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August 8, 2017

Ms. April Battle, Buyer
West Virginia, Department of Administration, Purchasing Division
2019 Washington Street East
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Email: april.e.battle@wv.gov

RE: RFP Number CRFP 0511 HHR1700000004

08/08/17 09:14:18
WV Purchasing Division

Ms. Battle:

Thank you for the opportunity to respond to the State's Request for Proposal (RFP) for a new Medicaid Enterprise Integrated Eligibility Solution (IES) Solution. Deloitte* is pleased to submit our proposal in response to your RFP for the West Virginia Integrated Eligibility Solution.

We have carefully reviewed the RFP and understand that West Virginia seeks a vendor with proven experience in delivering a modular, future-ready, federally compliant solution. We also understand that the State is looking for a multi-vendor project team coming together to offer solutions that have been successfully implemented in other states. To that end, Deloitte is excited to present our team of leading health and human services industry vendors who have proven experience with successful projects similar to the scope of work requested by West Virginia.

We bring DHHR the lowest risk choice to guide and successfully implement your Integrated Eligibility Solution through our experience and proven solution. We understand that it is the State's intention to maximize reuse and to standardize the approach to administering human services across the enterprise. A program of this size and complexity can only be accomplished with a cohesive team that has successfully implemented and operated each of the required modules to meet the numerous and complex requirements of the DHHR programs; and one that collectively has the systems integration and project management experience to deliver a seamless, single platform.

Our proposed partners include industry leading vendors like Briljent, Technosoft, Salesforce and Amazon. Our proposed partners, solution and approach were specifically selected to respond to DHHR's needs and objectives as outlined in the RFP on an aggressive timeline.

For this project, Deloitte has assembled a team of professionals that is uniquely suited to deliver on the wide breadth and depth of the scope of the West Virginia IES solution. We have proposed a senior delivery team that not only has business experience across each of the functional areas, but also, with deep expertise in delivering a modern, modular system with deep integration, reusability, and efficiencies. Our proposed team has deep experience in Integrated Eligibility - Medicaid (including MAGI experience) and Family Assistance Programs, Children's Health Insurance Program (CHIP), Child Care, Child Welfare, and Child Support Enforcement. Our professionals have experience implementing these solutions across forty four states and the District of Columbia.

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The value that the Deloitte team offers is an experienced team, proven solutions, DHHR knowledge and an innovative approach to implement an enterprise wide health and human services solution with the capability to position the State to maximize Federal Financial Participation (FPP) and is based on a framework which brings the power of a modern and modular system to meet future needs. We have a proven record of experience which is the key predictor of ability to deliver outcomes to the State.

Our team will be ready to deliver on day one of the WV IES project because we have the hands on experience with the legacy systems at WV DHHR and a bench of over five thousand public sector professionals of which more than two thousand are focused on Health and Human Services. The knowledge acquired over the years partnering with our clients have helped our clients win thirty-three awards between 2013 and 2016 alone. But most importantly, our goal is to provide the citizens of West Virginia with a more efficient and effective integrated eligibility system. A system that pays for itself over time through efficiencies and delivers better outcomes for those who use it.

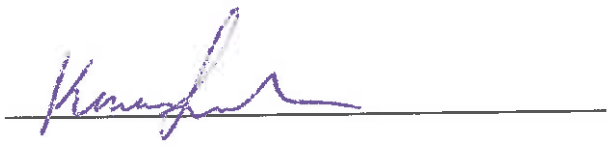
We understand the importance of this project to the State of West Virginia and if chosen, will not take our responsibilities lightly. We commit to working with the WV DHHR and the citizens of the State of West Virginia with a goal to exceed your expectations every day.

Our team is incredibly excited for the opportunity to partner with DHHR on this programmatic transformation. For a quick reference of our comprehensive, proven solution and team to meet DHHR's vision and outcomes for the citizens of West Virginia, we have included a brochure in the front pocket of this binder.

If you have any questions, please contact me at your convenience. I may be reached via email, kensmith@deloitte.com or phone, +1.304.685.2947.

Sincerely,

DELOITTE CONSULTING LLP

By: 

Kenneth J Smith, Principal

WEST VIRGINIA IES PROJECT

Title Page

As required by the RFP, Deloitte provides the following information as our title page.

Title Page Requirement	Response
State the RFP subject	CRFP 0511 HHR1700000004 to the Department of Health and Human Resources to provide for the design, development, implementation, maintenance and operation of an integrated eligibility solution (IES) that will support various programs administered by the West Virginia Department of Health and Human Resources (WV DHHR).
Vendor's name, address, telephone number, fax number	Deloitte Consulting LLP 191 Peachtree Street; Suite 2000 Atlanta, GA 30303 - 1749 Phone: (304) 685 – 2947 Fax: (844) 244 - 5892
Contact person	Kenneth J. Smith, Principal
Contact email address	kensmith@deloitte.com
Date	August 8, 2017
Signature	

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Corporate Qualifications and Experience

Section 3.1

Attachment A, Section 3.1 Corporate Qualifications and Experience

As a leader in providing solutions for Health and Human Services (HHS) nationally, Deloitte is excited to present our breadth of experience across HHS for the Department of Health and Human Resources (DHHR) for the State of West Virginia. Our Application Modernization offering and the breadth of our program experiences make us uniquely qualified to deliver a modern, modular Integrated Eligibility Solution (IES) to support evolving business demands, optimize IT investments, and create the foundation for future innovation. We understand your vision of a modular multi-vendor solution and as such, we are bringing together a team of leaders to meet your requirements. Our solution, the West Virginia Human Services Platform (WV HSP), is a teaming of best of breed solutions by Deloitte, Briljent, Technosoft, Salesforce and Amazon. With Deloitte as the prime contractor, and ultimately responsible for the success of the project, we are not offering a monolithic single vendor solution, but instead offer a solution that provides best of breed solutions from industry leading solution providers that will truly provide West Virginia with the Human Service platform of the future.

Why the Deloitte Team?

- Our solution, the WV HSP, combines the talents of a diverse and experienced set of partners
- Market leaders with significant investments for sustainability in the HHS suite
- Continuous investment in innovation, and solution development in emerging technologies
- Over 45 years of HHS experience serving 41 states, and the District of Columbia and 20 years of service to the State of West Virginia

Deloitte is a recognized leader in providing technology solutions and services. As the world's largest consulting firm, we help our clients solve complex business challenges with technology to achieve sustainable results. We are proud of the success we have achieved working together with our clients to design, implement, maintain, enhance, and support system operations while implementing features and tools that increase work efficiencies within the state health and human services environment.

Figure 3.1-1. Deloitte Assembles a Diverse Team with Unmatched Qualifications for West Virginia.

Deloitte Team Brings Unparalleled HHS Experience to WV

A proven record of excellence is the single biggest predictor of ability to deliver excellent service to the DHHR. As depicted in the following figure, we have multi-state experience in every capability you require. In 19 States, we have modernized and implemented Medicaid Eligibility and Affordable Care Act functionality either as standalone projects or as part of a larger Integrated Eligibility (IE) initiative. In more 20 States, we implemented systems for children services: Child Care and Child Welfare. Deloitte's Child Support Practice has worked in 25 States over the last 30 years. The Deloitte Team has experience in each aspect of the project: from implementing our solution to transitioning legacy systems; to defining creative, yet achievable implementation approaches; to meeting ACA mandated deadlines; to implementing MITA, SOA, and HIPAA technical standards. We bring these experiences and leading practices to the State for the WV IES Project. Our deep national experience reduces the overall project risk and increases your probability for success.

Our partner Technosoft, responsible for the WV HSP Client Management module, has significant experience servicing several State and Local Governments including California, Illinois, Michigan, Minnesota, New Mexico, Washington, Pennsylvania and Texas. They bring hundreds of years of collective experience in various Government functions including Child Support, Unemployment Insurance, Medicaid, Eligibility, Health Insurance and LIHEAP. Technosoft is a digital transformation and technology solution provider to global enterprise companies. The company operates Centers of Excellence in application life cycle management, cloud platform enablement, data science and machine learning, and CRM/ERP management.

With over 18 years of experience, our partner Briljent, responsible for the WV HSP Training Management module, has had a singular focus on developing and delivering exceptional adult learning solutions, becoming a highly acclaimed presence in the training and instructional design industry. Briljent has delivered over 2.5 million hours of training to tens of thousands of learners. Briljent's approach combines experience in the areas of learning management and instructional design with proven learning techniques, tools, and methods.

Briljent's experience and focus on delivering eligibility training in a variety of states is an asset that sets them apart from other vendors. The ability to draw on past experience leads to greater efficiency without sacrificing quality in the approach. Briljent has maintained a keen focus on providing training that specifically addresses the complexity of community-based health and social service programs. This includes years of experience partnering with Deloitte in developing and delivering training for such projects as the Indiana Eligibility Determination Services System (IEDSS) and the Illinois Integrated Eligibility System (IES) implementation.

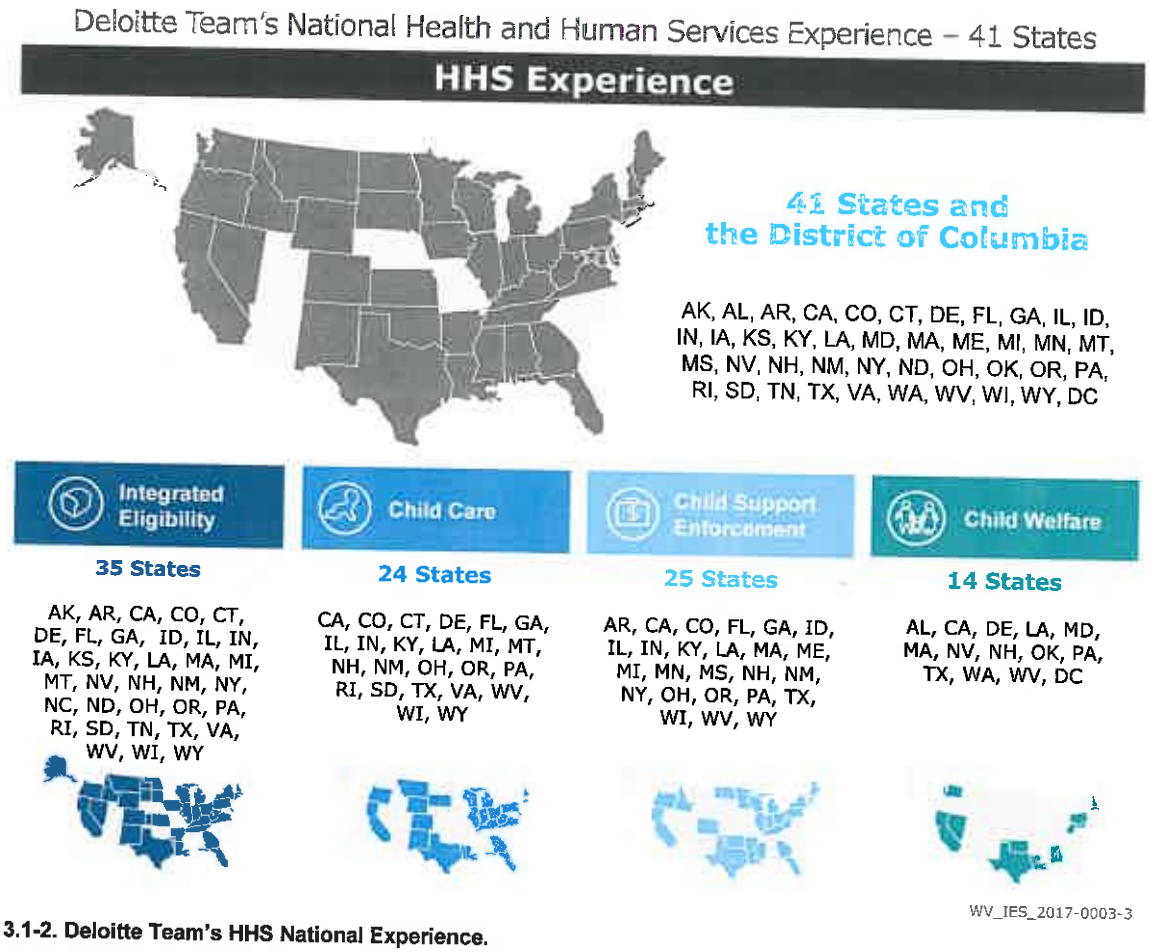

Figure 3.1-2. Deloitte Team's HHS National Experience.

Deloitte's national HHS experience includes the design, development, and implementation of various integrated eligibility determination systems, and administration of the programs listed in the following figure. Deloitte is the only vendor who brings this experience to West Virginia and reduces risk of this critical project with proven solutions.

Figure 3.1-3. Deloitte HHS Experience Program Index

Deloitte has over 5,000 Public Sector professionals of which more than 2,000 practitioners are focused on Health and Human Services. The knowledge acquired over the years and a history of successful innovation with our State clients have helped them win multiple HHS awards. The following table highlights some of the awards for business and technology innovations our State agency clients have recently received.

State	Awards won by state agencies for business and technology innovations delivered in collaboration with Deloitte
Wisconsin	• 2011 Best Fit Integrator Project Award – Wisconsin CARES • 2011 APHSA ISM Awards: Wisconsin Self Service Document Submission (Application of New Technologies), Wisconsin HMO Selection (Innovation in Service Delivery) • 2010 CSG Innovations award - BadgerCare Plus
New Hampshire	• 2016 APHSA ISM - Collaboration Across Boundaries Award - New HEIGHTS (NH) - LTSS Enhancements • 2016 Digital Government Achievement Award – Government-to-business category - New HEIGHTS (NH) - LTSS Enhancements • 2012 Computerworld Honors Program Laureates – New Hampshire EASY Online Application • 2012 American Council for Technology's Excellence.Gov Award Finalist - New Hampshire EASY – Finalist in Excellence in Enhancing the Customer
Pennsylvania	• 2015 Center for Digital Government Digital Government Achievement Award - PA Online Automated Child Abuse History Clearance • 2014 Center for Digital Government Best Fit Integrator - Commonwealth of PA H2X (Health and Human Services Exchange) • 2014 NASCIO Recognition Awards for Outstanding Achievement in Information Technology – Pennsylvania CS (winner: Information Communications Technology Innovations) • 2014 Pennsylvania Governor's Award in Technology – Allegheny County Department of Human Services (Jail Collaborative) • 2011 Computerworld 21st Century Achievement Award Finalists - Pennsylvania COMPASS • 2011 Computerworld Honors Program Laureates - Pennsylvania COMPASS • 2011 Center for Digital Government's Digital Government Achievement Awards - Pennsylvania COMPASS
Michigan	• 2012 Computerworld Honors Program Laureates - Michigan Bridges • 2012 Best Fit Integrator – Michigan Bridges (category: Exceptional Service Award in Health and Human Services)

Figure 3.1-4. Award-Winning Solutions.

The strength of the Deloitte Team in the HHS practice, its proven modern and modular systems, and its unmatched team of professionals make it uniquely qualified to deliver the WV IES Project for the State of West Virginia.

Deloitte Team Understands DHHR Priorities and Challenges

Deloitte not only has the national eminence and proven HHS solutions; we also have 20 years of experience in West Virginia with local practitioners passionate and committed to improving the lives of the citizens of West Virginia. Some of the highlights during our 20-year relationship include:

- DDI of the State's first integrated eligibility system RAPIDS
- DDI of West Virginia's automated child welfare system FACTS
- DDI of the Web-based eRAPIDS
- DDI of the Web-based application inROADS
- Built a data warehouse - RAPIDS Analysis and Formatting Tool (RAFT)
- Implemented enhancements to the RAPIDS integrated eligibility solution to support determination of an individual's eligibility to state subsidy programs as defined by PPACA. The resulting initiative gave birth to projects such as Enterprise Service Bus, Master Data Management, Self-Service refresh, and Common Eligibility Determination Business Rules Engine.

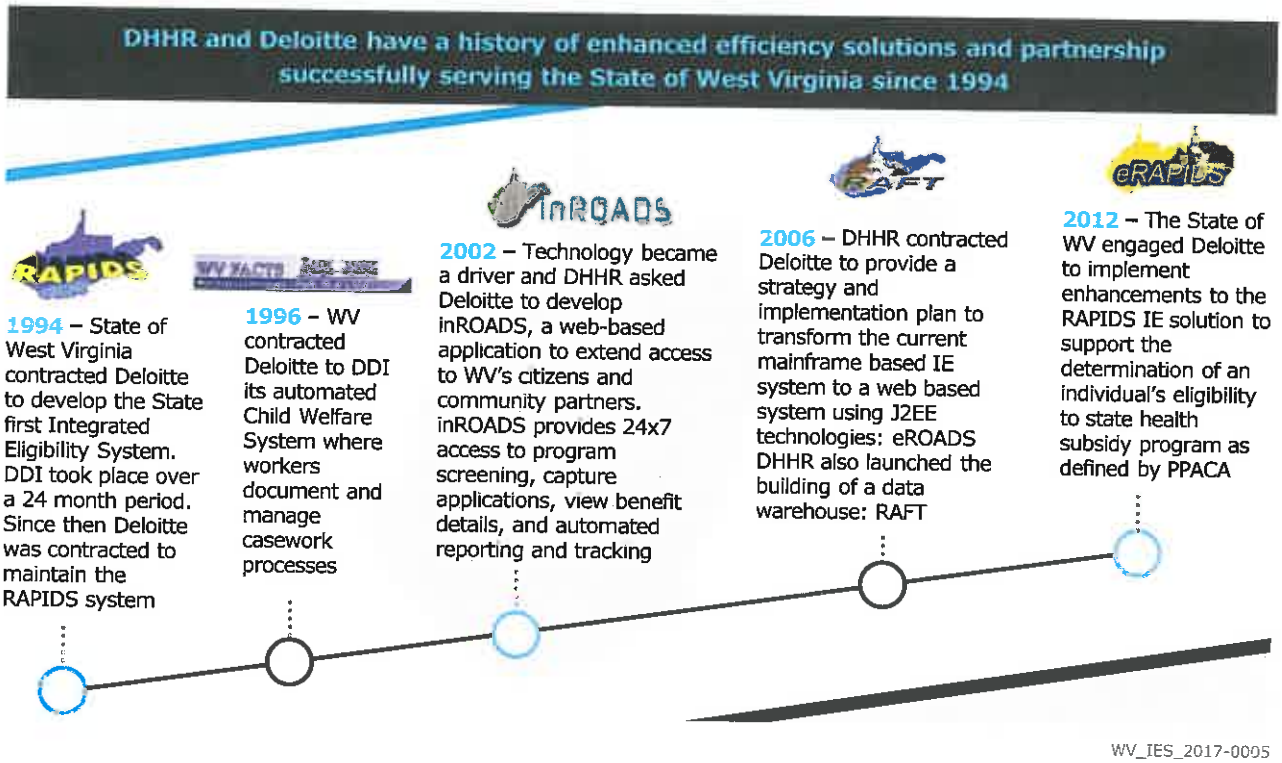

Figure 3.1-5. DHHR and Deloitte history over the years.

The RAPIDS, inROADS, FACTS, RAFT, and eRAPIDS systems, developed and maintained by Deloitte allowed the State of West Virginia to continually improve public services provided to its citizens and reduce administrative costs. The RAPIDS system, in its support of county workers' activities in administering welfare programs, has created a uniform application environment across the State's 55 counties, reduced the Quality Control error rate across each of the eligibility programs, and improved worker productivity by relieving workers of clerical duties, complicated eligibility calculations, as well as paperwork. Additionally this has allowed the State to obtain enhanced federal funding for the costs, development, and administration of federally funded welfare programs, and enhanced client services through the outreach concept and improved timeliness and accuracy of benefit issuance.

The key benefit of our experience in West Virginia is that we have hands on knowledge of the legacy systems that the WV HSP solution will replace. This experience is invaluable in contributing towards an efficient, comprehensive and predictable modernization with reduced risk on the State's aggressive requested timeline.

Deloitte Team Application Modernization Service Offering to West Virginia

As stated in subsection 4.2 - Modernization of this RFP, the State understands the risk associated with the continued use of its mainframe to host its HHS systems, the challenge of finding qualified programmers to support its antiquated legacy systems and the costly maintenance. We realize that keeping older systems up and running becomes more costly every year, sometimes consuming more spend than strategic business objectives. Meanwhile, capabilities are stretched thinner and thinner—if not left behind entirely—by emerging needs such as

mobile access, cloud architecture, cyber security, compliance and reporting, and on-demand analytics. As a response to this challenge, after collaborating for years to support the modernization of our clients' legacy systems, Deloitte recently acquired innoWake, a company with more than 15 years of experience focused on helping clients across industries modernize their legacy software. innoWake has innovative, sustainable, and flexible solutions for modernizing legacy applications and development environments. innoWake's processes and tools are unique and proven. They will allow us to modernize and enhance WV DHHR applications to meet the specific requirements included in the RFP.

Deloitte's Application Modernization offering provides organizations a proven, automated, low-risk process for modernizing old — also known as legacy — technology infrastructure and applications. Organizations have found tremendous value by migrating to modern languages like Java and .NET that integrate with the latest technologies. Key to Deloitte and innoWake's approach is fully automated migration of old code and data in unison.

We modernize by building on the functionality embedded in our client's core systems. Our incremental approach reduces risk and maximizes your investment by focusing effort on system improvements rather than trying to reinvent what is already working.

The Texas Department of Motor Vehicles (DMV) Modernization Project

- Deloitte and innoWake worked with the DMV to map out an incremental approach to modernizing the 20-year old system coded in ADABAS/NATURAL and COBOL
- The project modernized millions of lines of code to a new Java-based platform. It updated more than 700 screens, 3,000 batch jobs, and 120 ADABAS Database System files
- The first application modernization pilot was ready for system testing in only six weeks
- Results included enhanced customer-centric capabilities, quick implementation of legislative changes, automation of business processes, enhanced agency reporting and improved system reliability

Figure 3.1-6. Incremental Approach to Modernization.

Modernizing enables deployment of applications to cloud or mobile platforms, which helps improve business processes, workflow and communications while also integrating analytics, security and enterprise content management applications.

Through its Application Modernization offering with innoWake, Deloitte provides a proven methodology and truly unique offering to support the WV IES Project in ways that other vendors cannot.

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Figure 3.1-7. Our team supporting WV DHHR.

Deloitte Team Delivers Leadership Commitment to West Virginia

Deloitte's Public Sector practice is strengthened by two key features: 1) our recruitment of industry specialists; and 2) our professionals who dedicate their careers to serving Public Sector clients. We recruit top industry specialists as advisors and directors, leveraging their vast industry experience to remain ahead of market trends and appropriately educate and share knowledge with our staff and our clients. Some examples of this include:

- **Dr. Wade Horn**, former assistant secretary for the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services (DHHS)
- **Michael Coulson**, former director of the Bureau of Program Support in the Office of Income Maintenance for the Pennsylvania Department of Human Services and former APHSA ISM President
- **Margot Bean**, former commissioner of the federal Office of Child Support Enforcement (OCSE) in the Administration for Children and Families (ACF) U.S. Department of Health and Human Services (DHHS)

"Our extensive experience in HHS system modernization and the broad in-house knowledge acquired by hiring industry specialists as advisors and directors, have transformed our IE solutions into future looking systems that maximize efficiently through a modular approach and effective sharing and coordination."

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Deloitte relies on resources like Margot, Michael, and Wade and their continued involvement and relationships with Federal agencies and leaders to provide insight and to incorporate the forward-thinking federal concepts into our solutions.

Deloitte Team Demonstrates Experience in RFP Goals

Our deep experience and excellence in HHS systems is matched by our common vision and dedication to the goals and objectives of West Virginia as defined in the RFP. At the heart of the West Virginia Human Services Platform (WV HSP) is the modernization of the legacy applications: Integrated Eligibility, Child Care, Child Support Enforcement, and Child Welfare programs. The integration of these functions into a modern and modular solution for the future is the overarching goal of the WV HSP solution.

Our proposed solution, the WV HSP, is based on the four core modules defined by the State in the RFP (Training Management, Client Management, Service Management and Finance Management) and four program case management modules (Integrated Eligibility, Child Care, Child Support Enforcement and Child Welfare). Each of these modules is described in detail in Section 4.4 of our response. The solution addresses the core RFP goals, shown in the below figure.

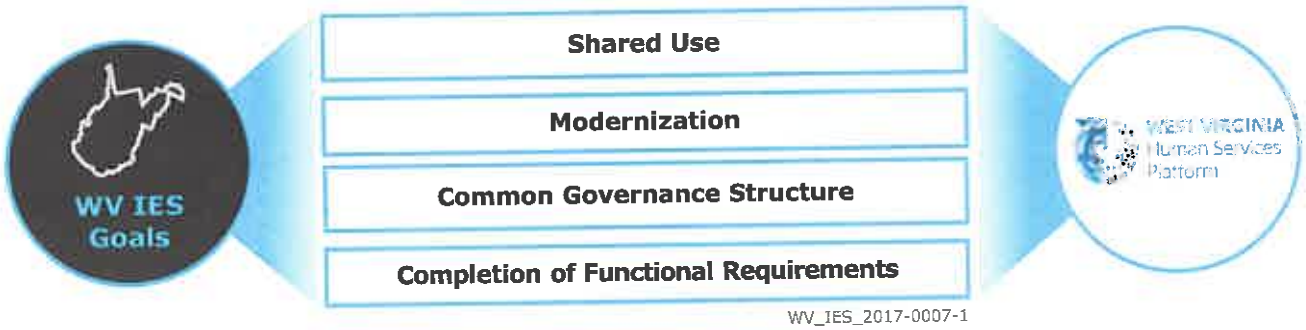

Figure 3.1-8. Deloitte has deep experience helping our HHS clients reach the project goals and objectives listed above.

Deloitte is dedicated and focused on delivering across each of the four goals and supporting the objectives of the WV IES Project. To us, these are shared goals and objectives and our experience over the years aligns with these goals.

The following table highlights just a few examples from our experience, alignment, and success with each of the individual objectives for the stated goals.

Goals	Our Understanding	Deloitte Team Demonstrates Proof
Shared Use - Maximize reuse across DHHR to decrease duplication across existing services, minimize cost, and standardize approach.	Interfacing with the Existing Data Marts and Data Warehouse	**Pennsylvania.** We have developed solutions which transmit data to and receive and store data from data marts/data warehouse for Human Services programs. In addition, we created a central repository for client demographic data that would allow them to uniquely identify clients who might be participating in multiple programs and systems in order to streamline client registration, better detect fraud, identify opportunities to better serve clients and improve program and information reporting. The initiative included the DDI of Master Client Index (MCI), an integrated application built using an open-system architecture allowing the integration with legacy and Web-based applications. MCI is ultimately designed to provide the Department of Human Services with a single repository of client demographic data across the state. This initiative stared with separate disparate data sources and integrated them into in a single solution to support enterprise decision making.
	Reusability: implement a solution that includes the key functionality enablers to shared use and modularity	**Michigan.** Michigan BRIDGES project's mission was to provide a statewide, single and integrated service delivery system for eligibility and benefit determination of Michigan's cash assistance, medical assistance, food assistance and child care assistance program. System enabled information sharing across traditional barriers – We helped the State incorporate technology information sharing leading practices, such as establishing web services and a new Enterprise Service Bus to facilitate the reuse of interface logic. Reuse of interface logic will continue to help the State reduce complexity and maintenance costs. In addition, MI BRIDGES system is an n-Tier Web-based application to maximize reuse at the web, application, integration, and database level tiers. This approach promotes reuse by having each of the modules leverage the same security framework, Enterprise Service Bus, and Business Rules Engine.

Goals	Our Understanding	Deloitte Team Demonstrates Proof
Modernization - Path forward using modern hosting technology to reduce the time associated with critical system modifications and reduce the State's utilization of legacy technology	Enterprise Hosted Solution: integrate each of the programs across the eligibility enterprise	**Illinois.** During the DDI of Illinois Integrated Eligibility System, Deloitte met the requirement to host application in a Tier II equivalent facility with N+1 capability for all HVAC, electrical, UPS and generator facilities. Our hosting services vendor, Secure-24, provided services from its multiple, state-of-the-art data centers. Every component of Secure-24's physical infrastructure is built to exceed the most stringent requirements and operates on an N+1 basis for reliability, or fully redundant/clustered, infrastructure including redundant SAN connectivity and data replication with no single points of failure. Secure-24 implements environmental security controls, which provide reasonable assurance that computer equipment, storage media, and program documentation is adequately protected from the elements (e.g. fire, water etc.). In addition, Deloitte has hosted solution in lower environments: DEV, SIT, and UAT for the states where we implemented IES. Through Secure-24, we also hosted a disaster recovery environment in a secondary data center. This disaster recovery environment is capable of providing a failover in the unlikely event the IL HIX loses availability in the primary data center.
	Proven Solution: provide a reliable solution comprised of modules and functionality that have been successfully deployed and operated in other states	**Connecticut.** In 2012, the State of CT engaged Deloitte to design, develop, and implement Connecticut's State-Based Exchange (SBE) in compliance with ACA regulations. Some of the project objectives were to: • Provide an enterprise system combining private insurance from carriers and State and Federal assistance programs such as APTC, MAGI Medicaid and CHIP for the State of Connecticut • Facilitate "no wrong door policy" with intake from multiple channels such as online, phone, and paper forms, and support for modules such as account management, data collection, verification, eligibility determination, enrollment, workflow based processes for workers and consumers, letters/notices, and interfaces • Build an integrated system with State Medicaid and CHIP system, Carrier systems, SERFF, IRS, and State and Federal data sources • Provide extensible solution with support for data warehouse, reports, mobile applications, single sign on, and 1095 reports Since implementation, Connecticut's success has been nationally recognized through numerous awards while reducing the uninsured rate by half to 4 percent. Deloitte's support of Connecticut's SBE continues as we prepare for a third open enrollment period in fall of 2015. The system received 19 awards from 13 different organizations from 2013 to 2015 including: • 2014 WEDI Health IT Leadership Award • 2014 GTRA and HTRAC Executive Technology Award • 2014 PMI Project of the Year Award Finalist • 2014 Collaboration Across Boundaries Recognition Award - Excellence in Human Services Information Technology • 2015 CIO 100 Honoree
	DDI Schedule: split DDI phase into at least 2 releases; propose a schedule that presents a solution for full solution acceptance no later than two years after project kick off	**Georgia.** Deloitte was tasked with the State of Georgia's Integrated Eligibility System (GA IES) project to implement a single public assistance solution to replace the existing benefit systems. • The Georgia IE has multiple releases with EMPI (Master person client), Pilot, Wave 1 and Wave 2 for statewide. • EMPI was rolled across statewide as the first release. EMPI helped Integrate several disparate technologies seamlessly to use the Enterprise Master Person Index to meet Georgia's business needs. • The EMPI was rolled in 12 month time which included, requirements, design, implementation, SIT , UAT , training. • The technical infrastructure includes Java, Informatica MDM and multiple environments to support business needs. • The Build includes code merging from different environments and deploying on a tight schedule to meet the agreed timelines • The EMPI system is in production and has been successful across the state.

Goals	Our Understanding	Deloitte Team Demonstrates Proof
	Automation: automate current manual business processes to increase efficiency	**Delaware.** We provided DDI of the following initiatives for Delaware ASSIST Worker Web application: • MAGI Passive Renewal and Bulk Renewal Verification - allow Medicaid cases due for renewal to be processed automatically with no or limited worker intervention • Auto Case Creation - automation to process MAGI based Medicaid applications received from the Federally Facilitated Marketplace (FFM) and Self-Service (SS) • Change Report Center (CRC) module provides a centralized tool for managing change reports submitted by the citizens online via Self-Service (SS) application or through other channels such as walk-ins, email, phone, or fax. • Real Time Eligibility: Immediate eligibility determination results for Medicaid and Chip displayed to applicants in the citizen Self-Service Portal, upon successful submission of their application
Common Governance Structure - Manage single integrated portfolio across DHHR to bring a new level of maturity to program governance	• Project Management • Quality Management • Requirements Analysis and System Design • Development • Testing • Data Conversion • System User Training • Implementation Readiness • Operations • Turnover and Closeout • Inventories of Reports, Forms/Notices/Letters, and Alerts • Business Process Models/Mapping • Enterprise Reporting Capability	**Texas.** Implementation of several improvements in the delivery of social service programs administered by Texas department of health and human services. Deloitte developed and managed each aspect of the largest, most advanced automated public assistance system in the country: TIERS. The project's primary goals included replacing several outdated systems. Each had its own operating environment, processes, tools, and governance. Goal was to replace these disparate systems with one state-of-the-art integrated system and changing the agency's business processes to improve accuracy and the delivery of services to millions of state citizens. In addition to being responsible of DDI of the solution, Deloitte was also responsible for unifying OCM for these systems. That included a common communication, training, and change management. We provided OCM for nearly 13,000 end users. Deloitte Human Capital team supported HHSC by providing the following services: • Redesign and enhancement of existing curriculum and support for HHSC's TIERS/Portal training efforts • Design and develop Train-the-Trainer (T3) programs to support the redesigned curriculum and non-direct groups/audience, and deliver T3 program for existing curriculum • Develop a Transition and Change leadership plan; implement readiness activities and other products to facilitate end user adoption of TIERS • Collaborate with HHSC leadership in the establishment of effective project governance methods and support project management needs for the project
Completion of Functional Requirements - Delivering programmatic needs to meet functional requirements	Alignment with Business and Technical Specifications	**Indiana.** IEDSS is an integrated eligibility project designed to support SNAP, Cash and Medicaid. It contains the following major modules: Eligibility and Determination (EDBC), Application Registration and Data Collection, Correspondence, Self-Service, Master Client Index (MCI), and Interfaces. The solution utilizes service oriented architecture (SOA) in combination with various COTS and open-source products to enable interoperability between IEDSS and State/Federal agencies. Deloitte performed a multi-phased process improvement project that included a Business Process Analysis (BPA), requirements gathering, Governance, training, and financial performance management projects. Deloitte developed business process models and use cases to capture requirements for child support processes and some supporting modules, collaboratively during Requirements Joint Application Design (RJAD) sessions with state, county and external stakeholders during many of the projects. Roughly, 911 business requirements and 212 technical requirements were scoped in the initial RFP.

Goals	Our Understanding	Deloitte Team Demonstrates Proof
	Alignment with Operations Specifications	**California.** Since 2011, Deloitte provides enhancement, maintenance and operations (M&O) services in support of the California Child Support Automated System (CCSAS), including: • Activities necessary for the successful operation of the CCSAS System, and provide technical architecture and infrastructure knowledge related to CCSAS hardware and software systems • Activities necessary for the support of CCSAS System Infrastructure, such as network servers and desktops, including those distributed throughout California in Local Child Support Agencies • Performs activities necessary for the support of CCSAS System Help Desk support • 548 system fixes and maintenance change requests and 82 major enhancements
	Alignment with Service Level Agreements	**Pennsylvania.** The Pennsylvania DHS Project Management office, operated by Deloitte and managing a portfolio of projects is structured to manage project in the portfolio by Service Level Agreements. Deloitte team responsible for: • Setting up management structures oriented around SLA requirements • Collecting and reporting of projects status using SLA and key metric data • Facilitating remediation plans based on SLA metrics

Figure 3.1-9. Business Organization in Response to RFP Request.

3.1.1 Vendor's Organization

The following table provides the details requested in the Request for Proposal document, Section 3.1.1 regarding specifics on the business organization of Deloitte.

Business Organization

RFP Requirement	Response
Business/Company Name	Deloitte Consulting LLP
Change in Ownership within the past five years	None
Current Office Headquarters	30 Rockefeller Plaza New York, NY 10112 United States Phone Number: +1 212 492 4000 Web site: http://www.deloitte.com/
Background of the parent and/or subsidiary company, its size, lines of business, and personnel and technical resources	The predecessor organizations of Deloitte Haskins & Sells and Touche Ross & Co. date back approximately 170 years. In 1989, the practices of Deloitte Haskins & Sells and Touche Ross & Co. combined under the name Deloitte & Touche. In 1994, Deloitte & Touche became a Delaware Limited Liability Partnership under the name Deloitte & Touche LLP. In 1997, Deloitte & Touche LLP reorganized. As a result of the reorganization, Deloitte & Touche LLP, a Delaware Limited Liability Partnership, changed its name to Deloitte & Touche USA LLP and ceased providing audit, tax, and related services, as well as consulting services. D&T Partners LLP, a Delaware Limited Liability Partnership, changed its name to Deloitte & Touche LLP and began performing audit, tax, and related services. Additionally, Deloitte & Touche Consulting Group Holding LLC and Deloitte & Touche Consulting Group LLC, each a Delaware limited liability company, were formed to provide consulting services previously provided by Deloitte & Touche LLP.

RFP Requirement	Response
	Since 2003, these consulting services have been provided by Deloitte Consulting LLP. Since 2004, tax services formerly provided by Deloitte & Touche LLP have been provided by Deloitte Tax LLP. Beginning May 29, 2005, financial advisory services formerly provided by Deloitte & Touche LLP have been provided by Deloitte Financial Advisory Services LLP. Each of these entities is a Delaware Limited Liability Partnership. Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. In the US, services are provided by the subsidiaries of Deloitte LLP (Deloitte & Touche LLP, Deloitte Consulting LLP, Deloitte Tax LLP, Deloitte Financial Advisory Services LLP, and their subsidiaries), and not by Deloitte LLP.
Date established	Deloitte's parent company was founded in 1849.
Primary business	Professional services
Total number of employees	Deloitte has more than 244,400 professionals at member firms (78,600 in the 113 US locations) delivering services in audit, consulting, financial advisory, risk management, tax, and related services in more than 150 countries and territories.
Number of individuals involved in human services computer systems maintenance, transfer, and development	Deloitte has over 5,000 public sector professionals of which more than 2,000 practitioners focused on Health and Human Services.
Litigations and claims made against professional liability insurance (pending or settles) or the collection of performance bonds which have occurred within the past three years	None
The site or sites from which the Vendor and subcontractors, if any, will perform the relevant tasks listed in the proposal	Key and Support project staff will be located in Charleston, West Virginia. Other project staff will be located in Mechanicsburg, PA (Delivery Center) and Austin, TX (Delivery Center).

Figure 3.1-10. Business Organization in Response to RFP Request.

3.1.2 Vendor Capacity, Qualifications, References, and Experience

Per Section 3.1.2 of the RFP Deloitte is providing below four (4) project examples relevant to the scope and skills required for the WV HSP solution. As requested, three (3) of these examples are from current clients and one (1) is from a former client. Following the four project examples, Deloitte has provided, as requested three (3) completed Vendor Reference Forms as shown in RFP Appendix XI, Table 42 Vendor Reference Form.

WEST VIRGINIA IES PROJECT

Project Example 1 (Current) – Commonwealth of Virginia

Name of Client and Project Title

Commonwealth of Virginia
Department of Social Services (DSS),
Department of Enterprise Systems (DES)

VIRGINIA DEPARTMENT OF SOCIAL SERVICES

Virginia Case Management System (VaCMS) and Virginia Integrated Eligibility System (VA IE)

Nature of the Client

Similar to the needs of WV IES, Deloitte partnered with Virginia's DES and DSS to design, develop, and implement new **Child Care** and **Integrated Eligibility** systems and applications for DSS's **modernization** efforts, as well as support the ongoing enhancements and maintenance of existing applications and systems.

The Virginia DSS is responsible for administering a variety of programs including TANF, SNAP, Medicaid, Adoption, **Child Care Assistance**, Refugee Resettlement Services, and Child and Adult Protective Services to **over 1.6 million Virginians** each year.

Nature and Scope of Project

RFP Goals:

- ✓ Shared Use
- ✓ Modernization
- ✓ Common Governance Structure
- ✓ Completion of Functional Requirements

Solution Scale:

- ✓ 120 reports
- ✓ 3,675 providers
- ✓ 1.2 million citizens
- ✓ 5 programs and 120,000 monthly applications in VA
- ✓ 3,800 state case workers

Our Experience with VA Meets WV's Goals and Objectives

Shared Use

The VA IE Project consolidated and integrated the administration of health and human services programs supported by different systems into a single solution – the CommonHelp Portal – to enable citizens to apply for various benefit programs including Child Care, Medicaid, TANF, SNAP, and LiHEAP online.

The establishment of a reliable, single source of information about the services received by each client contributed to the effective administration of the Commonwealth's health and services programs by appropriating services in an effective, efficient, and accountable manner and moving away from relying heavily on resource intensive, manual processes.

Modernization

VA's IE and Child Care system implementations resulted into **reduction in case worker's time** spent on processing a case by **automating** various business processes:

- Clients use the CommonHelp application to apply for benefits and most of the information are already **pre-filled** for the case worker
- **Eligibility determination is automated** based on the business rules established in **BRE**
- **Batches run automatically** to process various business operations on pre-defined frequency

Today, DSS has a dependable, modern solution that helps VA control costs and is adaptable to the changing business needs and State and federal regulatory requirements.

Common Governance Structure

Throughout the life cycle of the VA IE and Child Care Projects, Deloitte employed the standards, processes, and methodologies derived from the Project Management Institute (PMI), **Project Management Body of Knowledge (PMBOK)** framework to replace VA's **antiquated technology** and institute **consistent governance standards across the enterprise** while **minimizing maintenance and operations costs.**

Completion of Functional Requirements

Team members worked with the equivalent of WV's Office of Management Information Services (OMIS) to build and implement a **flexible and adaptable** system that allows multiple programs to use common functionality, **automate business processes to create job efficiencies**, and **reduce system maintenance expense** through the reuse of application components while adhering to **State and Federal regulatory changes.**

Name of Client and Project Title	Commonwealth of Virginia Department of Social Services (DSS), Department of Enterprise Systems (DES) VIRGINIA DEPARTMENT OF SOCIAL SERVICES Virginia Case Management System (VaCMS) and Virginia Integrated Eligibility System (VA IE)
Functional Requirements ✓ Child Care ✓ Integrated Eligibility	Deloitte started implementation of the VaCMS for automating the Child Care program in 2010, which similar to FACTS, **maintains and processes information necessary to allow case workers to provide needed services and monitor client status.** Since its implementation, Deloitte has helped DSS expand the solution to **adapt to State and federal regulatory changes** and continuously streamline the work of social services staff with **minimal cost** and **minimal impact to the continuity of business operations.** Much like the origin of the WV HSP and its needs, Deloitte collaborated with the Commonwealth to develop, implement, and maintain the CommonHelp Portal (Virginia's Self-Service Portal) which **consolidated and integrated the administration of health and human services programs supported by different systems into a single solution** to enable citizens to apply for various benefit programs including **Child Care**, Medicaid, TANF, SNAP, and LIHEAP online.
Technology Components ✓ Enterprise Service Bus ✓ Business Rules Engine	Commonwealth of Virginia (COV) enterprise shared middleware supported the Medicaid Information Technology Architecture (MITA)'s Service Oriented Architecture (SOA). Interface component services are implemented in IBM **ESB** that are published and shared for connecting business processes, such as income verification and asset verification. IBM WebSphere Operational Decision Management (WODM) is the tool used to implement the **BRE** for the VA IE project. MAGI, Medicaid, TANF, SNAP, and EAP program's eligibility determination rules are hosted for the applications to consume. **BRE** is hosted by Virginia Information Technologies Agencies (VITA) – COV enterprise as a shared service component.
Additional Technology Components	J2EE, Medicaid Information Technology Architecture (MITA), MITA SOA, IBM ESB, IBM WebSphere Operational Decision Management (WODM), JRE 1.6, Experian QAS, SAP Crystal Reports 2011, Informatica Powercenter, HP ExStream, OpenText ExStream and iText, LexMark ImageNow, IBM WODM, PL/SQL Developer, Oracle 11g RAC, RedHat Linux v6.x, AIX, EMC, IBM Rational Quality Manager, IBM Rational ClearQuest, IBM ClearCase
System Performance	DSS uses the IBM Application Performance Management (APM) tool to monitor and gauge the health and performance of the system on a daily basis. It provides analytics, **reduces the length of outages and slowdowns**, and finds the root cause of issues. The servers **automatically send alert messages** to the database analysts if there is an issue with the servers or if there is a long-running query for over ~10 minutes.
Project Duration	Start Date Year: 2010 End Date Year: Current

Project Example 2 (Current) – Commonwealth of PA

Name of Client and Project Title

Commonwealth of Pennsylvania
Department of Human Services (DHS)

pennsylvania DEPARTMENT OF HUMAN SERVICES

Nature of the Client

Pennsylvania DHS administers a variety of services that provide care and support to Pennsylvania's most vulnerable citizens. Deloitte successfully maintains cross-HHS systems in the areas of **Integrated Eligibility**, **Child Care**, **Child Welfare**, and **Child Support** Enforcement across a large number of users and agencies for the Commonwealth.

Nature and Scope of Project

RFP Goals:

- ✓ Shared Use
- ✓ Modernization
- ✓ Common Governance Structure
- ✓ Completion of Functional Requirements

Solution Scale:

- ✓ 723 reports
- ✓ 4,272 providers
- ✓ 4.8 million citizens
- ✓ 14 programs and applications with DHS
- ✓ 11,541 state case workers

Our Experience with PA Meets WV's Goals and Objectives

Shared Use

The applications supported by the Deloitte team are the cornerstone components for a portfolio of systems that Commonwealth agencies use to **support HHS service delivery for their constituents**. Collectively, these systems are used to **serve over 3.5 million Pennsylvania users and residents**.

Various common business support functions are utilized by the systems including registration, intake, **eligibility**, **case management**, correspondence, **payments**, collections, **reports**, and interfaces.

Modernization

The state's **IE system** - integrated Client Information System (CIS) suite contains three main components that **support case processing**, **determine eligibility**, **authorize services**, and **distribute benefits** to Pennsylvanians:

- Commonwealth of Pennsylvania Access to Social Service (COMPASS) – transactions include **40,000 applications**, **7,000 renewals**, and **1,200 account changes submitted per month**
- Client Information System (CIS) – transactions include an average of 5.1 million mainframe transactions per day, an average of 149,000 applications for services and 75,000 renewals per month

Combined, the Pennsylvania **Child Support** Enforcement System (PACSES) mainframe and open systems components input and track cases, manage the financial processes related to the cases, and locate delinquent members by supporting approximately **3.4 million transactions per day.**

The complete, combined set of state's **child care** system - Pennsylvania Enterprise to Link Information for Children Across Networks (PELICAN) support approximately **961,000 transactions** and generate an **average of 7,884 reports per month**, while the **Child Welfare** Information Solution (CWIS) application processes approximately **15,760 transactions per day**.

Common Governance Structure

Our teams perform a variety of services to multiple major projects at the Commonwealth including new **development**, enhancements, **maintenance**, middleware, **database**, configuration, content management, business intelligence, **architecture**, platform, **security**, and **release management**.

Completion of Functional Requirements

On a monthly basis, the Deloitte team provides over 50 application migration services that minimize issues and rework. This enables the Commonwealth to enhance the overall efficiency of its health and human services enterprise and increase cross-project communication and coordination.

Functional Requirements

- ✓ Child Care
- ✓ Integrated Eligibility
- ✓ Child Support
- ✓ Child Welfare

The PELICAN (Child Care) application suite supports the Commonwealth's early childhood programs by maintaining and processing information necessary to allow workers to provide needed services and monitor client status. Components of the PELICAN suite include the Certification & Licensing System (CLS), Child Care Works (CCW), Early Learning Network (ELN), Pre-Kindergarten Counts (PKC), and Provider Self-Service (PSS).

To appropriate services in an effective, efficient, and accountable manner, CIS (Integrated Eligibility) includes:

Name of Client and Project Title	Commonwealth of Pennsylvania Department of Human Services (DHS) pennsylvania DEPARTMENT OF HUMAN SERVICES
	• Web-based self-service portal application that extends the accessibility of the social service application process to citizens and business partners (COMPASS) • Comprehensive functionality to determine Cash Assistance, Medical Assistance, SNAP, and LIHEAP eligibility and issue benefits to over one million citizens (CIS) To improve efficiency of county administered child welfare programs and increase the visibility of information, CWIS (Child Welfare) consolidates current, disparate state-level systems and provides up-to-date dashboards and the ability to report on abuse and neglect cases across the Commonwealth. PACSES (Child Support) includes **extensive data integration with other systems** including the Federal Office of Child Support Enforcement (OCSE) Federal Case Registry (FCR), IRS, Multistate Financial Institution Data Match (MSFIDM), the Pennsylvania Department of Transportation (PennDOT), the Pennsylvania Justice Network (JNET), and several others.
Technology Components ✓ Data Warehousing ✓ Enterprise Service Bus ✓ Business Rules Engine ✓ Master Data Management	The overall solution for Pennsylvania includes a cross-program Oracle **Data Warehouse**, Informatica for ETL, Cognos for Reports, Corticon **BRE**, BizTalk, webMethods using a custom **ESB** framework, and a custom developed **MDM**. The **Enterprise Data Warehouse** (EDW) spans multiple systems to provide a consolidated view of enterprise data, optimized reporting and enhanced data analysis. EDW's design facilitates the storage and querying of information across various program offices in order to enrich the reporting capabilities for data from EDW to a technically diverse user population. Working with resources representing multiple departments, data is collected, information extracted, transformed and loaded into the EDW, and then delivered to various user community groups through the Commonwealth's BI tool, Cognos.
Additional Technology Components	ASP.net, Adobe Life Cycle, SiteMinder, Identity Manager, Corticon Rules Engine, BizTalk, IBM WebSphere, CyberArk, OpCon, Compliance Sheriff
System Performance	For the Commonwealth, Deloitte provides in-depth insight into system performance across the enterprise by measuring: • **Infrastructure performance and stability**, such as CPU, Memory, Disk, and Network utilization through industry-standard tools like Microsoft System Center Operations Manager (SCOM), and Sightline. These tools provide intelligent alerting, trending, and reporting. • **Application performance and log analysis**, leveraging AviCode .NET application monitoring and Splunk log correlation and analysis capabilities. These tools provide code- and log-level review of transactions and events for detailed troubleshooting and complex alerts.
Project Duration	Start Date Year: 2012 End Date Year: Current

Project Example 3 (Current) – State of Michigan

Name of Client and Project Title	State of Michigan Department of Human Services Michigan Bridges Integrated Eligibility System (MI BRIDGES) - Deloitte
Nature of the Client	The **Department of Human Services** (DHS) is Michigan's public assistance, child and family welfare agency. DHS directs the operations of public assistance and service programs through a network of over **100 county offices** around the state. Similar to our proposed solution for WV DHHR, Deloitte supported MI DHS to successfully develop their integrated eligibility and child care system, **MI BRIDGES**. Bridges supports **10,000 users** located in **126 field offices**, determining eligibility and benefit amounts for **55 types** of federal and state assistance, including Medicaid and cash assistance and serves **2.5 million clients** in over **1.5 million cases** across all **83 counties** in Michigan.
Nature and Scope of Project RFP Goals: ✓ Shared Use ✓ Modernization ✓ Common Governance Structure ✓ Completion of Functional Requirements **Solution Scale:** ✓ 553 reports ✓ 333K Providers ✓ 2.6 Million citizens ✓ Programs: SNAP, Cash, Medicaid, Medicaid Cost Share, Child Development and Care, State Emergency Relief (LIHEAP and non energy services) and Direct Support Services) ✓ 200K applications/month ✓ 10,000 case workers	**Our Experience with MI Meets WV's Goals and Objectives** **Shared Use** **MI BRIDGES** is a statewide integrated eligibility case management system and self-service portal (MiBridges) designed to support administering public assistance programs including TANF, Medicaid, MAGI, SNAP, emergency services and Child Care. **Modernization** **BRIDGES was** developed as an n-tier Web-based application built using Deloitte's **Human Services Framework solution**. The application was built using **J2EE** and related technologies. This architecture is comprehensive in that it supports the full complement of BRIDGES functions in a unified and **tightly-integrated environment** with the horsepower required to meet the state's capacity and scalability requirements. **Common Governance Structure** In support of MI BRIDGES, Deloitte provided support covering all phases of the SDLC, including **requirements**, design, **testing**, **project management**, **quality assurance**, **operations**, security, and **application development**. **Completion of Functional Requirements** Through the delivery of BRIDGES, the following requirements were completed: • **Replaced multiple legacy systems** that provided Medicaid and Cash Benefits to recipients. • Provided **caseworker relief** from navigating multiple systems. • Eliminated the support and maintenance costs of legacy systems.

WEST VIRGINIA IES PROJECT

Name of Client and Project Title	State of Michigan Department of Human Services Michigan Bridges Integrated Eligibility System (MI BRIDGES) - Deloitte
Functional Requirements ✓ Child Care ✓ Integrated Eligibility	BRIDGES delivers on a broad range of services, including over 55 types of federal and state assistance, and provides programmatic support to Michigan's citizens in need across Integrated Eligibility, Child Care, Emergency Services, TANF, SNAP, MAGI and Medicaid.
Technology Components ✓ Enterprise Service Bus	As part of **Bridges**, The State of Michigan **Enterprise Service Hub** was used. This hub is a secure platform to connect variety of internal and external systems and facilitates the integration of Federal verification services
Additional Technology Components	Sun Solaris 11.1, Windows Server 2008 R2, Windows Server 2012 R2, IBM Integration Bus 9.X, IBM WebSphere Application Server, IBM HTTP Server, IBM WebSphere MQ Messaging Software, Informatica Power Center
System Performance	The Bridges team relies on the use of performance baselines and monitoring, measuring all key transactions in comparison with the baselines established.
Project Duration	BRIDGES Start Date Year: 2006 BRIDGES End Date Year: Current

WEST VIRGINIA IES PROJECT

Project Example 4 (Former) – State of West Virginia

Name of Client and Project Title	State of West Virginia Department of Health and Human Resources/OMIS RAPIDS Project
Nature of the Client	**The State of West Virginia Department of Health and Human Resources (DHHR)** includes the Bureau for Behavioral Health and Health Facilities, Bureau for Child Support Enforcement, Bureau for Children and Families, Bureau for Medical Services and the Bureau for Public Health. The Deloitte team was engaged by DHHR to launch the State's first integrated eligibility system, **RAPIDS.** The Rapids Project was aimed to reduce the amount of manual intervention required to determine eligibility and the aim to reduce error rates across all three eligibility programs; **Food Stamps**, **Medicaid**, and **TANF**.
Nature and Scope of Project **RFP Goals:** ✓ Shared Use ✓ Modernization ✓ Common Governance Structure ✓ Completion of Functional Requirements **Solution Scale:** ✓ 304 reports ✓ 873 providers ✓ 607,231 citizens ✓ 22 programs and applications in RAPIDS ✓ 2,232 state case workers	**Our Past Experience with WV Benefits the Current Needs of DHHR** **Shared Use** The State of West Virginia contracted Deloitte to implement enhancements to the RAPIDS **integrated eligibility solution** and to support the determination of an individual's eligibility **to state sponsored programs**. WV DHHR was provided an opportunity to **leverage existing investments and technology assets**. To incrementally upgrade the RAPIDS system, Deloitte provided enhanced usability and extended functionality through the eRAPIDS initiative. Each eRAPIDS component is **designed to be modular and reusable**. The Work Programs and Worker Scheduler components of eRAPIDS. Currently the **Work Programs component is being transferred to Montana and New Mexico**. **Modernization** In 2006 our team provided a strategy and implementation plan to **modernize** the current mainframe based **integrated eligibility** system. In collaboration with DHHR, Deloitte upgraded RAPIDS legacy technology to a **system using J2EE**. 'eRAPIDS' was the resulting initiative, which delivered incremental upgrades to the RAPIDS subsystems over the span of eight releases. **Common Governance Structure** In support of RAPIDS project efforts, our team was responsible for the **design**, **development**, **testing** and **implementation** of the RAPIDS Suite. At the conclusion of the implementation, our team continued to provide **maintenance** to DHHR, and worked with leadership to identify and implement system enhancements. **Completion of Functional Requirements** The development of the RAPIDS suite delivered on the functional requirements which provide enabling capabilities to the DHHR employees and also enhanced services to the citizens of West Virginia. As a result of RAPIDS, DHHR realized: • More accurate application information • 24x7 application entry • Reduction in data entry for State workers • Automated reporting and application tracking • Enhanced client services • Improved access to DHHR services
Functional Requirements ✓ Child Care ✓ Integrated Eligibility	RAPIDS delivers services to the citizens of West Virginia through government programs including: TANF, Medicaid, CHIP, SNAP, Emergency Assistance and LIEAP. In addition, the system supports a variety of interfaces to multiple programs which include **Child Support**, **Child Welfare**, MMIS, ACF, SSA and FNS.

Name of Client and Project Title	State of West Virginia Department of Health and Human Resources/OMIS RAPIDS Project
Technology Components ✓ Business Rules Engine ✓ Enterprise Service Bus ✓ Master Data Management ✓ Data Warehousing	RAPIDS is supported by a **Master Data Management** (MDM) solution which allows information sharing across DHHR applications using common identifiers for individuals, employers, health plans and health providers. The unique identifiers provide a multi-dimensional cross-reference that captures individual identifiers within system and across agencies and links these identifiers to the "golden record" stored in the Master Data Hub. The centralized storage and analysis of this information reduces error rates and supports fraud detection. The solution also reduces paperwork as coordination between bureaus is further automated. As part of this engagement, Deloitte also assisted in the development of the RAFT **Data Warehouse.** The warehouse allows RAPIDS business staffers to have direct access to the Benefits Eligibility information without having to deal with the underlying database complexity. The warehouse provides a variety of benefits to DHHR employees: • Speeds up the reporting process • Improves quality and frees up technical resources • Data elements are provided in business terms • A data dictionary has been established • Transactional complexity has been removed • Users are more familiar with data terminology RAFT utilizes an Oracle database where the data is refreshed every month. Data is extracted from the legacy mainframe through COBOL programs and loaded in the RAFT database using an ETL tool, Oracle Warehouse Builder. RAFT uses the business intelligence reporting software to generate complex canned reports, cubes to perform business analysis and report studio to create Adhoc reports. An **ESB** solution was leveraged, providing DHHR with a scalable and flexible application framework that can be extended to accommodate new programs, new business rules and changing business processes. This solution allows inROADS and eRAPIDS to interact via ESB, and loose coupling between the interacting systems. Communication via ESB promotes reusability of existing services and faster adaptation to new requirements. Our team also collaborated with DHHR to develop the Common Eligibility Determination **Business Rules Engine** solution providing a COTS based business rules engine to address the new Modified Adjusted Gross Income (MAGI) Medicaid rules.
Additional Technology Components	DB2, SQL for DB2, Oracle 10g, Oracle 11g, Cognos PowerPlay, Windows XP Professional, Z8902, Z/OS v1.11, COBOL for Z/OS, TELON; CICS, NET express, Mainframe Express, Microsoft Visual Studio 6.0, Macromedia Dreamweaver, J2EE 1.4, Mainframe Express, TELON, Control-M, Enterprise Architect(EA), Subversion, Cast Bobby World Wide, IIS, Com Objects, Enterprise Architect(EA),SQL Explorer, Weblogic, Subversion, Eclipse
System Performance	The RAPIDS system measures performance through the **Boomerang** tool. Key metrics measured include average page response time (by county) and average render time among state employees.
Project Duration	Start Date Year: 1994 End Date Year: 2014

Vendor Reference Forms

Following are the three completed Vendor Reference Forms as required in Section 3.1.2 Vendor Capacity, Qualification, References, and experience of the RFP. Original hardcopy version of these reference forms are available upon request.

Table 42: Vendor Reference Form

	Vendor Reference Response
Name of Reference	Laurie Snow
Name of Referencing Organization	New Hampshire Department of Health and Human Services
Address of Referencing Organization	7 Eagle Square, Concord NH, 03301
Telephone Number of Referencing Organization	603-227-0326
E-mail of Referencing Organization	Laurie.Snow@dhhs.nh.gov
Title of Project	New HEIGHTS Enterprise Eligibility and Enrollment
Description of Project	DHHS utilizes New HEIGHTS to manage eligibility, enrollment and service delivery for Medicaid, Medicare Savings Program, Supplemental Nutrition Assistance Program (SNAP) aka Food Stamps, Temporary Assistance for Needy Families (TANF), Child Care Scholarships and State Supplemental Programs. As the enterprise platform for DHHS, New HEIGHTS includes the MCI/MDM system for cross silo integration, the ESB platform for data exchanges, a shared service document capture and content management solution and a SOA-based architecture that has enabled DHHS to integrate multiple programs using shared components and capabilities. New HEIGHTS also encompasses the "Gateway" to services which is DHHSs Java-based responsive design web application supporting mobile, tablet and desktop platforms. The Gateway provides access to all of DHHS services across the full spectrum of offerings and a centralized forms management solution. New HEIGHTS directly serves approximately 275,000 clients annually (~1-5 citizens). Through NH EASY Gateway to Services, clients are able to explore program offerings, screen for potential eligibility, apply for services, complete financial and medical verifications, send and receive correspondence and manage their case. New HEIGHTS also facilitates scheduling of appointments, notifications, outstanding tasks, redeterminations and other similar client functions offering web, paper, phone, text, and e-mail communication channels. New HEIGHTS also offers a sophisticated document capture and workflow management system orchestrating the processing of over 2M documents annually. New HEIGHTS is utilized by 1,100+ DHHS workers who approve, deny and manage benefits for citizens providing client services and complying with State and Federal laws, mandates and policy. New HEIGHTS and NH EASY is also used by over 240 community partners including counties, towns, hospitals, nursing homes, home and community based care providers, non-profits, case management agencies, authorized representatives and other stakeholders to provide collaborative health and human services.
Start Date of Project	2005
End Date of Project	2018
What was your experience with this vendor?	Deloitte goes above and beyond focusing on our success at DHHS. They consistently exceed expectations meeting operational mandates, continually improving operational efficiency, rising to the challenge of policy, procedures, legislative and strategic needs. DHHS utilizes a number of vendors for various application support services and Deloitte stands out as an over achiever. A key differentiator for Deloitte is their disciplined project management approach and emphasis on delivering DHHSs vision for optimized operations.
Were there delays in the project? What caused the delays?	Deloitte has consistently delivered on schedule coming through to meet State and Federal mandates. When challenges arise that place schedule at risk Deloitte doubles down with creativity and commitment. If the delays are a result of pending or evolving policy decisions they consistently demonstrate flexibility and a firm resolve to bring the work in on schedule, there is no "us or them", we operate as one team to deliver on behalf of DHHS.

	Vendor Reference Response
Describe a situation where the vendor disappointed you, and how they responded?	As with any highly complex project we regularly face challenges. Overall these challenges are addressed prospectively. However, when we do experience a temporary setback, Deloitte steps up with the resources, creativity and commitment required to make it right. They don't shy away from recognizing, owning and solving problems. We also have a weekly executive meeting 1:1 between the State and Deloitte PM's dedicated to identifying and addressing risks and concerns on any and all fronts. We have a monthly retrospective with the full complement of leaders on the State and Deloitte teams to evaluate opportunities for improvement. Deloitte takes quality and ownership of continual improvement very seriously. Their character in challenging times is why disappointments are few and far between and are quickly remedied when they do surface.
What are some things you wish the vendor would do differently?	Deloitte consistently exceeds expectations. As addressed above, when something needs to be done differently they collaborate with us and make necessary course corrections like a true partner. Another key reason we don't view Deloitte as needing to make change is that both the State and Deloitte teams recognize we are better together. As a result, there is constant exchange of ideas and expertise and we regularly find the "third way" which incorporates the sum of our capabilities. Another unique differentiator is the absence of scope conflicts. To the contrary Deloitte regularly pushes the envelope to offer value add by collaborating with us to find the most productive and creative way forward for the benefit of the business within budget.
Reference Signature	 Laurie Snow

Table 42: Vendor Reference Form

	Vendor Reference Response
Name of Reference	James Weaver, Chief Technology Officer
Name of Referencing Organization	Commonwealth of Pennsylvania, Office of Administration
Address of Referencing Organization	1 Technology Park, DGS Annex Complex Harrisburg, PA 17110
Telephone Number of Referencing Organization	717-772-8013
E-mail of Referencing Organization	jamweaver@pa.gov
Title of Project	DHS Suite of systems: Client Information System (CIS), Pennsylvania Child Support Enforcement System (PACSES), Child Welfare Information Solution (CWIS), and Pennsylvania's Enterprise to Link Information for Children Across Networks (PELICAN)
Description of Project	DHS has partnered with Deloitte for the past 16+ years to perform enhancements and maintenance operations for the Department's Integrated Eligibility, Child Support, Child Welfare, Child Care, and Home and Community Services enterprise systems. PA DHS offers 28 key programs and supports the daily lives of more than 5 million Pennsylvanians. These programs include critical DHS programs, similar to DHHR including Medical Assistance, CHIP, LTC, SNAP, Cash Assistance, and LIHEAP Assistance, Child Care, Child Welfare, Child Support, Home and Community Based Services, and other aging and adult services. All these programs are processed via IT applications and systems developed and maintained by Deloitte for the PA DHS and with the mission of supporting the department's critical objectives to deliver services to its constituents. These applications support PA DHS by: • Serving over 5 million Pennsylvanians • Processing over $1,000,000,000 of benefits per month • Supporting more than 4,000 providers and 25,000 workers statewide Deloitte successfully maintains award winning and nationally recognized cross-HHS applications and systems in the areas of Integrated Eligibility, Child Care, Child Welfare, and Child Support Enforcement across a large number of users and agencies for the Commonwealth of Pennsylvania. These systems support more than 5 million of the Commonwealth's most vulnerable and needy people. These systems are the core to determining and delivering the Department's key benefits and services. The state's Integrated Eligibility system consists of a web-based self-service portal application (COMPASS) that extends the accessibility of the social service application process to citizens and business partners and a Case Management system (CIS), consisting of open system and mainframe components, to determine and process Cash Assistance, Medical Assistance, Long Term Care, SNAP, and LIHEAP benefits. Commonwealth of Pennsylvania Access to Social Service (COMPASS) supports transactions of over 40,000 applications, 7,000 renewals, and 1,200 account changes monthly. Client Information System (CIS) and supports transactions averaging 5.1 million mainframe transactions per day, 149,000 applications for services and 75,000 renewals per month

The state's Child Care system - **Pennsylvania Enterprise to Link Information for Children Across Networks (PELICAN)** application suite supports the Commonwealth's early childhood programs by maintaining and processing information necessary to allow workers to provide needed services and monitor client status. Components of the PELICAN suite include the Certification & Licensing System (CLS), Child Care Works (CCW), Early Learning Network (ELN), Pre-Kindergarten Counts (PKC), and Provider Self-Service (PSS). This application suite supports approximately 961,000 transactions and generate an average of 7,884 reports per month.

The State's Child Support Enforcement system - **Pennsylvania Child Support Enforcement System (PACSES)** includes extensive data integration with other systems including the Federal Office of Child Support Enforcement (OCSE) Federal Case Registry (FCR), IRS, Multistate Financial Institution Data Match (MSFIDM), the Pennsylvania Department of Transportation (PennDOT), the Pennsylvania Justice Network (JNET), and several others. The mainframe and open systems component of the system input and track cases, manage the financial processes related to the cases, and locate delinquent members by supporting approximately 3.4 million transactions per day.

The state's Child Welfare system – **Child Welfare Information Solution (CWIS)** consolidates current, disparate state-level systems and provides up-to-date dashboards and the ability to report on abuse and neglect cases across the Commonwealth. To improve efficiency of county administered child welfare programs and increase the visibility of information, the application processes approximately 15,760 transactions per day.

The state's Home and Community Services Information solution application suite supports individuals enrolled in state and federally funded Home and Community Based Service (HCBS) programs and also allows the state to record, review, investigate, and analyze incidents which could put the health and welfare of a program participant at risk. Components of the HCSIS suite include **Home and Community Services Information system (HCSIS)**, Enterprise Incident Management (EIM) and Public Welfare Incident Management (PWIM) – processing an average of 1,300 Individual Service Plans and 300 Incidents on a monthly basis

The state's Children's Health Insurance Program supported by **CHIP Application Processing System (CAPS)** - a dedicated case management system targeted towards processing health insurance for children and supports over 200,000 CHIP recipients.

Deloitte delivers a variety of services for the Department of Human Services:

Application Maintenance and Operations (M&O) - Deloitte uses a mature operational approach that is flexible yet tailored to the respective system maintenance and operational needs. Our approach supports an integrated IT shared services enterprise model which drives continuous improvement to enhance quality, lowers costs, and meets the unique needs of each program.

Application Enhancements and Development - Majority of all the application enhancements prioritized by PA DHS focus on Commonwealth's technology goals of improving worker usability, programmatic enhancements, system accuracy, and data quality.

Enterprise Data Warehouse (EDW) / BI / Reporting - The overall solution for Pennsylvania also includes a cross-program Oracle Data Warehouse, Informatica for ETL, Cognos for Reports, Corticon BRE, BizTalk, webMethods using a custom ESB framework, and a custom developed MDM. The Enterprise Data Warehouse (EDW) spans multiple systems to provide a consolidated view of enterprise data, optimized reporting and enhanced data analysis.

Resources Provisioning - All Deloitte PA DHS projects operate under a shared service model to provide strategic, tactical, and operational support that enables

	migration to next generation programs and technologies without risking mission critical PA DHS application operations and technical support. The team includes a unique blend of staff with in-depth PA DHS application and IT experience together with other experts from across the firm that bring expertise in ITIL, CMMI, enterprise architecture, SOA, security, cloud computing and other forward-thinking IT frameworks and technology trends ***IT Operations Support*** - Deloitte's Operations Support team provides a demonstrated approach to deployment and maintenance of ongoing operations as well as support for new IT initiatives in complex production environments. PA DHS' IT environments include a heterogeneous set of six applications with 28 disparate ancillary systems. Additionally, PA DHS manages over 28 enterprise services, open system and legacy technologies, batch and online processing, and COTS and custom systems using more than 50 different technology products. Our approach focuses on the different needs to support these environments. Deloitte has spent over 10 years working with you to assemble the right mix of resources that properly align with your current and future vision. ***Cyber Security and Privacy*** - Deloitte's approach and processes for Security Management enable our team to integrate application, data, infrastructure, and network security controls throughout the SDM life cycle. Our approach places PA DHS as one of the leading agencies in the Commonwealth. The Deloitte team leverages the PA DHS Risk Framework to work with the project teams to identify potential security and privacy risks for new initiatives and design controls to mitigate them.
Start Date of Project	2000
End Date of Project	2020
What was your experience with this vendor?	Within DHS, Deloitte is not simply seen as our vendor, they are seen as our partners. Deloitte has consistently provided unwavering support of our department, our staff, and our systems and routinely go above and beyond to deliver. The Deloitte team provides support and guidance not only with our systems and technology, but also focus on solving our challenges associated with operational support and implementation of policy. In addition to high-quality delivery and support, Deloitte also brings strong project management discipline to our large enterprise organization.
Were there delays in the project? What caused the delays?	Deloitte has routinely delivered challenging, large-scale system implementations under tight timeframes meeting both Federal and State requirements. Deloitte focuses on making DHS successful and provides innovative, yet achievable options for meeting our goals and objectives. When schedules and timelines are tight and challenging, we work collaboratively to identify ways to get the work done.
Describe a situation where the vendor disappointed you, and how they responded?	Within DHS, we deal with very complex technology system implementations and Deloitte successfully delivers for the department repeatedly. We are truly partners in the work that we do and we are successful together. When we do have temporary setbacks on a particular project, we work together to course correct and get back on track. Deloitte quickly reacts to make the situation right and owns up to their responsibilities in the occasional event when issues arise, which are not very common. We trust that Deloitte has our best interests in mind and they have demonstrated their commitment and partnership to DHS time and time again.
What are some things you wish the vendor would do differently?	As mentioned previously, Deloitte is our partner and an extension of my team. They consistently deliver highly complex, top priority Federal and State initiatives. In addition, Deloitte provides innovative ideas and solutions to meet the evolving world of integrated eligibility service delivery. We don't view Deloitte as a vendor that needs to do things differently. We view them as a partner who works alongside of us to do the right thing for the constituents of the Commonwealth of Pennsylvania.
Reference Signature	James Weaver

Table 42: Vendor Reference Form

	Vendor Reference Response
Name of Reference	Dottie Wells, Director Division of Enterprise Systems
Name of Referencing Organization	Commonwealth of Virginia Department of Social Services
Address of Referencing Organization	801 E Main St, Richmond, VA 23219
Telephone Number of Referencing Organization	(804) 726-7639
E-mail of Referencing Organization	dottie.wells@dss.virginia.gov
Title of Project	Eligibility Systems Modernization
Description of Project	Virginia is implementing an integrated eligibility system called the Virginia Case Management System (VaCMS) in an effort to modernize the technology and processes that the Virginia Department of Social Services uses for benefits program delivery and management. The VaCMS determines eligibility and maintains cases for the full range of social services eligibility programs -- TANF, TANF VIEW, SNAP, SNAPET, Energy Assistance, plus Medical Assistance (F&C, MAGI, Aged-Blind-Disabled and LTC). The functionality of the current VaCMS project was built in two phases over a 3-1/2 year period, and uses as its foundation a solution that Virginia procured through two prior projects also completed by Deloitte: the Virginia child care eligibility determination system (completed in 2011) and a citizen online portal (completed in 2012). The first phase of our current project implemented changes to the Medicaid program functionality mandated by ACA and was finished in 2015. The project's second phase is implementing the remaining benefit programs starting with a pilot of SNAP in April 2016 and a pilot for TANF in August of 2016. In October 2016, the SNAP and TANF intake functions were released statewide along with energy assistance, fraud, and appeals. Statewide data conversion of ongoing cases is planned for early 2017. Deloitte facilitated design sessions, developed and tested the solution and lead the training efforts, as well as supported maintenance and operations activities. The VaCMS has transformed the way Virginia agencies process and maintain caseloads. By the first quarter of 2017, workers will process and manage their benefit programs caseloads end-to-end in one system. VaCMS is used daily by 3,000+ workers in 120 local departments of social services across the Commonwealth.
Start Date of Project	January 2013
End Date of Project	December 2017
What was your experience with this vendor?	Virginia is satisfied with Deloitte's ability to perform. We have developed a collaborative partnership with Deloitte over the years. The partnership began six years ago with the child care eligibility determination system and has continued through the expansion of the system to include Medicaid and other benefit programs. This partnership has allowed us to work together to achieve successful implementation for this project that has been our Commissioner's stated #1 priority. Deloitte brings a strong balance of management, technology, training, and implementation resources with business and subject matter knowledge to the project. Their resources bring a deep understanding of the technologies being implemented. We view Deloitte as a partner working together to meet a common goal of improving how we deliver services to the Citizens of Virginia.
Were there delays in the project? What caused the delays?	As with any large technology project, we have faced challenges. Virginia has adjusted its implementation schedule several times over the past 3 years. Some of the adjustments were because of functionality defects that needed to be addressed, but most of them have been caused by shifting state and federal priorities. Because of our

	Vendor Reference Response
	strong partnership with Deloitte, we work hard to adjust the plans in a way that minimizes negative impacts and continues the momentum forward. Through regular status reporting and frequent touch points, we are able to work together to mitigate risks, resolve issues, and take advantage of opportunities.
Describe a situation where the vendor disappointed you, and how they responded?	As with any large project, it has taken time for both state staff and Deloitte staff to "learn" each other. We chose to work with Deloitte because of their successful past performance with us, and because the staffing has been mostly consistent throughout the project. Any disappointments we have had have been primarily because of a miscommunication between state and Deloitte staff on requirements functionality. I believe that Deloitte responds to challenges with a spirit of partnership and demonstrates flexibility and commitment as we continue towards our goal of completing the project.
What are some things you wish the vendor would do differently?	Deloitte is a flexible partner who collaborates with us to work through our challenges and deliver a solution that fits our unique business needs. One thing I wish they would do differently is regularly facilitate information sharing of their projects in other states. Other than the ISM conference, there appears to be no venue that Deloitte sponsors to share innovative ideas, successes and challenges. Because we are all very focused on our own projects, states do not often have an opportunity to independently research other states' efforts.
Reference Signature	

Dottie Wells

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Project Staffing

Section 3.2

Attachment A, Section 3.2 Project Staffing

Deloitte has assembled a team of professionals that is uniquely suited to deliver on the wide breadth and depth of scope required for West Virginia's Integrated Eligibility Solution (WV IES) Project. The WV IES Project requires a team with business expertise across all of the Health and Human Services (HHS) functional areas, a team with experience modernizing legacy HHS systems, and a vendor and partners with deep expertise in delivering a modern, modular system with deep integration, reusability, and efficiencies. It also requires a vendor and partners with skills, experience, and future thinking orientation. The team must have unparalleled experience in collaborating and delivering a futuristic solution that requires industry-leading methodologies, thought leadership, and positions West Virginia as a leader among its peers. The Deloitte Team is the only team that can deliver on all of these requirements and is fully committed to West Virginia's Human Services Platform (WV HSP) Solution.

Our Team – Delivering a Team That Exceeds RFP Requirements. Our team, focused on your future

- Deloitte is the national leader in functional expertise required for the WV HSP
- Deloitte's Application Modernization offering gives WV the ability to modernize its legacy systems to support evolving business demands, optimize IT investments and create the foundation for future innovation
- Deloitte has staff who have vast experience with the West Virginia landscape along with national experience to successfully implement the WV HSP
- Deloitte has staff skilled in leading methodologies and leading practices supported by Deloitte's national, industry leading, HHS practice

The Deloitte Team delivers individuals with deep experience in Integrated Eligibility (IE) – Medicaid (including MAGI expertise) and Family Assistance Programs, Child Care, Child Welfare, Child Support Enforcement and the Children's Health Insurance Program (CHIP). Our professionals have experience implementing technology solutions for these programs across 41 states and the District of Columbia.

The Deloitte Team draws on experience from across our partners so that every core module and program case management module has the highest-qualified individuals to deliver. The team has real deployment experience in business automation and efficiencies in these benefit programs and can deliver the highest level of automation required by the State. These individuals are highly experienced in understanding and exceeding federal compliance and standards such as the CMS 7 standards and conditions. They are also well versed on ACA legislative mandates.

Figure 3.2-1. Deloitte Team Delivers Unmatched HHS Experience to DHHR.

In addition, other key and support staff have deep experience in designing solutions with data warehousing, enterprise service bus, business rules engines, and master data management components required by the State. The Security and Cyber team resources are highly skilled and bring each of the requisite certifications and experience required by the State. The proposed Deloitte Team professionals are skilled in the methodologies used throughout the configuration, integration, testing, and deployment phases of the project. The team has been carefully selected to include experienced resources for data conversion, performance testing, training and other specialized tasks to support the project. The Deloitte Team also understands the complexity and criticality of estimating the level of effort and staffing correctly for the success of the WV HSP and has certifications in program management excellence such as PMP and ITIL.

Our acquisition of innoWake (described in more detail in Section 3.1), gives us an additional pool of experts with a highly technical, specialized skill set, and experience in automated code modernization. innoWake is a company with over fifteen years of experience modernizing legacy software code into modern language like Java and .Net. This acquisition has strengthened our Application Modernization service offering and will provide the State with a proven, repeatable, low-risk process for modernizing your legacy systems.

Finally, our previous experience with West Virginia's existing systems puts Deloitte in a position to truly understand the existing systems for the most efficient and thorough modernization experience. Our proposed key, support, and other staff bring back individuals that have over 20 collective years of experience in West Virginia working on the very legacy systems that our proposed solution will replace. These individuals will provide valuable information to the team, they are excited about the possibility for serving the citizens of West Virginia again, and they have a personal commitment to the community.

Only Deloitte is able to assemble a team that meets every aspect of the experience and skills required to deliver the vast requirements and scope of the WV HSP. We are uniquely able to do this because of national leading expertise and experience in HHS and our proven record of accomplishment of modernizing and delivering modern and modular HHS solutions.

Deloitte Team Delivers Experience Across Each of the DHHR Project Goals

Deloitte has committed to providing a team that has the skills and experience required to deliver on the State's stated goals of Shared Use, Modernization, Common Governance Structure, and Functional Requirements. Our key and supporting staff have been chosen specifically to align to the four DHHR project goals of the WV IES Project. The table below highlights the alignment of our key and supporting staff to each of the WV IES Project goals.

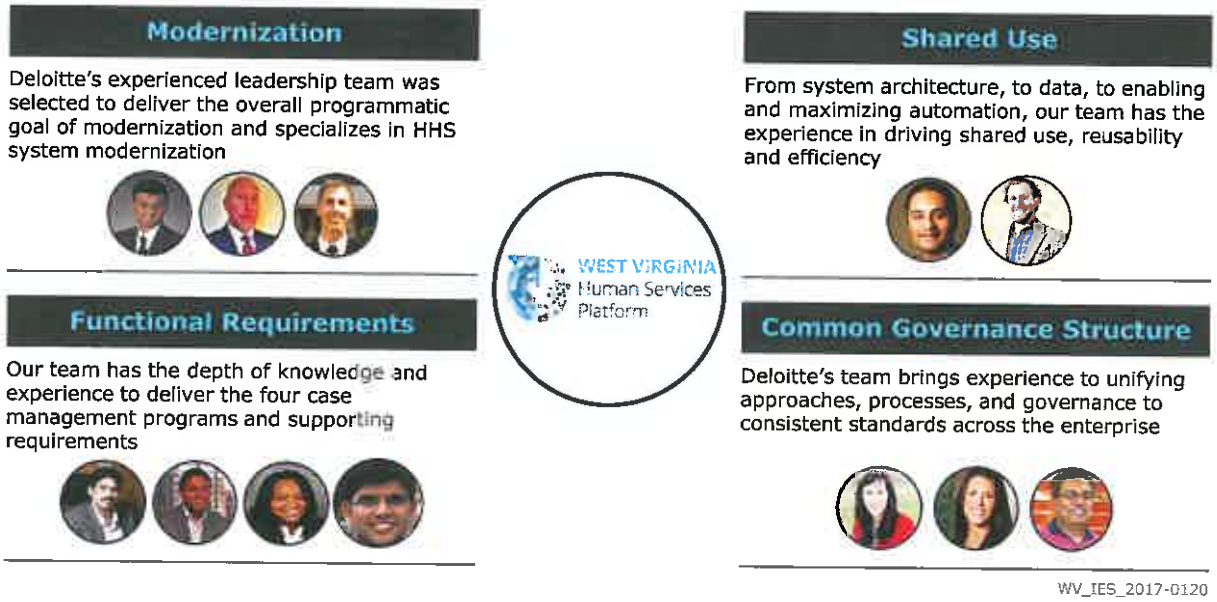


Figure 3.2-2. Deloitte Team Delivers on the Project Goals.

The Deloitte Team Brings Experience in RFP Services

The breadth of services required for the WV IES Project crosses many functions and teams. Deloitte has assembled a team to provide experience and competency in each of these distinct services. Our team not only has the experience in specific RFP services, but also has the vision to unify these services to deliver a single unified platform for West Virginia's future. Our team brings a long history of success in these functions from similar experiences across the nation and working together they will provide the consistency and leadership needed to meet the challenges of scope, quality and timeline. The table below highlights the alignment of our key and supporting staff across the key RFP services required to deliver the WV HSP solution.

RFP Service	Deloitte Team Delivers Experience
Program Management	**Deloitte Team Brings Project Management Experience** **Lou Polzella** – 25 years of public sector experience delivering and managing large-scale system integration project including staff, business activities, and daily operations. Due to his experience, Lou has become a leading expert in the realm of HHS related projects. **Jason Reese** – A certified PMP, brings 10 years of program management in state public sector information systems consulting experience. He has delivered and managed large-scale system integration projects (including the State of Montana, CHIMES Integrated Eligibility System, Green Screen Modernization of Employer Enrollment, and New Hampshire Department of HHS).
Programmatic Requirements	**Deloitte Team Brings Programmatic Experience** **Vinayaga Prasad** - Vinny has over 21 years of experience working on large-scale system integration projects of which 19 of them were spent working closely with the state of West Virginia Department of Health and Human Resources. He is experienced in each of the configuration activities for development, modification, and enhancement of IE solutions. **Beryl Washington** - Brings 14 years of experience in requirements gathering, design, development, testing, implementation, and maintenance of large-scale HHS applications. Her subject matter expertise extends to Child Welfare, Adult Protective Services, Juvenile Justice, Integrated Eligibility, and Medicaid. She has worked with state and local governments in Texas, Florida, Maine, Alabama, Maryland, Pennsylvania, and the District of Columbia. **Rishabh Jain** – 8 years of experience, with a focus on large-scale public sector HHS system integrations. Rishabh is a subject matter expert in the Child Care and early learning and HHS practice. **Sadruddin Ali** – Sadruddin is a PMP certified professional with over 15 years of technology consulting experience in managing large and complex business transformation for HHS projects in Ohio, Wisconsin, Massachusetts, and other states.

RFP Service	Deloitte Team Delivers Experience
Maintenance and Operations	**Deloitte Team Brings Maintenance & Operations Experience** **Megan Connors** – 15 years of experience, including testing, release and project management on large-scale public sector projects, including Integrated Eligibility systems in Kentucky, Texas and Wisconsin. Her HHS experience includes programs such as Medicaid, SNAP, TANF, and Child Support. **Omer Enaam** – Combined 9 years of health care and state public sector experience delivering and managing large-scale systems integration projects. His HHS experiences include interfaces, data architecture and data architecture for the state of Tennessee Eligibility Determination Systems. **Nagarjuna Nagisetty (Nag)** - Over 16 years of experience, with extensive work in public sector (state) domain. Nag has been intimately involved with the inception, design, development, and Implementation phases of large-scale integrated eligibility systems, including a deep understanding of WV functionality. Nag is a technically competent professional and a subject matter expert with command in welfare program agencies.
DDI	**Deloitte Team Brings DDI Experience** **Arun Natesan** – Arun has over 27 years of information systems analysis, design, review, implementation and maintenance experience. He has 15 years of experience managing HHS accounts (including Michigan, Kentucky, Pennsylvania, District of Columbia, and Alabama) through development, systems operations, and maintenance phases. **Hannah Haas** – Hannah brings over 7 years of experience in each phase of SDLC from business analysis to requirements gathering, system design, implementation, maintenance, support and testing. Hannah has 6 years of experience with the state of West Virginia Department of Health and Human Resources **Jackie Steiner** –Jackie has over 7 years of experience, with a focus on large-scale public sector HHS system integrations and focuses on the key DDI activities such as requirements and deliverable management. Jackie has 5 years of experience with the state of West Virginia Department of Health and Human Resources
Web Hosted Platform	**Deloitte Team Brings Web Hosted Platform Experience** **Tom Simmons** – Tom has 30+ years of experience and is a global technology leader. His expertise is in providing strategic advisory to Public Sector and Commercial clients to establish IT strategy, governance and operating models, improve functional maturity and optimize data centers and networks. He has extensive experience in managed services with several top technology providers. **Bharath Chari** – Bharath has over 18 years in the IT industry catering to the public sector as a security professional with multiple certifications. As a chief security officer and advisor to States such as Florida and Indiana he has deep experience in securing enterprise hosted solutions.

Figure 3.2-3. Deloitte Team brings experience in RFP services.

Deloitte Delivers Leadership Commitment to West Virginia

Deloitte supports our team with senior advisors that provide guidance and overall objectives. These senior advisors are leaders in their respective area and bring a wealth of insight and innovation to the overall delivery of the WV HSP system.

Advisor	Leadership Commitment
Quality Assurance Advisor	**Tim Perkins** – Tim leads our consulting practice for the State of West Virginia. He brings more than 28 years of government consulting leadership to this role, working with both state and local clients. He has extensive experience with statewide implementations of custom built systems and has led multidisciplinary teams in each phase of systems integration and development.
Infrastructure Hosting Advisor	**Tom Simmons** – Tom has 30+ years of experience and is a global technology leader. In addition to his experience in optimizing data centers and network, Tom has experience in Global technology strategy, Global IT transformation, Governance in distributed business operations, Shared services/Outsourced services and P&L management. Tom also served as Deloitte's Global IT CTO prior to his Consulting assignment.

Advisor	Leadership Commitment
Integrated Eligibility Advisor	**Kenny Smith** – Kenny is the national leader for Integrated Eligibility practice. Kenny has 15 years of DDI experience in large-scale programmatic transformation implementing IES solutions spanning 5 States. He is very excited at the opportunity to bring his IES experience to WV as a proud alumnus of West Virginia University, and having previously served DHHR on the RAPIDS project nearly a decade ago.

Figure 3.2-4. Deloitte Delivers Leadership Commitment to West Virginia.

WV_IES_2017-0008

Figure 3.2-5. Deloitte Team Brings Industry Certifications.

3.2.1 Key Staff

The Deloitte team is proud to present in detail the key staff of the WV IES Project team as requested in Section 3.2.1 of the RFP. These key positions have been highlighted in the section above as meeting the goals and services required in the RFP. In the table below, we highlight each role and what makes that individual uniquely qualified to exceed the experience and meet the responsibilities set forth in the RFP Appendix IV: Staff Qualification, Experience, and Responsibilities. The team of key staff are 100% dedicated to the WV IES Project and will work from the Charleston, WV location.

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES Account Manager **Arun Natesan**	• 15+ years of experience managing HHS IT projects of similar size, scope and technology (including Michigan, Kentucky, Pennsylvania, District of Columbia, and Alabama) • 7 years of experience managing and leading Child Care and Early Learning Systems accounts (including Commonwealth of Pennsylvania) through development, systems operations, and maintenance phases • 7 years of experience managing and leading SACWIS accounts (including District of Columbia FACES.NET and Alabama SACWIS) through development, systems operations, and maintenance phases • 16+ years of experience working with HIPAA Privacy and Security Rules in WV and AL Retirement, Kentucky IE, MA Unemployment, California AOC, Pennsylvania's Child Care project, District of Columbia, New York Department of Tax and Revenue, Michigan Child Support, and at Kaiser Permanente **Meets RFP Responsibilities** Arun has over 27 years of information systems analysis, design, review, implementation and maintenance experience. This experience has been applied to several functional areas and case management systems – Retirement systems, Court Case Management systems, Child Care Systems, Early learning Systems, Integrated Eligibility Systems, Child Welfare (SACWIS) Systems, and Child Support Systems. Arun has been instrumental in designing and developing large complex technology and business transformation projects. Arun led Deloitte Consulting's Child Services practice nationally.

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES Deputy Account Manager/Operations Manager **Louis Polzella**	• 25 years of experience at the State of Connecticut Department of Social Services including 15 years as the Chief Information Officer in the Information technology Services (ITS) Division • Served on the American Public Human Services Association (APHSA) board, the IT Solutions Management for Human Services (ISM) board (including one two-year term as President from 2011 through 2012), and on the APHSA Affiliate President's Council • Subject Matter Expert on the CT Integrated Eligibility Replacement Project, also known as ImpaCT **Meets RFP Responsibilities** Lou directed an organization of approximately 100 state staff and 100 plus contractors supporting an agency of approximately 4000 staff. The ITS division was responsible for the maintenance and operations as well as new development efforts for each of the IT systems administering Medicaid, SNAP, TANF, General Assistance, Long Term Care, QMB, and Child Support Enforcement.
WV IES Project Manager **Jason Reese**	• 3 years of experience as the Project Manager for the State of Montana CHIMES Integrated Eligibility System after serving 3 years as the Application manager • 5 years of experience as the Eligibility Determination Benefit Calculation (EDBC) Track lead for the State of Michigan Bridges Integrated Eligibility System • Certified Project Management Professional (PMP) **Meets RFP Responsibilities** A certified Project Management Professional, Jason has over 10 years of experience in managing and delivering large and complex projects through the full system development life cycle. He has built deep expertise in Development, Data Conversion, Training, Change Management and Implementation aspects of delivery. Currently, he is the project manager for State of Montana Integrated Eligibility project.
WV IES Integrated Eligibility Line of Business Manager **Vinayaga Prasad**	• 19 years of experience with WV RAPIDS project at various levels and capacity ranging from Application Manager to Programmer Analyst • 1 year as the Project Manager of Anthem, Green Screen Modernization of Employer Enrollment **Meets RFP Responsibilities** Vinny has over 21 years of experience in in Public Sector program management and information technology (IT) projects. Vinny brings deep expertise and knowledge of HHS programs. Vinny has 19 years' experience working in the public sector on large-scale systems development projects to automate HHS programs such as Medicaid, SNAP (Food Stamps), TANF, Medicare Premium Assistance, and Special programs such as School Clothing Allowance and Low Income Energy Assistance Program.
WV IES Child Support Enforcement Line Of Business Manager **Sadruddin Ali**	• 15 years of experience in in project management, technology transformation, business process reengineering, technology strategy, and data management for large-scale global implementation in Public Sector and Financial industries • Experience in HHS include 46 months of managing and leading cross-functional teams for the Department of Children and Family and Child Support Enforcement in Ohio, Massachusetts Pennsylvania and Wisconsin. • Certified Project Management Professional (PMP) **Meets RFP Responsibilities** Sadruddin brings more than over 15 years' experience in project management, technology transformation, business process reengineering, technology strategy, and data management for large-scale global implementation in Public Sector and Financial industries. He also has proficiency in leading custom application development projects in the Child Support Enforcement (State of Wisconsin), HHS (including Disaster Recovery (GOHSEP, Louisiana), HIX (MA), HCSIS (CoPA), SACWIS (DC, TN, PA-Allegheny, NJ), Transportation (PA), Taxation (OH).

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES Line of Business Child Care Manager **Rishabh Jain**	• 8 years of experience with a focus on large-scale HHS system integrations. Rishabh is a subject matter expert in Child Care and early learning in our HHS practice. His years of experience have given him a strong background in the skills required such as quality assurance/control, procedures, documentation and reporting • 7 years in various roles including Application Manager for the Child Care application on the Virginia Integrated Eligibility System project **Meets RFP Responsibilities** Rishabh is currently the application manager for the Child Care application for the Commonwealth of Virginia and has worked as the Subject Matter Expert for Child Care for other projects. He has deep functional and technical knowledge of Child Care systems and is well-versed with the dynamics of the program. His experience spans the entire system development life cycle from initial scoping to development and post-deployment support. He has spent last five years focused on working directly with users in both business and IT organizations to define needs and project outputs
WV IES Line of Business Child Welfare Manager **Beryl Washington**	• 14 years of experience delivering and managing large-scale system integration projects in HHS • 3 years as a Project Manager for the District of Columbia HHS - Child Welfare Information System project • Certified Project Management Professional (PMP) **Meets RFP Responsibilities** Beryl has fourteen years of consulting experience in IT strategy, Information Technology, Reporting, and Project Management. Beryl has led onsite and remote teams focused on the requirements gathering, design, development, testing, implementation, and maintenance of large-scale applications. Beryl has widespread public sector experience in the HHS sector. Her subject matter expertise extends to Child Welfare, Adult Protective Services, Juvenile Justice, Integrated Eligibility, and Medicaid. She has worked with state and local governments in Texas, Florida, Maine, Alabama, Maryland, Pennsylvania, and the District of Columbia. Focused on Child Welfare, she has extensive knowledge of SACWIS regulations, practice process reengineering, application development, practice model analytics, and various state and federal reporting requirements.
WV IES Test Manager **Megan Connors**	• 15 years of experience including testing, release and project management on large-scale public sector Integrated Eligibility Systems • While working on the Wisconsin Integrated Eligibility System Client Assistance for Re-employment and Economic System (CARES) project, managed the test team through the testing phases of the ACCESS Apply for Benefits application release • Led delivery of SNAP/TANF Assessment to help the Kentucky Cabinet of Health and Family Services (CHFS) determine the impact of incorporating the SNAP and TANF programs into their Integrated Eligibility and Health Benefit Exchange system **Meets RFP Responsibilities** Megan has extensive experience focusing on system modernization and, most recently, in Deloitte's Application Modernization approach to systems development. Megan's experience spans the Transportation sector in the Department of Motor Vehicle (DMV) space as well as public health and human services including programs such as Medicaid, SNAP, TANF, and Child Support. Megan has developed strong communication, organization, and project management skills by participating in each phase of the system development life cycle including requirements, design, development, testing, implementation, and maintenance.

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES System Manager **Omer Enaam**	• 9 years of health care and state public sector experience delivering and managing large-scale systems integration projects including Tennessee's Eligibility Determination System Modernization and Oregon Health Authority and Human Services • Served as Portfolio and Delivery Manager for Anthem's Modernization of Data Integration and Healthcare Analytics. Managed a portfolio of over 50 projects across Provider, Consumer Products, Regulatory Reporting, Financials, Medical Management and others domains to help the client meet various regulatory requirements, achieve operational efficiencies and bring new products to the market • Certified Project Management professional (PMP) **Meets RFP Responsibilities** Omer has over 16 years of experience in implementing and operating information systems. He has helped multiple healthcare, payer and public sector clients build and modernize systems. His experience encompasses planning and implementing large-scale, complex transaction processing systems and integrating on-premise and cloud-based assets. Also, he has worked in multi-vendor environments, led transition to new operating models and established steady state operations.
WV IES Security Manager **Bharath Chari**	• 18 years of experience in HHS • 3 years of experience as the Security Manager for the implementation of a new Integrated Eligibility System for the State of Indiana. He is responsible for confirming that the new system meets all of the security requirements of the MARS-E, IRS 1075 and NIST 800-53 • Certified Information Systems Security Professional (CISSP) • Certified Information Systems Auditor (CISA) • Certified Project Management Professional (PMP) • ITIL v2 • Lean Six Sigma Black Belt **Meets RFP Responsibilities** Bharath has over 18 years in the IT industry primarily catering to the public sector. Bharath has served the State of Florida in the HHS industry for 11 years. He has performed multiple roles including serving as the security officer for Florida's Department of Children and Families. He led the development of the IT Security Strategy for the State of Florida and also developed many of the security policies for the State.
WV IES Change Control Manager **Hannah Hass**	• 7 years of experience working on large-scale state government HHS projects. • 6 years of experience with the state of West Virginia Department of Health and Human Resources **Meets RFP Responsibilities** Hannah is a Manager who has 7 years of experience with large-scale systems integration projects. She has experience as a track lead for multiple subsystems within projects, which have given her responsibilities including management of a team of developers and working collaboratively with client personnel. Hannah demonstrates effective communication and teamwork skills that have resulted from her variety of roles on the project and direct involvement with both the client and developers.

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES Deliverables/ Requirements Manager **Jackie Steiner**	• Over 7 years of experience, with a focus on large-scale public sector HHS system integrations. During this time, she has had large amounts of exposure to leading and managing requirements, and deliverables • 5 years of experience with the state of West Virginia Department of Health and Human Resources **Meets RFP Responsibilities** Jackie is a Manager currently working in the Public Sector HHS industry. She spent 5 years working as the Track Lead for multiple subsystems on the West Virginia RAPIDS project, including leading the inROADS self-service portal track. Jackie also co-led the addition of the Affordable Care Act updates to the online Medicaid application, including Presumptive Eligibility and Electronic Notices. From February 2015 – May 2016, Jackie acted in a similar position as the Customer Portal track lead for the State of Georgia. She led the track through development and testing. In May 2016, she transitioned to the lead of the Eligibility Determination and Benefits Calculation (EDBC) team, where she is currently leading the team through UAT and into Production.

Figure 3.2-6. WV IES Project Key Staff.

The key staff of the WV IES Project team in all cases exceed the qualifications and experience required by the State. This unmatched team is 100% committed to the WV IES Project. This team not only brings leading experience, but also includes individuals with previous experience in West Virginia to provide invaluable knowledge of the current landscape to guide West Virginia to the WV HSP Solution.

3.2.2 Support Staff

The support staff for the West Virginia IES project team, as defined in Section 3.2.2 of the RFP, provide skill and expertise in specific areas throughout the life of the contact. These full-time support staff play a key role in technical activities and leadership on the team. The team of support staff are 100% dedicated to the West Virginia IES project and will work from the Charleston, WV location. In the table below, we highlight what makes each individual for each role uniquely qualified. These resources exceed the experience requirements and meet the responsibilities set forth in the RFP Appendix IV: Staff Qualification, Experience, and Responsibilities.

RFP Requirements	Exceeds WV IES Experience Requirements
WV IES Interface Manager **Derek Lindberg**	• Over 8 years of experience in large system integration projects, with a focus on HHS programs for various states: Idaho Department of health and Welfare, Delaware health and Social Services, and Texas Office of the Attorney General – Child Support • 4 years of experience as Interface and Benefits Manager for the State of Delaware Eligibility Modernization project **Meets RFP Responsibilities** Derek has over 8 years of experience in large system integration projects, with a focus on Health and Human Service programs. He has extensive experience implementing large-scale, Web-based systems development projects to automate public health and human services programs. Most recently, Derek is serving as the Project Manager for a project with the Idaho Department of Health and Welfare where the team is modernizing the core Child Support system in just 18 months via our Application Modernization service offering.
WV IES Data Architect **Mohan Krishnappa**	• Over 19 years of IT experience including a database architect lead for each life cycle of projects including database planning, design, and architect. • Certified Professional in Oracle Database 11g • Certified Professional in Oracle Exadata • Certified Professional in Oracle Database Performance Tuning • Certified Professional in Oracle Applications R12 • Oracle Exadata 11g Certified Support, Implementation Specialist **Meets RFP Responsibilities** Mohan is an Oracle technology architect in Deloitte for more than 10 years. Mohan specializes in Oracle Database infrastructure implementations and leading Oracle database and business applications administration for Public sector and Commercial industries. He is a Certified Professional in Oracle Database 11g, Oracle Exadata, Oracle Database Performance tuning and Oracle Applications R12, and an Oracle Partner Network (OPN) recognized professional. He has led DBA teams for State of GA IES and State of NM UISM implementation. He designed the Oracle infrastructure for production and disaster recovery sites, conventional hardware and converged appliances, V-Block and Oracle Exadata, including Exadata implementations.
WV IES Data Architect **Jani Dhage**	• 16 years of experience with the State of West Virginia Department of Health and Human Resources FACTS Project in various roles including Senior Application DBA • 2 years of experience with the State of West Virginia Department of Health and Human Resources RAPIDS Project as a Track Manager and Senior Application DBA • Certified Project Management Professional (PMP) • Oracle 11g Certified Professional • Oracle Certified Java 8 Associate (OCJA) • COBOL II Certification **Meets RFP Responsibilities** Jani is the Senior Oracle DBA for Anthem Healthcare for the Modernization Project. Prior to joining Anthem team, he worked for 2 years on the DHHR RAPIDS eligibility system and also worked for more than 16 years on the DHHR FACTS Child welfare solution in a variety of roles. Jani is a strong and versatile asset with a mix of functional and technical knowledge.

Figure 3.2-7. WV IES Support Staff.

The support staff of the WV IES Project team in all cases exceed the qualifications and experience required by the State. This unmatched team is 100% committed to the WV IES Project. This team not only brings leading experience, but contains individuals with previous experience in West Virginia to provide invaluable knowledge of the current landscape to guide West Virginia to the WV HSP Solution.

3.2.3 Other Staff

In addition to the key and support staff, the Deloitte team brings a team of professionals dedicated to supporting the WV HSP solution. As per the RFP, other staff are 100% dedicated to the West Virginia account for the time in which their services are required. The only exception to this are the "Project Advisors" designated in the organizational chart. The RFP requests a list of proposed roles under the category of Other Staff including the proposed number of full-time equivalents (FTE). The list of all Other Staff, role and descriptions, skill sets, and FTE are included in Section 3.2.4 Proposed Staffing Plan below in the "Roles and Responsibilities" subsection.

3.2.4 Proposed Staffing Plan

This section describes the proposed staffing plan for the Deloitte team to deliver the WV IES Project. This section contains the following items:

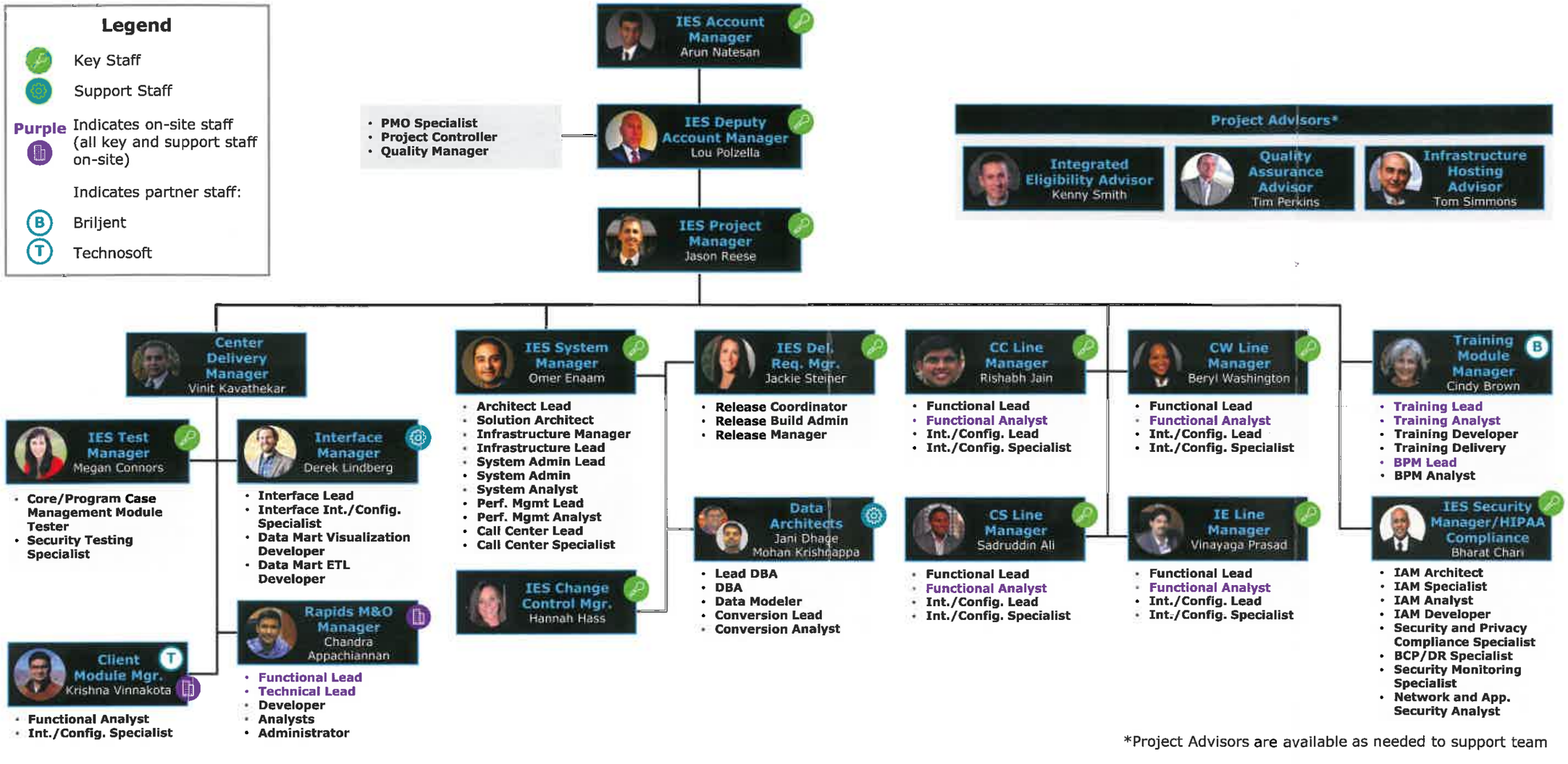
- Organizational chart for each phase of the project
- Description of the roles, responsibilities, and skill sets associated with each position on the organizational chart
- Brief summary description of the roles and responsibilities of each key staff member
- Approach to staff retention
- Approach to personnel management
- Process for transitioning essential knowledge to the Agency's technical staff

Project Organizational Chart

The WV IES Project is organized into two phases for the purposes of the organizational chart. Included on the following page is organizational chart view for the Design, Development and Implementation (DDI) phase, and organizational chart view for the Maintenance & Operations phase of the project. As required by the RFP, each organizational chart view shows all staff to be used for the phase, indicates which staff are on-site and off-site, and designates work that is done by our partners (i.e. subcontractors). Many of the roles will require staff to be on-site for portions of the project and off-site for other portions. These resources are not designated as on-site in the organizational chart. Only staff that are fully designated to be on-site are indicated as on-site in the organizational chart.

WEST VIRGINIA
IES PROJECT

West Virginia IES Organization Chart – DDI Phase



*Project Advisors are available as needed to support team

Figure 3.2-8. Organization Chart for DDI Phase.

WEST VIRGINIA IES PROJECT

West Virginia IES Organization Chart – M&O Phase

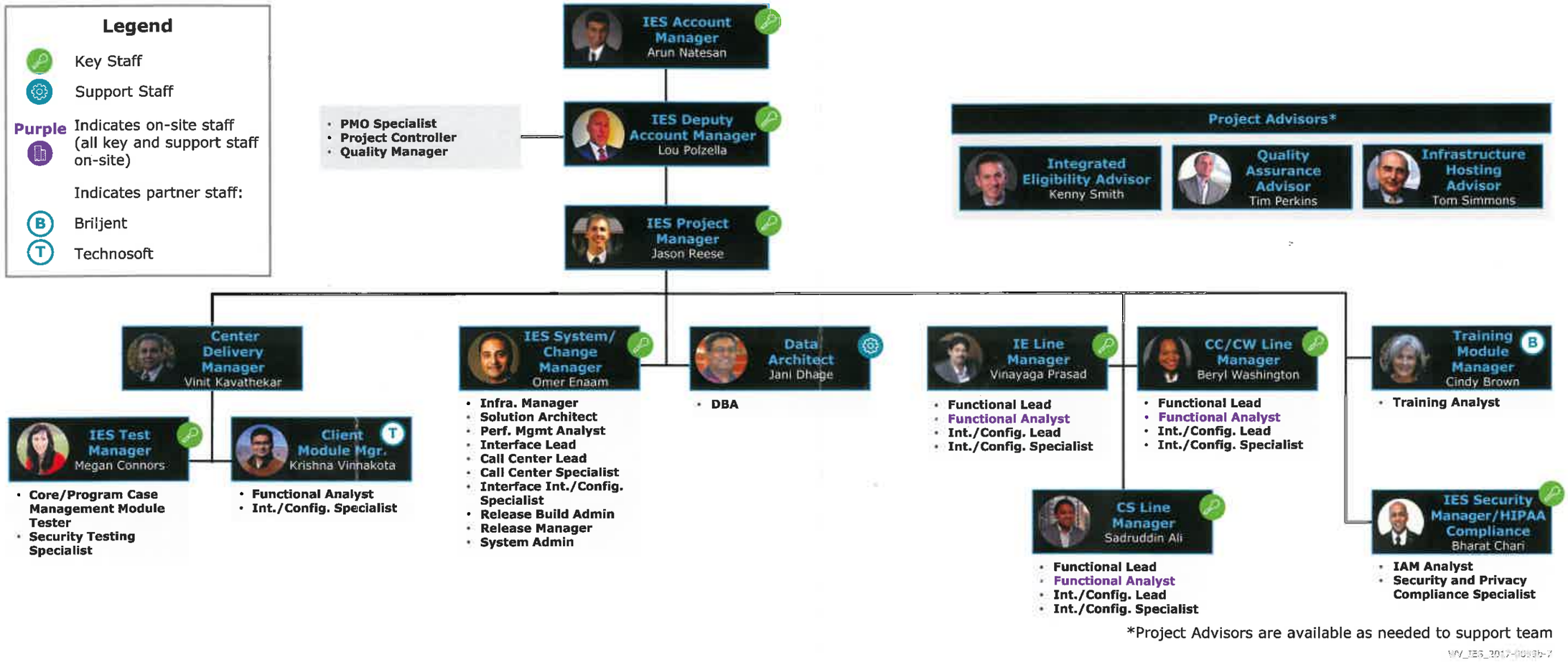


Figure 3.2-9. Organization chart for M&O Phase.

Roles and Responsibilities

The RFP requests a description of the roles, responsibilities, and skill sets associated with each position on the organization chart. For the key and support staff roles, responsibilities and skill sets (experience) were provided by the State in Appendix IV, Table 21 (Key Staff) and Table 22 (Support Staff). For all Other Staff, roles and descriptions for the responsibilities and skills sets, and FTE's for these roles is provided in the table below.

The FTE numbers were calculated from the average number of FTE's in that role during the DDI activities. This average is provided since the staffing levels naturally change over time and the overall average provides a quality metric to demonstrate that the project maintains staff in sufficient numbers to fully perform the requirements. If the same role occurs in both the DDI and M&O phase organizational view chart and the staffing levels are different, FTE information will be provided for both phases.

Role	Responsibility	Skill Sets	FTE
Center Delivery Manager	• Coordinate overall Delivery of Center based activities • Coordinate with other teams leads to support design, configuration, integration, and testing activities	• Management experience of design, development, and testing resources • Communication and organization skills to effectively coordinate tasks with leads • Delivery methodology eminence	1
RAPIDS M&O Manager	• Coordinate overall maintenance and operations activities for RAPIDS • Manage M&O Functional and Technical Managers • Primary contact to State on RAPIDS M&O topics	• Rapids system technical and functional expertise • M&O methodology eminence • Deep knowledge of WV IES M&O landscape and priorities • Ability to manager functional and technical threads	1
RAPIDS M&O Functional Lead	• Coordinate functional deliverables associated with M&O releases • Evaluate cross functional impacts of work items and incidents • Support M&O analysts and Technical Managers	• M&O processes and procedures expertise • Understanding of WV IES M&O functional tracks • Manage the functional direction of M&O • Effectively communicate West Virginia's functional requirements to M&O team	1
RAPIDS M&O Technical Lead	• Coordinate technical aspects of RAPIDS maintenance and operations • Evaluate cross system impacts of work items and incidents • Support M&O developers and analysts	• M&O processes and procedures expertise • Understanding of WV IES M&O technical requirements • Manage the technical developers daily tasks • Drives operational requirements and outcomes across M&O support team	1
RAPIDS M&O Developer	• Implement work item resolutions • Resolve immediate operational incidents	• Understanding of wide ranging technologies deployed by West Virginia • Ability to triage WV IES system • Ability to resolve operational incidents and tasks	8
RAPIDS M&O Analyst	• Assess functional complexities and impacts of work items • Evaluate cross functional impacts of work items • Coordinate resolution of work items • Coordination of operational incidents	• Understanding of RAPIDS M&O cross functional impacts and complexities • Ability to support technical and functional roles and tasks • Effectively communicate across M&O team, West Virginia stakeholders and any other involved parties	1
RAPIDS M&O Administrator	• Manage RAPIDS application operations • Work with State to discuss operational topics and issues	• Familiarity with RAPIDS operational aspects • Assess operational metrics and issues	1

Role	Responsibility	Skill Sets	FTE
	• Coordinate M&O releases with RAPIDS M&O manager	• Troubleshoot and coordinate with M&O staff	
Training Module Manager	• Work with State representatives to create and execute overall communications and training plan • Manage and direct training related staff and activities	• Familiarity with West Virginia staff training needs and requirements • Oversight of module specific training direction • Experience in end-to end-training development and delivery	1
Training Lead	• Create training strategy and plan • Manage training materials development and approval • Coordinate with State staff on training logistics and execution • Work with infrastructure lead to design and provision training environments	• Understanding of cross functional dependencies associated with training • Leadership of module specific training • Ability to effectively communicate system and functional knowledge	3
Training Analyst	• Work with application team to identify training development needs • Work with functional resources to refine and document application functionality	• Design effective training materials for various modules • Familiarity with developing training materials in various mediums	DDI 4 M&O 2
Training Developer	• Develop end user training materials	• Develop effective training materials for various modules • Familiarity with developing training materials in various mediums	16
Training Delivery	• Execute and deliver end user training materials	• Effective communication of training content across various modules • Experience training in classroom environment	14
BPM Lead	• Coordinates business process management efforts on project • Manages business process management resources • Works with State to define scope of business process work	• Ability to manage business management resources • Ability to drive efficiencies in business process workflows • Depth of knowledge of the West Virginia staff and associated needs	1
BPM Analyst	• Supports business process management workflow • Documents business process changes	• Ability to model and analyze business process workflows	7
Data Mart Visualization Developer	• Implement and configure Data Mart visualization software components	• Familiarity with Data Mart data visualization tools implementation and integration	DDI 2 M&O 1
Data Mart ETL Developer	• Implement and integrate Data Mart ETL software	• Familiarity with Data Mart ETL tools implementation and integration	DDI 4 M&O 1
Security Testing Specialist	• Conduct Security vulnerability testing for application code, database and AWS infrastructure. • Perform false-positive analysis of automated testing results • Provide recommendations for identified vulnerabilities	• Expertise in advanced and emerging cyber threats and vulnerabilities • Knowledge of web technologies and network infrastructure • Experience in conducting security vulnerability testing using automated tools and manual technique	1
Interface Lead	• Defining overall interface inventory, specifications and technology standards • Defining technical architecture specifications for all integration methods and protocols • Manage interface team resources	• Oversite of interface architecture • Evaluation and implementation of technical specifications and standards • Ability to manage and coordinate activities for interface team	1

Role	Responsibility	Skill Sets	FTE
Interface Integration/ Configuration Specialist	• Implementing interface configurations • Creating and maintaining interface control documentation • Serving as subject matter expert and addressing defects found during system, interface, integration and user acceptance testing	• Familiarity with tools and methodologies associated with the interface architecture implementation • Effective communication with testing, functional and architecture counterparts	DDI 5 M&O 1
Architect Lead	• Create and maintain overall architecture management strategies • Support Solution Architects and coordinate with infrastructure lead	• Oversight of overall architecture strategy • Ability to manage system architects • Technical expertise regarding system architecture	1
Solution Architect	• Assist IES System Manager in defining, documenting, and maintaining all application and technical architecture diagrams • Assist IES System Manager in working with partner vendors on tight integration of 3rd party components into the WV HSP solution • Responsible for defining and maximizing reusability of shared use components	• Specialization in a set of technological solutions implement with WV IES • Effective communication and collaboration across partner vendors • Ability to maintain documentation of associated with application and technical architecture	1
Infrastructure Manager	• Create and maintain overall infrastructure management strategies • Support Infrastructure Managers and coordinate with architect lead • Work with other team leads to define environment needs	• Technical expertise regarding system infrastructure • Understanding and implementation of State's technical infrastructure requirements • Ability to plan and execute development environments	1
Infrastructure Lead	• Defining all physical and logical environments required to support all project phases • Managing software licenses • Managing environment operations and support for project team	• Manage overall infrastructure strategy • Familiarity with tools and methodologies for infrastructure diagramming • Understanding of software licensing agreements	1
System Admin Lead	• Coordinate strategy for overall system administrative duties • Oversee team of system admins	• Manage overall system administration • Guide system administration methodologies	1
System Admin	• Evaluation of overall system design and implementation • Maintain operational, configuration and monitoring procedures	• Execute system administration specific tasks • Familiarity with tools and business requirements regarding system availability, configuration and operations	DDI 5 M&O 1
System Analyst	• Install and configure system software • Assist Infrastructure lead in building and maintaining software and hardware environments	• Analyze system security monitoring logs • Experience with installation and configuration of system administration tools	1
Performance Management Lead	• Oversee system performance and health check monitoring • Determine key metrics for system health and performance evaluations • Define opportunities to improve system performance	• Evaluation of overall system performance metrics • Drive optimization of system performance and health check success	1
Performance Management Analyst	• Execute system performance and health check monitoring • Test and tune infrastructure and work with application teams to implement performance improvements	• Analyze system performance monitoring logs • Experience with installation and configuration of system performance management tools	DDI 5 M&O 3
Lead DBA	• Coordinate overall database management strategies	• Ability to effectively communicate and manage data needs to team of DBAs	1

Role	Responsibility	Skill Sets	FTE
	• Manage team of DBAs	• Deep technical and functional knowledge of the WV IES data	
DBA	• Determine capacity planning and monitor performance • Design and configure database architecture • Execute data migration and manage environment specific data	• Experience with database related tools and technologies • Ability to manage database operations	DDI 2 M&O 1
Data Modeler	• Design and develop logical and physical data models to meet State's business needs	• Familiarity with tools used to create logical and physical data models	1
Conversion Lead	• Create data conversion strategy and tools • Manage data conversion specification development, documentation, and execution • Work with infrastructure and technical staff on environment and infrastructure requirements for data conversion • Work with legacy system owners to define configuration validation plan	• Ability to effectively communicate data conversion strategy requirements to team of conversion analysts • Intimate knowledge of the WV IES data, conversion tools and processes	1
Conversion Analyst	• Implement data conversion tools • Create data conversion routines working with functional leads, analysts, and legacy system owners • Implement data conversion routines • System test and resolve conversion defects • Work with other functional testing teams to analyze and resolve conversion related issues	• Understanding of data conversion requirements and associated system functionality • Ability to support IAM developers and coordinate associated tasks • Effectively communicate across IAM team, West Virginia stakeholders and all other involved parties	5
Release Coordinator	• Responsible for the release coordination tasks associated with in flight release • Planning and environment availability analysis for all future planned releases	• Coordinate tasks associated with release planning • Review documentation and communication of release coordination tasks and schedule • Facilitate patch releases where necessary	1
Release Build Admin	• Responsible for environment build coordination associated with the current in flight release • Planning and executing build schedules	• Execute system build task list • Migrate and merge code through lower environments	DDI 3 M&O 1
Release Manager	• Implementing and maintaining change control processes defined by Change Control Manager • Configuration and change management of all project environments	• Facilitate tasks associated with release planning • Document and support communication of release coordination tasks and schedule	1
Client Module Manager	• Coordinate overall strategy and delivery of Client Management module	• Client module technical and functional expertise • Knowledge of WV IES Client module requirements • Coordinate delivery of modules with Project Manager	1
Client Module Functional Analyst	• Create, review and validate business processes for Client Management module • Create and maintain functional design documentation • Serve as functional subject matter expert during system and UAT test phases	• Understanding of cross functional impacts and complexities • Ability to support technical and functional roles and tasks • Effectively communicate across functional teams, technical teams, training teams, West Virginia stakeholders and all other involved parties	1

Role	Responsibility	Skill Sets	FTE
Client Module Integration/ Con-figuration Specialist	• Implement Client Management module specifications • Perform unit testing • Support system, integration and user acceptance testing corrections in configuration • Support Health and Human Services functional analysts in maintenance of application documentation	• Familiarity with tools and methodologies associated with the system implementation of Salesforce • Effective communication with testing, functional and architecture counterparts	DDI 3 M&O 1
IAM Architect	• Architect and design the IAM solution for WV HSP solution	• Expertise in architecting, designing and implementing IBM IAM Security products • Understanding of Federal and State security and privacy requirements for integration with IAM solutions	1
IAM Specialist	• Implement and integrate IAM products for WV HSP solution	• Implementation experience with one of more IAM products using industry standard integration methods	6
IAM Analyst	• Define, design and implement IAM business processes for WV HSP solution	• Experience in IAM business process methods in support of user identity and access life cycle functions • Understanding of IAM security and privacy compliance requirements and industry leading practices	1
IAM Developer	• Install, customize and configure IAM products for WV HSP solution	• Experience in installing, configuring, conducting system integration and user acceptance testing of IAM products • Ability to configure and triage associated IAM solutions	6
Security and Privacy Compliance Specialist	• Security and Privacy Compliance Specialist	• Define and document the Security, Privacy and Confidentiality Plan and System Security Plan (SSP) for WV HSP solution • Provide security guidance for incorporating Federal and state security compliance requirements within WV HSP solution • Create and conduct stakeholder review of compliance artifacts	DDI 4 M&O 1
BCP/DR Specialist	• Define and develop a business continuity plan and disaster recovery strategy and plan for WV HSP solution	• Experience with development and implementation of DR/BCP plans	2
Security Monitoring Specialist	• Define security information and event management (SIEM) specifications for collecting required application, infrastructure, IDS/IPS and IAM solution logs • Implement security monitoring tools and SIEM alerts, notifications and dashboards for WV HSP solution	• Experience with designing and implementing SIEM tools and methodologies associated for security monitoring	3
Network and Application Security Analyst	• Define and implement network and application security requirements for WV HSP solution	• Experience in designing and implementing IDS/IPS tools and methodologies	2
Call Center Lead	• Coordinates activities associated with the Call Center • Analyzes sources and root causes of inbound calls to report trends	• Manages team of call center specialists • Ability to escalate call center issues	1

Role	Responsibility	Skill Sets	FTE
Call Center Specialist	• Respond to call center inquiries from both public and State workers	• Knowledge of operational procedures to handle call center inquiries	5
Project Management Office Specialist	• Organizes information pertaining to the project • Provides status reporting to key stakeholders • Confirms project standards are upheld across multiple teams	• Strong communication of project related information to critical stakeholders • Well versed in project management and West Virginia specific standards	1
Project Controller	• Creates and maintains materials related to project financials	• Financial skillset to evaluate and account for project financials, resources and time	2
Quality Manager	• Validates and enforces project and technical standards • Creates quality assurance documentation	• Well versed in West Virginia specific technical quality standards • Cross functional system knowledge to understand the quality complexities	1
Functional Lead	• Responsible for creation of functional design documentation • Manages functional thread to meet requirements	• Understanding functional requirements • Ability to manage resources to create and document system functional design	DDI 9 M&O 3
Functional Analyst	• Designing and documenting the functional flows • Conducting JAD sessions with State • Supporting functional test phases	• Ability to design and document functional business flows • Communicate and facilitate design sessions with State	DDI 20 M&O 2
Integration/Configuration Lead	• Manager configuration and integration activities and resources • Meeting functional and technical specifications	• Ability to direct implementation of functional and technical documents • Ability to manage and direct specialist resources	DDI 10 M&O 2
Integration/Configuration Specialist	• Implement functional and technical design documents with integration and configuration parameters	• Configuration and implementation skills in selected product set • Ability to perform unit testing	DDI 80 M&O 14
Core/Program Case Management Module Tester	• Define test scenarios and data requirements • Coordinate test data configuration • Execute test scenarios and scripts • Report and track test defects through resolution	• Ability to translate requirements into test scenarios • Familiarity with core/program case management module to execute test cases • Ability to develop and execute test automation scripts • Effectively communicate test defects to functional and delivery team	DDI 12 M&O 4

Figure 3.2-10. Roles and Responsibilities.

Approach to Staff Retention

The RFP requires that we state our approach to staff retention and ensuring continuity of staff among key project phase. The Deloitte team's staffing plan is designed so that the majority of staff members are assigned throughout the main DDI phase of the project (lasting through the last statewide deployment in approximately month 37 of the project). This is intentionally done to maximize continuity and cohesiveness of resources throughout the project length. Our approach is intended to keep knowledge within the project team and reduce transitions, which require team and bring the risk of knowledge gaps. Our staff understand the term of commitment and expectations around staffing.

In the event that a Deloitte professional needs to depart the project for personal reasons or resignation, Deloitte will provide the State with 30 days' notice wherever possible to allow for adequate knowledge transfer and to allow the State time to review and approve a replacement.

Additional details and description of the formal staffing process and procedures will be documented in the Staffing Management Plan deliverable that will be formally submitted and approved to the State during the Project Start Up phase.

Approach to Personnel Management

The RFP requests that the vendor define the approach to personnel management covering specific topics relative to personnel management. The table below provide responses to each of these topics. Additional details and description of these topics will be documented in the Staffing Management Plan deliverable that will be formally submitted and approved to the State during the Project Start Up phase.

Personnel Management Topic	Deloitte Team Approach
Hiring and firing and employee relocation	
Staff training, both initial and ongoing, including transfer of system and business knowledge, project management methodologies and processes, and project status, to new staff and for incumbent staff transitioning between project roles or phases	Initial and ongoing staff training is supported by our comprehensive firm wide HHS knowledge transfer tools and West Virginia specific onboarding information • All Deloitte HHS professionals receive frequent and ongoing training and knowledge transfer in key legislative concepts and cross training from previous HHS implementations and projects • Our onboarding process will provide West Virginia specific training from resources with hands on experience in the State on the legacy systems Partner staff will also use the same onboarding process and will be trained on relevant staffing methodologies and process as required by the responsibilities.
Staff performance monitoring	Deloitte's internal Resource Performance Management process is designed for frequent and growth oriented feedback from both primary and secondary feedback providers from within the project. Our performance monitoring specific to the WV IES Project will extend to all Deloitte and partner staff and will include regular performance snapshots every two weeks. Additionally, bi annual formal performance reviews are standard.
Succession planning, staff replacement, and staff backup	Out staff replacement and staff backup draws not only from the 2000+ HHS skilled professionals, but also from established large delivery center teams in specific geographic locations. Our US Delivery Center in Mechanicsburg, PA has 1500 dedicated public sector professionals to provide staffing from. Our partner staff will follow the same standard for succession, replacement, and backup of staff.
Procedures for obtaining additional staffing support	Similar to staff succession, replacement, and backup, procedures for obtaining additional support will follow our standard firm staffing processes. This process includes dedicated teams of staffing advisors by skillset, industry, and geography. Deloitte is able to pull our deep bench of experienced professional quickly. The Deloitte team can be augmented from various different sources including our consulting bench, US based delivery centers, contingency workforce placement as well as our relationships with our partners.

Figure 3.2-11. Approach to Personnel Management.

Process for Transitioning Essential Knowledge

The RFP states that we describe our process for transitioning essential knowledge to the Agency's technical staff. The primary method for knowledge transfer is the effective and complete documentation of the system. These documents provide a permanent written record of the system. The primary formal deliverables that would serve to provide knowledge transfer would be the System Documentation, User Documentation, and Training Materials.

During the Maintenance and Operations phase of the project additional written artifacts would provide valuable information on technical and operational aspects of the system. The Deloitte team will work with the State to identify any gaps in knowledge transfer to Agency technical staff and provide means for effective knowledge transfer.

Letter of Intent

The RFP requires a letter of intent for each proposed staff member not currently employed by the vendor. To be clear, all Deloitte resources proposed for the WV IES project are currently employed by Deloitte and all the resources proposed from our teaming partners are currently employed by those teaming partners. In addition, we have included on the following pages completed and signed letters of commitment from teaming partner staff who are shown on our organizational view chart for the WV IES project. The original letters are available upon request.

briljent

Briljent
7615 W Jefferson Blvd
Fort Wayne, IN 46804
260-434-0990

July 19, 2017

April Battle
Buyer
State of West Virginia
2019 Washington Street, East
Charleston, WV 25305

RE: Letter of Commitment for RFP Number CRFP 0511 HHR1700000004

Dear Ms. Battle

This letter confirms that I am committed as a specific resource, in accordance with the RFP requirements in Section 3.2.4, Staffing Vendor Response Requirements

I am currently an employee of Briljent who is partnering with Deloitte for the WV IES Project.

I understand that this letter is a commitment to work on the project contingent on award of the bid.

I look forward to the opportunity to work with you on this important project.

Sincerely,

By: Cindy Brown
Cindy Brown

Technosoft Corporation
One Towne Square, Floor# 6
Southfield, MI 48076
(248) 603-2600

July 28, 2017

Ms. April Battle
Buyer
State of West Virginia
2019 Washington Street, East
Charleston, WV 25305

RE: Letter of Commitment for RFP Number CRFP 0511 HHR1700000004

Dear Ms. Battle:

This letter confirms that I am committed as a specific resource, in accordance with the RFP requirements in Section 3.2.4, Staffing Vendor Response Requirements.

I am currently an employee of Technosoft who is partnering with Deloitte for the WV IES Project.

I understand that this letter is a commitment to work on the project contingent on award of the bid.

I look forward to the opportunity to work with you on this important initiative.

Sincerely,

By: _____

Krishnarao Vinnakota

Key Staff Certifications

Appendix IV: Staff Qualifications, Experience, and Responsibilities requires certifications for the WV IES Project Manager and the Security Manager roles. These certifications are supplied below and the originals are available upon request.

Project Management Institute

THIS IS TO CERTIFY THAT

Jason P Reese

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Mark Dickson - Chair, Board of Directors

Mark A. Langley - President and Chief Executive Officer

PMI® Number: [redacted]

PMP® Original Grant Date: 26 March 2014

PMP® Expiration Date: 25 March 2020

PMI
Project Management Institute

WEST VIRGINIA IES PROJECT

International Information System Security Certification Consortium

The (ISC)² Board of Directors hereby awards

Bharath Chari

the credential of

Certified Information Systems Security Professional

having met all of the certification requirements, which include the professional experience prerequisite, adoption of the (ISC)² Code of Ethics, and successful performance on the required competency examination, subject to recertification every three years, this individual is entitled to all of the rights and privileges associated with this designation, as defined in the (ISC)² Bylaws.

Wim Remes - Chairperson

Jennifer Minella - Secretary

CISSP

ANSI ISO/IEC 17024

[redacted]
Certification Number

4/30/2019
Expiration Date

Certified Since: 2010

(ISC)²

Verify Member is in good standing at: www.isc2.org/verify

Printed on: 12/7/2016

CISA Certified Information Systems Auditor
An ISACA Certification

ISACA hereby certifies that

Mr. Bharath Chari

has successfully met all requirements and is qualified as **Certified Information Systems Auditor;**
in witness whereof, we have subscribed our signatures to this certificate.

Requirements include prerequisite professional experience; adherence to the ISACA Code of Professional Ethics and the CISA continuing professional education policy; and passage of the CISA exam.

[redacted]
Certification Number

21 March 2011
Date of Certification

C.K. Mitrianis
Chair, ISACA Board of Directors

31 January 2018
Expiration Date

Chief Executive Officer

ISACA

Project Goals and Objectives

Section 4

Section 4, Subsection 4, Project Goals and Objectives

West Virginia benefits from Deloitte's experience and capabilities to provide a proven hosted solution that operates on a modern and modular platform. Focused on your future, we deliver the West Virginia Department of Health and Human Resources (DHHR) a single, modular WV Human Services Platform (WV HSP). This solution combines Integrated Eligibility, Child Support, Child Welfare and Child Care functionality into a single hosted solution that is modern, scalable, shared, and reusable. This modernized system will allow West Virginia DHHR to deliver industry leading health and human services in an effective, efficient, and accountable manner.

Our Understanding of West Virginia's Goals, Objectives and Project Vision

West Virginia DHHR seeks to consolidate and integrate various health and human services programs currently supported by various legacy IT systems (RAPIDS, FACTS, and OSCAR) into a single vendor-hosted modern and modular WV HSP system to support the DHHR enterprise.

- **Shared Use**. WV HSP provides a reusable, modular, multi-vendor, and cost-effective solution, which reduces implementation and maintenance costs.
- **Modernization.** WV HSP is a proven cloud hosted, scalable, interoperable and modern solution that meets DHHR's current and future needs.
- **Common Governance Structure**. WV HSP follows standardized, transparent, and predictable project management processes across the enterprise to increase efficiency and productivity.
- **Completion of Functional Requirements**. WV HSP complies with state and federal regulations, and meets all of DHHR's technical and functional requirements.

West Virginia has made significant investments in its technology systems to support its programs and those IT investments have served the State well – some operating over several decades. Each of its applications were built at different points in time and as a result, the State owns and supports a variety of technology applications and infrastructure to meet the needs of customers. DHHR has outlined some of the challenges that typically occur with mature technologies, including: increasing costs for maintenance and operations of the current legacy systems, an inability to meet State and Federal regulatory changes due to system constraints and inflexibility, as well as an inefficient use of resources and inconsistent governance standards across the enterprise. Over time newer technology and tools are developed that overcome the challenges that exist with current technology assets. However, the transition to new systems can be costly and wrought with risk to the State's most vulnerable citizens. Few organization have the ability to develop and invest in new technology "from scratch." West Virginia's vision is to take advantage of the benefits of a new integrated, modular system but reuse as many current investments as possible. Rather than redesigning an application that is in many cases working, the State has opportunity to reuse, modernize and enhance the capabilities and functionality of their existing IT systems.

Our Strategy to Meet DHHR Requirements

Deloitte carefully considered many options available to meet DHHR solution objectives at a reduced cost. With the benefit of our experience in implementing HHS solutions and business change in more than 20 states that compare to the size, scale and complexity of West Virginia, we are pleased to present an innovative solution – WV Human Services Platform (WV HSP) - to achieve the State's goals.

In determining the right solution, we looked at the State's investment portfolio and developed an approach for each component. This approach combines Integrated Eligibility, Child Support, Child Welfare and Child Care functionality into a single hosted solution that is modern, scalable, shared, and reusable. The WV HSP solution relies on three strategies for modernization depending on the various applications maturity and needs in order to meet the DHHR enterprise requirements: 1) Reuse and re-platform newer applications and tools, 2) Leverage successful, proven solutions from other States where possible, and 3) Modernize existing legacy applications on the mainframe and integrate them with Service Oriented Architecture (SOA) hosted in the Cloud.

Figure 4.0-1. Three Strategies for Modernization for WV HSP.

The following is a more detailed discussion of the three strategies:

Strategy #1- Re-platform, Extend, and Enhance DHHR Newer Investments

We evaluated DHHR's IT investments modernization goals (listed under Section 4.2) and identified applications that can be re-platformed to the Cloud. More recent IT investments such as Informatica MDM, eRAPIDS, InRoads, and the State's Data Marts will follow this strategy. Re-platforming involves taking the applications and tools from their current environment and moving them to a modern, scalable, Cloud-hosted platform in order to extend their life and provide support for future expansion. This approach will enable these assets to be extended for the entire WV HSP solution to serve the DHHR enterprise rather than just select programs, and they will be enhanced as necessary to fully meet requirements.

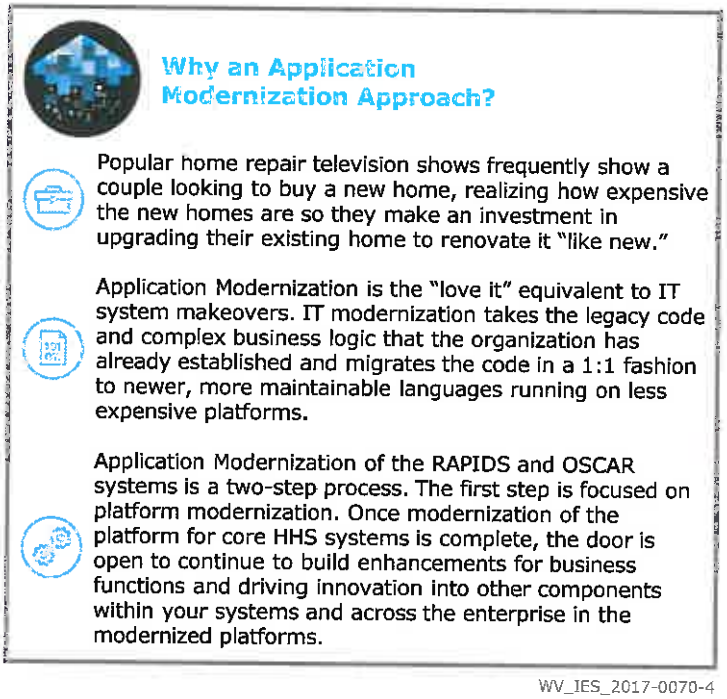
Strategy #2- Bring in Proven Assets from Other States to Meet Enterprise Needs

Deloitte has partnered with Salesforce to develop software as a service (SaaS) solutions for Child Welfare for the State of Delaware and Child Care for the State of Colorado. Salesforce is designed to provide customers with the highest levels of performance, reliability and security. Its multi-tenant application architecture will automatically scale to accommodate new users and applications securely, reliably and cost-effectively, without worrying about managing infrastructure. This means that every customer is always on the latest release of Salesforce applications, and has access to the latest technology. West Virginia will benefit from the development of these modules in Salesforce as our strategy for modernizing the FACTS Child Care and Child Welfare systems is to replace these legacy systems with Deloitte's preconfigured Salesforce applications. This approach will migrate data from the FACTS applications into modern solution that will achieve the scalability, performance and security desired by DHHR, most importantly meeting federal requirements such as FedRAMP authorization.

Strategy #3 – Application Modernization of Complex Mainframe Assets into WV HSP's SOA

For complex mainframe systems such as RAPIDS and OSCAR, which include intricate business logic and represent the highest risk for a system replacement, our proposed approach is Application Modernization. This process is performed with an automated conversion process of legacy COBOL code to Java, to provide the current system functionality on a modern hosted Cloud technology platform. System enhancements are then completed on the modernized platform. The modernized system will be hosted on Amazon Web Services (AWS) providing enterprise class hosting with the ability to automatically scale to meet West Virginia business demands. This strategy reduces project risk and costs by focusing effort on system modernization rather than trying to recreate what is already meeting requirements. Through application modernization of DHHR's complex legacy mainframe systems, our approach leverages the Agency's existing investment to maximize reuse while enhancing with efficiencies and standardization across the enterprise. Deloitte is excited to bring this proven strategy to DHHR.

More information on our three strategies and Deloitte's Application Modernization approach and methodology can be found at the end of this section.



WV_IES_2017-0070-4

Figure 4.0-2. Why an Application Modernization Approach.

Application Modernization at the Texas Department of Motor Vehicles

The Texas DMV is a dynamic State Agency dedicated to customer service. Each year the agency registers almost 24 million vehicles and collects more than $1.5 billion in revenue. Realizing the Agency needed to significantly upgrade their core technology systems, they partnered with Deloitte to migrate their legacy systems from their mainframe (an IBM ZOS Natural, COBOL and ADABAS stack) to modern (Web-based system using HTML 5, Java and distributed DB2 database), hosted platforms. The migration was completed within two years and the mainframe was decommissioned.

"It was as if our system was driving our processes rather than the other way around. We realized that, in order to make the changes needed to serve our customers better, we were going to need a more agile system. Our next step is to modernize our business processes and increase end-user engagement to help drive the future of the registration and titling system. Given how much we have learned already, those, along with other future projects, will go much more smoothly. This has been a real confidence-builder for our entire team."

Whitney Brewster
Executive Director, Texas Dept. of Motor Vehicles

Deloitte's Solution: West Virginia Human Services Platform

All three strategies come together as the WV Human Services Platform (WV HSP) in a single seamless enterprise solution by using an n-tier Service Oriented Architecture (SOA) technical foundation, and is divided into multiple technology layers to reduce complexity and deliver modularity. Unlike the State's current environment that is rigid, hard to scale, "siloed" and hard-to-maintain, **WV HSP is a modern, modular and flexible solution built upon a service-oriented architecture (SOA) and hosted in the Cloud.**

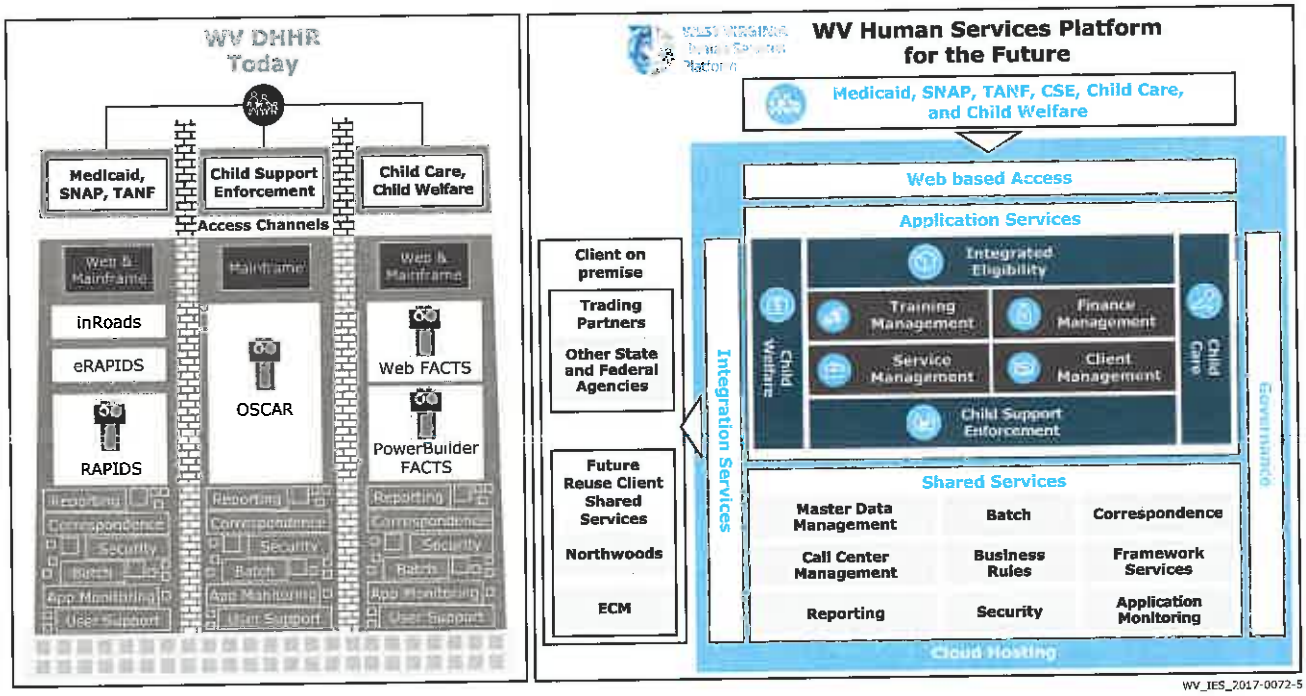


Figure 4.0-3. WV Human Services Platform for the Future.

The shared service layer provides a unified experience for the WV HSP solution. The common Integration layer also provides seamless integration, and the common security layer promotes consistent and improved security for the WV HSP. The core modules are built on a solid SOA technical foundation, and align with the CMS 7 Standards and Conditions to meet DHHR goals and objectives in a modular, flexible and integrated service delivery model for the State.

The modular WV HSP meets the enterprise architecture requirements including integration services and is detailed in Section 4.1 – Shared Use, Section 4.1.1 Reusability, and Section 4.2 – Modernization, by providing an interoperable, adaptable, n-tiered, SOA based Cloud hosted system. This modern, flexible system allows for faster and more reliable changes, whether operational or regulatory. Together, the WV HSP reduces project costs and provides the required value by modernizing your current investments, as well as driving efficiency and enhancing DHHR's ability to deliver on its mission.

The table below describes how our approach and solution benefits the State and addresses your current concerns:

DHHR Current Concerns	Benefits of WV HSP (Human Services Platform)
Increasing Costs	Deloitte's proven application modernization approach will efficiently migrate and consolidate assets off of the legacy platform. This will enable savings from the reduction in ongoing maintenance and will further reduce the IT technical debt across the DHHR enterprise.

DHHR Current Concerns	Benefits of WV HSP (Human Services Platform)
Antiquated Technology	The WV HSP reduces risks of obsolete technology with an efficient move to new technologies. The solution is modern, interoperable, flexible, agile, and Cloud hosted which allows for faster and more reliable changes, whether operational or regulatory. The modular platform is n-tiered, built on Service Oriented Architecture (SOA) and has the ability to scale on demand for environment needs, allowing for incremental modernization based on the priorities of DHHR. WV HSP also uses homogeneous application technology, which is easy to enhance and maintain across the DHHR enterprise.
Inefficient Use of Resources	The WV HSP includes improvements designed to strengthen key business abilities such as organizational efficiency and digital engagement with customers. The modernized solution reduces the time needed for county office and state workers to spend on manual and administrative processes, and allows them to spend more time serving clients. The WV HSP will reduce time required by DHHR's IT staff in currently support multiple systems using different technologies, and instead, allow these resources to focus on system enhancements and DHHR priorities.
Inconsistent Governance Standards Across the Enterprise	Deloitte's approach is grounded in our EVD for SI methodology that defines a consistent approach to governance. It incorporates leading project management practices from the Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK), the Software Engineering Institute's Capability Maturity Model Integration (CMMI) model, IT Infrastructure Library (ITIL) and Hybrid Agile principles.
Challenges to enterprise reporting with a single view of data	Data from legacy systems will be easily accessible to searches and analytical tools. Master Data Management (MDM) for Master Client Indexes (MCI) will allow for a commonly identified view of citizens. The WV HSP solution will allow for enterprise reporting, data analytics, and an easy to use interface to create and customizable reports.
Difficulty with identity management and monitoring security vulnerabilities across the enterprise	The WV HSP solution provides single sign-on to allow for one user ID/password to access the entire WV HSP solution rather than multiple system passwords used today. Identity and access management provides role based access controlling user's access to specific parts of the system. In addition, it provides self-service features like user registration and username and password recovery. Multi-factor authentication allows remote access for authorized system users. Consolidated intrusion detection and prevention tools will be better at monitoring and identifying threats, application incidents and events. The WV HSP solution meets federal security compliance requirements.

Figure 4.0-4 Deloitte's Application Modernization Solution Addresses DHHR's Enterprise Concerns.

The WV IES Project modernization approach calls for modularity and reusability to drive down implementation costs, one of DHHR's top goals. The proposed solution is broken out into the 4 core modules mandated in the RFP, as well as 4 additional program-specific case management modules needed in order to achieve the State's objectives. These modules are shown in the diagram below. Deloitte has **partnered with two additional vendors – Technosoft and Briljent – who will deliver and own the Client Management and Training Management modules respectively.**

Figure 4.0-5. WV IES Project delivering modularity.

As West Virginia's partner, Deloitte is proposing a WV HSP solution that will significantly reduce future maintenance and operations costs, and also provide an effective and modern solution that focuses on reuse, efficiency, and has minimal impact to the continuity of business operations. Our proposed solution for the WV IES Project is based on our team's experience in the industry and with successful implementations with a variety of IT modernization

approaches. We have deep experience in all three modernization strategies: re-platforming solutions, configuring case management and training systems, and proven implementation experience in application modernization.

Deloitte's vision of the WV HSP as the platform of the future aligns well with the State's stated objectives. The following sections of this proposal describe in detail our responses to your specific requests.

Figure 4.0-6. The WV IES Project achieves your goals.

In the diagram below, we further illustrate our understanding of your goals and how it is aligned to our vision of the Human Services Platform of the future.

Figure 4.0-7. WV HSP: A Modular Solution.

Our vision of the WV HSP solution of the future is based on the principles outlined in the following table.

Unified	• The platform of the future must employ an architecture that ***maximizes reusability and shared components*** • The platform of the future must provide a ***unified experience*** across all programs • The platform of the future must promote the access and sharing of data	WEST VIRGINIA Human Services Platform ✓
Proven	• The platform of the future must come from a committed team with the ***experience, skills and capabilities*** to deliver • The platform of the future must have components and approaches that are ***successfully implemented and production-proven*** in other states	WEST VIRGINIA Human Services Platform ✓
Compliant	• The platform of the future must be compliant with all federal regulatory requirements • The platform of the future must follow the Center for Medicare and Medicaid Services 7 Conditions and Standards	WEST VIRGINIA Human Services Platform ✓
Efficient	• The platform of the future must ***enhance efficiency in day to day operations*** for your workforce • The platform of the future must enable ***predictable operating costs***	WEST VIRGINIA Human Services Platform ✓
Interoperable	• The platform of the future must follow industry standards for integration and interoperability • The platform of the future must use a ***dedicated integration layer***	WEST VIRGINIA Human Services Platform ✓
Modular	• The platform of the future must be ***comprised of best of breed modules*** • The platform of the future uses modules that are ***open and flexible***	WEST VIRGINIA Human Services Platform ✓
Automated	• The platform of the future must automate common businesses processes • The platform of the future must ***minimize manual intervention*** by workers	WEST VIRGINIA Human Services Platform ✓
Hosted	• The platform of the future is a hosted solution to reduce modification time and dependency on legacy technology • The platform of the future provides ***predictable costs***	WEST VIRGINIA Human Services Platform ✓
Multi-vendor	• The platform of the future ***utilizes multiple vendor modules*** playing to their specific strengths and capabilities • The platform of the future eschews monolithic single vendor solutions	WEST VIRGINIA Human Services Platform ✓
Modern	• The platform of the future uses current technology to maximize reusability, efficiency, and maximize lifespan	WEST VIRGINIA Human Services Platform ✓

Figure 4.0-8. The WV HSP Solution adheres to your principals.

WV HSP Leverages Teaming Partners to Deliver Modularity

West Virginia needs a partner team with proven experience in delivering both a modern and modular solution to provide effective and efficient services in an accountable manner. We understand the benefits of partnering with other vendor partners to provide an enterprise wide solution. We also recognize that the key to delivering a best-of-breed solution is to leverage capabilities from multiple industry leading products and provide a single platform which can seamlessly integrate with these products.

The State identified four required modules for the Integrated Eligibility solution:

- Training Management
- Client Management
- Service Management
- Finance Management

As part of our solution two of the mandatory modules will be owned by our teaming partners as follows:

Briljent will own and deliver the **Training Management** module. This module relies upon state-of-the-art Learning Management System (LMS) and Online Help (OLH) technologies to support delivery, monitoring and ongoing refinement of training resources. With over 18 years of experience, Briljent has had a singular focus on developing and delivering exceptional learning solutions, and delivered over 2.5 million hours of training to tens of thousands of learners. Briljent's approach combines experience in the areas of learning management and instructional design with proven learning techniques, tools, and methods.

Technosoft will own and deliver the **Client Management** module. This module enables the State to serve its constituents by providing a dynamic online application available through a client portal which supports business processes such as submitting applications for multiple programs, reporting changes, submitting referrals and checking the status on application and case information. Technosoft leverages industry standards and domain expertise to provide technology expertise, delivery focus and quality. The firm's collaborative culture and exceptional talent will help address DHHR's Client Management module needs.

In addition; Deloitte will implement and support the Service Management and Financial Management Modules. The **Service Management** module provides an integrated, worker-centric and outcome based solution. This module supports shared functionality across all programs, while tailoring eligibility rules, automated workflows, electronic documents and alerts or tasks to the unique needs of the State's individual programs. The **Financial Management** module supports the accounting process that supports the customers of the Department of Health and Human Resources (DHHR) with respect to child care, child support, child welfare, and family assistance programs. Finance Management is a critical, core functional module for the WV HSP that achieves compliance with federal and state regulations.

The WV HSP is comprised of 4 additional program specific case management modules that leverage the functions of the core modules to provide a wide range of functions to clients, providers, and workers.

- **Child Support** Case Management module provides the State with features to perform the all of following functions: Intake, Locate, Establishment, Case Maintenance, and Enforcement of Child Support. This module will be deliver so the State continues to satisfy federal child support requirements for Child Support Enforcement, including federal certification.
- **Child Care** Case Management module delivers functionality for all aspects of the State's child care program. This includes provider management features ranging from application and licensing to contract management and payments. The Case Management module also provides for enrollments and attendance as well as billing reconciliation and recoupments.

- **Child Welfare** Case Management provides the State with customizable modules to support the management of child welfare cases. The solution is aligned with Comprehensive Child Welfare Information System (CCWIS) requirements and provides the State with the necessary framework to administer Child Welfare services and programs in the State.
- **Integrated Eligibility** Case Management provides access to Medicaid and Children's Health Insurance Program (CHIP), Low-Income Energy Assistance Program (LIEAP), Temporary Assistance for Needy Families (TANF), and Supplemental Nutrition Assistance Program (SNAP).

These eight modules fit together in a comprehensive solution as depicted in the following figure and are supported by a robust Cloud infrastructure, shared services, cyber security, and data analytics. The WV HSP solution has the capabilities to integrate with industry leading COTS products and services from our partners Briljent and Technosoft. The alignment of our solution's functional and technical capabilities with the State's requirements serves as an accelerator to achieve your goals. The WV HSP approach is built upon an integrated platform to support business functions through its core modules. The framework leverages existing assets allowing for both horizontal and vertical scalability. Horizontal scalability provides the ability to add new or expand existing modules to meet future system enhancements to accommodate the changing business and regulatory landscape. Vertical scalability provides the ability to increase server processing and hardware capacity without impacting operations.

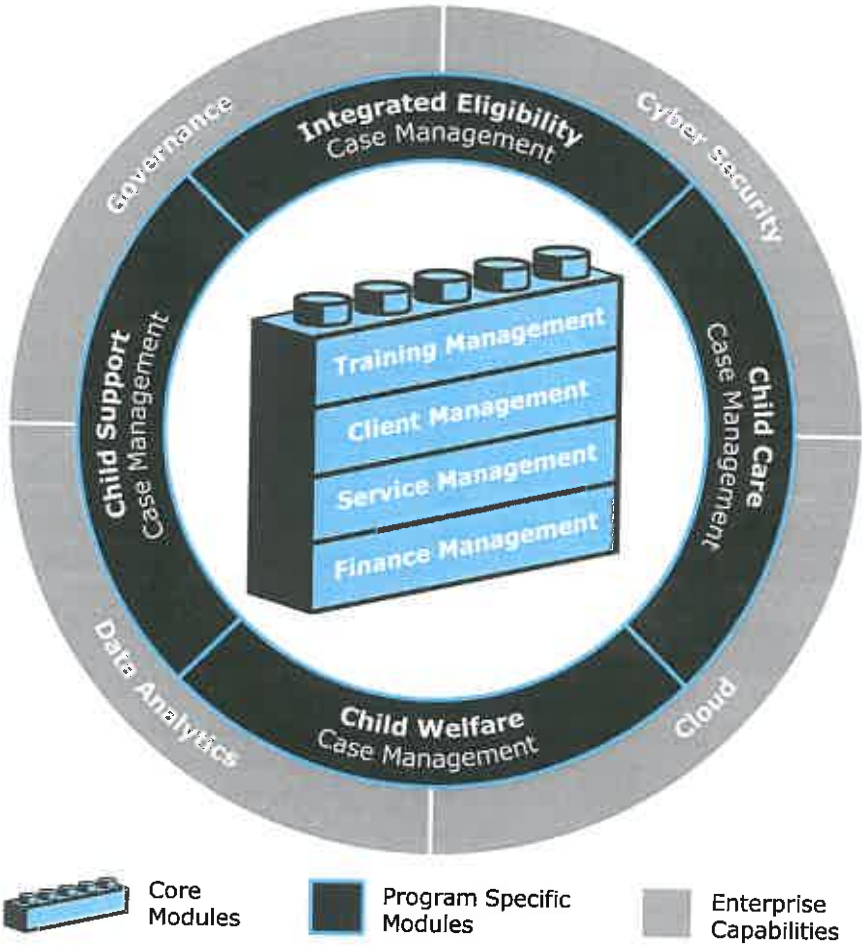


Figure 4.0-9. WV HSP as a comprehensive solution.

WV HSP (Human Services Platform) – Providing a Modular Solution

The WV HSP Solution will be developed on an n-tier Service Oriented Architecture (SOA) that simplifies solution integration and extensibility. Migrating into a modern architecture organizes the major technical aspects of the system into conceptual layers to reduce complexity while increasing modularity, extensibility, and maintainability. The WV HSP solution supports shared services across all health and human services programs, while tailoring eligibility rules, automated workflows, electronic documents and alerts to the unique needs of the State's individual programs. As indicated in the WV HSP component view below, the co re application modules use shared supporting components to provide a unified experience for the WV HSP solution. A common Integration layer provides seamless modular integration and the common security layer promotes consistent and improved security for the WV HSP. The core modules have a SOA technical foundation, aligning with the CMS 7 Standards and Conditions to deliver business functions in a flexible and integrated service delivery model for the State.

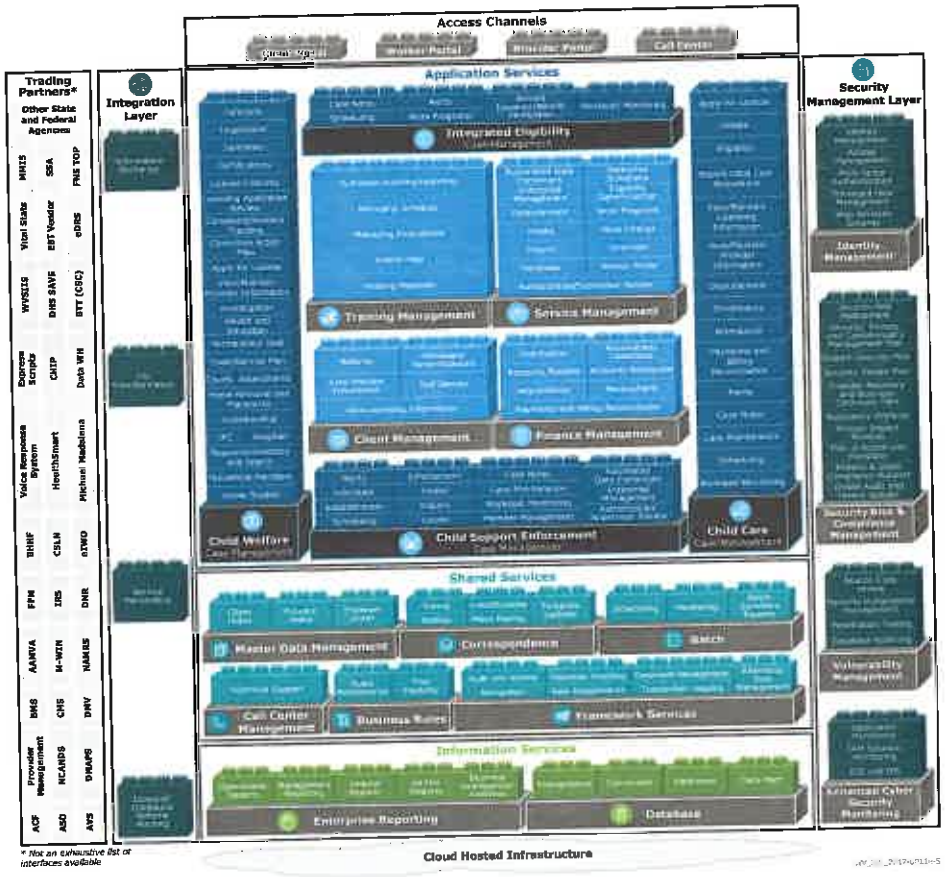


Figure 4.0-10. A diagram of the WV Human Services Platform Architecture

Proven National Experience

Deloitte and our teaming partners have the resources and qualified personnel that will be available to the WV IES Project. Deloitte has over 5,000 public sector professionals of which more than 2,000 are focused on Health and Human Services and growing to 3,000 specialized in Cloud solutions. The knowledge acquired over the years and a history of successful collaboration with State clients has helped win 33 HHS awards between 2013 and 2016 alone. The table below highlights Deloitte's national Health and Human Services experience:

State	Integrated Eligibility	Child Care	Child Welfare	Child Support	Self-Service
Alaska	✓				✓
Alabama			✓		
Arkansas	✓				
Arizona				✓	
California	✓	✓	✓	✓	✓
Colorado	✓	✓			✓
Connecticut	✓	✓			✓
Delaware	✓	✓	✓		✓
Florida	✓	✓		✓	✓
Georgia	✓	✓		✓	✓
Idaho	✓				✓
Illinois	✓	✓			✓
Indiana	✓	✓		✓	✓
Iowa	✓				✓
Kansas	✓				✓
Kentucky	✓	✓		✓	✓
Louisiana	✓	✓	✓		✓
Maryland			✓	✓	
Massachusetts	✓		✓	✓	✓
Michigan	✓	✓		✓	✓
Mississippi				✓	
Montana	✓	✓			✓
Nevada	✓		✓		✓
New Hampshire	✓	✓	✓	✓	✓

State	Integrated Eligibility	Child Care	Child Welfare	Child Support	Self-Service
New Mexico	✓	✓		✓	✓
New York	✓			✓	
North Carolina	✓				✓
North Dakota	✓				✓
Ohio	✓	✓		✓	
Oklahoma			✓		
Oregon	✓	✓			
Pennsylvania	✓	✓	✓	✓	✓
Rhode Island	✓	✓			✓
South Dakota	✓	✓			✓
Tennessee	✓			✓	✓
Texas	✓	✓	✓	✓	
Virginia	✓	✓			✓
Washington			✓		
West Virginia	✓	✓	✓		✓
Wisconsin	✓	✓		✓	✓
Wyoming	✓	✓		✓	✓
DC			✓		

Figure 4.0-11. The Deloitte Team brings a proven and reliable solution to West Virginia.

Deloitte's Enterprise Value Delivery (EVD) for Systems Integration (SI) to deliver the WV IES Project

The WV HSP solution represents a large system implementation that requires a partner team with demonstrated capabilities to deliver a project of this magnitude. Unproven methodologies and project management capabilities can result in an unsuccessful deployment even with the right solution. Our EVD for SI methodology for delivering the WV IES Project meets all of the core requirements of the State as defined in the RFP.

Project Management	• The vendor must use an industry standard project management methodology • The vendor must employ an integrated approach to project management	EVD for ST ✓
Methodology	• The vendor must employ a robust Systems Development Live Cycle (SDLC) Methodology • The vendor must meet stated functional requirements (Business, Technical, Operations, and Service Level Agreement)	EVD for SI ✓
Quality Assurance	• The vendor must align quality management with the Project Management Body of Knowledge (PMBOK)	EVD for SI ✓

Figure 4.0-12. Our EVD for SI Methodology is proven and delivers for the WV IES Project.

Our application modernization project approach is grounded by Deloitte's industry leading methodology of Earned Value Delivery (EVD) which aligns with Project Management Body of Knowledge (PMBOK) and is consistent with ITIL and CMMI leading practices and mature processes. Our proven delivery approach for project delivery has accelerated the implementation of similar Health and Human Services solutions.

Deloitte uses a project management methodology that meets the high-quality expectations of West Virginia by leveraging our integrated EVD for SI method. Our method establishes a consistent delivery approach for solution implementation projects that apply to various industries. It improves adoption and effectiveness through change management (CM) and structured learning programs. Our method incorporates the experience and industry-leading practices accumulated from building and deploying hundreds of systems integration projects to reduce effort and risk.

Deloitte's EVD methodology provides a complete set of processes, templates, and accelerators to meet West Virginia's project needs. It embeds best practices in HHS systems from our collective experiences with a focus on higher quality, lower risk, and predictability in the delivery of the project, which will benefit West Virginia. Deloitte's methodology provides a comprehensive application modernization life cycle approach that uniquely combines flexible, reusable service-oriented capabilities, technical frameworks, tools, accelerators, and Deloitte's extensive experience developing solutions over the past 45 years in the HHS marketplace.

Our approach leverages existing proven assets to accelerate the development and deployment of the West Virginia HSP solution at a reduced time and project risk. The following table explains features and benefits of our approach:

Features of Our Approach	Standardized Approach to Administer Human Services	Benefits to West Virginia
Solution development life cycle	• Uses EVD for SI as our end-to-end SDLC process and tool kit, including tools, templates, and accelerators • Provides a broad set of standardized development and operating processes	• Speeds up development and delivery • Enables cost-effective delivery by leveraging processes across the DDI activities involved in the modernization of RAPIDS, OSCAR and FACTS • Industry proven processes lowers project risk
Requirements management and traceability	• Rigorous process and use of automated tools for managing requirements traceability across the project life cycle	• Provides a complete list of requirements and traceability from Requirements through User Acceptance of the system
Defect management	• Processes, procedures, use of tools for discovery, resolution, and process improvement across entire SDLC	• Identifies defects earlier in the SDLC • Provides metrics that improve software quality • Testing Dashboard helps in effective test results reporting
Tools and standards	• Conduct, build, and deploy activities, including analysis, design, and development using proven methodologies, industry standards, and notations • Implements best practice and industry standards	• Use of Project Estimator and Planning Suite for scoping, estimating, and planning • Provides full configuration management tools • Jira tool provides centralized project management • Jama tool provides efficient management of testing, traceability, and defect management

Features of Our Approach	Standardized Approach to Administer Human Services	Benefits to West Virginia
Technical documentation	• Extensive documentation throughout the SDLC • Integration of West Virginia resources in SDLC processes and review	• Leverage templates to develop RSD, DSD, Technical Architecture, Logical and Physical Data Models, User Training etc. documentation • Provides full documentation which provides WV the flexibility of transition if required
Testing	• Integrated testing processes, methods and tools, and testing artifacts produced during SDLC • Integration of West Virginia resources in key test processes	• Testing best practices provide a thoroughly tested, stable and a robust WV HSP solution • Repository of 2500+ regression test cases from prior IE, Child Support, Child Welfare and Child Care implementation to jump-start testing
Component integration	• Component-oriented framework, based on industry-open standards, provides simplified access to Web services, defined data elements, and can extend business functions to respond to policy or practice changes	• Allows integration of WV HSP solution with other state and federal agencies in a secure way • Use SOA principles to deliver component integration • Templates for integration and regression test cases specifically designed for IE, Child Support, Child Welfare and Child Care implementations
Data conversion approach	• Uses EVD for SI conversion methods • Work closely with the WV staff to identify target systems and databases	• Replicates existing reporting capabilities and assets leveraged today by DHHR • Lays the foundation for integrating the data marts to DHHR's Enterprise Data Warehouse
System environments approach	• Systematic approach to establishing requirements, timing of acquisition • Establish multiple system environments required to support SDLC	• Provides the ability to scale on demand by tracking environment needs • Enhances cost-effective support for SDLC and production environments • Cost-effective acquisition approach
Integrated security	• Identify and document security capabilities	• Mitigates potential threats and vulnerabilities early in the project life cycle.
Information technology service management	• Integrated service management processes, activities, and deliverables • Integration of West Virginia resources in key maintenance and operation processes, including knowledge transfer.	• Enables smooth maintenance, software upgrades, and enhancements to the product • Enables knowledge transfer and transition • Enables effective release planning for enhancements and maintenance work items • Enables maintenance and operations insights
Legacy Modernization	• Modernizing legacy systems for enhanced maintainability, long term viability, and long term costs • Use EVD for SI approach for integrating a modernized system	• Enables faster reaction time to new business needs • Reduced operations and maintenance costs • Adds flexibility and scalability for future needs • Reduces risks of obsolete technology and efficient insertion of new technologies

Figure 4.0-13. Features and Benefits of our EVD for SI Approach.

Meeting West Virginia IES Project Goals and Objectives with Proven Solutions

West Virginia has outlined the following objectives to implement an enterprise wide Health and Human Services solution. The table below provides details on Deloitte's approach to deliver these objectives such as shared use, modernization, common governance structure and completion of functional requirements. For each objective, we provide examples of our proof of experience. In the forthcoming sections, we describe our understanding of each of your goals, and our approach to meeting each of the goals and objectives for DHHR.

Shared Use	WV HSP (Human Services Platform) has shared modules which have been developed on a singular and modular platform	
Objective	**Deloitte's approach to deliver the objective**	**Examples**
Interfacing with the Data Warehouse	Deloitte understands the importance of quality data to take informed decisions. Our approach includes creating a data governance plan which details the migration of existing data marts to the hosted solution. Our approach will migrate existing data marts to hosted platforms and using we will provide a unifying data visualization application to access and aggregate data in the existing data marts. This approach will provide reporting and decision making support for all data sets.	To unify and report data across Medicaid, TANF, Child Care and Child Welfare programs, we have interfaced with data warehouse for the Commonwealth of Pennsylvania for unified visualization and reporting. Other relevant states: ID, SD, WI, IN, NH, OR, CA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA
Reusability	WV HSP (Human Services Platform) segregates the Browser/Presentation Layer, Application Container, Business Layer, Reporting Services, Database/Document Repository and the Integration Layer. The N-Tier SOA architecture of the solution provides the necessary modularity and allows to scale and adapt to changes quickly. The Enterprise Service Bus is used to communicate with external interfaces. SAM based user security is used to control authentications and authorizations performed within the solution.	Shared Technical Services Tier - incorporates shared software services such as Enterprise Service Bus, Business Rules Engine to deliver a reusable solution across HHS enterprise and applications across the HHS enterprise (Child Care, Child Welfare, Child Support Enforcement, Integrated Eligibility) Other relevant states: AK, CT, GA, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, KY

Modernization	Built on Cloud technology and reusing agency business processes, WV DHHR core modules have collectively been implemented across 20+ states	
Objective	**Deloitte's approach to deliver the objective**	**Examples**
Enterprise Hosted Solution	Deloitte's Cloud hosted solution provides piece of mind. Together with our service providers and managed services we deliver infrastructure and application management services ranging from development through production. Services capabilities and processes are designed, developed, and implemented for security, high availability and disaster recovery.	During DDI of Illinois Integrated Eligibility System, Deloitte met the requirement to host application in a Tier II equivalent facility. Our hosting services vendor, Secure-24, provided services from its multiple, state-of-the-art data centers. Other relevant states: GA, WY, RI, FL
Proven Solution	WV HSP brings a solution that is fully functional, and developed on a proven technology stack by using latest Cloud infrastructure, SOA methods, and security tools. Deloitte uses the best-of-breed application modernization approach combined with pre-assembled solutions in order to deliver on DHHR's goals and objectives.	The NH New HEIGHTS project resulted in the development of a successful integrated eligibility system. New HEIGHTS acts as a shared platform, providing benefits to citizens seeking assistance from one of the 125 programs across the state and is responsible for providing over $800 million in benefits. Other relevant states: AK, CT, GA, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, KY
Design, Development and Implementation Schedule	The DDI schedule proposed by our solution achieves the major goals of the RFP with regard to mainframe dependence and predictable costs while reducing the risk to overall modernization delivery. Our approach provides WV HSP for user solution acceptance within 24 month of project kick off and works to decommission existing mainframe applications quickly.	The VA IE Project used a similar DDI approach to consolidate a single solution to enable citizens to apply for various benefit programs including Child Care, Medicaid, TANF, SNAP, and LiHEAP online. Other relevant states: AK, CT, GA, IL, IN, LA, MI, MT, NM, ND, RI, TX, OR, KY

Modernization	Built on Cloud technology and reusing agency business processes, WV DHHR core modules have collectively been implemented across 20+ states	
Automation	Deloitte recognizes the significance of automating repetitive and manual tasks which provides the county office workers the ability to focus more effort and time on higher value tasks resulting in improved customer service and faster processing. Our approach to automation is comprehensive and includes both business process automation and system process automation. WV HPS's flexible and modular architecture provides an extendable foundation for achieving and improving automation of business processes and many business automation features have been built into the platform.	The solution at Connecticut includes automation of the application intake process, automated Medicaid Eligibility Determination, and imaging workflow automation Other relevant states: AK, CT, GA, IL, IN, LA, MI, MT, NM, ND, TX, VA, OR, KY

Common Governance Structure	Deloitte's Project Management Methodology (EVD for SI) integrates project management leading practices from the Project Management Institute (PMI), CMMI, and our own demonstrated project management methodology honed through hundreds of Health and Human Services projects	
Objective	**Requirements**	**Deloitte's Response**
Project Management	Deloitte uses leading project management methodologies, standard project management tools, detailed procedures, practices, and approaches derived from our numerous HHS implementations. Our methodology for project management aligns with Project Management Body of Knowledge (PMBOK) and is consistent with ITL and CMMI. Our standards based, rigorous Project Management approach give WV confidence the complex WV IES Project will be delivered.	Deloitte provides the Commonwealth of Pennsylvania with a clear view of the "Health of the Project" using a centralized tool, HP PMC. Other relevant states: ID, SD, WI, IN, NH, OR, CA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA
Quality Management	Our commitment to quality applies to each activity in the system development life cycle (SDLC). Our quality assurance process aligns with Project Management Body Of Knowledge and include detailed proactive planning and management techniques, ongoing quality reviews at multiple levels, and continual communication with and evaluation by users. By adopting a proactive approach to eliminate errors and rework, we deliver high-quality reliable products in efficient and timely manner that meet WV's expectations.	As a CMMI Level 3-compliant practice, our work in Texas follows a disciplined approach to quality management including structured processes to manage quality, risk, and deliverables. Other relevant states: ID, SD, WI, IN, NH, OR, CA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA
Requirements Analysis and System Design	Deloitte's Enterprise Value Delivery (EVD) for SI methodology and our approach to Business Analysis/Requirements Management provides a proven process for managing and tracing requirements across each phase of the SDLC. Our approach is supported by tools that provide visibility into the requirements and providing transparency into the design, development, testing of the requirements. Our Agile-based design method incorporates detailed system design into each sprint execution. This Agile-based design approach increases transparency and the ability to incorporate feedback during the design process.	Deloitte has leveraged EVD for SI for the successful implementation of the Delaware Eligibility Modernization project including both Integrated Eligibility and Child Care programs Other relevant states: ID, SD, WI, IN, NH, OR, PA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA

Common Governance Structure	Deloitte's Project Management Methodology (EVD for SI) integrates project management leading practices from the Project Management Institute (PMI), CMMI, and our own demonstrated project management methodology honed through hundreds of Health and Human Services projects

Objective	Requirements	Deloitte's Response
Development	Our Hybrid Agile-based development approach allows agency to continue prioritizing features throughout the life cycle and sprints for the release. This allows for additional flexibility and adaptability throughout the design and development effort, which results in better outcomes for the composition of each release. During the development, cross-functional teams work closely together throughout the release effort to ensure the individual components developed during each sprint integrated properly with other dependent components.	In 2012, the State of CT engaged Deloitte to design, develop, and implement Connecticut's State-Based Exchange (SBE) in compliance with ACA regulations. The implementation of a first-of-its-kind system, our modular solutions, brought expected hurdles, but through a collaborative cross-agency approach the system was delivered on time. Other relevant states: AK, GA, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, KY
Testing	Deloitte's testing methodologies has been refined in over 45 years of serving Human Health and Services clients across over 20 states to incorporate lesson learned and best practices. We follow a technical sound test strategy and test planning approach, establish formally controlled and focused test process and test rigorously to improve end solution quality. Our methods and past experiences reduce implementation risk and provides the state with the best opportunity for success in serve its citizens.	Our successful implementation for the state of Delaware is due to our robust testing procedures. A combination of manual and automated testing scripts was used to test the solution. Regression testing was performed automatically for each maintenance release Other relevant states: ID, SD, WI, IN, NH, OR, PA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA
Data Conversion	Deloitte has a robust and structured conversion approach that is production-proven across our national portfolio of HHS implementations. Data conversion is more than just a one-time activity to move data from one system to another. We incorporate repeatable development, testing, and implementation cycles in the conversion process, creating a highly automated data conversion strategy driving continuous improvement of data quality. This provides a high conversion rate allowing the State to continue business operations and serve its citizens in an uninterrupted manner while transitioning to the proposed solution.	For the state of California, we designed a comprehensive data migration approach and successfully completed data migration for Santa Clara's health and human services. Other relevant states: ID, SD, WI, IN, NH, OR, PA, NE, OK, NM, CO, TX, FL, MA, NY, NC, GA
System User Training	Our training curriculum includes techniques to meet the learning needs of each type of learner, and uses verbal presentation, visuals, hard copy materials, and hands-on practice exercises to provide learning opportunities for auditory, visual, and kinesthetic learners. By designing a training approach that focuses on adult learning needs, Deloitte supports users as they learn to become independent and gain the self-confidence they need to successfully use WV HSP (Human Services Platform).	Kentucky utilized an extensive training plan outlined by Deloitte. This helped the staff to get up to speed from Day 1 and increase worker productivity. Other relevant states: AK, CT, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, GA

Common Governance Structure	Deloitte's Project Management Methodology (EVD for SI) integrates project management leading practices from the Project Management Institute (PMI), CMMI, and our own demonstrated project management methodology honed through hundreds of Health and Human Services projects	
Objective	**Requirements**	**Deloitte's Response**
Implementation Readiness	A successful system launch requires more than just the system functionality. It requires synchronized coordination between the State and vendors to effectively plan all project implementation activities and decisions that lead to implementation readiness. We leverage our deployment discipline of our EVD methodology and numerous implementation experiences to work closely with our client on a continual, collaborative basis and coordinate various aspects of business, technology, dependencies and policy.	On the Delaware Eligibility Modernization project our implementation services followed the EVD for SI methodology. This methodology was used to track the implementation readiness for 7 external vendor partners and over 30 agency partners within the State. The methodology covered readiness checklists, communication and training strategies, and implementation items such as playbooks, contingency and continuity planning across all 37+ vendors. Other relevant states: AK, CT, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, KY
Operations	Operational Excellence is an element of organizational leadership that stresses the application of a variety of principles, systems, and tools toward the sustainable improvement of key performance metrics. Strictly based upon the service management practices prescribed by the IT Infrastructure Library (ITIL), Deloitte's practitioners leverage industry best practices, tools, and prior experience to deliver both exceptional service transition and service operations capabilities, as well as defining repeatable operational processes that can be measured and continuously improved.	For state of Michigan, Deloitte maintained the ongoing operations of the Bridges project to implement changes in federal and state regulations, evolving business needs, opportunities for improving business processes, continued software and hardware upgrades, and break fixes. Other relevant states: CA, PA, OR, CO, MA, WI, TX, RI, GA, CT, IL, KY, DE, MN, VA, WA, AK, ND
Turnover and Closeout	We understand it is our team's responsibility to prepare the agency staff to independently operate, maintain, and enhance the proposed system. Your staff must be well-trained and knowledgeable in every aspect of the system. We have proven techniques to confirm that transition occurs throughout the contract period. We also conduct a transition assessment upon project closure in order to evaluate that the necessary level of knowledge transfer was achieved and to provide your team with lessons learned, leading practices, and other recommendations for efficient and effective ongoing operations, maintenance, and enhancement of the system.	Deloitte worked with the State of Florida to implement the Child Support Enforcement Automated Management System (CAMS). Upon completion of the project, Deloitte conducted a successful transition of the system to the State's support team. Through a well-orchestrated and structured program that provided opportunities for team members to work together and collaborate on a broad base of project tasks, together with formal learning and knowledge transfer, the State was able to successfully take over the management and support of the system at the conclusion of the warranty period.
Inventories of Reports, Forms/Notices/ Letters, and Alerts	Deloitte understands the importance of maintaining a list of reports, forms, notices, letters and alerts for a comprehensive Health and Human Services solution. Deloitte's proven approach to develop and maintain reports, Forms/Notices/Letters, and Alerts adheres to the timeline and change approval process.	For PA, we generated 160,743 correspondences in 2016 for Child Care project and have categorized reports for providers, case, payment, funding. Template based and Ad hoc COGNOS reports have been implemented for PA.

Common Governance Structure	Deloitte's Project Management Methodology (EVD for SI) integrates project management leading practices from the Project Management Institute (PMI), CMMI, and our own demonstration project management methodology honed through hundreds of Health and Human Services projects	
Objective	**Requirements**	**Deloitte's Response**
Business Process Models/Mapping	Deloitte's business process management approach provides you with an accurate and objective assessment of the current workforce and system performance, a fit/gap analysis of future state business processes against WV HSP (Human Services Platform), defined and modeled future state processes that align with the MITA maturity model, and business process governance across each phase of the project.	Deloitte has been engaged for the design, construction, testing and implementation of the transfer system including a one year warranty and two years of maintenance and operations. Currently, we are performing a fit/gap analysis to determine the processes which need improvement. OR Other Relevant States: FL, MN, IN, TX
Enterprise Reporting Capability	Deloitte is the Health and Human Services market leader for developing Business Intelligence solutions that drive decision making through the use of our Eligibility and Enrollment solutions. Our knowledge and understanding of policy, business process and analytics differentiates us from our competition as our "data-driven" approach enables State leadership to maximize performance, productivity and quality for case managers and field staff.	The use of HHS Interactive has helped the Commonwealth of PA to generate dashboards which help in predictive analysis of Child Welfare and Integrated Eligibility, and Child Care programs. PA

Completion of Functional Requirements	With WV HSP (Human Services Platform) we have successfully implemented similar functional requirements in 20+ states which leveraged existing assets used in production to meet the State's requirements	
Objective	**Deloitte's approach to deliver the objective**	**Examples**
Alignment with Functional Requirements	From our fit/gap analysis of the requirements, we have identified that our WV HSP (Human Services Platform) already meets approximately 96 percent of your business requirements as "Native" or "Config", allowing us to focus on the remaining 4 percent for West Virginia-specific business needs.	We performed a comprehensive fit/gap with the functional requirements for the state of Georgia. This enabled the Deloitte team to customize the platform to GA's requirements for a successful implementation. GA Other relevant states: AK, CT, IL, IN, LA, MI, MT, NM, ND, RI, TX, VA, OR, KY

Figure 4.0-14. WV HSP (Human Services Platform) Solution meets WV IES needs.

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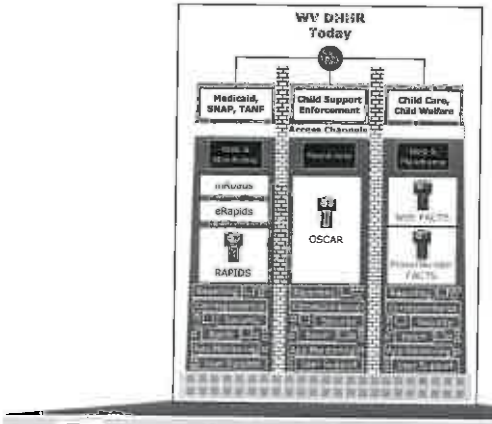
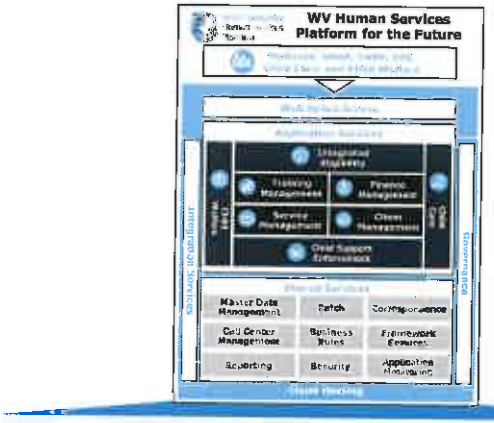
WEST VIRGINIA WV DHHR TODAY VS. WV HSP FOR THE FUTURE

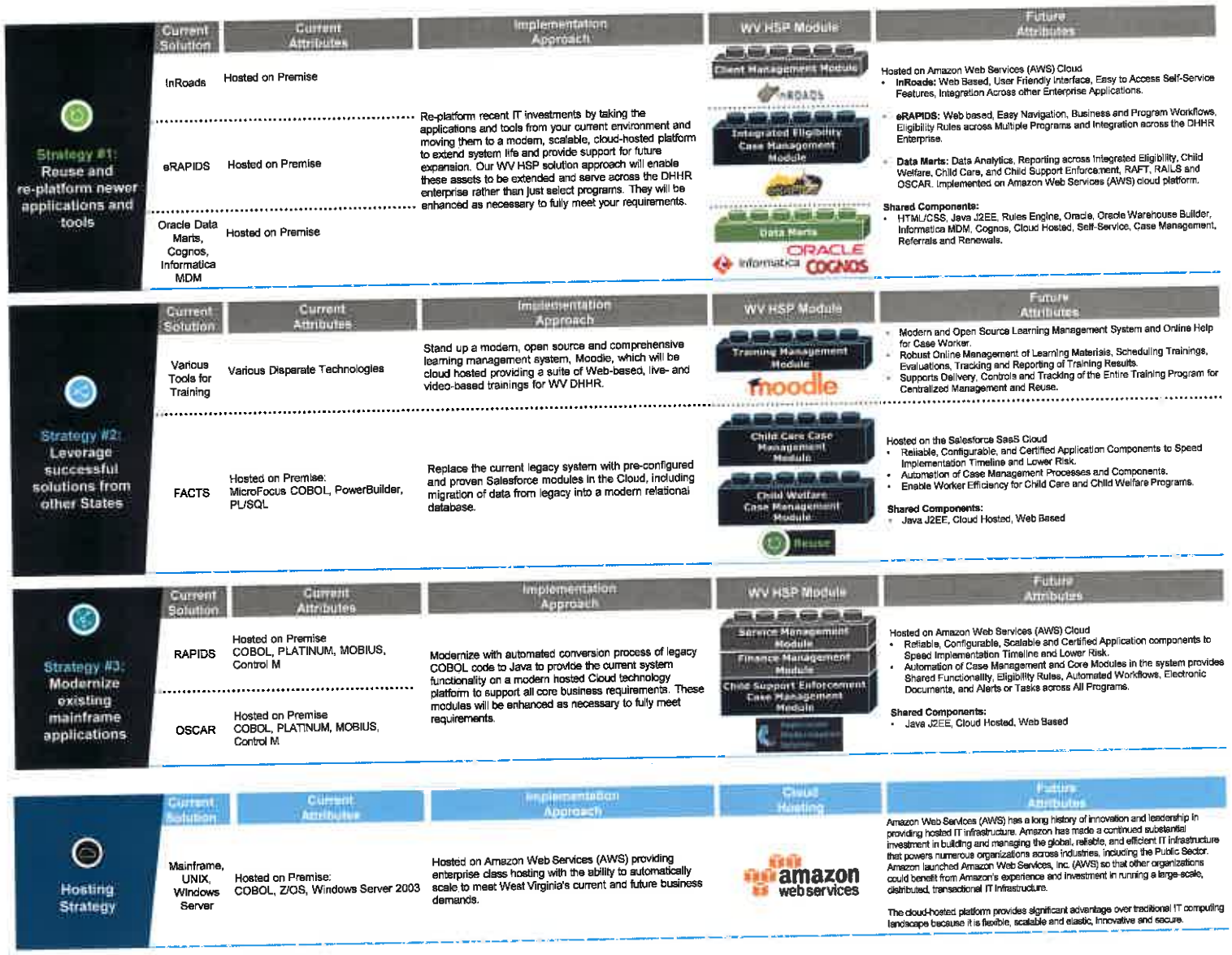


	Less accessible. Program sliced Citizen Access
	Disparate, multiple log ons
	Data siloed by program, not outcome focused
	Business Rules in COBOL, hard to maintain
RAPIDS OSCAR Web FACTS PowerBuilder FACTS	Disparate application technologies, siloed by program and hard to maintain, increasing maintenance and enhancement cost
	Mainframe – Antiquated technology, inflexible, rigid, hard to scale, on premise/State hosted
	Repeated functionality - hard to maintain and inefficient
	Inconsistent Governance Standards Across Enterprise
	Resource Intensive manual processes for County office workers and other State employees



	DHHR Enterprise Customer Portal
	Single sign on
	Master data management, commonly identified citizens - MDM for all programs (Medical Assistance, SNAP, TANF, CSE, Child Care, and Child Welfare)
Drools	Rules in Open-source business rules engine, conforming to CMS 7 Standards and Conditions
	Modern, homogeneous application technology, easy enhancements, SOA, modular, maintainable, reliable
amazon webservices	Scalable, flexible, agile, cloud hosted with Amazon Web Services, fully web-based
	Shared Services provide a seamless integration layer to promote efficiency, consistency and improved security
	Enterprise Value Delivery for System Integration (EVD for SI) methodology provides consistent governance standards
	Industry-leading process mapping tool (IndustryPrint) reduces manual work and accelerates modeling through automation

WEST VIRGINIA IES PROJECT



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A BETTER WAY

Deloitte Application Modernization

THE NEED FOR CHANGE

Legacy systems can stretch budgets and patience with escalating maintenance costs and diminishing efficiency. However well-matched they were to the demands of their day, they may not be able to handle modern needs like analytics, mobile and cloud access, or cybersecurity.

An array of forces is driving systems owners to make changes. The question is: How many of these forces are affecting you?

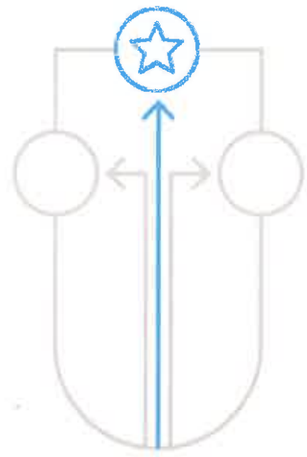
- COSTS
- MAINFRAME BRAIN DRAIN
- AGILITY
- EFFICIENCY
- REPORTING
- INTEROPERABILITY
- RISK
- SECURITY

THE CASE FOR A BETTER WAY

Investing in all-new systems may be costly and disruptive. But nursing your legacy system along invites higher maintenance costs and deeper inefficiency. In contrast, Application Modernization preserves your systems while bringing their performance up to current standards.

This process replaces, or "refactors," the dated interfaces, code, and data structures that are holding them back, while it modernizes the related business practices to leave your enterprise better able to handle current needs like cloud, mobile, analytics, and the business of IT. Unlike other offerings, Deloitte's refactoring process is fully automated—which is both faster and more accurate than manual approaches.

Application Modernization delivers more efficiency and service time on the IT side, and more speed, better user experiences, and deeper capabilities on the front end.



WHY DELOITTE STANDS APART

AUTOMATION. With millions of lines of code across multiple platforms, most enterprises can't afford to wait out a manual upgrade. Deloitte's fully automated code refactoring makes the process not only faster but more reliable.

DEPTH. Many providers offer semi-automated code refactoring. But they don't also offer the full range of disciplines that make Deloitte the world's largest professional services organization. That's the difference between a narrow tech solution and an intelligent enterprise solution.

THE PROCESS

Deloitte's Application Modernization practice sees the whole picture—and delivers support that aligns IT improvements with the needs of the enterprise. Each solution is custom-designed to account not only for the core system "renaissance," but also for the business of IT, digital needs, cloud capabilities, and analytics.

- ASSESS CURRENT STATE
- DEFINE FUTURE STATE
- ASSESS APPROACH VIABILITY
- CREATE ROADMAP
- IMPLEMENT AND ITERATE MODERNIZATION STEPS
- MAINTAIN AND OPERATE

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BENEFITS YOU CAN EXPECT

With Deloitte, our Application Modernization process delivers both IT and business benefits:

LOWER RISK
No core requirements to define, no missed functionality, minimal end user training, and the ability to modernize at your own pace

HIGHER QUALITY
1-to-1 functional test scenarios result in high-quality releases, with no interruption of current business process

LOWER COST
Full automation prior to modernization reduces the number of developers required to refactor applications, while the ROI is realized earlier due to ability to release high-value functionality early in the project

HIGHER INTEROPERABILITY
Modernized systems make it easier for current applications to connect with ones the business hasn't requested—yet—and to take advantage of cloud services

Goal: Shared Use

Section 4.1

Attachment A, 4.1, Goal: Shared Use

The modernization of West Virginia's Human Services systems into a single modern and modular shared platform is driven by the State's overarching goal of standardizing the approach to human services for West Virginia. The West Virginia Human Services Platform (WV HSP) has been designed to provide shared use of functions and features at the core to meet the State's objective to reduce unnecessary costs and unique operations.

Our Approach

WV HSP is based on core tenets to meet DHHR shared use objectives. These objectives are accomplished through data sharing and product reuse, and the solution includes the following important aspects:

Modern: WV HSP will be implemented on a cloud hosted platform to reduce operational expenses and increase operational efficiency across the solution. Modern tools can be uniformly applied to aid in the management and reporting of the platform.

Modular: Based on a loosely coupled SOA architecture, changes can be made to each module as needed to support Human Services Delivery to the citizens of West Virginia.

Integrated: There is an enterprise focus on interoperability across the platform and with trading partners to support business needs through the use of modern tools such as an Enterprise Service Bus used by the modules to support their specific needs.

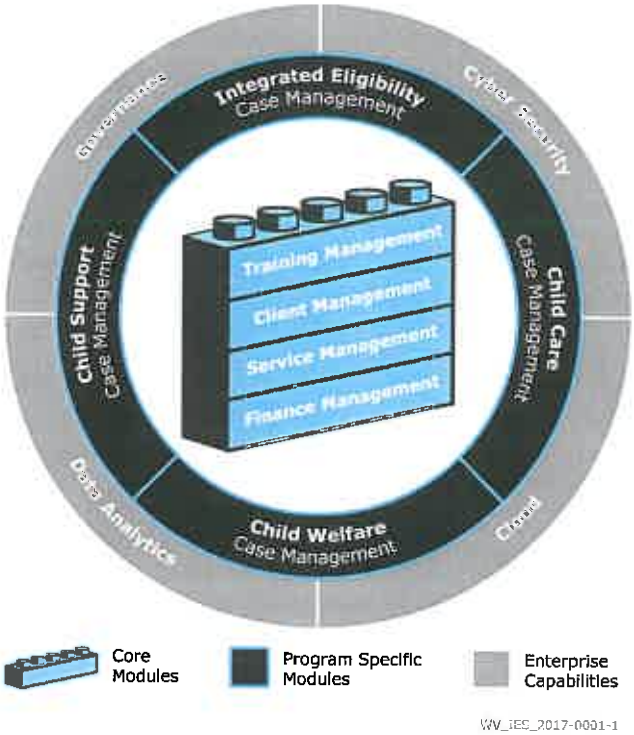

Figure 4.1-1. Comprehensive solution.

Maximizes Reuse: WV HSP utilizes a shared set of services supported by both open source and COTS tools and products to maximize reuse across WV HSP modules and integration with trading partners. Tools chosen for WV HSP, such as the existing Northwood's EDMS solution, were carefully selected based on their strengths and in order to maximize reuse of existing DHHR assets and tool reuse across WV HSP.

Effective Data Access: WV HSP enables access to high quality data across the platform through the effective use of shared data management tools and supported by the integration layer and the data management aspect of WV HSP.

The diagram below illustrates key services and components that are shared for common functions. These services mandate reuse and common architecture for business functions such as business rules, correspondence, and scheduling. Technical items such as the enterprise service bus and service oriented architecture enable reuse of standard integration patterns.

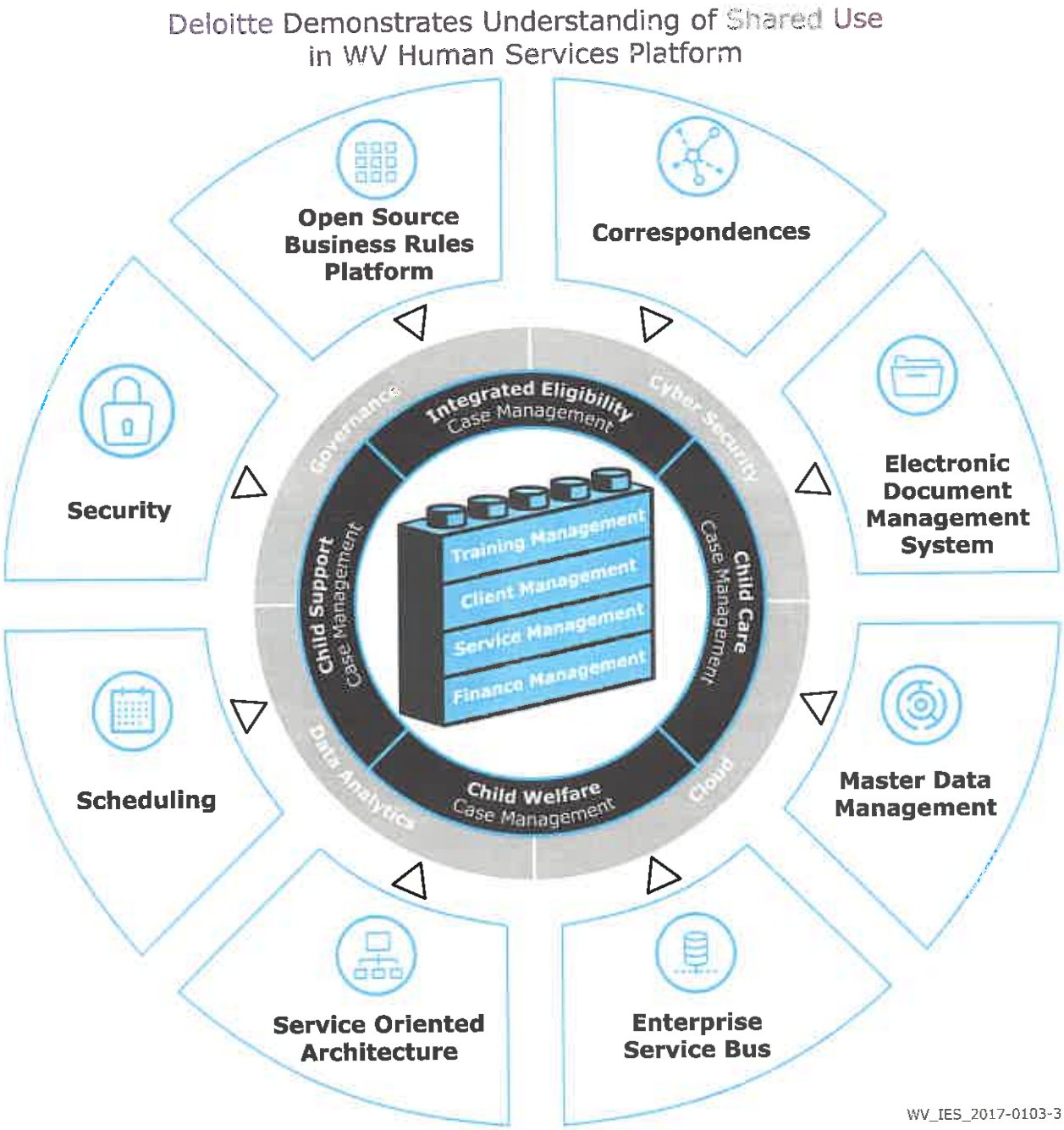

Figure 4.1-2. WV HSP enables shared use.

Objective: Interfacing with the Data Warehouse

Deloitte recognizes the importance of DHHR's continued access to quality data for the purposes of informed decision-making. WV HSP will meet DHHR's objective of Interfacing with the Data Warehouse by migrating the existing DHHR data marts to AWS cloud hosting and providing functionality for WV HSP to transmit data to and receive/store data from the existing data marts. This approach will allow DHHR to meet your current, critical analytics needs while providing a scalable, cost-effective, cloud hosted platform for the future. WV HSP will also have an interface with the existing DHHR enterprise data warehouse which will allow the solution to transmit data to and receive/store data from the enterprise data warehouse, which can then be integrated into the MDM solution.

Our Understanding

The section below highlights how our approach supports the RFP requirements, as follows:

RFP Requirement	Our Approach to Meeting the Requirement
The IES should be able to transmit data to the existing data marts.	The three current data marts (RAFT, RAILS, OSCAR data mart) will be migrated to the AWS cloud hosted platform, alongside WV HSP, and the ETL routines which currently populate data into the data marts will be updated and new ETL routines developed as required in order to properly transmit WV HSP data to the data marts.
The IES should be able to receive and store data from the existing data marts.	The ETL routines which send data from the data marts to DHHR applications will be updated and new ETLs developed as required to send data to WV HSP and store the data in WV HSP.
The IES should be able to transmit data to the DHHR enterprise data warehouse.	An interface will be created to transmit data from WV HSP to the DHHR enterprise data warehouse.
The IES should be able to receive and store data from the DHHR enterprise data warehouse. Data received from the DHHR enterprise data warehouse should be able to be integrated into the MDM solution.	An interface will be created to receive and store data from the DHHR enterprise data warehouse. WV HSP will leverage the Informatica MDM tool and will have functionality to integrate data received from the data warehouse into the MDM. Additional information about the WV HSP MDM solution is provided later in this section in the sub-section titled "Master Data Management and Master Client Index".

Figure 4.1-3. How our approach supports the RFP requirements.

Our Approach

The ability for WV HSP to transmit data to and receive data from the existing data marts and the enterprise data warehouse is guided by the three phases of our Analytics and Reporting Solution Architecture outlined below. Our approach supports existing functionality, meets DHHR's requirements and creates a platform that is scalable to grow with future DHHR needs. The solution provides a foundation to support the information requirements of today and establishes an information architecture that serves as the building block for future DHHR growth and additional data and analytics needs.

Phase 1 - Platform Migration

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During the platform migration phase, there will be several components which will be moved from their current on premise location to the AWS cloud hosted platform.

- The existing DHHR data marts (RAFT, RAILS, and OSCAR Data Mart) will be migrated from their current on premise platform to the same modern cloud hosted AWS platform as WV HSP.
- The existing Oracle Warehouse Builder ETL scripts that are used to send data to and from the data marts will be migrated to the cloud hosted platform.
- The Oracle Warehouse Builder ETL tool itself will also be hosted on the cloud platform.

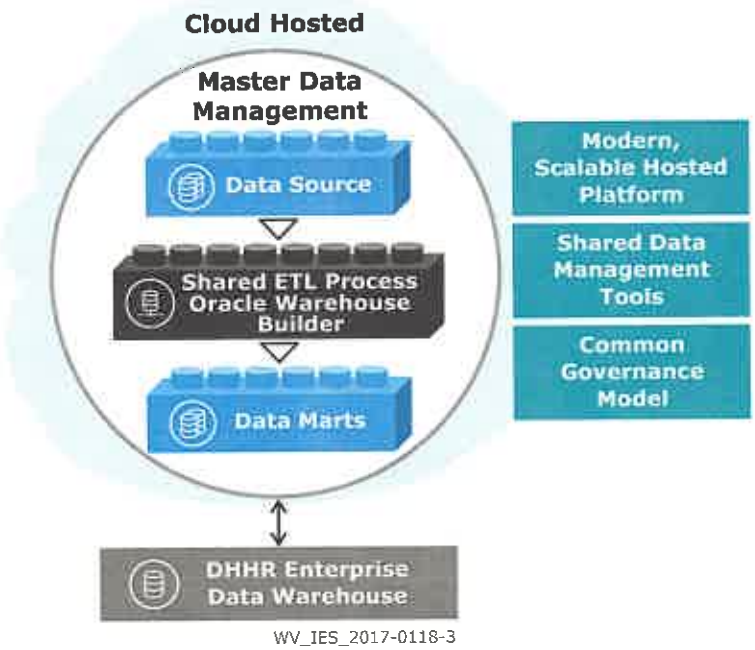

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Figure 4.1-4. Conceptual View

There are several benefits to this approach. The reuse of the Oracle Warehouse Builder ETL tool will maximize reuse of existing technologies and minimize effort for training and adoption of the tool. The cloud hosting approach will reduce effort for WV HSP to send and receive data to and from the data marts and will create a scalable, cost-effective platform for the future through the use of a cloud platform which is shared with the core WV HSP solution. The common governance model will provide a consistent model in managing the process.

Phase 2 - ETL Script Configuration and Validation

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In the ETL script configuration and validation phase each script is configured to communicate data between the WV HSP and the data marts. The scripts are validated to confirm that the data exchange is occurring in totality and that the data transformation and loading is correct. Existing scripts are modified and new scripts are created as needed. This is performed iteratively for each data mart, for each of the scripts to confirm current data mart functionality continues to function as it does today and WV HSP is able to send and receive data to and from the data marts. As each data mart is migrated, testing is performed across the existing data mart reports to make sure they continue to function properly. Data will be extracted, transformed, and loaded leveraging the ETL tool in use at DHHR today:

Oracle Warehouse Builder (OWB). To complete the efforts in this phase, a new interface will be developed for WV HSP to transmit data to the DHHR enterprise data warehouse and receive and store data from the data warehouse. WV HSP will have capability to integrate data received from the data warehouse into its MDM solution, which uses the Informatica MDM product. Leveraging modern tools already in use at DHHR, like OWB for ETL and Informatica for MDM, reduces risk to the modernization effort and reduces the learning curve through the use of known products.

Phase 3 - Production Implementation

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Production implementation is the point where the data mart cloud migration is complete and the WV HSP functionality to transmit/receive/store data to/from the data marts and transmit/receive/store data to/from the DHHR enterprise data warehouse moves to the production environment. Through this functionality, WV HSP will provide DHHR with the ability to meet your current reporting and analytics objectives and create a base platform for future expansion of DHHR reporting and analytics capabilities on a cloud hosted platform.

Objective: Reusability

The West Virginia Human Services Platform (WV HSP) reuses components across modules achieving a flexible architecture. We understand the importance of a solution that is implemented using an N-Tier Service Oriented Architecture (SOA), maintains open standards, and is component-based. WV HSP meets these needs and helps the state achieve its goals of shared use and modularity as the foundation to integrate different applications and diverse data types.

Deloitte applauds the State's vision for Enterprise Architecture is to build modular systems that promote shared use and reusability. WV HSP meets DHHR requirements for reusability and provides a modular, flexible, extensible, secure, reliable and scalable solution.

WV HSP uses an N-Tiered, SOA based architecture. The architecture enables the seamless integration of modules without introducing stringent requirements on the integrating system's technology stack. Each layer is independent, with specific and well-defined integration points that facilitate modifying components in one area without impacting other application areas. N-Tiered SOA architectures enable flexibility and adaptability to respond quickly to changes in business and technology.

Deloitte's proposed WV HSP meets WV DHHR Requirements:

- Implemented in an SOA N-Tier architecture on a cloud hosted platform
- Standards based integration through an Enterprise Service Bus to maximize module integration and interoperability with trading partners and other agencies
- Shared common components for reuse
- Externalized Open-source business rules engine integrated with the core solution promoting modularity, scalability and flexibility
- Reusable enterprise reporting components that combine data across the enterprise to provide a unified view

Our Understanding

WV HSP includes key functionality enablers to shared use and modularity. SOA serves as a foundation and will eliminate barriers between different applications and diverse data types. Our approach will facilitate system-to-system data sharing, seamless interoperability, and collaboration across multiple programs and agencies. The section below highlights how the WV HSP solution meets the RFP requirements.

Our Approach

Deloitte has proposed a technical architecture that enables flexibility and adaptability to respond quickly to changing business needs or changes in regulatory requirements. The software architecture promotes shared use across the enterprise through a shared use of services and tools.

Our vision of the WV HSP solution of the future is based on the principles outlined in the following table and requirements noted by DHHR.

N-Tier SOA	• WV HSP provides an N-Tier, service oriented architecture, enabling the separation of layers including data, integration, application, and presentation for greater flexibility and agility for software changes to meet business or technical requirements.
Enterprise Service Bus	• An Enterprise Service Bus that provides open, standards-based connectivity through a variety of APIs and other interface methods to support communication of data across entities.
Standards-based Interoperability	• The use of standards-based interoperability technologies including; Web Service Definition Language (WSDL), Simple Object Access Protocol (SOAP), Extensible Markup Language (XML), and Java
Open-source Business Rules Engine	• An open-source business rules engine (Drools) and a configurable, Web-based business rules management system to support the business rules for the WV HSP modules. This is a tool used to support business rules for WV HSP.
Electronic Document Management and Workflow	• Support for electronic document management and content workflow, as well as generation of reports, notices, and letters across the enterprise reusing the Adobe LiveCycle software.
Enterprise Scheduling	• An enterprise scheduler for all system users, including client scheduling as part of the application logic used in WV HSP by each module.
Master Data Management and Master Client Index	• A Master Data Management solution, containing a Master Client Index. Reusing the Informatica MDM tool to continue supporting the data management requirements but hosting on the AWS cloud platform.
Enterprise Reporting	• An enterprise reporting solution supporting standard and ad hoc reporting. WV HSP will reuse the Cognos reporting software to continue supporting the existing reporting functionality but host it on the AWS cloud platform.
Role-based Access	• An integrated security management capability with role-based access. There is role based access in WV HSP, the tool integration and platform management. This is an integral feature across the HSP solution and hosted platform.

Figure 4.1-5. Reusability Approach.

N-Tier SOA architecture

The proposed solution architecture is divided into six separate layers: **Presentation Layer, Application Services Layer, Integration Layer, Shared Service Layer, Information Services Layer, and Security Management Layer**.

The module diagram below is an illustration of this for WV HSP. Following the module diagram is a description of the integration between the modules and the reusability components.

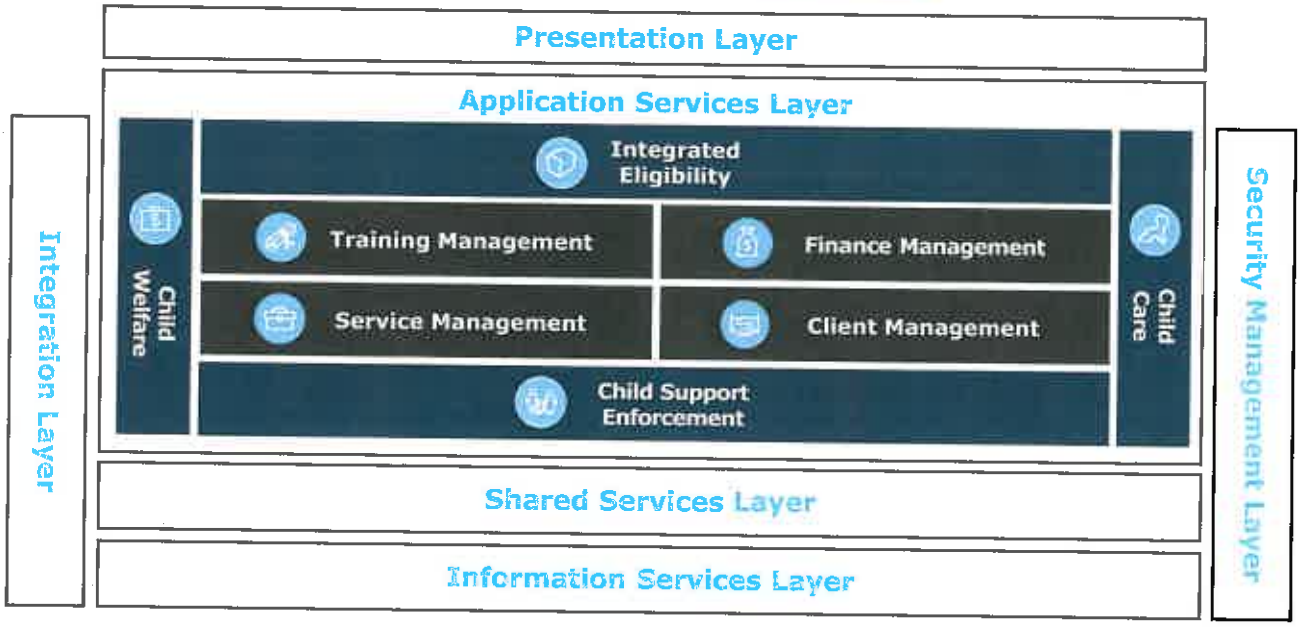

Figure 4.1-6. WV HSP N-Tier SOA Architecture Depicting Module Integration and Reuse Components.

The technical features illustrated in each of the layers are described in greater detail in the tables below along with tools and features that support the overall solution.

Presentation Layer	Provides Web-based channels of access to the system for citizens, workers, providers, and community partners. Provides UI components and presentation components along with data validation upon entry.	
Feature	**Reusability**	**Software Components**
Client Portal	Provides a Web-based user interface for the citizen-centric, service-based Internet application with modular integration across the entire enterprise.	• HTML5/CSS • Java/Apex • Cloud Hosted
Worker Portal	Provides a Web-based user interface for State staff to perform business workflows including eligibility determinations across multiple programs.	

Figure 4.1-7. WV HSP Presentation Layer.

Application Services Layer	Provides core application logic, which supports functionality used by workers, providers, and community partners.	
Module	**Reusability**	**Software Components**
Client Management	The Client Management module provides functionality to support citizen-facing self-service business processes such as submitting applications for multiple programs, reporting changes, submitting referrals and checking the status on application and case information.	• Java • Cloud Hosted • Moodle
Service Management	The Service Management module provides an integrated, worker-centric and outcome base solution which supports service management processes. It provides shared functionality across various DHHR programs, while tailoring eligibility rules, automated workflows, electronic documents and alerts or tasks to the unique needs of the State's individual program	
Finance Management	The Finance Management module supports the accounting process that supports the DHHR customers with respect to child care, child support, child welfare, and family assistance programs.	

Application Services Layer	Provides core application logic, which supports functionality used by workers, providers, and community partners.
Training Management	The Training Management module is implemented using Moodle. This comprehensive learning platform connects the West Virginia DHHR workforce and community partners to a suite of Web-based, live- and video-based trainings. It offers robust scheduling capabilities and supports delivery, controls and tracking of the entire training program for centralized management.
Integrated Eligibility Case Management	The Integrated Eligibility (IE) Case Management module is comprised of components for processing applications and cases for benefit programs including Medicaid, SNAP, TANF, LIEAP, CHIP, Work Programs and Emergency Assistance. It includes IE specific case management components such as benefit issuance, benefit verifications, work programs and workload monitoring enabling workers to be more efficient through automation, improved workflows, processes and efficiencies.
Child Care Case Management	The Child Care (CC) Case Management module includes core components such as Provider Contracts and Service Agreements, Provider Rates/Fee Schedules, Enrollments, Attendance and Payments and Billing Reconciliation functions to enable workers to efficiently process cases within the Child Care Assistance Program.
Child Welfare Case Management	The Child Welfare (CW) Case Management module enables business processes designed to promote the safety, permanency, and well-being of children, youth, and families. It comprises components such as Assessments, Home Studies, Investigation, Placement, Courts, Adoption, Guardianship, and Interstate Compact on Placement of Children (ICPC).
Child Support Enforcement Case Management	The Child Support Enforcement (CSE) Case Management module automates core CSE case management processes such as locating parents, establishing paternity, obtaining child support orders, and enforcing support obligations.

Figure 4.1-8. WV HSP Application Services Layer.

Our integration strategy is driven through the WV HSP integration layer. This layer plays a key role in the integration and communication of data across external trading partners, security, shared service tools and information management. The integration layer will support multiple integration communication channels such as web services based on SOAP/Rest API's, File Transfer protocols, File Transformation and electronic data exchanges. This integration provides support across HSP solution modules or with external trading partners, as shown in the graphic below.

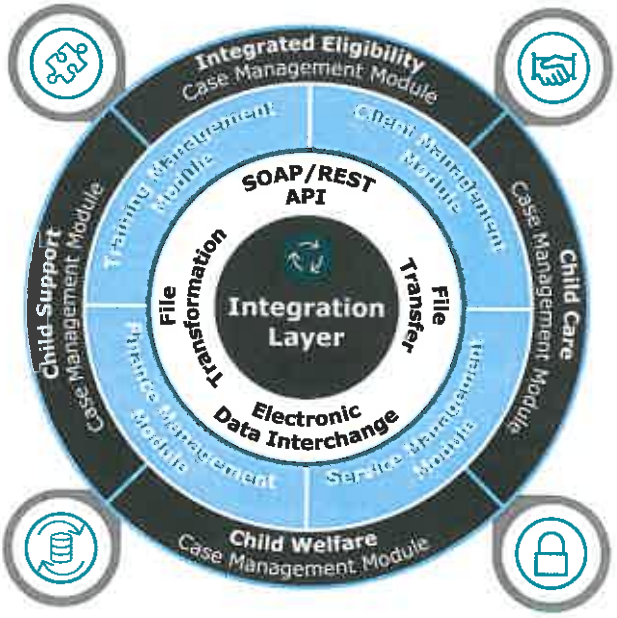

Figure 4.1-9. Integration Strategy Diagram.

Enterprise Service Bus (ESB)

Deloitte understands the need for building modular systems using open standards based connectivity using an Enterprise Service Bus (ESB) as the backbone for integration. Our proposed solution for DHHR uses ESB-based integration through the Oracle SOA Suite for system-to-system communication supporting the complex requirements on the source and destination system technology and data formats. The ESB will support the orchestration of service requests between modules and support the exchange of data with external trading partners and other agencies. Deloitte has experience leveraging an ESB product to manage interoperability between programs and entities to support business functionality and data management.

ESB Solution Features	Benefit to the State
Service Orchestration	Provides for the arrangement, coordination, automation and management of application services.
Service Discovery	Enables automatic detection of services offered.
Messaging	Provides a fault tolerant messaging architecture that is supported by high availability, scalability, and traceability.
Web Services Management and Security	Provides a management framework, services, and infrastructure elements to ease the configuration and security of web services.
Support for Standards	Supports industry specific standards like Health Insurance Portability and Accountability Act (HIPAA) and National Information Exchange Model (NIEM). For other standard exchange formats advanced by CMS, SSA and the IRS, the ESB supports message transformation and translation to map the standard format with partner systems.

Figure 4.1-10. ESB Solution Benefits.

Standards-based Interoperability

WV HSP uses open standards including Web Service Definition Language (WSDL), Simple Object Access Protocol (SOAP), Extensible Markup Language (XML), and Java. Using these standards allows developers to focus on the functional implementation without the need to worry about the transport mechanism to exchange data and also allows reusing existing technology investments on legacy systems through requisite adapters. We use Web Service Description Language (WSDL) as the standard for describing the structure and a service registry to catalog the location of web services. To facilitate the greatest return on investment (ROI) on these services, we develop a set of standards for WSDLs that promotes interoperability and reusability. We leverage Web Service – Interoperability (WS-I) guidelines and profiles implemented as a set of assertions that test various requirements for the structure of a WSDL document. We maintain standards for services documentation in our Programming Standards and Guidelines that enforce standard specifications and industry best practices.

Integration Layer	Provides integration layer as a SOA based WV HSP. The WV HSP modules are integrated via the integration layer. The integration layer also supports services to integrate internally with other state enterprise systems and external systems of trading partners, including the Federal Data Service Hub	
Feature	**Reusability**	**Software Components**
Information Exchange	Provides a modular framework and containers for building and deploying integration services for transforming and routing messages and providing secured delivery.	• Oracle SOA Suite
Transformation	File and Message transformations which are structural or semantic in support of interoperability. A structural transformation converts one data format to another while a semantic transformation interprets the message data to alter its meaning.	
Routing	Configurable routing services that determine the end point to which a message needs to be sent and deliver it in the format required.	
Service Marshalling	Provides a modular mechanism of managing service contracts in a way that is easily interoperable across multiple systems and avoids the need for stringent requirements around interfacing systems technology.	

Figure 4.1-11. WV HSP Integration Layer.

The sections below provide a description of the Shared Service Layer.

Master Data Management and Master Client Index

The WV HSP provides Master Data Management (MDM) for Master Client Indices and department-wide reference and hierarchical data. This helps the State in maintaining a central repository for information. This allows multiple systems within the State to share this information, reduce data redundancy, and improve data accuracy and integrity. The WV HSP leverages the State's existing Informatica MDM platform for supporting master data management but hosts it on the cloud platform rather than on premise.

The integrated MDM supports fundamental day-to-day business processes such as registering an applicant or updating master client information. Integration between WV HSP and the data consumers is accomplished through open standards based integration.

MDM Integration Features	Modularity Delivered
Integrates using web services	• Enhances interoperability across multiple programs within the Enterprise • Increases the efficiency of development staff as standards such as WSDL and SOAP are built into the development tools proposed • Extensible and ready for the State's future state enterprise architecture
Easily Extensible for multiple programs	• Supports the definition of enterprise data models so that the Master Data Management is easily extensible across multiple programs and future applications within the enterprise

Figure 4.1-12. Master Data Management.

Open-Source Business Rules Engine

Deloitte will implement an open-source, Business Rules Management System (BRMS) that decouples business rules from application code, providing the ability for business rules to be authored, modified, analyzed, documented, executed, and managed by the line of business independent of the underlying software system. WV HSP will leverage Drools, an open source business rules engine. The modules will use the common business rules software to support their specific rules based needs to support automated decision-making.

Organizations use externalized Business Rules in scenarios where business logic is expected to change and relies on an execution engine to work through the dependencies and linkages that define complex program requirements. Integrating the Business Rules Engine (BRE) is an industry best practice in HHS systems. Federal and state regulations complicate the business rules and the challenges are typically around understanding the program not the technology. Deloitte understands both. We support multiple States that use integrated business rules engines in our solutions.

Deloitte has experience integrating several rules engines as part of implementing solutions of similar size and scale for several states. Drools is being proposed as the open-source external business rules engine. Deloitte will work with the state to configure the rules engine to meet your unique requirements and will establish a reusable business rules service.

The following table summarizes key features of the proposed solution.

Open Source Business Rules Solution Features		Benefit to the State
	Business Rules Repository	Provides a centralized open-source repository for business rules
	Business Rules Manager	Provides a rich Web-based GUI with editors, and tools to aid in the management of large numbers of rules.
	Business Rules Engine	Provides a proven open-source rules engine that implements the Rete algorithm, a highly efficient pattern matching algorithm for implementing large rule systems.

Figure 4.1-13. Business Rules Solution.

Electronic Document Management and Workflow

Our proposed solution integrates with the Northwood's Electronic Document Management System (EDMS) which is a mandatory reuse component from the State via web services to store and index electronic documents. Open standards-based connectivity with the document management system allows easy integration with other WV HSP modules and functions like content workflow and Cognos reporting solution for storing the generated reports. WV HSP provides integration of the EDMS with Adobe LiveCycle for generation and storage of notices and letters across modules of the WV HSP solution.

Integration points are embedded throughout WV HSP modules, allowing citizens, partners, providers, and State staff to upload documents into the EDMS and to retrieve and view documents for which they are authorized. Role-based security controls the types of documents a user is able to search and retrieve.

The enterprise components for document generation and storage in DHHR's EDMS repository are externalized from core applications hence making the EDMS services modular and reusable. The approach offers open standards based API's for the consuming systems to invoke hence promoting reusability by making these services widely accessible within the enterprise.

Document Management Features	Modularity Delivered
Common components that facilitate streaming and efficient ways to transfer large documents over a network	• Minimizes the impact on network performance when transferring large documents
Open, industry standards that facilitate rapid development and standards compliant web services	• Enhances interoperability between WV HSP modules and the EDMS • Increases the efficiency of development staff as standards such as WSDL and SOAP are built into the development tools proposed

Figure 4.1-14. Document Management.

Enterprise Scheduling

Our proposed solution utilizes enterprise scheduling for system users, including clients to plan appointments, tasks and priorities in WV HSP to improve productivity. Our proposed approach for WV HSP is to use and modernize the scheduling functionality from RAPIDS, modernize this functionality from COBOL to Java and expose enterprise scheduling functionality as a web service that can be consumed across program areas and meet your scheduling requirements.

This approach is consistent with reuse and a modular service oriented architecture derived from proven business logic in RAPIDS. We will integrate the enterprise scheduler with the Eligibility and Notices functions to trigger notices to clients when tasks are upcoming or unmet.

Shared Services Layer	The shared services layer provides two core functions. First, the layer provides core technical services such as business rules, document generation and reporting. As necessary, these services can be marshaled by the ESB to support the provision of core business services. Second, the layer brokers access to back end data stores, including OLTP and OLAP databases	
Feature	**Reusability**	**Software Components**
Master Data Management	Provides a modular approach to master data management by providing API's for integrating systems to consistently push data and clear an individual or provider.	• Informatica MDM • (reuse)
Batch Management	Opcon provides a common scheduling tool for each module to manage their individual batch schedules through a common tool.	• SMA Solutions Opcon
Correspondence Management	Provides modular enterprise services for applications to consume, create and route correspondences in a consistent way.	• Adobe Livecycle
Open Source Business Rules Management	Provides components that execute complex eligibility business rules that have been externalized from core solution code. This allows the configurable, Web-based business rules management system to be easily reused across multiple programs as well as the ability to leverage and reuse rules that have been pre-configured.	• Drools open-source business rules
Asset Verification Service	Provides a common mechanism to manage asset verification and financial institution information. This is a reused component of an existing solution as stated in the RFP.	• Reuse by interfacing to existing solution
Enterprise Scheduling	Provides modular service-based enterprise scheduling across program areas	• Web service from a modernized RAPIDS scheduling (modernized and reuse)
Document Management	Provides modular enterprise services for individual systems to publish and retrieve documents from the Enterprise Content Management repository.	• Northwood's Document Imaging (ECM) • (State Hosted reuse)
Call Center Management	Provides reusable assets for call center integration across applications for functions such as call routing and IVR.	• AMPM

Figure 4.1-15. WV HSP Shared Services Layer.

The section below provides a description of the Information Services Layer.

Enterprise Reporting

WV HSP meets the State's enterprise reporting requirements by providing an Extract, Transfer, and Load (ETL) capability that facilitates standard and ad hoc reporting across the system. Our solution reuses the existing tools: OWB for ETL and Cognos Business Intelligence already in use by DHHR. This means that current reporting functionality will provide continuity in the reporting model and supported by the modernized HSP solution.

Information Services Layer	Includes data sources accessed by various components in the WV HSP, including the database	
Feature	**Reusability**	**Software Components**
Enterprise Reporting Management	Provides components that generate reports as per the requirements. These components implement the logic for retrieving data from database. Support online analytical processing (OLAP) and data mining functionality for business intelligence applications.	• Cognos BI (reuse)
Data Management	Provides components to extract data from external sources, transform source data to fit needs and load the transformed data into the end target.	• Informatica MDM • Oracle Warehouse Builder

Figure 4.1-16. WV HSP Information Services Layer.

The section below provides a description of the Security Management Layer.

Role-based Access

WV HSP provides an integrated security management module with role-based access and uses IBM Security Access Manager. By default, an IBM Security Access Manager access check is performed using a role name, the cell name, the application name, and the module name. Access control lists (ACLs) determine which application roles are assigned to a principal. ACLs are attached to the applications in the IBM Security Access Manager access-protected object space at the time of application deployment. Principal-to-role mappings are managed from the administrative console.

Our approach will conform to State's policies, applicable Federal/State laws, regulations and industry leading practices. The technical design for the Security Management component of WV HSP is based on loosely coupled design principles and a technical controls analysis performed for each system function.

Security Management Layer	Provides advanced Identity and Access Management including privileged used management and multi factor authentication, security compliance, vulnerability management, and security events monitoring	
Feature	**Reusability**	**Software Components**
Identity Management	Enables provisioning and de-provisioning of identities, in addition to self-service features (registration, forgot Username, forgot password)	• IBM Security Identity Manager (ISIM)
Access Management	Enables authentication, authorization and single sign-on	• IBM Security Access Manager (ISAM)
Multi-Factor Authentication (MFA)	Enables multi-factor authentication for remote access for authorized system users	• IBM Security Access Manager • (ISAM) – MFA
Privileged Access Management	Provides management of privileged access for WV HSP	• IBM Security Privileged Identity Management (ISPIM)
Application Program Interface (API) Governance	Provides security and governance of WV HSP web services	• IBM DataPower Gateway

Security Management Layer	Provides advanced Identity and Access Management including privileged used management and multi factor authentication, security compliance, vulnerability management, and security events monitoring	
Security Information and Event Management (SIEM)	Provides data analytics, log correlation, monitoring and auditing reports of WV HSP	• Splunk
Intrusion Detection System/Intrusion Prevention System	Provides continuous monitoring to prevent and detect system and application incidents and events	• Trend Micro
Security Testing	Perform vulnerability testing to identify new vulnerabilities in existing and new code. Conduct automated and selected manual secure code analysis to find current vulnerabilities.	• Trustwave AppDetective PRO • Nessus Pro • HP Fortify Security Center
Security Compliance Management	Provides support to achieve regulatory compliance with federal and state regulations such as CMS MARS-E 2.0, HIPAA, IRS Pub. 1075, etc.	• Integrated Risk Framework

Figure 4.1-17. WV HSP Security Management Layer.

Goal: Modernization

Section 4.2

Attachment A, 4.2, Goal: Modernization

*Modernization of the three current legacy systems into an integrated platform with proven, modular components is a core tenant of the WV IES Project. To achieve this, Deloitte proposes the **modern and modular** West Virginia Human Services Platform (WV HSP). WV HSP is comprised of proven components built upon a **world-class enterprise hosted infrastructure** to meet DHHR objectives and requirements. WV HSP's enhanced automation streamlines business processes and increases worker productivity.*

Deloitte acknowledges the challenges that West Virginia faces with maintaining legacy technology that currently supports the RAPIDS, OSCAR, and FACTS systems. Our proposed solution for the WV IES Project is based on reusing, re-platforming, extending and enhancing selected existing DHHR enterprise applications, bringing production proven assets from other states, and performing application modernization on the most complex legacy systems in DHHR's enterprise. Our approach and solution enables the State to serve its constituents by managing various DHHR benefits including Medical Assistance, SNAP, LIEAP, Child Care Subsidy, Child Protection, Child Support, and Youth Services.

WV HSP delivers a single integrated platform to DHHR:

- A modern, hosted solution that enables West Virginia to integrate programs across the HHS enterprise
- A proven technology platform that leverages existing assets and meets the State's requirements
- A proven and achievable DDI schedule meeting WV's goals with decreased risk
- An enhanced level of automation to streamline business operations

The WV HSP is a modern, modular solution built upon a service-oriented architecture (SOA). WV HSP is built upon a proven enterprise architecture solution that delivers the modernization goals and objectives of West Virginia DHHR. The Deloitte Team brings a solution proven to meet your requested business outcomes in these programs. Deloitte brings solution modules which meet natively or with configurations 96 percent of WV IES Project requirements. The remaining 4 percent of WV IES Project requirements are addressed through the DDI process outlined in our response. Additionally, Amazon provides enterprise class hosting which automatically scales to meet West Virginia business demands, while Salesforce provides a cloud based, hosted SaaS solution accessed via single sign on.

With our previous experience with RAPIDS and FACTS, we understand supporting these legacy solutions creates pain points and complexities within each application. Resources who can support legacy technology, such as the

COBOL used in the RAPIDS mainframe, are difficult to find and will become more difficult in the future. High maintenance costs are also associated with maintaining the legacy technology.

Additionally, the lack of structured modules within each solution can lead to inconsistent user experiences. Our approach to the WV IES Project moves DHHR off legacy platforms, and establishes a consistent user experience on the WV HSP platform. The solution meets each of the State's stated objectives for modernization as summarized in the graphic and table below.

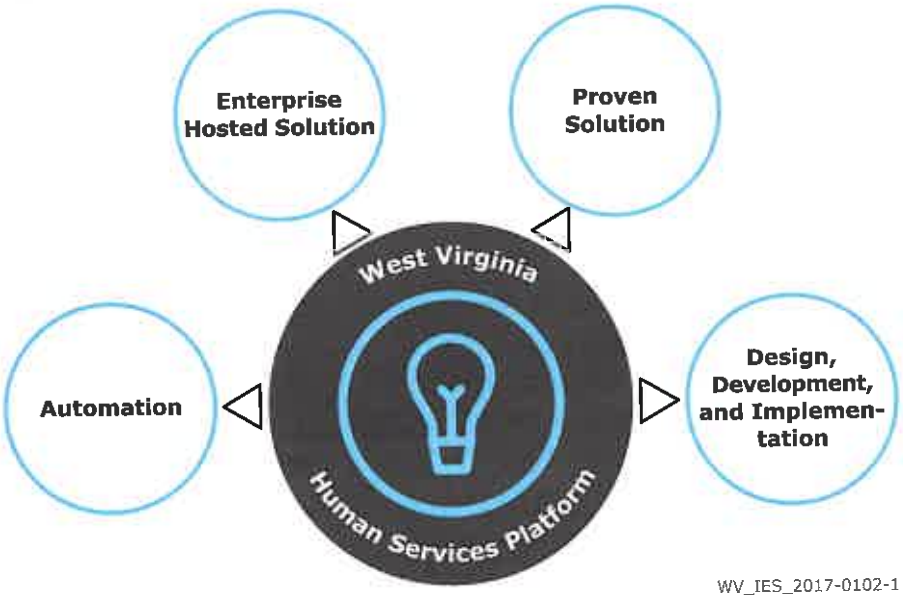

Figure 4.2-1. WV HSP meets the State's modernization goals.

Objective	Description
Enterprise Hosted Solution	• The WV HSP is hosted to centralize maintenance and operations • WV receives ongoing technology refreshes • Amazon Web Services provides a scalable on-demand environment to meet WV business demands
Proven Solution	• WV HSP re-platforms, extends, and enhances as necessary existing, modern DHHR Investments. Re-platforming DHHR's existing modern investments onto new platforms and hosting them in the AWS cloud extends the solutions life and supports future expansion. • WV HSP brings proven solutions from other states to meet DHHR's Child Welfare and Child Care requirements. • WV HSP performs Application Modernization of RAPIDS and OSCAR via automated conversion from COBOL to Java delivers current functionality on a modern, hosted platform following a proven methodology.
Design, Development, and Implementation	• Delivers a solution for DHHR user acceptance in two years • Established and proven methodology for project management and project delivery • Consistency with configuration and integration services provided by the vendor
Automation	• The WV HSP is built to maximize efficiencies and support efficient automation which have been proven in other states • Business process engineering and workflow automation for improved business operations

Figure 4.2-2. Four key objectives make up the Modernization of West Virginia's legacy systems.

Objective: Enterprise Hosted Solution

Our hosting solution leverages Deloitte's deep experience in cloud engineering and managed operations services to complement our choice of Amazon Web Services (AWS) as our hosting provider. In selecting AWS, we have chosen a hosting provider as innovative as our WV HSP solution. In this section, we describe in detail our overall hosting approach and how the WV HSP modules will migrate to the cloud. We will augment our previous descriptions of the WV HSP architecture to address your specific requirements around application tiers and modernized functionality.

Deloitte's enterprise hosting solution is designed to address your specific secure hosting needs and objectives. Our solution uses fully modern hosting technology from AWS, the market leader in innovative and secure enterprise-grade hosting. This selection helps West Virginia achieve the goal of reducing utilization of legacy technology and makes system modifications less time consuming. Our management approach of the hosted environment leverages Deloitte's leading cloud data center operations methodologies and processes. Our cyber risk services practice has assembled a security plan that creates confidence in the security and operational soundness of the hosted solution.

- Deloitte has experience hosting and operating health and human services solutions in numerous states across the country

- WV HSP leverages AWS IaaS as a primary cloud hosting provider and also leverages Salesforce SaaS, to achieve the scalability, performance and security desired by DHHR. Our solution provides technology lock-in protection.
- Deloitte has extensive experience with transitions from legacy to modern hosting environments

Our Understanding of Your Response Requirements

We understand that DHHR expects a vendor hosted solution that integrates programs across the eligibility enterprise and migrates solutions off the legacy mainframe. Programs to be integrated and hosted are Family Assistance, Social Services and Child Support. The vendor hosted solution should reduce the time associated with system modifications, while moving away from DHHR's legacy mainframe hosted platform.

Approach for Migrating from the State Mainframe to an Enterprise-Hosted Solution

The approach for migrating from the State's legacy systems to the modern enterprise-hosted solution is to maintain the current supporting legacy environment while in parallel provisioning the future State infrastructure on a cloud hosted platform. The required SDLC environments will be hosted on the Amazon Web Service Cloud Services (AWS) platform to support the WV HSP solution.

Our approach includes implementation of the modernized RAPIDS and OSCAR applications on the cloud platform along with the re-hosted configuration of eRAPIDS, inROADS and corresponding Data Marts. The Child Care and Child Welfare systems will be replaced with configurable and customizable Salesforce SaaS cloud based applications. The legacy data is securely and systematically transferred to the cloud platform hosting the WV HSP solution. Upon completion and statewide rollout of the modernized solution, services to the legacy mainframe environment will be retired.

Using Existing State Architecture

Deloitte acknowledges that West Virginia requires continued infrastructure support of the legacy mainframe environment until transition to the modern hosting solution is complete. Balancing continuity of operations and establishing a solid foundation for continued support is top of mind when implementing the transition approach. Upon the execution of the contract, Deloitte will work with the State to begin to assume the hardware and software costs related to the legacy environment, until it is retired as current systems are replaced with the WV HSP solution.

Cloud Vendor Lock-in Protection Parameters

Avoiding dependency (i.e., lock-in) on a single cloud provider technology implementation is an important part of Deloitte's strategy for the WV HSP implementation. The WV HSP uses third-party COTS products and services readily available in the market.

The modernized RAPIDS and OSCAR applications use the Java platform with DB2 database back-end. These modules and additional COTS products run on common Linux OS platforms. Critical security and operations management tools are also procured as COTS products. Control of the data is retained by the customer at all times.

The WV HSP solution does not use AWS proprietary application platform products that would lock the State to the use of Amazon Web Services as the infrastructure service provider.

Description of the Proposed Hosting Solution

We are excited to present our selection of the leading Cloud Service Provider Amazon Web Services (AWS) and the use of Salesforce SaaS solutions for WV HSP. AWS hosts the core infrastructure and critical data that will require compliance with West Virginia State security policies, IRS Publication 1075, HIPAA and other applicable regulations.

We considered the requirement for the cost-effectiveness of the solution together with a number of other critical features needed to meet the State's operating objectives, including FedRAMP authorization for both AWS IaaS and Salesforce SaaS Clouds, a secure data center footprint, continuously available backbone network, on demand scaling, rapid provisioning of compute, storage and network capacity, disaster recovery and support. As required in Section 5.9 Off-Site Facility Locations, the primary and disaster recovery hosting facilities for AWS and Salesforce will be maintained within the continental United States.

Benefits of a Cloud Hosted Solution

Amazon Web Services

AWS has a long history of innovation and leadership in providing hosted IT infrastructure. Amazon has made a continued substantial investment in building and managing the global, reliable, and efficient IT infrastructure that powers numerous organizations across industries, including the Public Sector. Amazon launched Amazon Web

Services, Inc. (AWS) so that other organizations could benefit from Amazon's experience and investment in running a large-scale, distributed, transactional IT infrastructure. AWS has been operating since 2006 and now serves more than one million active customers every month worldwide. Using AWS provides for rapid provisioning of compute, storage, network and other resources in a scalable and flexible model to meet WV HSP infrastructure needs now and in the future.

The cloud-hosted platform provides significant advantage over the traditional IT computing landscape because it is:

- **Flexible.** enabling organizations to use the programming models, operating systems, databases, and architectures with which they are already familiar
- **Scalable and Elastic.** Organizations can quickly scale compute, storage and memory resources to and from their applications in order to meet customer demand
- **Innovative.** AWS launched 1,017 new features and services in 2016 in addition to 1,759 features and services added over the previous 5-year period. Continual innovation provides customers a state-of-the-art IT infrastructure without having to make recapitalization investments
- **Secure.** To provide end-to-end security and privacy, cloud providers build services in accordance with security leading practices, provide several security layers protecting physical data center facilities, and meet key compliance requirements. AWS is a FedRAMP-authorized Cloud Service Provider. AWS offers FedRAMP compliant hosting systems that have been granted authorizations, have addressed the FedRAMP security controls (NIST SP 800-53), uses the required FedRAMP templates for the security packages posted in the secure FedRAMP Repository, have been assessed by an accredited independent Third Party Assessment Organization (3PAO), and maintain continuous monitoring requirements of FedRAMP.

Salesforce Service

The Salesforce service will host the Child Care and Child Welfare components of the WV HSP. Salesforce services are also FedRAMP certified and have been designed to provide customers with trusted privacy with the highest levels of performance, reliability and security. Salesforce has built, and continues to invest in a comprehensive security infrastructure, including firewalls, intrusion detection systems, and encryption for transmissions over the Internet, which Salesforce monitors and tests on a regular basis. Salesforce built and maintains a multi-tenant application architecture that has been designed to enable the Salesforce service to scale securely, reliably and cost-effectively. The Salesforce multi-tenant application architecture maintains the integrity and separation of customer data while still permitting all customers to use the same application functionality simultaneously. With multi-tenancy, Salesforce customers run their applications on a common infrastructure. This means that every customer is always on the latest release of Salesforce applications, and has access to the latest technology. Multi-tenancy means that it is easier to scale new users and applications. With multi-tenancy, customers do not have to worry about managing infrastructure.

Description of the System N-Tier Architecture

The WV HSP architecture, illustrated in Figure 4.2-3, is designed to meet the State's objectives relative to an N-Tier architecture. The goals of the State in pursuing an N-Tier architecture are scalability, performance, and security and the WV HSP meets these objectives. Both vertical and horizontal scalability are key components of each tier's design. The application core of J2EE meets this requirement, as do the Enterprise Service Bus, Master Data Management, Business Rules Engine, and database components. Performance and security is achieved by separating the transactions into discrete layers that can be tuned for performance individually as well as separated for fine grained authentication and authorization access.

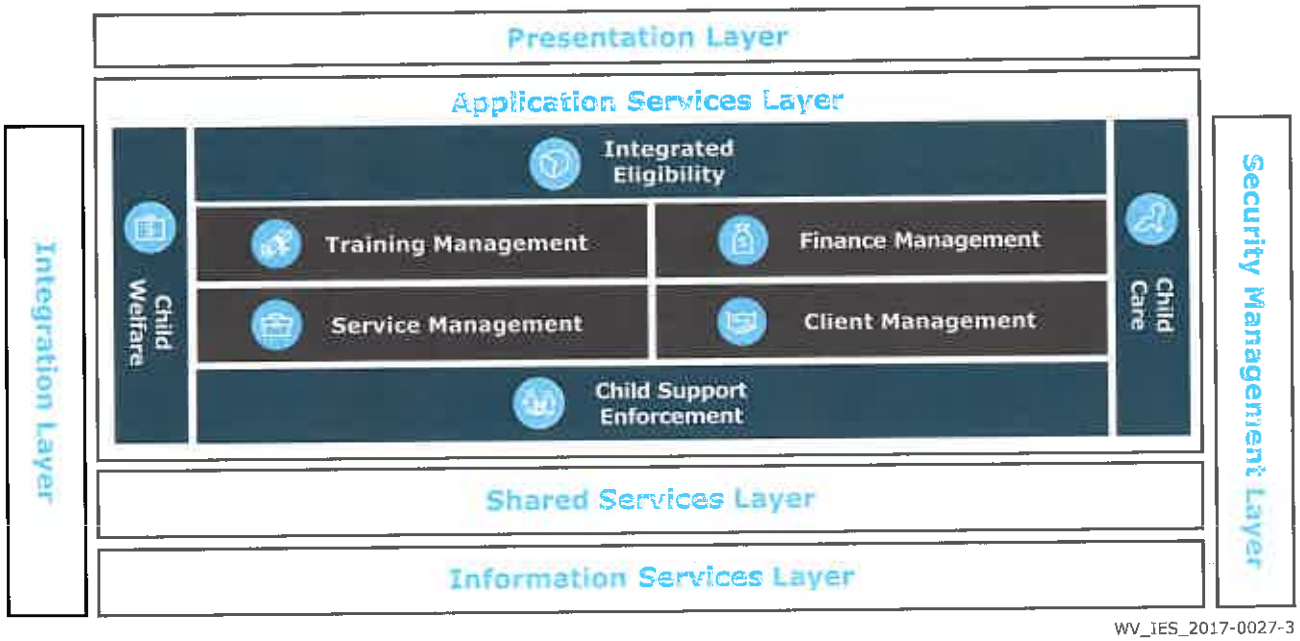

Figure 4.2-3. WV HSP N-Tier SOA Architecture.

The following table summarizes and maps the State's requirements for an N-Tier architecture to the WV HSP platform layers. Further descriptions of the architecture used by the WV HSP solution are provided in Section 4.0-Figure 4.0-1.WV Human Services Platform Architecture in addition to detailed information provided in Section 4.1.2 Reusability.

N-Tier Requirement	WV HSP Response
Web Tier • Load balanced Web User Interface (UI) servers • 1024-bit secure socket layer (SSL) encryption	Deloitte implements a highly available and secure Web User Interface infrastructure on AWS IaaS with load-balancing and Web Application Firewall capabilities, and configures communication encryption that meets State requirements (1024-bit encryption SSL and TLS 1.2). Salesforce uses load balancers within each logical layer to distribute load among multiple web and application servers for additional scalability and redundancy. All transmissions between the user and Salesforce Services are TLS encrypted with a 2048-bit Public Key. The Services use International/Global Step Us TLS certificates, with AES 256-bit encryption.
Application Services Tier • Middle-tier services call for complex transactions between the Web and Database tier • Supports SOA interface to business transactions	WV HSP meets the requirement by providing an Application Services Layer which provides Web-based channels of access to the system for citizens, workers, providers, and community partners. The Application Services Tier is also responsible for all middle-tier service calls between the web and database tiers. This layer also contains the specific application services that can be invoked from the other layers. Salesforce supports industry standard interfaces HTTP, XML, and SOAP. Salesforce supports uploading of file-based data via HTTP. Force.com Web Services API can be used to create, retrieve, update, or delete records in from the Salesforce platform from any external system that supports SOAP-based Web services, such as Java, .NET, or PHP client applications. With more than 20 different calls, the API also allows you to maintain passwords, perform searches, retrieve metadata information about objects, and more.
Database Services Tier • Provides consistent logical view of the data model • Serves as a security layer by limiting the calling applications access to the physical data model • Role-based security	This layer is fully isolated from the other tiers and access to the physical data model is limited to calls from the database application services. As documented below in the "Enhanced Identity & Access Management" section, the WV HSP solution employs role-based security access control in the Database Services Tier. The WV HSP solution will use role based security to support the authentication and authorization of users working with the applications.

N-Tier Requirement	WV HSP Response
Data Tier • Data marts with a roadmap to an integrated data warehouse • Role-based security	The migration of existing data marts into the hosted solution with the integration ETL and MDM capabilities and its interface to the WV HSP solution serves as a foundation that can be built upon for an integrated data warehouse capability. Additional information is provided in Section 4.1.1 Interfacing with Data Marts. Access to data in the Data Marts will continue to be managed through the existing role based access controls which are in place today. Although the Data Marts may be hosted on a cloud platform, the same RBAC will be followed to restrict data access to only authorized users, applications or reports.
Security Tier • Identity and Access Management • Role-based security	The Identity and Access Management solution provides role based access control (RBAC) to limit exposure of data to only those application users who are authorized to view and update the data. Each module in the HSP solution uses role based access controls to manage and authorize view data in the application. Authorization is managed via user profiles, which dictate the records/fields a user can see, change, add or delete.
ETL/Data Processing (DP) Services • Architecture supporting real-time Electronic Data Interchange (EDI) and batch ETL updates	The WV HSP solution architecture includes an Integration layer that provides for system to system interfaces. This integration layer supports multiple interface patterns and protocols including EDI and XML. If interfaces require batch updates of data that service is also provided by the Integration layer. Salesforce supports both real-time and batch updates on data. Salesforce supports the notion of an external system ID to facilitate updates from an external system.
Disaster Recovery • Automated failover to a hot secondary site with shorter recovery time is preferred	AWS hosting of WV HSP includes a pre-configured hot secondary site in a geographically separate AWS Availability Zone Region. This approach provides for continuous replication of data and applications from the primary hosting region with capabilities for automated implementation within the 24 hour RTO and RPO recovery times specified in this RFP. With respect to Salesforce customer data, up to the last committed transaction is replicated to disk in near-real time at the designated disaster recovery data center, backed up at the primary data center, and then cloned at an archive data center. The WV HSP disaster recovery and high availability strategy is further described in the Disaster Recovery section below.

Figure 4.2-4. N-Tier Architecture and Services.

Disaster Recovery and High Availability

We understand WV HSP is a mission essential system providing essential services to three-quarters of the citizens of West Virginia. As a result, DHHR places great importance on Disaster Recovery. Deloitte's hosting architecture maintains a hot secondary site, which is a preconfigured Disaster Recovery environment in a separate AWS Region (physically and geographically) which includes automated recovery should a catastrophic event disable the Primary AWS Region. This automated disaster recovery architecture enables the ability to meet 24 hour RPO and RTO specified in the RFP.

Our disaster recovery strategy employs several safeguards:

- The primary data center databases are replicated asynchronously to hot standby databases in the Secondary AWS Region to accelerate recovery processes.
- Select snapshots of disc volumes, custom machine images and content of S3 buckets are replicated to the Secondary AWS Region to be used during Disaster Recovery Plan activation.
- Application configuration, source code and binary dependencies are available to quickly re-build the environment in the Primary and Secondary AWS Regions.
- Amazon Route 53 DNS routes users' traffic to the Secondary AWS Region when a Disaster Recovery Plan activation is completed.

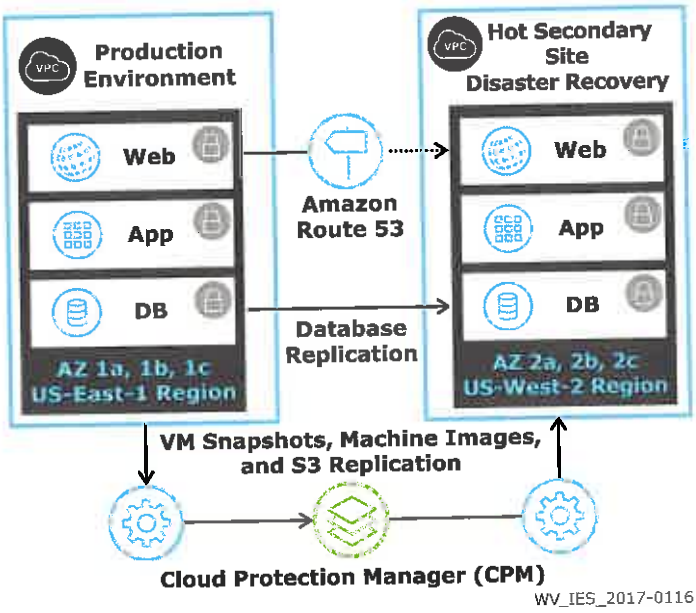

Figure 4.2-5. AWS Disaster Recovery Protection.

Additionally, Deloitte's hosting design incorporates leading practices for **high availability and redundancy** leveraging AWS Fault Tolerance and High Availability reference architecture. This is achieved by deploying AWS Elastic Load Balancer (ELB) to distribute application clustered environments across multiple and physically separate AWS Availability Zones (AZs) within an AWS primary region. Processing will be automatically assumed by the remaining configured AZs should one environment become unavailable.

Description of the Modernized Functionality

A complete description of the modernized functionality for the project's scope is contained in Section 4.4 – Goal: Completion of Functional Requirements. In this section, we would like to separately reply to the specific request to describe the solution's modernized functionality for the specific items documented in the RFP. The following table summarizes the key aspects of these items or refers to specific sections in this RFP response where the functionality is described in further detail where noted.

Modernized Functional Item	WV HSP Response
Enrollment and Review Process	WV HSP modernizes RAPIDS and re-platforms the solution on the cloud. Our solution provides robust enrollment and review processes including automated redetermination using electronic matches with external data sources, manual correction/overrides, and evaluation of eligibility for all DHHR assistance programs and meets the requirements outlined in this RFP. Further details about the Enrollment functionality and the Review Process functionality is described in Section 4.4.
Self Service	The WV HSP Self Service module enables the State to serve its constituents by providing a dynamic online application available through a client portal which supports business processes such as submitting applications for multiple programs, reporting changes, submitting referrals and checking the status on application and case information. This functionality is described further in Section 4.4.

Modernized Functional Item	WV HSP Response
Automated Voice Response System	Our approach of modernizing DHHR's AVRS is through WV HSP integration. The WV HSP will host services meeting the needs of DHHR's State AVRS. (Please note the WV HSP will meet the requirements as specified in BRM0127, BRM0128, and GT0444).
Workflow Management	Deloitte works with various DHHR bureaus to identify and understand the existing workflows of the system. We define workflows for collection of data, determination of benefits, generation of reports, integration of the notice engine for correspondence, triggering of alerts, exchange of data with external systems through interfaces, and user interface component requirements for various subsystems of the solution.
Enhanced Identity & Access Management	Deloitte's WV HSP solution meets DHHR's requirements for multifactor authentication, privilege access management and analytics reporting. See section below titled "Enhanced Identity & Access Management."
Enhanced Network Segmentation	AWS utilizes software defined data center technologies, including software defined networking. Proper segmentation and micro-segmentation are utilized to enhance the overall security strategy. Simply put, it breaks the data center into logical network segments and manages each of them with high-level IT security policies.
Enhanced Cyber Security Operations/Monitoring	Deltoitte's solution delivers proven cyber security operations to DHHR. WV HSP utilizes AWS next gen firewall as uses Splunk to aggregate security data analytics. See section below titled "Enhanced Cyber Security Operations/Monitoring."

Figure 4.2-6. WV IES Modernized Functionality.

Enhanced Identity & Access (IAM) Management

West Virginia DHHR requires an enhanced Identity and Access Management solution which provides single sign-on, role-based access, multi-factor authentication, and privileged access management. Deloitte utilizes the industry demonstrated IAM Methods methodology to implement enhanced Identity & Access Management capabilities for the WV HSP.

The following table lists the salient features of our proposed Identity and Access Management solution to meet the objectives of a modernized and enhanced IAM solution.

WV IAM Solution Salient features	Benefits offered to WV HSP
Implement a Modern Access Management solution to provide greater security and enhanced authentication	• Improve security of application using Authentication, Authorization and Auditing (AAA) Services • Enhance accessibility and convenience using Single Sign On (SSO) • Enhance security by implementing multi-factor authentication and privileged access management
Enhance Efficiency and Effectiveness of IAM Processes through consistent processes, common solutions, automation	• Establish consistent processes for user registration, administration and access requests • Provide increased self-service capabilities to WV users to initiate and compete selected IAM tasks

Figure 4.2-7. WV IAM Solution Salient Features.

The following diagram provides a conceptual view of the WV Identity and Access Management solution, its capabilities and technology stack utilized.

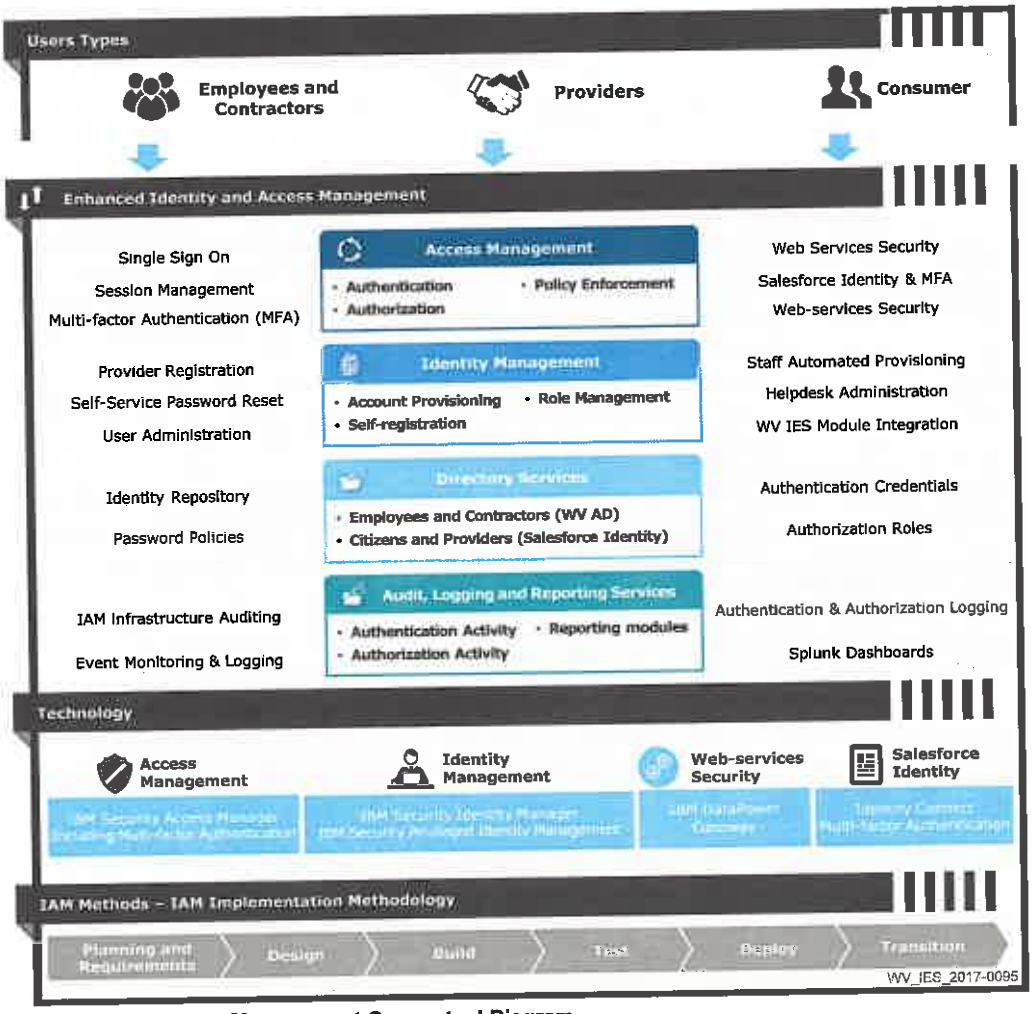

Figure 4.2-8. WV Identity & Access Management Conceptual Diagram.

The following sections describes the IAM functions implemented for the WV HSP solution:

IAM Function	IAM Technology	How Technology delivers WV HSP Requirements
Identity Management	IBM Security Identity Manager (ISIM)	ISIM solution implements provisioning and administration solution that automates the process of adding, updating, and deleting employee's accounts for WV staff users. • Automated user provisioning and de-provisioning to an Active Directory in WV HSP integrated with WV Active Directory • Citizen self-service capability, user and role management to meet requirement GT0500
Access Management	IBM Security Access Manager (ISAM)	ISAM delivers critical functionality for role-based access control, single sign-on, centralized policy management and session management. • Provides single sign-on for WV HSP solution utilized by citizens, WV Staff and contractors • Implements role-based access by enabling coarse-grained authorization capabilities to restrict access to users based on the business function • Audit and Logging capabilities to monitor user transactions Deloitte utilizes Salesforce authentication functionality to provide access management capabilities (e.g. authentication and Salesforce resource authorization, single sign-on)

IAM Function	IAM Technology	How Technology delivers WV HSP Requirements
Multi-factor Authentication (MFA)	IBM Security Access Manager (ISAM)	IBM Security Access Manager (ISAM) provides secure and tailored yet easy-to-integrate multifactor authentication. • Multi-factor authentication when WV Workers and contractors access WV HSP modules remotely • Supported MFA options like One-time Passcode on SMS, software tokes, etc. are considered for WV HSP MFA for providers accessing third-party data is implemented using Salesforce in-built MFA capability
Web-services Security	IBM DataPower Gateway	IBM DataPower's web-services security provides a consistent and streamlined approach to message layer (web service) interactions and secures SOA solutions and secures, accelerates and integrates system to system communication within WV HSP solution. • IBM DataPower protects web-services communication within WV HSP and with external providers • Provides audit logging of message events
Privileged Access Management	IBM Security Privileged Identity Management (ISPIM)	ISPIM integrates with WV systems including production servers and databases to monitor privileged sessions. • Manages privileged accounts credentials used between systems to systems. • Privilege Session Monitoring • Applicable for system infrastructure and Database schemas in AWS

Figure 4.2-9. Enhanced IAM capabilities for WV HSP solution.

Enhanced Cyber Security Operations/Monitoring

Deloitte's proposed WV HSP solution implements Splunk Enterprise as a Security Information Event Monitoring (SIEM) component to provide enhanced Cyber security monitoring, audit logging, reporting and log correlation. Our SIEM solution consolidates data from multiple audit sources and performs advanced security analytics on the collected data to alert the business user and security administrator for events such as security exceptions, incidents and regulatory compliance violations. It also provides periodic and ad hoc reports to monitor security and application Key Performance Indicators (KPIs), forensics, real-time monitoring and reporting of security incidents. The below figure describes the features and capabilities of our SIEM solution:

SIEM System and Continuous Monitoring Function	Technology	Deloitte brings SIEM System and Continuous Monitoring Benefits to WV HSP
Single point of machine data collection	Splunk	Splunk SIEM solution provides an effective integration WV HSP systems to capture and provide a centralized view of audit logs • Provides single point of view to display audits logs captured from applicable WV HSP applications, systems, databases and servers. • Integrates with applicable data sources including AWS IaaS and Salesforce SaaS platforms, Web, Application and database log files
Real-time event correlation and advanced analytics	Splunk	Splunk SIEM solution provides customized dashboards for advanced analytics • Provides customized dashboards containing log correlations from different WV HSP systems Provides multiple filter criteria including real-time, last 24 hours or custom date and time frames
Cyber Security Monitoring	Splunk	Splunk SIEM solution provides continuous monitoring and generates alert when previously identified thresholds are surpassed. • Generates alerts based on applicable Centers for Medicare & Medicaid Services (CMS) Minimum Acceptable Risk Standards for Exchanges (MARS-E) AU-2 recommended continuous monitoring list including attempts to access unauthorized WV HSP databases and systems from internal and external resources Generates reports based on previously identified criteria and CMS MARS-E recommended frequency

SIEM System and Continuous Monitoring Function	Technology	Deloitte brings SIEM System and Continuous Monitoring Benefits to WV HSP
Digital chain of custody	Splunk	Splunk SIEM solution maintains a digital chain of custody with unaltered audit trails for data retention and forensic requirements Audit trail encryption and secure transfer are used for audit trail protection during transfer and storage
Intrusion Detection System (IDS)/ Intrusion Prevention System (IPS) – Threat Intelligence Data	Trend Micro	Trend Micro solutions provides IDS/IPS enhancing security of WV HSP servers hosted in AWS • Continuous monitoring to detect and prevent intrusion of WV HSP systems • Provides IDS reports at intervals determined by State • Integrates with Splunk for data analytics and log correlation
Vulnerability Management	Nessus HP Fortify Security Center TrustWave AppDetective PRO	Deloitte brings an industry-standard testing and quality management process to West Virginia and leverages an integrated set of processes, assets and tools including. • Automated Vulnerability Scanner • Secure Code Analysis • Automate Database Scanning
Next-gen Firewall		Our AWS based hosting environment includes next-generation firewall protection that features advanced capabilities, such as Web application request filtering, Distributed Denial of Service protection, server end-point protection.

Figure 4.2-10. Enhanced Cyber security monitoring for WV HSP solution.

The WV HSP solution creates event based logs for different types of auditable objects, such as system configuration, field or attribute modification, etc. These logs provide tracing to individual sources, users, or parties for recorded events. The security event information monitoring solution, based on Splunk, collects application, infrastructure and IAM solution logs at a defined frequency level, and provides event based notifications when suspected user activities is detected. It also collects audit information from Salesforce. Splunk analyzes the data using its advanced data correlation and analytics engine and identifies incidents and violations with respect to previously defined and configured WV-specific security policies and compliance requirements. The following figure illustrates the conceptual architecture of our proposed SIEM system:

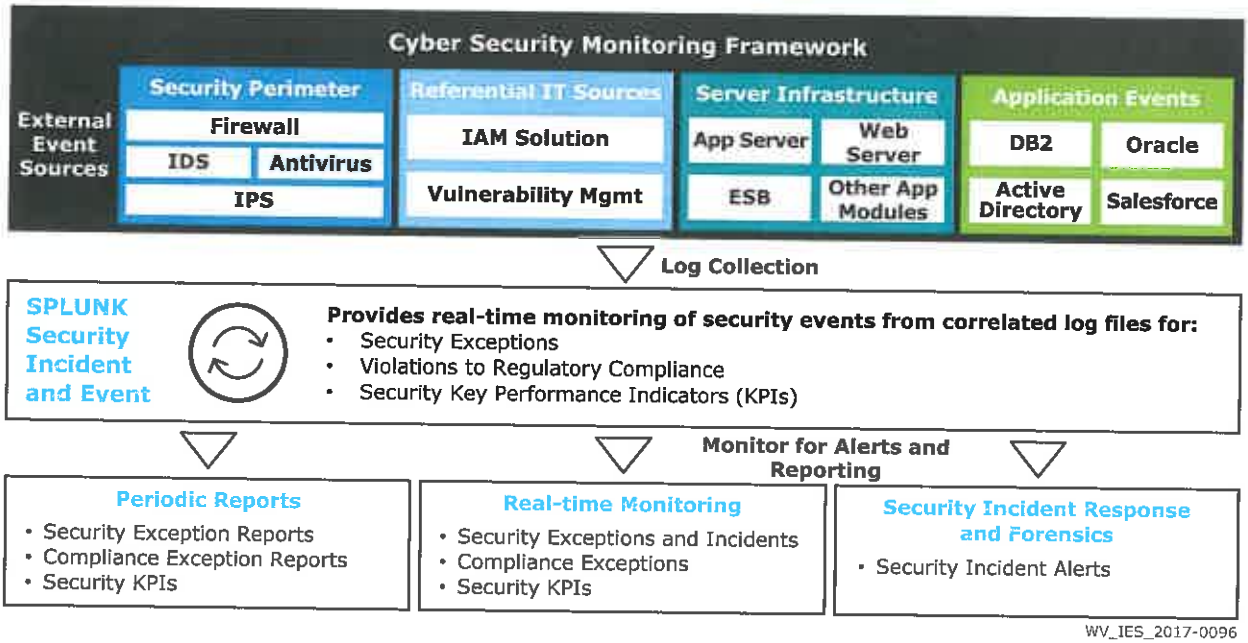

Figure 4.2-11. Conceptual Splunk Architecture: The architecture for providing Cyber security monitoring from event and incident sources.

The WV HSP solution implements advanced monitoring and provides a flexible set of alerts that can be communicated to various stakeholders. The WV HSP Cyber Security Monitoring solution addresses logging and monitoring use cases per NIST 800-53 rev 4 AU-2 guidelines, such as:

- Audit Records contain sufficient information to determine who, what, when, from where and to where, including the event outcome
- Audit log storage for seven years
- Alert if system stops receiving logs from in-scope log sources
- User Account/Role Modification, addition and activity reports
- Privileged User Activity Report

The following conceptual diagram depicts the overall enhanced Identity & Access Management (IAM) and Cyber Security Monitoring solution for WV HSP.

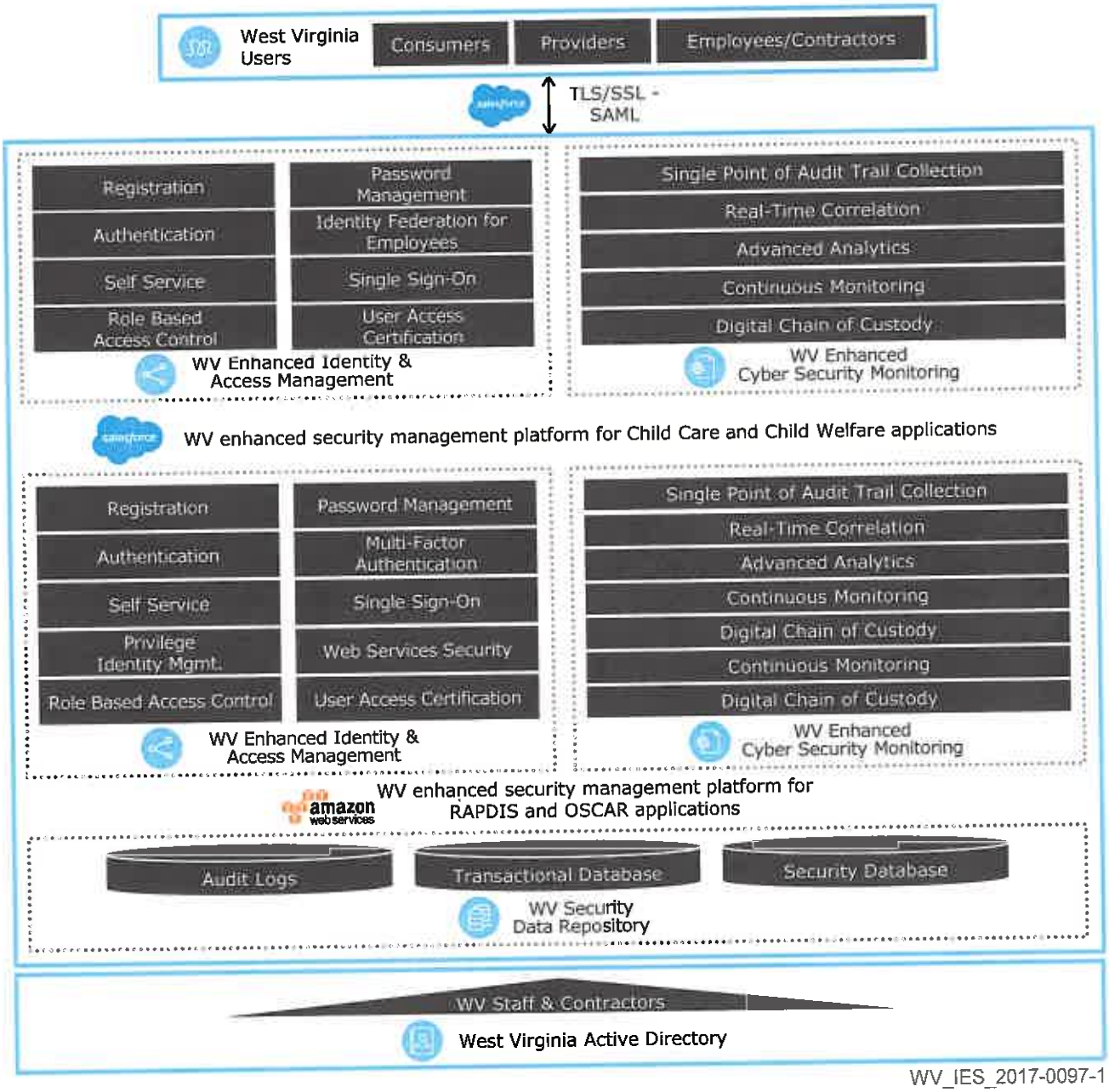

Figure 4.2-12. Overall enhanced Identity & Access Management (IAM) and Cyber Security Monitoring solution for WV HSP.

Objective: Proven Solution

The West Virginia Human Services Platform (WV HSP) brings an incremental and tiered solution to modernize West Virginia's delivery of human services programs. The WV HSP solution relies on a three pronged strategy to meet DHHR's enterprise requirements: 1) Reuse and re-platforming of DHHR existing, production proven modern investments in solutions and products, 2) leveraging successful, proven solutions from other states, and 3) modernization of existing DHHR stable platforms and integration into the Service Oriented Architecture (SOA) hosted in the cloud through an application modernization approach which has been successfully proven on multiple other projects. This proven solution is augmented by the Deloitte Team's deep domain knowledge in Health and Human Services solutions and technical expertise in Application Modernization, Salesforce, and AWS to transform the eligibility enterprise for West Virginia.

We are the undisputed market leaders in the HHS domain:

- 25 years of Integrated Eligibility experience
- 38 Eligibility Case Management solutions
- State Government Child Support Enforcement Systems in nearly half the states
- More than 20 State Government Systems for Children's Services (Child Welfare and Child Care)
- Actively enhancing and maintaining Eligibility Case Management and service delivery systems in 23 states

The WV HSP solution meets West Virginia's vision of a modern and proven solution by reusing DHHR's investment in existing modern technologies such as Oracle, Informatica MDM and Northwoods and stable platforms developed on modern technologies such as inRoads and eRAPIDS; bringing production proven assets from other states, such as the Child Welfare and Child Care modules; and performing application modernization for your stable legacy RAPIDS and OSCAR applications. This solution is brought together in a single seamless enterprise architecture by using an N-tier Service Oriented Architecture (SOA) technical foundation, and is divided into multiple technology layers to reduce complexity while increasing modularity. For more information on Deloitte's Application Modernization approach, please refer to the end of this section.

By delivering a sound technical architecture platform that has been replicated across multiple states, we bring a level of delivery confidence to West Virginia in meeting its implementation schedule. What makes the WV HSP solution unique is the ability to integrate best in breed core and program case management module solutions. The WV HSP is hosted by Amazon Web Services, a proven industry leader in hosting innovation. Deloitte has teamed with experienced partners- Technosoft, and Briljent – who have extensive track records of delivering success across multiple HHS implementations. The following sections highlight our proven approach to deliver WV HSP modular solutions.

WV HSP provides DHHR with a proven solution, brings a proven team along with proven teaming partners. A summarized view of our proven capabilities are provided at the end of section 4.2.2.

Our Understanding of Your Requirements

We understand that West Virginia seeks a reliable, proven solution that supports DHHR's mission of providing necessary services to West Virginia's most vulnerable citizens. Deloitte's history of innovative solutions to eligibility enterprise challenges uniquely positions us to meet DHHR's requirements for a hosted, module based solution. Our proven track record of successful implementations, similar in size, scope and complexity to the WV HSP solution, provide DHHR with confidence in the success of the WV IES Project. When Deloitte's technical and creative proficiency is aligned with the proven capabilities of our application modernization offering as well as accelerators such as Moodle for Learning Management, the resulting platform positions West Virginia as a leader in the field of human services modernization. The following section describes our approach to meet your requirements.

Our Approach to Meet Your Requirements

We have carefully reviewed the requirements set forth in the RFP and offer a proven solution that leverages West Virginia's existing investment in modern resources while bringing solutions to West Virginia that have been successfully implemented in other states. **Our innovative WV HSP achieves your objectives. In creating this strategy, we evaluated West Virginia's IT portfolio and developed an approach that meets your objectives for each module of the WV HSP.** Our approach, outlined in Section 4.0, has three core strategies:

Strategy #1: Re-platform, Extend, and Enhance Existing DHHR Investments

DHHR has several existing modern IT investments that are candidates for hosting and enhancing for future use. They are built on modern technologies and offer inbuilt opportunities to extend across programs and meet the requirements defined in the RFP. By re-platforming these applications and tools onto modern, hosted platforms, West Virginia can extend their life cycle while providing opportunities for future expansion. Our strategy extends the reach and enhances the functionality of these applications to serve the DHHR enterprise.

Deloitte has worked with multiple states to design and implement new technologies and innovative solutions aimed at improving Health and Human Services capabilities. This experience enables us to bring the latest thinking around cutting edge technologies to West Virginia. This section identifies the existing and proven WV IES modern resources that we plan to leverage, re-platform, extend and enhance as part of the WV HSP solution.

Client Management Module

Our approach to the WV HSP Client Management module is to reuse, extend and host inRoads, the existing self-service portal for the State. Leveraging inRoads not only maximizes the reuse of an existing investment the State has already made into a modern self-service solution, but will also minimize disruption to the State's citizens who are already familiar with inRoads. The client management module is built around a citizen-centered delivery model and automates case management functions such as Self-Service, Referrals, and Renewals across Health and Human Services programs.

We use our experience of implementing self-service, client management capabilities in more than 25 states to enhance inRoads for future expansion.

Integrated Eligibility (IE) Case Management Module

Our approach to the WV HSP IE Case Management module is to reuse and enhance eRAPIDS by re-platforming to a modern, scalable, Cloud-hosted AWS platform. It currently provides a Web-based interface for State staff to perform business workflows including eligibility determinations across multiple programs. Leveraging eRAPIDS in WV HSP provides the case workers a familiar worker portal reducing the risk of failure as well as the amount of disruption for your staff and West Virginia citizens.

The Deloitte Team's experience with implementing Integrated Eligibility case management solutions spans 35 states and provides DHHR with the most proven Vendor and solutions in this space.

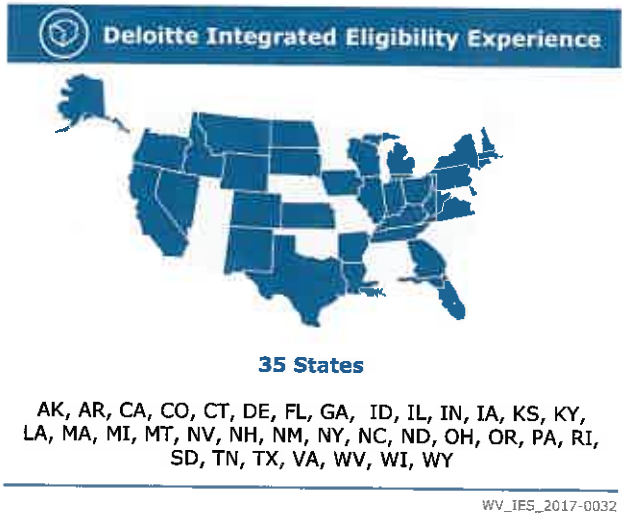

Figure 4.2-13. Deloitte Integrated Eligibility Experience.

	DHHR Modern Asset leveraged by WV HSP	Proven Solution	Description
WV HSP Client Management Core Module	inRoads	✓	• The WV HSP Client Management Module has already been proven in West Virginia. inRoads has provided the Department and the citizens of West Virginia with a proven and efficient self-service portal. • inRoads was transferred from the State of Wisconsin and is a proven and successful self-service platform as Wisconsin ACCESS.
Integrated Eligibility Case Management Module	eRAPIDS	✓	• eRAPIDS provides WV HSP an IE Case Management Module that is modern and proven in the state of West Virginia. • eRAPIDS was transferred from the State of Wisconsin and provides a production proven Integrated Eligibility platform as Wisconsin CARES.
Technology Reuse	Informatica Master Data Management (MDM)	✓	• The Informatica MDM currently provides a robust MDM solution to West Virginia • Deloitte's IE implementation at the state of Georgia leverages an Informatica MDM solution for providing client and provider master data management.
Technology Reuse	Cognos Enterprise Reporting	✓	• Cognos reporting currently provides a stable reporting solution to West Virginia • At the Commonwealth of Pennsylvania, our Cognos based enterprise reporting solution provides reporting capabilities including interactive dashboards, operational and management reports along with robust ad hoc reporting capabilities.

Figure 4.2-14. WV HSP reuses existing State resources.

Strategy #2: Bring West Virginia Proven Assets from Other States to Meet Enterprise Needs

West Virginia is looking for solutions that have been proven in other states. Deloitte's WV HSP brings solutions proven in other states with requirements that match DHHR's stated objectives. These pre-configured, production proven solutions will replace select legacy systems and move DHHR solutions onto the cloud. Legacy data will migrate to a modern relational database to meet DHHR's performance, scalability and security goals.

Our approach of bringing a solution proven in other states to West Virginia has already been demonstrated by the success of eRAPIDS and inRoads which were proven Deloitte solutions in the State of Wisconsin. This section identifies proven solutions from other states that will be part of the WV HSP solution.

Training Management Module

WV HSP includes Moodle that provides a proven state-of-the-art Learning Management System (LMS) and online learning technologies to support delivery, monitoring and ongoing refinement of training resources. The WV HSP training management platform delivers the right training resources to workers to answer their on-the-job functional needs. This comprehensive learning platform connects the West Virginia DHHR workforce and community partners to a suite of Web-based, live- and video-based trainings. It offers robust scheduling capabilities and supports delivery, controls and tracking of the entire training program for centralized management.

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Figure 4.2-15. Moodle's client centric training dashboard

Deloitte, in collaboration with our teaming partner, Briljent, will provide development and delivery of training for the WV HSP solution. Deloitte's extensive experience with designing "Train-the-Trainer" training procedures for states similar in size and scale as West Virginia are leveraged to design and implement an extensive training plan for WV HSP. Briljent has experience of providing large-scale eligibility training in more than five states.

Child Welfare and Child Care Case Management Modules

The WV HSP Case Management modules for Child Care and Child Welfare use proven assets from other States. The Child Welfare Case Management module will be a transfer of Deloitte's proven Child Welfare implementation using the Salesforce platform from Delaware. The Child Care Case Management module will be a transfer of Deloitte's Salesforce solutions from the States of Colorado for core child care functionality and Ohio for provider licensing. These modern, proven assets bring the scalability, performance and security desired by DHHR, and are proven to meet federal requirements. Deloitte's approach delivers confidence; these modules currently serve the Human Services program needs of other States in the US.

Figure 4.2-16. Our team has successfully implemented Child Care and Early Learning solutions in 24 States.

Figure 4.2-17. Our team has successfully implemented Child Welfare solutions in 14 States.

Deloitte brings you 23 years of experience serving Child Welfare agencies, and delivering 20 Child Welfare projects (technology and program redesign). Our industry leading practices, assets, and approach will support your modernization implementation.

Deloitte is a leader in developing Child Care systems and is eminently qualified to design, develop, and implement the Child Care functionalities within the WV HSP solution. When our clients need to modernize their systems, we are their choice for complex implementations. We have assisted human services agencies around the country in completing innovative system integration projects that are citizen-focused, outcome-oriented, and cost-effective. We have successfully delivered child care solutions in 24 states

	Proven Asset for WV HSP	Proven Solution	Description
WV HSP Training Management Core Module	Moodle Learning Management System	✓	• The Moodle learning module currently has more than **100,000,000** users and has had about 300,000,000 enrollments to date. There have been **over 12,000,000 courses offered through Moodle**. Moodle is becoming increasingly popular in universities and an example of this is Louisiana State University (LSU). LSU adopted Moodle in 2007 as their campus wide learning management system. • The Kentucky Department of Family Services used Moodle to support the delivery of training to over 2,000+ staff the Kentucky Kynect implementation. • Moodle supported the delivery of training to 300+ Washington Health Benefits Exchange staff and 600+ call center reps. • Montana DPHHS uses the Moodle Learning Management System to support the learning needs of 500 employees • Indiana Department of Human Services used Moodle to support the delivery of training to the State staff.
Child Care Case Management Module	Child Care Solution from Colorado and Ohio	✓	• The Child Care module will be a transfer of Deloitte's Salesforce solutions from the States of Colorado for core child care functionality and Ohio for provider licensing
Child Welfare Case Management Module	Child Welfare Solution from Delaware	✓	• The Child Welfare Case Management module will be a transfer of Deloitte's proven Child Welfare implementation using the Salesforce platform from Delaware

	Proven Asset for WV HSP	Proven Solution	Description
Proven Technology	Amazon Web Services (AWS)	✓	• Deloitte architected and implemented the AWS cloud for Maryland DHS using AWS managed services infrastructure. The infrastructure is being piloted at this time. In a 3 year period, it is anticipated that all applications will be migrated to AWS cloud. • The development environment for the state of Connecticut has also been migrated and hosted in the AWS platform.

Figure 4.2-18. WV HSP leverages proven assets from other States.

Strategy #3: Application Modernization of Complex Mainframe Assets into WV HSP's SOA

Along with re-platforming the State's modern solutions and bringing proven solutions from other states, WV HSP will also leverage and modernize the State's legacy assets. This section identifies the key WV IES legacy resources that we plan to leverage, modernize and enhance as part of the WV HSP solution.

Service Management Module

Our approach to the WV HSP Service Management module is to modernize and extend the existing stable West Virginia RAPIDS platform through an innovative application modernization approach. This approach uses a proven legacy technology application modernization approach, which is combined with upgrading a platform which is already stable in the State of West Virginia, which reduces the risk of failure as well as the amount of disruption for your staff and West Virginia citizens.

Deloitte has significant experience implementing service management modules across multiple states to deliver the case management, payment management, and enterprise reporting and interface integration functionalities.

Deloitte's proven application modernization approach was key to the successful implementation of the Service management module at the State of Colorado with the Colorado Benefits Management System (CBMS). Our implementation at the State of Colorado maintains 1,200 COGNOS reports, 80+ interfaces, over 27,000 business rules and 20+ test environments

Financial Management Module

We propose a financial management solution for WV HSP that modernizes and enhances the existing stable West Virginia OSCAR platform through application modernization.

Deloitte has implemented financial management modules that have been successfully implemented across 25 states/territories with similar size and scale to the WV IES. Our proven experience mitigates many of the risks associated with large-scale implementations.

To highlight one specific success story, Deloitte's implementation in the Commonwealth of Pennsylvania for Child Support helped the Commonwealth became the first state to achieve over 80 percent on *all* federal performance measures and they have sustained that performance for more than five years.

Child Support Enforcement Case Management Module

The WV HSP Child Support Case Management module provides modernized Child Support Enforcement case management functionality by leveraging the OSCAR legacy platform using our proven application modernization approach. The approach provides a modernized child support case management module that the Department staff are familiar with reducing business process impacts and business disruptions.

Deloitte brings comprehensive child support enforcement system implementation experience to the WV IES team of working with 25 states. Our solution team has delivered federally-certified child support systems to multiple states.

Figure 4.2-19. Deloitte Child Support Experience.

DHHR Legacy Asset leveraged by WV HSP	Proven Solution	Description
WV HSP Service Management Core Module — Service Management	✓	• Deloitte's proven application modernization approach was key to the successful implementation of the Service management module at the State of Colorado with the Colorado Benefits Management System (CBMS). Our implementation at the State of Colorado maintains **1,200** COGNOS reports, **80+** interfaces, over **27,000** business rules and **20+** test environments. • The Texas DMV partnered with Deloitte to modernize their legacy systems and retire their mainframe using Deloitte's proven modernization approach. Texas DMV collects over $1.5 billion in revenue and registers nearly 24 million vehicles annually. Faced with increasing maintenance costs and constraints of legacy technology, Texas DMV's decision to modernize their existing IT investment. Deloitte migrate their legacy systems from their mainframe (an IBM ZOS Natural, COBOL and ADABAS stack) to modern (Web-based system using HTML 5, Java and a distributed DB2 database), hosted platforms. The migration was completed in less than two years and the mainframe subsequently decommissioned.
WV HSP Finance Management Core Module — Finance Management	✓	• An example of Deloitte's proven experience of implementing a Finance Management module using the application modernization approach comes from Colorado with the successful modernization of the ACSES system. • Colorado's Automated Child Support Enforcement System (ACSES) was a 25 year old mainframe application consisting of more than 1.4M lines of uncommented code with more than 8,000 programs. The State was looking to modernize the functionality it to a server-based, Java/SQL system, while maintaining the existing logic. It had over 300 interfaces with external partners, including file based (batch) interfaces via FTP, Direct Connect, VPS, and online interfaces via RPC and screen scraping. There were over 600 users across all counties of Colorado.
Child Support Enforcement Case Management Module — Case Management – Child Support	✓	• Deloitte's proven approach is being used in the State of Idaho Dept. of Health and Welfare for their Child Support Enforcement System to modernize their mainframe based legacy child support enforcement system.

Figure 4.2-20. Modernization of DHHR's legacy assets in WV HSP's SOA.

Proven Hosting Experience – Amazon Web Services

Amazon Web Services, Inc. (AWS) is a proven name for providing cloud infrastructure for enterprise solutions and serves more than one million active customers every month worldwide. AWS launched 722 new services and features in 2015, and as of September 30, have released 706 new features and services in 2016. Identified as a "Leader" in the field of Cloud Infrastructure as a Service by Gartner (August 2016), AWS invests in customer success through an accelerating pace of innovation with a focus on operating efficiently at massive scale, and growing an expansive partner ecosystem.

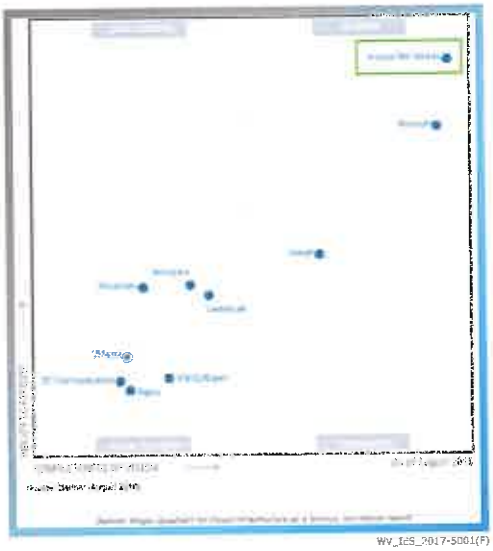


Figure 4.2-21. AWS – Gartner Magic Quadrant.

Department of Health and Human Resources Integrated Eligibility Solution Leverages Existing Resources

We propose to leverage and re-use existing West Virginia technical assets and software for implementing WV HSP and thus gaining maximum returns to the State.

Our intention is to re-use solutions, which are innovative and allow for the maximum effective use of your existing technology in order to meet your requirements.

Deloitte has worked with many states to re-use existing technology and infrastructure to maximize efficiencies. We understand, that through re-use and leveraging existing assets, Deloitte can reduce total cost of ownership in addition to the primary benefit of re-using currently operated and production proven components.

The following is a list of existing tools and software that are owned by the State, which we have evaluated and plan to leverage for reuse in the WV HSP to provide maximum benefit.

Business Function Served	Software Name
Address Validation	Experian QAS
Managed File Transfer	Oracle Managed File Transfer
Master Data Management	Informatica MDM
Service Governance	Oracle SOA Governance
Service Orchestration	Oracle Service Bus
Service Registry and Portfolio Management	Oracle Enterprise Repository
Service Transformation	Oracle B2B
Workflow	Oracle Business Process Management Suite 12c
Client Communication Management	Adobe Livecycle and Production Print
Database Management	CA platinum
Enterprise Content Management	Northwood's Document Imaging (ECM)
Enterprise Content Management	Informatica Power center
Extract Transform and Load (ETL)	Oracle Warehouse Builder
Image Capture	Northwood's Document Imaging (ECM)

Business Function Served	Software Name
Online Report	Cognos
PDF Generation	Adobe Livecycle
Database	IBM DB2
Database	Oracle
Service Gateway	IBM DataPower Gateway Virtual Edition

Figure 4.2-22. WV HSP reuses existing State resources.

Our Clients are recognized in the National HHS Market

Our successful health and human services implementations for different public sector clients have been awarded on multiple platforms. Deloitte won **2015 Best Fit Integrator - Exceptional Service Award in Health and Human Services** for the Commonwealth of Kentucky's Healthcare Connection. Kynect is a national model for its continuous smooth operation and navigation options for users. Due to Kynect, one in every 10 Kentuckians has secured affordable, quality health care for their families – many for the first time. In Connecticut, since implementation, the project's success has been nationally recognized through numerous awards while reducing the uninsured rate by half to 4 percent. The system received **19 awards from 13 different organizations from 2013 to 2015** including: 2014 WEDI Health IT Leadership Award, 2014 GTRA and HTRAC Executive Technology Award, 2014 PMI Project of the Year Award Finalist, 2014 Collaboration Across Boundaries Recognition Award - Excellence in Human Services Information Technology and 2015 CIO 100 Honoree.

Deloitte has been recognized on multiple HHS implementations:

- More than 35 HHS awards won by Deloitte clients during 2013-2016
- *"Kentucky is the hands-down national leader in helping people access affordable health care. Our exchange, kynect, is the gold standard for ease of use and convenience."*
  Kentucky Governor Steve Beshear
- *"Of the top four states identified by the Pew Charitable Trusts as having a well-running Web site, Deloitte was the contractor used every time."*
  WallStCheatSheet.com

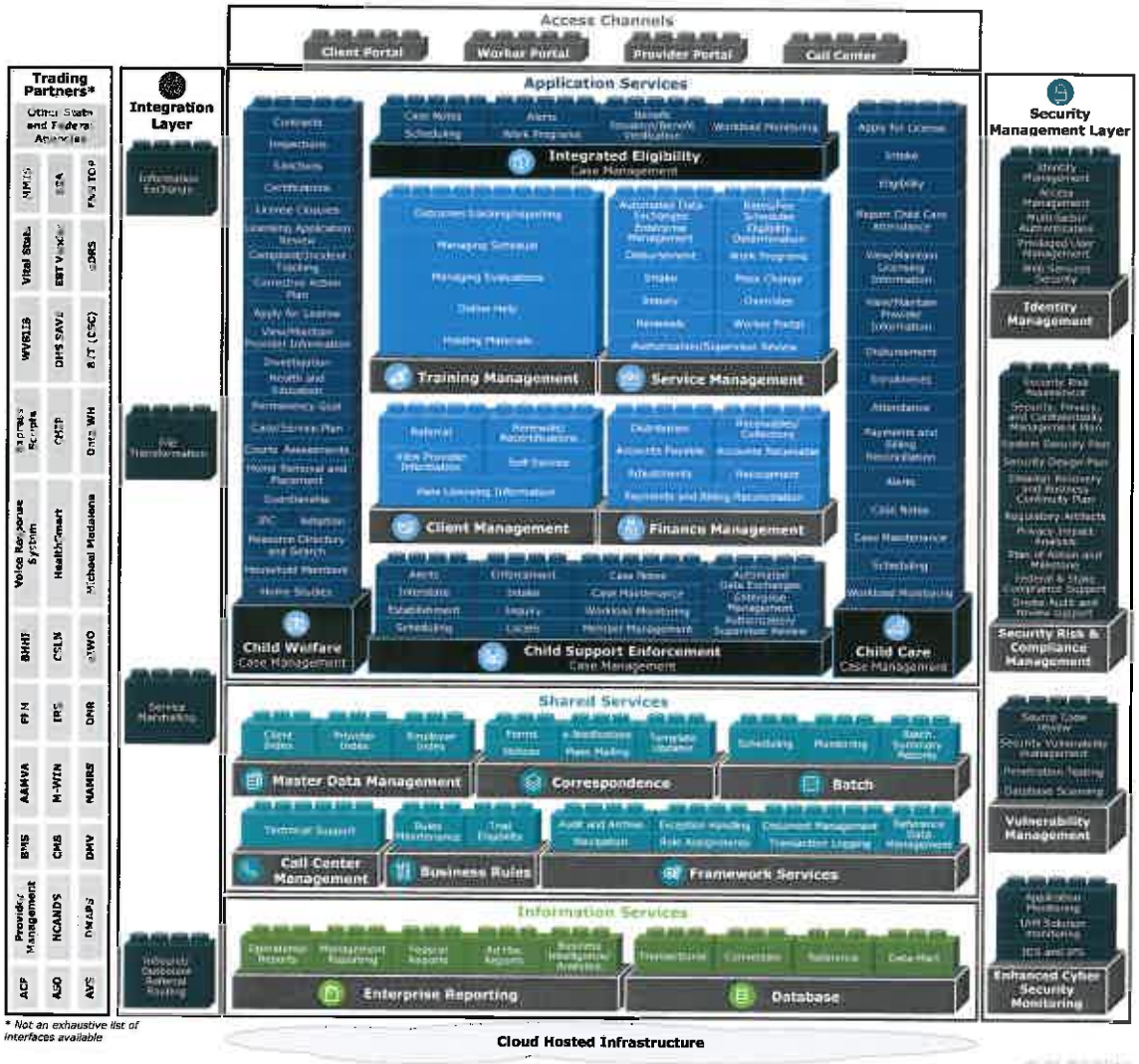
4.2
Goal:
Modernization
4.2.2

WEST VIRGINIA
IES PROJECT

Deloitte.

WEST VIRGINIA
HUMAN SERVICES PLATFORM

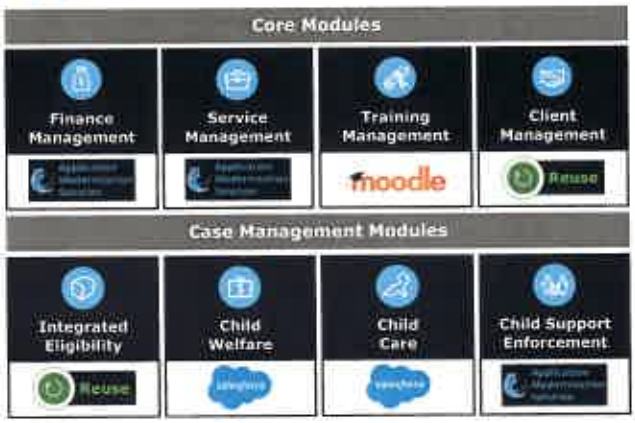
A MODERN, MODULAR, RELIABLE CLOUD HOSTED SOLUTION FOR THE FUTURE



* Not an exhaustive list of interfaces available

DELOITTE BRINGS AN EXPERIENCED TEAM AND PROVEN SOLUTION

PROVEN SOLUTION



CO, DE, ID, IN, KY, LA, MT, OH, TX, WA, WI, WV

PROVEN DELIVERY TEAM

States they've worked in delivering HHS Programmatic transformations

CT, FL, GA, IN, KY, MA, MI, MO, MT, ND, NJ, NM, OH, OR, PA, TN, TX, VA, WI, WV, DC

PROVEN VENDORS

Human Services Experience

AK, AL, AR, CA, CO, CT, DE, FL, GA, IL, ID, IN, IA, KS, KY, LA, MD, MA, ME, MI, MN, MT, MS, NV, NH, NM, NY, ND, OH, OK, OR, PA, RI, SD, TN, TX, VA, WA, WV, WI, WY, DC

4.2.3 Objective: Design, Development, and Implementation (DDI) Schedule

The overall design, development and implementation (DDI) schedule for complex system modernization projects must be carefully constructed to not only meet the mandatory requirements and goals of the State, but to also manage risk and result in a schedule that is positioned for the success of WV IES. The WV IES timeline delivers the WV HSP solution for acceptance within two years, meeting DHHR's requested schedule. In developing our proposed timeline, which is based upon our vast HHS implementation and modernization experience, we balance these factors in a manner that best achieves your goals and objectives.

The overall DDI schedule that we have proposed allows the State to realize key objectives as quickly as possible to start realizing the benefits of predictable costs and begin the modernization process of the legacy environment to a new modern and hosted environment. With nearly three-quarters of the State's population known to at least one of DHHR's programs, it is critical to plan a robust and an achievable schedule that allows the State to deliver a modern solution while maintaining business continuity.

Section Highlights

Deloitte's understanding of the WV Human Services Platform (HSP) solution allows us to:

- Outline a strategic WV HSP release schedule for DHHR programs
- Deliver the full WV HSP solution in DHHR's defined time frame.
- Balance project timeline goals and objectives with risk

Our Understanding of Your Need

We understand that West Virginia faces challenges with the current system landscape in maintaining separate systems for DHHR benefit programs and has a vision of unifying and modernizing its disparate systems that currently support various human services programs. With that in mind, it is imperative that the contract kick-off falls within the third quarter of the 2017 calendar year in order to begin transition into a more modern hosted platform.

Deloitte understands your scheduling needs based on Federal Financial Participation (FFP), and have proposed a schedule that maximizes those requirements. With our extensive industry knowledge, we offer an achievable schedule to meet the State's needs.

We acknowledge that the State desires a phased implementation approach with at least 2 releases, where certain programs and features would be deployed as part of an initial release followed by 1 or more additional releases to implement remaining programs and enhancements. The State requests that the IES solution should be presented for full solution acceptance no later than two years after the project kick-off. In addition, the State has required that Maintenance and Operations (M&O) of RAPIDS be taken over by the vendor by January 2018.

Our Approach to Meet Your Requirements

After reviewing the proposed schedule and the requirements in the RFP, we propose to accomplish the included scope with six (6) DDI releases. This approach delivers a modernized, re-platformed solution to DHHR while reducing risk through a phased implementation. The final release will move into the User Acceptance Phase within 2 years after project kick-off, therefore meeting the RFP requirement of the solution being presented for full acceptance no later than two years after project kick off. The pilot period for each release would consist of 3 months. The table below outlines the six (6) releases to support the modernization scope described within the RFP:

DDI Release Description	Solution Presented for User Acceptance	Pilot Completion
RAPIDS (IE) Modernization Phase 1 – Technology Platform Modernization • Modernize the legacy RAPIDS solution to WV HSP supporting SNAP, MA (Medicaid and Medicare premium assistance such as QMB, SLMB, QIA), CHIP, TANF (WV Works), School Clothing Assistance & LIEAP • Host the modernized RAPIDS solution • Decommission the legacy RAPIDS solution	February 2019	August 2019
RAPIDS (IE) Modernization Phase 2 – Business Application Modernization • Incorporate additional modernization components to WV HSP for SNAP, TANF, Medical Assistance programs • Business logic including BRE	October 2019	April 2020
OSCAR (CSE) Modernization Phase 1 – Technology Platform Modernization • Modernize the legacy OSCAR solution to WV HSP • Host the modernized OSCAR solution • Decommission the legacy OSCAR solution	December 2018	June 2019
OSCAR (CSE) Modernization Phase 2 – Business Application Modernization • Incorporate additional modernization components to WV HSP for Child Support	August 2019	February 2020
FACTS (Child Care) Technology Platform and Business Application Modernization • Modernize the Child Care Case Management solution • Decommission legacy FACTS solution (Child Care)	May 2019	November 2019
FACTS (Child Welfare) Technology Platform and Business Application Modernization • Modernize the Child Welfare Case Management solution • Decommission legacy FACTS solution (Child Welfare)	May 2019	November 2019

Figure 4.2-23. WV HSP module implementation timeline.

Our approach keeps DHHR's goals in mind, and is based on our vast knowledge and experience integrating and implementing similar modern and modular HHS projects that encompass multiple programs in more than 20 states. We work with you at a speed you are comfortable with – making sure that we do what is right for you rather than what is easiest for us.

For the program case management modules and the production use of the WV HSP solution we are proposing a timeline that is an alternative release plan to what was suggested by the State in the RFP. For the legacy systems being modernized (RAPIDS and OSCAR), we are proposing a two-phased approach to modernize the solution as soon as possible. Phase 1 modernizes the legacy technology platform and hosts components within WV HSP. Phase 1 also includes decommissioning the legacy components. Phase 2 incorporates the remaining modernization components, meeting the RFP requirements. Additional Phase details are provided below.

Even with our proven approach and solution in states across the nation, the scope and breadth of the requested requirements merit that additional time be taken, and that a piloted approach be used in order to identify issues up front before all citizens and county workers of West Virginia have access to the solution. Additionally, based on the Food and Nutrition Service (FNS) and Federal Financial Participation (FFP) guidelines of using a three-month pilot period, we propose a strategy which includes a pilot phase for each system release.

Our approach meets the State's goal of predictable costs by strategically structuring releases. Our approach is founded on the State's vision of identifying logical groups of functionality made available to the users via an incremental rollout of the solution. By following this approach, key features of the system are delivered to stakeholders in functionally comprehensive sets in a short time span.

As seen in the high-level timeline below, support from State resources is required for DDI, UAT and ongoing release support. We understand State resources are limited and availability may not always be possible, but look forward to working with the State to develop an appropriate coverage plan during times of need. Additionally, various deliverables are submitted throughout the DDI phase, followed by a deliverable review cycle of 10 business days.

DHHR Human Services Platform Solution Timeline

Deloitte has reviewed the State's approach to implementation, and we understand the need for a phased strategy and agree with that vision. This approach, however and like any other, has inherent considerations. This section describes the timeline for each milestone in our implementation approach across the six releases. The timeline chart below highlights the key components identified in the RFP and how these align with each release of the WV IES Project to deliver the solution. The RFP has included a statement that the vendor should provide one project baseline at approval of the initial project schedule, as well as one project schedule re-baseline before completion of the DDI activities. Deloitte works with the State to mitigate any impacts from the re-baseline and we assume the change control process and any financial impacts are addressed using the process defined in the Change Management Plan (See Mandatory Requirement 5.17).

The high-level timeline below represents the major activities for the WV IES Project. The project work plan included in Appendix C contains a detailed WBS breakdown of project tasks and dates.

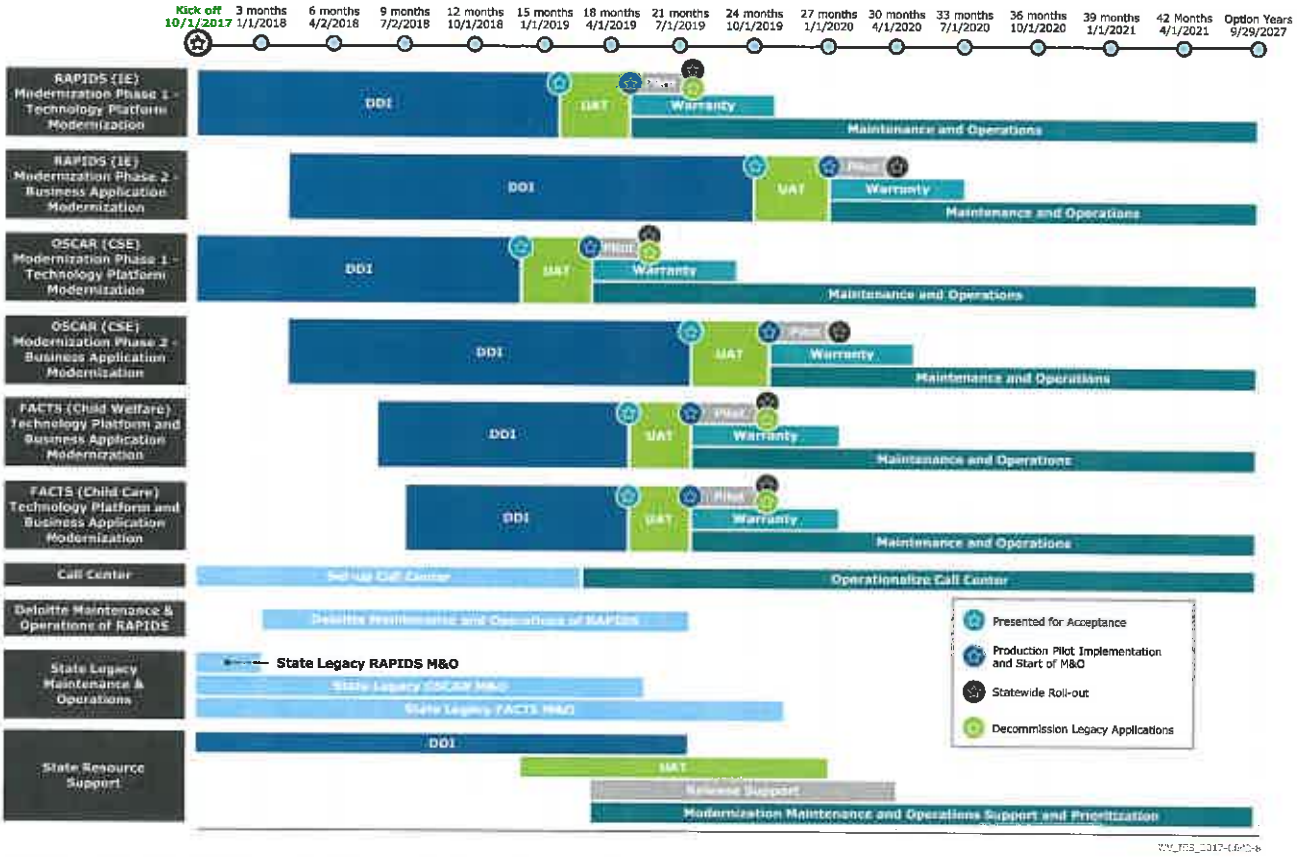


Figure 4.2-24. Our high-level timeline for the West Virginia IES project.

Our DDI scheduling approach incorporates key milestones as requested by the State and delivers a successful WV IES Project. We understand the importance and criticality of developing a comprehensive schedule to track, monitor, and deliver milestones which are critical to the success of the project.

WV HSP Program Case Management Modules Releases

The six DDI releases correspond to the implementation of the various WV HSP program case management modules to replace the legacy systems. We understand the high risk and cost associated with maintaining these systems, and therefore plan to decommission them as soon as possible to begin operating on the new WV HSP platform.

As outlined in the timeline graphic above, the technology platform modernization of a legacy system is a timely process. In order to cut costs as soon as possible, we are proposing a two-phased approach to the modernization for the Integrated Eligibility and Child Support programs. Phase 1 for each shifts the existing components off the legacy systems (RAPIDS and OSCAR, respectively) and into the WV HSP platform, allowing you to decommission your legacy systems and move to a modern technology platform as soon as possible, with minimal disruption to business users. Once the foundation release is performed, a second release completes the modernization process by meeting RFP requirements that are not achieved in the first phase. This approach helps the State achieve cost savings sooner, and reaches modernization in an efficient manner which reduces risk and business disruption. The Child Welfare and Child Care modernizations will be performed in a big-bang approach, with both releases moving to UAT, Pilot and Statewide implementation at the same time. Since Child Care and Child Welfare functionality are currently on the same legacy platform, our approach once again reduces risk and business disruption, while allowing the State to roll out functionality in the most efficient manner.

The following subsections define and describe the activities represented in the high-level timeline to support these releases.

Design, Development, and Implementation (DDI)

We understand the criticality and complexities of the RAPIDS, OSCAR, and FACTS systems. We have proven experience in configuring and integrating these systems and their associated program areas into WV HSP.

The DDI phase lays the foundation for Acceptance, Pilot, and ultimately statewide rollout. The project initiation phase encompasses the following project planning activities: acquiring project team, establish a project schedule, and creating a baselined work plan. Our work plans are proven from past experience, and are flexible to accommodate baseline adjustments during DDI, as required. These plans are also part of our starting point and enable us to quickly deliver these artifacts and complete the project initiation phase. This groundwork is then used throughout the rest of the project to deliver a cost-effective, high quality project and solution to the State.

The objective of the Detailed Requirements Definition phase is to verify and confirm requirements and plan design activities. During this phase, Deloitte works with State technical stakeholders to establish a sound architectural foundation, and work to eliminate the highest risk elements of the project. The key activities performed include planning, initiating and validating system requirements. Requirements are validated during Requirements validation sessions hosted by Deloitte and held in a mutually agreeable office location. Once we have confirmed the requirements, they are used as an input to the Design phase, which focuses on the creation of system architecture and functional design. We work with the State identified Subject Matter Experts (SMEs) across field operations, policy, training, and technology to assist in the validation of Requirements and Design phases. Maintaining traceability between requirements and design keeps Deloitte and the State focused on avoiding gaps in the overall solution.

The objective of the Design Phase is to plan and initiate the design, establishing a design solution and defining test plans. Similar to requirements validation sessions, design validation sessions, or Joint Application Design (JAD) sessions are completed through a series of working sessions with the key stakeholders. These sessions are used to validate the business processes, determine configuration values as well as to validate the integration design specifications. During the technology platform modernization phases, a code freeze is implemented for the legacy systems towards the end of the design phase. This ensures an accurate one-to-one migration of the technology platform.

As seen in the high-level timeline, support from State resources is required during DDI. During this time, the State staff assist in supporting the design of each program being integrated into the WV HSP solution. We understand State resources are limited and availability may not always be possible, but look forward to working with the State to develop an appropriate coverage plan during times of need.

Additionally, various deliverables are submitted throughout the DDI phase, followed by a deliverable review cycle of 10 business days. Once the DDI has been successfully completed for each program, User Acceptance follows where the State can begin the extensive testing effort. The following section outlines the activities of the User Acceptance phase.

User Acceptance Testing

Once the DDI phase and its underlying activities are complete, it is time for the State to begin its User Acceptance Testing (UAT) efforts. This is the time for West Virginia to get hands on with the newly implemented WV HSP functionality. With six releases requiring UAT support, we have carefully outlined a schedule that optimizes stakeholder involvement, reducing UAT overlap and letting the State focus on testing efforts. Please note that the final UAT will begin 24 months after project start, in accordance with the RFP requirement to present the solution for full acceptance no later than 2 years after project kick off. The UAT phase allows end users and State staff to experience the system changes prior to their implementation of the Pilot rollout. The State can validate that the system meets the business requirements and provide feedback regarding the overall functionality and usability of the system. During UAT, Deloitte provides data, environments, and test scripts to allow the State to thoroughly test the WV HSP.

Based on our experience on projects of similar scope to WV IES, we have proposed a 3 month UAT period for each release. We understand that the State has limited State resources, so where appropriate, we have proposed UATs for more than 1 release at the same time, such as Child Care and Child Welfare, to allow for most efficient completion of UAT, while taking resource constraints into consideration. For Integrated Eligibility and Child Support, we have a 3 month UAT for each release, once again making the use of limited State resources as efficient as possible because in the initial release for each program area, WV HSP will have the same functionality as what the State is already familiar with on a modern platform while in the 2nd release, new functionality can be tested.

During each UAT, we identify and involve user-testing personnel who participated in requirements and design sessions early in the process. We also schedule training sessions, provide training materials, and train testers on the tools and processes used in Acceptance testing prior to the start of testing. Given the integrated nature of WV HSP across multiple program areas, we would recommend having continuity of some State resources throughout all the UAT phases. Having state SME resources available during these times provides a way to learn from previous testing phases, and hold lessons learned sessions to identify room for improvement as shared modules are tested. The following section introduces the piloted rollout approach to the WV HSP solution.

Pilot and Statewide Implementation

Based on our previous experience and per the guidelines identified by the Food and Nutrition Service (FNS) and Federal Financial Participation (FFP), we have proposed a pilot rollout strategy for integrating the various DHHR

programs into the WV HSP. After the Acceptance phase for each release, the WV HSP system undergoes a 3 month pilot period, where underlying issues can be identified and resolved without affecting the entire State's benefit system.

Deloitte works with the State to identify a pilot strategy that aligns with the State's goals and that aims to minimize risk. Once identified, we work with you to triage any Production issues during the three-month pilot, establish priority, and resolve prioritized issues accordingly. Also during this time, the existing solutions for administering benefits are maintained and utilized for the counties not identified as part of the pilot program.

The first release pilots the modernized Child Support functionality 18 months after the start of the project with statewide deployment expected at the completion of the three-month pilot period. The second release pilots the modernized Integrated Eligibility programs 20 months after the start of the project with full statewide deployment expected 3 months later. The remaining releases will follow a similar pilot schedule – 3 month pilot followed by statewide rollout. We are proposing six months of software warranty to begin upon the start of the pilot for each of the releases. Maintenance and operations for the WV HSP modernized solution continues through 09/29/2023, with four potential option years that would extend the contract to October 2027.

It is important for the State to understand that until all the Legacy systems are decommissioned from the start of Pilot for the 1st release until OSCAR is decommissioned at the end of Month 20 and FACTS is decommissioned at the end of Month 25, the legacy Child Support (OSCAR) and legacy Child Welfare (FACTS) systems need to interface with the modernized Integrated Eligibility Solution. This requires some maintenance and operations work for the legacy FACTS and OSCAR teams. Deloitte is responsible for the modernized portion of these interfaces; however, the State is responsible for the FACTS and OSCAR portions of the interfaces to the WV HSP solution during this time period.

Maintenance and Operations

Deloitte understands the importance of performing corrective, adaptive, and preventive software maintenance across the wide range of services and solutions for the WV HSP project. The scope of services for operations and maintenance not only includes application "bug," or defect fixes, but also includes activities such as performance monitoring and tuning, software upgrades and patches. Maintenance and Operations (M&O) is critical to keeping these systems running smoothly, efficiently and is essential in preventing unplanned disruptions. M&O is comprised of a wide spectrum of service delivery that is critical to meeting ongoing business needs. Deloitte understands that the WV HSP project and its related systems involve many stakeholders with distinct business needs, priorities, and expectations of the systems that support the project.

Operations services encompass a number of tasks that enable an application to continuously meet the needs of its stakeholders. Tasks such as infrastructure management, performance monitoring, batch scheduling, incident management, and capacity planning provide the behind-the-scenes support necessary for an uninterrupted end-user experience. As part of the ongoing operations phase, DHHR can expect a predictable set of operational services executed regularly for production stability, configuration management, infrastructure administration, and continuous operations improvement. More information regarding the M&O of WV HSP can be found in section 4.3.

Enhancement Pool Releases

We understand the State's requirement of up to 30,000 enhancement pool hours per year for the life of the contract as per mandatory requirement 5.50. We follow strict discipline in installation and enhancement or modification of the components. Our change management process emphasizes rigorous process and use of automated tools for managing requirements traceability across the project's life cycle and phases, including WV IES Project governance.

Finalization of scope and design are accomplished in Analysis and Design phase. Potential changes to the scope are completed through a formal process in alignment with Change Management Plan. Scope changes cannot occur without passing through the formal process, which includes:

- Identifying and documenting change requests against project approved deliverables or work products
- Prioritizing valid change requests for impact analysis
- Analyzing change requests and reject, defer, or approve for implementation
- Implementing and monitoring approved change requests and making adjustments for their impacts

We use Atlassian's JIRA tool for the change control system. Using an automated system to house the change control requests provides a central repository for centralized control and clear visibility. Using this tool, we work with the state to clearly document enhancements planned for a particular release.

WV Call Center Implementation Release

In order provide end user support, as part of the project we will establish a Call Center that supports the modernized WV HSP solution. The Call Center provides tier 1 and tier 2 technical support for both end users. DDI activities on the call center begin with the initiation of the project and complete just prior to pilot of the first DDI release in order for the Call Center to be operational and ready to support end users from the start of the 1st pilot phase.

Assume Responsibility for Medical and Family Assistance Programs

A key milestone in the high-level project timeline is alignment with the mandatory requirement 5.40. Per this requirement we assume responsibility of the Medical Assistance and Family Assistance Programs. Our interpretation of this requirement is that the Deloitte team will have to assume responsibility for the RAPIDS Maintenance & Operations activities till the modernized WV IES system is implemented. We acknowledge that the Deloitte team will assume responsibility of the maintenance and operations activities for the RAPIDS system starting January 1, 2018 until the system is decommissioned at the end of July 2019.

Objective: Automation

Deloitte's approach to automation of the WV HSP (Human Services Platform), provides the State with the capability to automate a number of business processes for increased productivity and enhanced efficiency of state staff, improved access to data for analysis and decision making, better customer service for applicants, enrollees, partners, and providers, and reduced operating and maintenance costs.

Our recommended WV HSP solution is built upon experiences and lessons learned from implementations in over 20 states and brings to West Virginia a solution that introduces automation to everyday tasks through the use of task dashboards, workload distribution, and production proven workflows that decrease effort and increase efficiency.

WV HSP employs leading architecture practices that enable automation of business processes

- Service Oriented Architecture (SOA) facilitates re-use of services
- Business Rules Engine (BRE) provides a configurable platform to maintain core business and eligibility rules
- Automation within both online and batch processing
- Key WV HSP business process automation features include real-time eligibility determination, and automated MA renewals.

Our Understanding

Deloitte understands West Virginia's challenges with largely manual business processes that require significant time and effort for county office workers. We recognize the significance of automating repetitive and manual tasks which provides the county office workers the ability to focus more effort and time on higher value tasks resulting in improved customer service and faster processing. Our approach to automation is comprehensive and includes both business process automation and system process automation as further explained in this section. WV IES' **modern and modular architecture** provides an extendable foundation for achieving and improving automation of business processes.

Our Automation Enablers

Our **Service Oriented Architecture** (SOA) based solution includes an Enterprise Service Bus (ESB), Master Data Management (MDM), data warehousing capabilities, Identity and Access Management (IAM)/Single Sign-On (SSO), Document Management (EDMS), correspondence management, and Business Rules Engine (BRE). The ESB facilitates re-use of services and supports seamless integration across benefit programs. Automation is achieved by leveraging the underlying reusable service components. The WV HSP architecture provides the flexibility to automate business processes and workflows both in an online and batch mode.

The WV HSP architecture is based on industry leading practices, new technologies and **Federal standards for interoperability** and promotes data transfer and orchestration across benefit programs and system tiers. Our solution's modular architecture and reusable services provide the flexibility to automate business functionalities. Automation is mostly achieved by reusing the services and system components that are used by the online

functionality providing accuracy and consistency for the automated processes. The interoperability of the presentation layer with the underlying architecture also provides workflow automation capabilities.

Figure 4.2-25. West Virginia benefits from WV HSP proven automation capabilities.

In this section, we describe how our solution's automation features meet the six features requested in the RFP and provide additional features that help the State in increasing productivity and staff efficiency.

- **Multi-program capability.** The WV HSP solution provides a flexible and integrated platform including an enterprise business rules engine which enables automation across benefit programs. Our proposed solution supports shared functionality across multiple programs, while tailoring eligibility rules, automated workflows, benefit plans and processes to the unique needs of individual programs. WV HSP leverages SOA technical foundation to deliver business functions in a flexible and integrated service delivery model for WV.
- **Flexibility.** Our approach allows us to deliver a WV HSP solution that is significantly easier and less expensive to maintain than comparable systems. The WV HSP is a business driven solution that adapts easily to policy changes as new programs and rules come into effect. It includes the DROOLS rules engine for easy, time saving configuration of business rules. Business rules can be quickly changed, tested, and deployed without changing the underlying application code, reducing maintenance costs and improving your business-technology alignment.
- **Agility.** WV HSP solution is a layered, modular and SOA based solution. This solution architecture uses industry standards and is loosely coupled to provide agility across program management and business processes, reduce maintenance costs, reduce redundancy and improve interoperability with other systems. Our holistic approach to design leads to modular components that promote ease of maintenance and support centralized configuration. For example, Splunk's log analysis capabilities are aggregate multiple data sources streamlining the process of administrative monitoring. This modern architectural approach allows us to create solutions that use best of breed software components reducing integration cost and development time.
- **Productivity.** The WV HSP solution includes a number of business process automations as further described in this section. These features provide faster processing, improved accuracy and improved worker focus resulting in improved productivity.
- **Self-Service.** The WV HSP solution includes and integrated web portal that generates access and up-to-the-moment information for clients, staff, providers, and other authorized stakeholders across the HSP. Our proposed WV HSP solution's self-service web-portal provides a customer-centric channel for customers to apply for assistance 24/7 via a web browser, simplifies the process for applying for services, increases the ability of clients to manage their own accounts, and increases the availability of relevant program and policy information.
- **Reporting and data analytics.** Our proposed solution offers proven reporting and data analytics capabilities that provide valuable information to stakeholders. We understand the need to retrieve statistics on system, worker, and caseload performance (accurately and systematically) as it drives improvement in services delivery. Our proposed WV HSP solution fulfills this requisite functionality by reusing the State's existing implementation of Cognos to pull pertinent data and deliver it in a concise and meaningful format for state users that comply with HIPAA, ACA, and state requirements.

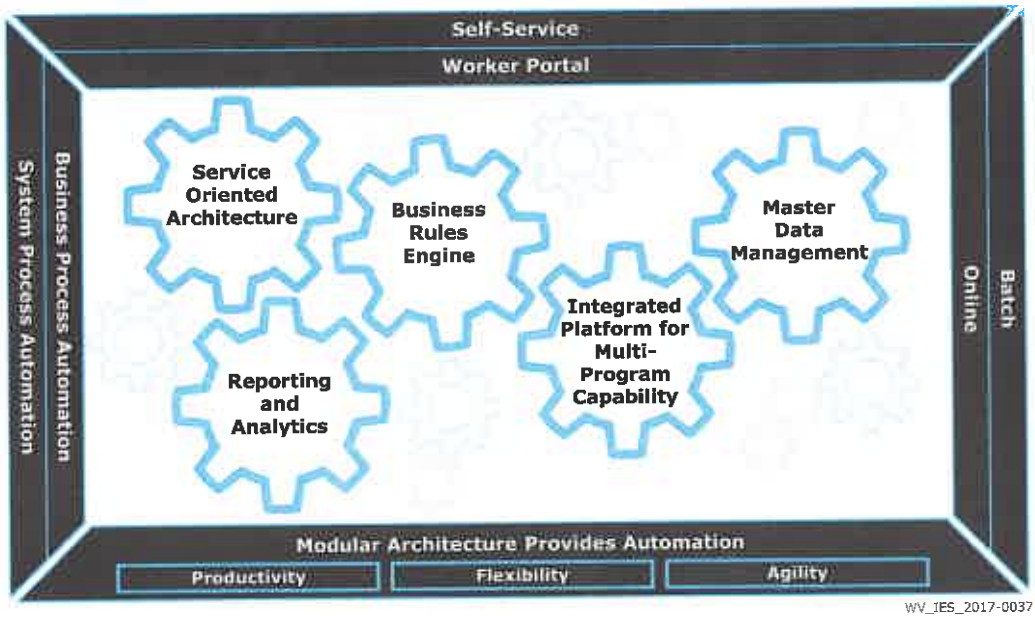


Figure 4.2-26. WV HSP Automation.

WV HSP Automation Features

Deloitte's proposed WV HSP solution provides **features** specific to automation of business processes that can be configured to the State's requirements. These features enable the case workers to focus on high value tasks and activities providing higher client satisfaction and quicker processing. Some automation features reduce the effort for the clients providing an easy end-user experience.

The below table provides the key automation features of the WV HSP solution. It is not a complete representation of our solution's automation features and we work with you to understand your automation pain-points to configure a solution aligned to meet the requirements of this RFP.

Feature	Multi-program capability	Flexibility	Agility	Productivity	Self-Service	Reporting and Data Analytics
Self-Service Screening and Real-Time Eligibility Determination	✓	✓	✓	✓	✓	✓
Automated Client Intake	✓			✓	✓	✓
Automated Eligibility Determination	✓	✓	✓	✓	✓	✓
Automated Workload Assignment	✓	✓		✓	✓	✓
Automated Renewals	✓	✓	✓	✓		✓
Automated Reporting and Analytics	✓			✓		✓
Federally Facilitated Marketplace (FFM) Integration	✓		✓	✓		✓
Automated Verifications and External Agency Integrations	✓		✓	✓		✓
Child Abuse Automated Background Check Processing			✓	✓	✓	✓
Automated Child Support Legal Workflows		✓	✓	✓		✓
Automated Child Support Enforcement Action		✓	✓	✓	✓	✓

Figure 4.2-27. WV HSP Automation Features.

Along with the automation features highlighted in this section, our proposed solution's underlying architecture provides us and the State the ability to further extend the automation capabilities to other business processes.

Self-Service Screening and Real-Time Eligibility Determination

The WV HSP solution supports real-time determination of eligibility for applied benefit programs. Data is collected from the applicant via the online application, verified in real-time through a variety of Federal and State interfaces, and eligibility is executed against program rules stored in the BRE. Whenever possible, the user receives an immediate determination of eligibility upon completing and submitting the application. Additionally, pre-determined applications from the Federal Marketplace follow a similar process where real-time eligibility is evaluated leveraging application and verification information provided by CMS. If eligibility determination is unable to be completed in real-time, the application is transferred to the Worker Portal for determination to be completed by a worker. As part of the project, we work with the State to identify State specific requirements for real-time eligibility and configure the solution.

- More than 16,000 LIHEAP benefits were processed and issued successfully using Real-Time Eligibility in the Commonwealth of Pennsylvania during the 2016 LIHEAP season

Key benefit. Increased productivity for county office workers, immediate eligibility determination and time savings for clients using self-service.

Automated Client Intake

Along with the application registration, the WV HSP solution also includes automated client intake. Automated client intake is performed in instances when Real-Time Eligibility cannot be determined but the system has the information required to complete client intake. This reduces the county office worker's workload of manually entering the case information for client intake.

Key benefit. Improved productivity, accuracy and time savings for county office workers.

Automated Workload Assignment

The WV HSP solution includes a worker dashboard focused on worker activity assignment, assignment management, and organization/activity administration. As a user's single point of access, the dashboard increases efficiency and allows staff to most effectively meet the needs of their clients. The dashboard provides an automated solution that enables counties to define and manage tasks using assignment methodologies and staff details that determine distribution of activities to staff members.

The assignment methodologies include options like default assignment, direct assignment, self-assignment and round-robin assignment and are defined at an alert or work item level. This enables uniform, managed and efficient distribution of activities along with improved tracking and reporting.

Key benefit. Improved productivity and worker efficiency, improved work item tracking for supervisors

Automated Renewals

The WV HSP solution seeks to streamline the renewal process, minimizing the effort required by State staff and recipients to extend eligibility during annual renewals. Electronic data sources are used to re-verify current household information and determine if any changes have occurred that impact the coverage for current recipients.

Business rules establish a renewal date for each eligible recipient in a household at the time of initial application processing. Our proposed solution supports establishing continuous eligibility spans for benefit programs and recipient populations where income or resource tests should not be re-evaluated until renewal. The renewal date is extended automatically for recipients that remain eligible for coverage at the time of renewal, starting the next certification period and resetting system monitoring processes for that household.

- In **Delaware**, 52 percent of the monthly Medicaid (MA) renewals are processed by the system saving approximately 1,900 worker hours per month
- More than 7,000 MAGI Medicaid cases were renewed successfully with no worker intervention at the Commonwealth of **Pennsylvania** in January 2016

This feature has been successfully utilized by a number of our clients and have seen significant productivity and efficiency improvements for county office workers and reduced workloads for clients.

Key benefit. Improved productivity and time savings for county office workers; Time savings and improved benefit coverage for clients.

Automated Reporting and Analytics

Our proposed WV HSP solution provides an ETL integration capability with the reporting solution. Automated pre-configured or canned reports are generated and delivered automatically by the WV HSP solution. We work with you to understand and define your reporting requirements to deliver reports configured and aligned to your business requirements.

Key benefit. Improved decision making capabilities for the management due to new data visualization capabilities.

Federally Facilitated Marketplace (FFM) Integration

The WV HSP system provides integration capabilities with the Federally Facilitated Marketplace (FFM) where FFM referrals are automatically evaluated and processed for Medicaid and CHIP eligibility. The FFM integration also supports automatic transmission of referrals from the WV HSP solution to the FFM if individuals are not identified to be eligible for State Medicaid benefits.

Key benefit. Improved productivity, accuracy and time savings for county office workers; Time savings and improved benefit coverage for clients.

Automated Verifications and External Agency Integration

We recognize the significance of the eligibility system to integrate with external agencies and data sources to identify applicants and validate the client information in accordance with CMS guidelines. The WV HSP solution provides the ability to integrate with external systems for the intake of verifications and other eligibility related forms and documents. This includes but not limited to Identify Check with the CMS Federal Data Services Hub (FDSH) remote identity proofing (RIDP) service, Citizenship/Lawful Presence check with SSA, Income & Allowable Deductions check with Equifax (TALX).

Key benefit. Improved productivity and program accuracy.

The integrated eligibility solution for Pennsylvania includes a number of system automation features.

- Automation of the application intake process
- Automated Medicaid Eligibility Determination
- Imaging workflow automation

Child Abuse Automated Background Check Processing

Individuals who volunteer or work with children are required to have background checks completed prior to gaining employment and on an on-going basis to confirm they are not a known perpetrator of child abuse. This Child Welfare automation feature supports a child abuse background check for the State child welfare agency as they validate against the State's central registry of perpetrators of child abuse.

Automated Child Support Legal Workflows

Automated workflows in the Child Support case management module facilitates full range of legal actions required to establish and maintain support obligations, including establishment of paternity and court processing. The solution automatically monitors establishment timeframes and initiates appropriate next steps, such as necessary court actions, corresponding document preparation, and scheduling. Another example from the legal workflow inventory is the automatic identification of cases eligible for the review and adjustment process, which also triggers subsequent processing activities.

Key benefit. Reduces the need for caseworker intervention, improves incentive metrics, increases client satisfaction and increases revenue to the child support agency.

Automated Child Support Enforcement Actions

The Child Support case management module supports automated Enforcement remedies to collect current and past due support. Immediate Enforcement actions are system-initiated actions that must be taken after entry of an order for support and/or health insurance coverage. Immediate Enforcement actions include income withholding orders (IWOs), National Medical Support Notices (NMSNs), credit reporting, and real property liens. Other Enforcement activities do not require user intervention, but are systematically initiated when the solution identifies that a case meets eligibility criteria based on configurable business rules.

Key benefit. Robust automation of Enforcement actions allows West Virginia to maximize collections and revenue providing families with the maximum support required.

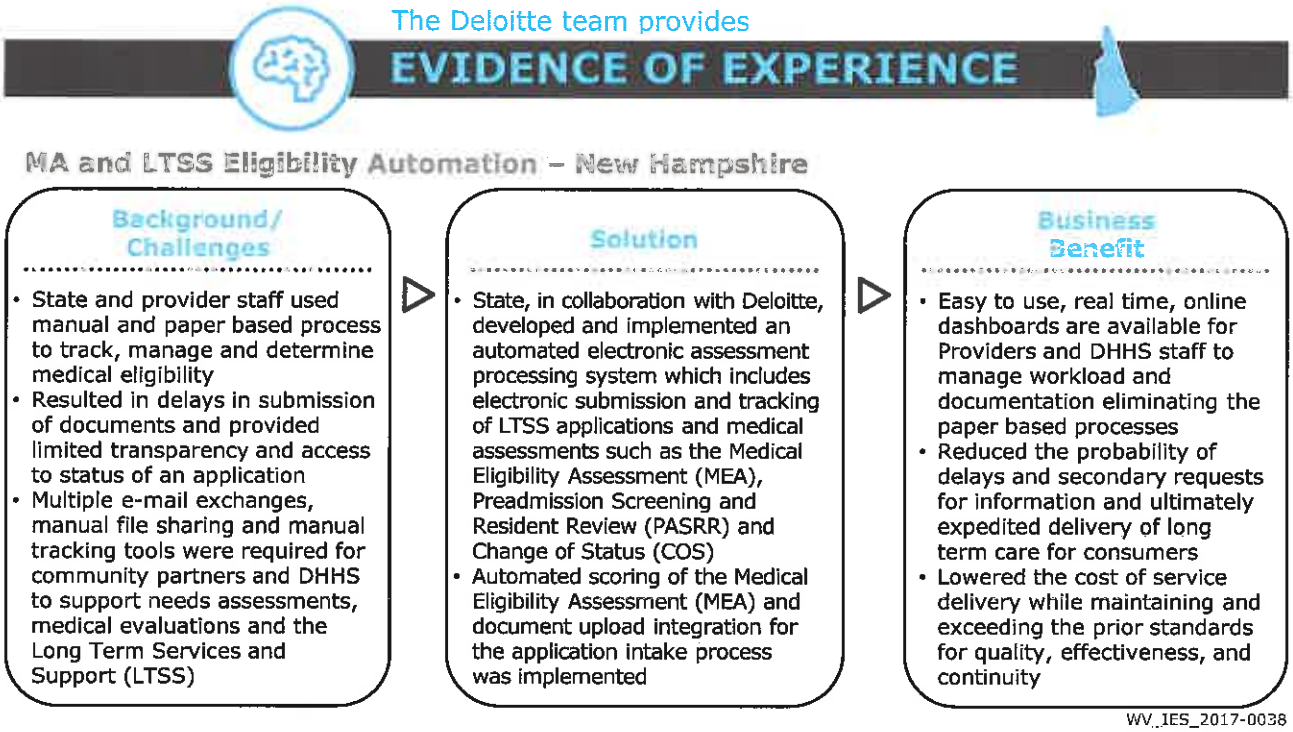


Figure 4.2-28. MA and LTSS eligibility automation success story.

Continuous Improvement

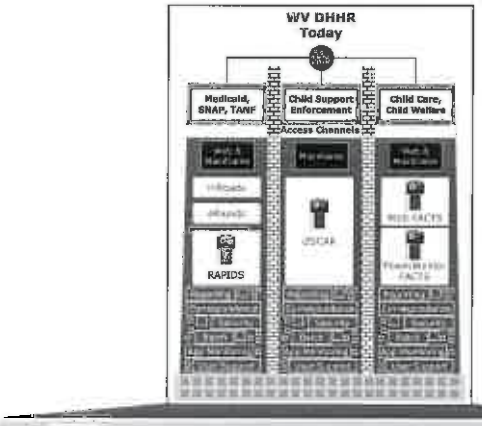
Continued improvements are the cornerstone for creating and maintaining value for the State through better strategy, design, transition and operation of services. Our team relies on the performance baselines and maturity assessments to continually improve the quality of automation services, operational efficiency and business continuity. Aligned to ITIL and based on the Plan–Do–Check–Act (PDCA) Deming Total Quality Management improvement model, our approach is informed by a closed-loop feedback system and a three-step process: Plan, Monitor and Optimize.

Process Step	Description
Plan	As part of the planning phase, we work with you to identify the metrics to be monitored and the time intervals for capturing the metrics. Once the monitoring metrics and time intervals are finalized, we implement monitoring processes in alignment with the plan.
Monitor	Most of the automation processes provide automation completion reports which are reviewed by the WV HSP team and is shared with the State representatives. We analyze the reports and monitoring metrics and provide system improvement recommendations
Optimize	We work in collaboration with you to implement the identified system improvement opportunities. The monitoring processes are reviewed to include additional monitoring and reporting processes.

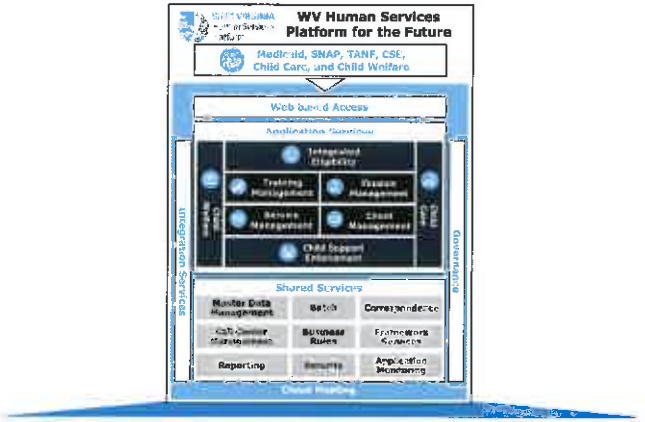
Figure 4.2-29. Continuous improvement process steps.

Deloitte.

WEST VIRGINIA WV DHHR TODAY VS. WV HSP FOR THE FUTURE



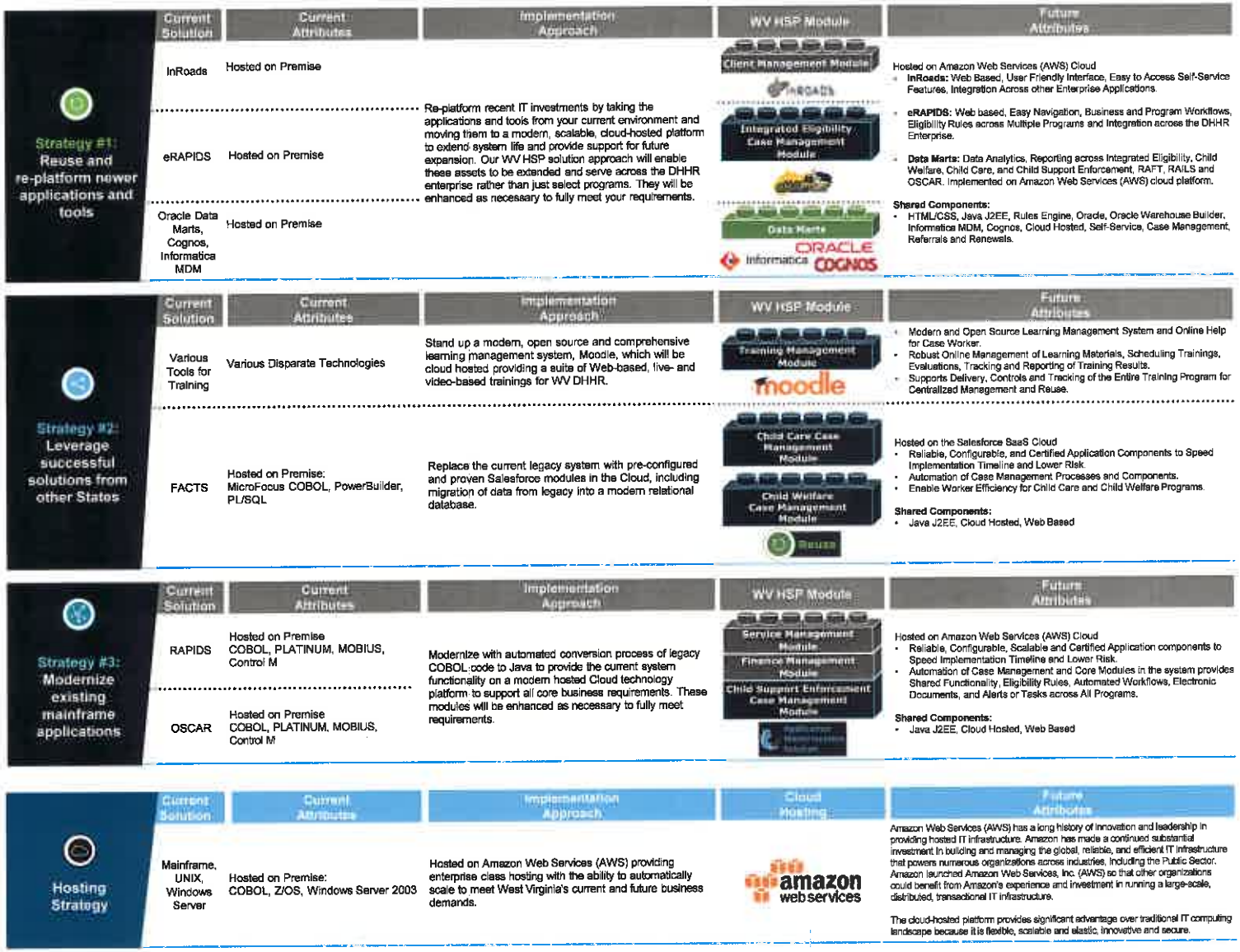
	Less accessible. Program siloed Citizen Access
	Disparate, multiple log ons
	Data siloed by program, not outcome focused
	Business Rules in COBOL, hard to maintain
RAPIDS OSCAR Web FACTS PowerBuilder FACTS	Disparate application technologies, siloed by program and hard to maintain, increasing maintenance and enhancement cost
	Mainframe – Antiquated technology, inflexible, rigid, hard to scale, on premise/State hosted
	Repeated functionality - hard to maintain and inefficient
	Inconsistent Governance Standards Across Enterprise
	Resource intensive manual processes for County office workers and other State employees



	DHHR Enterprise Customer Portal
	Single sign on
	Master data management, commonly identified citizens - MDM for all programs (Medical Assistance, SNAP, TANF, CSE, Child Care, and Child Welfare)
Drools	Rules in Open-source business rules engine, conforming to CMS 7 Standards and Conditions
	Modern, homogeneous application technology, easy enhancements, SOA, modular, maintainable, reliable
amazon web services	Scalable, flexible, agile, cloud hosted with Amazon Web Services, fully web-based
	Shared Services provide a seamless integration layer to promote efficiency, consistency and improved security
	Enterprise Value Delivery for System Integration (EVD for SI) methodology provides consistent governance standards
	Industry-leading process mapping tool (IndustryPrint) reduces manual work and accelerates modeling through automation

4.2
Goal: Modernization
4.2.4

WEST VIRGINIA IES PROJECT



Goal: Common Governance Structure

Section 4.3

Attachment A, 4.3, Goal: Common Governance Structure

The Deloitte Team brings a proven track-record for standardizing enterprise governance strategies, management approaches, operational support and integrated change control processes to improve the consistency and delivery of human service programs across the enterprise. These capabilities are essential for West Virginia to effectively manage its various human services programs as a single integrated portfolio and to attain a new level of maturity in program governance across DHHR. These capabilities are supported by robust, reliable and integrated tools that provide the data and insights needed to deliver the WV Human Services Platform (HSP).

Section Highlights

The Deloitte Team uses the EVD for SI Methodology to deliver a common enterprise governance structure:

- EVD for SI is a national method, established using project methodologies that are consistent with PMI, CMMI, and industry best practices.
- EVD for SI is supported by an integrated toolset to drive consistency and compatibility.
- EVD for SI uses industry standard metrics to allow for predictable, data driven decision making, through transparency and consistent communication.

A vendor with the demonstrated capability of establishing consistency and delivering integration across the DHHR enterprise is needed to support West Virginia's various human services programs. Deloitte has delivered successful standardized enterprise governance, management and change control processes for similar Health and Human services agencies, such as the Pennsylvania Department of Human Services (Integrated Eligibility, Child Support, Child Care, and Child Welfare). The Deloitte Team's ability to support standardization of governance strategies, management approaches and integrated change control processes is derived from our use of the Deloitte Enterprise Value Delivery for Systems Integration (EVD for SI) methodology. EVD for SI integrates best practices in project management, systems development, and maintenance and operations methodologies. It incorporates leading project management practices from the Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK), the Software Engineering Institute's Capability Maturity Model Integration (CMMI) model, IT Infrastructure Library (ITIL) and Hybrid Agile principles. EVD for SI defines a consistent approach to governance, integrated portfolio management and adaptive change control. It is characterized by the following core principles:

Our Core Management Principles	Benefits to West Virginia
Avoid Re-inventing The Wheel	West Virginia and the Deloitte Team leverage Deloitte's experience, assets, and pre-configured tools to quickly stand up a Project Management Office (PMO), processes, and tools, leading to efficient use of time and resources from the start.
Clear Communication Channels	Quickly establish a stakeholder map and related communication processes that enable and facilitate rapid and timely information sharing, collaboration, and efficient decision making, founded on the overarching principle of "no surprises."

Our Core Management Principles	Benefits to West Virginia
Transparency	Provide West Virginia with a clear and timely picture of project status and progress, who is responsible for each activity, who to contact to resolve questions and issues, and what decisions have been made.
Joint Management	Establish and promote a strong working partnership between the State and the Deloitte Team, fostering team work and leveraging each team's strengths.
Measuring Progress	Establish meaningful metrics based on past experiences tailored for West Virginia's unique interests and timing to quantify project progress and enable measurement.
Standard Methods	Create predictability and reliability of project activities and plans. Use proven PM methods and tools that support consistent, effective planning, and control for project phases, contributing to the success of the project.

Figure 4.3-1. Core Management Principles of our Project Management Approach.

Underlying our West Virginia project governance structure and project management approach is a thorough understanding of your RFP requirements, our experience working with you, and our understanding of complex health and human service systems. In the following section we detail the EVD for SI method, how it would be applied in West Virginia and how it benefits an integrated, cross-functional human services enterprise.

Objective: Project Management

An integrated project management team consisting of State and vendor staff leveraging established processes with common goals is paramount. To that end, Project Management is key to the successful execution and implementation of a complex multi-release system implementation such as the WV IES Project. The Deloitte Team, with our vast experience in governing Health and Human Services implementations, brings an established project management methodology, coupled with a highly qualified and experienced team to manage, track, and control activities and outcomes that have contributed to over 100 successful project implementations across our Health and Human Services portfolio, many with characteristics and complexity similar to the WV IES Project.

Our "one-team" approach of collaboration between our staff and State staff has achieved high levels of success on large HHS enterprise system implementations in several states. Our Project Management methodology within EVD for SI is established using project methodologies that are consistent with PMBOK, CMMI, and industry best practices.

Mature, repeatable processes and disciplines that span the entire systems development life cycle enabling a Capability Maturity Model Integration (CMMI) L3 maturity rating.

Deloitte's EVD for SI Project Management discipline leverages leading practices and aligns with both the Project Management Institute's (PMI's) Project Management Body of Knowledge (PMBOK) and the Software Engineering Institute's Capability Maturity Model Integration (CMMI) model to define its foundational project management framework.

Deloitte has interpreted, enhanced, and updated these project management capabilities with our extensive delivery experience and proven practices to build a methodology that is consistent with industry standards, and relevant and practical to our project teams.

The project management approach that we propose is built on a thorough understanding of the agency's project management objectives as elaborated in the RFP, our experience implementing similar complex Health and Human Services systems, and our knowledge of the EVD for SI methodology. In the following section, we detail how the EVD for SI methodology is critical to the success of an Integrated Project Management Team, promotes stakeholder collaboration, and aligns with the project health criteria as defined by WV DHHR.

Figure 4.3-2. Project Management is a core component of Deloitte's EVD for SI methodology and is based on PMBOK and CMMI.

Our project management disciplines are fully integrated into our overall Hybrid Agile delivery approach—an alignment that results in the tight coupling of project management and project delivery.

EVD for SI Methodology

Deloitte's EVD for SI methodology is based on hybrid agile principles. Characteristics of our EVD for SI methodology include:

- Fixed scope with estimated time and resources
- High level requirements gathered at the beginning of the project with prioritization of modifications through rigorous change control
- Cross-functional teams
- Sprints organized by features or critical processes
- Constant feedback and iterative testing approach for early identification and resolution of defects

Our EVD for SI methodology blends agile concepts with the predictability of defined scope delivered iteratively to drive speed, flexibility and transparency

The following figure highlights key agile concepts in the EVD for SI methodology. These include daily stand-ups, sprint burn downs, the ongoing incorporation of client feedback, sprint reviews and retrospectives, team capacity and velocity, and requirements prioritization.

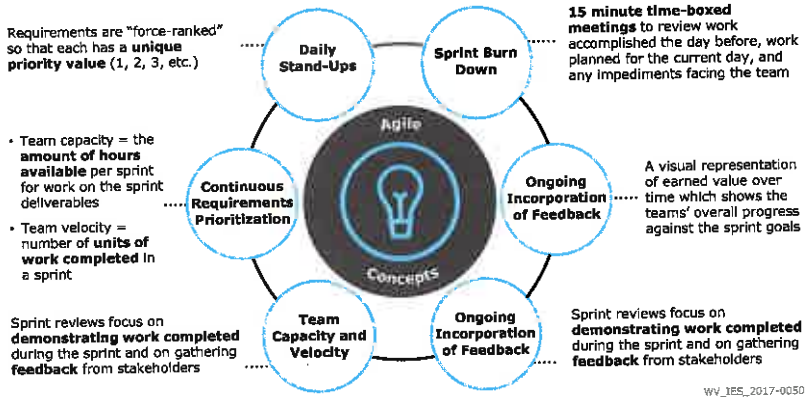


Figure 4.3-3. Key Agile Concepts of Deloitte's EVD for SI Methodology.

Figure 4.3-4 depicts Deloitte's EVD for SI Hybrid Agile methodology applied to the WV IES project. The methodology provides a road map for our joint team to produce a stable, sustainable system while reducing project risks that affect budget, schedule, and performance. Our Hybrid Agile methodology is focused on collaborative cross functional teams from both the State and the Deloitte Team that deliver value as early as possible in the development life cycle. The methodology includes sprints encompassing development and testing activities for a release. High level requirements and design are established at the start of the release process, and then prioritization and modifications are updated throughout the sprints for the release. This allows for additional flexibility and adaptability throughout the development effort, which results in better outcomes for the composition of each release. Phases of the methodology have been mapped to the objectives in Section 4.3. Throughout Section 4.3 we will explain how our Hybrid Agile Methodology supports your objectives.

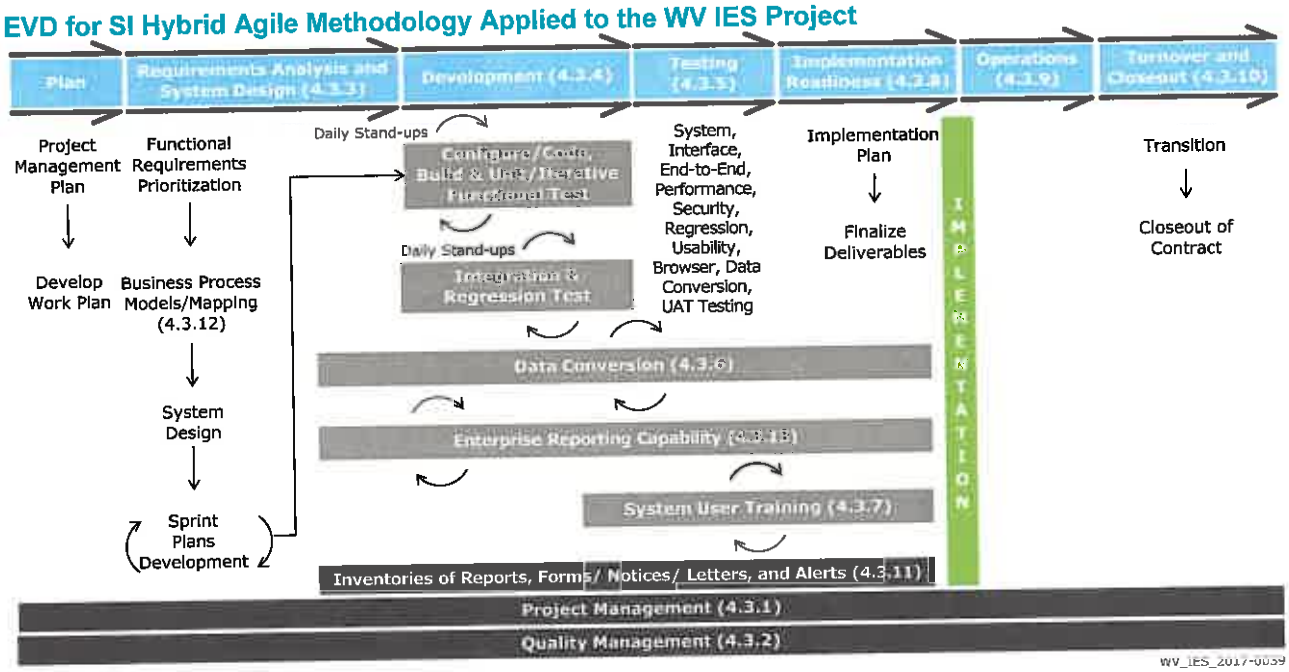


Figure 4.3-4. Deloitte's EVD for SI Hybrid Agile Methodology Applied to WV IES Project.

EVD for SI Methodology Benefits to the WV IES Project

The Hybrid Agile delivery approach employed by the EVD for SI methodology offers the following benefits.

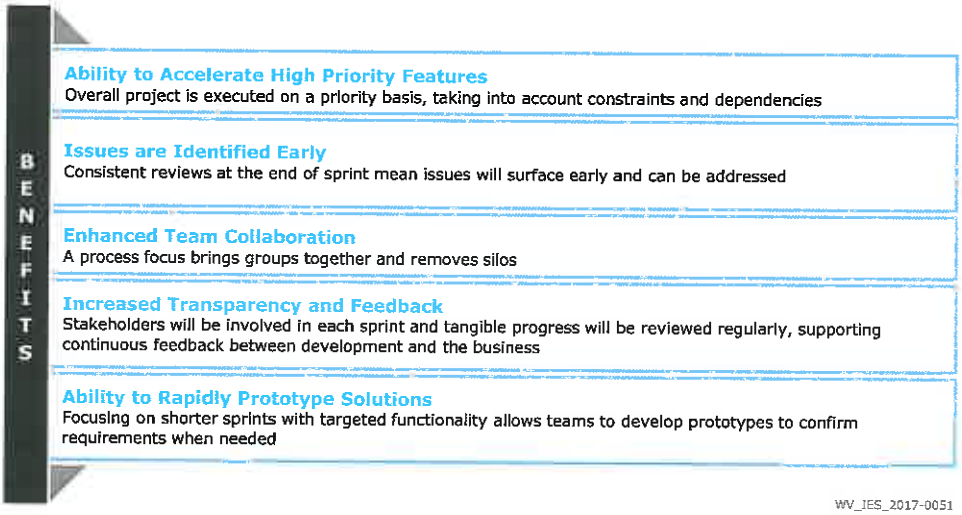


Figure 4.3-5. WV DHHR Benefits from Deloitte's EVD for SI Methodology Based on Hybrid Agile Principles.

Deloitte's EVD for SI is supported by a suite of tools and based on mature, well-tested processes and provides the foundation for delivering consistent, high-quality results. Our project management toolset combines third-party, "best of breed" tools with our intellectual property and leading practices in managing and delivering projects. These tools accelerate integrated project management activities in a structured environment with effective planning, delivery, and solution support capabilities. The primary tool for Project Management is a Web-based solution used for planning and monitoring including, risks, issues, work plans, scheduling, resource allocation, time tracking and budgeting. At the onset of the project, Deloitte provides training for stakeholders to set up the project management methodology and to familiarize the team with the key project management tools. The below figure portrays where the Project Management activities fit within our overall EVD for SI Hybrid Agile methodology for the WV IES project and outlines our response to your specific RFP requirements.

Figure 4.3-6. Robust Project Management activities support our Hybrid Agile approach.

Our Understanding

Deloitte understands that a strong project management methodology is vital to the successful delivery of project milestones and overall success. Our project management approach supports and promotes application of knowledge, skills, toolsets and techniques to conduct project activities to meet the project requirements.

Integrated Project Management

We understand that the overall project management plan is developed and executed as a joint effort between West Virginia DHHR, the Enterprise Medicaid Project Management team, the current eligibility and enrollment vendor and Deloitte. Additionally, the project management approach should enable consistency across the WV IES project deliverables and the services required by WV. Our robust Integrated Project Management methodology establishes comprehensive and practical process and procedures while providing the following benefits to the WV IES project:

Project Management Methodology Features	Key Benefits to West Virginia DHHR
Flexibility	Presents a scalable, flexible framework to address project-specific needs while still supporting an integrated approach as required by DHHR
Usability	Offers practical Project Management tools to effectively plan and execute the project, manage scope, and deliver high-quality solutions with stakeholder collaboration
Proven Processes	Uses proven project control processes to effectively manage project activities. Deloitte has implemented the EVD for SI methodology across more than 30 states to successfully deliver Health and Human Services projects
Integrated Approach	Enables and supports better integration between stakeholder groups identified by DHHR
Collaboration	Promotes and facilitates a strong working partnership between the DHHR, contracted IES Project Management Team, current eligibility and enrollment vendor and Deloitte

Figure 4.3-7. Benefits of Integrated Project Management Methodology.

Stakeholder Collaboration

Collaboration between West Virginia DHHR, IES PM Team, the current eligibility and enrollment vendor and Deloitte is key to the success of the WV IES project. These parties will work collaboratively to manage the project and agree upon in-scope deliverables and services. Enablers to stakeholder collaboration include the use of project management tools such as PMC, forming a project management team, status meetings, joint requirements and design sessions, documentation using SharePoint, and forming a change control board. The project management team should coordinate across the project threads, monitor the progress of each track, and seek additional opportunities for integration and sharing between stakeholders.

Project Health Metrics

Deloitte understands that, as part of an overall project management methodology, common project health indicators are required to quickly convey the disposition of project health metrics. The health indicators for the project will be aligned with DHHR's categorization of metrics into Red, Yellow, and Green. Additional details regarding our project health reporting is contained in the following section.

Figure 4.3-8. Project management stakeholder collaboration.

Our Approach

Deloitte's approach to project management is grounded in our EVD for SI methodology and provides an integrated and proven method to management across each phase of the WV IES project. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows.

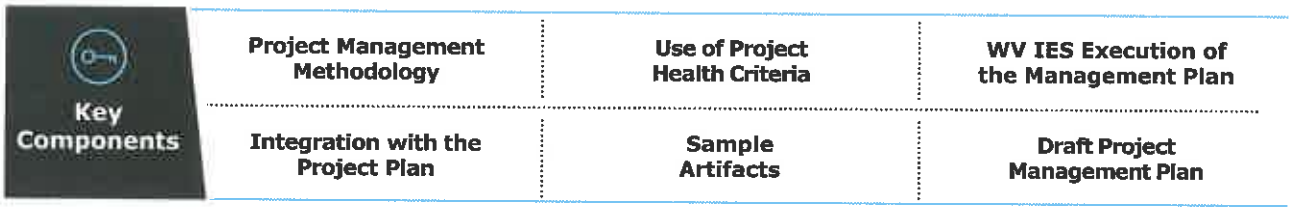


Figure 4.3-9. Key Components to the Deloitte Team's Project Management Approach.

Project Management Methodology

Deloitte's EVD for SI methodology provides a complete set of processes, templates, and accelerators to meet the WV IES project needs. It embeds best practices for Health and Human Services projects, aligns with industry standards CMMI and PMBOK, and has been refined based on our experience managing complex cross-functional projects with a focus on higher quality, lower risk, and predictability in solution delivery. We infuse rigor and discipline consistently throughout project task groups in the form of structured controls to manage risk, monitor quality, measure performance, and maintain the project schedule. Management controls also provide visibility into our processes, which allows us to apply continuous process improvements. The cornerstone of the EVD for SI project management methodology is a series of detailed and integrated phases—Initiate, Plan, Execute, Control, and Close—as represented in the following figure.

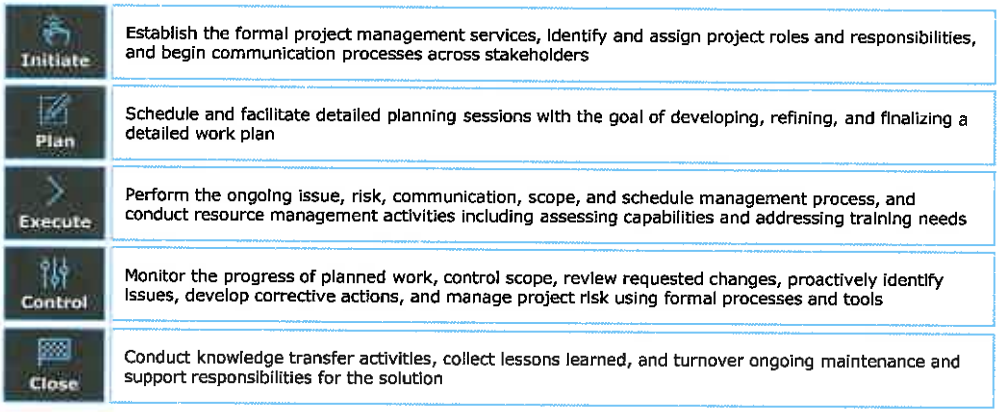


Figure 4.3-10. The phases of Deloitte's Project Management Approach.

The key benefits of the project management method approach employed by EVD for SI are listed below.

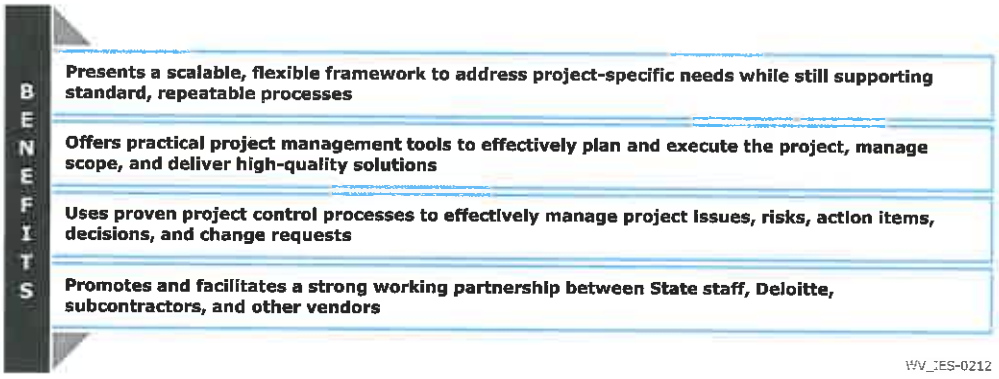


Figure 4.3-11. Deloitte's EVD for SI brings benefits to the WV IES project.

Deloitte understands the importance of building and maintaining a close relationship with the WV IES project management team. Through a joint effort of regularly reviewing practices, procedures, resources, schedules, and deliverables, the project teams encourage coordination and consistent decision making. Key members of the Deloitte Team, including the Quality Assurance Manager, meet regularly with the IES project management team and facilitate clear and regular project communication. The Deloitte project team also participates in regular meetings with the IES project management team to review and gain agreement on WV IES project status and direction.

Use of Project Health Criteria

Measuring project health is a critical process throughout the life cycle of the WV IES project. To be able to define project health consistently and allow for reliable decision making, key project health metrics are required to be defined, tracked and reported. Through a joint effort with the State, using predefined red, yellow and green metric definitions, the EVD for SI methodology provides the framework for tracking project health through project closeout. The graphic below is an example Project Health Report for WV IES.

WV IES Project Health Criteria

Key Milestone/ Deliverable	Status	Red or Yellow Project Information	
		Reason for Red / Yellow Status	Path to Green
Financial Management	Y	Scheduling difficulties preventing Requirements sessions from occurring in a timely manner	Adjust schedule and requirements content focusing on high value key requirements
Training Management	Y	Training environment configuration behind schedule	Assign additional resources to expedite environment configuration
Services Management	G		
Client Management	G		

G *On Track* Y *Within Tolerances, But Issues Identified* R *Issues Sufficient to Impact Critical Path Milestones* B *Complete*

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Figure 4.3-12. WV IES Project Health Report.

WV IES Project Execution of the Management Plan

The EVD for SI project management method contains detailed controls, procedures and communication mechanisms to manage the tasks and processes throughout the WV IES project. The Deloitte EVD for SI methodology has CMMI compliant procedures, standards, and controls built in which serve as the baseline for scope management. Combined with input from the State, procedures that meet the individual needs of the project are defined. The core management controls, tasks procedures and communication mechanisms of our project management approach are detailed in the following table:

Our Core Management Controls, Tasks, Procedures and Communication Mechanisms	Approach and Benefits to West Virginia
Schedule Management	• We work collaboratively with DHHR to outline and define a comprehensive project plan to effectively manage overall project requirements, objectives, and detailed schedule to track on-time delivery of project milestones.
Risk Management	• Our prior experience has proven that the most effective risk management style is to be proactive, not reactive, in identifying, resolving, and retiring risk. • We strive for open communication with DHHR in order for the project team to continuously be aware of potential risk areas.
Issue Management	• Our issue resolution process is collaborative and draws upon our extensive experience delivering numerous large-scale system implementation projects. • Our issue escalation approach is used to identify, communicate, escalate, and document resolutions for obstacles to the completion of deliverables, milestones, activities, and tasks for initiatives within the project.

Our Core Management Controls, Tasks, Procedures and Communication Mechanisms	Approach and Benefits to West Virginia
Scope Management	• Our approach and inputs to project plan provides DHHR with complete transparency and structure of how we will deliver the scope of requirements defined by WV in the RFP.
Quality Management	• The purpose of the quality management is to outline a process that enables Deloitte to develop and implement stable, repeatable processes within the WV IES Project and to verify compliance with processes to achieve continuous improvement as needed. • This process is designed to create a proactive means of quality when developing the project by focusing on the processes that govern its life cycle.
Communications Management	• We develop a communications plan in close collaboration with DHHR. The communications plan and strategy is regularly reviewed with DHHR and other stakeholders to inform them of project status to avoid surprises and confusion. • We accomplish this through timely and accurate project status reports, scheduled meetings, and frequent informal contact. With the numerous and diverse stakeholders associated with this project, effective communications throughout the project life cycle is a vital element for project success.

Figure 4.3-13. Core management principles of our Project Management approach.

Integration with Project Plan

The Project Plan is developed in accordance with Deloitte's EVD for SI methodology which is used by translating the State's RFP requirements into a detailed work breakdown structure (WBS). We use the WBS to develop the staff load and effort estimates that ultimately serve as the foundation for the detailed project plan, staffing and resource allocation plan to successfully implement the WV HSP. Our methodology and approach interacts effectively with the overarching Project Plan, which was developed as per industry project management methods. A detailed WBS for the WV IES project has been provided as an appendix artifact (Appendix C – Draft Project Schedule) along with this RFP response. The WBS identifies all project tasks and deliverables along with their tentative completion timelines.

Once a project plan is created, it will be reviewed with the State and baselined once approved. The plan will be used to track and manage tasks, deliverables, milestones, dependencies, and resources of the project to help with appropriate tracking and status reporting. Deloitte will work collaboratively with the State and the IES Project Team to create consistent direction for how, when, and why the project plan should be updated. Deloitte will also update the project plan based on progress and provide relevant metrics to project leadership. The project plan will be maintained in a repository where it is easily accessible to key State staff and also available upon request. The following tools will be used as part of the Project Management discipline:

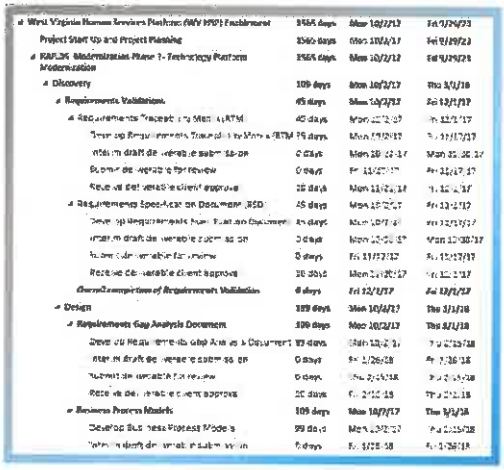

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Figure 4.3-14. Detailed WBS for the WV IES Project submitted as appendix artifact Appendix C-Draft Project Schedule along with this RFP response.

Project Management Tools

Tool	Function	Benefit to WV DHHR
JIRA	• Risk & Issue Tracking • Change Management	JIRA is an industry standard platform that provides enterprise wide visibility to risks and issues. Using a central repository creates centralized control and clear visibility.
Microsoft Project	• Work Plan tracking	Microsoft Project supports tracking of actual development effort on project work plans. WV IES stakeholders will then be in a position to track goals and deliverables effectively.
JAMA	• Requirements Management	JAMA provides a single source of truth for requirements tracking across each phase of the SDLC.

Figure 4.3-15. Project Management Tools.

Sample Artifacts

Deloitte's EVD for SI methodology provides the WV IES project with tools, templates, and accelerators. Our methodology is the starting point for a project and serves as an accelerator throughout the project, reducing delivery time and project risk. Assets include plans, templates, standards and guidelines, tool guides, project artifacts, as well as the specific deliverables as outlined in the WV IES RFP. We have standardized and evolved the assets that are the result of our long heritage in supporting similar engagements and are informed by the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI) and Project Management Body of Knowledge (PMBOK). The graphic below highlights the major artifacts and accelerators of EVD for SI. Sample templates have been provided in the appendix artifact (Appendix C – Draft Deliverable Format) along with this RFP response.

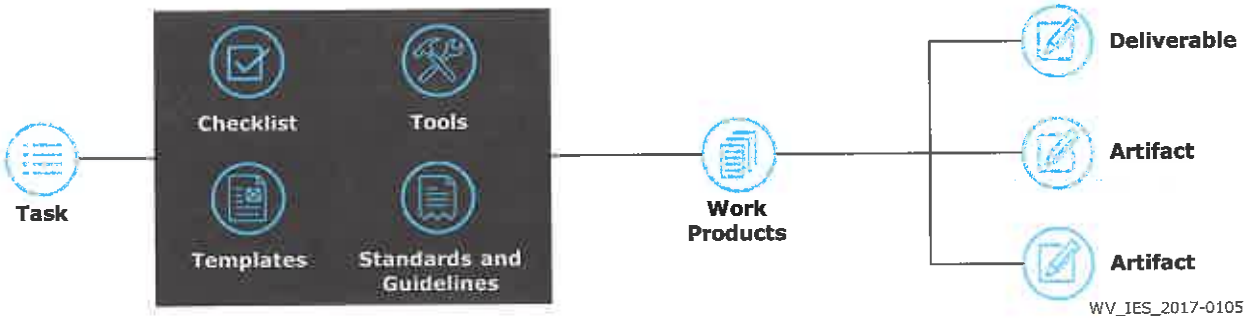

Figure 4.3-16. EVD for SI Major Artifacts and Accelerators.

Draft Project Management Plan

As requested within the RFP, an initial draft deliverable Project Management Plan example for the WV IES project can be found in Appendix C of this proposal. The components of the project management plan and sub plans are defined below:

Project Management Plan Components

#	Key Components	Key Factors for WV IES Project Success
1	**Project Schedule**	The Project Schedule is a plan showing the responsibilities, dependencies, schedule, and planned effort for a set of tasks associated with the project. The objective of the project schedule is to develop the master plan for the project which includes major activities and key milestones.
2	**Deliverable Dictionary**	The Deliverables Dictionary defines the complete list of deliverables signed off by the client for a project, and includes the plans for deliverable review, deliverable sign-off, and formal deliverable acceptance for each deliverable.

#	Key Components	Key Factors for WV IES Project Success
3	**Stakeholder Management Plan**	The Stakeholder Management Plan describes the process required to identify the people and organizations that can be impacted by the project. The plan contains the following components: Initial stakeholder assessment, approach to engaging each group, and a management plan for each group's involvement in the project.
4	**Staffing Management Plan**	The Staffing Management Plan is used to plan and manage labor resources for the project. Specific information related to each project team resource rolling on and off the project is documented and maintained in the Labor Resources tab of the staffing management plan.
5	**Facility Management Plan**	The Facility Management Plan defines the physical location plan for project resources. It defines shared space, on-site and traveling support requirements.
6	**Documentation Management Plan**	The Documentation Management Plan outlines the approach for maintaining a central repository for project materials, designs, and deliverables. It outlines the approach for organizing documentation by phase and team. The plan also outlines security measures and version control requirements for documentation.
7	**Training Management Plan**	The Training Management Plan is a management tool that documents the information needed to plan, track, and report on training activities. It includes the following information: Review process timeline, training development review and approval responsibilities, general and specific training information
8	**Testing Management Plan**	The Testing Management Plan is used to develop the schedule of testing. This includes creation of test sets, sequencing of test cases within a set, assignment of resources, and planned execution dates based on test case duration.
9	**Project Management Sub-Plans**	
	A. Scope Management Plan	The objective of the scope management plan is to identify, manage, and facilitate change control decisions on change requests to client contract terms and/or project deliverables that have been signed off and placed under change control. A detailed WBS for the WV IES project has been provided as an appendix artifact (Appendix C – Draft Project Schedule) along with this RFP response. The WBS identifies all project tasks and deliverables along with their tentative completion timelines.
	B. Schedule Management Plan	The objective of this plan is to track progress and manage adjustments to the schedule on a weekly basis through the duration of the project. The steps in this process follow a repeating cycle.
	C. Cost Management Plan	The objective of this plan is to update actual project costs, compare them against the project's planned budget, and define action items to manage significant variances.
	D. Quality Management Plan	The Quality Management Plan describes the project's quality program and objectives, as well as specific plans for how the program is executed on the project.
	E. Human Resource Management Plan	The Human Resource Management Plan describes the project's plan for addressing staffing and resourcing needs. The plan defines the core roles and responsibilities for each member of the team and addresses the reporting structure across the project.
	F. Communications Management Plan	The Communications Management Plan lists key communications events that occur over the life cycle of the project, as well as the target audience, timing, delivery mechanism, key messages, and responsible parties.
	G. Risk Management Plan	The objective of risk management plan is to manage the risks identified on the project, and to avoid, mitigate, or minimize their negative impacts to the project if realized. Effective risk management includes identifying, analyzing, monitoring and controlling risks through each project phase.
	H. Issue Management Plan	The objective of this plan is to manage the issues identified in the project, which includes identifying, prioritizing, assigning, monitoring, and closing issues through project phases.
	I. Change Management Plan	The objective of the change management plan is to facilitate the use of standardized methods and procedures for the efficient and prompt handling of changes.
	J. Security, Privacy and Confidentiality Management Plan	The Security, Privacy and Confidentiality Management Plan is a document that details the access requirements and characteristics for client confidential information and the plans to safeguard that information.
	K. Configuration Management Plan	The Configuration Management Plan defines the project's control environments and mechanisms for configurable items, as well as the processes and procedures to manage and maintain project deliverable configuration items throughout the life of the project.

#	Key Components	Key Factors for WV IES Project Success
	L. Data Conversion Management Plan	The Data Conversion Management Plan outlines the necessary preparation required for a successful migration of data. It defines the methodology that should be used to plan, prepare, and execute data migrations for the duration of the project.
	M. Disaster Recovery Management Plan	The Disaster Recovery Management Plan outlines the set of steps and procedures that are put in place in the event of a disaster. The plan outlines procedures for physical, technological disasters as well as if the plan was intentional vs. unintentional.
	N. Integration Management Plan	The Integration Management Plan illustrates the general design approaches that are taken for the various integration components of the application including for Web services, messaging, service orchestration, and batch.
	O. Data Quality and Governance Management Plan	The Data Quality and Governance Plan describes the activities, resources, and schedule needed to develop and deliver an ongoing quality program.
	P. System Back-Up Management Plan	The plan outlines the procedures for infrastructure monitoring, backup, patches and security updates. The plan dictates the timing, frequency of system backups as well as the procedure for a roll back should one be required.
10	**Turnover and Closeout Management Plan**	The Turnover and Closeout Management plan summarizes project closure activities and provides the final document of record for a project.
11-12	**Weekly/Monthly Status Report Template**	The objective of these reports are to generate the project metrics as defined in the project in the Metrics Plan; and deliver project status information and guidance to the project team, per the Project Status and Stakeholder Communications Plan section of the Project Management Plan.

Figure 4.3-17. The WV IES Project Management Plans and Sub-Plans.

Tailored EVD for SI for Technology Platform Modernization

Deloitte's EVD for SI method is flexible and extensible and supports technology projects of varying nature and complexity. For the WV IES project, it will be tailored to meet the project requirements of the Technology Platform Modernization Phase. During the technology platform modernization phase of the WV IES project, the WV HSP solution platform will be modernized from the current legacy mainframe platform to an open systems technology based platform. To support the one-to-one modernization of the legacy RAPIDS and OSCAR systems, the EVD for SI methodology will provide a tailored approach to align with the project requirements. The following table provides a few examples for the tailored approach for the Technology Platform Modernization Phase:

#	Project Phase	EVD for SI Tailored Approach
1	**Requirements and System Design**	Technology Platform Modernization requires a detailed current state analysis of the legacy system. EVD for SI will supports a Features Document to capture the outcomes of the current state analysis as a variation of the Requirements Specification Document (RSD).
2	**Development**	For application modernization efforts pertaining to RAPIDS and OSCAR, we will apply our automated modernization tools to convert the legacy COBOL code and screens to Java. The current coding standards enforced within the legacy system are carried over into the similar code structure of the modernized system.
3	**Testing**	Our methodology supports leveraging existing test cases for the legacy mainframe platform for the modernized open systems platform due to the one-to-one nature of platform modernization. Reuse of existing test cases results in improved project efficiencies and reduces the training requirements.
4	**Data Conversion**	Technology Platform Modernization does not require a traditional data conversion as the platform is upgraded with a one-to-one automated modernization approach. Our EVD for SI approach leverages existing toolsets and methodologies to migrate the data from the legacy mainframe platform to the modernized open systems platform with a one-to-one migration reducing the need for additional data analysis and cleansing required during traditional data conversions.

Figure 4.3-18. Deloitte's Proven Methodology will be tailored to deliver the WV IES Project.

4.3.2 Objective: Quality Management

Deloitte believes that quality is not a step in the process, rather it is ingrained throughout the project life cycle. We place a high value on the quality of our delivery and our ongoing monitoring and support. Deloitte's EVD for SI - Hybrid Agile based Quality Assurance Process is built upon industry-proven models such as the Project Management Institute's Project Management Body of Knowledge (PMBOK), CMMI, Six Sigma and ITILv3.0 that are leveraged actively throughout the project life cycle. Our integrated quality management approach across project management, contract management and end-to-end software development provides a strong foundation to the WV IES project.

Section Highlights

- A robust, reusable and effective quality management process derived from PMBOK and enabled by custom tools and accelerators.
- A proven deliverable management process tailored to meet the DHHR's requirements.
- Data driven Quality metrics supplementing the on-going continuous improvements resulting in effective Quality Assurance & Quality Control processes

Deloitte is a market leader in the Health and Human Services (HHS) space and has successfully implemented HHS solutions across more than 40 states. Through our experience, we have learned that successful project implementation can be directly attributed to quality management practices on the project.

We have delivered similar projects in many states and have achieved a success rate of 98.2% for first pass approvals through the implementation of Integrated Eligibility, Child Care, Child Welfare, and Child Support applications. Our Quality Management (QM) approach promotes the delivery of high-quality solutions by enabling checks and balances against our Project Management and Delivery Standards. Our attention to quality, defined processes, and proven track record drive timely and quality deliverable submissions and spans the entire life cycle of the project. The below graphic portrays where this section's activities fit within our overall EVD for SI methodology for the WV IES project and outlines our response to your specific RFP requirements.

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Figure 4.3-19. Quality Management spans across the entire project from inception to closure.

Our Understanding

Deloitte's quality management approach begins with one mindset — to consistently achieve quality across each project activity and resulting deliverables. Our repeatable and modular Quality Management processes (e.g. deliverable creation, deliverable pre-submission review, project management metrics, and solution delivery metrics) have been demonstrated across numerous HHS projects for states such as Virginia, Pennsylvania, and New Hampshire. These reusable processes are leveraged during delivery of the WV IES project providing predictability and assurance to DHHR stakeholders. We understand that quality management is an ongoing process and must be built into each stage of the project. The purpose of the quality management plan is to outline processes that enables Deloitte to develop and implement stable, repeatable processes within an engagement.

- Deloitte practitioners go through a mandatory training of methods and templates from our EVD for SI methodology which includes Quality Management practices.
- This training, coupled with the experience of applying it on our 40+ HHS implementations, provides a strong foundation to our practitioners to have focus on quality & accuracy on WV HSP implementation

Alignment with Industry Leading Methods

DHHR expects Quality Management processes be aligned with PMBOK. Be assured, Deloitte's EVD for SI - Hybrid Agile quality management processes are closely aligned with PMBOK standards and are used to establish, promote, and monitor both quality and solution delivery throughout the project. Additionally, Deloitte leverages its CMMI level-3 accredited Delivery Center for solution delivery and quality assurance of its projects which shares best practices, pre-developed assets and trained resources across projects. This results in using and enforcing standard, disciplined, and consistent processes across project management, contract management and solution delivery disciplines, and enables effective Quality Control (QC) in monitoring quality gates and standards. The following table provides the mapping between the Quality Management knowledge area as described in PMBOK and relevant processes and tasks in our EVD for SI methodology.

Project Management Body of Knowledge		Enterprise Value Delivery (EVD for SI)	
Knowledge Area	**Knowledge area description**	**Process**	**Work Product(s)/Tasks**
Quality Management	Processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project satisfies the needs for which it was undertaken	Plan Quality Management	• Develop Quality Management Plan
		Perform Quality Assurance	• Perform Quality Verification • Perform Configuration Management Assessment • Perform Engagement Reviews (PPD Quality Reviews) • Perform Senior Management Review
		Control Quality	• Perform Engagement Reviews • Manage Project Status • Perform Metrics Analysis Procedure • Performing High Maturity Activities • Quantitative Project Management or (QPM) • Performing Deliverable Reviews • Obtaining Deliverable Sign-off • Execute Test Plan

Figure 4.3-20. EVD Mapped to PMBOK's Quality Management Knowledge Area.

Effective Quality Planning

An effective quality management process requires an efficient Quality Planning approach followed by strong Quality Assurance and Quality Control. We believe in transparency and clarity throughout our quality planning effort and hence this exercise includes collaborating with DHHR for defining various project management life cycle plans and templates as well as software development life cycle work products. During early phases of the project, we meet with appropriate DHHR stakeholders to define our approach for quality planning. This includes determination of the project quality requirements, identification of quality standards (e.g., design review standards, development, unit testing and code review standards), and establishing the required criteria to meet these standards. Our quality planning includes steps that take into consideration DHHR standards and policies and incorporates them into our software verification, validation, review, and audit processes.

Our quality planning processes includes creating verification steps throughout the project life cycle and including them in the project work plan to drive their execution and enforcement.

Demonstrating Quality through Submission of Deliverables

We understand that accuracy of WV IES project deliverables is critical to the success of the implementation. Therefore, we implement an efficient deliverable management process that adheres to policies and standards as documented in our Quality Management Plan. Deloitte agrees with the approach to formally submit each deliverable for DHHR's review and seek written approval of the content and format. This allows the stakeholders to have same level of understanding of scope and expected outcomes. The following table highlights the features and benefits of Deloitte's approach to create and submit high quality deliverables:

Features	Benefits
Best-in-class deliverable templates from our EVD for SI methodology	• Reduces costly rework and multiple review cycles • Accelerates project delivery and reduces risk
Production proven deliverables from similar prior implementations	• Incorporates lessons learned from past implementations to provide comprehensive and understandable content that reduces review time and promotes quality
Deliverable Walkthroughs prior to submission	• Informal review of draft deliverables prior to official submission increases awareness of deliverable format and contents for DHHR stakeholders involved in specific deliverable review • Early incorporation of DHHR's deliverable feedback increases deliverable accuracy, maximizing deliverable approval • Documented meeting minutes, action items and their follow ups builds transparency on action items and increases reliability of the deliverable review and approval process
A well planned deliverable submission schedule based on lessons learned	• Balances commitments of State staff for deliverable review cycles by providing early indicators of upcoming deliverables

Figure 4.3-21. Features of our deliverable review and approval process with DHHR and their key benefits.

Deliverable Format and Template Approval

We understand that getting to an agreed upon deliverable format will require close collaboration with DHHR during the project initiation phase. We leverage our deliverable templates from our EVD for SI methodology and work with DHHR in cases where the deliverable templates do not meet the objectives of the WV IES project.

Deliverable Review and Approval Process

Deloitte acknowledges the deliverable review process documented by DHHR. This allows DHHR to validate if the deliverable meets the agreed upon specifications and functional requirements. Below are the primary steps of the Deliverable Review Process with DHHR:

Steps	Actions performed by Deloitte	Expected Outcomes
1. Defining Acceptance Criteria	• Prior to deliverable creation, meet with DHHR to establish and document the acceptance criteria for each life cycle deliverable	• Leverage approved criteria during deliverable review process to reduce rework for Deloitte and DHHR
2. Conducting deliverable Walk-through	• Schedule deliverables walk-through • Identify number of walk-throughs based on size and complexity of deliverables • High level or detailed deliverables review	• Avoid potential surprises during formal reviews leading to condensed deliverables review time • Reduction in changes in deliverable post submission thereby improving quality of deliverables
3. Submission and Review Process	• Submit finalized deliverables • Identify review cycle expectations	• Improved ability to conduct exhaustive deliverables review • Reduced DHHR's work load with respect to deliverable reviews
4. Deliverable Approval	• Receive written approval, notice of conditional approval, notice of return, or request for additional time in 10 business days • Obtain reason for return if portion of deliverable does not meet expectations	• Fixed process and communication protocol for deliverable review process • Enhanced ability of DHHR to solicit deliverable feedback from their stakeholders & program executives
5. Deliverable Resubmission (if required)	• If required, gather feedback on the conditional approval & comments • Resubmit the corrected deliverable in 5 business days	• Complete and detailed documentation leveraged during WV HSP delivery and future maintenance and operations
6. Additional Review (if required)	• Expect response from DHHR in 5 business days	• Fixed duration to review the resubmitted deliverables increases accountability for accurate submission of deliverables
7. Resubmitted Deliverable Approval (if required)	• Receive written approval of the deliverables from DHHR	• Accurate and detailed artifacts of the WV HSP logged in the West Virginia's SharePoint repository creates a single reference point for document repository and version history
8. Deliverable Rejection and Issue Escalation (if required)	• Receive deliverable rejection and reason for return • Conduct deep dive into rejection reason for corrective action • Do lessons learned to prevent such rejections in future	• Identified and documented process of issue escalation i.e. Issue Management Plan, brings transparency to Deloitte as well as DHHR leadership • Compliance check from Deloitte team to prevent reoccurrence of rejections improves accuracy

Figure 4.3-22. Our deliverable review process aligns with DHHR expectation and adds repeatability to deliverable approval rate.

Our Approach

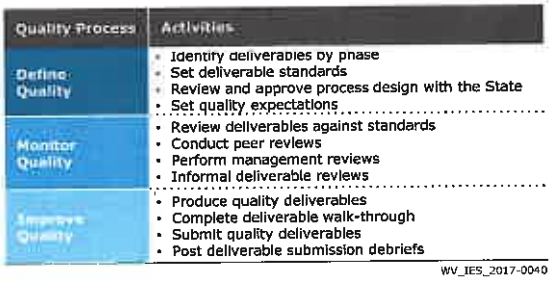

Figure 4.3-23. Quality Management Approach.

Implementing a project as large and complex as the WV IES creates the need for having a mature quality management approach. Deloitte uses a mature Quality Management process that is made up of three parts: 1) define quality, 2) monitor quality, and 3) improve quality. This is integrated into our overall project management approach. It seeks to objectively evaluate the project delivery process and the resulting deliverables, documentation, system code, and system features. Quality Management is addressed both internally, by being embedded throughout our method, as well as through our Global Quality Management program which provides periodic independent review of project management, design decisions, and deliverables by a senior level Firm resource throughout the project life cycle. Deloitte's approach to quality management provides accountability, traceability and a commitment to continued improvement across the phases of the project. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

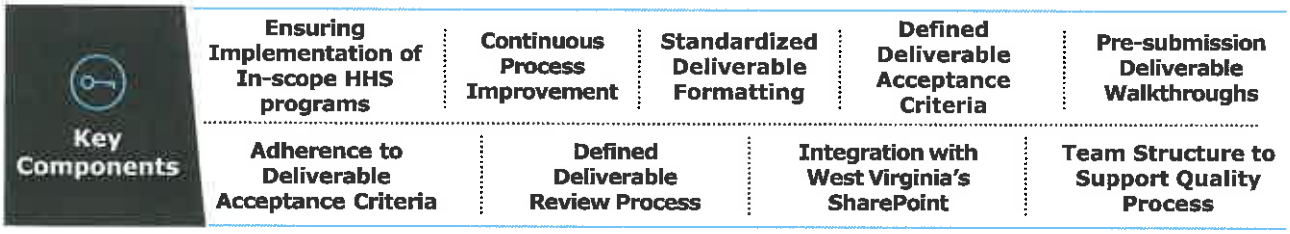

Figure 4.3-24. Key Components.

1. Ensuring implementation of in-scope HHS programs

Deloitte recognizes that implementation of complex Integrated Eligibility, Child Care, Child Welfare, and Child Support programs needs industry-leading tools and templates to capture the business and system requirements. We create and maintain a Requirements Traceability Matrix (RTM) and a Features Document which collectively provides the foundation for tracking in-scope requirements, design specification and test cases to confirm successful implementation of the solution. Through the RTM and JAMA, where the requirements are loaded after formal approval, there is bi-directional traceability of requirements through the design and testing artifacts. Once requirements are approved and loaded into the RTM, both the State and Deloitte use this tool to validate the solution is correctly implementing the Human Services Programs. Deloitte also facilitates Architecture Review Board (ARB) meetings and Data Model Reviews with DHHR to discuss architecture and design of the proposed solution.

2. Continuous Process Improvements

Deloitte's continuous process improvement approach is the cornerstone for creating and maintaining value for WV IES. In order to achieve continuous improvement on the quality of services and operational efficiency, Deloitte leverages two process frameworks (CMMI and ITIL) as well as lessons learned from similar Integrated Eligibility, Child Care, Child Welfare, and Child Support applications implemented and managed by our Delivery Center.

Project Spotlight

On our Commonwealth of Pennsylvania project, enhanced string testing within our development phase resulted in an increase defect detection rate of 15% prior to Integration Testing improving our Test Case 1st pass rate from 65% to 80%.

CMMI. Our EVD for SI methodology extends the Capability Maturity Model Integration (CMMI) framework for project delivery, quality processes, and continuous improvement in solution design and development. CMMI is a process improvement maturity model for development of products and services. This framework is incorporated in our operations to minimize risks, provide consistency, repeatability and predictability, and measurable means for improvement for software development project.

ITIL. The IT Infrastructure Library (ITIL) version 3 is a framework for governance of IT services, and focuses on continual measurement and improvement of the quality of IT services. Deloitte incorporates the ITIL service life cycle principles in our operations to improve our performance and productivity, and provide enhanced services. IT services provided by Deloitte will be guided by the ITIL framework on the WV IES project.

Quality Reviews. As the solution gets constructed, Deloitte conducts engagement reviews to validate the engagement performance for successful delivery, identifying areas for improvement, and providing actionable recommendations. Engagement Reviews are performed by experienced principals/directors. These reviews are primarily focused on helping engagements review solution and deliverables, approach, project staffing, estimation, planning and timeline.

3. Standardized Deliverable Formatting

Deloitte uses standard deliverable templates from our EVD for SI method. Those deliverable templates are reviewed during the project initiation and tailored as applicable for the WV IES project. The deliverable templates have a cover page, standard title, table of contents, header, footer and consistent layout along with document control information (including name of the document, work order, version, date, revision history details). Deloitte will review each deliverable format with DHHR and seek agreement prior to development of the deliverable.

4. Defined Deliverable Acceptance Criteria

The basis of our deliverable starts with clearly understanding deliverable requirements and documentation. Deloitte works with DHHR to establish a Deliverable Expectation Document (DED) which governs the contents of deliverables. It also includes Deloitte and DHHR agreed upon Deliverable Acceptance Criteria. Deloitte leverages templates from the EVD for SI methodology and tailors them to the specific needs of DHHR. Deloitte submits a DED to the DHHR for each deliverable that contains the following sections:

Section	Description
Introduction	• Captures a high-level overview and the scope of the deliverable
Deliverable Description	• A detailed description of the deliverable, the requirement for which the deliverable is prepared
Deliverable Acceptance Criteria	• Lists conditions that must be met before the deliverables are accepted (e.g., for development phase, the acceptance criteria includes completion of unit test checklists and code QA checklists for development objects) and identifies deliverable review and approval personnel
Deliverable Schedule	• Contains key deliverable dates for walkthroughs, reviews, and comment resolution
Resources	• Records the Deloitte team and the DHHR panel for deliverable walkthroughs and sign-offs

Figure 4.3-25. Deliverable Expectation Document (DED) structure to obtain DHHR approval on deliverable acceptance criteria.

5. Pre-Submission Deliverable Walkthroughs

The Deloitte Team and PMO hold meetings and walk-throughs with DHHR stakeholders to review draft deliverable format, taking and addressing comments received during those meetings. The deliverable walk-through schedule, frequency and duration is determined based on the complexity and size of the deliverable. Key stakeholders needed for the deliverable walk-throughs are also identified during the planning phase.

Deloitte conducts the walk-through(s) and presents the contents of the deliverable to the DHHR. Comments received from the DHHR during the walk-through(s) are incorporated into the deliverable prior to submission. The walk-throughs focus on how to navigate through the deliverable and a high-level overview of the contents of the deliverable. Our approach to deliverable walkthroughs helps the DHHR in expediting post submission review and recovery cycles.

6. Adherence to Deliverable Acceptance Criteria

Deloitte understands the importance of submitting deliverables which are complete and compliant with the established deliverable acceptance criteria. We confirm quality assurance of deliverables by leveraging multiple layers of reviews. The objective of each review is to verify the completeness and accuracy of the deliverable in addition to verifying that the deliverable meets the project standards. The following diagram illustrates the layers of review used in the deliverable review process.

In FY16, Deloitte successfully submitted 606 deliverables to Commonwealth of Pennsylvania Department of Human Services with a 98.2% first pass acceptance rate.

7. Defined Deliverable Review Process

The following figure illustrates the approach to the deliverable review and submission process (which aligns with the DHHR process outlined in Figure 4.3-1 above). The adherence to this process is tracked and managed through the weekly project status meetings and steering team meetings.

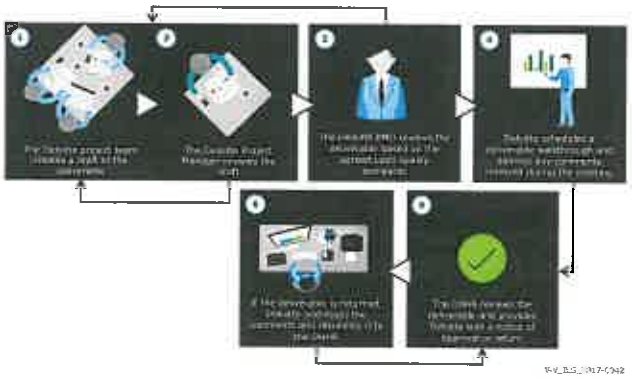

Figure 4.3-26. Illustrative process for deliverable QA.

8. Integration with West Virginia's SharePoint

Deloitte leverages its well-established PMO function to work with DHHR and establish a joint PMO process. We work with DHHR to understand the organization, the policies and the folder structure of the DHHR SharePoint site. Additionally, Deloitte works on training the project team to understand the administrative processes in submitting and uploading deliverable documents and WV HSP artifacts to the SharePoint site.

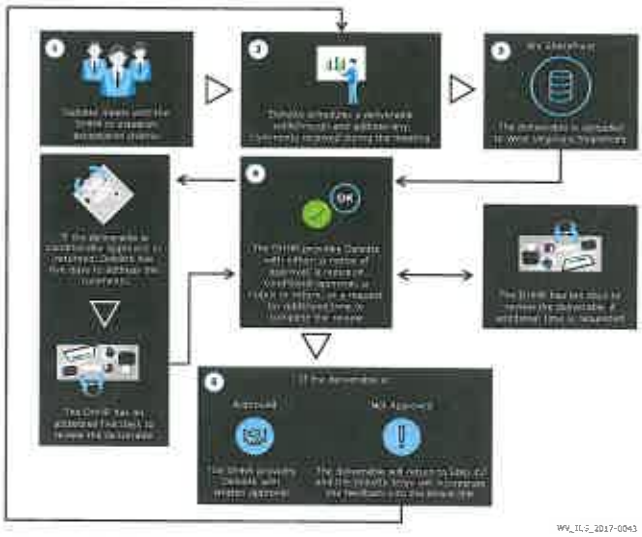

Figure 4.3-27. Illustrative process used by Deloitte for adherence to DHHR deliverable review & submission process.

9. Team Structure to Support Quality Process

As part of the project initiation phase, Deloitte establishes a team with strong and robust project management (PM) and quality management (QM) skills. DHHR benefits from our team's proven successful work history and demonstrated system maintenance, operational support and enhancements experience with projects of similar size, scope and technology and experience in working on complex Integrated Eligibility, Child Support, Child Welfare and Child Care solutions. The following table outlines the various roles and responsibilities of our Quality Assurance team:

Role	Responsibility
Project Manager	• Review and approve the Quality Management Plan • Review quality and engagement review findings • Assign project team members to take appropriate action items resulting from verifications, engagement reviews, specialist support visits (where applicable), and monitor and manage those action items to closure • Track engagement review and specialist review findings to closure
Quality Manager/Project Management Analyst (PMA)	• Develop and maintain the Quality Management Plan • Develop and maintain a quality verification schedule in the Quality Verification Plan • Develop and maintain the Quality Support Schedule • Track non-compliances identified in the quality verification to closure
Project Management Office (PMO)	• Coordinate with the DHHR PMO to establish a joint PMO function • Become a single point of contact for the deliverables management process between the DHHR and Deloitte • Act as a POC to effectively manage deliverables in West Virginia's SharePoint site
Project Team Members	• Prepare for and participate in quality reviews, engagement reviews and specialist support visits (where applicable) • Implement action items resulting from quality reviews, engagement reviews, and specialist support visits
Deloitte Quality Coach	• Develop and tailor the Quality Verification Checklist in preparation for quality verifications • Coordinate quality verification activities with the project participants • Perform process and work product verification reviews • Identify non-compliance issues and report results • Follow up on non-compliance issues for resolution and escalate when necessary
Engagement Reviewer	• Perform engagement reviews • Review the engagement review findings with project leadership • Follow up on action items from previous visits

Figure 4.3-28. Roles & responsibilities associated with maintaining Deloitte's Quality Management processes

Objective: Requirements Analysis and System Design

The success of the WV IES project begins with defining clear requirements and managing those requirements through implementation. It is critical that the same level of focus and diligence is applied across requirements analysis, definition, refinement and traceability. Deloitte's tailored Enterprise Value Delivery for System Integration (EVD for SI) methodology provides a proven process for managing and tracing requirements across each phase of the SDLC. Our modular and iterative design approach develops comprehensive and complete system design that provides reusability, efficiency, scalability of the solution.

- We dedicate time to refine requirements so they are clear, traceable, and testable and track requirements across each phase of the SDLC.
- We take a collaborative system design approach that combines modular design thinking and a proven method to develop efficient, reusable and scalable system design.
- Key Architectural reviews occur early in the process, building consensus and buy in

Deloitte brings a comprehensive approach to requirements management and system design. We understand how critical defining clear and comprehensive requirements is to the overall success of the WV IES project. Our EVD for SI methodology defines a repeatable approach to efficiently analyzing, clarifying and documenting requirements and design. Our methodology provides robust toolsets and templates to expedite requirement analysis and system design, reduce overall project risk and deliver quality in the solution. Clear requirement analysis directly feeds into our design approach which is underscored by collaboration with DHHR stakeholders. Consistent collaboration across required business areas throughout system design leads to comprehensive design and successful completion of the design milestones.

The following graphic portrays where this section's activities fit within our overall EVD for SI methodology for the WV IES project and outlines our response to your specific RFP requirements.

Figure 4.3-29. Deloitte's Approach to Requirement Analysis and System Design

Our Understanding

Requirements Analysis

Deloitte's EVD for SI methodology brings a comprehensive, production-proven approach to requirements management. We leverage our EVD for SI methodology to efficiently analyze, define, refine, document, approval and maintain traceability of WV IES requirements. This approach drives accurate implementation of the WV HSP within the defined schedule and in adherence with federal legislation. We understand that with the State's goals of accelerating the timeline to implementation, minimizing risks to delivery, and providing a solution that allows the State to drive improvement in service delivery while adhering to federal regulations is critical. We use our prior production proven implementations to serve as the basis for validation and analysis during requirement sessions. The following table summarizes key features of our requirement validation approach and its benefits to West Virginia.

Features	Benefits to West Virginia DHHR
Acceleration of Requirements Validation	We align the requirements clarification approach to your business objectives. We accelerate requirements validation by leveraging our prior solution implementations to visually demonstrate how your requirements are met. This accelerates a Fit-Gap Analysis and identifies areas that require configuration.
Visibility of requirements across the SDLC	One repository (JAMA) that provides a single source of truth for requirements tracking across each phase of the SDLC.
Bi-directional traceability between implemented features and original requirements	Traceability across the entire SDLC enabling an end-to-end view of requirements to design artifact to development object to test case. In the JAMA tool, bi-directional view of the following SDLC components: RFP Requirement, Clarified Requirement(s), Design Artifact(s), Development Object(s), and Test Case(s).

Figure 4.3-30. Deloitte's Approach to Requirement Analysis brings benefits to WV.

System Design

We use our proven modules and components as a foundation for system design to help WV DHHR achieve the design milestones identified in RFP. We understand that comprehensive and timely completion of design milestones are critical to advancement through subsequent phases of the Systems Development Life Cycle (SDLC). We understand that you need a system approach that aligns the architecture in compliance with MITA objectives and CMS Seven Conditions and Standards. Deloitte coordinates with DHHR stakeholders from various business areas to develop a holistic enterprise system design with those standards and objectives in mind. Our modular design approach identifies opportunities to reuse existing system components and save time and cost by avoiding duplication of effort. We leverage pre-existing components in our WV HSP solution to design a service oriented, n-tiered, high-performing, and scalable solution. EVD for SI provides a proven process for the development of high-quality system design deliverables and once they are approved maintaining up-to-date documentation. The following table summarizes key features and benefits of our design approach.

Features	Benefits
A comprehensive design approach that includes aspects of the solution such as data conversion design, application design, services design and interfaces design	A comprehensive and complete design that provides reusability, efficiency, scalability to the WV HSP solution. Our team has applied this design approach and successfully designed systems of similar size and complexity to WV IES. Our design approach aligns the architecture in compliance with MITA objectives and CMS Seven Standards and Conditions
Modular Design Focus	The EVD for SI modular design focuses on targeted components and offers the advantage of progressing design that continuously incorporating stakeholder feedback.
Robust Methodology	Deloitte's EVD for SI - Hybrid Agile methodology provides value driven, system configuration and customization approach that is based on CMS Exchange Life Cycle, CMMI, PMBOK and Deloitte's industry experience. Our methodology identifies opportunities to reuse existing system components to save time and cost by avoiding duplication of effort
A review of individual design steps is embedded in our approach	DHHR is involved with design throughout the entire process providing a high level of collaboration as well as multiple touch points for design review.

Figure 4.3-31. Deloitte's design approach brings benefits to WV.

Formal Architecture Design Review

We understand a consistent preliminary design approach should be applied across DHHR subsystems. Deloitte plans to schedule architectural design reviews with DHHR before starting the detailed system design efforts. We meet with DHHR to evaluate the architectural and technical direction of the proposed solution. We review system architecture, system impact, and interface design between enterprise subsystems and external systems. As part of the formal architecture review we work to identify As-Is architecture which will be used as the foundation for modification to the desired state. Through an understanding of the technical vision for the architecture solution we will define the data, integration application and security architectures. The data architecture review will be focused on how data is stored and utilized in the system. The integration and application components will focus on the core application solution architecture and how it integrates from end to end. Finally, the security architecture review will focus on creating an integrated security solution for the core application.

System Design Planning

The EVD for SI methodology has a mature approach to the system design planning process. Our system design plan has three core design components which culminate in a final design deliverable: preliminary system design, detailed system design and final system design. During preliminary system design the focus is to design high-level system architecture and integration points among various systems of the WV IES project. During the detailed system design phase, we further specify implementation details for each system components and their integration with the overall system architecture identified in preliminary design. We continue to design the actual

implementation details of each system components and final architecture during the final system design phase. These three levels of system design are integrated directly into the overall project work plan.

Deloitte works with WV DHHR staff to define the schedule for joint design sessions related to each of these phases and the schedule is published as part of the Project Plan for DHHR to review and approve. The project work plan is updated as we make progress through each of the three sub phases of the system design process.

Our Approach

Deloitte's approach to requirements analysis and system design are based on a proven method that allows for traceability and efficient management throughout the phases of the WV IES project. The EVD for SI methodology includes the approach to efficiently analyze, define, refine, document, approval and maintain traceability of WV IES requirements. This section further describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

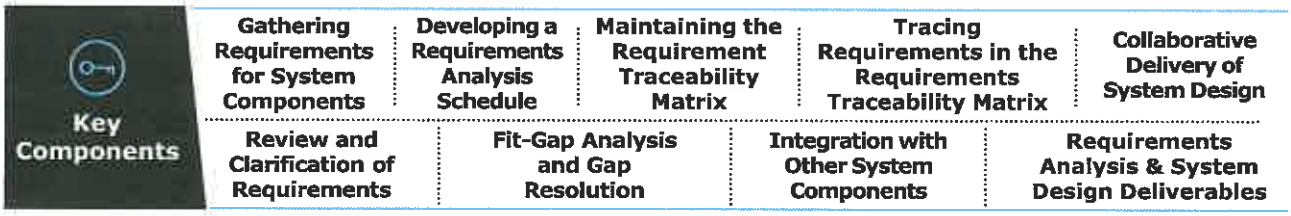

Figure 4.3-32. Key components.

Gathering requirements for system components

In order to develop a complete view of clarified requirements for WV HSP, it is critical to develop a consistent approach to define requirements across the various system components of the WV HSP solution. Our approach starts with the requirements provided in the RFP and in collaboration with DHHR SMEs we work to clarify them into actionable inputs to system design that align with our WV HSP solution. For in-scope requirements that the WV HSP solution does not fully support out of the box, actionable requirements clarification within the overall scope definition is critical to define the system design. During this process, if gaps are identified in the RFP requirements they are flagged as new and require prioritization through the change review process. The following table describes the activities to define requirements for individual system components and the benefits/outcome of performing requirement analysis on these components.

System Components	Our Approach to Requirement Definition, Refinement, Approval and Traceability
User Interface	Deloitte reviews and analyzes the existing user interface requirements outlined in RFP. We conduct fit-gap analysis to identify gaps and add clarification to existing requirements where needed. Deloitte further defines user interfaces through specifying user interaction with the system and focuses on usability to visualize how the system appears to the user and what controls are enabled to assist the user when interacting with the system.
Business Logic and Rules	Deloitte works closely with DHHR stakeholders to confirm the preliminary business logic and rules requirements. We work with DHHR to define rules, rule sets, business flows, rule constraints, business objects, and other attributes related to the business logic and rules.
Input/output Validation	Deloitte reviews the existing input/output validation requirements listed in RFP. We work with DHHR collaboratively to confirm input and output parameters performed by the interface such as data elements (integer, string), business objects (records, messages, files, arrays, displays, reports), and supported operations (select, update, insert, and delete).
Workflow Automation	Deloitte works with various DHHR bureaus to identify and understand the existing workflows of the system. We define workflows for collection of data, determination of benefits, generation of reports, integration of the notice engine for correspondence, triggering of alerts, exchange of data with external systems through interfaces, and user interface component requirements for various subsystems of the solution.

System Components	Our Approach to Requirement Definition, Refinement, Approval and Traceability
Data Models	Deloitte reviews and analyzes data storage requirements for various business areas that are identified in the RFP. We take components from industry recognized data governance models, such as TOGAF and COBIT, aligning them with our understanding of DHHR system in order to produce a data model that clearly and tactically defines the WHO, WHAT and HOW, allowing effective decision making, prioritization, and adherence to strategy.
Data Architecture	Deloitte works with DHHR stakeholders to understand how data is processed, stored, and utilized in the system. We define data architecture composed of data models, policies, rules or standards that govern the type of data collected and how it is stored and integrated. We refine the solution's data-related requirements and characteristics into a clear, concise, and graphically oriented representation that is meaningful to both business users and solution designers.
Web Services	Deloitte reviews and analyzes the existing requirements for web services for various DHHR subsystems. Deloitte creates a high-level design for the end-to-end integration solution based on these requirements. This includes a complete architecture definition for web services, messaging components, service orchestration, and the workflow integration approach.
Infrastructure	Deloitte works with DHHR to review the infrastructure requirements defined in the RFP and collaboratively define the logical and physical architecture of the system.
System Architecture	Deloitte establishes the high-level design for the solution. This includes a complete architecture definition for the application, focusing on the application's core functions, interface design, integration and messaging among various system components.
Batch Processing	Deloitte reviews the batch processing needs for database updates, data transmit, reports generation identified in RFP. We work with DHHR stakeholders to define the schedule and frequency for the batches. We further refine the requirements through identifying batch sequence and interdependence to support the project team with sufficient information for detailed design and integration with overall technical architecture.
Business Process Models	Deloitte works with DHHR to understand and analyze your current state of the people, processes, and technology (systems) interactions and then create As-Is Business Process models. Deloitte defines step-by-step business flow for each component of our solution and continue to refine and update business process models based on state policy and procedure changes.

Figure 4.3-33. Deloitte's requirement analysis approach to various system components.

Developing a Requirements Analysis Schedule

Deloitte works with WV DHHR staff to confirm the schedule for Joint Requirements Clarification (JRC) sessions and the schedule is published as part of the work plan. Once the requirement analysis schedule is approved, we integrate the schedule into the overall project work plan, and JRC sessions for each functional track then begin.

Maintaining the Requirement Traceability Matrix

Figure 4.3-34. Requirements traceability is maintained in JAMA.

The Requirements Traceability Matrix (RTM) provides the foundation of what requirements are being addressed, how they are being addressed, and how they are being tested. Once the RTM and the values required in the RTM are defined and approved by DHHR stakeholders, it is used throughout the project to map the clarified requirements to design artifacts, development objects, system test cases, test scenarios and conditions and how these requirements are being addressed. To that end, each element of project scope is decomposed into a requirement that can be understood in sufficient detail to begin functional design, test planning, and test script preparation during subsequent project phases. Once requirements are clarified, finalized, and signed-off by the State, they are moved into JAMA. JAMA is configured to support bi-directional traceability

across the SDLC. Bi-directional traceability allows for a JAMA user to see how the above components relate to one another. This traceability drives comprehensive coverage, showing that each requirement is being met by a design, each design has a development task, and each design/development component is being tested. In the figure below, a sample requirement is shown. On the left navigation, the various other SDLC artifacts are shown. On the bottom navigation, the related items are shown, displaying bi-directional traceability of this particular requirement.

Tracing Requirements in the Requirements Traceability Matrix

Deloitte provides appropriate stakeholders the requisite access to JAMA throughout the project SDLC to facilitate transparency and visibility across the project. At the end of the Requirements phase, the requirements are finalized and approved and the Requirements Traceability Matrix (RTM) is produced. At this point, the RTM shows traceability from RFP Requirements to clarified requirements. At the end of design, JAMA is updated with the appropriate design artifact mappings. During development and testing, JAMA continues to be updated with the appropriate mappings demonstrating each requirement is traced from definition to design to testing to implementation – throughout the systems development life cycle.

Collaborative Delivery of System Design

Deloitte takes a collaborative approach during the System Design Phase to analyze the approved requirements and create the Detailed Systems Design (DSD) document. We bring in stakeholders from the various programs including functional and technical subject matter experts to be involved in Joint Application Design (JAD) sessions. In these sessions, we address open questions, finalize the business and integration requirements, and discuss high-level business transformation and migration steps. The following figure illustrates an overview of Deloitte's approach for system design.

A well-structured and socialized schedule confirms that relevant stakeholders are invited to functional areas that are aligned to their subject matter expertise. It is extremely important to have the appropriate stakeholders attending the relevant sessions in order to make appropriate design decisions, prevent performing re-work and facilitate and efficient design review and approval. Our delivery framework embeds a collaborative approach into the design phase offering the advantage of focused progressive design that evolves based on stakeholder feedback within the WV HSP proposed solution.

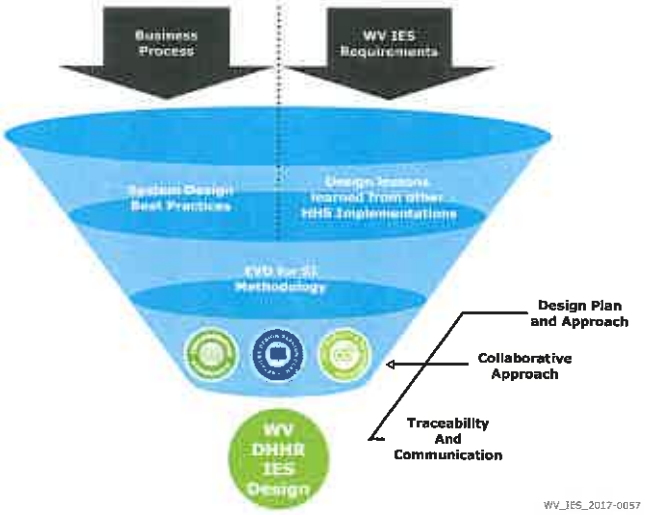

Figure 4.3-35. Deloitte's Design Approach.

Review, Validate and Clarification of Requirements

Deloitte holds a review of the requirements that are specified in the RFP. These requirement validation sessions include stakeholders from the different program areas to address their unique needs and provide opportunities to identify potential gaps. These sessions confirm our understanding of business and system requirements depicting system behavior. If gaps are identified in the requirements specified through the RFP they are clarified and an actionable approach is developed with the project team. If new requirements are identified, they are referred to the change review process for prioritization.

Fit-Gap Analysis and Gap Resolution

As the validation sessions are being held and requirements are being validated, Deloitte also performs a fit/gap analysis to identify where new requirements may need to be created. Each functional program area is evaluated for functional as well as operating and performance requirements. The analysis looks to identify gaps from both the current system functionality to the proposed system, as well as between integration points between program functionality. As gaps are identified that are mapped to existing requirements those requirements will be clarified. Should new requirements be identified through this analysis that are not specified in the RFP, they are prioritized through the change control process. Once approved through the change control process, new requirements go through the same review and approval process as the original requirements and are incorporated into the Requirements Specification Document.

Integration with Other System components

Our proposed WV HSP is designed specifically to integrate the required system elements and existing State assets into a comprehensive solution that meets the WV IES Project requirements. At the outset of the project, Deloitte works with the WV DHHR, other required infrastructure providers and trading partners to develop and confirm the approach to system integration. To meet the project timelines, it is critical that design decisions, artifacts, and changes are clearly and efficiently communicated to the stakeholders. This is essential to confirm that no rework is required and that different threads tie in to function as a single unit. The following table describes our formal and informal communication channels during the design phase:

Design Communication Method	Description
Joint Application Design (JAD) Sessions	The relevant stakeholders who support the impacted subsystems are included in JAD session to create a holistic view of how the IES design can be integrated with various system components.
Designer Forums	We host design discussion forums with stakeholders and vendors to discuss and communicate design decisions made across functional areas and modules. The forum promotes understanding and consistency among the teams.
Weekly Status Meetings	We communicate critical design decisions and progress made on designing of various components that form the IES solution with DHHR stakeholders and vendors through weekly status meetings
Design Walkthroughs, Reviews and Signoff Process	The formal processes of walkthroughs, review and approval include stakeholders from impacted parties to confirm that design is comprehensive and meets the requirements of the required stakeholders

Figure 4.3-36. Deloitte's Design Communication Methods.

Requirements Analysis & System Design Deliverables

Deloitte recognizes that large complex system integration projects with multiple interface dependencies on other systems requires industry-leading requirements conformation and baseline activities that integrate our requirement gathering, management and traceability through the follow-on design and development tasks.

1. Our Approach to complete Requirement Validation and Design Milestone and Deliverables

Deloitte leverages its own repository of templates and sample deliverables within our EVD for SI methodology to accelerate the creation of requirements and design documents for WV IES project. Our methodology provides consistent and well-defined templates that are standardized throughout each phase of the project and accelerates the document development and completion for the project team. We use the templates as a starting point/outline to create documentation for WV IES project and work collaboratively with the state to define system requirements and

develop design. Deloitte completes the deliverables identified by DHHR in the RFP and submits deliverables to DHHR for formal review and approval using the process in the approved Quality Management Plan. As requirements are finalized, they are loaded into JAMA and linked to Design, Development, and Test objects as we progress through the SDLC. Approved and finalized design deliverables are maintained in SharePoint our centralized design document repository. SharePoint allows for document versioning so as enhancements are requested or new requirements are prioritized throughout the SDLC the existing designs can be updated while retaining traceability and allowing for easy search and retrieval of the latest deliverable version.

2. Our Approach to obtain Agency Approval for Deliverables

Deloitte continually seeks to limit errors and rework. Documentation and deliverable reviews, both internal to our team and with State staff, are a core component of our quality monitoring approach. Deloitte's past quality management experiences provide a sound approach to manage WV DHHR's approvals and sign-offs by jointly defining deliverable acceptance and exit criteria to increase transparency and reduce risks. Deloitte project management team sets up calendars for approvals in agreement with WV DHHR for deliverables review and sign-off. The PMO team incorporates time for deliverable creation, deadlines, stakeholder's feedback, review, revisions and final sign-off. This process is further elaborated in the Quality Management objective (4.3.2).

3. Our Solution Meets MITA Requirements

Our WV HSP solution features an architectural design that meets MITA requirements. Our approach broadens the State's ability to leverage existing state technology assets, promotes interoperability while achieving MITA maturity, as shown in the following figure. The following table describes in detail how our proposed WV HSP solution meets the MITA requirements specified in the RFP:

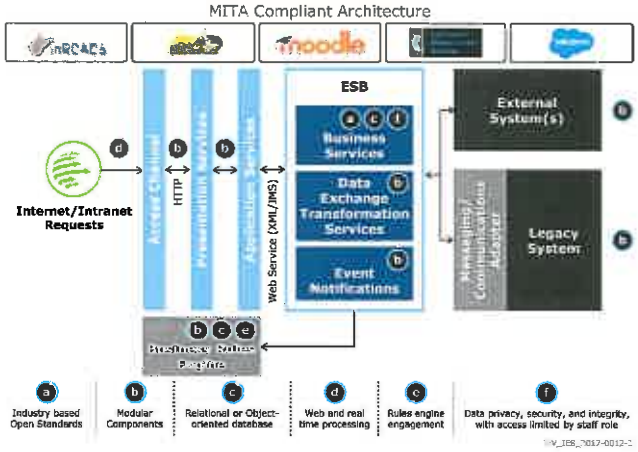

Figure 4.3-37. Our solution features an architectural design that is MITA compliant.

MITA Requirement	Description of how Deloitte's solution meets the requirement
Industry-based, open-architectural standards	Deloitte uses Enterprise Service Bus to serve as the foundation for our service-oriented architecture (SOA) thus representing the cornerstone of the State's compliance with MITA and CMS guidance and practices. We build new interfaces as services using SOA to comply with the open standards requirements.
Modular components	Deloitte breaks down various components in the modernized system into simpler modules with well-defined APIs using SOA interactions. Our team will work with DHHR stakeholders to identify modules that best align with their business functional and technical needs.
Relational or object oriented database	Deloitte develops a solution architecture that includes a canonical data model to facilitate integration by enabling communication between disparate systems with different data formats. Logical, physical data models and schemas are created to standardize and concatenate similar data from different sources that feed the system.
Web and real-time processing	Adhering to interoperable systems, Deloitte establishes the solution with a write-once use-many framework of web services that addresses the information needs of various internal and external business processes. In addition web user interfaces, batch interfaces, and APIs are included to allow various secure channels to access the functions.

MITA Requirement	Description of how Deloitte's solution meets the requirement
Rules Engine Management	Deloitte is committed to using open interfaces and exposed APIs, isolating business rules from core programming and making business rules available in both human and machine readable formats. Business Rules Engine are designed for ease of modifications without major downstream impacts.
Data privacy, security and integrity	Deloitte builds an architecture with built-in security and privacy capabilities. Access requirements are identified in the business processes, data models and other technical models. WV HSP solution supports integration with multi-factor authentication mechanisms, role based access and integration of these tokens with identity and access management functions.
Interoperable systems	Deloitte builds the solution for interoperability, both internally and externally. Open, standards-based communication mechanisms including SOAP and RESTful web services and secure file transfer will be provided to support interoperability with both modernized/new systems and modules. Both web service and single sign-on security mechanisms will be provided to secure the integrations with internal and external entities

Figure 4.3-38. Our solution adheres to all seven CMS standards and conditions.

4. Development and use of the Design Documentation

The following table summarizes our approach to the development and use of the requirement and system design documentations/deliverables:

Requirement & Design Documentations	Deloitte's approach to the development and use of the requirement and design documentations
System Requirements Specification Documentation	I. The Agency review to validate requirements Deloitte works with the stakeholders and SMEs to complete the formal review, validation and sign off in order to complete the milestones for the validation of requirements. II. Requirement updates Deloitte's requirements management discipline provides consistency in managing the change in requirements for the life of the system. A formal change request process is used to modify requirements with evaluation of business model and/or process changes. III. Means of measurement determining satisfaction of requirement The traceability established in JAMA helps project teams, stakeholders and SMEs relate requirements to system design to assess, evaluate and measure the satisfaction of the requirement.
Features Document	The Features Document used for automated modernization focuses on documenting the features available in the current legacy systems (RAPIDS and OSCAR)
RTM	The RTM and related requirements management processes are established to maintain the requirements throughout the project life cycle. Each validated requirement is documented and included in the traceability process, confirming that these requirements are adhered to throughout each project phase.
Requirements Management and Tracking System	Deloitte manages and tracks requirements through proposed JAMA tool. JAMA provides users real-time visibility into the interrelations between the requirements and how changes in one function may impact a number of other areas within the WV IES project.
Detailed System Design Documents	I. The Agency review, including walkthroughs of the Design Documents and demonstrations during the development of the design specification to enhance the Agency's understanding and to facilitate the approval process Deloitte establishes review, approval and sign-off process for documentation including design documents. Deloitte works closely with state to establish the quality assurance process for design deliverables involving informal as well as formal reviews, walk-throughs and demonstrations during design phase. II. Identification of system files and processing architecture Deloitte works with DHHR to establish a catalogue of system files. We conduct detailed analysis of existing application software, code libraries, and system architecture. III. A general narrative of the entire system and the flow of data through the system Deloitte illustrates high level data architecture and focuses on flow of data through the system including how data is processed, stored, and utilized in the system. It provides the criteria for data processing operations that make it possible to design data flows and also control the flow of data in the system. IV. Detailed description and diagram of the system architecture identifying how components are integrated to meet RFP requirements

Requirement & Design Documentations	Deloitte's approach to the development and use of the requirement and design documentations
	Deloitte works with DHHR stakeholders during design phase to develop system architecture deliverable providing detailed description and diagram of the system architecture along with identification of integrated components which can be tracked back to RFP. V. General and detailed subsystem narratives describing each function, process, and feature Deloitte details the design of system by defining the subsystems and modules; performing UML modeling; and defining the interfaces, functions, processes, attributes, workflows, and business logic to implement the subsystem functionality. VI. Security design description for each business area that defines access control including specifying roles, role locations, and a matrix of roles by inputs/outputs We design appropriate security controls to protect the data at rest, in motion and in use. The deliverable defines access controls using user profiles and roles based solution which is transparent to the end user. VII. Flow diagram of each subsystem, identifying the major inputs, processes, and outputs Deloitte works with DHHR stakeholders to develop and review UML diagrams including flow diagrams for each subsystem which identify the major inputs, processes and outputs using application specification deliverable with a key component of Deloitte's System Design discipline. VIII. Lists of the inputs and outputs by subsystem Deloitte works with DHHR stakeholders during the design phase for development, review and approval of application specification deliverable which also include list of the inputs and outputs by subsystem. IX. Hardware/software detail Deloitte works with DHHR to create a centralized catalog detailing hardware and software information for WV IES solution. X. High-level data model and a detailed and physically specific data models Deloitte develops high-level data model outlining data domain concepts and their relationships for the entire enterprise application. It depicts the logical entity types, data attributes describing the entities, and the relationships and relationship cardinalities between the entities. Physical Data Model includes model elements (such as tables, views, stored procedures, triggers, indexes, functions, and constraints) that represent the physical structure of the database and model elements (such as schemas and table spaces) that represent the underlying data storage design of the database.

Figure 4.3-39. Using requirement and system design documentation as an input to development.

5. Demonstration of the creation of validated data models

The WV HSP comes with preassembled data-models that have the ability to support the complex requirements of the integrated WV HSP solution. Our data models have the ability to accumulate and manage increasing volumes of data. Managing, accessing, and storing this information cost-effectively is one of the hallmarks of our solution. WV HSP's pre-configured conceptual, logical and physical data models are standards based, include data objects, relationships, attributes and meta-data. The WV HSP data models will be confirmed and approved by West Virginia through the systems design approval process.

4.3.4 Objective: Development

West Virginia benefits from Deloitte's experience and capabilities to successfully deliver a cross-functional Health and Human Services solution built on a proven, modern and modular hosted platform. Our 45 years of Public Sector experience within the HHS arena supporting states with modernization initiatives, allows us to achieve DHHR's goals of reducing costs and meeting the timelines associated with development and unit testing.

Section Highlights

Deloitte's EVD for SI methodology employs a hybrid agile approach to development.

PROVEN HHS EXPERIENCED

- Delivers value early in the SDLC
- Highly flexible and responsive to changing business priorities
- Provides stakeholder visibility early in the SDLC

The West Virginia Department of Health and Human Resources (WV DHHR) requires a vendor who can bring proven development practices to the WV IES project. Deloitte employs development and unit test processes, tools, and methods refined through previous successful engagements of similar nature and size. We use our EVD for SI methodology, which leverages industry leading development practices and is extended by our experience from implementing Health and Human Services experience across more than 30 states. Our proposed West Virginia Human Services Platform (WV HSP), is the result of our experience in the public sector and lessons learned from developing and maintaining eligibility case management, child care, child support, and self-service systems. WV HSP is a modular, scalable, sustainable, and flexible human services platform built upon a Service-Oriented Architecture (SOA). The alignment of our proposed solution's development methodology serves as an accelerator to achieve the functionalities that the State requests in the RFP. The below graphic portrays where this section's activities fit within our overall EVD for SI methodology for the WV IES project and outlines our response to your requirements.

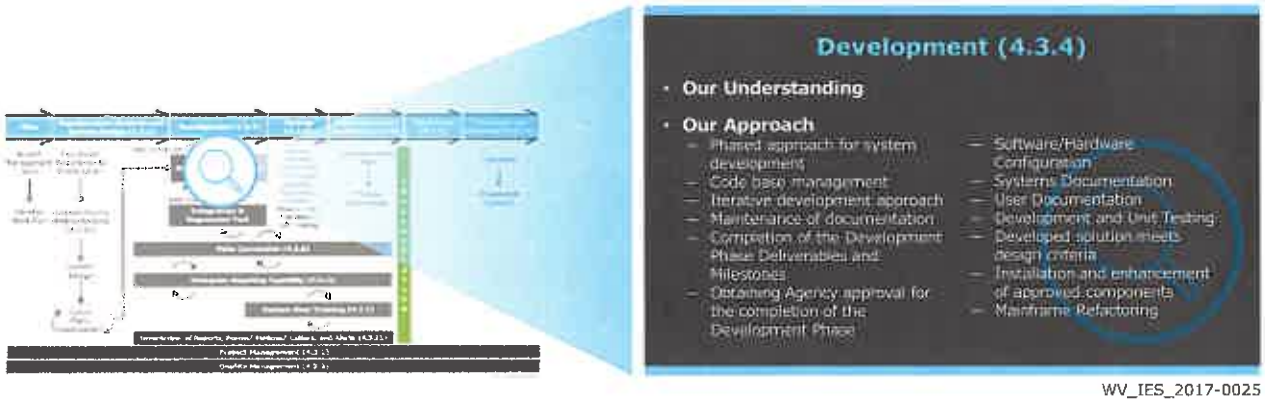

Figure 4.3-40. Deloitte's EVD for SI Methodology, highlighting the Development phase.

Our Understanding

We understand that, following the approval of the design specifications, the development of the various services, screens, reports, and other components of the WV HSP must begin. We begin with coding standards, to confirm consistency across developed modules. Our detailed work plan tracks development tasks, including unit testing and code reviews, for adherence to industry standards. Using experienced professional integrators from our delivery center whose sole focus is on integrating and configuring HHS-related systems, has proven a very effective means to efficiently and effectively perform programming tasks. We propose our EVD for SI methodology, which offers Hybrid Agile principles to bring the ability to prioritize requirements or features for a more flexible approach. The focus of this methodology is on continuous improvement and the ability to reduce required activities and costs for the State. We leverage our knowledge on code base management, development standards, testing procedures, and source code security analysis. System design documentation is kept current with updates to the design that occur due to technical implementation details, change requests, or other factors that cause a deviation from the original design.

Our Approach

This section describes our approach to development as well as how we enable the State to meet the planned milestones. The development phase is organized into multiple iterative sprints that increasingly incorporate prioritized requirements and fixes to issues identified during testing. Our development approach includes the activities related to building the system, and also provides frameworks for creating and executing unit test cases, performing quality reviews and integrating feedback into the development cycle. The approach integrates well with the other disciplines within the EVD for SI Method, using the outputs of Requirements and Design, and providing the input to Testing and Deployment activities. Core activities that take place during the development phase are listed below:

- Implement the technical design elements based on their defined priorities in iterative sprints.
- Define the unit test plan to insure quality code is delivered and that the developed components satisfy the defined requirements.
- Integrate the results produced by individual implementers (or teams), into an executable system.
- Complete peer reviews on developed components and conduct formalized code reviews to insure consistency and maintainability.

Deloitte's production proven approach to development allows DHHR to meet the timelines outlined in the project plan while maintaining the desired level of quality. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

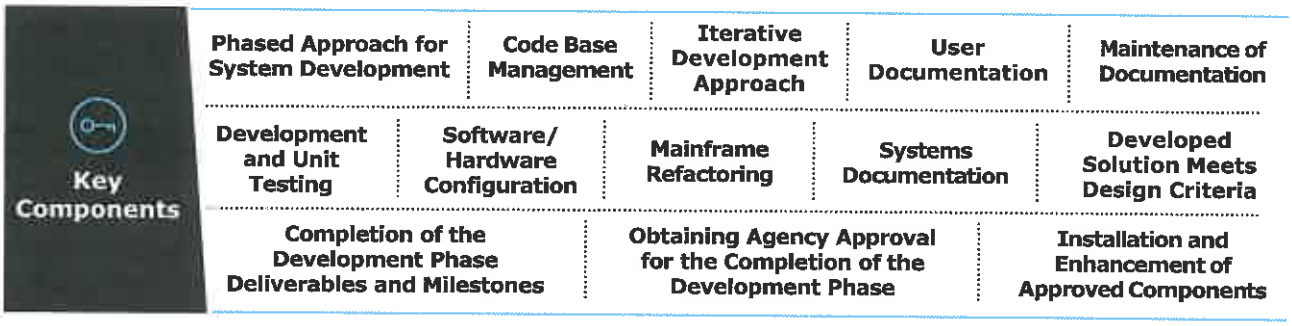

Figure 4.3-41. Key Components.

Phased approach for system development

As requested, and consistent with an iterative development approach, the Deloitte EVD for SI methodology adheres to phased software development principles and practices, including early and continuous delivery of software, regular collaboration between business subject matter experts and developers, and iterative functionality reviews to assist the DHHR in meeting its business needs. The development phase is broken down into feature or process focused sprints. To the extent possible testing is conducted in parallel with the development sprints which allows for active collaboration on functionality, requirement prioritization and consistent feedback. The iterative development phase as a component of the overall hybrid agile delivery approach is displayed in the graphic below.

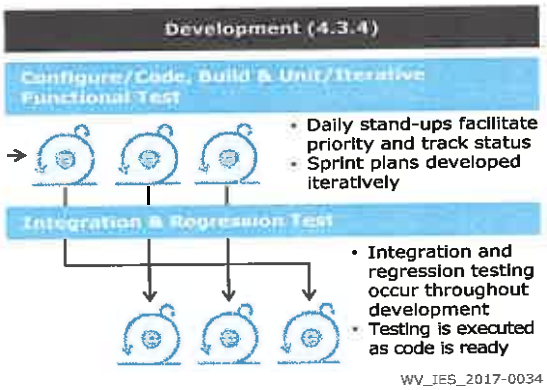

Figure 4.3-42. EVD for SI Hybrid Agile development approach.

Deloitte's EVD for SI methodology provides the project team with a set of software, tools and templates to jump start development of deliverables and facilitates delivery of high-quality work products. The following table describes the major software tools that will be utilized by the WV IES project.

Software Development Tools:

Proposed Tool	Purpose	Benefit to WV DHHR
Drools	Rules Engine	Centralized open-source rule repository that provides a flexible and transparent view of WV HSP business rules.
Bamboo	Build Automation	Continuous integration and advanced automation to build and deployment activities.
Crucible	Code Review	Collaborative approach to code review that promotes change discussion, facilitates reviews and tracks code activity across the WV IES project team.
BitBucket-Git	Source Code Version Control	Centralized source code repository that controls artifact versions, prevent duplication and maintain detailed auto trails.
Opcon	Batch Scheduling	Automated scheduler that facilitates batch execution and dependency while reducing manual intervention and risk.
Eclipse IDE	Development IDE	Facilitates application development through a comprehensive tools suite including source code editor and debugging functionality.
Oracle Warehouse Builder	ETL	Streamlined data extraction, transformation and loading.
Maxenso: fieldtracer, meeclipse, life cycle-manager, cobolclipse and Application-builder	Modernization Toolsets	Modernization toolsets to trace COBOL programs and develop Java

Figure 4.3-43. WV HSP software development tools and benefits.

Code base management

Deloitte uses Microsoft SharePoint and Git on various state eligibility, child support, child care and child welfare projects to store project artifacts (documents in SharePoint and code in Git). The repositories prevent duplication of artifacts, and track historical versions as well maintaining detailed audit trails. Git integrates with MyEclipse IDE and provides powerful configuration management capabilities including:

Source Code Security Analysis. Deloitte brings its demonstrated source code review methodology to define and execute vulnerability management program. Our secure code review is focused on identifying and mitigating insecure coding practices that could lead to application security vulnerabilities. This process creates a baseline for the initial release of each module. Thereafter, the source code analysis is performed in an incremental fashion as part of enhancement release for the application modules. The below table lists down the activities that are performed as part of our secure code review:

Steps	Activities
Planning and initiation	• Identify the logistics, such as access to code • Gather required application source code details • Establish engagement communication protocols and preliminary requirements (e.g., weekly status meetings, developer stakeholders, and West Virginia DHHR stakeholders) • Refresh the vulnerability database and download the latest plugins for the tools
Secure code review	• Perform automated source code reviews for WV HSP code in order to identify commonly found vulnerabilities in categories such as authentication, session management, access control, validation, encoding, error handling, logging, and encryption. Salesforce in-built capabilities will be utilized for scanning code developed within Salesforce. • Review automated scan results and perform false-positive analysis to identify relevant vulnerabilities • Conduct manual secure code analysis of selected scenarios to find advanced vulnerabilities such as business logic flaws, data flow validation, and privilege escalation
Analysis , re-validation, and remediation	• Analyze severity of identified vulnerabilities and review observations with the development team and DHHR client stakeholders. • Suggest remediation activities based on observed vulnerabilities and receive client acceptance • Track and monitor defect/remediation activities via ticketing or bug tracking systems • Assist with defect triaging • Perform revalidation of fixes implemented

Figure 4.3-44. Secure Code Review activities.

Development Standards. We provide project teams a set of standard frameworks to be used during development and coding standards to follow to produce clean and consistent code while configuring and integrating the WV HSP solution. We cover coding standards for several languages – Java, JavaScript, HTML/CSS, Oracle PL/SQL, and Salesforce. Team productivity is enhanced through our methodology by providing team members with easy access to a knowledge base with guidelines, templates and tools for development activities. This establishes better programming practices and appropriate use of design patterns and new programming tools.

Development and Build Machine Configuration Requirements. Deloitte proposes a Bill of Materials (BOM) to identify software and hardware requirements for the development, build, and unit testing activities. We understand that development and build activities are the pillars for the implementation of the WV HSP. During the Inception phase, we work with DHHR to finalize the development and build machine configuration requirements.

Figure 4.3-45. Sample Review Coverage Report.

Unit and Integration Testing Procedures. Unit testing offers isolated testing of a specific software code change from a code-level, and integration testing presents end-to-end functional testing across multiple components. Unit and Integration testing processes are further discussed in *Section 4.3.5.*

Code Coverage Targets. Atlassian Crucible is used for code review. This tool offers useful reports that show detailed statistics on review activity. The Review Coverage report shows how much of the code, and which files, in the repository have been reviewed, and when. During the development phase, we define code coverage targets and validate against the target after code review. The code coverage statistics are documented and stored in the repository.

Code Check-Out and Check-In Procedures. Git is used to control application source code. This tool integrates with MyEclipse IDE and provides powerful configuration management tools. Git provides version and change control for objects in a system. Developers with adequate security permissions follow a checkout and check-in process in order to modify files in the solution. This creates a rich audit trail that describes how a file evolved over time.

Developer tool expectations. We understand that development tools need to be installed on workstations or laptops for developers to perform development activities. We create the Bills of Materials document, which has a list of software and hardware required in alignment with the RFP. A list of development tools is included in this document.

Iterative development approach

Deloitte's EVD for SI methodology was developed based on our proven technology development and implementation methodologies, which include structured phases, tasks, and roles along with program accelerators such as preconfigured solutions, templates, samples, and development aids. The selected delivery approach should reflect the project goals and environment as well as the business needs. EVD for SI supports projects which need the ability to prioritize requirements or features, better insight into progress, or a more flexible approach but are not suitable for a pure agile delivery.

Our EVD for SI methodology blends agile concepts with the predictability of defined scope delivered iteratively.

Characteristics of Hybrid Agile Approach include:

- Fixed scope with estimated time and resources
- High level requirements gathered at the beginning of the project and agreed upon before the design and development iterations
- Cross-functional teams
- Sprints organized by features or critical processes

Maintenance of documentation

Enhancements and modifications to system documentation follow our Change Management processes. Our practitioners use the ITIL Change Management process, which is applied through enhancements and modifications to keep the system documentation current. Deloitte understands the necessity of change management to validate that systems are up to date and using the latest technologies in order to provide support for DHHR's business processes. Our methodology has explicit steps to update documentation after each phase.

The following portion of our response provides a narrative description of our approach to the completion of the Development Phase.

1. Completion of the Development Phase Deliverables and Milestones

Deliverables created as a result of the Development Phase provide proof and documentation that necessary development activity has been successfully completed. One of the key deliverables completed as a result of development is the updated system documentation. Updated and versioned system documentation is maintained in SharePoint and is described in more detail in Section 4 System Documentation below. Other outputs created throughout the development phase include application components, rule components, integration and database components, and data conversion components. These components, in conjunction with the user interface, provide a working prototype, which can be demonstrated to DHHR, during each Sprint Review.

2. Obtaining Agency approval for the completion of the Development Phase

Documentation and deliverable reviews, both internal to our team and with State staff, are a core component of our quality monitoring approach. Each team lead is responsible for the work products delivered by their teams. Different review types may be employed depending on the rigor required for the particular process, and range from informal offline reviews to formal inspections. Multiple review cycles may also be conducted, including reviews by peers, management, and State resources. The project deliverable review process from the Quality Management Plan will be followed.

During the Planning phase, Deloitte defines clear Entry and Exit criteria for Development Phase to validate that testing efforts are aligned with end results. The development and unit testing progress is tracked using custom reports. Shown below is a sample entry and exit criteria for Development phase that helps us formally control and manage testing for streamlined effort.

Entry Criteria	Exit Criteria
• Exit Criteria for Development and unit testing has been reviewed • A Defect Management Process is developed • Unit Test Scenarios have been developed and test data has been prepared • System documentation updated during development has been reviewed and approved	• Unit Test Cases have been executed and results recorded • 100% test case execution is complete • Defects are logged into JAMA/JIRA, if applicable • Unit Test Hand-Off Summary created and reviewed

Figure 4.3-46. Development phase completion Entry and Exit criteria.

In addition, Deloitte utilizes an internal Quality Verification Review (QVR) process where a periodic internal check is conducted by the Quality Management team to confirm adherence to testing processes, templates and accuracy of test cases and defects.

3. Software/Hardware Configuration

Our WV HSP solution uses leading government-tested software, the flexibility to configure and customize solutions, and the ability to scale as demand increases. The solution architecture focuses on customization and integration, accommodates the changes in the business processes, standards, and increased transaction volumes; reduces complexity and increases modularity, encapsulation, extensibility and maintainability. This "building blocks" approach not only aids in simplifying changes as new advancements are made to the framework, but also simplifies the understanding of the system in total by abstracting application architecture concerns from the functional business components, defined business rules, and data providers.

3.a. Regular system maintenance, performance optimization, resource capacity utilization, capacity planning, and capacity expansion

Our proposed EVD for SI follows cyclical approaches that highlight the continuously improving nature of the development and maintenance framework. This approach applies to the spectrum of maintenance tasks. It provides a general categorization of process improvement that is applied to provide key operational insights to improve system performance, with a focus on predictive and preventative insights. Deloitte's operations methodology relies on a set of clear and accurate data inputs to inform key decisions makers and administrators across operational domains. Deloitte's proposed AWS toolset based solution collects and aggregates infrastructure data and organizes it in dashboards, KPI's and interactive views.

We conduct capacity planning to estimate infrastructure, hardware, and software needs using an iterative approach. Capacity management estimates the expected resource impact on the server, network, database, and other components of the infrastructure. We then factor in capacity growth and use the information to determine the infrastructure, hardware, and software necessary to support anticipated transaction volumes and users. The first iteration establishes the high level estimates derived from the information in the RFP, as well as Deloitte's in-depth knowledge of similar systems we have implemented. At the beginning of the project, we perform an assessment to further refine and enhance the data to optimize our plan. Each successive assessment builds upon the previous one, adding additional data points to the capacity model.

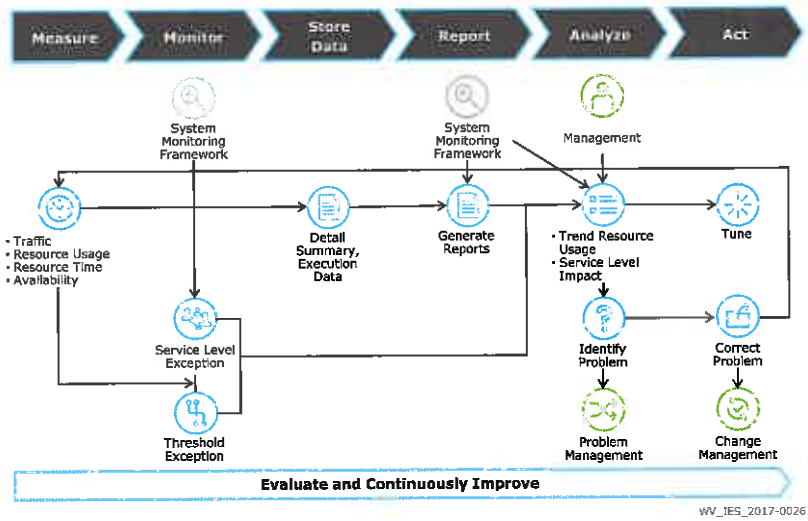

Figure 4.3-47. Process based Methodology for Capacity and Performance Management.

Our methodology for performance monitoring and management includes an integrated set of processes, methods, and tools. Based on the ITIL Framework and IT service quality industry practices, the combined capability provides operations staff with a holistic view of the status and health of the system, its components, and its services. As depicted below, the foundation of our methodology is an overarching process that supports the monitoring, measuring, reporting, and managing of performance against established objectives and promotes continuous improvement initiatives and actions.

3.b. Compatibility of hardware, software, or communications components installed for use by the Agency staff

Compatibility of hardware, software, or communications components are extremely important for development of the WV HSP. We work with DHHR to install the most compatible and supported versions of the proposed software. Software product upgrades provide new opportunities to improve performance and reduce cost. However, without proper planning and coordination, potential service disruptions and/or security vulnerabilities can be introduced by upgrades and have negative impacts on system stability. We work with DHHR to create software patch and upgrade plans via the change control process, and then identify a software patch environment to apply the patches or upgrades without affecting the ongoing development and testing activities.

4. Systems Documentation

The project repository contains various systems documentation, including data structures, Entity Relationship Diagram, design documents, user manuals, business rule engine configuration, and other artifacts/deliverables, and are accessed by State and Deloitte staff having various levels of access. Microsoft SharePoint is a powerful content management solution that is used to control system documentation, deliverables and other design artifacts. It provides version management tools, and maintains detailed audit trails. Systems documentation are stored in a central SharePoint repository. Documentation associated with the release schedule is submitted in a timely manner prior to the go-live date through the deliverable review process. Throughout this process, each project deliverable is reviewed and updated until it meets the expectations of West Virginia. Following acceptance testing, the deliverable is considered part of the WV IES project and is made available for access by stakeholders.

5. User Documentation

Deloitte understands the importance of user documentation, and the benefit it brings to DHHR. We drive the creation of a documentation methodology and framework and maintain proper methodology for purposes of consistency and efficiency. We prepare and/or maintain documentation pertaining to programming, systems operation, and user documentation. We translate business specifications into user documentation, and assist with the development of the Standard Operating Procedures (SOP) manual.

User documentation is a key input to the UAT phase for the WV HSP—it provides a basis for which UAT testers can understand the functionality of the solution, as well as the nature of the system changes implemented as part of a development cycle. The user documentation should be relied upon by the UAT test team as a guide for how to navigate and effectively use the system. As user documentation is updated iteratively as throughout the project, it is easily accessible and versioned so UAT testing team will be working on the most updated version of the documentation. Prior to start of training the user documentation will be considered final and it will be delivered as a key input to user training. The user documentation is a great way for end users to begin to dive into the functionality of the system and will be critical reference material throughout their transition onto the new system.

6. Development and Unit Testing

The iterative approach to software development offered by the Hybrid Agile methodology makes it an excellent development method. A number of cross-functional teams including systems analysts, developers, testers, and key stakeholders work together throughout the release development effort to validate the quality of the final product being delivered. In addition, by involving stakeholders throughout the phases of the release, clients are offered greater transparency and given the chance to provide feedback throughout the development process. As the development team receives feedback, interim releases are planned as agreed upon to align the developed product with the agreed upon requirements. In addition, the short sprint cycles, the continual testing that occurs throughout each of the sprints as well as final testing at the end of the sprint cycle allows for issues to be identified earlier in the process.

The following activities and deliverables are performed during the Development phase:

Phase Name	Key Activities		Planned Deliverables
Development	• Configure and Integrate the WV HSP solution • Establish and coordinate testing strategies • Complete Unit Testing on the WV HSP solution • Develop Software Build and Migration Plan • Implement Technical Architecture • Implement Physical Database • Develop Application Components	• Develop Data Conversion Components • Develop Integration Components • Develop Rule Components • Modernize Mainframe Code • Modernize Mainframe Batch Programs • Modernize Mainframe Database • Modernize Mainframe User Interface	• Updated System Documentation

Figure 4.3-48. Development phase Deliverables.

Deloitte is guided by development and configuration principles that we use during the Development phase. These principles set the approach for our development work and allow Deloitte to accelerate our work and produce a high quality solution to the State. We configure and customize the solution using iterative development cycles in which small testable portions of functionality are unit-tested in short cycles as part of a larger release. Iterative development enables rapid software customization and increases quality and acceptability of solution, as it has the ability to incorporate user feedback early on in the project life cycle. We have experience working with multiple states such as Connecticut and Pennsylvania using the iterative development model.

The following table identifies these principles and the benefits to the State.

Customization and Configuration Principle	Benefits to West Virginia
Start with the Existing Solution	• Leverage existing framework constructs and COTS products to accelerate the process.
Configure Software Iteratively	• Our approach allows for the selection and deployment of selected business workflow, framework and application components needed to support identified business processes • The content of each iteration is mutually agreed upon between Deloitte and the State
Use Component-based Architectures	• Using our approach and leveraging our production-proven assets, isolate, configure, and test core application components that are reused by other applications within the solution
Visually Model Software	• Uses pictorial illustration to more clearly communicate the model

Figure 4.3-49. Deloitte's core Development and Configuration principles.

Deloitte follows the WV HSP application development standards, including the use of frameworks, libraries, and accelerators as appropriate. Unit testing is primarily performed by the development teams as part of the development effort. Deloitte's approach to unit testing provides verification of the hardware or software prior to integration of those items. By performing unit testing as components are developed, defects and issues are identified earlier and as a result are less costly and time-consuming to resolve than defects found later in the testing process.

Unit Testing Best Practice
We follow best practices by conducting code reviews during unit testing and comparing the results with the detail design specifications.

7. Developed solution meets design criteria

The objective of the development phase is to configure and integrate a solution and test that it meets requirements and adheres to the approved design. Upon approval and acceptance of the design, Deloitte perform construction and configuration of the proposed solution. Deloitte understands the importance of creating comprehensive documentation, which acts as a foundation for the development of our systems development processes. For the WV HSP solution meeting the needs of DHHR and satisfying the design criteria, the system is developed according to the specifications laid out in the System Design (SD). The Deloitte team drafts the SD based upon user requirements, and provides the deliverable to DHHR for approval. This document provides insight into the overall conceptual and logical architecture of the system, as well as a detailed view of the required components. Once approval is granted, our team proceeds with the development of the prioritized requirements, referencing the SD during development activities. At the conclusion of the iteration, the Sprint Review verifies the requirements are implemented according to the design, previously approved by DHHR stakeholders. Should issues arise during a product demonstration or evaluation, Deloitte works with DHHR to resolve issues and refer back to the SD.

8. Installation and enhancement of approved components

We follow strict discipline in installation and enhancement or modification of the components. Our change management process emphasizes rigorous process and uses of automated tools for managing requirements traceability across the project's life cycle and phases, including WV HSP governance. Finalization of scope and design are accomplished in Analysis and Design phase. Potential changes to the scope are completed through a formal process in alignment with Change Management Plan. Scope changes cannot occur without passing through the formal process, which includes:

- Identifying and documenting change requests against project approved deliverables or work products
- Prioritizing valid change requests for impact analysis.
- Analyzing change requests and reject, defer, or approve for implementation.
- Implementing and monitoring approved change requests and making adjustments for their impacts

We use Atlassian's JIRA tool for the change control system. Using an automated system to house the change control requests provides a central repository for centralized control and clear visibility.

Objective: Testing

Deloitte's testing strategy, methodology, and plan effectively utilizes people, processes and templates proven successful on projects of similar size and complexity. This includes conducting end-to-end functional testing, validating interfaces, and supporting user acceptance testing for pilot and statewide implementations. This test strategy and test approach coupled with our toolkits such as the EVD for SI testing playbook reduces testing risk and increases overall accuracy.

Deloitte's testing methodology has been well refined during 45 years of experience in delivering public sector solutions in over 40 different states. This cross functional experience and practitioner expertise in various programs including Integrated Eligibility, Child Care, Child Support and Child Welfare systems allows us to propose a testing approach that reduces implementation risk and provides West Virginia with the best opportunity for success in serving its citizens.

The Deloitte Team leverages an existing repository of 2500+ regression test cases from prior IE, Child Support, Child Welfare and Child Care implementation to jump-start West Virginia's testing

- We bring our national experience and lessons learned for better planning and execution; leading to fewer failures and higher success rate in end-to-end interface testing
- Dedicated System Test Team, devoted to delivering a quality product, gives WV DHHR a single contact point for testing

Our Understanding

The West Virginia IES project requires cross functional experience and resource expertise in various programs including Integrated Eligibility, Child Care, Child Support and Child Welfare systems allows us to propose a testing approach that reduces implementation risk and provides West Virginia with the best opportunity for success in serving its citizens. The below graphic portrays where this section's activities fit within our overall EVD for SI Hybrid Agile methodology for the WV IES project and outlines our response to your specific RFP requirements.

Figure 4.3-50. Deloitte's Hybrid Agile Methodology for Testing.

The benefits of this methodology include efficient testing during Unit testing, Integration testing and Iterative Functional testing phases in parallel to the development effort. In addition, this methodology provides exhaustive test coverage with structured testing during SIT and UAT phases. Deloitte understands that a comprehensive testing approach is critical to delivery of a cross-functional solution that meets the state's requirements. This section describes our understanding of the objectives you outlined in the RFP.

Deloitte was named a Visionary in Application Testing Services

Source: Gartner, Magic Quadrant for Application Testing Services, Worldwide 2015.

Formally Controlled and Focused Testing

The overall objective of testing is to find and fix solution defects in a controlled process, to provide an incremental, high-quality, and business-aligned application. Thorough testing is conducted with a clear focus on output for each phase of testing which enhances the quality of the solution and serves to validate that requirements have been implemented appropriately. During the Planning phase, Deloitte defines clear entry and exit criteria for each testing phase to validate that testing efforts are aligned with end results. Testing progress is tracked using several custom reports generating statistics such as test execution first pass rate, defects per module, defect density, defect trend by severity, root cause analysis, and defect closure rate. In addition, Deloitte utilizes an internal Quality Verification Review (QVR) process where a periodic internal check is conducted by the Quality Management team to confirm adherence to testing processes, templates and accuracy of test cases and defects.

The report notes: "Deloitte approaches testing as an extension of its broader relationship and often as part of a program with the client. In this regard, Deloitte adapts to the unique needs of each client, typically with industry and process understanding, rather than imposing standard processes and tools."

Concurrent Development and Testing

Deloitte leverages an integrated testing approach that allows for concurrent unit and system testing done in parallel to the development effort. Our test planning during development is divided into iterations or sprints where unit testing is performed concurrently with development, and a set of system test scenarios are executed for each of the completed sprints. Including planning during the initial phase of the overall project helps to anticipate, validate and mitigate potential technical, business, and operational challenges inherent in large systems implementation. Our established testing processes and methodology are augmented with skilled and knowledgeable team members who have the experience to apply this structured testing methodology.

West Virginia Human Services Platform (WV HSP) Testing Types

Deloitte's EVD for SI testing approach incorporates each type of testing as defined by the Agency:

Type of Testing	DHHR Definition	Deloitte's Understanding
Unit Testing	Testing of groups of code or modules during development	Validating functionality and detecting errors early on that are fixed during the development cycle
Integration Testing	Testing of components or modules into the overall system codebase to validate that existing components are not broken by the new module	Delivers thoroughly tested pieces of functionality where dependencies and impact to other modules are validated and issues are discovered early on
Iterative Functional Testing	Each logical iteration meets functional and technical requirements	Delivering thoroughly tested functionality for an iteration. Each of the new functionality maps with the requirements from the requirements traceability matrix
System Testing	Validation of new functionality and interoperability of the system and other subsystems, and their integration with infrastructure into an overall integrated system	Verify whether the functionality of completely developed and integrated system meets its specified requirements when they are integrated and that various sub-system/package interfaces are interacting correctly with the system
Interface Testing	Completeness of Interface development and readiness for integration in the wider system	Validate that interfaces are developed and integrated with the overall system, and are transferring information with the Interface partners according to the requirements
Regression Testing	Set of agency approved scenarios that should be used for regression after integration of each component into the wider system, as well as after migration of new build versions	Approved regression scenarios are run after each sprint of integration testing, after new modules are integrated with existing system, as well as after a new build is migrated to a test environment
End-To-End Testing	Testing of a Business using real-world scenarios at the component, application, and system level	Consists of fully functional business scenarios created from a repository of cleansed actual examples that mimic real-life complex scenarios
Security Testing	Testing of functional, technical and infrastructural components to validate that the system meets security requirements	Validate using DHHR approved security testing scenarios, and provide report for results of application, database and servers supporting the solution and provide a remediation plan for security risks and vulnerabilities identified
Performance Testing	System should meet performance service levels required by DHHR for query and page response times under simulated load for number of users for multiple concurrent functions	Test how the system performs under expected load during peak volumes on production ready version of the system. System is stress tested to identify bottlenecks and breaking points within the application under higher than expected user volumes to the point of system failure. Additionally, it includes tracking other performance metrics such as network availability to pinpoint potential performance bottlenecks
Usability/Accessibility Testing	Testing of User Interface for internal and external users, power users, users with limited computer skills, or the users with disability	User Interface is compliant with section 504 and 508 of the American with Disability Act (ADA)
Browser Testing	System should operate in the supported browser versions and operating system configurations approved by DHHR	Perform browser testing using a subset of the approved system test scripts to validate that system is operating as expected for DHHR approved versions of the browsers and configurations including mobile browsers if applicable
UAT	System meets expectations of DHHR and the system users	Successful execution of DHHR approved UAT test scripts with test data in UAT environment. Coordinate with DHHR and other UAT participants. Review UAT results with DHHR, share UAT defect statistics and a mutually agreed mitigation strategy
Data Conversion Testing	Data migrated from current systems is brought to new systems in a usable, complete, correct and expected state	Data conversion testing is performed using automated tools to Extract, Transform, Load (ETL) data to the conversion environment with the DHHR approved tolerance level per the Data Conversion Management Plan. Test results of data conversion are sent for DHHR approval prior to beginning the conversion of production data

Figure 4.3-51. Testing Done by Deloitte Aligns with DHHR Definitions.

Our Approach

Deloitte's testing approach utilizes guidelines and practices provided by our EVD for SI methodology and Software Quality Management Framework. Our approach to testing includes the five overarching steps shown in the following figure.

Figure 4.3-52. Deloitte's Overarching Testing Approach.

Step	Description
Plan	• Create and receive approval for the Test Management Plan that outlines the overall scope of the testing effort, planned test types to be exercised, the test team organization, and the roles and responsibilities of the teams involved in the WV IES Project • Include existing test cases for WV HSP in the Test Management Plan which will be used to test the modernized software thus ensuring reusability of existing test artifacts • Define clear entry and exit criteria for testing phases
Author	• Use our existing 2500+ test cases as a baseline to expand upon for the WV HSP solution specific features based on our requirements, design, screen mockups and discussions with development team • Create test case in JAMA based on the approved format
Prep	• Establish testing environments, set up data, and train testers on WV specific processes and procedures • Communicate the process for tracking, reporting, defect triage, and exit criteria
Execute	• Execute testing based on agreed upon plans • Use JIRA for development and defect tracking • Use an internal Quality Verification Review (QVR) process to confirm adherence to testing processes, templates and accuracy of test cases and defects
Report	• Extract test execution results from JAMA and defect logs from JIRA • Track and report progress using custom reports generating statistics such as test execution first pass rate, defects per module, defect density, defect trend by severity, root cause analysis, and defect closure rate

Figure 4.3-53. Deloitte's Testing Approach.

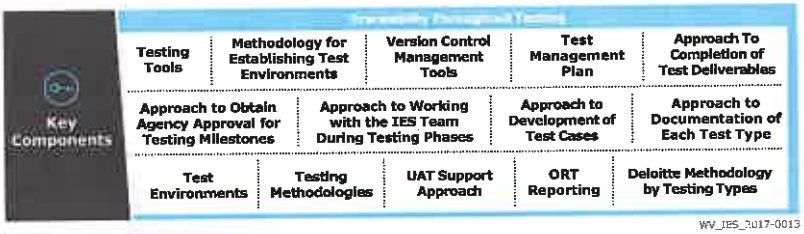

Figure 4.3-54. Key Components.

Our testing team works closely and collaboratively with the DHHR staff across each phase of the testing life cycle to develop quality deliverables that meet your requirements and reduce risks. We establish well-defined processes of verification by requiring test leads and experienced team members to review testing artifacts and deliverables for quality. Deloitte's approach to testing is underscored by a commitment to the delivery of the requirements necessary for successful implementation of the WV HSP. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

Testing Tools

Deloitte proposes the following testing tools for each of the testing areas:

Proposed Tools	Purpose/Type of Test	Benefits to WV DHHR
JAMA	Test Scenario Creation and managing relationship between requirements and test cases (i.e. Requirements Traceability Matrix)	Industry standard test management tool that supports requirement traceability and an environment for end-to-end test management
JIRA	Defect creation and management	Industry recommended tool frequently used in conjunction with JAMA for defect management
HP Load Runner	Performance Testing	Industry standard and the best known tool for its robustness to execute and report results of the Load Testing
Junit	Unit testing framework	Industry recommended tool for writing and running unit test cases in Java
Maxenso Suite	Enterprise Solution for modernization	Strong suite of products which supports modernization of development environments as well as the entire enterprise application
Bamboo	Automation Server	The leading automation server that supports building, deploying and automating Java based software
PowerMapper	Accessibility Testing	Best in class accessibility testing tool that supports comprehensive accessibility testing for ADA compliance
HP Fortify Security Center, Nessus Vulnerability Scanner, and AppDetective Pro	Security and vulnerability testing	Helps in identifying vulnerabilities in Web applications, databases and servers to mitigate associated security risks using dynamic and interactive analysis techniques for thorough coverage and accuracy
HP Unified Functional Testing	Automated Testing	Provides an environment for automated test script creation and execution.

Figure 4.3-55. Testing Tools Proposed for the WV HSP.

Methodology for Establishing Testing Environments

Deloitte utilizes the following approach to establish testing environments and to set-up test data:

Tasks	Approach	Benefits to WV DHHR
Determine Appropriate Test Infrastructure	Based on the type of testing, the following criteria are considered to define the test environment infrastructure: • Hardware Configuration • Software Configuration and Third-Party Installations • Memory needs for application server, database server, security server, batch server, scheduling server. • Load and capacity needed for the database server	Environments are suitably sized based on their intended purpose, thus maximizing their capacity and throughput, resulting in reduced environment error
Set-up Test Data	Identify and prepare test data required for the test effort. Initial data is created by running test cases through an automation tool such as UFT to create the required data volume. We also use our data conversion routines to load converted Production data in approved test environments where the volume and variation as well as historical variation of data is important. This primarily applies to load, UAT and training environments	Test data load is created as a routine, planned task. This brings fresh data in test environments to maximize ability to test with Production-like data and reduce data-related defects
Run Smoke Test	A set of test cases are run for specific test phase to validate the environment working as expected	System functionality is validated for a newly established environment

Figure 4.3-56. Approach for Establishing Test Environments and Setting-Up Data.

The following table shows the various test environments where each type of testing is conducted:

Environment	Type of Testing
DEV	Unit Testing, Integration Testing, Iterative Functional Testing
SIT	System Testing, Interface Testing, Regression Testing, End-to-End Testing, Security Testing, Usability/Accessibility, Browser Testing and Data Conversion Testing
Performance	Performance Testing, Stress Testing, Volume Testing
UAT	UAT, Regression Testing, End to End Testing, Security Testing, Data Conversion Testing
ORT	Unit Testing, Functional Stability Testing, Portability Testing, Pilot Testing and System/Data Recovery Testing
Training	End user training and UAT training
Disaster Recovery	Disaster Recovery testing

DEV = Development Environment; SIT = System Integration Test Environment; UAT = User Acceptance Test Environment; ORT = Operation Readiness Testing

Figure 4.3-57. Environments Utilized for Conducting Different Types of Testing

Version Control Management Tools

Deloitte has proposed various tools to manage version control across project deliverables and source code. For example, Deloitte uses SharePoint as a common repository and collaboration tool to store and share use cases, Requirements Traceability Matrix, detailed functional requirements, design documents, and status reports. JAMA is used to create and store test scenarios, test cases, test results, and is linked with defect management tool JIRA. Git is the source code management tool. The table below outlines the proposed tools used for documentation, source code and test management:

Area	Proposed Tool	Area	Proposed Tool
Code Review	Crucible	**Document Management**	SharePoint
Source Code Version Control	Git	**Defect Management**	JIRA
Test Management	JAMA, HP UFT(Automation), TermX (Unit test)	**Requirement Management**	JAMA
Test reporting	JAMA and JIRA	**Build and Deployment**	Bamboo
Web Services Testing	SOAP UI	**Build Automation**	Bamboo

Figure 4.3-58. Tools Used for Documentation, Source code and Test Management.

Test Management Plan

The following sections provide a description of our proposed approach to organize, schedule, scope, structure, and communicate the testing effort. Our testing methodology allows us to confirm that the WV HSP solution meets the requirements as documented during the Design phase. As part of our methodology, we draft the Testing Management Plan. This plan outlines the overall scope of the testing effort, planned test types to be executed, the test team organization, and the roles and responsibilities of the teams involved in the WV IES Project. The Plan provides Deloitte's high level testing policies and processes, which will be used to support DHHR. The proposed Test Management Plan describes our approach to meeting various DHHR requirements related to testing and testing deliverables in the following sections (sections 1 through 9); an initial draft of the Testing Management Plan can be found in Appendix C.

1. Approach for Completion of Testing Phase Deliverables

Deloitte uses the following approach for the completion of testing phase deliverables:

Title	Approach to Completion
Identify and plan for testing deliverables	Deloitte uses robust planning processes early in the project life cycle for deliverables preparation and completion. Our planning approach includes the following steps: • Include the list of testing deliverables in project estimation • Incorporate testing deliverables and associated activities in the project work plan, along with the resources involved in their creation • Configure testing tools with the correct template to produce testing deliverables • Coordinate testing deliverable milestones with the PMO team for their creation and review cycle • Include test data preparation and test coverage steps during test design to provide traceability
Create testing deliverables	The testing deliverables are created based on scripts executed in JAMA and defects logged in JIRA. Therefore, during testing deliverable creation, our approach includes the following steps: • JAMA/JIRA are kept up to date with test progress and defect details. • Daily defect triage meetings are held to discuss if defect details, priorities and severities are correctly set and are clearly communicated to the stakeholders. • Test execution activities are prioritized so that the test cases with higher business impact are executed earlier in the test cycle. In addition, key metrics such as environment availability, defect resolution timeline and tester execution rates are monitored to allow process improvements.
Review testing deliverables	Test execution results are extracted from JAMA and defect logs are extracted from JIRA. They are reviewed by the Deloitte team for accuracy and completeness
Update deliverables	Deloitte recognizes the significance of updating deliverables throughout the life cycle of the project and has well-defined processes to update deliverables and system documentation when a change is identified during the project life cycle. Testing deliverables are modified if a new requirement is identified or an existing requirement is modified requiring changes to the testing procedures.

Figure 4.3-59. Approach Followed for Completion of Test Phase Deliverables.

2. Approach for Obtaining Agency Approval for Testing Milestones

Deloitte uses a structured approach for submitting testing deliverables, taking them through the formal review process and obtaining agency approval. The following table outlines our approach for obtaining DHHR approval for testing milestones: The Testing Management Plan available in the appendix artifact (Appendix C - Project Management Plan) illustrates the acceptance criteria for each type of testing required for the WV HSP.

Activities	Description
Planning	• Establish timeline for each of the testing deliverables • Review timeline with DHHR • Update plan if there are changes to timelines based on DHHR input
Establish Acceptance Criteria	• Establish approval criteria for each testing deliverable and milestone • Acceptance criteria for completion status of test case execution • Acceptance criteria for defect closure by severity • Entry and Exit criteria for each testing phase
Prepare Deliverables	• Prepare deliverables for each of the testing phases • Conduct Internal review of testing deliverables
Conduct Review	• Submit deliverables using specified formats • Review with DHHR using the agency defined timelines for review and feedback cycle
Track Approval	• Work with DHHR for incorporating feedback in deliverables and tracking for approval

Figure 4.3-60. Approach for Milestone Completion and Obtaining Agency Approval.

3a. Approach for Working with the IES Team during Testing Phases

Deloitte collaborates with DHHR towards achieving success in each phase of the Software Testing Life cycle. For each of these key testing focused activities, we work with DHHR by scheduling planning discussions and reviewing deliverable templates and actual deliverables to get informal as well as formal feedback. Additional focus is applied during UAT test execution phase in which we work with DHHR for UAT kick off, help them in driving test execution as well as assist in reviewing defects for their validations and re-execution. Deloitte follows communication strategy that includes identifying key points of contacts, scheduling touch-point meetings, delivering frequent status updates, and communicating risks, issues and mitigation plan throughout the testing phase.

- Defects captured in JIRA provide visibility in a user friendly format including impact, trends and analysis to improve transparency and quality of end product.
- Tailors Defect Prevention approach using tools to support code quality, data integrity and procedural improvements.
- Use of hybrid agile methodology during development incorporates continuous improvement with defect analysis and reporting.

3b. Approach for Developing Test Cases

We use our existing 2500+ test cases from our various IE, Child Care, Child Support and Child Welfare implementations and any existing DHHR system test cases in order to jump start test case planning and designing activities. Using successfully executed test cases gives us a strong baseline and confidence on their accuracy and reduces risk. We use these baseline test cases and then expand for WV HSP specific features based on our requirements, design, screen mockups and discussions with the development team. Test cases are created in JAMA based on the approved format. These test cases serve as a repository for future use during later phases of the software test life cycle. Modification and updates to test cases are performed directly within the tool.

Our approach includes contingency plans to address risks that may be encountered during IES testing.

3c. Approach for Documenting Each Test Type

Test cases and test execution results are tracked in the JAMA test management tool. Requested deliverables are produced from a report from JAMA and provided to DHHR. Defect information is tracked in JIRA and similar documentation reporting is done directly from the tool.

4. Deloitte Methodology by Testing Types

Deloitte's Hybrid Agile methodology is followed during testing. The following table captures the key activities that are carried out during these testing phases.

Testing Type	Activities	
a. Unit Testing	• Plan reviews • Define unit test standards • Prepare unit test checklist • Author test cases	• Conduct peer code reviews • Identify and document defects • Fix defects and retest • Review test results
b. System Testing	• Plan and Prep • Prepare Scenario and identify key test areas • Author test cases	• Identify and setup Data • Review test cases • Execute test cases • Rework and Retest

Testing Type	Activities	
c. Integration Testing	• Plan and Prep • Prepare Scenario and identify key test areas • Author test cases • Identify and setup Data • Review test cases	• Submit Test Cases • Execute test cases • Fix issues and retest • Compile test results • Submit test results
d. Regression testing	• Create Regression test scenarios • Submit test cases • Perform Manual testing against key functions • Create automated scripts using an automation tool • Script Execution	• Identify and document defects • Fix defects and retest • Rework and Retest • Compile test results • Submit test results
e. Performance/ Load/ Stress Testing	• Plan and Develop Virtual User scripts • Create test scenarios • Submit test cases • Perform Load Test using Load testing tool • Perform stress test to identify system breaking points to the point of system failure	• Perform tests to the point of system failure • Analyze Results • Tune application and infrastructure • Rework and Retest • Compile test results • Submit test results
f. Parallel Testing	• Identify selection criterial for areas tested in parallel • Create test data and identify inter-dependency	• Coordinate cross-team communication to resolve and retest issues identified in parallel testing
g. UAT Testing	• Plan/analyze requirements and business rules • Create High-level scenarios • Author test cases • Submit test cases	• Setup data • Execute scripts • Fix issues and retest • Submit test results
h Operational Readiness Testing	• Work with DHHR to identify key ORT testers to perform a final validation before certifying for production migration • Create ORT checklist and submit ORT plan • Deploy software to ORT/staging environment • Author ORT test cases	• Submit ORT test cases • Prioritize and execute representative test cases • Document and submit test results • Perform disaster recovery testing as described in Testing type n. Disaster Recovery Testing in this table
i. Interface Testing	• Identify interfaces with State and Federal agencies • Establish interface connectivity timeline • Setup test environment • Configure to point to interface partner's test environment • Create test scenarios and test data	• Perform interface testing • Fix issues and retest • Share status with DHHR and communicate risks/issues • Review, rework and coordinate open issues with DHHR and interface
j. Security Testing	• Perform Web Application Vulnerability (Functional and Technical) Assessment as part of the release to identify potential security vulnerabilities that may compromise confidentiality, integrity and availability of the applications. • Perform false-positive analysis and manual review of selected scenarios.	• Perform Network (AWS Infrastructure Server) Vulnerability Assessment and Penetration testing in the hosted application infrastructure • Perform Database Vulnerability on the WV HSP database infrastructure
k. Pilot Testing	• Identify system components that affect external system users, such as web portals, Web-based software, and data entry by other vendors, • Identify test cases and user base for pilot testing • Execute test cases to validate pilot functionality	• Set up test harness to validate interfaces and information exchange (e.g. Web Portals, etc.) with external partners • Identify and document defects • Fix defects and retest • Compile test results
l. Data Conversion Testing	• Validate data mapping • Validate demographic data	• Verify that converted data can be accessed by respective modules in the WV HSP solution

Testing Type	Activities	
	• Validate Calculations and derived data • Validate using business rules for case processing run • Test with other database systems	• Confirm that the converted data can be modified based on system rules and saved by the WV HSP solution
m. Usability/ Accessibility Testing	• Identify user types: Internal users, external users, power users, users with limited computer skills, prospective new users, users who require training, and users with disabilities.	• Execute scenarios for each user type to test UI behavior and Usability of screen • Validate ADA compliance for ADA section 504 and 508
n. Disaster Recovery Testing	• Create a Disaster Recovery Plan • Perform desktop walk-through, partial system or application tests, and full-scale simulation tests in order to test the Disaster Recovery plan	• Ensure that the Disaster Recovery plan can effectively guide and direct the recovery efforts for those systems and applications identified within the plan • Perform Disaster Recovery test • Document and submit test results • Update Disaster Recovery documentation (and retest if necessary)

Figure 4.3-61. Deloitte Methodology by Testing Types.

5. Test Environments and Data Creation

The environments used for various testing types can be integrated, stand alone, dedicated, or shared. In coordination with the Infrastructure Manager, the number of required environments as well as the type of environments are outlined and reviewed for the WV HSP solution. The following table highlights the test environments and our approach for creating test data in those environments. Each test environment will have a clearly defined defect resolution process and a well-defined exit criteria to ensure successful completion of testing in the environment.

Test Environment	Approach for Test Data Creation
Unit Testing/Iterative Functional Testing	• Unit test data is manually generated for the custom developed modules, according to their intended function. • Test data is generated to trigger a variety of inputs and possible outputs to the module.
System Integration Testing	• System Integration Test data is created manually to test the interfaces of systems interfacing with WV HSP. • Data is generated to portray the typical system interactions of WV HSP.
Performance, Volume and Stress Testing	• Initial test data is created manually by executing a set of fully-expanded functional scenarios that may impact the performance. Data is also loaded in the performance test environment from our data conversion to give the flavor of production volume and data variation. • Performance under numerous volume/user load scenarios is simulated ranging from normal operating usage, to heavy peak hour usage to extensively test the specific components. In addition, the application is subjected to higher than expected user volumes to the point of system failure to identify system threshold and breaking points.
Conversion Testing	• Conversion test data will be duplicated from existing data in the WV DHHR legacy applications. • This data will be tested through loading into WV HSP and the other interfacing applications where conversion will take place.
User Acceptance Testing	• Initial test data is created manually by executing UAT scenarios with different flavors and automation tool is utilized for creating intake applications. • Data is also loaded in the UAT environment from our data conversion to simulate production volume and data variation. Given the PII considerations, data in UAT environment is usually scrubbed using data masking techniques.
Operational Readiness Testing	• ORT test data will be established as production-like data to test production readiness. • Data is used to execute test cases that mimic production behavior • Pilot testing will be conducted during ORT including testing of system components that affect external system users, such as web portals, Web-based software, and data entry by other vendors

Test Environment	Approach for Test Data Creation
Training	• Initial test data is created manually by executing a set of test scenarios aimed at replicating real life production scenarios to provide a realistic training experience.
Disaster Recovery Testing	• Disaster Recovery test data is a copy of production data replicated from the Primary site to the hot Secondary site. These tests are designed to test the Disaster Recovery process.

Figure 4.3-62. Test environments description

Once a test environment is set up, Deloitte supports each test environment throughout the testing phase and manages communication with key stakeholders regarding environments unavailability in case of upgrades or deployments.

6. Testing Methodologies

Deloitte's structured Testing methodology is strictly based around the rigid testing processes listed below:

Test Process	Approach
a. Management of Testing Processes	• Use guidelines and practices provided by our EVD for SI methodology to cover aspects of testing.
b. Requirements Traceability	• Use of Requirements Traceability Matrix and Detailed System Design to validate linkage from testing to requirements • JAMA used as a comprehensive test management tool, mapping requirements to test cases creating bi–directional traceability. • Design documents and requirements are located in the tool and linked to corresponding test cases.
c. Automation of Functional Testing	• Automation test scenarios are selected based on key user functions and are automated for execution during subsequent phases of testing • Automation scenarios are identified by reviewing high volume transactions and/or business critical scenarios. • Use risk based testing approach to identify scenarios which are most important • We also review highly utilized screens for testing the application • Create automation scripts for bulk test data creation.
d. Test data development through sample preliminary converted files	• Data is loaded based on size and intended use of the testing environment. If existing data from production environment (i.e. converted data) is to be used, Personally Identifiable Information (PII) is removed. • Converted data goes through additional validation to check data integrity and completeness. • Test data is loaded into the testing environments prior to the start of the initial test phase. Automated test scripts are also used to create new and bulk data.
e. COTS Product Testing	• COTS products which are part of WV HSP are validated using scenarios that test their configuration switches and enable/ disable features. • Defect Identification, Defect Logging, Defect Triaging, Defect Resolution, Defect FIX and Deploy, Defect Retest are done within the COTS product testing.
f. Defect and issue identification, tracking and resolution	• Detailed defect and issue management processes are defined and consistent across each testing phase including: – Defect Definition – Defect categorization, prioritization, impact assessment and defect reproduction and documentation – Defect resolution and – Defect closure • All defects are maintained and tracked using JIRA • Continuous monitoring and reporting of defects and resolution progress

Test Process	Approach
g. Documentation Updates	• Manage documentation updates based on whether they are Controlled Items or Managed Items. • Controlled items are DHHR deliverables that need version control as well as DHHR approval once a baseline is created. • If these documents need update, they go through a change control process for creation and approval. • Managed items are working documents that do not require a strict approval process, but are version controlled.
h. Problem Handling	• Use weekly status reporting to notify DHHR for the progress made, key accomplishments, milestones reached and highlight issues, risks noted. • Critical issues which are identified as showstoppers during test phases, are discussed with DHHR on day to day basis with its root cause and a resolution plan.
i. Test Results Reporting	• Follow our EVD approach for preparing and delivering test results based on the deliverables milestones. • Status reports are shared highlighting progress of test execution, and issues encountered. • Testing progress metrics are generated for each test phase including SIT and UAT and is shared with DHHR.

Figure 4.3-63. Testing Methodologies.

7. UAT Support Approach

User Acceptance Testing is a crucial part of the development and delivery of this system. Key elements of successful testing are planning, preparation and execution. The test planning process involves establishing concise entrance/exit criteria, accurately defining test objectives, tests, and test data and laying the foundation for how UAT is organized. The key deliverables out of this process are formal test plans, tests, test data requirements, and status reports against plans.

Test Process	Approach
a. UAT Plan Development	• Outline the timelines related to the UAT testing • Summarize the overall understanding of UAT scope • Share expectations from each team that contribute to UAT testing • Share UAT processes including defect management, test case execution that impact testing • Review UAT execution assignments and daily execution schedule • Review UAT escalation and issue resolution process • Summarize defect triage schedule and UAT status reporting process
b. Test Data Management and Requirements	• Work closely with DHHR UAT Test lead to understand test data needs and requirements for UAT test execution based on the functional area expertise and align the data set up with the planned test scripts for execution. • As UAT test scripts are created, the test data need is documented along with it in the JAMA test management tool. • Use automated test scripts to create new data and use it in later test scenarios.
c. Results Analysis	• Compare UAT test execution report and defect summary with the agreed upon UAT exit criteria. • Determine mitigation plan if the UAT results do not match with the exit criteria thresholds. • Conduct review of the final UAT exit counts with executive leadership for UAT sign off. • Seek consensus from key stakeholders for Go-Live support.
d. Defect Tracking and Repair	• Follow the approved defect management process described in our response to section 6 in this document. • Defects are tracked with a detailed description of the problem along with the issue type and screen name in JIRA tool. • Each defect is also tied to a test case in JAMA for better correlation and impact determination. • Our team jointly reviews the recorded issues in JIRA to determine if the issue is in fact a defect or a change request.
e. UAT Final Report	• Report on UAT testing cycles • Document defect counts, pass/ fail rates, percent test case execution

Test Process	Approach
	• Final summary of UAT test case execution and defect summary • Mitigation plan for addressing outstanding UAT issues. • Provide written certification letter stating successful completion of UAT and a list of all issues ranked as critical (as defined by the agreed upon defect severity categorization) by the Agency having been corrected

Figure 4.3-64. UAT Support Approach.

8. ORT Reporting

Our approach to Operational Readiness Tracking (ORT) enhances the chances of project success by managing the end-user environment throughout the project life cycle and a focused effort toward the final testing cycle where the end-product is ready for production implementation. ORT provides the certification that the WV HSP, its sub systems, functions, processes, operational procedures, staffing, telecommunications and all other associated support is in place and ready for operation. In the post-implementation phase, the operational checklist is revisited to validate changes are complete and whether they met expectation. The following table outlines Deloitte's approach for Operational Readiness tracking:

Operational Readiness Tracking	Key activities and Benefits to DHHR
Baseline Assessment	• Baseline assessment of Operational processes, structure, and environment is conducted and areas of gap are identified. Next steps and schedules with respective owners are developed and are closely tracked until the production go-live.
Set-up and Readiness Tools	• Pre-assessment success factors help define and track roles and responsibilities, end state, feedback from stakeholder • Implementation checklist defines steps to successfully implement end state • Risk Assessment and Escalation Process mitigates risks and identifies potential impact
Implementation Plan Template	• Comprehensive implementation plan provides tactical descriptions for implementation and change management, risk escalation process, and an operational checklist

Figure 4.3-65. Operational readiness tracking.

The Operational readiness report is shared with DHHR prior to the release going into production, and includes the following:

- Deployment status for application and database
- Status for performing deployment activities
- Status of smoke test and server restarts
- Status of disaster recovery/business continuity test
- Post-production set of activities and their associated owners

In addition to the WV HSP solution readiness, ORT also includes discussion with DHHR stakeholders to assess readiness of DHHR staff to support the roll-out as well as the ability to support the volume and load expected after the roll-out.

9. Traceability throughout Testing

Deloitte uses JAMA as our Requirements Traceability Matrix (RTM) tool and links requirements to the test cases throughout the testing process. Requirements Traceability Matrix mapping confirms that the requirements defined for a system are validated as tested in the testing phase. This allows us perform a comprehensive set of test activities within a single tool including requirements mapping, test scripting and test execution.

4.3.6 Objective: Data Conversion

Our conversion approach minimizes the impact to field workers and automates applicable conversion tasks. Deloitte's in-depth knowledge of RAPIDS and MDM systems, understanding of West Virginia's HHS programs, and lessons learned from the similar conversion efforts in other states position us to collaboratively address challenges and mitigate risks in data conversion and system transition.

Section Highlights

- The Deloitte team brings to West Virginia relevant experience and proven assets from many large, complex, cross functional conversion efforts.
- Conversion processes, methods, and patterns pre-assembled with our Conversion toolkit
- Use of converted data for testing of the system functionality which prepare the data to be "Business Ready"

Deloitte brings to DHHR a clear understanding of how critical data conversion is to the success of the WV HSP project. Deloitte's broad data conversion approach produces an efficient, automated transition while minimizing impact to business continuity. The State benefits from our modern, demonstrated conversion process that has been used for HHS implementations in many states such as New Mexico, Virginia, Kentucky, Pennsylvania and Michigan. We incorporate repeatable development, testing, and implementation cycles in the conversion process, allowing for continuous improvement of data quality and a high conversion rate.

Data Conversion activities for requirements, design, development and testing follows EVD for SI and aligns with the overall solution implementation approach and timeline. Conversion trial runs begin as part of testing phase and continues in the implementation phase. Conversion activities for Production Pilot and Statewide implementation is carried out in the implementation phase. The graphic that follows portrays where this section's activities fit within our overall EVD for SI hybrid agile methodology for the WV IES project and outlines our response to your requirements.

Figure 4.3-66. Deloitte's Approach to Data Conversion.

Deloitte's HHS conversion strategy adopts a model that minimizes disruptions in the caseworker's workflow, and contributes to an effective transition from the existing applications and processes. A high-level view of some critical features and benefits of our approach is described in the following table:

Features	Benefits
Industry standard methodology incorporated with lessons learned from numerous implementations	• Demonstrated approach helps DHHR to address challenges and mitigate risks for data conversion • Assist DHHR agencies, case workers and business partners to effectively transition to WV HSP
Conversion process follows Deloitte's demonstrated EVD for SI Methodology	• Aligns development of conversion software with the solution • Provides effective decommissioning of legacy systems and associated costs • Lowers project risk with phased software implementation approach
Collaborative Strategy and Conversion Planning Approach	• Maximizes input received from State subject matter experts on existing business processes • Increase data business translation accuracy while minimizing potential business continuity disruptions

Figure 4.3-67. Features and Benefits of our automated data conversion approach.

Our Understanding

Deloitte understands how critical it is for DHHR to have the data converted from existing legacy systems to WV HSP in a secure, accurate, complete and timely manner. These disparate systems support multiple human services programs administered by BMS, BCF and BCSE, and have long served nearly three-quarters of the State's population. Clearly, the underlying data in these disparate systems is one of the most valuable assets of the State and it allows the systems to provide the appropriate services to the State's citizens. Effectively migrating the production data increases the reliability of the new system and more importantly the confidence of the end users in the performance of the new system. The State of West Virginia's successful implementation of WV HSP is dependent upon a data conversion effort that keeps quality at its forefront. The conversion of current case and participant data plays a significant role for the worker in being able to continue the provisioning of services to the family, and is important for state/federal data exchanges.

In Deloitte's experience, the quality of legacy data is a critical factor in successful conversion. Loading poor quality data into WV HSP could result in incorrect business decisions and may be more difficult to correct later. In order to improve and maintain the quality of the legacy application data, the conversion strategy must include a methodical data cleansing process. Data Cleansing is the process of reviewing and maintaining legacy application data so that it can be converted into WV HSP without intervention at final conversion time. Cleansing of the data must occur prior to loading it into the Production environment.

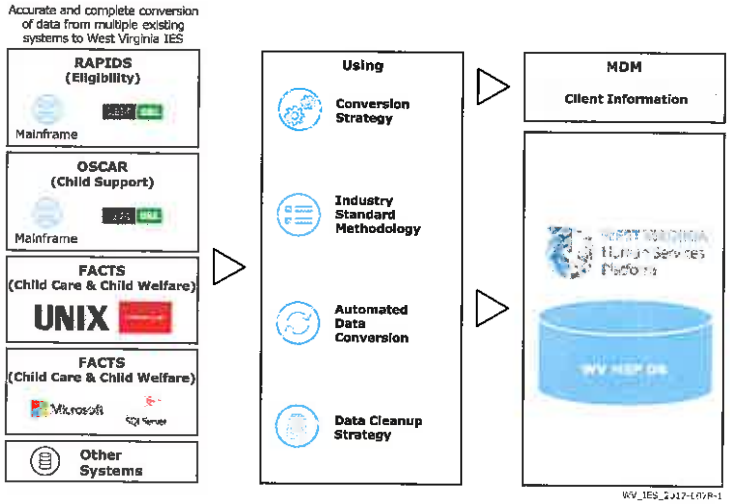

Figure 4.3-68. Our Understanding of Conversion Requirements.

Our Approach

The Deloitte team brings our tested conversion approach to migrate your data to meet the business needs of the WV HSP solution. Our methodology and approach meet the requirements and needs of data conversion objectives for the WV HSP implementation. Deloitte's approach to data conversion is an efficient, automated transition while minimizing impact to business continuity. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

Figure 4.3-69. Key Components.

Technology Platform Modernization does not require a traditional data conversion as the platform is upgraded with a one-to-one automated modernization approach. Our EVD for SI approach leverages existing toolsets and methodologies to migrate the data from the legacy mainframe platform to the modernized open systems platform with a one-to-one migration reducing the need for additional data analysis and cleansing required during traditional data conversions.

Data Conversion Strategy and Approach

The Deloitte team uses a conversion strategy incorporating industry standard best practices that have been successfully employed during our previous HHS implementations. These best practices are utilized to guide conversion efforts associated with new system development projects. Our data conversion strategy incorporates the following general guiding principles and best practices to address the unique aspects of the WV HSP data conversion.

The following table summarizes features and benefits provided by our data conversion Strategy.

Figure 4.3-70. Deloitte's conversion strategy.

Features	Benefits
Industry Standard Methodology	• Demonstrated approach helps DHHR to address challenges and mitigate risks for data conversion • Assist DHHR agencies, case workers and business partners to effectively transition to WV HSP • Accurate, complete, and easy-to maintain data mapping confirming quality conversion results
Automated Processes	• Optimized conversion processes • Reduction of execution errors and required person hours
Collaboration with DHHR Agencies	• Maximizes input received from State subject matter experts on existing business processes • Increase data business translation accuracy while minimizing potential business continuity disruptions • Control of the conversion process and reduced confusion amongst stakeholders
Iterative Development and Testing	• Aligns conversion development with the application development approach
Support Implementation, Training and Business staff	• Both the technical team and the business users are prepared for WV HSP implementation • Confirms that Training material is developed with data conversion
Continual Improvement of data quality	• Improved conversion data accuracy with each cycle • Reduced manual data conversion effort

Figure 4.3-71. Features and benefits of our conversion strategy.

Deloitte's industry standard conversion methodology will be used to guide the project team through the conversion life cycle. This approach has been carefully honed through successful conversions in at least 15 states for similar implementations. At each stage of the life cycle, the methodology defines what activities have to be completed for a smooth and successful data conversion for the WV HSP. We apply a risk-based data quality strategy to resolve data related issues efficiently and effectively. By prioritizing data remediation for high risk areas (data that directly

impacts conversion/business objectives), we achieve an increased level of data readiness before integration testing begins. Our conversion approach implements the key components of the conversion strategy and our description of that approach is organized as follows:

- Data Quality Analysis and Cleanup
- Data Mapping
- Automated Data Conversion Process
- Conversion Testing
- Production Conversion Runs
- Conversion Tools

Data Quality Analysis and Cleanup

Based on our experience, the success of a data conversion correlates to the success of the entire system replacement exercise. We plan data readiness activities that include data profiling, business rule analysis, cleansing and remediation, and conversion validation to confirm that the data converted to the WV HSP is of high quality. A common trait of successful and on-time projects is for the project to take a proactive approach in understanding how "ready" their data is for the new system and provide the appropriate attention to determining whether the data is of the appropriate business quality. In addition, project case studies often reveal that last minute efforts to address data issues are often not cost-efficient and can lead to other unexpected issues. The following table summarizes the available automated data validation checks the Deloitte strategy intends to implement for the WV DHHR IES solution. These checks are implemented when business rules can be defined and decided. The checks address data integrity problems that arise from missing fields, incomplete data, duplicate data, incorrect data, and non-standard characters in standard fields.

Data Validation Checks	Description
Missing Values	Missing data values such as first or last name, SSN, address fields, and dates
Incorrect Data	Non-standard character in standard fields or cases where character data populates numeric fields (or vice versa) such as incorrect date format, etc.
Duplicates	This involves duplicates between the same instance of a source system or across instances of multiple source systems.
Integrity Issues	These data errors pertain to records in one file having more than one record in another file or other such data issues, which require integrity and business logic to detect and cleanse.
Business Functionality Related Discrepancies	This sort of data problem is specific to a way a particular source system user completes various business processes. The data might appear acceptable from a data discrepancy standpoint but may be inconsistent with how the standard business processes should be performed. For these data discrepancies, we work closely with the subject matter specialists to resolve the issue.

Figure 4.3-72. Data validation checks.

We apply a risk-based data quality strategy to resolve data related issues efficiently and effectively. By prioritizing data remediation for high-risk areas (data that directly impacts conversion/business objectives), we achieve an increased level of data readiness before integration testing begins. As we have done for other states during the data clean-up effort, the Deloitte team works with the DHHR's SMEs during the data cleanup activities to determine the required support for each county/office.

Data Cleanup Activities

The Deloitte team uses our demonstrated data quality methodology to provide a risk focused, cost efficient approach to address data cleanup and preparation activities associated with the implementation effort. Key phases of our data quality approach include a data quality risk assessment, data quality analysis (profiling, business rule based analysis), remediation, conversion validation, and sustainable processes.

- **Data Quality Risk Assessment.** This process establishes the scope, extent, and prioritization of the data. It begins by producing an inventory of key source data and identifying key risks associated with the data from an operational, financial, legal/regulatory, and project risk perspective.
- **Data Quality Analysis**. This is the first step taken to assess the overall health of the data. In addition to performing profiling that is focused on understanding the attributes and relative level of quality of the data, a business rule based analysis is conducted to capture formal and informal practices, policies, guidelines and systems requirements. Legacy data sources are then evaluated against these rule-sets. Deloitte will work with DHHR to complete a high-level plan for DHHR to complete this activity as they are intimately familiar with the data, its sources and its deficiencies.

Figure 4.3-73. Data Clean-up approach.

- **Data Quality Remediation.** This addresses identified data quality issues and typically includes a combination of multiple activities including automated business rule-based cleansing, standardization, de-duplication, and manual cleansing activities. For each data source that is eligible for automated data cleansing due the ability to document defined business rules, a detailed data remediation report is produced and outlines the data quality exceptions along with the appropriate data cleanup tasks for the object. This report is generated periodically to monitor the data cleanup progress. Deloitte will work with DHHR to complete a high-level plan for DHHR to complete the manual cleansing activities.
- **Data Conversion Validation.** During this activity, we confirm that the data has been loaded correctly between the source extraction files and the target system, providing accountability for records in the legacy systems.
- **Sustainable Data Quality Monitoring**. This is performed to validate that once data quality standards are achieved, they are sustained throughout the entire conversion process, which is done so through the timely identification of various conditions and factors that may affect data quality.

Data Mapping

Deloitte works with the State to understand what data is available to be converted to the new solution. The teams may use detailed logical and physical data models for the legacy system and IES. Developing a thorough data mapping from the legacy system to the target provides the foundation for the data elements that are captured in the new system. As DHHR is intimately familiar with the source systems and their data structures, Deloitte will work with DHHR to complete a high level plan for DHHR to complete the data extraction, mapping and transformation of source data to the required format for the new WV HSP solution. In our prior conversion experience in several states, we have used a proprietary data-mapping tool that allowed us to track each element of the extraction files, the corresponding values of the new system, and information describing how a particular data element is to be translated from the extraction file to the new system. The translation between the data values of the extraction file and the new solution are clearly defined and leads to efficient and stable execution of the data conversion process.

The previous figure displays our custom data-mapping tool that we bring as part of our project to assist in the data conversion effort. This cross-reference matrix allows us to map, in detail, the data conversion path of the individual data element from the extraction files to the target system as well as the associated data conversion rules. This matrix also becomes the basis for a detailed data dictionary that fully documents the extraction file versus the target system cross reference and becomes the living data dictionary used for the length of the engagement. The data mapping tool is also used to define data validation rules which determine the criteria for cases to fail conversion.

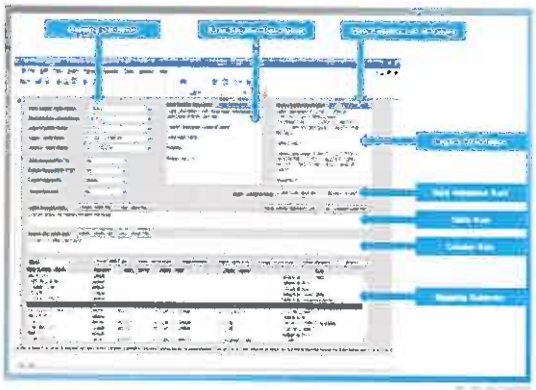

Figure 4.3-74. Data mapping tool.

Automated Data Conversion Process

Automated Conversion software plays an important role in the overall conversion effort. It significantly reduces errors as well as the required person hours by translating the various legacy system extraction files into a common format that is ready to be loaded into the IES solution.

The following figure shows a sample eligibility conversion process that is designed and built into automated conversion software. The legacy data flows from one conversion process to another and reaches to the target WV HSP database.

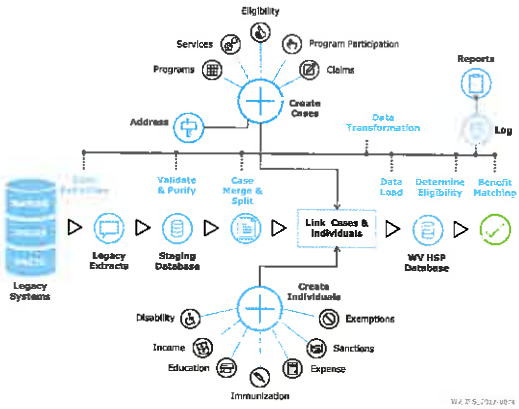

Figure 4.3-75. Automated Data Conversion Approach.

Conversion Software Development

The Data Conversion process primarily consists of performing ETL (Extract, Transform and Load) between the legacy extraction files and the target systems. Deloitte recommends using Oracle Warehouse Builder to support ETL process. Oracle Warehouse Builder provides a graphical user interface and a suite of tools specifically geared to a large-scale data conversion.

We focus on transforming data using the intuitive drag-and-drop interface. Since data mappings are constructed in the format of a flow chart, business analysts can easily review and understand how the conversion process works. This plays a critical role in confirming that the entire Conversion Team is on the same page throughout the systems development life cycle.

Conversion Testing

The readiness of conversion software and the converted data is measured based on 4 aspects of the conversion described in the following table.

Testing Aspect	Our Approach
Completeness	• Conversion reports are produced at each phase of the conversion process to validate numbers are tallying • SQLs scripts to validate the number of records loaded into each table • Validate the required legacy data is converted into IES and End-to-End conversion processes are executed successfully
Accuracy	• Establish dedicated Conversion test environment and Test with the real data (with masked PII/PHI data) • Involve SMEs to compare converted with legacy data using application screens

Testing Aspect	Our Approach
Functionality	• Test with the converted data • Validate Online screens are able to display the converted data and Screen navigation works appropriately when using converted cases • Validate Common business functions such as eligibility determination, case changes and renewals can be performed and critical interfaces can be run
Performance	• Validate duration of end-to-end conversion processes • Use Conversion environment for initial testing • Fine tune SQL queries/ETL code

Figure 4.3-76. Conversion Test Approach.

Based on our prior conversion experience for HHS implementations in other states similar to the requirements for West Virginia, effective tools and procedures are needed to track and report different steps in the conversion process. Our Conversion approach incorporates many checks and balances throughout the conversion processes to ensure that no data is lost in the process. The following reports are recommended for the IES conversion and additional reports may be provided based on discussion with the state's conversion team.

- Extract Control Report
- Validation Failure Report
- Conversion Result Report
- Reconciliation Reports for Child Support and Child Welfare
- Benefit Match Report

Trial Conversion Runs

This phase involves defining the conversion trial run schedule, preparing the environments for the conversion, executing the conversion programs and other cutover activities, validating results, and generating exception reports and preparing for the final execution of the conversion. The exception reports generated from the trial conversion are also shared with field workers and legacy staff to perform cleanup. Deloitte works with the State to determine an appropriate trial conversion plan and schedule that aligns with either the pilot or statewide conversion schedule. Trial conversions are performed multiple times prior to the production rollout to validate the conversion software and processes that are used in the live data conversion run.

Production Conversion Runs

The Implementation phase of our methodology includes cutover planning and execution. As the conversion software becomes more stable and robust through the various rounds of system testing, UAT testing and Trial Conversion Runs, Deloitte will begin preparing for the production conversion run. The production cutover run is a series of coordinated steps that include more than just the conversion processes.

- **Preparation & Maintenance of the Implementation Playbook.** The Implementation playbook contains the tasks required leading up to and for performing the conversion and implementation of the release. These tasks are jointly administered by Deloitte and State. The playbook provides stakeholders the estimated time to complete the conversion of data from source to target database.
- **Execute Conversion (Go-Live).** As final data conversion executes, exceptions will be written to a report (with codes and explanations) for review by State. Comprehensive summary reports will also be provided with detailed balancing metrics. The detailed report will contain a cross reference of legacy and new case numbers.

Conversion Tools

We use the following tools to convert legacy data:

Activity	Tools
Data Profiling	• Oracle Warehouse Builder ETL, IDQ, SQL
Data Transformation and Load	• Oracle Warehouse Builder • JAVA – for complex rules and iterative data processing • PL/SQL – stored procedures
Data Mapping	• Deloitte Data Mapping Tool (MS ACCESS) – to document extraction file to target mapping • MS EXCEL – Reference code value mapping

Figure 4.3-77. Conversion Tools.

Source System Identification

As part of the data migration strategy, one best practice is to conduct a Legacy Study and identify legacy data sources. This activity is conducted jointly between Deloitte and DHHR subject matter experts identified by the State. Our experienced analysts bring to the table the knowledge to ask the right questions in this activity. The Legacy Study is conducted with a background understanding of the WV HSP entity model.

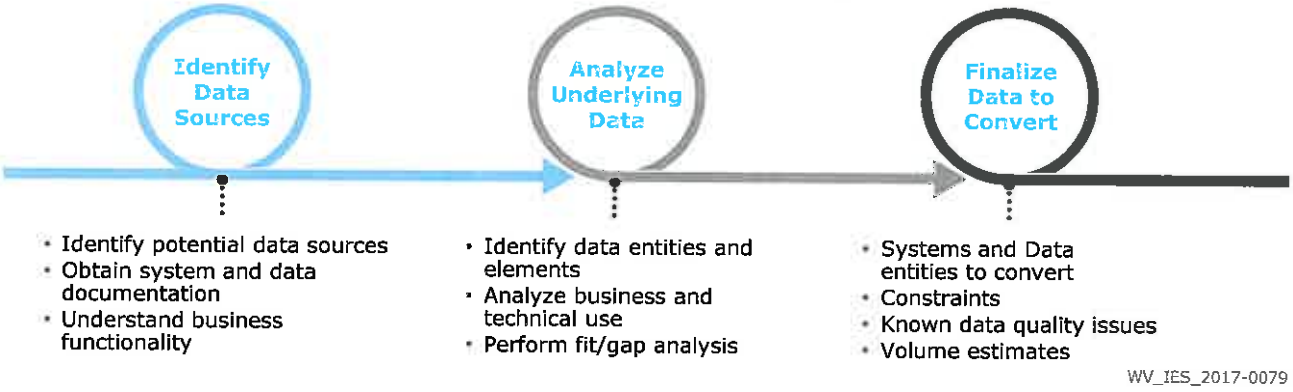

Figure 4.3-78. Process for source system analysis.

Deloitte understands that data is converted to WV HSP from multiple legacy systems that include:

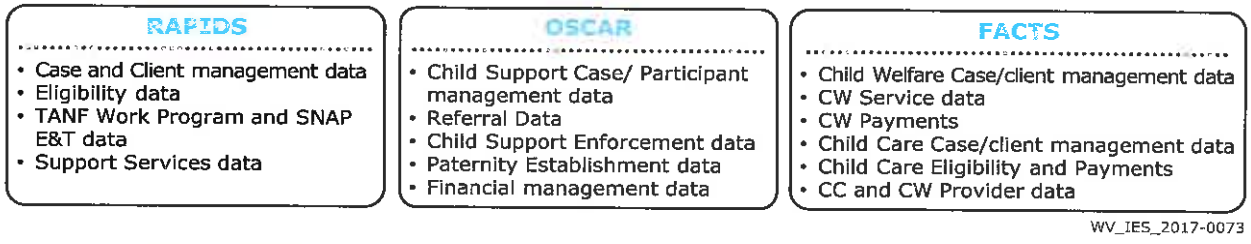

Figure 4.3-79. Source Systems.

There may be other systems identified during the current state analysis of the Legacy systems that require conversion to support the approved requirements of the new WV HSP solution. During the data conversion process, it is essential that the data stored in legacy be converted to WV HSP at a level that does not put a strain on how DHHR agencies perform their business operations. We have worked with other states similar to West Virginia to define a data conversion scope that migrates the necessary data from legacy to a new HHS system.

Once the systems are identified, we additionally look at the functionality and processing of each system. In order to define the conversion events, it is imperative that we document and understand the batch scheduling of the legacy systems. Our process for data conversion takes into account the timing of when certain updates take place within and across legacy applications in order to correctly plan data conversion events. The following table shows the data analysis technique that we follow to study the legacy systems data.

Key Activity	Purpose	Steps we follow
Domain Identification and Analysis	• Identify what information is stored in the legacy system and how this information is stored and used by business processes.	• Work with DHHR to identify legacy data sources • Identify business processes that interact with the data within the data model. • Define business domains (or functional areas) and categorize the data into these domains
Apply criteria for conversion candidacy	• Identify whether or not the data domain has to be converted	• Identify and analyze legacy domains for usefulness in the new system • Identify and analyze the new system domains • Work with DHHR to compare the domains for both the systems to identify the legacy domains not required in the new system
Entity Analysis	• Analyze new system entities and how they map to legacy domains	• Identify data entities in each functional domain and relationships among them and classify the entities based on the nature of data. For example, Master, transactional and historical. • Include or exclude data entities and elements from the data conversion scope and document reasons for inclusion or exclusion

Figure 4.3-80. Our data analysis technique.

Deloitte employs these data analysis techniques to identify and analyze the sources and underlying data for conversion candidacy. This analysis results in further refining and validating the data conversion scope that aligns with the functionality to be implemented in WV HSP.

Data Conversion Plan

Deloitte recognizes that planning is the most important step to a successful data conversion. Our large investment in Data Conversion planning drives successful implementation—a strategy we followed in our success stories with other HHS system solutions, most recently for clients in Kentucky, New Mexico, Virginia and Connecticut. The main output of conversion planning is a detailed data conversion management plan. The data conversion management plan presents a detailed strategy outlining the methods by which the legacy data is successfully incorporated into IES. The input for many of the sections of this plan come from detailed JAD sessions with SMEs for each of the systems from which data is to be converted. This plan is updated as each phase of the conversion effort progresses.

Develop Conversion Plan Deliverable Expectation Document

It is particularly important that the Conversion Plan is comprehensive and constructed with input from the State. We begin with preparing a Deliverable Expectations Document (DED). This DED describes the content and format of the Conversion Plan, including Objectives of the plan, the outline of the plan, description of the content that is included in each section of the plan and version controlling characteristics of the plan. Deloitte brings our breadth of experience to develop a data conversion management plan that fits the needs of the WV IES project. The conversion plan for WV HSP needs to consider the multiple tasks and activities involved with the conversion process as well as implementation activities, including the impacts to local offices. We work with the DHHR staff to design a data conversion management plan that minimizes the impact to the business, such as working with the DHHR staff to schedule conversion runs over the weekend as opposed to during the week when normal business is conducted. If there are impacts to the local offices operations, we communicate these items to the State so that we can collectively determine the appropriate course of action. Also, as the conversion plan is refined, we update the data conversion management document to reflect the most accurate information. When planning, we work closely with the State to identify these potential "pain" areas and develop strategies for automated correction wherever

reasonable. Our Plan details Deloitte's strategy to convert agreed upon data from legacy applications. The plan includes our strategy for defining the scope of historical data, its appropriate place in IES, and our approach for moving it over to the new database.

This Conversion Plan focuses on the policies, procedures, and activities required to complete conversion for pilot and statewide implementations of WV HSP, including identification of software and procedures that result from parallel operation of system. This document presents the approach and methodology for the WV HSP conversion. This document also identifies the impact of the Conversion process on other project development efforts. This plan is updated as each phase of the conversion effort progresses. We have used our data conversion approach to support many successful HHS implementations. We bring our lessons learned from these engagements, our industry experience, and our technical experience to perform an accurate data conversion from legacy systems to IES. As part of our response we are also including a comprehensive, initial draft deliverable Data Conversion Plan in Appendix C and the below table maps the conversion plan requirements in RFP to the conversion plan section.

Conversion Plan Requirements in RFP	Key Factors to WV IES Success	Refer to Section in the Data Conversion Plan in Appendix C
1.a : Data Conversion Plan Updates	Maintaining an up to date Data Conversion Plan facilitates communication across multiple stakeholders	Scope
1.b : Conversion Programs, Tools & Extract Routines	Deloitte brings a suite of tools specifically geared and proven to work in a large-scale, cross HHS program data conversion	Conversion Development
1.c : Validation of Data Conversion software	Automated Conversion software significantly reduces errors and the required person hours by translating the various legacy system source data into a format that is ready to be loaded into WV HSP	Conversion Test
1.d : Data Conversion Contingency Planning	Addresses risk possibilities such as the conversion process does not successfully complete within an acceptable time frame	Contingency Planning
1.e. : Data Conversion Results Validation	Measures accuracy and quality of the data post-extraction from the legacy systems	Conversion Test Approach to parallel system operations
1.f : Data Cleansing & Data Conversion Specifications Document	Data Cleansing identifies data related risks, and prioritizes assessment and cleanup activities based on risk-analysis	Data Cleansing
1.g : Data Conversion Test Scripts	Scripts are developed for completeness, accuracy, functionality and performance	Strategy for Data that do not convert
1.h : Support for UAT of Converted Data	UAT of Converted Data allows end users to confirm accuracy of the conversion	Support for UAT
1.i : Updating Data Conversion Requirements Document	Data Conversion Requirements mature and are iteratively refined	Conversion Strategy and Planning Conversion Design
2.a : Trial Conversions	Trial conversion runs confirm the conversion plan are accurate, the data conversion logic is high quality, and project the data volumes and conversion runtimes by data source.	Trial Conversion Runs
2.b : Results reporting and analysis	Conversion reports illustrate the effectiveness of the conversion process	Conversion Reports
2.c : Verification of pilot implementation data	A defined set of verification checks to be executed against the pilot data	Verification of Implementation Data
2.d : Verification of system-wide implementation data	A defined set of verification checks to be executed against the system-wide data	Verification of Implementation Data
2.e : Strategy for data that does not convert	Defined business processes to handle cases with exceptions during the conversion run	Strategy for Data that do not convert
2.f : Data Conversion Test Script Development	Deloitte develops test scripts to assess the thoroughness of the data conversion	Conversion Test

Figure 4.3-81. Data Conversion Plan.

4.3.7 Objective: System User Training

Training for a system with the size and complexity of the WV Human Services Platform (WV HSP) Solution requires a multi-faceted and thoughtfully-constructed approach. Combining industry-leading technology adoption methodologies with our extensive experience in Health and Human Services training, Deloitte drives results to promote and support successful user adoption.

Section Highlights

Deloitte's training is an important differentiator among systems implementation firms. We know that:

- Training and adoption of the WV HSP is a measure of success
- Leveraging proven methodologies improves training consistency and outcomes
- Putting workers at the forefront of curriculum design and establishing a clear understanding of their training needs is an essential first step in creating effective training

Our Understanding

We recognize that training is a critical element for the successful implementation of the WV HSP solution. Preparing stakeholders for implementation requires the users to have an understanding of new system functionality and how to use the technology for their day to day operations to continue delivering benefits to clients. A strong understanding means the workforce will continue to meet federal timeliness requirements and improve outcomes for children and families. A successful training program provides end-users with a comprehensive understanding, facilitated hands-on practice with the system, and personal confidence in their abilities to work effectively and problem-solve using critical thinking and system resources.

Our Approach

To prepare users to adopt the WV HSP solution, Deloitte takes the lead to drive the development of the training program. We leverage our Enterprise Value Delivery for System Integration (EVD for SI) methodology, which was defined, developed, tested and refined though our technology adoption experience nationwide. We combine it with program insights and leading practices for collaboration and development to produce a tailored training plan that promotes the effective transfer of learning. In accordance with our EVD for SI methodology, the development of training materials is completed in coordination with system development. Delivery of training is completed prior to Pilot and Statewide go-live to enable training of users close to go-live to increase retention. A comprehensive Train-the-Trainer approach involves West Virginia trainers throughout training review and delivery to provide the comprehensive, hands-on experience they need to successfully deliver ongoing post-implementation training. Deloitte's approach to user training is critical to effectively prepare users to adopt the WV HSP solution. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

Figure 4.3-82. The Primary Components of System User Training.

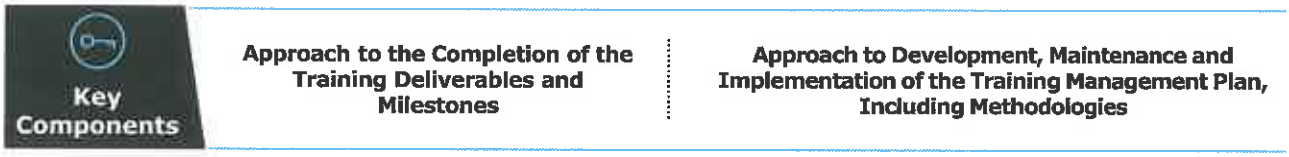

Figure 4.3-23. Key Components.

1. Approach to the completion of the training deliverables and Milestones (as listed in RFP Appendix II, including methodology for updating deliverables throughout the life cycle of the project)

The Deloitte training program begins with the development of a robust and actionable Training Management Plan. This plan serves as a roadmap for effective development and collaboration efforts and addresses DHHR's Training Management Plan requirements (D009) including the approach for formulating the Training Schedule (D071), Training Materials (D072), and a Training Report (D073). Deloitte delivers training activities based on the DHHR's approved version of this plan. Based on approved changes managed by our change control process, Deloitte updates the plan at least quarterly to reflect those approved changes or enhancements to the project scope. An Updated User Training Plan (D070) will be included in these updates. Deloitte's EVD methodology training reflects the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) model of instructional design and development, a process widely recognized by instructional designers for supporting the development of effective training. Each ADDIE phase includes specific activities based on the following principles, enhancing the learning experience.

Phase	Key Activities
Analyze	• Perform audience analysis by documenting processes and mapping them to job roles • Create training profiles for identified job roles • Develop the User Training Management Plan and training schedule • Confirm delivery method for required training content (e.g., Web-based vs. classroom)
Design	• Establish objectives for each training course • Develop course outlines • Design course evaluations and learning assessments • Develop Web-based training storyboards
Develop	• Develop Web-based and classroom training materials • Develop course evaluations and learning assessments • Conduct dry-runs and Train-the-Trainer sessions • Prepare training environment and create training data • Configure the Training Module • Test effectiveness of training content and make revisions as required
Implement	• Deliver the training program • Deliver Web-based and classroom training
Evaluate	• Evaluate training effectiveness

Figure 4.3-84. Phases of the ADDIE Model.

2. Approach to development, maintenance and implementation of the Training Management Plan, including methodologies of the following:

Our experience working across numerous states in training for Deloitte HHS implementations teaches us that the best approach to developing, maintaining and implementing the Training Management Plan prioritizes collaboration and focuses on achieving a shared vision for the desired outcome. Each phase of work starts with Deloitte facilitating a discussion with the right stakeholders coming to the table to identify the needs of the organization and the capabilities required to meet those needs. In this manner, the team makes critical decisions around developing, maintaining and implementing the training. The Training Management Plan sets the overall direction for training and includes training goals, expectations, methods and schedules. This deliverable includes at minimum the components shown in the graphic below.

Figure 4.3-85. Components of the Training Management Plan.

a. Assessment of internal and external training needs, including gap analysis

West Virginia's training audience is a diverse and expansive group and it is critical to understand the needs across the board to design effective training. Deloitte leverages tools to identify user training needs, working with DHHR leadership to collect information about the various user audiences, starting with leveraging the State's existing workforce data and then supplementing it as needed with additional data collected via mechanisms such as focus groups, surveys, discussions with program managers/consultants or user group interviews. Data points include worker counts by title and location, job categories and descriptions, combined with an inventory of system functions mapped to roles. A key output from the training needs analysis is a role profile for each identified audience group. The role profile is a critical reference used in later phases of the project by our training team to validate training requirements and confirm content for training materials. Deloitte also assesses the degree and severity of change from the old system to the new one. We will analyze the business processes that will be impacted, the strength of internal supports (communications, super user communities and local office trainers for instance) and the organization's prior experiences responding to major change in order to develop a qualitative view of the organization's training needs that complements the quantitative assessment. This combined analysis forms the foundation for developing the Training Management Plan reflective of the needs of the DHHR's workforce, building upon the DHHR's existing knowledge base, and providing a baseline measure to gauge training effectiveness.

b. Approach to user training, supporting IES business processes identified by the RFP

Deloitte's training approach includes Web-based, live, and Video-based training to support WV IES business processes. Our approach reflects our experience that the impact and learning retention are greatest when training allows users to understand how a system has been designed to reflect policy, to practice using its features for typical day-to-day activities, and to hear how the system fits into the new business processes. Presenting system, business, and policy references holistically along with clear step-by-step system instruction allows workers to understand and embrace the new system landscape. Furthermore, great training is not static or repetitive; we know, and adult learners tell us, they retain information more efficiently when exercises are realistic, complex, engaging, interactive, and varied.

Figure 4.3-86. How the Deloitte Training Team Merges Inputs to Design the Training needed to Support the IES Business Processes.

The Deloitte training team leads course and scenario design sessions that merge inputs from new IES business processes documented throughout DDI, West Virginia (WV) Subject Matter Experts (SMEs), and the technology team to produce comprehensive trainings that support IES business process.

c. Delivery of end-user training throughout the DDI phase

Our delivery plans are built around key milestones in the pilot and statewide go-live implementation schedules. For Integrated Eligibility and Child Support, we will deliver two waves of training for each Phase (1 & 2) timed to the pilot and statewide go-lives. For Child Care and Child Welfare, training will coincide with pilot and statewide go-live. The details of the curriculum are shown under Section D (Development and use of online tutorials, online help, online policy and procedures manuals, hardcopy user manuals for training delivery), Section E (Development and use of Live, web and video-based training) and Section I (Planned curriculum). The structure, however, of the delivery of ongoing training throughout DDI and Operations phases is as follows.

For the Virginia Case Management System (VaCMS), Deloitte developed and implemented over 15 Web-based training modules to support 3,000+ state Medicaid and Benefit Program employees in 120 offices across the Commonwealth. The multi-phase schedule required developing more than 10 days of course curricula which workers took "a la carte" according to the programs they supported.

For each Pilot Go-Live milestone, Web-based trainings are posted in the training module where they are taken as preparation for classroom training by Pilot participants. Classroom trainings, which are centered on realistic hands-on scenarios and that offer ample opportunity for question and answer with the instructor, occur in the immediate lead-up to Pilot start. These include, within their course design, lessons on using the online performance support elements (online help, online tutorials, policy, and procedure manuals). For Classroom training delivery, Deloitte finds that pairing one system trainer with a Subject Matter Expert from the business produces the best results.

Between Pilot and Statewide Go-Live, materials are fine-tuned based on feedback, performance monitoring and, if necessary, significant changes in the system design. Online supports such as Quick Reference Guides (QRGs) and online tutorials are enhanced based on needs observed during Pilot so that they are robust sources of information for the workforce with the production system. For the Statewide Go-Live milestone, the revised Pilot Web-based trainings are posted in the training module where they are taken as preparation for Statewide classroom training. Classroom trainings occur in the immediate lead-up to Statewide Go-Live and include, within their course design, lessons on using the online performance support elements. For the Operations phase, major releases are supported through a combination of updated online performance support elements and release notes.

d. Development and use of online tutorials, online help, online policy and procedure manuals, and hardcopy user manuals for the delivery of training

Deloitte's training approach incorporates documentation and other online user supports into a "one-stop shop." These materials include:

- **System Online Tutorials.** Show workers step-by-step processes through short embedded videos so they can learn by watching instead of reading. Our solution includes 24 on-demand embedded videos (each less than 3 minutes long) for WV HSP functionality.
- **System Online Help.** Provide explanations of fields, procedures and helpful how-to instructions for the WV HSP. Existing online help will be reused where possible. It also includes Quick Reference Guides (QRGs) that provide instructions and information for infrequently performed functions or multi-step tasks. Our solution includes 40 QRGs (each under 4-pages long).
- **Policy and Procedure Manuals.** With content provided by DHHR, the online help system also houses the complete set of policy and procedure manuals so that workers can enjoy one-stop access to business, program and system information. Our solution assumes no more than 300 pages of online help for West Virginia policy and procedures.

- **Facilitator Guides and Data Sheets.** Detailed instructor materials that provide West Virginia state trainers the scenarios, context, and exercise details they need to successfully conduct classroom training during the post-implementation phase.

To produce the WV HSP system training elements, we tailor online materials that have proven successful in our other implementations so we are not starting from scratch. After an iterative process for review, revisions and approval, these materials are electronically embedded within the system so that they are readily available to workers at the time and place of need as they work in the WV HSP solution. We advise against the mass producing hardcopies of the user manuals. While some printed materials can be helpful especially in training, the nature of production release cycles means that printed materials require costly reprinting. Online materials provide easy updates and compelling cost savings.

e. Development and use of Live and Web-based training

We work to develop the optimal blend of training live and Web-based formats to increase learning and retention. For example, system navigation basics are often taught using a Web-based training format. In contrast, complex topics, such as eligibility changes, often require an instructor to tailor the lesson delivery to the employees' skills and needs. Video-based training allows delivery of live instructor-led training over the Internet to large populations of learners when providing quick access to information is important. The graphic that follows shows how live, web and video-based trainings work together.

Figure 4.3-87. How Live and Web-based Trainings Work Together.

These formats feature explanation of key concepts ("Tell Me") and demonstrations of the processes carried out in the system ("Show Me"). Live and Web-based trainings also include hands on exercises ("Let Me Try") which is accomplished through simulated exercises in Web-based training and through sandbox exercises in the Training Environment during Live classroom training. Lessons, where possible, show workers how to perform system functions in the context of a business process and workflow.

- **Web-based training.** These are pre-recorded trainings no longer than 45-minutes that are delivered over the Internet and taken asynchronously. Our solution includes 15 WBTs.
- **Live training.** This is instructor-led classroom training and it is delivered in the lead-up to Pilot and Statewide Go-Live milestones.
- **Video-based training.** These are live, instructor-led trainings conducted over the Internet. They allow for interactions and can be delivered with fewer logistical constraints than live instructor-led classroom training to large groups of people (up to 200 simultaneously).

Our training strategy for WV HSP has been right-sized based on our experience and expectation of case management module user group change adoption learning curve. Our analysis of the WV HSP training needs has revealed our proposed training sessions, itemized below.

Case Management Module User Group	Courses	Number of sessions
Integrated Eligibility	• One dry-run for West Virginia state trainers	• Total of 1 session
	• One Train-the-Trainer session for West Virginia state trainers	• Total of 1 session
	• Six one-hour video-based trainings allocated as needed across the six IE audiences detailed below according to their particular training needs.	• Total of 9 sessions
Child Care	• One dry-run for West Virginia state trainers	• Total of 1 session
	• One Train-the-Trainer session for West Virginia state trainers	• Total of 1 session
	• One 4-day curriculum for eligibility workers	• Total of 20 sessions
	• Two 1-day curricula for specialty staff	• Total of 6 sessions combined
Child Welfare	• One dry-run for West Virginia state trainers	• Total of 1 session
	• One Train-the-Trainer session for West Virginia state trainers	• Total of 1 session
	• One 5-day curriculum for case workers	• Total of 60 sessions
	• Two 1-day curricula for specialty staff	• Total of 16 sessions combined
	• One 2 hour curriculum for providers	• Total of 8 sessions
Child Support	• One dry-run for West Virginia state trainers	• Total of 1 session
	• One Train-the-Trainer session for West Virginia state trainers	• Total of 1 session
	• Eight one-hour video-based trainings allocated as needed across the eight Child Support audiences detailed below according to their particular training needs.	• Total of 8 sessions

Figure 4.3-88. Counts of live classroom training sessions.

f. Target Audience for training

Our approach to training recognizes that training needs to be customized in order to provide the right instruction to the right end users. This is because "one-size-fits-all" training leads to users who lack the advanced skills needed to perform new job expectations after a system change.

For this solution, Deloitte recognizes the wide array of roles and responsibilities who need to be served by the training. To enable a smooth transition to the WV HSP, the training must at minimum address the needs of State staff, vendor staff, clients, providers, and third-party stakeholders who work in the system. During the development of the Training Management Plan we conduct an audience analysis to document the training needs of each audience group including State staff, vendor staff, clients, providers, and third-party stakeholders.

g. Plan to provide or leverage existing State training facilities to perform end user training

We work to identify training facilities that serve the training needs of workers regionally, minimizing the length of travel to the extent possible. DHHR will identify and prioritize the use of state facilities to conduct training (beyond the conference space provided at the Deloitte facility) and we assume that a majority of classroom training will be delivered at these external facilities. As part of our planning process, we anticipate needing no more than 12 sites

per day during peak training delivery to meet the needs of the project. Deloitte has experience working with states to schedule and confirm their facilities for the effective delivery of training. This knowledge allows us to work more efficiently in finalizing locations and schedules for classroom trainings in each region. In preparing for classroom training, we use checklists to proactively manage the sites and confirm their readiness and sustainability for training. Wherever possible, a facility set-up should occur prior to the scheduled training. If this is not possible, we develop a plan for rapid set-up on the day-of.

h. Tools the vendor will use to support training

Deloitte leverages an array of industry-leading training tools and technologies to accelerate the training development and delivery process. Deloitte carefully selects a set of tools that align with the client's needs. This includes authoring tools to make training materials as impactful as possible, as well as delivery tools to engage users spread across West Virginia. The following table describes the tools we use to develop materials and implement training.

Tool Type	Purpose	Preferred Tool Choice
WBT Authoring Tool	Allows development of eLearning materials such as software demonstrations, scenarios, and quizzes, with the ability to publish to a training module for viewing over the Internet.	**WBT Authoring Adobe Captivate**
Embedded Online Help	Allows embedding of user instruction materials within the system.	Salesforce and HTML
Video-Based Training	Allows for immersive online meeting experiences for collaboration and virtual classrooms.	**Adobe Connect**
Training Module	The training module is the framework that handles aspects of the learning process, including management of training offerings, logistics, reporting, registrations and completions.	moodle
Training Environment and Data Staging Tools	A training environment is a copy of the system code that is staged in a sandbox where workers can have hands-on practice in the system.	Our solution includes a number of case- and application-cloning scripts to streamline the process of staging data for classes.
Classroom Handouts	Materials to improve the learning process and classroom experience and which can be designed as job aids for use back at work.	Microsoft Word and PowerPoint

Figure 4.3-89. Tools Used to Facilitate Training Plan, Develop Training Materials, and Implement Training.

i. Planned curriculum

Deloitte leverages its experience with other states to shape its understanding of the needed training curricula. These experiences help us identify the user groups and roles and to anticipate which system functions will be of greatest importance. Each course is also informed by the business processes that are essential to each user group. We refine the user roles and audiences as well as the training path for each based on the training needs assessment and through collaboration and facilitated training design and review sessions. An initial view of the audiences and relevant topics included in the curriculum is described below for the various program areas.

Integrated Eligibility

Our solution includes one Web-based training (not to exceed 45 minutes in length) and six hours of video-based curriculum allocated as needed across the six audiences detailed below and according to their particular training needs. Below is a list of audiences/user roles and topics we have covered in the past that can be used to accelerate our training development efforts for Integrated Eligibility Case Management module users.

User Role/Audience	Topics
Receptionists	New functionality
Call Center Workers	New functionality
Caseworkers	Interfaces and new functionality
ABD specialists	Interfaces and new functionality
LTC specialists	Interfaces and new functionality
Supervisors	Interfaces and new functionality

Figure 4.3-90. Initial View of the Training Components for Integrated Eligibility Case Management Module users.

Child Support

Our solution includes one Web-based training (not to exceed 30 minutes in length) and no more than eight hours of video-based classroom curriculum allocated across the audiences listed below. Below is an initial view of the audience's/user roles and topics to be trained for Child Support Case Management module users.

User Role/Audience	Topics
Case Workers	Correspondence, Interfaces, and new functionality
Financial Specialists	Correspondence, Interfaces, and new functionality
Locate Specialist	Correspondence, Interfaces, and new functionality
Legal Specialists	Correspondence, Interfaces, and new functionality
Enforcement Specialists	Correspondence, Interfaces, and new functionality
Supervisors	Interfaces and new functionality
Data Analytics and Administrative Specialist	Interfaces and new functionality
Customer Service Specialist	Correspondence, Interfaces, and new functionality

Figure 4.3-91. Initial View of the Training Components for Child Support Case Management Module Users.

Child Care

An initial view of the audience's/user roles and topics to be trained for Child Care Case Management module users follows. Our solution includes 6 Web-based trainings (each not to exceed 45 minutes in length) and 4 days of classroom curriculum. To supplement key learnings training also includes 12 embedded videos.

Audience	Topics
Caseworkers	Intake, Changes & Renewals; Authorizing Child Care Services
Supervisors	Reviewing casework; Reporting
Vendor and Financial Staff	Vendor enrollment and changes; Managing finances
Provider Management Staff	Service Delivery; Provider Licensing; Provider Contracts; Resource Directory
Providers	Provider portal functions

Figure 4.3-92. Initial View of the Training Components for Child Care Case Management Module Users.

Child Welfare

An initial view of the audience's/user roles and topics to be trained for Child Welfare Case Management module users follows. Our solution includes 7 Web-based trainings (each not to exceed 45 minutes in length) and 6 days of classroom training. To supplement key learnings training also includes 12 embedded videos.

Audience	Topics
Community Partners	Using the portal
Providers	Using the portal
Supervisors	Staff Directory; Workload Management; Reporting

Audience	Topics
Caseworkers	Intake; Case Planning; Ongoing Services Management; Person Management; Common Functions; Eligibility
Hotline Staff	Hotline functions

Figure 4.3-93. Initial View of Training Components for Child Welfare Case Management Module Users.

j. Initial Training Schedule

We recommend that instructor-led trainings be completed within 4-6 weeks of Pilot start and within 10-12 weeks of Statewide go-live. Web-based training pre-requisites should be published one month prior to the start of the related instructor led training. This schedule and associated tasks are accommodated in the Project Schedule.

k. Version control and maintenance of training documentation

Deloitte recognizes that training materials development is an iterative process and materials may require updates to stay in synch with system design and to improve course effectiveness. It is also true that these changes often occur simultaneously to the training materials being used (in the case of Web-based trainings) and delivered (in the case of classroom trainings). To allow easy tracking of versions and to confirm the right versions of material are being leveraged according to the time and need, Deloitte applies standard release and date-based file naming conventions to materials. We maintain materials in an organized repository for archiving and centralized access.

l. Training Evaluation, including the use of evaluation survey tools, to determine whether the trainings produced the expected results.

Deloitte recognizes the Kirkpatrick model of training evaluation as the industry standard for gauging training effectiveness. The model features four distinct levels, each of which indicates progress in transforming training-based learning to on-the-job success.

- **Level 1 Reaction.** Measures participants' reaction to the training event. This is monitored through end-of day training evaluations collected through online surveys.
- **Level 2 Learning.** Measures whether participants learned the training material. This is monitored by trainers who observe whether workers are able to successfully complete exercises, can answer in-class game questions and are asking relevant, on-point inquiries about the system and procedures.
- **Level 3 Behavior.** Measures whether participants' behavior changed as a result of the training. This is assessed in part by monitoring processing rates of workers in the production system after Pilot and Statewide Go-Live.
- **Level 4 Results.** Measures whether the training helped the organization meet its objectives. This is evaluated (in conjunction with an evaluation of the system performance) by looking for improvements in case quality or processing rates.

The metrics collected are both quantitative and qualitative in nature and are regularly monitored to provide the training team with feedback that can be used to update training content and delivery methods.

m. Initial and ongoing training outcomes tracking and reporting, including information such as, but not limited to, the number of training sessions, type of training, training locations, number of trainees, and information regarding the actual training results and recommendations for follow-up training

It is critical to measure the progress of training activities and provide insights into the effectiveness of the training program. Deloitte will provide regular read-outs of training progress metrics timed to allow opportunity to course-correct if necessary. Our typical training progress reports capture the following.

Metric	How Deloitte Collects This Information for West Virginia
Progress to schedule	Deloitte manages classroom training registrations and completions, Web-based trainings and attendee counts of live video-based trainings. Completion is compared against target totals and expected pace. This is done through the training module which provides a view of the number of training sessions completed by type, location, and number of trainees In class, Deloitte trainers track attendance to monitor successful attendance or identify students who registered but did not attend.
Material Coverage	Deloitte monitors to track that classroom courses are completed and documents if trainings were unable to be completed due to weather, network issues, illness or other circumstances The training module (Moodle) tracks Web-based training completion rates.
Material Utilization	Deloitte can monitor and measure the frequency with which online resources are utilized by workers in the system and whether portions of those online resources are recommended by workers for enhancement
Training Delivery Quality	Online surveys are used to collect worker evaluations of classroom curriculum and classroom trainers to measure training quality and identify recommendations for follow-up training

Figure 4.3-94. Typical Elements of Training Progress Reports.

Deloitte's decision to choose the Moodle solution as its training module is driven by its superior tracking and reporting functionality. In particular:

- Learning administrators manage the learning catalog and assignments with a simple, yet powerful, interface
- Managers and administrators track compliance training and reduce the risk of non-completion through robust reporting tools
- Allows for customized themes and learning environments via plug-ins
- Supports the latest eLearning standards

n. Approach to supporting 'Train-the-Trainer' activities during the operations phase

Our comprehensive Train-the-Trainer approach gives West Virginia state trainers the opportunity to partner with Deloitte for the development and delivery process. Getting trainers involved at an early stage allows them to shape the content and ensure that they are comfortable and familiar with the materials well before delivery. As part of our Train-the-Trainer approach, West Virginia state trainers participate in collaborative review sessions to provide feedback, refine scenarios, and shape curriculum. They attend a dry-run session where they observe Deloitte trainers deliver preliminary versions of the materials, and a formal Train-the-Trainer session during which they facilitate a classroom training in a safe space supported by Deloitte trainers who offer guidance and coaching. West Virginia state trainers partner with Deloitte trainers through the initial end user training to gain further comfort with the material and how it is delivered and received. West Virginia state trainers fill a classroom support role during the early stages of training, helping to answer student questions and navigate the system during exercises to increase their familiarity; toward the end of the training calendar, they partner with a Deloitte instructor to co-facilitate lessons. This approach prepares and empowers West Virginia state trainers to independently deliver post-implementation classroom training.

4.3.8 Objective: Implementation Readiness

West Virginia benefits from Deloitte's experience implementing complex technology solutions to increase the likelihood of a smooth transition to the WV HSP. We follow the Enterprise Value Delivery for Systems Integration (EVD for SI) methodology for Implementation which has proven effective with numerous eligibility case management solutions, child support enforcement systems, and children's services systems. Further, we have over twenty years of experience delivering technology solutions to West Virginia. Our proven approach coupled with national and West Virginia specific experience results in implementation planning and execution that provides stakeholders a seamless transition to the new technology.

We begin Implementation Readiness activities prior to each go-live by assessing factors such as technical readiness, training, operational readiness testing, and the status of key deliverables from previous phases defined by project leadership. We do this to identify if the system is ready for production and the transition to operations. The Implementation Readiness phase follows the Testing phase and is the culmination of previous phases as well as the beginning of the transition to the Operations phase. The below graphic portrays where this section's activities fit within our overall EVD for SI hybrid agile methodology for the WV IES project and outlines our response to your requirements.

Figure 4.3-95. Implementation Readiness.

Our Understanding

We understand the importance of a thoughtfully planned Implementation Readiness phase to enable a smooth go-live and transition to operations. Due to the complexity of WV HSP, Deloitte confirms that deliverables from previous phases are approved and maintained, users have been trained, testing is completed, and that the conversion of legacy data and deployment to the production environment happens in accordance to established plans. Additionally, the Implementation Readiness phase includes planning and preparations to maintain and operate the WV HSP after go-live.

Our Approach

The main objective of Implementation Readiness is to effectively implement the WV HSP in the production environment and successfully transition to operations. Each go-live involves significant planning and coordination between the development, testing, implementation and support teams, and third party groups such as federal agencies, vendors, and service providers. Following the proven EVD for SI methodology takes dependencies into account to achieve an effective implementation. Deloitte's approach to implementation readiness provides the framework for a smooth transition to the WV HSP solution. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

Figure 4.3-96. Key Components.

1. Implementation Readiness Deliverable & Milestone Completion

An important step in the Implementation phase is to confirm the completion and approval of deliverables initiated in previous phases. The following table includes the approach to completing and updating Implementation Readiness Phase Deliverables and Milestones as listed in Appendix II of the RFP.

	ID	Title	Approach to Completion	Methodology for Updating
✓	D068	Operational Readiness Test Scripts	Receive approval of the representative test scenarios that are most common and of high priority	Based on lessons learned from each release or other projects, mutually agree upon updates to the test scripts
✓	D069	Operational Readiness Test Results	Review Operational Readiness Test Results reports to confirm that pre-defined targets are met or exceeded	Regenerate the report after re-testing
✓	D070	Updated Training Management Plan	Revise the plan based on recent system changes and receive final approval though the deliverable acceptance process	Develop and receive approval, then revisit and update as required.
✓	D071	Training Schedule	Finalize and receive approval from DHHR at least 45 days prior to the start of training. Completion of the training is within 30 days of the last scheduled day of training	Meet with DHHR training counterparts to propose updates or changes and follow the predefined approval process
✓	D072	Training Materials	Classroom training materials are approved at least 10 business days prior to the start of training delivery and web training materials are approved at least 30 days prior to the start of classroom session	Meet with DHHR training counterparts to propose updates or changes and follow the predefined approval process
✓	D073	Training Report	Approve and finalize within 30 days following the completion of classroom training schedule	Meet with DHHR training counterparts to propose updates or changes and follow the predefined approval process
✓	D077	Operations Project Management Plans	Work with DHHR to develop an operations project management plan containing requirements that relate to strategic planning, policy making, monitoring, and oversight activities of the agency	Meet with DHHR operations counterparts to propose updates or changes and follow the predefined approval process
✓	D078	Solution Health Monitoring Plan	Prior to the acceptance milestone, Deloitte engages DHHR to document a Solution Health Monitoring plan	Meet with DHHR operations counterparts to propose updates or changes and follow the predefined approval process

	ID	Title	Approach to Completion	Methodology for Updating
✓	D080	Federal Certification and Review Management Plan	The planning effort begins at the start of the project. The plan is developed before the Child Support portion of the project starts, working with State staff using our past Child Support certification experience in Pennsylvania, Florida, and Oregon and executed throughout	Continually revisit and update as required by Federal OCSE
✓	D081	ACF Certification Documentation	Deloitte documents federal certification requirement compliance through mapping during the requirements definition phase and continues into the functional and technical design, development, and implementation phases. The certification questionnaire responses are started and expanded upon during development. During implementation, the questionnaire is complete and supporting presentation materials are prepared for the federal visit	During each phase, responses are elaborated on
✓	D082	Federal Review Supporting Documentation	Create during development phase and refine during training phase	Revisit and update as required

Figure 4.3-97. Approach to Completing and Updating Implementation Readiness Deliverables.

Our Implementation Readiness activities include a review and validation of deliverables initiated in prior phases to confirm these deliverables are reflective of approved changes. The project management team continues to monitor the progress of planned work, review requested changes or refinements and necessary updates to these deliverables. Furthermore, several deliverables are initiated and approved during the Implementation phase as described below.

Operational Readiness Plan (D067)

As discussed in Section 4.3.9, Deloitte brings broad national experience in delivering operational excellence to case management engagements, including current operations in many states across Integrated Eligibility, Child Care, Child Support, and Child Welfare. The backbone of the WV HSP is the collection of servers, operating systems, network equipment, security appliances, and numerous other infrastructure components that operate in tandem to host and run the solution. As the constant proper functioning of each of these components directly affects the customer experience of the applications, Deloitte understands that the solution must include a comprehensive operations plan. This step-by-step plan outlines pre-go-live and post-go-live activities and are updated and prepared by a series of reviews with internal and external stakeholders. A final approval is received prior to system go-lives and documentation updates are made based on approved requests and lessons learned from past go-lives.

Implementation Plan (D074)

Deloitte works with DHHR to create a broad implementation plan that outlines the steps needed to conduct the cut-over from RAPIDS, FACTS, and OSCAR to the WV IES Solution at go-live, including Day 0 data conversions, security access report implementations, field validations, and post-implementation steps. Also, the plan defines the impact threshold for defects that must be addressed prior to go-live. This step-by-step plan outlines pre-go-live and post-go-live activities and is updated and prepared by a series of reviews with internal and external stakeholders. A final approval is received prior to system go-lives and documentation updates are made based on approved requests and lessons learned from past go-lives.

Cut-Over Playbook (D075)

The Cut-Over Playbook provides the detailed sequence of deployment activities that are being planned and tested to prepare for the transition to the WV HSP. It outlines pre-go-live and post-go-live activities and is updated and prepared by a series of reviews with internal and external stakeholders. A final approval is received prior to the planned system go-live and updates are made based on approved requests and lessons learned from past go-lives.

Our cut-over approach promotes a cut-over to the WV HSP that is non-disruptive to stakeholder groups. Pre-go-live activities include setting up and testing UAT and Staging environments in the weeks and months prior to the release. Go-live activities include creating go-live notifications for key stakeholders, providing production environment setup instructions, creating backups, preparing the production environment, deploying the new code in production, performing production validations, and then reaching a Go/No-Go decision. Additionally, rollback and recovery plans are detailed in the event of a No-Go decision. These activities cover the infrastructure, code deployments, database setup, application setup, interfaces and installation/verification and have specific owners. The following graphic depicts cut-over playbook activities.

Figure 4.3-98. Deloitte's Cutover Playbook Activities.

Report Distribution Schedule (D076)

Deloitte understands that the timing of reports must be planned carefully to provide information when required using the correct reporting time frames while maximizing performance and minimizing the time to complete the reports based on the available resources. To enable this, Deloitte completes multiple report runs and classify each report based on running time and Central Processing Unit (CPU) usage. Using this information, Deloitte identifies the reports which are time specific by working with DHHR and external vendors as needed and then create the Report Distribution Schedule based on CPU usage, running time and time specific reports. The Report Distribution Schedule are reviewed and approved according to the project standard procedures and then updated based on testing results if needed. Prior to go-live, Deloitte confirms DHHR approved the final Report Distribution Schedule. The schedule is maintained and updated through the operations phase based on experiences from production and changes through the change control process.

Social Security Administration Certification Documentation Approach (D083)

During the requirements analysis phase, Deloitte identifies the documentation required to support the Social Security Administration certification process. During Implementation Readiness Deloitte confirms that the required documentation is complete and submits a confirmation document through the WV IES project deliverable review process. Subsequently, documentation is maintained based on certification requirements.

Implementation Certification Letter (D084)

Upon statewide implementation of the WV HSP solution and successful completion of the ORT test phase, Deloitte will submit the Implementation certification Letter. This is an attestation that solution functionality has been delivered and is ready for overall solution acceptance.

2. Agency Approval Process of Implementation Readiness Phase

We follow the project-standard approval process for assessing the completion of Implementation Readiness Phase-specific milestones. Details for each milestone are below.

Overall Completion of Implementation Readiness (D079)

Upon completion of the Implementation Readiness phase, Deloitte submits a readiness confirmation letter to DHHR for approval through the formal deliverable process. The Implementation Readiness phase is considered complete when Deloitte completes Operational Readiness Testing (ORT), training, and cut-over planning for each proposed release. The letter confirms completion of the following deliverables, which are submitted and approved: Operational Readiness Plan, ORT Scenarios, ORT Results, Training Plan, Training Materials, Implementation Plan, and the Implementation Playbook.

Overall Completion of Deployment to Production (D085)

The acceptance of the overall completion of deployment to production occur after DHHR has finished planned validations in the production environment and a "Go" call has been provided from West Virginia leadership. These tests thoroughly evaluate that the system works as per approved design. While performing deployment validations, DHHR tracks issues discovered and Deloitte prepares mitigation strategies so that the deployment can be further evaluated for acceptance or rejection. These can include system work-arounds, developing a schedule to fix defects, and even a rollback of the release and a refresh to the pre-go-live production environment. Additionally, Deloitte resolves defects that cross the acceptable impact threshold defined in the Implementation Plan deliverable. After necessary functionality is approved as working and issues and their resolution plan have been addressed and accepted, the deployment to production are accepted. Deloitte's track record for handling comprehensive internal and external validations in SAT, UAT, and production environments means the acceptance of the deployment of the WV HSP occur with confidence from DHHR.

3. Implementation Plan Approach

The Implementation Readiness phase is a critical phase where the tracks and threads of the project come together to launch the new WV HSP. Deloitte leverages the EVD for SI methodology during each phase, but especially for this critical phase, as the implementation planning is broken down into three phases – Plan, Execute, and Support. This approach to implementation planning does not just involve the Deloitte team but includes DHHR stakeholders and other stakeholders who are needed to support the successful implementation of the WV HSP. As we begin the implementation planning process, we identify each user group and subsequently plan for and provide statewide implementation support for these groups.

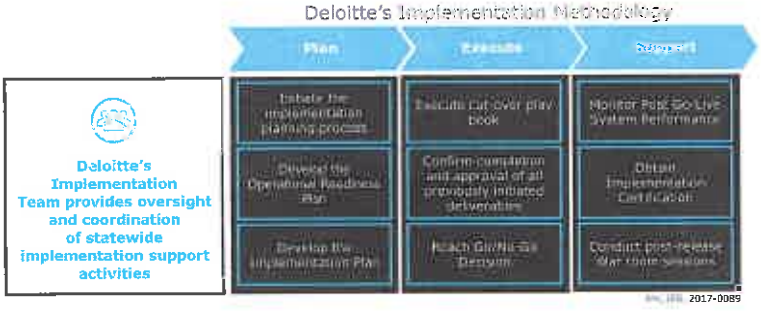

Figure 4.3-99. Deloitte's Implementation Methodology.

Implementation Plan Deployment

It is critical to have a well-defined approach that supports the desired timelines while minimizing the risk of rolling out a large new system. In the following figure, we define how the EVD for SI methodology supports DHHR's implementation/deployment needs across staging, readiness, and deployment. The figure identifies our approach to support the proper sequencing of deployment processes and functions for the WV HSP and to verify it is ready for pilot and statewide rollout.

	Staging	Readiness	Deployment
Method	• Conduct implementation planning activities • Determine staging exit criteria • Stage the WV HSP in a production-like environment to "shake down" the technology	• We work with DHHR to define business readiness criteria for the different WV HSP stakeholders • Assist DHHR in creating a business readiness assessment report • Determine if there are readiness gaps and measures to fill those gaps (e.g. additional training) • Determine technology readiness to support the new WV IES solution	• Support the technology deployment of the solution

Figure 4.3-100. Methods and Tools to Support the Proper Sequencing of Deployment Processes.

a. Implementation Scheduling

Being modular in nature, the solution provides the flexibility to implement critical system enhancements with minimum disruption to business. To mitigate risk during implementation, scripts, batches, data fixes, code deployments, and refreshes are evaluated for dependencies and a logical schedule is determined. Our team works with DHHR to schedule system deployments during off hours to reduce impact to the end users and allow Deloitte and DHHR validations to be completed. Finally, time shall be allotted for a release roll back if problems exist during validations and DHHR provides a no-go call.

b. Assessment of Implementation Readiness

The implementation readiness assessment analyzes pre-determined criteria (such as operational readiness testing results, conversion readiness, training and implementation readiness deliverables). We collect data to give visibility into the state of the project so that critical leadership stakeholders can align on DHHR's readiness for go-live. The readiness criteria fits within a set of dimensions that apply to DHHR, weighted to create a readiness score. The score can include the following dimensions:

- **People.** Training, engagement, communications, and security role access
- **Process.** Preparedness of business processes, policies, and procedures, as well as deployment of reporting needs to support the business
- **Technology.** System configuration and data readiness, testing completion
- **Operations.** Tracks the preparedness of resources and support organizations to be able to support the business and operations at and post go-live
- **External Stakeholders.** Tracks the engagement and technical readiness of external stakeholders including vendors, providers, and citizens
- **Readiness** is tracked and reported via the tools in the following table:

Tool	Description
Leadership Dashboard	The **Leadership Dashboard** provides project leadership with visibility into the progression of project activities related to metrics identified in the Implementation Plan. It is a high-level view of key activities and work streams, organized into key findings and status. This dashboard is provided for review and feeds into the Validation Worksheet, outlined below.

Tool	Description
Validation Worksheet	The **Validation Worksheet** collects stakeholder responses to functional readiness questions related to go-live, in combination with each status presented in the Leadership Dashboard. Each individual row, or criteria, is updated based on leadership meetings. The Worksheet information is then analyzed to produce readiness indicators for People, Process, Technology, Operations, and External Stakeholders, which feed into the Readiness Report discussed below
Readiness Report	The **Readiness Report** takes information from the Validation Worksheet and translates it into a digestible, high-level view of the People, Process, Technology, Operations and External Stakeholder readiness. It outlines action items, key accomplishments, and next steps for each category and can be presented in stakeholder meetings.

Figure 4.3-101. Readiness Reporting Tools.

c. Preparation and Delivery of Readiness Documentation

We prepare and deliver to DHHR documentation necessary to assess implementation readiness. As described in the previous figure a series of tools are used to assess and report on implementation readiness across People, Process, Technology, Operations, and External Stakeholders categories. Ultimately, the data produced from the Validation can be used to:

- Provide the Project Manager, Sponsor, and others with an understanding of the responses and results
- Highlight potential course corrections and risk mitigation activities
- Share data with relevant influencer groups to give them the same visibility as their leadership and participate in mitigating actions
- Provide the information needed to recommend a Go/No-Go decision

Implementation readiness documentation is reported via the reporting tools mentioned previously at regular intervals based on the readiness plan.

d. Requirements Tracking Process

We provide a demonstration that the WV HSP satisfies requirements specified in the RFP (including Appendices). Additionally, we show that requirements were accurately documented during the requirements analysis and system design activities collectively in a Requirements Traceability Matrix (RTM) and the Features Document. Each requirement is linked to a particular release and updated as required. The RTM is managed using JIRA, which is an issue tracking program that is often used for agile software development. During the readiness review, Deloitte references the RTM and confirm that the requirements defined in the scope of a particular release are included and complete.

e. Integrated Testing Environment (ITE) Configuration

As discussed in *Section 4.3.5*, Deloitte understands the importance of comprehensive testing to the success of the WV HSP implementation. Our testing approach utilizes guidelines and practices provided by our EVD for SI methodology and Software Quality Management Framework to cover comprehensive testing. Our team brings production-proven, hands on experience with computing and configuring environments very similar to the one needed to implement the WV HSP. Our team confirms that the configuration of the integration testing environment is completed as described in *Section 4.3.5*.

f. System Accessibility and Performance Demonstration

Deloitte has extensive experience in implementing and maintaining the WV HSP modules. We understand the reliance/importance of enterprise systems to DHHR's mission and the need for these to have minimal to no downtime and for users to access them when needed. Deloitte provides DHHR a high performing solution with a

physical architecture that supports high availability and meets system accessibility and performance requirements. Deloitte includes accessibility and performance scripts in our Operational Readiness Testing to demonstrate that WV HSP meets established performance and accessibility metrics.

g. Our WV HSP Minimizes Disruptions

The Deloitte team works with DHHR to perform internal and external operational readiness testing to simulate the cut-over to the new WV HSP and confirm that disruption to members, vendors, providers, and other stakeholders is minimized. To reduce end-user impact, the go-live occurs outside of normal business hours and Deloitte assists DHHR with executing approved go-live validations. Additional time for analyzing and addressing production impacts are accounted for during the go-live to allow sufficient consideration to be made by DHHR leadership when approving the cut-over.

h. Solution Walkthroughs

We conduct solution walkthroughs and demonstrations for OMIS and designated staff. Demonstration scenarios are mutually agreed upon by Deloitte and DHHR based on recommendations per the implementation plan and to cover commonly performed business functions.

i. Implementation Certification Letter

We provide an Implementation Certification Letter that certifies that the system is ready for production. By leveraging previous experiences and leading practices, we work with West Virginia to provide the complete list of requirements necessary to design and construct a fully functional, federally certified system and determine if there are gaps. This certification acts as exit criteria for the ORT test phase and confirms the solution functionality has been delivered and is ready for State acceptance.

j. Obtaining Agency Operations Approval

We work with the operations team to obtain written approval from DHHR to start operations.

k. Beginning Operations of IES

We coordinate with the operations team to begin operations (as described in RFP Section Four, Subsection 4.3.9: Operations).

4. Completion and Finalization Approach for Activities and Deliverables Initiated Prior to Implementation Phase

Section 4.3 Quality Management describes the deliverable management process including the review and approval process. During the implementation phase, prior to go-live, we check to confirm the deliverables below have been reviewed and approved.

ID	Title	Completion and Finalization Approach
a.	**ORT, repeating portions of these testing activities as agreed upon and requested by the Agency"**	Deloitte and DHHR mutually agree upon testing activities that closely mimic production and perform these activities prior to go-live to confirm operational readiness. These activities include: • Validating software deployment into ORT environment • Identification, development, prioritization, and execution of representative test scenarios • Documentation of test results • Preparation and submission of Application QA Request • Providing the Implementation Certification Letter to certify all ORT testing has been successfully completed

ID	Title	Completion and Finalization Approach
b.	**Emergency Back-out Strategy**	Deloitte submits an Emergency Back-out Strategy that includes restoring the system to defined backup, rolling back the database, and unmerging new code to restore the production environment to its pre-go-live condition. This strategy is reviewed and approved as part of the pre go-live process
c.	**Pilot Testing**	Deloitte confirms the pilot testing scrips have been completed and results meet the criteria defined in the Pilot Testing Plan
d.	**System Documentation**	Deloitte submits System Documentation for review prior to implementation and confirm approval
e.	**User Documentation**	Deloitte submits User Documentation for review prior to implementation and confirm approval through the project standard processes
f.	**Provider Documentation**	Deloitte confirms completion and acceptance of provider documentation by reviewing the deliverable tracking spreadsheet
g.	**Reports**	Deloitte confirms reports have been completed and reviewed and approved according to the project standard review and approval approach
h.	**Report Distribution Schedule**	Deloitte prepares final schedule for the reports based on test runs and submit it to DHHR for approval
i.	**Security, Privacy, and Confidentiality Plan**	Deloitte completes the Security, Privacy, and Confidentiality Plan to submit to DHHR for review and approval prior to go-live
j.	**Production environment, including final production schedule**	Deloitte identifies infrastructure needs for Production environment and coordinate with DHHR for procurement well before final production schedule
k.	**Business Continuity Plan, including backup and recovery procedures**	Deloitte creates disaster recovery planning taking DHHR business needs into account and submit a plan that mitigates impacts in disaster scenarios and receives approval prior to go-live
l.	**Data conversion**	• DHHR successfully completes and approves identified dry runs • Deloitte optimizes conversion code so that complete execution can occur within the cut-over window • DHHR validates and accept converted data. • Deloitte completes a legacy data cleanup • DHHR accepts the conversion window for cut-over
m.	**Pre-Implementation training**	Deloitte confirms pre-implementation planning has been completed based on the Training Plan
n.	**Update of Project Management Plans for future phases**	Deloitte follows the project standard approaches for updating project management plans based on requested changes or identified improvements
o.	**Confirmation of stakeholder readiness for new solution implementation (where stakeholders are defined as the vendor, the Agency, and others as determined by the Agency)**	The implementation plan includes readiness activities to confirm stakeholder readiness and those activities and the corresponding readiness of each stakeholder group are reviewed prior to go-live

Figure 4.3-102. Deliverables Initiated during the Implementation Readiness Phase.

4.3.9 Objective: Operations

The State benefits from our operations and maintenance approach that is proven to deliver reliable maintenance releases and stable and cost efficient operations. This is achieved by collaborating with the State in making practical decisions about application alignment, enhancements, and innovations that facilitate the State's vision. Our approach, EVD for SI, applies industry-leading IT Service Management (ITSM) and IT Infrastructure Library (ITIL) standards and processes to guide the efficient design, management, and operations of IT activities and functions. Our standardized operations practice and procedures, refined by our decades of experience, deliver predictability, emphasize quality, and strive for continuous improvement, and cost savings for our clients.

Section Highlights

Deloitte brings the following benefits to Operations and Maintenance:

- Approach guided by ITIL and ITSM principles for effective and efficient service delivery
- Our collaborative approach enables the Deloitte team and DHHR to effectively work together to prioritize work items in an expedited fashion to drive systems that meet the needs of their users and citizens
- Knowledge gained over 40 years operating large, integrated HHS systems benefits DHHR by having a team that knows how to drive stability, cost efficiency, and reliability into the maintenance and operations of their systems.

As an experienced and trusted partner, Deloitte intends to team with DHHR in aligning their maintenance and operation activities with their overarching vision for an enterprise HHS solution. The EVD for SI methodology infuses industry-leading IT frameworks and standards including ITIL and ITSM concepts, Control Objectives for Information and related Technology (COBIT), as well as Capability Maturity Model Integration (CMMI) processes. These frameworks, which are extended by our experience and own best practices, deliver standardization and efficiency to operations. Through the application of industry-standard tools, operational best practices, and proprietary insights, operations and maintenance are executed in tandem to accelerate delivery, reduce risk, increase program effectiveness, and drive continual improvement. The below graphic portrays where this section's activities fit within our overall EVD for SI hybrid agile methodology for the WV IES project and outlines our response to your requirements.

Figure 4.3-103. Deloitte's EVD for SI Methodology, highlighting Operations.

As Deloitte has demonstrated on other projects in New Mexico, Pennsylvania, Texas, Wisconsin and more, we will work with the State to align our EVD for SI methodology in order to operate, maintain, and enhance the WV HSP solution to optimize system performance and business efficiency. Our methodology provides the following benefits to the state of West Virginia and the WV IES project.

Figure 4.3-104. Deloitte's Key Differentiators in Operations.

Figure 4.3-105. Deloitte's IT Service Management Principles.

Operations services encompass a number of tasks that enable an application to continuously meet the needs of its stakeholders. Tasks such as infrastructure management, performance monitoring, batch scheduling, incident management, and capacity planning provide the behind-the-scenes support necessary for an uninterrupted end-user experience. As part of the ongoing operations phase, DHHR can expect a predictable set of operational services executed regularly for production stability, configuration management, infrastructure administration, and continuous operations improvement.

Our Understanding

The Deloitte team understands West Virginia's objective for Operations in the WV HSP solution is the effective management of systems and processes in order to drive the ongoing consistency, quality and customer satisfaction from the initial deployment and throughout the life cycle of the engagement. A comprehensive operations management approach is needed to continuously operate, monitor, and improve the enterprise applications under WV IES.

Maintain, Manage and Support the HHS Enterprise Requirements

Operations is the key to "keeping the lights on" – instability or downtime of human services applications can result in a true disruption of providing benefits to constituents or delivering critical child welfare and child support services. Continuous monitoring and improvement of operations are the central operational requirements to supporting and enabling each business area in providing services to the citizens of West Virginia. The Deloitte team concurs that operations activities for the West Virginia IES should start after the approval of the solution when it is implemented in a production environment.

Conducting Operations Activities in Accordance with Rules and Regulations

The Deloitte team understands operational activities are to follow the prescribed Communication, Training, Problem, and Quality Management plans from DHHR, and are to adhere to applicable Federal and State regulations and guidance.

Our Approach

At its core, Deloitte's Operations methodology achieves the optimal balance between IT service excellence and cost efficiency. Deloitte's operations methodology provides the required operational services tightly aligned with the objectives across the twelve Integrated HHS business areas, continuously supporting the project throughout the phases of the software development life cycle and ongoing operations. Deloitte's approach to operational management is tightly integrated with the core HHS business functions and is critical to continuously improving the WV HSP enterprise applications. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

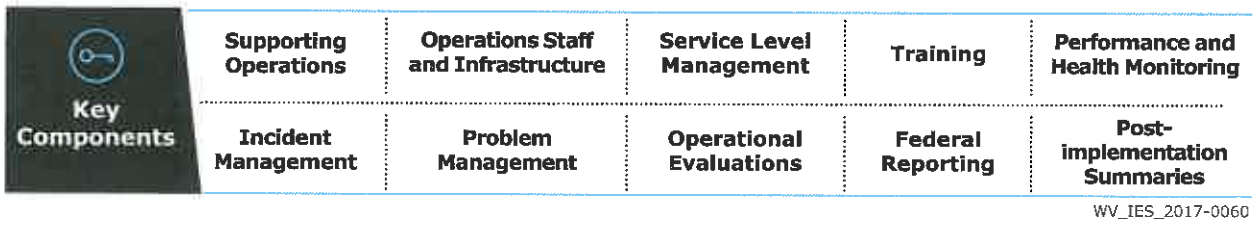

Figure 4.3-106. Key Components.

1. a. Supporting Operations

Supporting Each Business Area

As depicted in *Section 4.4 Completion of Functional Requirements*, Deloitte understands the core business modules of the WV HSP not only form the functional aspects of these business areas, but also the operational support required for WV HSP through the timespan of post-production maintenance and support. The following table explains Deloitte's understanding of how the operations methodology supports and enables the Business Areas as defined in the RFP.

Business Area	Description	How Operations Supports the Business Area
Business Relationship Management	Contains requirements that relate to the standards for interoperability between agencies and partners	• The EVD framework infuses principles from industry-leading IT frameworks and standards including: IT Infrastructure Library (ITIL) and IT Service Management (ITSM) concepts, Control Objectives for Information and related Technology (COBIT), as well as Capability Maturity Model Integration (CMMI) processes and controls to govern standardization and efficiency, while incorporating continual monitoring and improvement. • Deloitte performs the following key operations to support these business areas – Technical operations – Service Portfolio and Service Catalog Management – Service Transition Planning and Support – Service Level Management – Asset Management – Problem Management – Availability Management – Configuration Management – Request Management – Release Deployment Management
Client Management	Contains requirements that relate to managing client information and managing communications and outreach with clients	
Eligibility and Enrollment Management	Contains requirements that relate to determining client eligibility and enrolling and de-enrolling clients in programs and services	
Financial Management	Contains requirements that relate to payments and receivables and "owns" the information associated with service payment and receivables	
Operations Management	Contains requirements that relate to managing case workloads and related support	
Program Management	Contains requirements that relate to strategic planning, policy making, monitoring, and oversight activities of the agency	
Provider Management	Contains requirements that relate to supporting the needs of this population, maintaining information on providers, (especially their performance and certification), and communicating with the provider community	

Business Area	Description	How Operations Supports the Business Area
Service Management	Contains requirements that relate to identifying client needs and providing services, and monitoring and managing client status	– IT Change Management – Incident Management – Technology Capacity Management – Performance Management – Client/Stakeholder Communication Management
Utilization Management	Contains requirements that relate to these focus areas: compliance management, performance evaluation, and reporting	
Security	Contains requirements related to the security of the solution	• Deloitte incorporates the applicable State of WV security and privacy standards and policies to our Risk Framework to address the States specific security and privacy requirements. • Deloitte assists the State to identify organizational changes (non-system changes) necessary to support the federal compliance and establish plan of action and milestone report to track and manage changes and process enhancements. • Deloitte performs Security and Vulnerability testing and assessment • Deloitte develops risk based and Multi-Factor Authentication procedures
General Technical	Contains requirements related to the overall function of the solution as a whole	Deloitte performs various technical activities as part of its post implementation operations support as defined in our EVD for SI Operations Methodology which include items such as application life cycle management, software license and upgrade management, database management, infrastructure monitoring and management.
Operations Phase	Contains requirements that apply after the solution (or individual modules within the solution) have been accepted by the State	Deloitte will perform operations services to support the Operations Specifications depicted in **Table 27 in the Appendix VII** from the date of implementation of each component. In order to provide a narrative on Deloitte's methodology and approach to meeting the scope of West Virginia's operations requirements, each of the **67 Operations Specifications** have been grouped into an Operations Methodology & Approach Domain—each Domain includes a narrative of how Deloitte supports and enables operations • Environment Management • Operations Management • Configuration Management • Technical Support • Performance & Health Monitoring • Technology Upgrades & Patching • Infrastructure Operations • Federal Interfaces • Environment Management • Vulnerability Testing • SLA Reporting

Figure 4.3-107. How Operations Supports Each Business Area.

Operations Phase

The following section groups the 67 Operations specifications into a common set of focused Operations Domains that are tailored to benefit WV HSP.

Operations Management

The Operations Management domain encompasses the overall governance, communication, and planning activities associated with Operations. Deloitte understands that successful execution of operations in an enterprise requires effective ongoing communication and coordination to execute regular operations tasks and to respond quickly to incidents. In conjunction with the Project Management Plan, Operations Management provides the processes and tools that enable our operations staff to carry out operational tasks and communicate operational plans and impacts to West Virginia stakeholders. The following table lists the key activities that are part of Operations Management.

Operations Management Activities	Operations Management Processes & Outcomes
Release & Deployment Planning	• Creating and maintaining release dashboards and tracking release SDLC dates by enterprise applications or modules • Coordinating and overseeing Code Promotion and Configuration management
Environment Alignment	• Manage code versions installed on individual servers across each environment, grouped by a specific function or platform

Operations Management Activities	Operations Management Processes & Outcomes
	• Minimize downtime for environments due to conflicting code versions, and eliminate confusion with code versioning in each server and environment
Operational Calendars	• Establish a repository of regular and ad hoc operational activities executed in environments with impacted applications or modules • Operational activities are entered and viewed by the enterprise fostering communication and awareness of operational activities

Figure 4.3-108. Key Service Transition Management Activities.

Configuration Management

Configuration Management and Documentation is an essential component of the effective delivery of a large, enterprise-level solution such as WV HSP. Tools that we use for Configuration Management include

- JIRA – tool to track Incidents and Tasks including Risks, Issues and key Decisions
- JAMA – tool to track Requirements and Design traceability (the actual design artifacts are stored in SharePoint only the traceability is done through JAMA)

Additionally, to manage the complex product planning and product version monitoring, Deloitte leverages Application Life cycle Management (ALM) best practices. Specifically, the use of ALM practices allows our team to achieve the necessary level of coordination between required platform upgrades and other release management requirements for periodic WV IES releases.

Technical Support

Deloitte monitors and responds to system- and user-generated Incidents, and performs triage and escalation if necessary, to resolve the issue in a timely manner to provide prompt, accurate, and reliable responses to system incidents and problems. Incidents are covered in detail in *Section 2.b. Incident Management* and problems are covered in *Section 2.c. Problem Management.*

Performance & Health Monitoring

Deloitte's operations execution is supported by multiple planned event and performance management systems such as Amazon Web Services (AWS) CloudWatch and CloudWatch Logs, AWS CloudTrail, AWS Config, VPC Flow Logs and Splunk as a centralized log management solution. AWS Trusted Advisor performs automated check of compliance with AWS Security and Performance Best Practices. Salesforce logs are also being delivered to Splunk. These combined toolset provide application performance, infrastructure health, and security incident & event management data for a variety of IT and business users. Tracking end-to-end business transactions and collecting data points from multiple systems enables DHHR to proactively identify and remediate operational incidents before outages begin to affect business processes and end users. Our approach to infrastructure performance management embeds technical proficiency and monitoring tools into ongoing operational processes. By continually monitoring and collecting infrastructure and application performance metrics, we enable DHHR to achieve higher WV HSP availability, lower mean time to resolve issues, and lower total cost of infrastructure operations. Performance monitoring, health checks, data correlation, and alerting are covered in greater detail in *Section 2. A. Performance and Health Monitoring.*

Technology Upgrades & Patching

Deloitte's approach to managing product upgrades and patches focuses on these core outcomes:

- Reduced risk of out of compliance or behind on versions
- Minimal disruption to operations

Effective management of software products also includes activities to upgrade products or apply patches while minimizing impacts to ongoing application maintenance and infrastructure stability. Deloitte's approach to product upgrade planning and execution focuses on effective prioritization of product upgrades based on expected business value and application release dependencies, rather than just solely on product vendor upgrade schedules. The following dimensions are considered as part of product upgrade planning:

- Dependencies between COTS products
- Upcoming application SDLC's and releases
- New WV DHHR capability requirements
- Product end-of-life or deprecation dates

While supporting the ACCESS project at the State of Florida Public Welfare Department, the Deloitte team leveraged operations best practices from our EVD for SI methodology to maintain operational stability of the 22 integrated ACCESS systems during:

- Continued software and hardware upgrades
- Changes in state public welfare regulations
- Increases in concurrent user load, reaching 4,000 users in the worker-facing portal

By conducting detailed release planning in collaboration with West Virginia stakeholders, we schedule product upgrades and patches to align with existing releases as much as possible. As existing application functionality or maintenance sprint cycles include regression testing and user sign-off, these standard release activities can also be leveraged to test the new product or version with the application code and configuration that is consuming it.

Infrastructure Operations

Deloitte draws on infrastructure operations experience and personnel across 23 health and human services implementations in order to deliver stable, adequately provisioned infrastructure for health and human services platforms. Some of the key Infrastructure Operations Activities include:

- Capacity planning
- Server backup and recovery
- Patch management
- Virtual Network management
- Virtual Hardware/VM setup/Provisioning and management
- Access/Permissions management
- Enterprise service gateway configuration management
- Data Management Activities
  - Backup and Restore
  - Archive and Purge
  - Space Utilization
  - Performance Tuning
  - Disaster Recovery
- Creating and maintaining release dashboards
- Enterprise Environment alignment
- Automated enterprise services health check validation

- Performance testing
- Configuration Management across web, batch, app, middleware and mainframe domains
- Stakeholder Communications
- Monitor system availability and performance.
- Creation of batch run books, escalation protocols and restart instructions for project batch jobs.
- Investigate, analyze and recommend solutions to production issues impacting in-scope applications.
- Creates a streamlined communication channel between service providers and clients
- Daily System Health Check
- Monitor System Resource Usage
- Monitor Low Performing Queries
- Monitor App and System Log Files

We know that data is critical to the State and daily backups of data will be performed in case of the need for system recovery. Processes will be established to periodically (at least Quarterly) validate data recovery. In addition, Disaster recovery of the Production Environment will be provided. Additional details on Disaster Recovery is located in *Section 4.2.1 Enterprise Hosted Solution*. Additionally, as part of Production Operations, Deloitte documents a Disaster Recovery plan and testing approach for DR environments. Deloitte has experience creating DR plans for HHS clients based on the published standards and frameworks including NIST SP800-34, NFPA 1600, BS 25999, BSI/DRI and other industry and technical guidance. Our approach not only includes the planning to replace information systems and other critical resources (Disaster Recovery), but also to manage enterprises in such a way that the outages and interruptions may be anticipated and mitigated before they occur (Business Continuity).

Federal Interfaces

Deloitte's Operations team manages the various interfaces both within the State as well as with external agencies or the Feds. These interfaces are monitored for uptime, speed, and errors and incidents are logged, triaged, prioritized and scheduled for resolution accordingly. Deloitte is aware of the ramifications of having issues with Federal Interfaces, and our robust management, monitoring and resolution process minimize potential disruptions.

Environment Management

To conduct environment setup activities, Deloitte executes the steps necessary to stand up the necessary infrastructure, install the platforms and code in the environments, provision users, configure the security tools and processes, and validate the availability and stability of the new environment. Additionally, the objective of data setup in each environment is to identify and prepare test data required for the test effort for Performance test activities including Load test and Batch volume test. Iterations of the test or environment refresh go through this task to prepare incremental test data.

Vulnerability Testing

The Deloitte team proposes an approach to performing vulnerability testing that leads to identification of new vulnerabilities, with existing or new software implementations. Deloitte's approach to vulnerability scanning leverages tools such as HP Fortify Security Center, Nessus and AppDetective to identify code, database or AWS hosted infrastructure vulnerabilities. Deloitte will perform automated vulnerability scans of identified critical scenarios, involving application code and databases, on a monthly basis and share a vulnerability testing report to the State. Our approach to vulnerability is centered in our overall security approach to protect various components by using specific security controls in accordance with compliance requirements such as Federal Information Security Management Act (FISMA), Health Insurance Portability and Accountability Act (HIPAA), Internal Revenue Service (IRS) 1075, SSA, ePHI, Computer Matching and Privacy Protection Act of 1988 (CMPPA) and Health Information Technology for Economic and Clinical Health (HITECH), NIST 800-53 (Security Controls), FIPS 140-2, and others.

SLA Reporting

Service Level Agreements are a framework for measuring Systems Operations performance. Through our process rigor and monitoring frameworks, the Deloitte team focuses on the availability of the WV HSP system and business processes to serve West Virginia. In order to self-assess and report out on the overall system availability and performance, Deloitte establishes processes and procedures for the capture and reporting of data as it relates to the agreed upon SLA's. For more information on our response to Service Level Agreements, see *Section 1. c. Service Level Management.*

1. b. Operations Staff and Infrastructure

To meet the ongoing needs of day-to-day operations and infrastructure in the WV HSP solution, Deloitte establishes teams of Operational Staff that are dedicated to executing operational support services. Our operations staff are guided by leading practices for value-driven services to respond to incidents and requests, and to perform regular duties to operate the WV HSP solution. We provide resources that are trained and experienced in the operations domain in which they support. Our team proposed to perform the operations of these systems and to maintain sufficient infrastructure is based on our knowledge of the ecosystem of current WV systems, the requirements laid out in the RFP for the new WV HSP solution, and our experience working with other states in a similar capacity.

For one example, Deloitte provides the enhancement, maintenance, operations, and infrastructure and database capacity planning for the Integrated Eligibility, Child Care, Child Support, and Child Welfare solutions for the Commonwealth of Pennsylvania. It is this unique, cross program, integrated account based solution experience that guides the staffing of our proposed operations team and sizing of the proposed infrastructure. Deloitte will communicate with DHHR the activities of this team and performance of the infrastructure and will work with you to address concerns related to allocation and staffing.

1. c. Service Level Management

The objective of Service Level Management is to assess if the operational processes used to support the project are adequately developed, trained, and implemented. This activity addresses the quality assurance activities and responsibilities to operate the WV HSP within West Virginia's quality requirements, and conforms to the stated quality standards and the project processes are predictable and repeatable. On a regular basis, our team monitors the Service Level Agreements defined in Appendix VIII: Service Level Agreements (SLAs) and provides a report detailing WV HSP system compliance with each metric. Our team engages DHHR to evaluate unfulfilled SLAs for root cause and develop plans to mitigate future occurrences. We understand the critical nature of the business, keeping the system available to stakeholders and the need to perform production operations tasks effectively and promptly.

Maryland Health Benefits Exchange

Throughout our engagement with the Maryland Health Connection, we implemented successful capacity planning. This plan was effectively executed during open enrollment, which exhibited periods of significantly high customer traffic with no impact to the customer experience

1. d. Training

As the modular WV HSP evolves through ongoing releases or maintenance initiatives, the Operations domain requires consistent and clear communication from the delivery teams, often in the form of training, in order to maintain awareness of the changes in functionality and design such as new batches, updated workflows, and new products and platforms. Deloitte's approach to training Operations staff is centered in providing both documentation-based and experiential training on the new or updated system functionality. Deloitte facilitates the knowledge transfer from the delivery team to the operations team, to allow seamless transition between the implementation of new code or functionality of the system, and the ongoing operation of the solution.

2. a. Performance and Health Monitoring

The system performance and health monitoring approach for West Virginia relies on a focused set of monitoring tools and frameworks, with each serving a specific monitoring capability for the solution as per the approved Quality Management plan.

Monitoring Tools

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Figure 4.3-109. Proactive Monitoring of Solution Health Maximizes Uptime.

To meet the system and applications monitoring needs of DHHR, Deloitte proposes a suite of industry-leading monitoring tools: **AWS CloudWatch** for AWS infrastructure performance monitoring, **AWS CloudWatch Logs** for collecting and processing logs from AWS servers, **AWS CloudTrail** and **AWS Config** for auditing changes to AWS infrastructure, **AWS Trusted Advisor** for security checks and best practice recommendations and **Splunk** for security information and event management (SIEM). These tools have been carefully selected based on their capabilities, proven experience in the marketplace, and interoperability with the proposed WV HSP solution components. The tools and the system components they monitor are explained below.

Monitoring Tool	Monitoring Area	Capabilities and Benefits
AWS CloudWatch	AWS Infrastructure Performance Monitoring	• System-wide visibility into resource utilization, application performance and operational health • Metrics for CPU utilization, data transfer and disk usage • Ability to create custom metrics to track the operational performance • Set alarms on any metrics to send notifications or take automated actions
AWS CloudWatch Logs	Host-based event log and performance data collection	• Collection of OS and application-level even log files and performance data from AWS servers
Splunk	SIEM: security events and transaction audit	• Correlation of security events for intelligent alerting on breach or improper use scenarios • Audit log recording and analysis to meet Federal requirements
AWS CloudTrail	AWS Infrastructure API audit	• Governance, compliance, operational auditing and risk auditing • Automatic recording of activity logs for compliance audit trails • Visibility into user and resource activities by recording API calls • Automatic response/action to events that can result in security vulnerabilities
AWS Config	AWS configuration change tracking	• Tracking point-in-time history of changes for AWS resources
AWS Trusted Advisor	Real-time best practice recommendations	• Best practice recommendations for cost optimization, performance, security, fault tolerance • Security checks like Security groups, IAM use, MFA, EBS/RDS public snapshots

Figure 4.3-110. WV HSP Monitoring Tools.

System Availability

Our approach to implementing system availability monitoring is to perform two different types of activities:

- **Cyclical activities.** These are recurring activities at periodic intervals that can be reasonably predicted. The following tasks are considered cyclical activities:
  - Perform daily System health check
  - Monitor System resource usage
  - Monitor low performing queries and perform corrective actions

- **Non-cyclical activities.** Other types of activities are considered non-cyclical activities and occur during the maintenance and modification phases. The following tasks are considered non-cyclical activities:
  - Perform a smoke test of the application after each deployment
  - Troubleshoot incidents related to System operations
  - Monitor application and system log files to identify issues

Alerting

Deloitte configures the thresholds, distribution lists, and distribution formats which allow for the generation of alerts based on user-defined threshold and conditions.

Alert Example	System Data Collection Source	Example on alerts distribution and potential action
Error exceptions marked as critical Excessive failed login attempt rate	Splunk	These alerts may be directed to the security admins to identify potential security threats.
CPU utilization more than 85% Disk utilization more than 80% RAM utilization more than 85%	AWS CloudWatch	These alerts may be directed to the Infrastructure team to further identify the infrastructure and operational capacity to mitigate potential system outage and overloading issues.

Figure 4.3-111. Sample Alerts from the tools.

2. b. Communication Management

Incident Management

Whether an incident is raised through real-time application monitoring or flagged by an end user, our team follows a rigorous incident management process as detailed in the Communications Management Plan. Four priority classifications are used for reported problems/incidents based on the impact on the ability of users to meet business needs using the WV HSP solution in its current state. The priority classifications against which operations issues are evaluated are outlined in the following table.

Issue Severity	Characteristics and Action Required Based on Severity
Severity 1	• Fatal Problem Reports. Problem reports/incidents that result in the complete failure of WV HSP or complete functional module so that no work can be completed. • Escalation Level: These problems/incidents are addressed immediately as an emergency and take top priority over other activities until resolved.
Severity 2	• Major Problem Reports. Problem reports/incidents that result in the failure of WV HSP or a sub-system, but workarounds or processing alternatives exist, allowing for continued work within the system. • Escalation Level: We work with the DHHR to discuss and implement the work-around process and in parallel define the corrective action and schedule its resolution.
Severity 3	• Minor Problem Reports. Problem reports/incidents that do not result in system failure, but do result in incomplete or inaccurate system results or processing. These often cause minor disruptions that can be worked around until a solution is released into production. • Escalation Level: These problem reports/incidents are triaged as part of the normal change incident management process. • We lead the triage discussions to identify the root cause and business impacts of the problem reports/incidents. We work with DHHR to develop an action plan and timeline for resolution.
Severity 4	• Cosmetic Problem Reports. Problems that do not prevent or hinder system functionality. These are trivial problem reports that cause little or no negative consequences to WV HSP. • Escalation Level: Resolution of these problem reports/incidents is prioritized with impacted personnel. • We include these problem reports/incidents in the normal problem report triage process. Based on other system activities and priorities, we work with DHHR stakeholders to develop an action plan and timeline for resolution.

Figure 4.3-112. Severity Classifications for Operational Issues.

2. c. Problem Management

As per the Issue/Problem Management plan described in Appendix C, the Deloitte team follows well-established problem or issue management practices. It is critical that WV HSP is available and functions accurately each day. We are committed to collaborating with DHHR to identify potential disruptions in a timely manner, and effectively manage, and resolve disruptions in the smooth functioning of the WV HSP solution. Our collaborative and dedicated team will support the timely identification, documentation, and management of incidents and problems from discovery to resolution.

Our team follows the process defined in the Issue Management Plan to manage incidents and problems. Release management is a coordinated, cross-organizational effort that manages the introduction of changes into the production environment, including those affecting applications, infrastructure, and operations. The benefits of release management include improved service quality, reduced operational risk, and more timely releases.

2. d. Operational Evaluations

Deloitte understands the importance of continuous improvement and has conducted thorough post-implementation evaluations to determine the quality of the implemented solution. We run post implementation and ongoing operational evaluations to identify and prioritize continuous improvement opportunities for potential implementation in subsequent post-production releases. This includes new improvements resulting from monitoring performance metrics, new improvements requested from process owners, stakeholders, or end users, and improvements originating from preventive and corrective maintenance opportunities identified by the Deloitte team. These improvements are collated and shared with DHHR in the form of reports with insight and actionable steps to optimize efficiency and improve customer service satisfaction. We have leveraged such reports and demonstrated their consistent accuracy and usefulness in other states such as Texas, Michigan, and New Mexico.

2. e. Federal Reporting

WV HSP will help the State to meet Federal requirements and produce the reports which need to be shared with the Federal government. The reports are Bi-weekly, monthly, Quarterly, Bi-yearly and yearly based on federal requirements. The Deloitte operations team maintains WV HSP and the associated reports. Deloitte works with DHHR to define the archive requirements for reports, not just those required by the Federal government. Our archiving and purging strategy is a key component to managing risk, Right to Know requests, data growth and security.

2. f. Post-Implementation Summaries

At the conclusion of each implementation, the Deloitte Team will create Post-Implementation Summaries specifying criteria for production deployment along with other supporting documents, including logs documenting stakeholder signoff. We will work with the State to define this summary report that details the results of completed implementation activities.

Objective: Turnover and Closeout

The Deloitte team values West Virginia's success and will work collaboratively for a seamless turnover and closeout at the conclusion of the WV IES project. Our EVD for SI methodology provides the foundation for our turnover approach and has proved successful on large, complex projects in Pennsylvania, Texas, Florida, and Delaware. We place a high emphasis on planning and collaboration throughout the project and especially during the closeout phase to successfully transition responsibilities without disruption to West Virginia citizens.

- Experience in successful project turnover and closeout activities for complex enterprise HHS portfolios.

- Proven methodology that promotes a detailed, structured and collaborative exchange of knowledge
- Concentrated focus on minimizing business impact throughout the turnover process with specific attention paid to components which may pose higher risk

Our EVD for SI methodology provides the processes, templates, and tools needed to efficiently transition projects while minimizing risk and disruption to end users. We used our EVD for SI methodology to successfully turnover systems in Pennsylvania, Texas, Florida, and Delaware. As a result, we understand how complex it is to transition health and human service enterprise solutions and we bring the approach required to drive a focused and organized transition. Our experience and proven methodology, combined with our familiarity with the system environment positions us to provide a successful turnover to DHHR.

The following graphic portrays where this section's activities fit within our overall EVD for SI hybrid agile methodology for the WV IES project and outlines our response to your requirements.

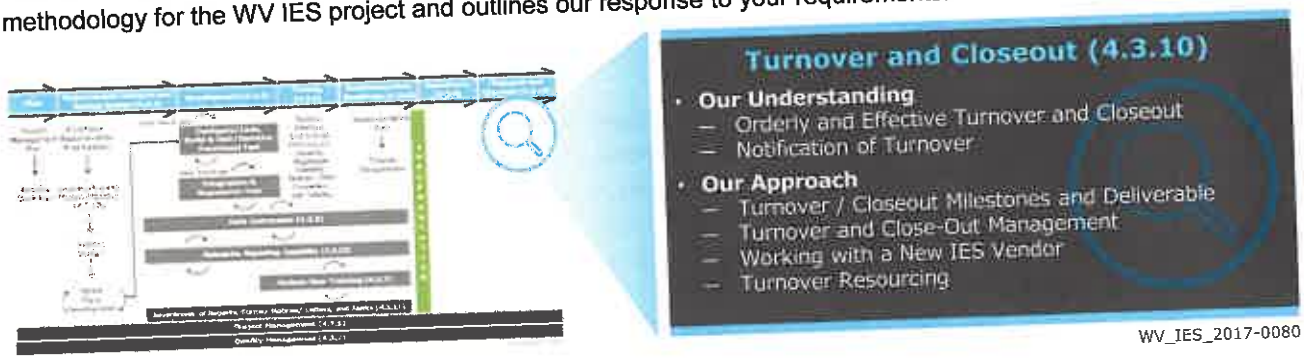

Figure 4.3-113. Turnover and Closeout Management streamlines the transition at the conclusion of the project life cycle.

Our Understanding

Orderly and Effective Turnover and Closeout

Deloitte understands DHHR is searching for a trusted advisor, capable of successfully carrying out the turnover and closeout of WV HSP. We understand that to successfully transition a human service portfolio this complex a comprehensive and detailed approach to the transition is required. Our turnover and closeout approach is structured in phases and requires collaboration throughout. The collaborative effort between Deloitte and the State is designed to place specific emphasis on the continuity of DHHR business processes in pursuit of establishing minimal impact across the processes and services supported.

Deloitte has a strong track record of successful turnover of large Public Sector projects:

- Delaware Client Information System II (DCIS II)
- Pennsylvania Human Service Network (H-Net)
- Administrative Office Pennsylvania Courts Common Pleas Case Management System
- Pennsylvania Finance Transformation

Notification of Turnover

Deloitte understands that the turnover and closeout phase should equip the state with the tools and knowledge to support ongoing maintenance and operations of WV HSP. In order to validate a comprehensive turnover and closeout we understand that specific timeframes and milestones are needed so progress of the transition can be tracked and reported. When provided notice from OMIS, at least 12 months prior to the end of the contract period, our team will need to begin executing the turnover plan. When notice is provided Deloitte will begin the collaborative effort to develop key artifacts, transfer critical knowledge, and handover key technology components necessary to support the ongoing maintenance of WV HSP.

Our Approach

Deloitte has established a turnover methodology which focuses on a collaborative and efficient transition to DHHR. Our approach works to minimize risks introduced as a result of the transition by using a repeatable proven methodology. Our methodology has been applied successfully on a broad spectrum of large cross functional human service projects. The method provides a structured, phased approach to turnover activities and is designed to maximize transparency, promote collaboration, and report effectively throughout the process. The methodology is built around a common goal to facilitate a seamless turnover and enable our clients to continue with uninterrupted business. In the sections below, we detail the approach for turnover deliverables and milestones, close-out management, collaboration with incoming and existing vendors, as well as resourcing for the transition period.

Deloitte's approach to comprehensive turnover and closeout is critical to a seamless transition of project responsibilities with minimal impact to the core business. This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

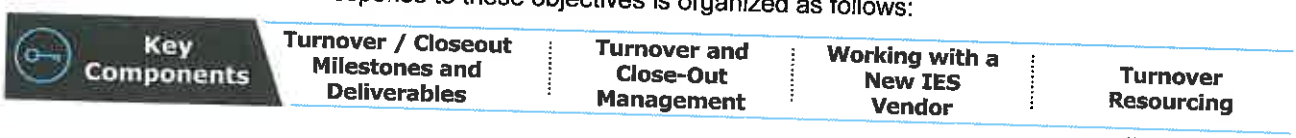

Figure 4.3-114. Key Components.

1. Turnover/Closeout Milestones and Deliverable

A key part to the turnover and closeout process is the completion and submission of the turnover and closeout deliverable. The turnover and closeout deliverable is made up of two components, the turnover plan, which will guide the activities performed as part of the transition, and the results report, which will assess progress against the plan. These components of the deliverable and the approach to their development is described in more detail in the sections below.

Turnover Plan (D029)

The Turnover Plan will guide the activities required to complete a transition, between Deloitte and DHHR. These activities span a variety of areas and will require collaboration with the State to identify system transition methods, establish milestones, document success criteria, define resource readiness criteria, and prioritize the tasks required to successfully complete the turnover. The steps below outline the critical steps required in the development of the turnover plan. Turnover activities are planned and finalized within the priorities set by DHHR.

Identify Knowledge Transfer Methods. Identify knowledge transfer methods to be used throughout Turnover Execution including mentoring, shadowing, formal training and in depth documentation reviews.

Establish Reporting Criteria. DHHR will establish the requirements for reporting on the status of the turnover activities for Deloitte.

Create Staff Transition Plan. Our team will work the DHHR leaderships to identify roles, responsibilities and timeframes for the transition of IES. We will review current responsibilities for each team role to validate the organizational structure and further define the responsibilities of the staff.

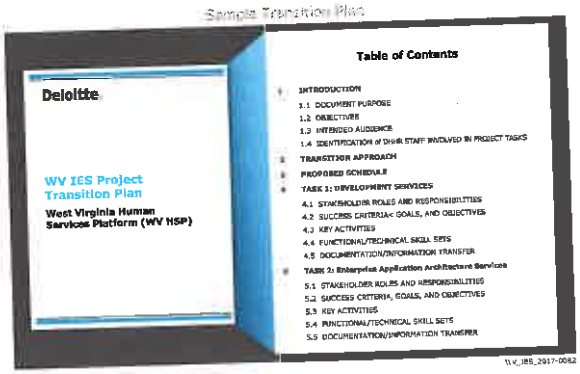

Figure 4.3-115. Sample Project Transition Plan.

Identify Minimum Skill Requirements. Major roles that support the project will be provided with a list of responsibilities along with the recommended minimum skillset and experience. An example for 'Application Architect' responsibilities and recommended skillset can be seen below.

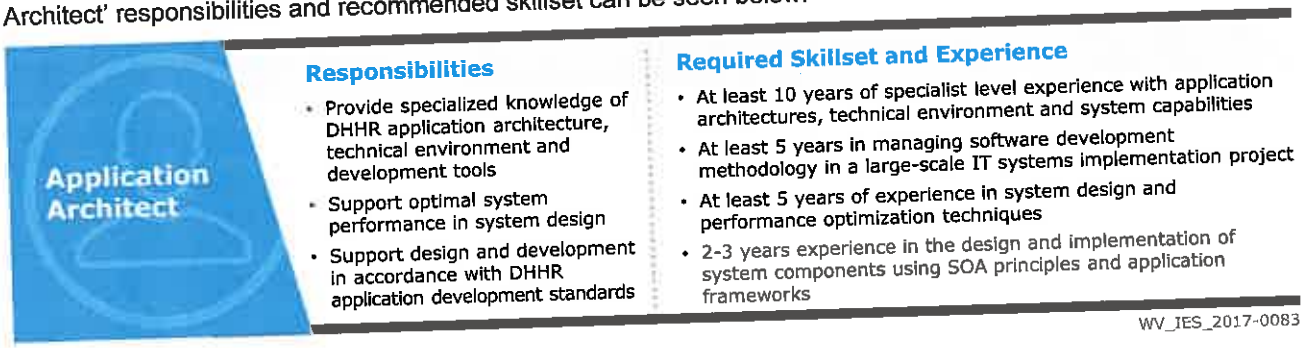

Figure 4.3-116. Responsibilities and minimum skill requirements example.

Define Asset, Data, Escrow Turnover. We will work with DHHR to establish the schedule and steps for transition of system assets (software, hardware, furniture), all data and any escrow agreements. Any required certificates of destruction, required by DHHR, will be executed after verification of appropriate destruction by the agreed upon method.

Define Turnover Schedule. We will work with DHHR to establish the schedule for transition of system responsibilities during the turnover execution phase. This schedule is dependent on the level of knowledge, experience and background of the successor resources.

Define Success Criteria. Our team collaborate with DHHR to establish metrics for the management of turnover progress. These metrics will be reviewed periodically throughout the Turnover process and will be revisited during Closeout.

Project Closeout Report

The Project Closeout Report documents the completion and outcomes of the turnover activities executed under the approved Turnover Plan. The results report is submitted as a component of the Turnover Plan. Below is a list of the key content and list of activities needed to drive the completion of the Project Closeout Report:

Review turnover Tasks and Activities. Deloitte will describe the overall completion of turnover activities and a detailed completion status for each high-level task and activity that took place during the turnover period.

Summarize Turnover Objectives. We will summarize the turnover objectives from the Turnover Plan and the corresponding results. In addition, we will describe the success criteria and provide a performance scorecard that displays the turnover results.

Review Turnover Risks and Issues. We will provide a detailed listing of the risks and issues associated with the turnover effort along with a detailed description of the status on the resolution of risks and issues.

Review Turnover Status Report. Provide a description of the current status of in-scope DHHR applications and systems as well as information about outstanding fixes and changes as of the end of the turnover period.

The Turnover Results Report documents completion of our turnover activities other than post-turnover support. In the process of creating the report, we can also assist DHHR in completing a readiness assessment of the successor team. Throughout the turnover period we provide status updates via a turnover status report; a consolidated up-to-date view of the final turnover status is included in the final Turnover Results Report.

2a. Turnover and Close-Out Management

The Deloitte approach to turnover and close-out management is broken down into three sub-phases, including, Turnover Planning, Turnover Execution, and Turnover Closeout. The three phases and their key components are depicted in the following figure and then each phase is described in more detail in the sections that follow.

Figure 4.3-117. The Deloitte three phased approach to turnover and close-out management.

Turnover Planning

To begin the Turnover and Closeout process, our team will establish a foundation for turnover activities through identifying specific goals in collaboration with DHHR. Deloitte will record our experiences over the course of the project which impact procedures, knowledge transfer techniques, and documentation to be included in the Turnover Plan. Our defined Turnover Planning process should equip both Deloitte and DHHR with a planned approach to complete Turnover Execution and also align turnover expectations among WV IES Project stakeholders. The steps below define our high level approach toward the turnover planning process:

Kickoff Meeting. The Kickoff meeting is used to formally initiate turnover, establish objectives of the turnover effort, and communicate the processes and time frames that are to be followed during turnover.

Establish Turnover Management Process. We will work with DHHR to finalize the turnover management process. This process determines the level of resource allocation of our staff among maintenance, operations and turnover activities.

Draft Turnover Plan. Develop the turnover plan which should include the turnover schedule, roles and responsibilities, staff transition plan, resource requirements, knowledge transfer approach and services to be transitioned.

Establish Logistics. We will work with DHHR and the successor vendor to finalize logistics prior to the execution of turnover activities. This includes the onboarding of the new successor resources, including an overall organization overview, alignment plan, access to the facilities, emails and other requirements for the successor team to start working on-site with the systems.

Review Turnover Plan. After creating a draft of the plan, we will review with the DHHR stakeholders and gain approval for the outlined approach for the turnover execution and closeout. Once this plan is approved, execution of turnover activities will begin.

Establish Turnover Issue Escalation and Resolution Procedures. DHHR establishes issue escalation and resolution procedures for issues that arise during the turnover execution for both Deloitte and the successor team. This process is based on the mutually agreed upon escalation methods.

Turnover Execution

After the turnover plan has been completed and agreed upon, our team will transition to execution of the turnover. At this time, we will perform the activities previously outlined in the **Turnover Plan**. Under the leadership of our designated Turnover Manager, Deloitte will be responsible for managing turnover activities, addressing issues and ensuring tasks are delivered to the satisfaction of DHHR. Our team will work closely with DHHR, to continually identify and reprioritize components of the turnover which may pose as a high risk, and disrupt DHHR business operations. While there are many items as part of the Turnover plan, the items outlined below are the critical success factors to execute the Turnover Plan:

Figure 4.3-118. Turnover plan critical success factors .

Review Roles and Responsibilities. We will review the **Staff Transition Plan** with the wider DHHR team, so stakeholders can understand the shift of responsibilities throughout the duration of the transition phase. Deloitte will maintain service delivery staffing at the beginning of the Turnover Planning and will start a gradual ramp-down period as the successor's resources become acclimated with the system, process, procedures and responsibilities. This will also include providing job shadowing support for the successor's resources.

Facilitate Knowledge Transfer. Our team will lead knowledge transfer sessions and verify previously identified resources are equipped with the knowledge and documentation they need to conduct their new responsibilities. Preferred knowledge transfer activities will be identified by DHHR, but not limited to: Documentation Review, Walkthroughs, System Demonstrations and Job Shadowing.

Provide Documentation. We will provide documentation as a result of the system development, maintenance and operational support activities throughout our engagement. The documentation should provide a foundation of information and procedures which will support the maintenance and operation of the IES system. The documentation will be reviewed, with key stakeholders, throughout knowledge transfer activities. Clarification and additional documentation will be supplemented as requested.

Conduct Status Checks. Our team will continually provide status and quality checks to confirm our direction and progress. We have incorporated the execution of dry-runs and quality checks during our operational readiness execution phase to identify risks or issues early and reduce the need for additional verification cycles during operational readiness validation.

Transfer Hardware and Software\Escrow. We understand the State maintains ownership of all necessary hardware, software, and licensing which supports WV HSP including the data and source code. At the conclusion of the engagement, Deloitte will package and transfer these items to the successor team and provide knowledge transfer and documentation required to maintain and operate the system effectively.

Data. WV IES project related data including status reports and system documentation will be transferred to the successor team.

Transition Responsibilities. The Deloitte team will work with DHHR to transition services conducted in support of WV HSP. After providing walkthroughs and demonstrations, DHHR or the next contracted vendor, will begin to perform these services under the monitoring of Deloitte.

Closeout

During the Closeout phase, our team will evaluate the turnover activities and prepare the Turnover Results Report. These activities should be performed in the final month of turnover. The goal of this phase is to finalize turnover tasks and to provide DHHR an understanding of the final outcomes across the turnover effort and provide the completion status of turnover tasks, a description of how the objectives have been achieved and documentation of issues which surfaced throughout the transition. At this point, DHHR should assume responsibility across each area of the application maintenance and operational support, in line with DHHR requirements and the relevant standards. Our approach to the closeout phase is outlined by the key steps below:

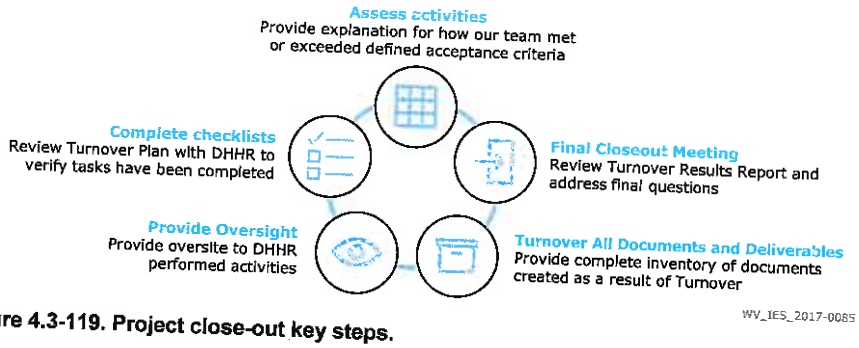

Figure 4.3-119. Project close-out key steps.

- **Assessment of Activities.** The Deloitte team will conduct an assessment of the activities completed throughout the Turnover phase. This will be completed to determine whether the turnover process met/exceeded the defined criteria outlined.
- **Checklist Completed**. Our team will review the Turnover Plan, and verify agreed upon tasks have been completed to their entirety. For activities where progress still needs to be made, Deloitte will thoroughly indicate the purpose and next steps for these items.
- **Deliverables Completed and Documented**. At this time, deliverables should be completed and documented, to the satisfaction of DHHR. West Virginia should have deliverables in their possession, as well as documentation to support these deliverables.
- **Certificates of destruction.** We provide a Certification Letter that certifies that all data and system documentation in Deloitte's possession has been destroyed.
- **Security Privileges Updated**. As DHHR will already be performing tasks related to support WV HSP, final security privileges will be updated. We will verify HHR stakeholders have necessary permissions and Deloitte practitioner privileges will also be removed at this time.
- **Provide Project Closeout Report**. To summarize the turnover results, Deloitte will deliver the Project Closeout Report. The report provides completion status of each high level task and activity that took place during the turnover period. We will demonstrate that work items have met the success criteria defined throughout Turnover Planning.
- **Final Closeout Meeting**. After Turnover Closeout activities have concluded, Deloitte will conduct a meeting, in collaboration with DHHR, to review the Turnover Results Report. In this meeting DHHR will verify the closeout is complete and have the opportunity to raise final questions. At the conclusion of the meeting DHHR will drive the maintenance and operations of WV HSP.

2b. Working with a New IES Vendor

The Deloitte team will work side by side with the new IES vendor staff, throughout the life of the turnover planning, turnover execution and closeout of the WV IES Project. During the turnover phase, our constant collaboration will include working side-by-side with new vendor so their team gains familiarity with the systems, corresponding maintenance operations and support procedures. Our team will work with the new IES vendor to schedule the transfer activities, dependent upon the team's preferences. The Deloitte team will offer a variety knowledge transfer approaches including:

- **Documentation Review.** Our team will walk the DHHR stakeholders through in depth system documentation developed throughout the engagement.
- **Discussion Forums.** We will hold focused, open discussions in order to answer any questions the State may have regarding WV HSP processes and technology.
- **System Demonstration.** Our team will hold system demonstrations, module by module, in order for sufficient knowledge transfer of system capabilities to occur.
- **Job Shadowing.** Deloitte SMEs will pair with State counterparts to perform job shadowing and learn the processes and technologies involved in adequately performing WV HSP support responsibilities.

2c. Turnover Resourcing

Deloitte works with DHHR to develop a Staff Transition Plan, a subsection of the Turnover Plan. This plan will define key roles and responsibilities, as well as timeframes for the turnover of responsibilities. The plan will also outline the amount of support needed, from Deloitte, from the time we kick off turnover, through closeout of the project. Alongside DHHR, we will work to finalize specific roles, responsibilities and the resource requirements for each role needed to support the transition.

Objective: Inventories of Reports, Forms/ Notices/ Letters, and Alerts

West Virginia DHHR has requested an approach to maintain a comprehensive inventory of their reports, forms/ notices/ letters, and alerts. In addition, you need a process embedded to continuously maintain and update the inventory as new assets are modified or created. The Deloitte Team creates and maintains an inventory from the beginning of the WV IES project that allows DHHR to quickly and efficiently organize reports, forms/ notices/ letters, and alerts assets thereby helping you achieve your vision of ensuring that the right clients receive the right services, at the right time, to support their path to self-sufficiency.

Deloitte's EVD for SI backed approach to Artifact Inventories benefits DHHR:

- Inventory Design processes are created with long term usability in mind.
- Develops the inventory of existing artifacts thereby setting a baseline for the WV IES project
- Maintains a comprehensive inventory as business needs changes

Our Understanding

DHHR requires a vendor to design, develop, and maintain a comprehensive inventory of artifacts. A well designed approach, combined with a robust inventory tool provides a comprehensive inventory enabling DHHR to maintain a detailed understanding of their existing assets. In addition, this allows DHHR to implement and standardize a change control process for inventory maintenance that will guide project stakeholders and vendors through step by step instructions to manage changes, updates, and/ or modifications to these assets. This helps WV DHHR stakeholders to efficiently monitor and track their inventories and support the project mission of providing the appropriate services in an effective, efficient, and accountable manner.

In order to create a comprehensive inventory solution in an integrated and standard location, Deloitte will leverage the EVD for SI approach to inventory creation using the Git module. Git is a market leading version control system which allows organizations to manage critical documentation. When changes are submitted, designated project owners/leadership can review changes and determine if they are to be incorporated into the main repository according to the change control process. The following graphic portrays where this section's activities fit within our overall EVD for SI hybrid agile methodology for the WV IES project and outlines our response to your requirements.

Figure 4.3-120. Deloitte's Approach to Inventories of Reports, Forms/Notices, Letter, and Alerts.

Our Approach

Deloitte brings a proven methodology to help WV DHHR to consolidate its existing legacy reporting capabilities into one consolidated reporting solution. For this project, we will leverage our established EVD for SI approach. EVD for SI was developed based on years of hands-on experience working with state and local government clients as well as working with commercial clients to deliver solutions. This methodology includes detailed processes, tools, templates, and strategies to accelerate project delivery, improve quality, mitigate risk, and provides end-to-end project management guidance. For the implementation of this project, Deloitte has developed a tailored approach of EVD for SI to meet WV DHHR's objectives and needs. EVD for SI allows us to enhance overall project delivery, facilitate change management, identify and mitigate risk, and improve overall quality for DHHR.

Figure 4.3-121. Key Components.

Enterprise Reporting Capability Implementation – EVD for SI Approach

During each of the above phases, a number of core activities take place to validate the designed, developed, and implemented reports, forms/ notices/ letters, and alerts inventory accurately meets the needs and requirements of WV DHHR. Our approach promotes the use of universal templates across various systems of DHHR for reports, forms and notices to ensure consistency, uniformity and shared use. Throughout the remainder of this section, we will discuss the key activities which will take place in each project phase to design, develop, and maintain a comprehensive inventory inclusive of reports, forms/notices/letters, and alerts for the West Virginia Human Services Platform (WV HSP).

Plan

The first phase of the EVD for SI approach to inventory creation is the Plan phase. The Plan phase is typically executed during the first several weeks of the project and includes the development of a detailed master plan to guide overall activities required to inventory reports, forms, notices letters and alerts. The project scope clearly defines the scope for this effort. The work plan is used to document key activities, timelines, and ownership throughout the effort. At the conclusion of the Plan phase, Deloitte will submit a comprehensive work plan.

Requirements Analysis and System Design

The second phase of the EVD for SI approach to inventory creation is the Requirements Analysis and System Design phase. This phase is focused on capturing the business/technical requirements and use cases to be

implemented as part of project. In addition, it includes finalizing the design for each prioritized requirements/use case. During Requirements Analysis, Deloitte will work to identify and document each of the existing DHHR reports, forms/notices/letters, and alerts. Deloitte will conduct a series of requirements sessions to understand the goals and needs of the inventory solution. As a starting point, Deloitte has reviewed the existing list provided in the RFP procurement library. During the requirements analysis phase, this list will be validated with DHHR stakeholders to confirm it is still valid and comprehensive. In addition, new or additional reports, forms/notices/letters, and alerts will be captured. At the conclusion of requirements, Deloitte will facilitate a prioritization discussion with DHHR. The purpose of the prioritization discussion will be to prioritize the requirements, which should be carried forward as in-scope during Design. During design, Deloitte will work to capture additional details related to the prioritized requirements. For the purposes of creating an inventory these details will include the asset type (report, form/notice/letter, or alert), the name, description, the owner, who the asset was created by, the created date, the last updated date, and the sub-system. These details will be documented in deliverables such as the Reports Inventory and the Correspondence Inventory. An example of a similar deliverable is shown in the following figure.

#	ID	Version Number	Type	Asset Name	Description	Owner	Created By	Created Date	Last Updated By	Last Updated Date	Sub-system
1	1030255	3.1	Report	OSEP Cube	The OSEP Cube provides details related to a child's ECO score, evaluation, type, and date. This report allows Child Care and Early Learning agencies to provide federally mandated metrics to the Office of Special Education Programs (OSEP).	John Smith	Tim Buchanan	1/21/16	Sara Shaffer	4/15/16	Child Care

Figure 4.3-122. Sample Deliverable. WV_IES_2017-0066

At the conclusion of the Requirements Analysis and Design phase Deloitte will review and submit the list of prioritized requirements and the inventory design documents, to DHHR. By the end of this phase Deloitte will have collaborated with DHHR to finalize the comprehensive list of reports, forms/notices/letters, and alerts which will be created in Git as part of the initial inventory creation.

Development

The third phase of the EVD for SI approach to inventory creation is the development phase. This phase will focus on the actual development/configuration activities required to create the inventory using the Git module. Using Git, an inventory will be set up for the WV HSP. This inventory will store the reports, forms/notices/letters, and alerts and will be used to track the latest versions during the development phase. Each report, form/notice/letter, and alert will be input into the Git repository which will form the master version. Universal report templates will be defined and published across all WV HSP applications to promote shared use and consistency of centralized templates, leading to standardization of report formats and styles. The inventory will be logically organized by sub-system through a series of folders and sub-folders allowing users to quickly and intuitively navigate to a given report. During Development the Deloitte team will work to capture a screen shot for each existing report, form/notice/letter, and alert. These screen shots will be input directly into Git repository. In addition, the team will work to input the details document in the Inventory Design Deliverable. These details will include a description of the asset, the type of asset, the creation date, and owner. Once the reports, forms/notices/letters, and alerts have been input, Deloitte will work to set up role based security. Role based security will clearly define which users have the ability to view the assets and which users have the ability to modify. In addition, the role based security will clearly define the change control process according to the user designated to approve changes/additions (referred to as inventory dictators and the lieutenants) so that the users know who is accountable for approving changes/ additions to the master inventory. At the conclusion of the Development phase, Deloitte will deliver the Development Completion Report and the updated Work Plan.

Implementation

The fourth phase of the EVD for SI approach to inventory creation is the Implementation phase. The Deliver phase encompasses the key activities needed to deploy the solution to the production Git environment. In addition, it outlines the ongoing support activities which will be required to continue to maintain the inventory solution. For ongoing maintenance, added, changed, or deleted reports, form/notice/letters, or alerts will be documented using the Inventory Design Deliverable. After the documentation is received a new asset will be added into the inventory in line with project timelines. At the conclusion of the Deliver phase Deloitte will submit a deployment completion plan as well as a maintenance support plan.

Operations

Deloitte recognizes the importance of operating and maintaining the inventory of Reports, Forms/Notices, Letters and Alerts as business needs evolve over time. We bring formalized change control processes to DHHR that are built into the Git inventory. By following these processes and leveraging the enabling Git technology, you can be confident the correct Report, Form/Notice, Letter or Alert version is consistently used. Deloitte's EVD for SI approach will help DHHR achieve their objective of "Inventories of Reports, Forms/ Notices/ Letters, and Alerts".

As detailed above Deloitte's approach includes the creation of a Git inventory of Reports, Forms/ Notices/ Letters, and Alerts from the baseline provided by DHHR in the RFP procurement library. In addition, Deloitte will maintain a comprehensive inventory inclusive of added, changed, or deleted reports, forms/notices/letters, and alerts through the life cycle of the project. The inventory solution will incorporate change control processes to confirm proper signoff and review is received prior to an add, change, or delete being implemented in the master inventory.

Our approach will help DHHR maintain the integrity of the Reports, Forms/ Notices/ Letters, and Alerts inventory. The following table summarizes how our approach meets DHHR's requirements.

Requirement(s)	WV HSP Capability	Approach and Benefits to DHHR
The Vendor should propose an approach to develop and maintain a comprehensive inventory to be maintained throughout the duration of the contract. The Vendor should describe how the approach fits within the overall timeline and follows the approved change control process.	✓	• Deloitte will use our proven EVD for SI approach to design, develop, implement, and maintain a comprehensive inventory for DHHR leveraging the Git module • The market leading version control tool Git will be used for the DHHR inventory. Git provides an intuitive user interface with role based security to confirm the right users have the right access to DHHR's various inventory assets. • As part of this project, we will leverage the initial Reports, Forms/ Notices/Letters, and Alerts inventories provided as part of the RFP to build a foundation for future updates throughout the SLDC.

Fi Figure 4.3-123. Approach and Benefits of comprehensive inventory.

Objective: Business Process Models/ Mapping

West Virginia needs a vendor with extensive business knowledge to define effective business processes to improve efficiency and promote effective data sharing. Deloitte leverages our experience working with Health and Human Service agencies, process mapping tools, and familiarity with the Medicaid Information Technology Architecture (MITA) 3.0 Framework to produce new process models for the West Virginia Integrated Eligibility System (IES) project. The new business process models (BPMs) represent the framework of activities and processes that support the enterprise and reflect system design to promote desired business outcomes.

Deloitte's business process mapping approach:

- Incorporates To-Be processes into the system design efforts to promote realizing the desired business outcomes after go-live
- Aligns processes with the MITA Framework
- Leverages Deloitte's industry-leading process mapping tool (IndustryPrint) and existing Child Care, Child Welfare, Child Support, and Integrated Eligibility process models to reduce the time spent building models from scratch

To provide services in a more efficient manner and to promote effective data sharing requires having a clear understanding of short-and long-term goals, establishing future-state guiding principles, and identifying opportunities for improving the delivery of services. The BPMs identify the integration between the business and the WV Human Services Platform (WV HSP). The below graphic portrays where this section's activities fit within our overall EVD for SI Hybrid Agile methodology for the WV IES project and outlines our response to your requirements.

WV_IES_2017-0067

Figure 4.3-124. Business Process Models/Mapping.

Our Understanding

Modernization of Integrated Eligibility, Child Support, Child Care, and Child Welfare systems changes how State personnel, providers, and members interact with each other throughout the case life cycle. To prepare for a successful implementation requires a clear understanding of To-Be business processes. New BPMs are a component of the design of the new integrated system. They also help to prepare staff for changes.

BPM Creation and Alignment with the MITA Maturity Model

Our approach leverages Deloitte's EVD for SI methodology and includes tools, procedures and process models to accelerate the development of new BPMs that represent the framework of activities and processes supported by the WV HSP. We create, maintain, and update the BPMs throughout Design, Development, and Implementation (DDI) and then, after implementation, maintain them as part of the change control process.

We develop To-Be BPMs to establish standard processes as a component of the system design to support alignment between the system and business expectations. To accelerate the creation of new BPMs, we use our library of existing Child Welfare, Child Care, Child Support Enforcement, and Integrated Eligibility process models which are incorporated into Deloitte's business process mapping tool, IndustryPrint. Deloitte's approach to BPM aligns with and incorporates the MITA 3.0 Framework to improve the efficient, effective, and economical management of Medicaid.

Deloitte worked with several states to align Human Services organizations and processes to the MITA framework:

- In New Hampshire, we identified As-Is and To-Be state capabilities and mapped future state functional alignment to MITA Maturity Model to validate a business model that is centered on a "whole person" approach to service delivery
- In Kentucky, we assessed the existing Medicaid business organization's alignment to MITA and industry best practices and provided a roadmap for increasing the organization's alignment and performance
- In Massachusetts and Maine, we used the MITA framework to complete ICD-10 Impact Assessments

Incorporation of the MITA Maturity Model Measurable Qualities

To-Be processes must be designed with the goal of improving the current state of practice relating to business, information and technical capabilities within the enterprise. Deloitte's business process modeling approach incorporates the alignment of the new business process models with the five levels of maturity represented by the MITA Maturity Model used by West Virginia to measure these capabilities. Using the MITA 3.0 Framework Maturity Model and DHHR's current Business Capability Matrix, Deloitte defines business, information and technical capabilities for the WV DHRR IES solution. The definitions include a maturity measurement for the business process, differentiated by the six measurable qualities to distinguish performance from one maturity level to another.

During the design of the To-Be BPMs, Deloitte works with West Virginia to align relevant processes to MITA business process models and levels of maturity and establish Key Performance Indicators (KPIs) for the 6 measureable MITA qualities.

MITA Measurable Quality	KPI Used to Measure Quality
1. Timeliness of processes	• Percent of applications processed within the Standard of Promptness (SOP)
2. Data Access and Accuracy	• Percent of system up time compared to unplanned system outages • Number and duration of unplanned outages monthly
3. Effort to Perform, Efficiency	• Use data mining after deployment to analyze the average processing time for each step and determine areas for improvement
4. Cost-effectiveness	• Comparison of average processing time per application
5. Accuracy of Process Results	• QA reviews to determine accuracy of eligibility results • Data mining analysis to visualize the adoption of the new processes
6. Utility or Value to Stakeholders	• Average processing of applications per worker – before and after deployment comparison

Figure 4.3-125. Sample KPIs for the MITA Measurable Qualities.

We build these and additional KPIs into the BPMs in IndustryPrint. These KPIs can be used after deployment of the new system to assess user adoption of the new business processes, identify gaps and areas for improvements, and track progress towards higher levels of MITA maturity.

Our Approach

This section describes our approach to the objectives you outlined in the RFP and our response to these objectives is organized as follows:

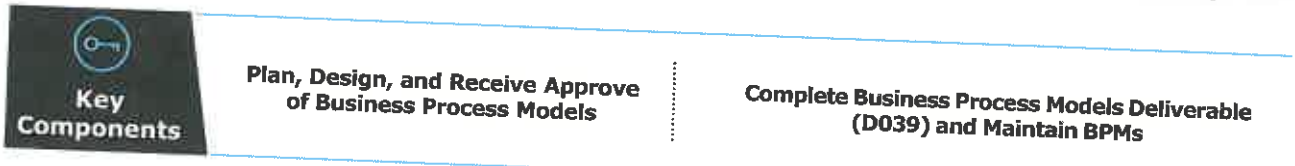

Figure 4.3-126. Key Components.

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The Plan, Design, and Approve phases for business process management are completed during the Requirements Analysis and Design phases. This enables the To-Be BPMs to be developed as component of the system design. Mapping future end-to-end business processes reduces ambiguity and uncertainty amongst stakeholders and relieves some of the anxiety of the unknown. Completing the To-Be business process maps during the system design encourages integration between the business and the new technology.

After approval, we update BPMs to reflect approved changes made through implementation into production. After implementation, the change control process includes a review of related BPMs so that business processes are maintained at the same time technical changes are approved.

The following table lists key features of Deloitte's approach:

Feature	Description	Benefit
IndustryPrint	Deloitte's configuration ARIS, a market-leading modeling platform. IndustryPrint includes standard HHS process models	• Accelerates BPM development through the use of a web-hosted business modeling approach • Includes process models from Deloitte's successful Child Welfare, Child Support, Child Care, and Integrated Eligibility implementations
MITA 3.0 Framework	Used to map Medicaid processes, set key performance indicators (KPI) standards, and advance business process maturity levels	• Aligns processes with MITA business process models • Uses the MITA Business Capacity Matrix to evaluate business capability of the six measurable qualities • Provides requirements to move to the next maturity level

Figure 4.3-127. Features and Benefits of Deloitte Business Process Management Approach.

Plan, Design, and Receive Approval of BPMs

Plan Processes

Deloitte's Business Process Model Management Plan details the purpose, scope, and objective of business process model management. This plan provides a catalogue of the future state processes to be documented and how they align with the MITA 3.0 Framework. It also defines our methodology for managing BPMs, including how we develop our To-Be BPMs and which tools, frameworks, and guiding principles are utilized. Our plan documents a timeline for milestones and activities, a tracker of roles and responsibilities, an example of a business process workflow model, and an index of To-Be BPMs to enable coordination and completion of the plan.

Distinguishing Factors

- Deloitte is a recognized leader. We were named the leader in Business Transformation Consulting by Forrester *(Business Transformation Consultancies Wave Q3 2015)*
- We were recognized as a global leader in Operating Model Strategy & Organization Design Consulting by Kennedy *(Operating Model Strategy and Org Design Consulting 2014)*

Design To-Be Processes

HHS-specific process flows for various HHS program areas included in IndustryPrint provide a starting point for mapping new BPMs, which saves resources relative to documenting them from scratch. In areas where existing business processes change as a result of WV HSP implementation, we will create new models for the processes impacted by new functionality, such as new interfaces. We will seek to reuse any available and applicable business process documentation to support the WV HSP. Deloitte leverages the MITA 3.0 Framework Maturity Model and uses system requirements documentation and design sessions as inputs to update the standard IndustryPrint models. In some instances, we schedule To-Be business process workshops with program leads to refine future state workflow diagrams in IndustryPrint, document future roles and responsibilities and prioritize desired business outcomes.

BPMs in IndustryPrint consist of three levels. At the highest level, IndustryPrint consists of process groups that are collections of functionally related processes, such as Eligibility Determinations. Each process group consists of one or more processes, such as redeterminations for Child Care. A process comprises a graphical process model, of which tasks are the basic building blocks. The three levels of IndustryPrint (process group, process, and sub process) are illustrated in the following figure.

Figure 4.3-128. Samples of IndustryPrint processes and sub-processes.

IndustryPrint enables us to dynamically link processes and drill into sub-processes to adequately demonstrate end-to-end processes and dependencies among agencies, worker roles, and process steps. IndustryPrint enables us to embed task-level descriptions of the process steps, handoffs, roles and responsibilities, and how the WV HSP and other tools are used in the process (Level 3). Additionally, during the design of the To-Be business process models,

Deloitte and West Virginia identify KPIs for the six measureable MITA qualities. We build the KPIs into the BPMs in IndustryPrint so they can be used after deployment to assess user adoption of the new business processes, identify gaps and areas for improvements, and track movement to higher levels of MITA maturity.

Approve Business Process Models

Deloitte submits the BPMs deliverable to follow the project standard review and approval process described in the Quality Management section 4.3.2. The delivery of process models is staggered to allow for a manageable review process. Once approved, the new business processes are used to support development efforts. The BPMs are referenced from design documentation to create a linkage between the design and the processes.

Complete the Business Process Models Deliverable (D039) and Maintain Business Process Models

The BPMs deliverable defines step by step workflows for the business processes supported by the WV HSP, includes KPIs for tracking the MITA measurable qualities, and alignment with system design documentation, MITA Maturity Models and BPMs. Including KPIs for the MITA measurable qualities in the BPMs enables the assessment of capabilities relative to the MITA Maturity Model. The design and approval of the future state BPMs is a major milestone, however it is not the final milestone. BPMs continue to evolve throughout implementation and it is imperative they are maintained. To enable the maintenance of business processes, the change control process includes steps for reviewing the impact of a change on BPMs and updating them as needed. Referencing relevant BPMs in design documentation creates traceability so that as designs are updated, corresponding BPMs can be evaluated and updated if needed.

When a change to a BPM is identified, the team reviews and the changes to understand additional downstream or upstream impacts. These impacts and updates are documented and reviewed and approved with stakeholders as part of the change control process.

4.3.13 Objective: Enterprise Reporting Capability

Enterprise reporting and information management capabilities are critical to support informed policy and decision making by Health and Human Services organizations. The Deloitte team brings a robust set of capabilities, solutions and experience that have been proven through multiple state Public Sector implementations leading to reporting capabilities that are integrated, consistent, accurate and extensible. The reporting and analytics solution provides WV HSP with actionable information enabling the achievement of program goals and objectives.

Section Highlights

The WV HSP solution provides robust reporting and analytics capabilities to help DHHR to derive the following key benefits:

- Standardize and consolidate reporting
- Monitor and enhance program accountability
- Reduce program administration costs
- Improve regulatory compliance reporting

Deloitte's Information Management practice is comprised of over 5,000 practitioners meaning that we can provide WV HSP with significant experience delivering proven reporting and analytics solutions. We bring more than 25 years of experience delivering reporting and analytic solutions to an array of Health and Human Services clients. We have collaborated with numerous state agencies to design, develop, and implement reporting and analytics solutions that allow stakeholders to derive insight from their information.

Based on our experience working with Health and Human Services clients, we have developed a proven approach focused on providing a robust reporting and analytics solution to enable stakeholders to make fact based data driven decisions. The following graphic portrays where this section's activities fit within our overall EVD for SI Hybrid Agile methodology for the WV IES project and outlines our response to your specific RFP requirements.

Figure 4.3-129. Enterprise Reporting.

Our Understanding

Deloitte understands DHHR's objective to provide enterprise reporting capabilities to drive informed policy and decision making. DHHR seeks to consolidate their existing legacy reporting systems into 'one enterprise reporting model'. An enterprise reporting model or framework will lay the foundation for cross-department and cross-program reporting and analytics to allow DHHR stakeholders to effectively and efficiently answer and analyze critical business questions.

Consolidating Existing Legacy Systems

Deloitte understands DHHR's need to consolidate existing reporting capabilities from your legacy systems into one enterprise reporting model. As indicated in the following graphic, data will be extracted transformed and loaded from a series of legacy DHHR data marts. These data marts include RAILS, RAFT and OSCAR.

Currently, DHHR leverages Cognos to support a wide array of reporting functions including ad hoc, cubes, and canned reports. These reporting capabilities enable program stakeholders to monitor and track program operations. In addition, they help to satisfy state and federal reporting requirements. We will continue to leverage the Cognos reporting platform to provide one enterprise reporting platform that meets the Department's reporting requirements identified in the RFP.

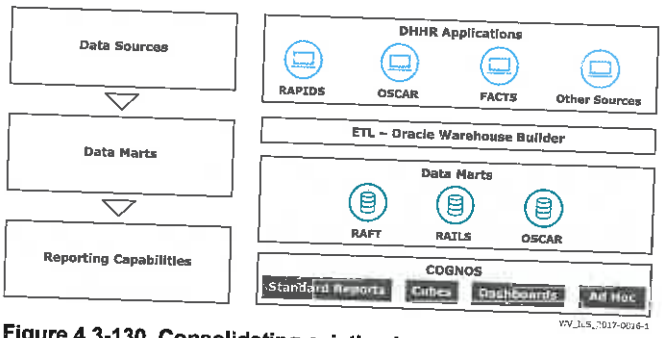

Figure 4.3-130. Consolidating existing legacy systems.

Deloitte's WV HSP enterprise reporting capabilities provide DHHR with proven data integration, data management, reporting and analytic capabilities. These capabilities help organizations enhance HHS operations through informed policy decision making. Our Cognos based consolidated reporting solution aims to integrate data across the organization, standardize data governance, minimize redundancy and duplication, and provide a single "version of the truth". In sum, the enterprise reporting solution provides broad reporting capabilities ranging from ad hoc reporting and interactive dashboards to cubes and canned reports required to facilitate strategic decision making and fact based policy decisions.

Our Approach

WV HSP enterprise reporting solution will combine best practices and lessons learned working with dozens of HHS organizations. It encompasses numerous KPIs spanning multiple HHS program areas such as Child Welfare, Child Care, Child Support, Medicaid, TANF, and SNAP. These KPIs position stakeholders to make informed, data-driven decisions. In order to implement a consolidated reporting solution for WV HSP, Deloitte will leverage our established Enterprise Value Delivery (EVD) for Systems Integration (SI) approach. Our EVD for SI methodology was developed based on years of hands-on experience working with state and local government clients as well as working with commercial clients to deliver reporting and analytic solutions. This methodology includes detailed processes, tools, templates, and strategies to accelerate project delivery, improve quality, mitigate risk, and provides end-to-end project management guidance. Throughout the remainder of this section we will detail our proposed reporting solution and our approach to implement for WV HSP.

Proposed Reporting Solution

As part of this initiative, Deloitte is proposing to leverage DHHR's Cognos reporting platform. Our approach provides a robust, web-hosted reporting and analytics technology stack which includes data storage, data integration tools, and business intelligence tools. In addition, WV HSP reporting solution will enable an array of reporting capabilities including standard reporting, ad hoc and cubes, interactive dashboards, and canned reports. It will provide a multitude of reporting features including mobile access, batch scheduling, and import/ export functionality. As indicated in the following graphic, our WV HSP reporting solution provides an array of reporting capabilities and features organized around key HHS business areas.

Our approach supports multiple key performance indicators (KPIs) to meet West Virginia's reporting and analytics needs. These KPIs are logically grouped into the following business areas: Child Welfare, Child Support, Child Care, Medicaid, TANF, and SNAP. It will provide DHHR stakeholders with the ability to make informed decisions with the overarching goal of improving services to West Virginia's citizens. The subsequent sections detail the business functionality as well as the key enterprise reporting capabilities and features supported by the WV HSP reporting solution.

WV HSP Reporting Business Areas

WV HSP enterprise reporting solution empowers stakeholders at multiple levels across the organization with the right data needed to make the right decisions which are required within the individual program or department. It provides Executive, Program, and Operational reporting to organizations. Executive reports are typically intended for senior HHS leadership including the Secretary, Deputy Secretaries, and other executive stakeholders.

Executive reports integrates data across the entire HHS organization enabled by Master Data Management (MDM) to allow stakeholders the ability to quickly and intuitively monitor and compare performance across multiple programs. Program analytics provide both aggregate and detailed metrics related to individual HHS programs. This allows stakeholders to monitor and track a series of key indicators to improve performance and address programmatic questions. Operations analytics are typically intended for Case Managers, Case Workers, and other operational staff. Operations analytics allow stakeholders to track critical day-to-day metrics such as case intake, application metrics, and timeliness to provide enhanced insight to manage their workload. Each of the above stakeholders have the ability to analyze a multitude of key performance indicators across an array of programs. These programs include Child Welfare, Child Care, Child Support, Medicaid, SNAP, and TANF. Additional details related to the specific business areas are found in the following table. Samples of potential KPIs and reports which could be prioritized as part of the WV IES project are highlighted in the following table. These examples are not meant to be an exhaustive list but instead highlight some of the functionality that could be implemented based on DHHR's needs and requirements.

Business Area	Description	Sample KPIs
Child Welfare	The Child Welfare business area provides critical analytics and historical information regarding child safety, permanency, and well-being. It provides extensive details related to tracking child welfare referrals, investigations, adjudications, and services. In addition it provides key performance indicators related to the AFCARS population including the number of children in care, average length of time in care, household stability, and details related to children who re-enter care after reunification.	• CW Referrals by Source and Category of Concern • Average Response Time • Number of Investigations by Type (General Protective Service, Child Protective Services) • Substantiated vs. Unsubstantiated Investigations • Number of Children who Re-enter Care • Child and Family Services Review compliance • Adoption and Foster Care Analysis and Reporting System (AFCARS) federal metrics

Business Area	Description	Sample KPIs
Child Care	The Child Care business area is focused on analyzing, understanding and improving child care access and provider quality. Child Care access is focused on tracking subsidized child care enrollments and expenditures by facility type and location, while Provider quality is focused on analyzed STARS ratings, incidents, complaints, and inspection details.	• Child Care Subsidy Enrollments by Location • Child Care Expenditures • Number of Providers by STAR Rating • Non-STAR rated providers • Number of Enrollments by Type (Group Home, Center, Other) • Number of Children on Waitlist • Number of Regulated Providers • Child Care Providers on Provisional licenses • Federal Child Care Subsidy reporting metrics
Child Support	The child support business area provides extensive details related to analyzing and understanding child support orders, collection payments, child well-being, income, arrears, household composition, payment sources, and non-custodial parents (NCP) employment trends. In addition, it supports federal OCSE, ACF, and CSS reporting requirements.	• Child Support Collection Amounts by Collection Type • Child Support Payment Source • Child Support Collections Per Case • Number of Non-Custodial Parents with a Job • Child Support Collections Received from Employed Non-Custodial Parents • Child Support Collections by Location • OCSE Federal Reports
Medicaid	The Medicaid business area provides DHHR stakeholders with robust reporting and analytics solution to track, analyze, and understand Medicaid related metrics. The Medicaid area includes details across multiple MA programs such as MAGI, Non-MAGI, CHIP, and LTC. In addition, it provides insight into the benefit plans serving MA recipients.	• Number of Medicaid Enrollments by Program • Medicaid Program Churn • Medicaid Eligibility Timeliness • Medicaid Case Processing Timeliness • Number Medicaid Eligibility Renewals • Children enrolled in CHIP by Plan • Enrollment by MCO (Managed Care Organization) • MA and CHIP Federal Reports
SNAP	The SNAP business area provides extensive details related to analyzing and understanding SNAP Payment distributions and SNAP Payment errors through a series of KPI's. The metrics tracked enable organizations to assess overall program growth in numbers, cost, quality, and program integrity.	• Number of Enrollments in the SNAP Program • Total SNAP Expenditures • Expedited SNAP Enrollments • Number of Individuals exiting SNAP by Reason (Income, Employment, Renewal Failure) • Number of SNAP Errors by Type (Overpayments, Ineligible, Underpayment) • Cost of SNAP Errors by Type (Overpayments, Ineligible, Underpayment) • EBT Card Usage • FNS Federal Reports
TANF	The TANF business area is focused on analyzing, understanding and improving self-sufficiency through employment. The TANF area provides extensive details related to analyzing and understanding TANF enrollment trends, work participation rates, employment and training programs, job retention, and re-entry.	• Number of Enrollments in the TANF Program • Total TANF Expenditures/Payments • Length of Enrollment in TANF Program • Work Participation Rates • Percentage of Individuals re-entering TANF • Percentage of TANF recipients employed • ACF Federal Reports

Figure 4.3-131. Sample KPIs.

Throughout the WV IES project, Deloitte will work in collaboration with DHHR to define and finalize the specific reports which should be created to support your reporting and analytics needs.

WV HSP Reporting Capabilities

The WV HSP enterprise reporting solution provides reporting and analytics capabilities to help DHHR analyze and understand one of your most important assets – your information. The following table highlights the specific capabilities that can be leveraged as part of the WV IES project.

Capability	Details
Standard Reports	• Standard Reporting provides an array of pre-built prompt based canned reports which are available for user consumption. Users can easily execute a standard report by clicking on an available report and inserting the specific prompt details
Cubes	• Cubes are multi-dimensional arrays of data which allow organizations to answer a wide array of business questions tied to the same set of data. Based on the specific needs and requirements of the Department and the available data, Deloitte can quickly and expediently implement DHHR specific cubes
Dashboards	• Dashboards provides users a holistic view of related reports and underlying KPI's that enables users to derive insights. Users can easily review multiple reports containing multiple KPIs on one dashboard view
Ad Hoc	• Ad Hoc Reporting allows users to access a series of data elements to create and define business queries. Users with limited to no programming knowledge are able to use ad hoc to build their own custom reports. Reports can then be saved and re-run in the future to support continued analysis

Figure 4.3-132. WV HSP Reporting Capabilities.

WV HSP Reporting Features

In addition to bringing robust and innovative reporting and analytic capabilities, Deloitte's enterprise reporting solution will also bring a series of key reporting features. This will provide WV DHHR stakeholders with enhanced flexibility to derive the most insight from their data. A high-level overview of each of these features has been provided below.

Feature	Details
Data Access	• Access to the underlying data is controlled via role-based security so only users with appropriate privileges are able to view. Additional controls exist to prevent privileged users from sharing underlying data with users whose privileges do not allow them to otherwise view that data, keeping your data secure.
Data Import	• The reporting solution has the ability to integrate data from different data sources
Data Export	• The WV HSP enterprise reporting solution has capability to export standard reports, drill through reports, and underlying data
Federal Reporting	• The WV HSP enterprise reporting solution provides the ability to create ad hoc reports to support federal reporting. • The WV HSP enterprise reporting solution provides capabilities to comply with Federal and State reporting regulations which include: Federal OCSE 157 Reporting, Federal OCSE 34 Reporting, Data Reliability and Self-Assessment Reporting.
Audit	• Select advanced users will have the ability to track and monitor report usage. Audit capabilities help to track report adoption and monitor usage. The reporting solution will offer the ability to track usage across multiple dimensions: usage by report types, usage by month, usage by user role, and usage trend across time by user roles.

Figure 4.3-133. WV HSP Reporting Features

We are confident that Deloitte's reporting and analytics solution approach will meet DHHR's needs by allowing stakeholders to understand and analyze their information to make fact based, data-driven business decisions, with the ability to interact, collaborate, and discover.

Approach to Meeting DHHR's Objective

Deloitte's EVD for SI approach leverages an iterative, flexible, sprint-based approach which enhances team collaboration and improves overall delivery efficiency. EVD for SI includes a number of key phases which include the following: Plan, Requirements Analysis and System Design, Development, Testing, and Implementation.

During each of the above phases a number of core activities take place to confirm the designed, developed, and implemented solution accurately meets the needs and requirements of WV DHHR. Throughout the remainder of this section, we will discuss our approach for implementing the key activities which will take place to implement reporting capabilities.

Plan

The first step of the EVD for SI approach is the Plan phase. The Plan phase is typically executed during the first several weeks of the project and includes the development of a detailed master plan to guide overall project activities. The master plan is comprised of the project scope, the project work plan, and the stakeholder engagement plan. The project scope clearly outlines what major tasks and work products are in scope for the project. The work plan is used to document key activities, timelines, and ownership throughout the project. This will confirm that the stakeholders are onboard with project scope, activities, and timelines. In addition, the work plan will serve as the guiding document throughout the project life cycle to proactively manage current tasks and identify and slipping or late activities. As part of the plan phase, Deloitte will conduct a project kickoff session with client stakeholders to review project scope, key activities, and open questions related to reporting.

Requirement Analysis and System Design

The second step of the EVD for SI approach is Requirements Analysis and System Design. The Requirements Analysis and System Design phase is focused on capturing the requirements and use cases to be implemented as part of project. During this step, Deloitte will conduct a series of requirements sessions with the approved and designated stakeholders to discuss and identify the reporting requirements. Reporting focuses on designing, developing, and implementing new reports to support DHHR's needs. During the Analysis and System Design phase, Deloitte will work to finalize the design related to the prioritized requirements. The prioritized requirements will detail the new and modified reports included as part of reporting. System Design will focus on several core areas – data model validation and design, ETL process design, report system design. Data model validation and design refers to the activities which will be conducted to review and finalize the enterprise reporting solution's data model. Deloitte will develop a data model focused on capturing information required for each prioritized and approved report. In addition, during design we will work to create an ETL process document. The ETL process document will detail the extract, transform, and load logic which will be used to move and consolidate the WV HSP sourced data into the data marts. Finally, as part of design for reporting we will work to create a system usability document. This document focuses on capturing design details related to in-scope new/ modified reports. Design details include the wire frames, business logic, security, data sources, filters, and calculations for each report. At the conclusion of the Analysis and System Design phase, Deloitte will submit the prioritized list of requirements, Report System Usability as well as an updated project work plan detailing the proposed project sprints.

Development

The primary activities included as part of the development phase include the development of our extract, transform, and load processes to move data and the development of the new Cognos framework manager packages and reports. As indicated in the timeline above, development and unit testing activities will be delivered in a series of overlapping sprints. This will allow reports for each individual program area to be rolled out in iterations.

This allows DHHR to begin leveraging key DHHR reporting assets while other subject areas are still being designed, developed, and implemented.

Testing

The fourth phase of the EVD for SI approach is the Testing phase. Testing includes both Integration and Acceptance activities. Integration refers to the test scenarios which will be written and executed by the Deloitte team. These test scenarios will focus on testing the ETL processes to confirm they are accurately moving the

source data to the DHHR data marts. In addition, Integration testing will include validating the new reports function correctly. These test scenarios will focus on navigating to each report, validating the report structure and format, validating the data and business logic, and validating the report security. Acceptance testing refers to the user acceptance testing activities which will be executed by DHHR. Acceptance testing will validate that DHHR is comfortable with the developed solution. Bugs or defects identified during Integration and Acceptance testing activities will be reviewed, triaged, and prioritized by Deloitte in collaboration with DHHR. The prioritized defects will be resolved and re-tested for confirmation.

Implementation

The fifth and final step of the EVD for SI approach is Implementation. Implementation includes activities needed to deploy the solution to the production environment. In addition, it outlines the ongoing support activities which will be required to continue to maintain the reporting solution. At a high level these activities will include applying data structures in production, deploying ETL processes, and deploying Cognos reports. Step by step instructions will be detailed for each activity as well as the respective owners. At the conclusion of the Implementation phase Deloitte will submit a deployment completion plan as well as a support plan. Deloitte's EVD for SI approach will help DHHR achieve their objective of "enterprise reporting capability." As detailed above the reporting solution will integrate data across programs to allow actionable information to be leveraged by stakeholders for informed policy and decision making. Our approach will position DHHR with quality data to make fact based, data-driven decisions.

Our Team's Organization Structure for Supporting Enterprise Reporting

Deloitte offers a broad suite of capabilities to help clients tap into the value of their data and enable insight-driven decision making. We will bring the best and brightest individuals with two-fold experiences of deep subject matter expertise in Health and Human Services and technical knowledge for large-scale reporting and analytics implementations. Based on our understanding of the enterprise reporting capabilities which DHHR is requesting, as well as our extensive background implementing similar HHS reporting solutions for other state clients we recommend the below mix of resources be included as part of the organizational structure. While the number of resources will vary for each project phase, the core skill sets and team structure will remain consistent.

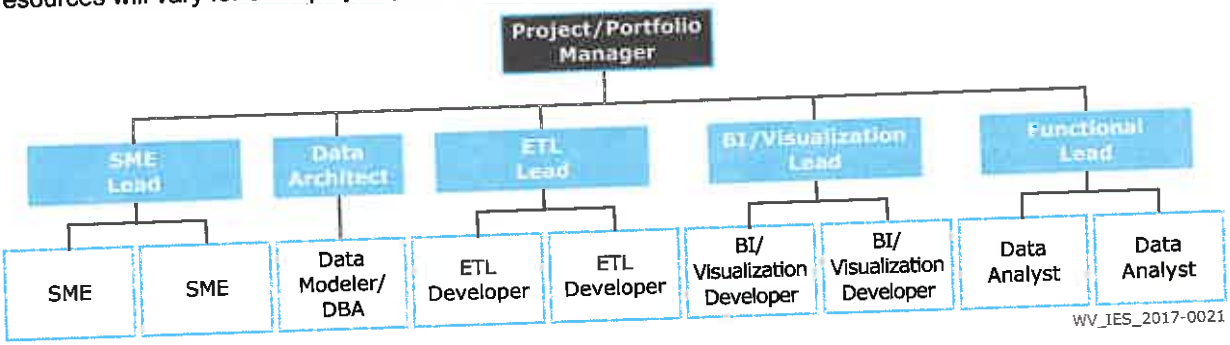

Figure 4.3-134. Enterprise Reporting Team Organization Chart.

Position	Position Description
Reporting Project Manager	• The project manager will provide overall reporting team project management and coordination throughout the life cycle of the project.
Project Management Office Support	• The PMO Support team will review deliverables for technical and quality assurance, as well as provide strategic guidance to the project team.
Data Architect	• The data architect will provide overall data modeling support for enterprise reporting capability needs. This includes the data model design of the hosted data marts and the replicated reporting capabilities.

Position	Position Description
Subject Matter Expert (SME)	• The SME is will provide input in deliverable preparation and participate in relevant sessions based on their background. These are experienced practitioners with the health and human service practice focused on a program area to be delivered such as Child Care or Medicaid.
ETL Developer	• The ETL Developer will work on moving the data marts to the hosted solution leveraging the data model design from the data architect. • Additionally, the ETL developer is responsible for preparing data in the hosted data marts to be consumed by the BI tool (Cognos) and the ETL process document.
BI/Visualization Developer	• The BI/Visualization developer will develop the dashboards, reports and cubes for stakeholders.
Data Analysis – Functional	• The team of consultants will be responsible for leading requirement sessions, documenting design and functional testing of the reporting capabilities developed.

Figure 4.3-135. Position Descriptions.

Meeting your Functional Requirements

As detailed previously Deloitte is proposing implementing a Cognos based one enterprise reporting and analytics solution for WV DHHR. Our solution brings reporting capabilities including interactive dashboards, cubes, and reports along with robust ad hoc reporting capabilities. Ad hoc allows stakeholders the flexibility to drag and drop a series of data elements to quickly and intuitively build queries. In addition, ad hoc allows user to apply filters, measures, and calculations to enable users to drill up or drill down on data sets to derive additional insight. Ad hoc also gives users the ability to convert data queries/ outputs into custom reports. Ad hoc users also have the ability to enhance collaboration and data sharing. Reports can be scheduled to run/burst automatically and saved in shared group folders that multiple colleagues can view/analyze. Overall, our consolidated reporting solution's ad hoc capabilities allow both business and technical users the ability to effectively and efficiently create queries and reports. As detailed in the following table, our reporting solution approach meets DHHR's ad hoc reporting requirements and needs.

Requirements	WV HSP Reporting Capability	Details
The solution should provide ad hoc reporting of data related to the requests and responses processed through the Asset Verification System (AVS) to authorized users.	✓	• Our Cognos based reporting approach provides ad hoc reporting capabilities to allow authorized users to track and monitor data related to the requests and responses received through AVS. • Our reporting solution will enable users to query and build reports related to AVS data. Reports can then be saved and shared for future analysis.
Ad hoc state reports	✓	• Ad hoc reporting will enable WV DHHR the ability to quickly and efficiently respond to state reports.

Figure 4.3-136. Meeting DHHR Ad Hoc Reporting Requirements.

Our one enterprise reporting solution includes a broad set of features and capabilities that will enable DHHR to achieve their goals and objectives as outlined in the RFP. In addition, DHHR will be able to derive the following key benefits from our Cognos based approach:

- Provide an intuitive user interface with a consistent look and feel that supports access to an array of reporting capabilities including ad hoc, dashboards, cubes, and canned reports.
- Expand existing Cognos reporting capabilities
- Migrate/store required historical information
- Standardize the look and feel of reports, dashboards, cubes for user
- Robust and secure data management architecture in compliance with federal and state standards

The WV HSP reporting solution will provide DHHR with quality actionable data enabling the achievement of their vision so that the right clients receive the right services, at the right time, to support their path to self-sufficiency.

Goal: Completion of Functional Requirements

Section 4.4

Attachment A, 4.4, Goal: Completion of Functional Requirements

The West Virginia Human Services Platform (WV HSP) is a modern, modular solution that meets the State's functional and technical requirements with proven performance in production. It is compliant with Federal standards such as MITA, CMS' Seven Conditions and Standards, Child Support Enforcement federal certification requirements, Child Care ACF mandatory reports, and child welfare CCWIS as well as federal reporting requirements. It provides DHHR with a proven solution meeting the numerous federal requirements specific to these program areas, its service based architecture enables enterprise asset reuse. DHHR benefits from this modular design not only in meeting CMS's requirements and vision, but also because we are able to integrate best-of-breed solutions for specific modules and components to provide a flexible and configurable solution.

The solution we bring to DHHR is a modernized, scalable, sustainable, and flexible system built upon a Service-oriented Architecture (SOA) that meets the business and technical requirements of the State.

WV HSP is a modernized solution comprised of proven modules and components

- Cross-vendor capabilities
- Enterprise platform of the future
- Production-proven and maintainable

RFP Appendix VI: Business and Technical Requirements

West Virginia needs a system that is already operational and that is working for other states to minimize project risk. Our focus has been on creating and modernizing solutions in place that offer a high degree of industry-specific, purpose-built, native functionality based on federal requirements to shorten implementation time, reduce risk, and lower implementation cost. **From our fit/gap analysis of the State's 2,664 business and technical requirements, 74 percent are native functionality in the WV HSP, 22 percent are met through configuration and only 4 percent need to be met through coding.**

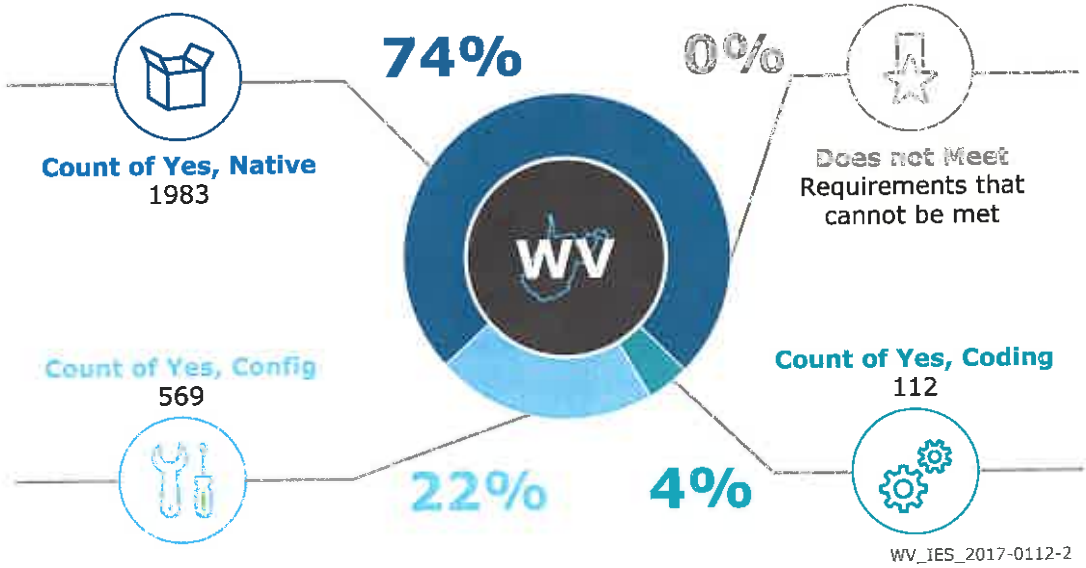

Figure 4.4-1. Our fit/gap analysis of the State's business and technical requirements.

The alignment of the WV HSP functional and technical capabilities with the State's requirements serves as an accelerator to achieve the functionality that the State mentions in the RFP. This alignment also serves as key input into our work effort estimates and our recommended release plan.

In the absence of further detail, for specifications that indicate "based on West Virginia business rules" or "defined by the State", our native responses are based on existing industry proven, best practice capabilities within WV HSP that meet Federal regulations, requirements, and standards. For more details about how we meet Federal regulations and requirement can be found at the end of this section.

In addition, the completed checklist for Appendix VI: Business and Technical Requirements is included in the appendix to this response.

RFP Appendix VII: Operational Requirements

Our fit to the Operational Requirements in RFP Appendix VII is 98 percent native. There is only 1 requirement that is met through configuration. No requirements need to be met through coding and there are no requirements that cannot be met.

The completed checklist for Appendix VII: Operational Requirements is included in the appendix to this response.

RFP Appendix VIII: Service Level Agreements (SLAs)

Deloitte agrees to perform based upon the SLAs as included in the resulting Contract.

4.4.1

Objective: Alignment with Requirements Appendices

In this section Deloitte presents our response to the requirements appendices. The RFP requested the "Vendor should complete the requirements checklists contained in RFP Appendices V, VI, and VII indicating whether, and how each functional requirement will be satisfied". Deloitte has included our response to Appendices VI and VII. However, as RFP Appendix V or VIII does not contain a requirements checklist, this cannot be included.

RFP Appendix VI: Business and Technical Requirements

The State identified four required modules for the WV Integrated Eligibility Solution:

- Training Management
- Client Management
- Service Management
- Finance Management

In addition to these four required modules, the WV HSP is comprised of 4 additional program specific case management modules that leverage the functions of the core modules to provide a wide range of functions to clients, providers, and workers.

These eight modules fit together in a comprehensive solution as depicted in the following figure supported by additional functional components, shared services, security, and integration layers:

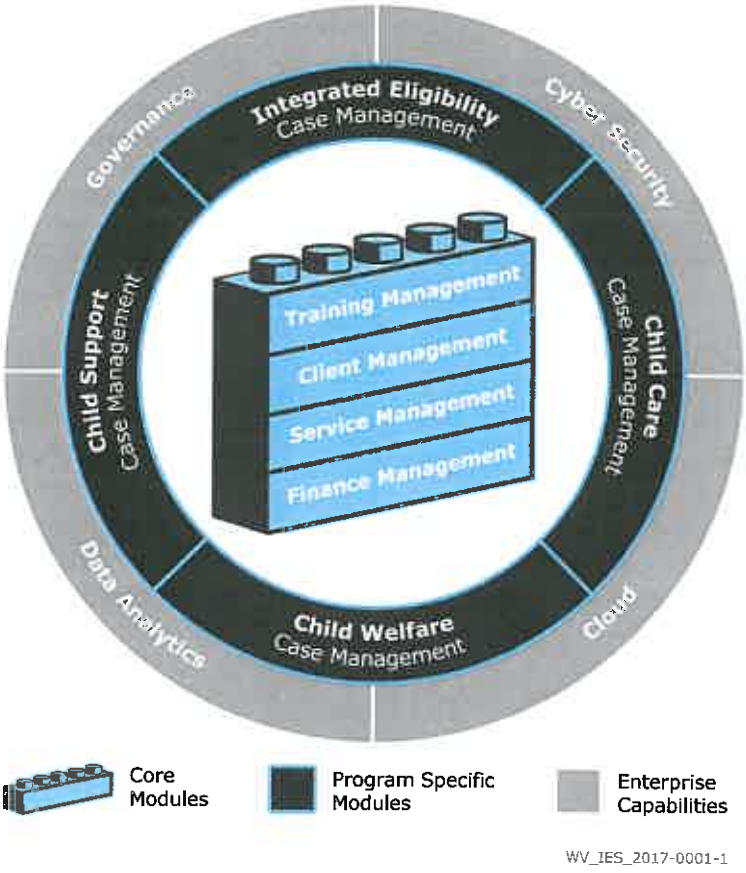

Figure 4.4-2. Comprehensive solution.

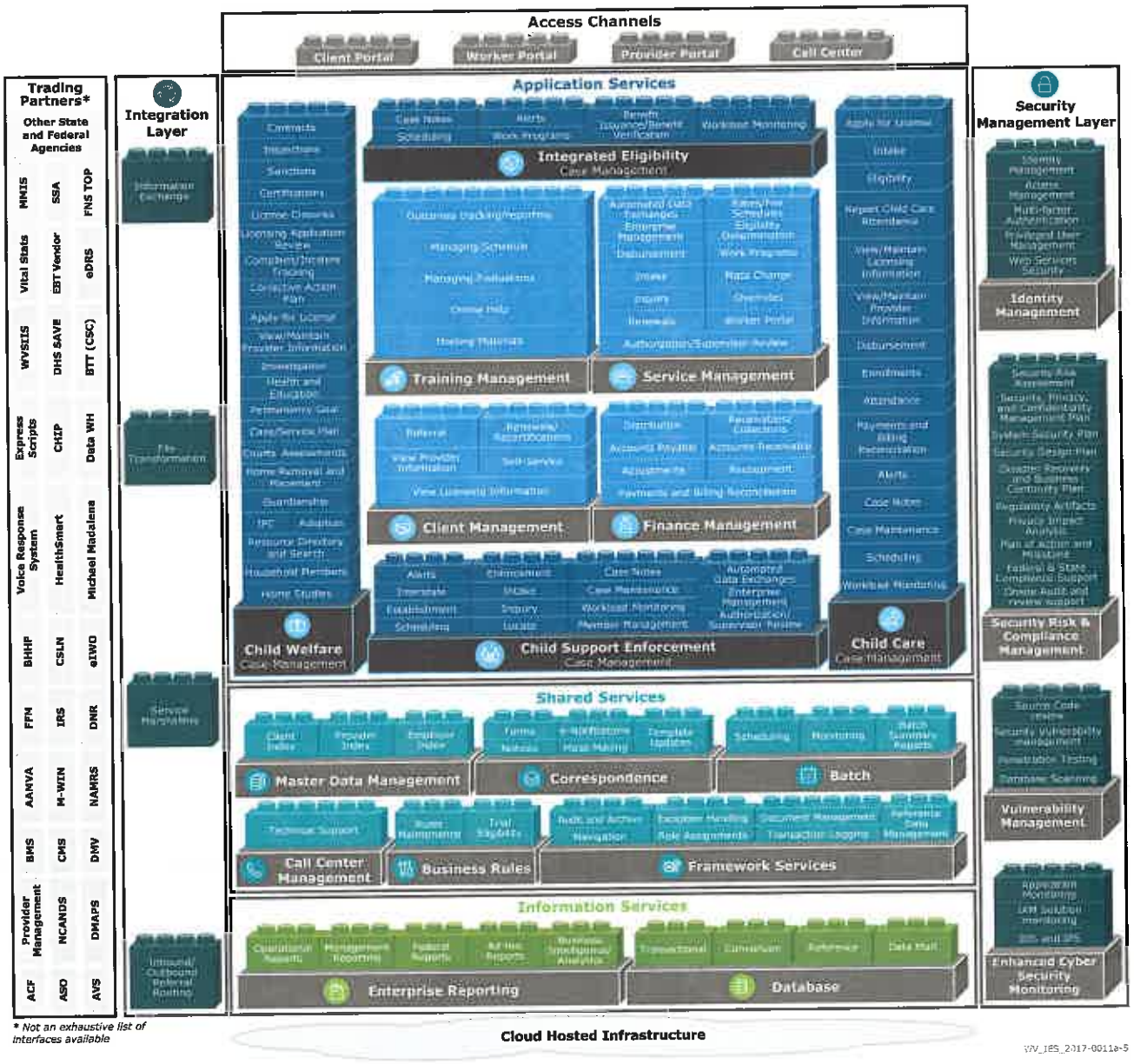

Figure 4.4-3. WV HSP component breakdown by module and layer.

In the following sections, we will describe how our approach to each module and its supporting components meet the State's requirements.

Client Management Module

Client Management encompasses the core functionality exposed to the State's clients. The Client Management module of the WV HSP enables the State to serve its constituents by providing a dynamic online application available through a client portal which supports business processes such as submitting applications for multiple programs, reporting changes, submitting referrals and checking the status on application and case information.

Self-Service

Self-Service is a user-centric designed and field-tested client portal. It provides a public facing channel for citizens to apply and screen for a number of assistance programs or to view/ maintain benefits 24/7 via a web browser and increases the availability of relevant program and policy information.

The client portal includes an intuitive user interface which allows residents to apply for benefits online, upload supporting documentation, report changes, complete renewals while providing up to the moment information about their benefits and electronic notices which can be viewed on demand in real time. Citizens will also be able to view payment information, scheduled events, docket information, and FAQs. The WV HSP increases client engagement and decreases call-center workload. The client portal security framework allows community partners or providers, such as nursing homes and hospitals, to register with a specific user type and access partner/provider-specific functions including providing presumptive eligibility information for hospitals, applying and evaluating eligibility in real-time, viewing the status of an application, payment, schedule and/or current coverage for their clients, and uploading verification documents to the content management system.

The integration between the self-service portal and the worker portal empowers clients while improving staff workload management, reducing data entry time for workers.

The client portal has a dynamic workflow that is configurable to meet the State's specific, unique needs. Workflows mirror the paper forms used to apply for multiple assistance programs and complete renewals/redeterminations. The screenshot below displays a sample navigation flow for our self-service component.

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Figure 4.4-4. Sample navigation flow for our self-service component.

Self-service takes into consideration that customers may not be able to complete the entire transaction at once. When applying for benefits, submitting a change, updating case information, or completing a renewal, the user is able to save their progress, leave the web portal, and resume where they left off upon logging back in. Once data on a page is saved, the user can navigate back through the application without losing any previously entered data. The time frame for saving a partially completed application is configurable. Customers are alerted to this time frame and applications not submitted after this holding period are purged. For SNAP, the user is able to submit an application with only minimal information, just name and contact details, as required by FNS.

Referrals

The Referrals component includes functionality to process referrals to/from external vendors and interagency referrals such as IV-A/IV-D agencies, Administration for Children and Families (ACF), State Medicaid agency, Medical Review Team (MRT), Treasury Offset Program (TOP) and Investigations and Fraud Management (IFM) etc. This exchange of data is an example of how the integrated solution creates meaningful partnerships across agencies and improves the DHHR's ability to meet client needs and business processes in a consistence fashion across the enterprise. Integrated with a Master Client Index, referrals also provide the opportunity to use current and historical assistance program information to identify outreach populations as candidates for existing or newly created services.

The Title IV-D and IV-A programs share the common goal of assisting families to be self-sufficient and to see to it that children receive the support they need. For IV-A programs, the focus is on providing support through multiple programs including TANF and SNAP. Title IV-A and IV-D interact to identify the responsible non-custodial parent, establish a consistent payment schedule for child support owed, and collect child support that is passed through to the family or assigned to the state for periods where the family receives Cash assistance.

Cash assistance benefit history is used to determine what support is due to the state and what support is due to the family. If a child is receiving TANF assistance then the money collected for child support is retained by the state, up to the grant amount. As children go on and off public assistance it is vital that this information is passed timely, accurately, and consistently so the money is distributed appropriately. The WV HSP is set up to share data between Title IV-A, IV-D, and Medicaid functions such as non-custodial parent, custodial parent, associated children, cooperation status, and child support payments information.

The WV HSP will allow the State to automatically accept automated referrals by accepting and processing required fields tied to the specific referral. The system will track the referrals as needed by specific agencies and the system will also provide list of referrals sent to external agencies in the past. Additionally, referrals are made from other agencies, departments, and programs to the Bureau for Children and Families to report abuse and neglect of a child. Relevant information needed to start the intake and investigation processes for abuse and neglect is electronically routed to provide swift and accurate referrals. Referrals routing and handling is further streamlined and automated to promote greater accuracy and accountability, using workflow functionalities such as assignment rules, escalation rules, support processes, and support settings.

Renewal/Recertification

The online redetermination service allows clients to complete the redetermination process before their benefits expire. Case details currently known to WV HSP are displayed and the client is prompted to update information as required by program policy for redeterminations. This streamlines the redetermination process and reduces the total data entry and time required for a client to complete the renewal. This is also configurable by program area to offer redetermination during the "grace period" even after expiration of benefits.

Service Management Module

The WV HSP Service Management module provides an integrated, worker-centric and outcome based solution. The solution supports an integrated approach and is flexible enough to support service delivery across the West Virginia Health and Human Services enterprise. Our solution supports shared functionality across all programs, while tailoring eligibility rules, automated workflows, electronic documents and alerts or tasks to the unique needs of the State's individual programs.

Worker Portal

The worker portal within the WV HSP provides State staff with a modernized application to perform their jobs. At the heart of the worker portal is a configurable, role-based dashboard which provides summary and drill-down views of relevant information based on the user's security profile. Action views highlight what needs attention now and what can wait, helping to prioritize work. Summary views calculate overall workload, case activities, and timeliness. Each view of the dashboard integrates with the corresponding data source and links the action from the dashboard with the underlying platform service, so views update in real-time as workers complete their tasks.

Intake

The Intake component supports application processing, case management, and eligibility determination by displaying and capturing the necessary program narrative, demographic, financial (income/expense), non-financial, resource, and verification information needed. Individual demographic information and the relationship between case participants (including tax filing relationships) is integrated in order to make eligibility decisions. The WV HSP will interface with and display master client data in real-time, potentially including name, Social Security Number, date of birth, gender, race, and other data elements as defined by the State.

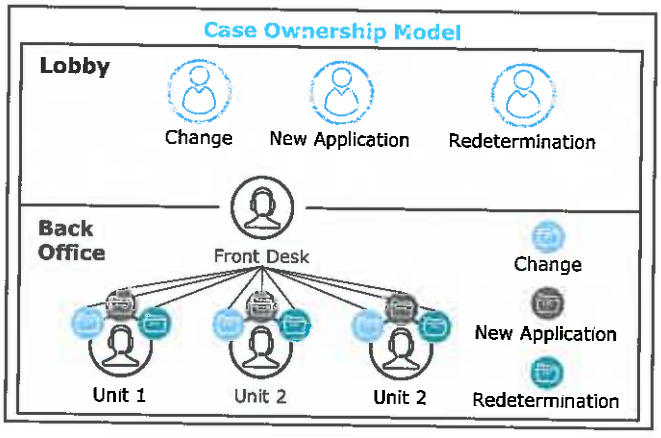
The information displayed and available to be updated is dynamic, based on user roles and program rules. The solution uses client data captured during intake across all programs, to minimize duplicate collection of information. During the intake process, the solution provides an efficient user interface to display and gather this data from users, including case workers, vendors for provider services, and the public via the self-service client portal.

Case Management

The worker portal allows workers to perform end-to-end case management and ongoing case maintenance functions for efficient client delivery. It supports application processing, case maintenance, and appeals processing by integrated business functions, automation, task dashboards, and guided workflows. The solution will allow DHHR workers to focus on resolving cases through the optimization of tools, and automated case service processes. Our solution will be easy-to-use enabling users to focus on the cases, as opposed to navigating the system. Equipping case workers to resolve the cases faster by providing them with access to the tools and relevant content in a one view. The worker portal will display all relevant information associated with a case as the user works.

Workload Monitoring

Workload monitoring varies based on the State's business process model. We typically see two types of business process models in State agencies, as depicted further in the following diagrams. Our solution supports both process models.



- Single person ownership for the case process like Change, New Application, Review
- Alerts are generated at each logical point
- Case Load coordinators, Supervisors reviews the Case Load for workers
- Entire case must be transferred to another case worker

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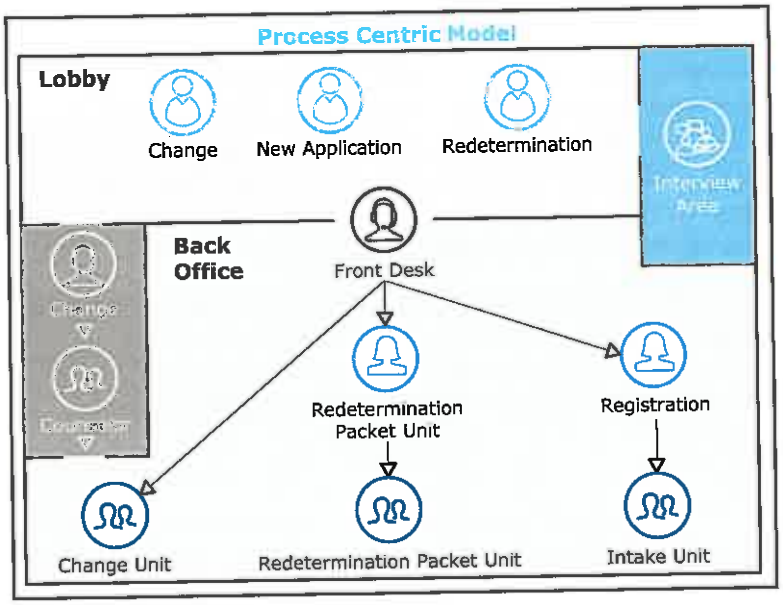
Figure 4.4-5. Case Ownership Model.



- Case worker is assigned tasks instead of cases
- Case is broken down into multiple different tasks (register application, case intake, initiate review, etc.)
- Different tasks for a case can be assigned to different case workers throughout the case's lifetime
- Each task can have their own unique due date
- Specific task can be transferred to another case worker

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Figure 4.4-6. Process Centric Model.

If operating within a process-centric model, each process is defined as a task. Tasks have a priority, due date, and assignee. Tasks get assigned and displayed in the assigned staff's/unit's work queue, sorted by priority and due date. With shared workloads, any worker in the unit can complete a task in the work queue, removing the dependency on a single team member.

Alerts

The Alerts component includes two primary functions: user alerts and system alerts. User alerts, also known as "reminders", are manually created and assigned by system users. System alerts are triggered by other system components and workflows, such as Interfaces/Automated Data Exchanges, Renewals, or time-based caseload monitoring processes (e.g., a child turning 19 years old). Alerts are associated to both cases, individuals, as well as DHHR staff and retrieved via the My Alerts function, similar to a task inbox. Alerts are stored in a reference table, allowing authorized system users to configure the priority of alert types, categorization of alerts, alert due dates, and alert escalation workflows.

Scheduling

The Scheduling component of the WV HSP consists of a graphical interface which uses combination of easy to navigate screens, forms and buttons to help the staff manage appointments and client scheduling tasks. The component enables staff to plan their appointments, tasks and priorities to improve productivity. This component also supports automated scheduling of appointments and length of the appointment, based on the workers' experience, type of appointment and availability. Additionally, the scheduling component provides supervisors the ability to enforce a specific schedule for workers who are on probation. For Child Support Enforcement, it allows for scheduling Intake appointments, paternity testing appointments, preliminary hearings, and court appointments.

Inquiry

WV HSP maintains detailed history of data, allowing both current, ongoing case data and historical case data to be reviewed and updated. Users are able to navigate through history spans to see data "as of" a specific date. As case

data changes, the Inquiry component provides a single point of access to summarize individual, assistance group, and case/household information. Access to view data is restricted based on the user's security role. Case confidentiality, family violence, and good cause indicators are very important to Child Support workers and an example of inquiry restrictions based on case characteristics and worker security levels.

Case Notes

Case, customer, and provider notes provide a narrative history for DHHR staff to better track case history and interactions, effectively serve clients when responding to inquiries, and perform case management tasks. WV HSP includes the ability for workers to enter, search, view, and amend case, client, and provider notes. Features such as spell-check and templates are available and provide standard formats for documentation. Case, customer, and provider notes can be flagged for sensitive information, restricting the ability to view or update these notes to only authorized users. The staff will also be able to update the applicant's case comments with an identifier, name of the applicant or related case member(s) to allow better tracking of case progress.

Automated Data Exchange

WV HSP includes a data management component with a data exchange, web services, project management, and reporting capabilities that work in collaboration with third Parties, while maintaining State and Federal standards and policies. The Automated Data Exchange will:

a. Enable the exchange of data between internal and external systems
b. Enable master data management by exposing secured interfaces to other authorized systems
c. Transform data from transactional repositories into an analytical repository
d. Create analytic reporting to be used to increase knowledge and support business decisions

Systems and programs do not and cannot exist in a vacuum. The sharing and transfer of data and files between Federal agencies, State Agencies and vendors is a major component and driver for a number of critical subsystems, such as child support enforcement, work program referrals, employment and training, Federal reporting etc. There is a need for efficient interfaces with these agencies and vendors in order to share information so the system can run smoothly and operate as expected. Complex data sharing and exchanges provide data to support the child support services provided by states. Our solution has the capability of both sending information collected and receiving and processing information from interfacing partners.

Overrides

WV HSP allows authorized system users to override eligibility determinations and system decisions prior to authorization/finalization of these outcomes. The overridden eligibility results are integrated into the workflow, driving downstream actions such as interface referrals, correspondence, and alerts. Overrides can be made effective "one-time only", a fixed span of time, or open-ended. The system also supports monthly reports summarizing the overrides by benefit programs and DHHR staff who authorized the overrides.

Disbursement

Disbursement is the process of actually making payments to recipients based on the completion of the distribution process for received collections. Our solution processes the disbursement of payables that are grouped together by defined grouping characteristics using a "payment run" function. The payables and credits of cash items (payments) are categorized as payments, cost and fee payments to the agency, refunds, and retained funds. In the disbursement process, WV HSP creates explicit data links between a disbursement and the appropriate disbursement recipient record. Disbursements are supported via debit card, direct deposit programs, or check

based on configured business rules. The WV HSP payment run (disbursement) functionality is capable of disbursing payables according to configurable grouping rules. This functionality allows the system to combine payables for an individual recipient into one disbursement. Alternatively, the system also supports the ability to disburse a single collection to multiple payees such as when disbursing to multiple intergovernmental agencies, if such a condition exists.

Finance Management Module

Finance Management is a critical, core functional module for the WV HSP that achieves compliance with federal and state regulations. This module supports the accounting process that supports the customers of the Department of Health and Human Resources (DHHR) with respect to child care, child support, child welfare, and family assistance programs. The collection, distribution and disbursement of support payments are important steps in the process of child support enforcement, in particular to provide financial stability to families and children. Precise and timely tracking and management of new and modified obligations as well as distribution and disbursement activities must adhere to federal requirements. This in turn provides for the accuracy and accountability of child support receipts, adjustments, and disbursements.

Financial Processing is a critical, core functional area for the WV HSP that provides the required functionality for these key child support financial activities, which include:

- Creating support orders to establish the monthly support obligations at the dependent level based on court order terms
- Charging full or partial monthly support obligations based on the frequency and the effective start date and end date for the order
- Billing non-custodial parents and employers to supplement income withholding orders
- Receipting collections from the State Disbursement Unit (SDU) and other payment sources
- Distributing collections to cases and obligations based on state and federal distribution rules
- Disbursing funds to the intended recipient or recovering funds for unreimbursed public assistance
- Categorizing, tracking and reporting held funds in the system to limit undistributed collections (UDC) and allow for funds transfer to the unclaimed property process according to state law
- Calculating account balances to reflect automated or manual initiated transactions
- Adjusting account balances due to misapplied funds, inaccurate case or order information or backing out an insufficient payment
- Notifying and recovering payee offset balances due to funds applied erroneously
- Reconciling bank accounts to record deposits and expenditures

Receivable/Collections

The WV HSP supports the receipt and posting of payments and costs or fees from various sources such as parents, employers, financial institutions, insurance companies, child care providers, and other state and federal agencies based on how your system works today. Design and development of the WV HSP includes components to facilitate required interfaces with the implemented State Disbursement Unit (SDU) software. These interfaces allow the solution to receive payment information on a daily basis, distribute the collections according to the federal and state distribution rules for each program, and send disbursement instructions back to SDU in order to disburse funds properly. Once the WV HSP receives the payment details from the SDU system, the payments are uploaded and posted for disbursement to the intended recipient(s) and to establish payment history.

Distribution/Disbursements

Distribution is the process of assignment payments across the Cases a Non-custodial parent may have as well as various obligation types like current, past due and future obligations. Disbursement is the process of actually making payments to recipients based on the completion of the distribution process for received collections. The WV HSP will process the disbursement of payables in the same way that your system today does. The disbursement methods that your system currently supports (such as debit card, direct deposit programs, or check based) continue to be supported in your new system.

Payment and Billing Reconciliation

Provider Payments are generated based on the agreed Provider Rates and Payment Terms detailed within the Provider Contracts (Agreements). Payment frequencies are configurable to meet your specific needs, whether monthly, weekly, or other. Payment calculations include several core components: the calculation of the total payment days (comparing attended days to authorized days) for each child in Provider's care, the selection of the rate for each child and type of care, the incorporation of irregular days including absent, holidays, flex, and others, the waiver of fees in exception cases, as well as changes for outstanding adjustments (both positive and negative). These payment components are parameterized to facilitate configuration and change over time due to changing regulations. The Parent Fee, the amount for which the parent is responsible to pay the Provider, is deducted from the total Provider payment from State. Payment amounts are available per child and summarized to support CCDF report estimates and other State requested forecasts. This detailed payment information is also available to Child Care Providers within detailed Payment Statements and shared through paper or online correspondence.

Once generated, payments are available for a financial review and approval. In case of identified corrections, the payments module provides the ability to reconcile and adjust payments, both positively and negatively as needed. A full payment history is maintained for each case containing the amount of payment, date, and method of payment. Approved payments are subsequently transmitted to financial institutions in order to issue the final Provider payments. Additionally, the mandatory federal reports (ACF 800/801) and tax information (1095B) are produced by the solution to eliminate any manual efforts to comply with Federal reporting requirements.

Recoupment

Recoupment represents a process that must be followed to complete a financial adjustment that involves a payment that has already been disbursed to a recipient (such as Child Care Providers). The recoupment process in the WV HSP is completed the same way recoupment is done today. If the payment amount has been disbursed to the recipient, then the adjustment process must create an overpayment transaction (receivable) to recover the amount from the recipient. Once an agreed response to repay is received and the tracking process of the recoupment is complete, the recovery of the balance is performed to recoup a configurable amount from future disbursements, or follows the repayment plan agreed upon by the recipient until the amount is recovered.

Adjustments

Account adjustments could result in an account balance adjustment; backing out and reposting one or more receipts to the same case between accounts or reposting to another case. The WV HSP provides functionality to perform adjustments the same way your system does today. The adjustment process within has distinctive sub-processes that incorporate the actions, steps, and the associated business requirements for performing account adjustments based upon the point-in-time at which the requirement for an adjustment is identified. Once the adjustment process has been completed, a validation is completed to determine the results of the adjustment, for example, if the adjustment resulted in an over disbursement to a recipient that now requires recoupment.

Child Care Payment Adjustments are calculated based on a positive or negative change in attendance information, as well as positive or negative adjustments in Provider Rates, authorization dates, child's age, family copayment, and other payment related elements. Positive adjustments are paid based on the payment schedule, and negative adjustments are recouped from future payments. Additionally, repayment plans can be developed to support large negative adjustments for Providers.

Accounts Payable/Accounts Receivable

The Accounts Payable functionality that Deloitte delivers helps manage, control and analyze the payment data passing through the child welfare agency. The Accounts Payable sub-module manages the generation of payments for all service provision and stages them for interface to the State general ledger application. The solution offers a number of options for payment generation, including: Automated generation of payment documents, Manual generation of payment documents, Automated generation of make-up payments and Automated generation of invoices. Although the solution is capable of automatically generating payments under multiple scenarios, we recognize that the State may not wish to cut checks on that time scale. Therefore, the solution offers the provision to hold (and release) payments before the payments are interfaced to the general ledger system for check creation.

Training Management Module

It is a critical need of all successful solution implementations to ensure the right training resources reach workers to answer their on-the-job functional needs. To that end, our WV IES Project team relies upon state-of-the-art Learning Management System (LMS) and Online Help (OLH) technologies to support delivery, monitoring and ongoing refinement of training resources.

Learning Management System (LMS)

The Training Management module of the WV HSP is implemented using Moodle. This comprehensive learning platform connects the West Virginia DHHR workforce and community partners to a suite of Web-based, live- and video-based trainings. It offers robust scheduling capabilities and supports delivery, controls and tracking of the entire training program for centralized management.

Online Help System

Our online help provides explanations of fields, procedures and helpful how-to instructions for the WV HSP. It also includes Quick Reference Guides (QRGs) that provide instructions and information for infrequently performed functions or multi-step tasks.

Integrated Eligibility Case Management

For over 35 years, Deloitte has delivered solutions that provide access (Eligibility and Enrollment) to Medical Assistance, Supplemental Nutrition Assistance Program (SNAP), Low-Income Energy Assistance Program (LIEAP), and Temporary Assistance for Needy Families (TANF). This includes developing, modernizing, and/or maintaining eligibility case management modules and service delivery solutions for 35 states that provide access to over 25,000,000 people.

Eligibility Determination

Eligibility Determination and Benefit Calculation (EDBC) component is at the heart of the Integrated Eligibility Case Management module, housing the business rules to determine eligibility for various Federal and State assistance programs including Medicaid, SNAP, TANF, LIEAP, and Emergency Assistance.

When a DHHR worker "runs" the eligibility process in WV HSP, thousands of business rules automatically process in sequence within seconds using decision logic. The eligibility process identifies which case members to include in the Assistance Unit, the span of benefit months to evaluate, when benefits should start for each program and person, any associated fee for assistance, and which categories of assistance to test – manual intervention is not required by the worker.

Our approach to eligibility allows us to deliver a WV HSP solution that is easier and less expensive to maintain than comparable systems. Confidence in the outcome is much higher and there is less opportunity for incorrect calculations, which increases program integrity and reduces waste.

WV HSP uses the Drools open source rules engine, which separates business rules from the application code and isolates programming needs for rules change. There is no need for programming skills to maintain these business rules; business analysts perform many required changes and can see the actual rule that will execute in production. This reduces the need for assistance from application programmers for day-to-day maintenance, support for the business rules engine while simplifying the process to change business rules, and translation of the rules into 'human readable' form.

Benefit Issuance

The Benefit Issuance component integrates with the Eligibility Determination component to issue payments to recipients and providers via multiple issuance methods including EBT (debit card), EFT (direct deposit), and warrant (physical check). WV HSP automatically triggers issuance upon initial authorization of benefits such as SNAP or TANF, and monthly batch processes use ongoing, authorized eligibility results to determine the amount of benefits to be issued. At the time of issuance, outstanding claims are evaluated and recoupment agreements are applied to reduce or offset issuances. WV HSP also supports supplemental issuances, allowing authorized users to re-evaluate benefits for past periods and issue additional benefits as determined by business rules and program policies. Issuance is available for historical viewing via the worker portal and also summarized at a program-level into reports.

Authorization/Supervisor Review

Our eligibility summary provides a summary view of the eligibility determination outcomes, inclusive of a citizen's resource and income budgets, assistance unit composition, and person-level reasons for inclusion/exclusion, detailed accounts of recoupments/offsets applied to reach final benefit amounts, outstanding verifications, denial reasons, rule test results are stored and available for drill-down for a worker to perform a detailed review of the determination result. Only once confirmed by the user via certification is the eligibility determination data stored in the database with a final, authorized result status. The certification integrates closely with the security component, allowing flexibility for the State to create various specialized units of staff. This helps balance work load, with various levels of access to certify different benefit types. Our certification component flags certifications, based on user role and security profiles, type of assistance, the outcome being certified (e.g. a large benefit supplement), that require a second-level supervisor review. As users certify, they authorize each client across all affected benefit months.

With the click of a single button, the certification process confirms the eligibility results and triggers a series of follow-up actions that may be required, including creating program renewal dates, alerts, case assignment, generating correspondence, sending data to external agencies and to benefit issuance systems. At the time of certification, eligibility sets a certification period. Per State-defined renewal timeframes, WV HSP is configurable to identify cases for recertification and renewal based on an upcoming certification end date. WV HSP also configures to align renewal dates of multiple program categories within the same household.

Work Programs

Work Programs is a transitional program developed to provide support and guidance to participants as they move into the workforce/employment. The program provides varied participation activities as well as case management for all participants receiving TANF cash assistance.

WV HSP supports the program's process and monitoring. It supports the overall enrollment and engagement process for work programs, including initial screening, negotiating employability plans, and capturing program compliance.

A completed application of assistance that is submitted is transformed into a case. Eligibility is driven by the data which gets reported in the application as well as the program eligibility rules as defined by the State. As Work Programs is an integral eligibility criteria for TANF programs, so the eligibility for TANF does not get approved until the information for the program is provided. The core application navigation rules enforce such checks to ensure that the benefit program pre-requisites are met before a TANF application is granted and authorized.

Saves time and effort

- Reduced staff workload
- Reduced case processing time
- Changes in FPL and Sliding Scale Parent Fees will produce mass updates

The WV HSP offers provider related features integrated with Work Program components which have the capability to interface with the State's employers to ensure that willing and eligible families can easily participate in available employment and training opportunities. The solution enables to capture the details regarding Work Programs and also has capability to interface with the corresponding providers as available in the State. In addition to this, program related notices can also be triggered from Eligibility as well as the Work Programs component.

Mass Change

WV HSP uses batch eligibility processing, also known as Mass Update or Mass Change, to implement policy changes and to re-evaluate ongoing eligibility for current recipients. Mass Update also has the ability to re-evaluate historic eligibility periods to identify potential overpayments or underpayments. When updated eligibility results are authorized, downstream functions are triggered for benefit issuance, client correspondence and notifications, task generation, and interface updates to trading partners are triggered. The solution will automatically initiate and complete these tasks that otherwise would be manually completed by a DHHR worker. These mass updates will be automated and will not require manual intervention by a DHHR worker but will be visible by viewing case notes and alerts.

Child Care Case Management

Deloitte is a leader in developing child care solutions and is eminently qualified to design, develop, and implement the Child Care functionalities within the WV HSP. We have assisted human services agencies around the country in completing innovative system integration projects that are citizen-focused, outcome-oriented, and cost-effective. We have successfully delivered modern child care solutions in 24 states. Our project team is comprised of qualified subject matter specialists and technical child care professionals knowledgeable in Child Care programs and Child Care systems as well as our social services methodology and tools. The following sections describe the components of the Child Care Case Management module.

Application for Licensure

Providers register and create a licensing application using the self-service features. The module offers a state-of-the-art, modern user interface, with configurable workflows and business rules. Timely onscreen and email notifications based on user actions and business rules further support State staff and providers during the licensing application process.

The system guides providers through the application for licensure process, beginning with registration of their user account and security profile. The module provides the ability to attach supporting application documents; required documents are configurable based on application type. Additionally, the module determines if an application payment is necessary based on application type. At any point, providers may save their application progress to be resumed at a later time, or withdraw it completely.

Once an application is submitted, a PDF copy of the application is available for the provider. Submitted applications are then integrated into the worker portal for the State to review and process and the application review outcome (approval/rejection) is updated within the module. Providers are able to review the application outcome and assessment details as well as print their license if approved. Rejected applications offer the provider an opportunity to address State comments and resubmit.

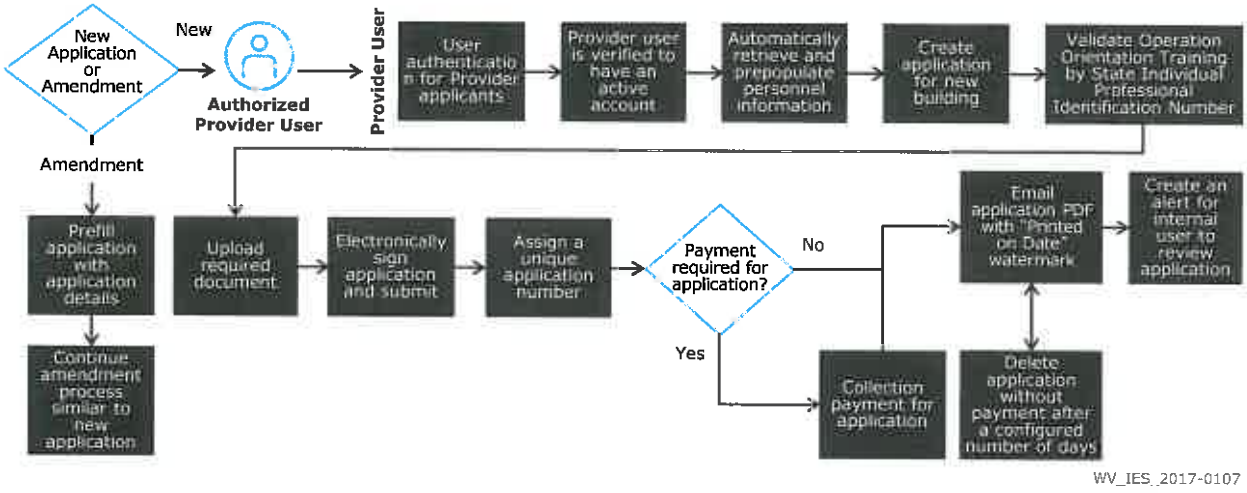

Figure 4.4-7. Application Submission for Licensure Business Process Flow.

View/Maintain Licensing and Provider Information

In addition to initial applications for licensure, the module provides services to support information inquiries, license maintenance, and renewal. Automated notifications display within the portal to remind providers that action is needed and guide them through license maintenance processes. Providers are able to view and print their licenses from the provider portal as needed. Providers can request to renew their license, view scheduled inspections, review inspection results, and update corrective action plans. Additionally, providers can report incidents for State review and review substantiated complaints and incidents reported by families or discovered during inspections.

The system provides access to detailed information required for participation in the Child Care Assistance Program. Providers view and manage their rates, contacts, and addresses required to support their contracts and have the ability to submit contracts for approval, electronically sign contracts, and renew contracts before expiration.

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Figure 4.4-8. A sample of how our solution provides a streamlined and modern user interface currently in our OH implementation to Providers to complete Licensing application, as well as to download and print their License.

Providers have the ability to view child care authorizations for all children enrolled in their facilities, including the related payment information for each child/authorization. Authorization and payment information is available within summary views as well as detailed lists which providers can download or print for their records.

Provider Contracts and Service Agreements

Contracts, or Agreements with Child Care Providers outline the processes and procedures required of participating Providers, in addition to licensing regulations. Provider Contracts represent the agreement between the Provider and State Child Care Assistance Program to provide Child Care assistance and facilitate payments for such services. These contracts may include components related to licensing compliance, attendance tracking, payments, disputes, appeals, documentation, and other related processes such as parent fee delinquencies. Provider Contracts may be managed through paper correspondence as well as online through the integration with Provider Self Service and electronic signatures.

In the event a Provider violates the terms of their Child Care Assistance Program Contract and Agreement, Provider Specialists may create Corrective Action Plans or will close the Provider agreement based on the severity of the violation. The system provides transparency into the Corrective Actions, tracking the details of the violation and remediation steps, as well as the status within the system. Where a Provider Contract is closed, the system will identify and revoke other open Agreements per rules, and notifying the Provider Specialist. These Providers will be identified within the system to warn or prevent Provider Specialists from reopening or creating new Provider Agreements, based on the terms of the Provider Agreement violations.

Regular Provider Payments are generated based on the agreed Provider Rates and Payment Terms detailed within the Provider Contracts. Mass changes to the terms or Provider Rates within the Provider Contracts will process updated Provider Contracts for review and submission.

Supplementing the Provider Contract are Repayment Agreements, allowing Provider Specialists to specify a repayment schedule and amount, represented in dollars or a percentage. This repayment agreement tool provides the ability to recover the full amount based on the resolution of a Provider Contract issue.

Much like the Child Care Contracts, Child Welfare Contracts begin with a licensure inquiry. A licensure inquiry can only be made after a certificate of need is obtained. The solution will track all steps toward opening a Child Placing Agency or a Group Residential Facility. After all necessary licensing and inspections are completed, the provider can then work with the Division of Grants and Contracts to provide residential and child placing services for children in the custody of the State.

Provider Rates/Fee Schedules

Provider Rates and Fee Schedule component supports complex rate structures and provides flexibility and configurability to specifically meet West Virginia's needs. Rate schedules are available for the many components of a Provider payment, ranging from Provider, State, Market Rate, Quality, Standard, Base, and Special Needs schedules. Provider rates are tracked by daily and monthly frequency, as well as Part Time, Full Time, and other units of care as required. The Rates component provides a user-friendly interface to manage the many dimensions of Provider payment rates and evolving regulations and requirements.

- An intuitive, modern user-interface that is easy to use across a diverse group of end-users
- Protects privacy of data and tracks attendance in real-time in a secured manner
- Capable of correcting mistakes in prior service periods
- Easy to use and train end-users

The Provider Rates/Fee Schedule provides the rules required to calculate and apply the Provider Base Rate based on the comparison of Market, State Ceiling, and Provider rates. The selection of a Partial, Daily, or Monthly base rate is driven by business rules within the payment calculation. Providers have the ability to report changes to their rate schedules within Provider Self Service, and the system will incorporate these changes within the next billing cycle per specified business rules.

The calculation of Differential Rates and Special Supplements is configurable based on the current policy and rule, and built for flexibility to continue to meet future legislation. These system calculations are displayed in a user friendly and transparent manner within the user interface and questions regarding the details of the calculations are quickly supported through guided user-help.

Enrollments

The Service Authorizations component of our solution provides the ability to manage the details of the terms of Child Care assistance, including Individual authorized, Authorization Date, Service Start Date, Service End Date, Quantity and Type of care including days and units, Provider selected, and the Parent Fee, a copayment amount that the family is required to contribute towards the total cost of care). Authorization details are provided to families and Providers through official paper correspondence, as well as electronically through Provider Self Service and Client Self Service. The authorization establishes the maximum amount of care for which the Child Care Assistance Program will pay for the given individual and is referenced within subsequent payment calculations. Case Workers have the ability to create Service Authorization schedules based on the child care needs of the family. Copayment assignment and additional fees paid to providers such as absent days, holidays, transportation, and registration fees are also noted within the Service Authorization.

A key step in the authorization process includes the selection of a Child Care provider. A wide range of relevant information such as Provider facility address, licensing information, services provided, qualifications, and the quality rating of each Child Care provider is available to support the selection of high quality Child Care services.

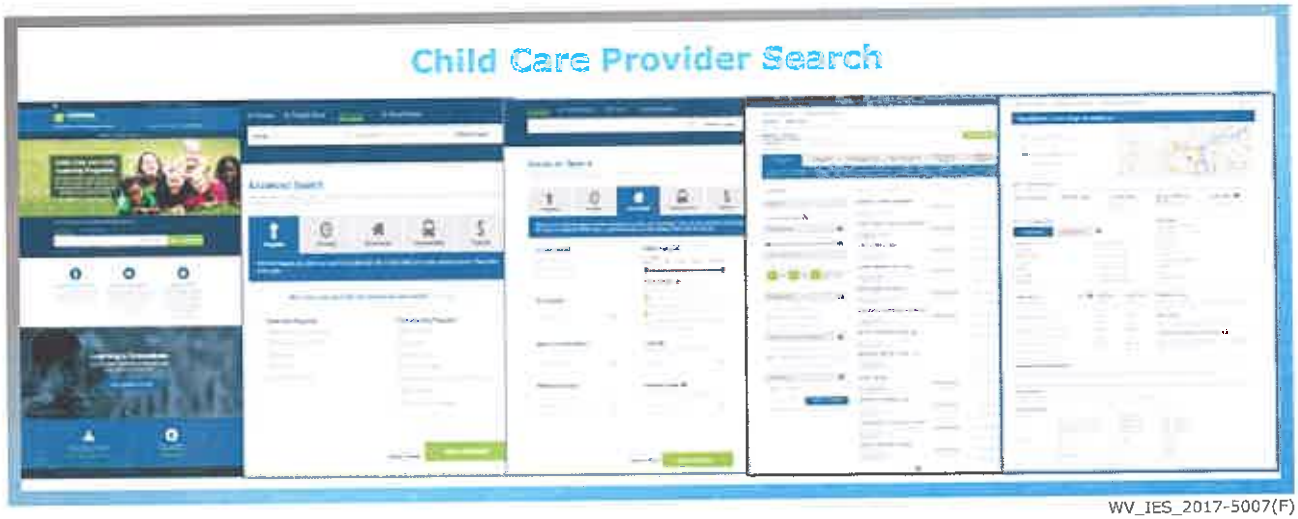

Figure 4.4-9. Child Care Provider Search.

Provider Search functions such as this one from our PA implementation, displays a wide range of relevant information such as Provider facility address, licensing information, services provided, and the quality rating of each Child Care Provider to support Parents in selection of high quality Child Care services.

The authorization tool also provides the ability to make modifications to individual authorizations to support family-requested changes. Additionally, mass change functions will support bulk updates to authorizations for cyclical activities such as school year/summer schedules, as well as changes to Provider status, or relevant rate schedules.

Attendance

Attendance submitted by Providers within the Provider Portal is available within the Worker Portal for State users to review, validate, and approve for payment processing in user friendly screens. Attendance submission frequency is configurable (daily, weekly, monthly) based on the needs of West Virginia. The attendance review and approval process is configurable based on the business process needs (for example, controls can be configured to track review and approval to include supervisory reviews and secondary controls).

State-identified attendance errors are corrected by State workers through payment administration screens which provide the ability to correct the attendance, including required documentation and traceability, and will result in a payment adjustment according to the business rules of West Virginia's Child Care Assistance Program.

Payments and Billing Reconciliation

Provider Payments are generated based on the agreed Provider Rates and Payment Terms detailed within the Provider Contracts (Agreements). Payment frequencies are configurable to meet your specific needs, whether monthly, weekly, or other. Payment calculations include several core components: the calculation of the total payment days (comparing attended days to authorized days) for each child in Provider's care, the selection of the rate for each child and type of care, the incorporation of irregular days including absent, holidays, flex, and others, the waiver of fees in exception cases, as well as changes for outstanding adjustments (both positive and negative). These payment components are parameterized to facilitate configuration and change over time due to changing regulations. The Parent Fee, the amount for which the parent is responsible to pay the Provider, is deducted from the total Provider payment from State. Payment amounts are available per child and summarized to support CCDF report estimates and other State requested forecasts. This detailed payment information is also available to Child Care Providers within detailed Payment Statements and shared through paper or online correspondence.

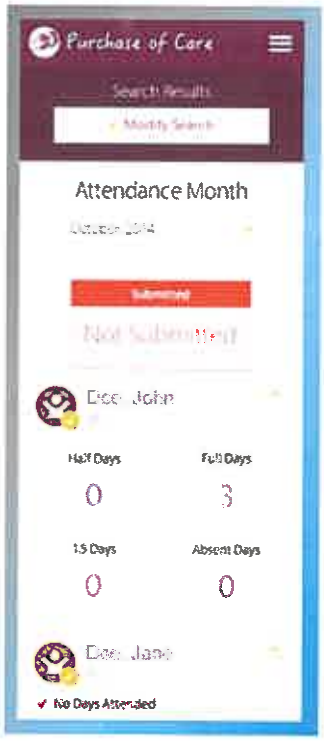

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Figure 4.4-10. Our solution provides the ability to view and submit attendance.

Once generated, payments are available for a financial review and approval. In case of identified corrections, the payments component provides the ability to reconcile and adjust payments, both positively and negatively as needed. A full payment history is maintained for each case containing the amount of payment, date, and method of payment. Approved payments are subsequently transmitted to financial institutions in order to issue the final Provider payments. Additionally, the mandatory federal reports (ACF 800/801) and tax information (1095B) are produced by the solution to eliminate any manual efforts to comply with Federal reporting requirements.

Child Care Payment Adjustments are calculated based on a positive or negative change in attendance information, as well as positive or negative adjustments in Provider rates, authorization dates, child's age, family copayment, and other payment related elements. Positive adjustments are paid based on the payment schedule, and negative adjustments are recouped from future payments. Additionally, repayment plans can be developed to support large negative adjustments for Providers.

Recoupment

The Child Care recoupment process in the solution is based on federal and state specific business rules that define the actions taken for recoupment. If the payment amount has been disbursed to the recipient, then the adjustment process must create an overpayment transaction (receivable) to recover the amount from the recipient.

Meets the Federal Regulatory and Compliance requirements

PROVEN HHS EXPERIENCED

- Reduced number of phone calls and complaints
- Improved payment accuracy
- Increased transparency of how payments are calculated
- Frequent and predictable payments

WV HSP allows for a configurable wait period between the issuance of recoupment notices if no response is received. Once an agreed response to repay is received, and the tracking process of the recoupment is complete, the recovery of the balance is performed to recoup a configurable amount from future disbursements, or follows the repayment plan agreed upon by the recipient until the amount is recovered.

Adjustments

Child Care Payment Adjustments are calculated based on a positive or negative change in attendance information, as well as positive or negative adjustments in Provider Rates, authorization dates, child's age, family copayment, and other payment related elements. Positive adjustments are paid based on the payment schedule, and negative adjustments are recouped from future payments. Additionally, repayment plans can be developed to support large negative adjustments for Providers.

Child Welfare Case Management

We bring you 23 years of experience serving Child Welfare agencies, and delivering 20 Child Welfare projects (technology and program redesign). Our industry leading practices, assets, and approach will support your modernization implementation.

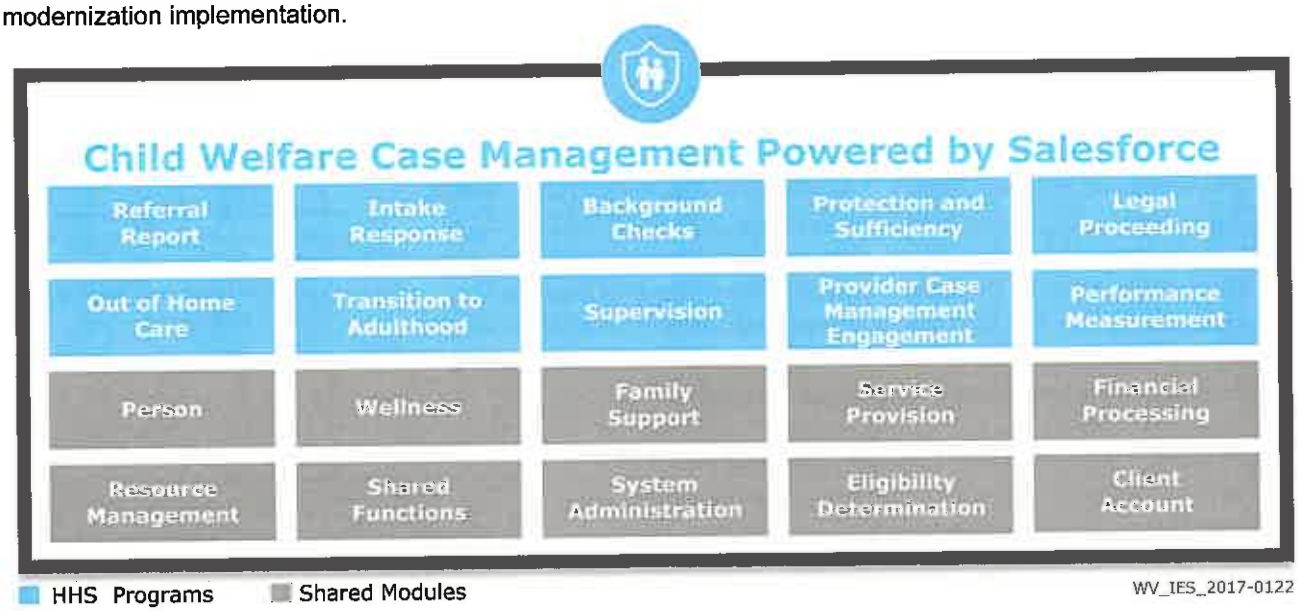

Figure 4.4-11. Child Welfare Case Management.

The Child Welfare Case Management module provides the State with customizable modules to support the management of child welfare cases. The solution is aligned with CCWIS requirements and provides the State with the necessary framework to administer Child Welfare services and programs in the State. As depicted in the graphic to the right, we offer 20 core CCWIS modules that are supported within the Child Welfare Module. In this section, we will highlight some of the key features relevant to West Virginia.

Intake

The Intake functionality is supported through the common Intake function within the Service Management module. Basic details about a child or a family or information request is collected as part of Intake. Intake worker assesses the information and based on the criticality of the incident, makes a recommendation for the agency involvement with the family.

Investigation

An effective Child Welfare Investigation component streamlines the activities around the investigative processes, like interviews, assessments, evidence collection, and definitions abuse, neglect or institutional abuses to assist workers and supervisors to make the best decisions on a child's safety. Investigators can easily search for prior history (persons/incidents), evaluate case information, record the contacts made with the family, assess the findings and integrate with the solution's assessments.

Based on the findings of the investigation, case workers can recommend opening a case for service delivery to the family involved in the investigation. If a case is open already for the same family, case worker can link existing investigation to the ongoing case and not open a new case thus preventing duplication of cases.

Child Welfare Provider Directory

Foster Care Providers, adoptive families, and community-based providers can be found in a single location within WV HSP. This functionality helps workers find the right provider at the right time, driving service search matches and timely referrals. Staff can find the right provider, the right services, and the right information they need quickly and efficiently.

Household Members

In addition to information initially gathered about providers, Child Welfare workers need to view detailed information regarding provider household members. For example, this module will collect detailed information of each member like income, employment, medical conditions, abuse/neglect records, etc. This information will help conduct safety assessments, risk assessments, and to perform home studies and monitor the safety and wellbeing of children in care.

Application for Licensure

WV HSP supports issuance of regular, provisional or temporary licenses to Child Welfare providers in West Virginia. The system allows for conversion of provisional or temporary licenses to regular licenses and offers the four distinct license actions of Approved, Restricted, Suspended and Revoked for Child Welfare services. In addition to maintaining the current status of each license, the solution also maintains an audit trail of license status changes over time.

Much like applications for licensure for Child Care, WV HSP can be configured to allow child welfare providers to register and apply for licenses according to West Virginia licensing business rules elaborated during the project's implementation. Once applications are submitted by providers, the State is notified that the application is ready for review. State staff enter/link comments, documents, inspections, sanctions and events to a facility. Workflows guide State staff through the application review process and apply business rules to determine the correct license type and status. Additionally, the system performs validations of the application information, such as the facility's physical address being within the State.

The solution can be configured to display background check results for individuals included on the application, as well as perform lookups to verify that the Provider staff have completed necessary training. The solution enables completion of Inspections, Corrective Action Plans (CAPs), and administrator tasks prior to application approval.

Home Studies and Inspections

The system supports creation of inspection tasks with a configurable workflow, as per necessary inspection scenarios, or provisional inspections created by a State user manually. The system allows authorized users to update, view and complete a user initiated inspection. To begin the inspection process, the system generates the appropriate type of inspection based on the Provider type. Completion requirements are enforced based on the combination of the inspection scope and type. Home study is a critical function that needs to be completed prior to license approval of a provider.

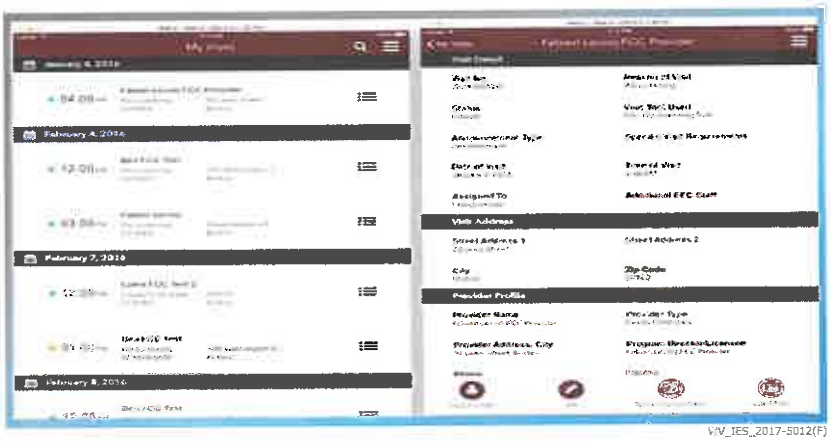

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Figure 4.4-12. A sample view of how provider specialists and Licensing staff can view and schedule site visits and inspections directly from their Home screen. They can further view the details of scheduled inspections by selecting an inspection from the Calendar view.

The system automates the process that supports reviewing applications for facility licensure, certification, and/or home approval for State and county licensing and approval staff.

If a Provider is found to be out of compliance with one or more requirements during an Inspection, or a complaint allegation is substantiated upon inspection, the State user is required to enter additional information for each requirement indicated. The system allows the compliance violation information to be added, updated and/or deleted and then allows the State user to mark a non-compliance as needing corrective action. It also generates a corrective action plan for each non-compliance marked as requiring corrective action.

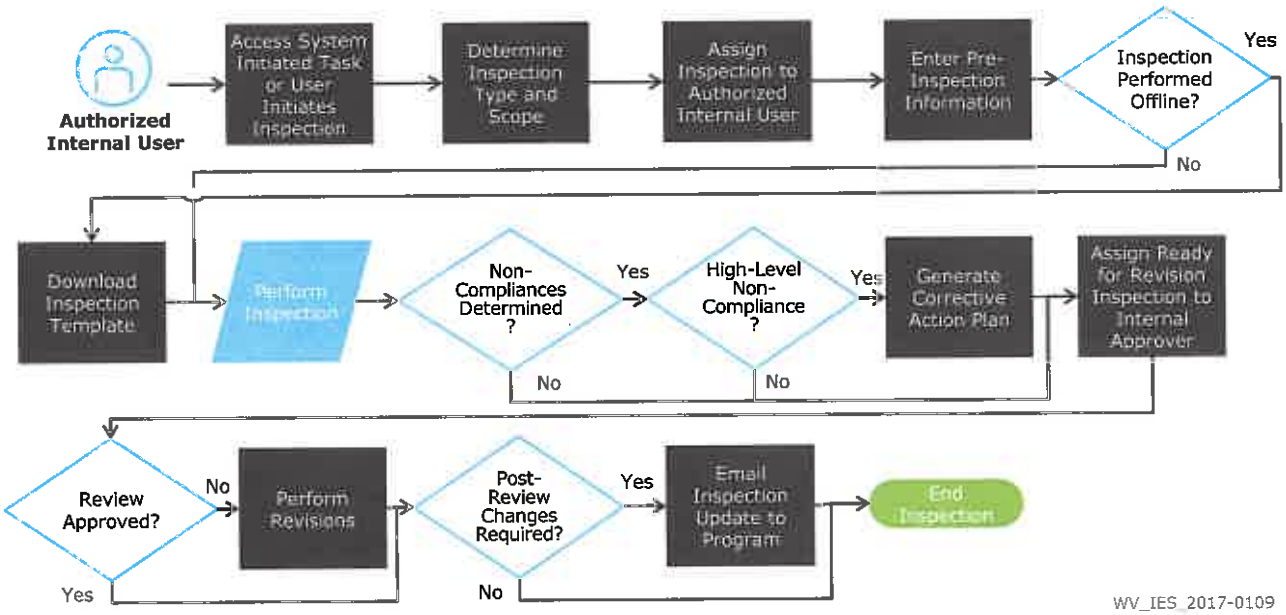

Figure 4.4-13. Inspection Business Process Flow.

Complaint/Incident Tracking

The system allows State staff to capture complaint/incident information, which may be obtained from Child Care or Child Welfare Providers and clients, and create a complaint/incident intake report within the system. In the instance the complaint is initiated via the hotline, the intake is marked as institutional abuse, the provider liaison is notified, and the license suspended while investigation is conducted. Intake and investigation for an institutional abuse are automatically linked to the Provider record as associated referrals.

The system also supports report and publication of complaints/incidents online, to enable citizens, who are looking for Child Care providers, to be able to see these incidents as they select a Child Care provider. The system enables State users to view, update, or add comments to a complaint, and recommend closing the complaint/incident intake report, with a reason, to a State approver. The State user may also create and initiate inspections for the complaint/incident.

The WV HSP enables State users to search complaint/incident records by Provider, complaint/incident intake report, or inspection, and return associated information.

Corrective Action Plan

The system has capabilities to generate Corrective Action Plans based on configurable business rules and inspection findings and send necessary notifications to Child Care or Child Welfare Providers. Provider users are able to access information about Corrective Action Plans from their licensing activities lists in the system and provide explanations and necessary documentation for inspection findings. State users are able to review the explanation and additional documentation provided by the Providers and approve the Corrective Action Plans or return them for revision.

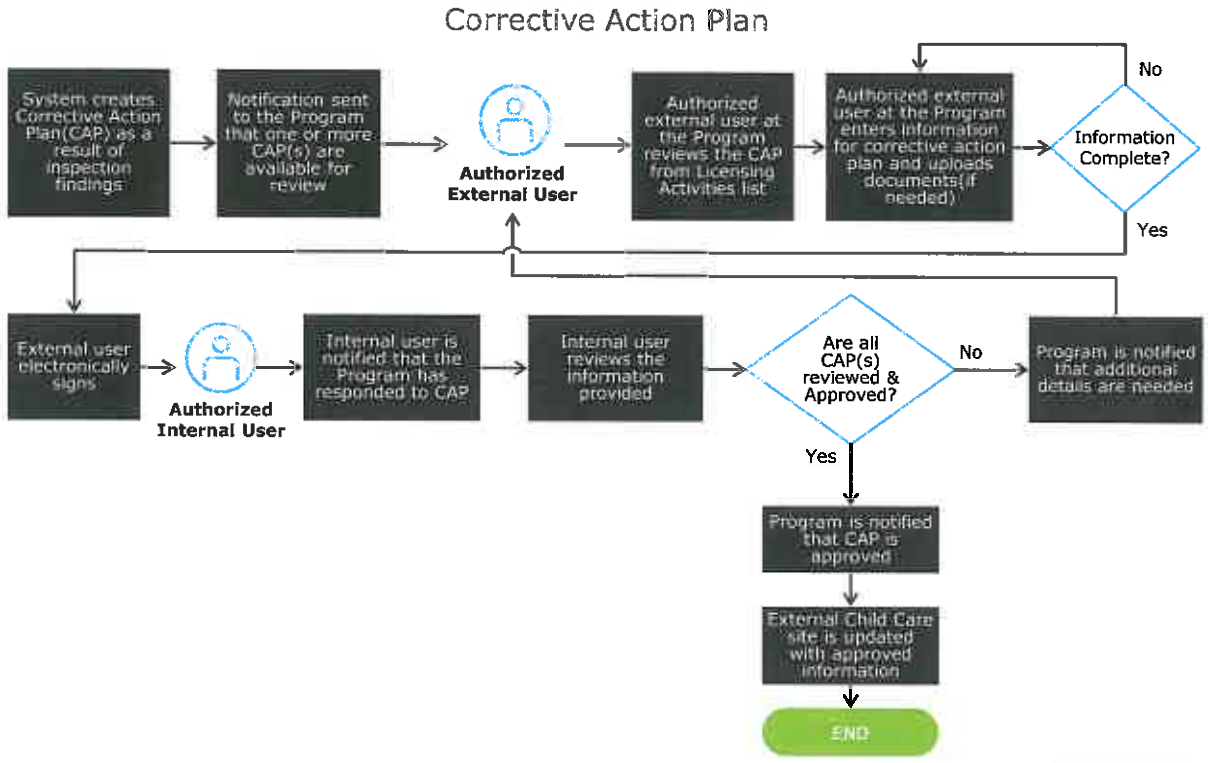

Figure 4.4-14. Corrective Action Plan Business Process Flow.

License Closures

The solution provides designated mechanisms to close an application or facilitate the closure of a Provider license, varying from facility initiated (voluntary) closure, to for-cause closure (serious compliance violations, expiration, etc.). The closure process can be initiated by a State user or applicant manually closing an application, or a Provider user submitting a request. Upon closure, the applicant and the State user receive notification of the closure, along with the specific reason(s) for closure. This closure is maintained in a historical record, where all non-active licenses and historical data related to closed programs can be viewed.

Health/Education

Child Welfare workers will be able to collect detailed information on a client's health and education. Education allows workers to capture information about the schooling, certifications, and/or education progress of clients documented in the system. This information acts as a significant input into determination of the well-being of a client. Additionally, workers can capture medical history consistently and not just through case notes. This information can be informed by data received from multiple sources and could affect expectations for how clients can best engage with the agency or the service plan. Having this kind of a comprehensive and up-to-date view of people's health conditions and education across the child welfare ecosystem enables the agency to better track critical relationships, interactions, and safety.

Court Actions

We understand that dealing with legal issues is a documentation and paper-intensive process. Proof of reasonable efforts to keep children in their home needs to be presented. Petitions, motions, orders, and appeals need to be filed and outcomes recorded. WV HSP not only keeps track of hearing dates, actions before the court, but also the court orders from hearings and the ability to produce the related documents and forms that must be submitted to the Court for Child Welfare related activities. WV HSP not only facilitates these activities – but offers a comprehensive, user-friendly solution for workers to easily manage the court activity of their caseload, like Home Removal Orders, Termination of Parental Rights, etc.

The comprehensive Courts functionality captures legal status, court orders and petitions. The system interfaces with a courts system and supports the automated or manual docket entry generation and storage of cases. The docket number can be updated or modified by authorized users and a docket number history is maintained.

Assessments

Assessments are one of the core Child Welfare functions a case worker performs during investigation and ongoing case management. Assessments provides an understanding of the strength and needs of the family, safety and risk conditions that exists for the child and make a decision how agency could be involved with the family and what type of service is required for the family to provide a safe environment for the child and family. Assessments, especially those that assist with Structured Decision Making (SDM) aid the agency in promoting child safety, permanency, and well-being for children and families. All the assessments are configured with tool tips which help the workers to look-up policy details pertaining to a particular question. WV HSP also comes standard with SDM safety and risk assessment instruments that can be customized to the State's mandates, policies and procedures. Assessments are configurable and scores of assessment question can be changed to meet state specific needs.

Case Plan/Service Plan

The Case Plan supports the review and tracking of progress of assessments, service plans completed for a child and family over a period of time. The individualized service plan are to provide specific services based on the

strengths/needs from assessments and permanency goal of the child. The Case Plan can be configured to be integrated with various assessments conducted by workers in the field. Case Plans can prepopulate information from those assessments to help workers identify potential interventions, services, and tasks to best serve their clients. The sample prototype Case Plan Screen illustrates how a multidisciplinary team can collaborate in crafting a comprehensive service plan for an individual in their care.

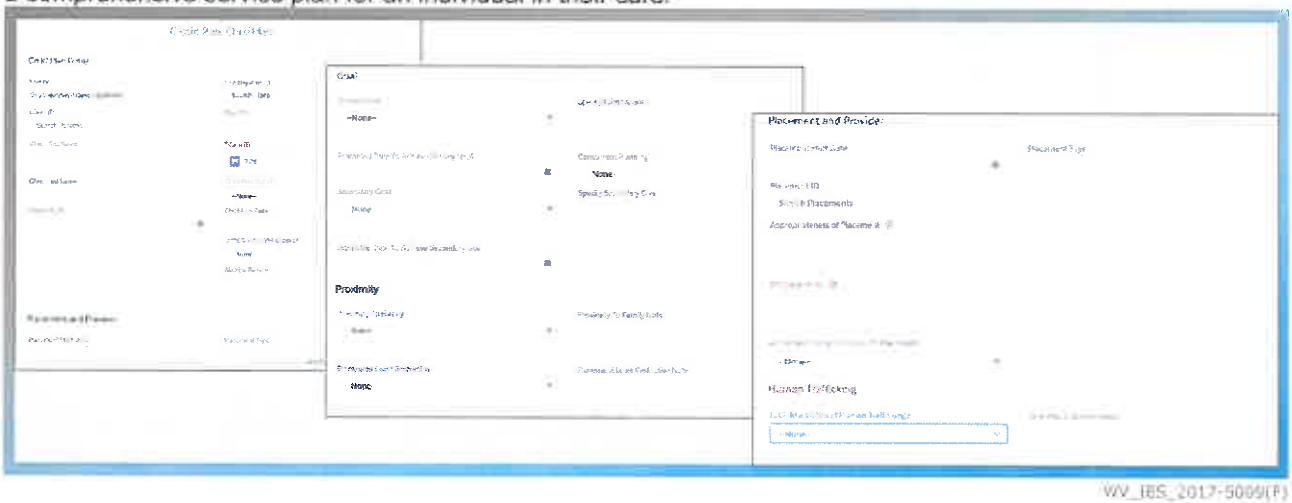

Figure 4.4-15. Sample Case Service Plan Screens Functionality.

Home Removals and Placements

WV HSP supports documenting home removals that occur as a result of court orders and other circumstances. Decisions about where and how to place a child in out-of-home care are made by considering the child's strengths and needs, the skills of the available caretakers or facilities, and the child's prospects for permanency with families. The system does this by allowing workers to conduct placement searches for one or more children at a time, in the case of sibling groups requiring the same type of placement.

Due to the importance of capturing the current location data for children, the application allows entry of placement information by multiple parties: case workers, agency specialists, providers. In doing so, all interested parties are kept abreast of the whereabouts of children in their care. A complete view of a child's placement history can be tracked and used to monitor the wellbeing of a child in care. The illustrations below provide a sample of the placement functionality.

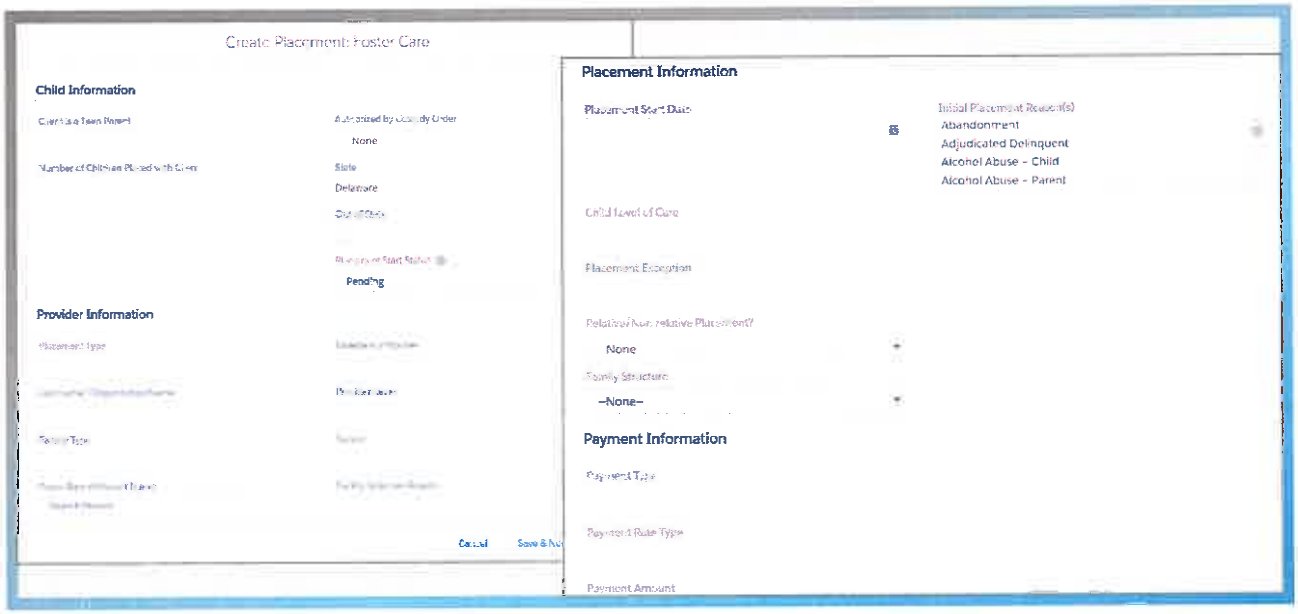

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Figure 4.4-16. Sample Foster Care Placement Selection Functionality.

Permanency Goals

WV HSP allows workers to capture primary and concurrent permanency goals for children to improve safety and well-being of the child. The permanency goals can vary depending on safety, risk and family conditions of the child and family. Users can document information about medical, health, court, and custody information and begin the review process of permanency placements from the Permanency Planning screen.

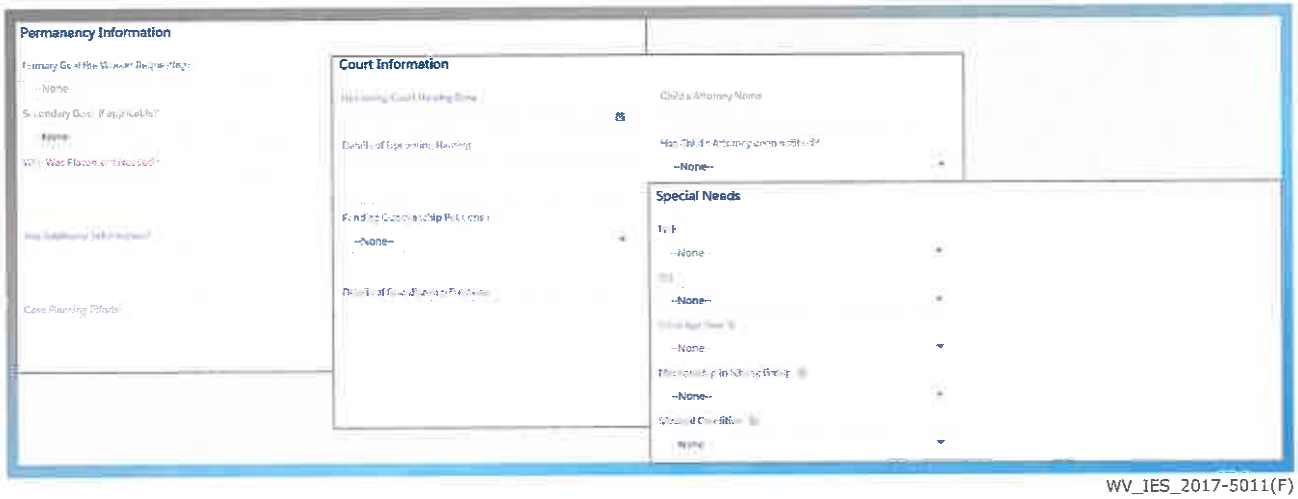

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Figure 4.4-17. Sample Permanency Planning and Goals Functionality.

Adoption and Guardianship

The Adoption and Guardianship features allow workers to assess, develop and evaluate adoption and guardianship plans for children.

Workers begin with preparatory adoption steps (permanency planning, the termination of parental rights, placement/subsidy agreements etc.) and concludes with post-adoption services and monitoring. The Adoption functionality provides workers with the ability to record information on the adoptive parents in addition to tracking subsidy benefits, as well as providing the functionality to deliver post-adoptive services and integrates with Court functionality to document Court Orders. Additional Adoption features include the ability to either capture efforts made to adopt the child, subsidies, and monitor the wellbeing between the child and adoptive parents. Moreover, the Adoption information can be directly leveraged for federal Title IV-E determinations.

When a relative caregiver wishes to provide a permanent home for the child and maintain relationships with extended family members without a termination of parental rights, the Guardianship sub-component allows workers to track the progress of a guardian make a permanent home for a child. Much like the Adoption functionality, workers can record the preparatory guardianship steps simply and easily through the Guardianship functionality. While caregivers can assume legal guardianship of a child in out-of-home care without termination of parental rights, as is required for an adoption, guardianship can be complex for all parties involved, the Guardianship functions allow workers to easily guide families through the process with simplicity.

Interstate Compact on Placement of Children (ICPC)

WV HSP can be configured to meet West Virginia ICPC functionality for recording ICPC/ICAMA services, allows workers to request or document requests for a home study or the State's supervision of a child depending on whether the referral is for an incoming or outgoing placement. Recording these services allows the state to capture and track information IC planning/financial data, placement information, service request, enclosure checklist, and placement decisions specific to the IC forms.

The system allows the user to indicate the sending and receiving state ICPC office involved in the ICPC case. ICPC workers are required to complete both the 100A and 100B forms for the sending or receiving state. The system allows to track the entire life-cycle of the ICPC referral packet. The workers are able to complete ICPC/ICAMA Home-studies for adoptive homes, relative homes, and foster homes. All the correspondences related to ICPC/ICAMA cases can be electronically uploaded into the application and attached to a case.

Title IV-E Eligibility Determinations

Fully scalable and easily adaptable IV-E eligibility determination and redetermination for Foster Care, Adoption, and Guardianship allows administrators to simply configure rules, validations, and approval processes without the hassle of complicated development. With integrated data streams and data sources, each eligibility determination gives the Department confidence in making the correct determination based on the data available.

IV-E Determinations leverage a variety of bi-directional real-time and batch interfaces for IV-E eligibility determinations. These batches and interfaces reach out to a variety of agencies like the court system, Department of Education, and banks per the CCWIS regulations. Eligibility workers are guided through an IV-E determination and the resources that are available with a click of a button.

Federal Reporting

WV HSP supports and is fully compliant for AFCARS, NCANDS, and NYTD reporting requirements. The AFCARS, NCANDS, and NYTD file creation allows automated generation of necessary Federal Report files directly from the system. AFCARS, NCANDS, NYTD fields are pulled automatically by the system and saved in the appropriate format for federal reporting. Error logging for these reports notifies users of missing data that needs to be entered or potentially non-compliant data. Users can manually select reports and reporting periods as needed for historical and amended reporting as necessary. Users can manually select reports and reporting periods as needed for

historical and amended reporting as necessary. Submission of these Federal Reports are handled through common Information Exchange components.

Child Support Enforcement Case Management

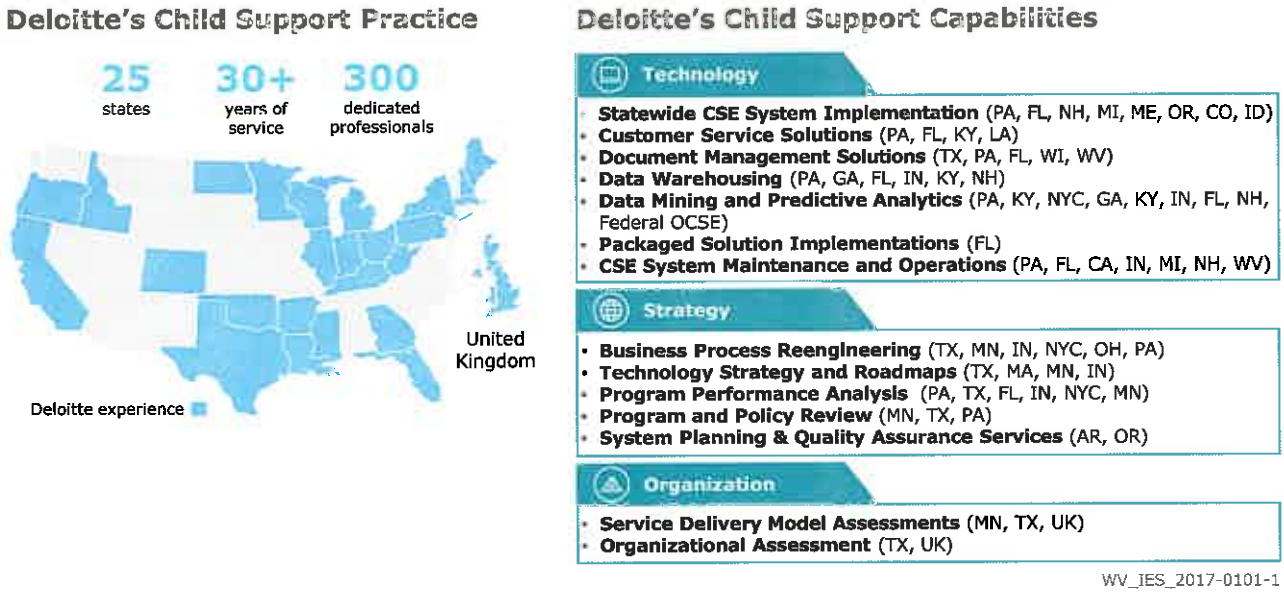


Figure 4.4-18. Deloitte's National Child Support Experience.

Deloitte has experience partnering with 50 percent of the States in the United States to deliver Child Support solutions. Our team has delivered six federally certified systems including two code modernization projects in Colorado and Idaho. Our WV IES team will leverage our child support experience to implement the business requirements provided by West Virginia for Intake, Locate, Establishment, Case Maintenance, and Enforcement. To deliver DHHR's vision, we will use our experience in Child Support code modernization in Colorado and Idaho and our 23 other Child Support projects to West Virginia. Our experience gives us a deep understanding of how to conduct modernization in a way that continues to satisfy federal child support requirements, including federal certification. An additional benefit of our approach to modernize OSCAR is that we eliminate the risk of achieving federal certification. Because OSCAR is already a federally certified system, the resulting system on a modernized platform will continue to provide features and services in the exact same way.

Intake

New Child Support cases can come from a number of different sources including clients and interfaces with other agencies that have case creation requirements.

The Deloitte team understands that developing interfaces between state agencies can be a challenging task and requires an understanding of the business and technologies that support the interfaces. IVA/IVE and Title XIX agencies often do not share the same goals and priorities as the child support program, which results in the challenge of coordinating and aligning priorities.

We have experienced similar challenges with other clients, and more importantly, have successfully overcome them. This experience provides us with a strong understanding of how the interfaces currently work, as well as an understanding of how they will need to work with the WV HSP.

Locate

The locate function is critical to child support enforcement. Typically, a significant portion of any state's child support caseload is not workable due to lack of critical data required to pursue establishment or enforcement actions. States have demonstrated that poor locate practices often adversely impact Federal performance measures and that significant improvement in locate can be achieved through automation of locate activities without worker intervention as demonstrated by Oregon in a federal demonstration grant. Analysis further shows that the longer a child support case is in "locate" (i.e., missing key data such as SSN, Date of Birth, Address, and Employment), the longer it is likely to remain in "locate" status. So, the faster a case is identified as missing critical data and sent to the automated locate process, the greater the likelihood that the missing party will be located and establishment and enforcement actions undertaken.

- Successfully demonstrated capabilities continuously enhanced from Child Support projects in 25 States
- Experience with getting systems Federally certified in 6 States
- Experience with Child Support Code Modernization in 2 States

Effective locate requires interfaces with other State and Federal agencies. This includes the FCR, State and National Directories of New Hire, FPLS, IV-A/IV-E, Title XIX, Courts, Credit Bureaus, and the DMV. In our experience, modernizing and retesting these interfaces with outside agencies can be challenging for reasons like the unavailability of testing environments for interfaces, coordination with so many other agencies and more. Our experience in other States positions us to solve challenges that can occur during the modernization of the locate subsystem.

Establishment

The business process of establishment is a critical function in the delivery of child support services. Key techniques for supporting an efficient establishment process include appointment scheduling, workflow to advance establishment work to the appropriate next activity, and automation of forms, docketing, and genetic testing. If any of these functions are performed inefficiently, the timeframes for establishing paternity will impact the establishment of support order and medical support. Ultimately, it will impact collections and overall program performance.

The current OSCAR solution meets West Virginia's basic automation requests. OSCAR is able to manage the activities and tasks associated with case establishment. The worker is notified of needed actions and activities through an alert mechanism that runs during overnight batch. By combining the alerts process with the case processor activities, OSCAR monitors and moves the actions through the logical order for processing. The modernized solution will continue to provide this same functionality in the future.

Case Maintenance

Case Maintenance is critical to federal compliance and effective case management. Deloitte understands that West Virginia's Case Maintenance functionality is a continuous process and that changes in case circumstances require immediate attention. WV HSP provides effective case monitoring and meets federal certification requirements to track activities on cases including worker actions in a case chronology that is efficiently and easily accessible for review.

Federal certification requirements mandate monitoring activities and timeframes, and require that child support systems automatically direct cases to the appropriate case activity within the specified timeframes. The system

must also track actions and dates to comply with federal timeframes. WV HSP has elaborate activity-chain-based workflow management that meets the federal certification requirements. This includes alert management, monitoring of cases, and a case diary to record and track chronology of actions.

Deloitte has proven experience in code modernization and will work with you to provide a solution that meets the requirements in Appendix VI.

Enforcement

Deloitte understands that the WV HSP must monitor case accounts and provide automated support for use of the wide variety of enforcement remedy options now available to child support programs.

WV HSP provides automated workflow mechanism that drives enforcement actions. A worker's role thus will be to respond to alerts, record events/notes, and redirect or inhibit actions if required.

WV HSP meets federal certification requirements. As a result, WV HSP provides for automated monitoring of enforcement actions. The monitoring of enforcement remedies is done via batch processing and the parameters and conditions for different remedies are pre-defined using reference tables. Any case needing attention because of delinquency has automated remedies initiated via the enforcement processor in WV HSP. When appropriate conditions have been met for delinquency, WV HSP initiates automated wage withholding and issues the wage withholding order, credit bureau referral and state and federal tax offset submission remedies amongst other automated remedy actions.

Shared Services

Equally important as the core business components are those underlying functions that support them. Best of breed products/services for rules management, asset verification, batch management, and correspondence management, among others, have been integrated into the WV HSP to provide DHHR with a modern, modular solution that support the goals and objectives of this project as well as the various lines of business. These components are implemented at an enterprise level to maximize the reuse of system components and minimize the effort of management.

Shared components allow for the reuse of a design approach that follows a consistent architecture. Rather than having each functional component designed, architected, and implemented a different way to handle common tasks, our dedicated components provide a standard underlying framework for each function. These frameworks can then be leveraged by the business components to provide a consistent handling across the solution.

In addition to encouraging reuse and common design approaches, these shared components also allows WV HSP to be easily managed, providing a sustainable solution for the long term. Since these components are common, once an individual is familiar with them they can more easily work on different business components without the need to relearn.

Batch Management

The batch component leverages proven operational and management procedures to define, document and perform batch operations, configuration management, database management and other batch related activities. This is critical to maintaining the availability, performance, and functional delivery necessary to meet the State's business operations, goals and objectives.

WV HSP's Batch Framework is designed to reuse business objects, tools and other components (like logging, messaging and entity layer) used by online and vice-versa. The solution architecture facilitates this need and makes the overall batch management process a fairly seamless activity.

Batch Scheduling

We use critical path analysis to determine those jobs that impact the batch window the most. Critical path jobs are defined as a set of interdependent jobs that need to complete the required updates to the system before it can be made available for real time updates. Factors such as frequency, inbound/outbound, estimated record count, and, run time will be analyzed and documented in order to successfully manage the batch plan. The standard information collected for the jobs will provide this data and help in the identification of dependencies. It will also help us identify the jobs that can potentially run in parallel to others and those that must be run in sequence.

Monitoring

The Batch Framework will use an array of tools, including a dashboard, for monitoring of batch jobs to identify bottlenecks during the scheduled batch cycles. Batch jobs are typically scheduled to run outside the core business hours to reduce the impact on online performance. Our batch team will monitor all jobs run during this cycle and in the event of a problem we will follow the documented procedures for problem identification, escalation and resolution to minimize the potential impact on business operations the following day.

Batch Summary Report

We propose using OpCon as the Batch Scheduler tool as it provides a full-feature reporting tool that generates data that is vital for managing the batch process. PERT and Gantt charts can be generated that show jobs in their running sequence with their job dependencies. Reports of individual jobs that show run times, processing durations, and counts of errors and terminations can also be produced. Reports can be scheduled to generate automatically, or they can be requested ad hoc.

Correspondence Management

The WV HSP brings a high-quality, proven tool to the State of West Virginia for the management of correspondence and document generation. Through the consistent management of correspondence within the solution, DHHR is able to unify the documents in its systems and increase efficiency. By leveraging a reusable component such as Adobe Livecycle, DHHR is able to realize benefits such as consistent maintenance of document and form templates, common content shared across templates and compliance with both federal and state regulations.

Forms, Notices and Correspondences

Forms, notices and correspondences are generated and tracked by the worker or automatically through workflow and batch processes. Document templates for all documents and forms are created using metadata that specify output methods. These metadata include the ability to identify documents to directly print or to require worker intervention according to specified criteria as designated by the State.

When managing document generation, the worker has the capability to review forms, notices and correspondences which have been generated and stored in WV HSP. Direct print documents and filler documents are visually distinguished in the interface used by the worker. Once generated, direct print documents are immediately marked as "sent" since they do not require worker intervention. However, filler documents are displayed as a draft version to the worker.

Once generated and submitted for printing, documents are stored in a central repository as required by the State. The documents can also be set to be editable, non-editable or to have redactions made from the original version according to rules which are configured for the specific documents. If modifications are made to document templates and forms retrieved from the central repository, new versions of the documents are created going forward and saved in the central repository.

Mass Notifications

In addition to the generation of documents, there is a need for mass notifications to be generated from the WV HSP. Based on key functionality captured in the application and data collection business processes, appropriate parties are sent mass notifications as required. For example, in child support, case participants may have upcoming scheduled appointments with the court or county representatives. These notifications are managed and generated within the same tool that includes other forms and correspondences for the WV HSP.

Business Rules Management

The program policies of the state are translated into rules within the Drools business rules engine for improved maintenance and management. This includes the authoring of business rules based on the state mandated policies, their maintenance and updates with ease as and when there are changes to the policy. The Business Rule Management (BRM) component provides the ability to adapt the policy requirements into rules that roll out eligibility results for public assistance programs within seconds. These rules are easy to maintain as they are written in simple English like language and can be understood by any business user.

An advantage of using a rules engine such as Drools is users are enabled to change rules directly with ease and also ensures decoupling of policy rules from the application. The externalized business logic approach reduces the number of defects in modifying code and makes it easier, faster and cheaper to respond to program changes.

The business rules documentation process used to confirm business coverage and provide direct traceability to program policy is a prime example of our team's structured and streamlined approach. Rulesheets are created in collaborative JAD sessions between our team's experienced staff and Department SMEs to translate program policy into requisite business logic. The Rulesheet structure promotes efficiency in rule creation and eliminates ambiguity through the balancing of logical conditions. WV HSP's BRM component provides a cost-effective way of maintaining the business rules and provides easy integration with other applications through the concept of services.

Master Data Management

We propose to reuse and extend the State's existing Master Data Management (MDM) solution for WV HSP. It addresses DHHR's needs by both satisfying the program objectives set forth, as well as providing a consistent and modern enterprise architecture that promotes interoperability and efficiency between programs.

Master Client Index (MDM for clients)	• Provides a unique ID for all the clients which are served by the WV DHHR. Unique client Index helps to maintain "system of record" for the core business entity "clients".
Provider Index (MDM for providers)	• Provides a unique ID for all the providers which are served by the WV DHHR. A unique provider index helps to maintain "system of record" for the core business entity "providers".
Employer Index (MDM for employers)	• Provides a unique ID for all the employers which are served by the WV DHHR. A unique employer index helps to maintain "system of record" for the core business entity "employers".

Figure 4.4-19. Master Data Management.

These indices help WV DHHR maintain consistent data across applications, maintain information in a central repository which improves data quality and promotes access to the most current data, improves client service as change in demographic information is communicated to other systems quickly and efficiently and reduces duplication across applications.

Enterprise Reporting

Our team understands DHHR's objective to provide enterprise reporting capabilities to drive informed policy and decision making. DHHR seeks to align their reporting capability from existing legacy reporting systems into a consistent enterprise reporting model. An enterprise reporting model or framework will lay the foundation for cross-department and cross-program reporting and analytics to effectively and efficiently analyze critical program metrics. This will provide DHHR with actionable data insight to achieve their vision of ensuring that the right clients receive the right services at the right time to support their path to self-sufficiency. For more information on the implementation approach, please refer to section 4.3.13.

Integration Management

WV HSP is based on open standards and incorporates SOA design principles. The ESB is a core part of the solution that orchestrates information flow between major architectural components and external systems.

WV HSP complies with MITA and CMS Seven Standards and Conditions. The SOA based solution allows a safe and secure mechanism to share information via a variety of industry standard protocols and shared services across programs in compliance with MITA standards.

Information Exchange

WV HSP's SOA architecture is based on open standards to allow for compliance industry and technology standards as well as provide a baseline for the most compatibility when exchanging information with other state agencies and partners. Instrumental to this approach is an Enterprise Service Bus which provides the following capabilities to WV HSP including ability to support a variety of standard messaging and transfer protocols including SOAP, HTTP/S, REST, JMS, FTP and SFTP. Use of these standards allows developers to focus on the functional implementation without the need to worry about the transport mechanism to exchange data. Also existing technology investments are reused by connecting to legacy systems through requisite adapters as desired by West Virginia.

- Integration across hardware, software and network components.
- SOA based extensible, maintainable and secure system integration.
- Compliance with state and Federal security requirements and protocols.
- Easy integration with third party interfaces

File Transformation

WV HSP leverages Web Service Description Language (WSDL) as the standard for describing the structure and location of web services. To facilitate the greatest return on investment (ROI) on these services, we develop a set of standards for WSDLs that promotes interoperability and reusability. We leverage Web Service – Interoperability (WS-I) guidelines and profiles implemented as a set of assertions that test various requirements for the structure of a WSDL document. We maintain standards for services documentation in our Programming Standards and Guidelines that enforce standard specifications and industry best practices.

Service Marshalling

The WV HSP framework contains an interface invocation construct to trigger all interfaces and process interface data. This construct gathers business data objects for interface communication from data sources and uses Java Architecture for XML Binding (JAXB) APIs to convert to XML documents that are sent as SOAP/REST messages over HTTP/S via web service calls to trading partner systems.

Inbound/Outbound Referral Routing

WV HSP already includes referral functionality via interfaces to send requests and case/client data to partner agencies. For example, the solution's existing Certification business rules include logic to trigger a referral for free/reduced school lunches when a SNAP or TANF eligibility result is authorized and includes at least one eligible child in the assistance unit. Interface requests, whether file-based batch requests or real-time web service transactions, will be routed through the Enterprise Service Bus (ESB) to the external agencies.

Security Management

Our team brings a centralized Identity & Access Management (IAM) solution that will integrate with WV HSP. Our team utilizes a blend of core IAM Commercial Out of the Shelf (COTS) products in the market to deliver IAM capabilities including authentication, authorization, single sign-on, privilege access management and access re-certification. The following sections contain the components and capabilities by product.

Identity Management

IBM Security Identity Management (ISIM) will handle provisioning of West Virginia employees, business partners and citizens. Provisioned user accounts will be stored in previously defined Active Directories and referenced by the solution. Our team will employ a role based access control model based on the principle of least privilege and ISIM will be used to assign approved roles to users.

ISIM will be configured to manage users according to West Virginia's current account management policies and procedures. We will leverage ISIM's automated workflow capability to manage the user account life cycle including requests and approvals. We will work with West Virginia to determine designated requesters, approvers, and recipients of notifications to establish workflow processes that meet your requirements. Additionally, ISIM will provide self-service to West Virginia users such as reset password and forgot user ID.

Authentication Management

IBM Security Access Manager (ISAM) integrates with internal and external facing applications to provide authentication and authorization services. ISAM will be a re-usable component within the WV HSP to secure WV applications. ISAM will also be configured to provide Single Sign-On for a seamless end-user experience.

Multi-Factor Authentication

Upon successful first factor authentication, ISAM will use multi-factor authentication component to validate if the previously defined user profile qualifies for an additional type of authentication. This component will evaluate the risk profile based on a previously defined criteria and enforces multi-factor authentication on high risk profiles.

Privilege Access Management

IBM Security Privileged Identity Management (ISPIM) provides management around privilege account. ISPIM integrates with WV most critical systems including production servers and databases to monitor privilege sessions. ISPIM also manages privilege accounts credentials used between systems to systems.

API Governance

IBM DataPower Gateway integrates with back-end APIs and web services to provide authentication and authorization. Additionally, DataPower provides interoperability and re-usability between legacy applications and new interfaces.

Vulnerability Management

HP Fortify Security Center is leveraged to perform static and dynamic vulnerability scan. Additionally, our team will use NESSUS to conduct network scans of WV infrastructure

SIEM Management

Security monitoring will be accomplished primarily through using Splunk. We will integrate Splunk to perform security monitoring of the application related audit logs. Splunk generates reports, real-time and near real-time alerts based on defined triggers and thresholds, and security dashboards. The SIEM tool will provide log correlation functionality including a central time stamped audit trail of security events.

Call Center Management

We will provide a Technical Support Call Center that provides access via telephone, email, mail, and web portal. This Call Center will be staffed with agents to provide IES application technology support to DHHR workers and clients. The Call Center will leverage Deloitte's **Applications Management Process Manager (AM-PM)** to track and monitor incoming incidents in a consistent and efficient manner. AM-PM is a comprehensive, fully integrated IT Service Management (ITSM) solution with a platform based on HP Service Manager and a world-class system based on standard ITIL processes.

RFP Appendix VII: Operational Requirements

Deloitte's Operations approach is guided by the **ITIL (IT Infrastructure Library) framework**—ITIL governs the design, implementation, and improvement of standard, reusable, and predictable IT services. Defined, regimented Deloitte cloud managed services tasks allow the WV HSP to deliver essential services to the citizens and workers of West Virginia while meeting stakeholders' expectations for solution reliability and uptime. These tasks include infrastructure management, availability and performance monitoring, batch scheduling, incident management, and capacity planning, to name a few. Many of these tasks are behind-the-scenes activities that are necessary to provide an uninterrupted end-user experience. To meet these goals, we plan a predictable set of operational services executed by experienced Deloitte cloud managed services resources in a repetitive cadence to deliver production stability, configuration management, infrastructure administration, and continuous operations improvement.

Figure 4.4-20. Deloitte's IT Service Management Principles.

To meet the Operational Requirements defined in RFP Appendix VII, our experienced team leverages system and application performance monitoring toolsets from Splunk, AWS, and IBM for application performance, infrastructure health, and security incident and event management data for a variety of IT and business users. By aggregating and correlating operational data points from multiple system and application sources, we will enable both swift response to operational incidents in a modular and distributed architecture, and predictive operations capabilities to anticipate application, infrastructure, and security events before they occur.

4.4
Goal: Completion of Functional Requirements
4.4.1

WEST VIRGINIA IES PROJECT

Deloitte.

WEST VIRGINIA HUMAN SERVICE PLATFORM
MEETING DHHR GOALS

BUSINESS

- **Common Governance Structure**: WV Human Services Platform (HSP) follows standardized, transparent, and predictable project management processes across the enterprise to increase efficiency and productivity.
- **Completion of Functional Requirements**: WV HSP complies with state and federal regulations, and meets all of DHHR's technical and functional requirements.

APPLICATION

- **Shared Use**: WV Human Services Platform (HSP) provides reusability, modularity, interfacing with the data warehouse, multi-vendor, and cost effective solution, which reduces implementation and maintenance costs.
- **Modernization:** WV HSP is a proven cloud hosted, scalable, interoperable and enterprise solution that includes automation of workflows to meets DHHR's design, development and implementation goals and schedule.

HOSTED SOLUTION

- **Enterprise Hosting:** WV Human Services Platform (HSP) will be hosted on FedRAMP compliant Amazon Web Services (AWS) providing the ability to automatically scale to meet West Virginia business demands and seamlessly access SaaS solutions for an integrated solution.
- **Scalable Architecture:** WV HSP utilizes a seamless enterprise solution using an n-tier Service Oriented Architecture (SOA). The HSP is a modular, modern, and flexible solution built using SOA and is hosted on the AWS cloud.
- **Enhanced Security**: WV HSP includes enhanced Identity and Access Management and Event Monitoring which provides single sign-on, role-based access, multi-factor authentication, and privileged access management together with proactive security event monitoring.

MAINTENANCE, OPERATIONS AND ENHANCEMENTS

- **Reduce Maintenance Cost :** The WV Human Services Platform (HSP) enables Faster Maintenance, Software Upgrades, and Enhancements, Reduced Redundancy, Improved Interoperability with other systems, and Reduced Operations and Maintenance Costs.
- **Ease of Maintenance:** Our approach to design is Holistic and develops modular establishment components that promote Ease of Maintenance and Support.

WV HUMAN SERVICE PLATFORM (HSP) MEETING FEDERAL REQUIREMENTS

Integrated Eligibility

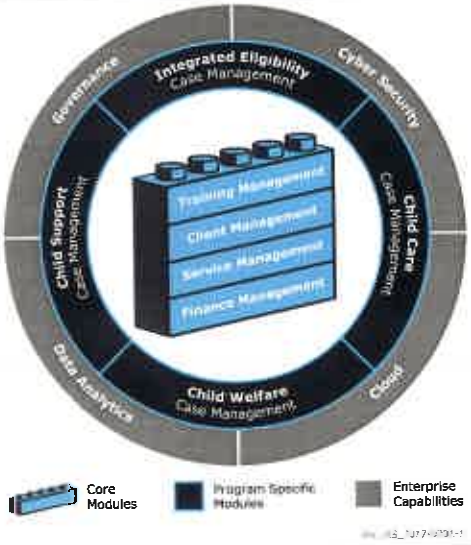
WV HSP complies with the CMS Seven Standards and Conditions required for West Virginia to be eligible for the enhanced match funding. These include Modularity, Interoperability, and incorporating a Business Rules Engine.

The solution supports shared functionality across the various programs, while tailoring eligibility rules, automated workflows, electronic documents and alerts or tasks to the unique needs of the State's individual programs, while meeting federal requirements, regulations, and standards.

Child Support Enforcement

Our WV HSP solution approach will keep West Virginia compliant with federal certification requirements, as documented in Automated Systems for Child Support Enforcement: A Guide For States. West Virginia will be able to demonstrate a comprehensive, statewide, operational system that meets all requirements, meeting the efficiency and effectiveness standards of an integrated system.

The solution will comply with requirements across all nine program areas – Case Initiation, Locate, Establishment, Case Management, Enforcement, Financial Management, Reporting, Security and Privacy, and Customer Service.



Child Care

Our project team brings qualified subject matter specialists and technical child care professionals knowledgeable in Child Care programs and our social services methodology and tools.

WV HSP has federal reporting capabilities that adhere to the required standards and formats. The solution has mandatory federal reports (ACF 800/801) and tax information (1095B), eliminating manual efforts to generate these reports.

Child Welfare

WV HSP complies with the mandate of a CCWIS solution. It contains, and is fully compliant with AFCARS, NCANDS, and NYTD reporting requirements, and allows automated generation of necessary files for Federal Reporting.

Our industry leading practices, assets, customizable modules, and approach will support your Child Welfare modernization goals.

Cloud Hosting

Amazon Web Services (AWS) is a FedRAMP-authorized Cloud Service Provider offering compliant hosting systems that have been granted authorizations. This includes incorporating FedRAMP security controls (NIST SP 800-53), using the required FedRAMP templates for the security packages posted in the secure FedRAMP Repository, being assessed by an accredited independent Third Party Assessment Organization (3PAO), and maintaining continuous monitoring requirements of FedRAMP.

WEST VIRGINIA IES PROJECT

Arun Natesan

IES Account Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 27 years

Arun Natesan has 27+ years of information systems analysis, design, review, implementation and maintenance experience. This experience has been applied to several functional areas and case management systems – Integrated Eligibility systems, Retirement systems, Unemployment Insurance systems, Court Case Management systems, Child Care systems, Early Learning systems, Child Welfare systems, and Child Support systems. Arun has been instrumental in designing and developing large complex technology and business transformation projects.

Responsibilities:

- The Account Manager serves as a liaison with the DHHR during all phases of the contract.
- The Account Manager is available and responsive to DHHR requests for consultation and assistance.
- The Account Manager:
  - Attends in person, upon DHHR request, meetings and hearings of Legislative Committees and interested governmental bodies, agencies, and officers
  - Manages the integration across human services programs serviced by the E&E enterprise
  - Is responsible for establishing and maintaining a positive client relationship.
  - Provides timely and informed responses to DDI, operational, and administrative inquiries that arise
  - Delegates authority to the Deputy Account Manager when not able to be available
  - Meets with State staff or such other person as DHHR may designate on a regular basis to provide oral and written status reports and other information as required

Number of Years with Company:	23	**Number of Years of Prior Experience in Position:**	• 14+ years as project principal or senior technology principal • 15 years of experience managing HHS accounts (including Michigan, Kentucky, Pennsylvania, District of Columbia, and Alabama) through development, systems operations, and maintenance phases • 7 years of experience managing and leading SACWIS accounts (including District of Columbia FACES.NET and Alabama SACWIS) through development, systems operations, and maintenance phases
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Arun Meets Appendix IV, IES Account Manager Requirements:

A total of eight years of experience in:

- Management of an organizational unit within a Human Services Department in a U.S. State or territory; and/or
- Management of an organizational unit within a Human Services Department which is performing operations in a State that are of similar scope to the services that West Virginia has requested; and/or
- Experience in other large healthcare integrated eligibility setting or Agency contracted with the State/Territory responsible for the performance of the same.

Arun has served as a project principal and senior technology principal for over 14 years. He has served numerous public sector clients including:

- Commonwealth of Kentucky
- State of Alabama
- State of West Virginia
- Commonwealth of Massachusetts
- State of Tennessee
- State of California
- District of Columbia
- Commonwealth of Pennsylvania
- New York Department of Tax and Finance
- State of Michigan

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks

- Client relationship management
- Stakeholder management
- Account leadership and management
- Risk and Issue management
- Contract management
- Program and Project management
- People management and coaching

- Technology transformation
- Technology trends and adoption

- Health and Human Services
- Child Care, Child Welfare
- Maintenance and Operations services

Additional Capabilities:

- Design and architecture
- Release management
- Operations management
- Test management

West Virginia Experience

Other Relevant Experience Similar to WV IES

Commonwealth of Kentucky, Senior Technology Principal (2 years)

- *Integrated Eligibility (BENEFIND)* Arun is providing project leadership and technology oversight for the implementation of the Integrated Eligibility system in the Commonwealth of Kentucky. Deloitte Consulting is designing and developing a n-tier, SOA enabled, Web based, Integrated Eligibility system using Microsoft technologies.

State of Alabama, Senior Technology Principal (2 years)

- *Retirement Systems of Alabama* Arun is providing project leadership and technology oversight for the development and implementation of a web based Retirement System for the Retirement Systems of Alabama. PAS is a configurable Retirement system that manages the entire life cycle from Employer Contributions to Member Retirement to Retirement Benefit payments. Deloitte Consulting is designing and developing a n-tier, SOA enabled, Web based, Retirement system using Microsoft technologies.

State of West Virginia, Senior Technology Principal (2 years)

- *Consolidated Public Retirement Board (COMPASS)* Arun is providing project leadership and technology oversight for the development and implementation of a web based Retirement System for the Consolidated Public Retirement Board in West Virginia. COMPASS is a configurable Retirement system that manages the entire life cycle from Employer Contributions to Member Retirement to Retirement Benefit payments. Deloitte Consulting is designing and developing a n-tier, SOA enabled, Web based, Retirement system using Microsoft technologies.

Education

- Bachelor of Science, Electrical & Electronics Engineering, Anna University

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Louis Polzella

WV IES Deputy Account Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 25 years

Louis (Lou) Polzella has 25+ years of experience with state public sector information systems. Currently, Lou is serving in a national capacity as a business development leader specializing in Integrated Eligibility and Health Care Reform, Child Support Enforcement, Child Care, and Child Welfare. Lou also works closely with all the federal funding agencies in providing input into state human service agencies' needs and how proposed regulation and legislation will help or hinder their operations. Lou works closely with the American Public Human Services Association (APHSA) in disseminating information and providing information on best practices that will benefit their state and local government constituents. Lou is also currently serving as a Subject Matter Expert on the CT Integrated Eligibility Replacement Project, also known as ImpaCT.

Responsibilities:

- The Deputy Account Manager fills the role of Account Manager in that person's absence. The Deputy Account Manager plays an active role in day-to-day management of the Account so as to be knowledgeable and aware of all issues, concerns, and requirements, including integration management amongst the various programs served by, and the components that make up, the eligibility enterprise.
- The Deputy Account Manager also serves as the Operations Manager, managing staff assigned to all operational business activities, day-to-day operations of the integrated eligibility enterprise.
- The Deputy Account Manager assists with oversight of the modernized E&E DDI and supports federal reviews including gatepost reviews, CMS, State, and/or federal certification processes and any other federal review requirements.

Number of Years with Company:	1	**Number of Years of Prior Experience in Position:**	• Connecticut Department of Social Services (25 years), including 15 years as the Chief Information Officer in the Information Technology Services (ITS) Division
Physically Located:	Onsite		

RFP Experience:

- System Management
- Eligibility Expertise
- Data Conversion
- Operations Management

Experience with WV IES Skillset

Lou Meets Appendix IV, WV IES Deputy Account Manager Requirements:

A total of four years of experience in:

- Management of an organizational unit within a Human Services Department in a U.S. State or territory
- Management of an organizational unit within a Human Services Department which is performing operations in a State that are of similar scope to the services that West Virginia has requested; and/or
- Experience in other large healthcare integrated eligibility setting or Agency contracted with the State/Territory responsible for the performance of the same.

Lou has 25 years of public sector experience delivering and managing large-scale system integration project including staff, business activities, and daily operations. Due to his experience, Lou has become a leading expert in the realm of HHS related projects.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Client relationship management
- Account leadership and management
- Risk and Issue management
- Contract management
- Program and Project management
- People management and coaching
- SLA tracking and reporting
- Cost management
- Schedule management

- Technology transformation
- Technology trends and adoption

- Health and Human Services
- Operations management

Additional Capabilities:

- Technology trends and adoption

Other Relevant Experience Similar to WV IES

Connecticut Department of Social Services (25 years, including 15 years as the Chief Information Officer in the Information Technology Services (ITS) Division)

- Directed an organization of approximately 100 state staff and 100 plus contractors supporting an agency of approximately 4000 staff. The ITS division was responsible for the maintenance and operations as well as new development efforts for all the IT systems administering Medicaid, SNAP, TANF, General Assistance, Long Term Care, QMB, and Child Support Enforcement.
- Directly responsible for a ten million dollar budget for the ITS Division.
- Responsible for the development, submission, and maintenance of the agency's APD requests to the federal government for federal funding participation.

Education

- Bachelor's Degree in Political Science/Pre-Law, University of Connecticut

Other Professional Qualifications

- Member, Human Services Information Technology Advisory (HSITAG)

WEST VIRGINIA IES PROJECT

Jason Reese

IES Project Manager

Key Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 10 years

Jason Reese is a Senior Manager with over 10 years of technology consulting experience in managing large and complex business transformation projects through all phases of the Software Development Lifecycle in multiple industries with primary focus on Health and Human Services (HHS) sector. He has assisted HHS agencies in state governments to transform their legacy systems to better serve their constituents, most recently the State of Montana Department of Health and Human Services. Jason had the responsibility for the overall success and timely delivery of the project working closely with the client management and the project team in the capacity of the Project Manager Role.

Responsibilities:

- The Project Manager leads the Vendor's project management activities for implementation of the modernized eligibility solution and all projects/enhancements initiated during Operations.
- The Project Manager also acts as the main point of contact for the State regarding implementation, and Maintenance and Operations project management activities.
- Support of any federal gatepost reviews, including CMS, State, and/or federal certification processes.

Number of Years with Company:	11	**Number of Years of Prior Experience in Position:**	• State of Montana - Project Manager for CHIMES Integrated Eligibility System (3 years) • State of Montana – Deputy Project Manager/Application Manager for CHIMES Integrated Eligibility System (3 years) • State of Michigan – Track Lead for Michigan Bridges Integrated Eligibility System (5 years)
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Jason Meets Appendix IV, WV IES Project Manager Requirements:

A total of four years of experience in project management of an IT project(s) that encompassed the full system development life cycle from initiation through post implementation within a human services department or health insurance marketplace in a U.S. state or territory.	A certified Project Management Professional, Jason has over 10 years of experience in managing and delivering large and complex projects through the full system development life cycle. He has built deep expertise in Development, Data Conversion, Training, Change Management and Implementation aspects of delivery. Currently, he is the project manager for State of Montana Integrated Eligibility project.

MEETS RFP REQUIREMENTS

WEST VIRGINIA IES PROJECT

Experience Performing RFP Tasks:

- Client relationship management
- Project management
- Risk and Issue management
- People management
- Cost management
- Quality management
- Schedule management
- Cost management
- Test management

- Technology Transformation

- Medicaid Eligibility
- Operations management

Additional Capabilities:

- Enterprise hosting
- Security architecture
- Data architecture

Other Relevant Experience Similar to WV IES

State of Montana - Project Manager for CHIMES Integrated Eligibility System (3 years)

- Managed an onshore/offshore team to perform maintenance, operations, and enhancement activities for the CHIMES EA system
- Partnered with the client to define scope and priorities for system modernization and usability enhancements made possible by 90/10 CMS enhanced funding (A-87 funding exception)

State of Montana – Deputy Project Manager/Application Manager for CHIMES Integrated Eligibility System (3 years)

- Coordinated and conducted JAD sessions, producing design deliverables and addressed client comments/concerns
- Facilitated cross-track issue and risk reviews and escalated issues to project and client management to accelerate resolution or mitigation
- Managed development timeliness and acted as a SME for development, conversion, and testing teams in US-I. Provided testing and user support throughout Pilot and Go Live, achieving holdback criteria within 6 months of implementation, and transitioned the project from DDI to M&O

State of Michigan, Data Collection Analyst and EDBC Track Lead for Bridges Integrated Eligibility System (5 years)

- Managed a 15-person team (3 analysts/deputy leads and 12 subcontractors)
- Acted as liaison between EDBC team and client as well as other project teams
- Responsible for defect analysis and correction, change request design and documentation, and planning and monitoring development deadlines. Tracked EDBC issues and escalated as appropriate to project management team

Education

- Bachelor of Sciences, Computer Science, University of Pittsburgh

Other Professional Qualifications

- PMI Certified Project Management Professional
- ITIL Foundation

WEST VIRGINIA IES PROJECT

Vinayaga C. Prasad

IE Line of Business Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 21 years

Vinayaga (Vinny) Prasad has over 21 years of experience in Public Sector program management and information technology projects. He brings deep expertise and knowledge of Health and Human Services (HHS) programs. Vinny has 19 years of experience working in the public sector on large-scale systems development projects to automate a variety of health and human service programs Vinny has served the WV Integrated Eligibility project (RAPIDS) for 19 years at various levels and capacity ranging from Application Manager to Programmer Analyst. He has developed strong communication, organization, and project management skills by participating in all phases of the system development life cycle including requirements, design, construction, testing, implementation and maintenance.

Responsibilities:

- Managing all configuration activities for development, modification, and enhancement of the system components and/or applications under their supervision.
- Requirements gathering for maintenance and operations and modifications of the proposed solution.
- Routine system maintenance, changes resulting from updates to eligibility business rules, and changes required to remain compliant with federal regulations and standards.
- Manage enhancements, changes initiated by the Bureau to achieve strategic objectives, implement new programs, and mature business capabilities.

Number of Years with Company:	21	**Number of Years of Prior Experience in Position:**	• Anthem Green Screen Modernization of Employer Enrollment (10 months) • State of West Virginia Department of Health and Human Resources (19 years) • Wipro Maintenance and Operations of Global Installed Base (1.5 years)
Physically Located:	Onsite		

RFP Experience:

- System Management
- Eligibility Expertise
- Data Conversion

Experience with WV IES Skillset

Vinny Meets Appendix IV, WV IES Integrated Eligibility Line of Business Manager Requirements:

• Four years of health and human services program management experience. • Knowledgeable in quality assurance/control procedures, strong documentation, and reporting background, demonstrated proactive problem management skills, and experience with change and incident management. • One of the four years of experience is with implementation experience in the solution and/or functionality being bid.	Vinny has over 21 years of experience working on large scale system integration projects. Of his 21 years, 19 of them were spent working closely with the state of West Virginia Department of Health and Human Resources maintaining and enhancing the Integrated Eligibility solution. He had established himself as a trusted advisor to RAPIDS staff, BCF policy staff, Regional Program Managers, Trainers, and OT MIS staff. He is experienced in all configuration activities for development, modification, and enhancement of IE solutions. He has experience performing conversion activities for legacy RAPIDS.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Operations management
- Stakeholder management
- Change management
- Configuration management
- Quality management
- Incident management
- Problem management
- Defect management
- Cost management

- Hybrid agile
- Application development

- Integrated Eligibility
- Maintenance and Operations

Additional Capabilities:

- Change management
- Design and architecture
- Public sector trends

West Virginia Experience

Other Relevant Experience Similar to WV IES

Anthem, Green Screen Modernization of Employer Enrollment – Project Manager (1 year)

- Managed team, implemented Enhanced User Interface and User Experience through optimized screen navigation; improved user productivity and quality
- Tailored User Interface aligned to business functions rather than mainframe transactions
- Support automation of repeatable tasks - improved alignment of E&B set-up functions across LOB/state

State of West Virginia, Department of Health and Human Resources – Application Manager (9 years)

- Responsible for all project management related activities on the project including personnel management, work planning, issue and risk management, deliverable reviews and implementation.
- Worked closely with DHHR staff to plan and execute several key initiatives ranging from Worker Web Project (eRAPIDS), Auto enrollment of Medicaid expansion, Application aging report for CMS, Timely generation of critical reports to support legislature
- Provide coordination, facilitation, and resolution of issues spanning all aspects of the project

State of West Virginia, Department of Health and Human Resources – Track Manager (7 years)

- Managed the routine maintenance and enhancements for RAPIDS's mission critical subsystems: Client Registration (CR), Application Entry (AE), Standard Filing Unit (SFU), Eligibility Determination & Benefit Calculation (EDBC), Reports (RP), Work Programs (WP), Client Scheduling (CS), Data Exchange (DX), Conversion (CV), Online Manuals (OM) & Reference Tables (RT)
- Worked closely with the State track leads for the same subsystems to prioritize and resolve defects and enhancement requests as they arise

State of West Virginia, Department of Health and Human Resources – Programmer Analyst (2.5 years)

- Led and successfully implemented an automated project management reporting system
- Led the migration of application development environment from OS/2 to Windows 95
- Led the Y2K testing effort for multiple projects within the engagement

Education

- Masters of Science, Computer Science Bharathidasan University, India
- Bachelors of Science, Computer Science Madurai Kamaraj University, India

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Sadruddin Ali

CSE Line of Business Manager

Key Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 15 years

Sadruddin Ali is a Technology practitioner with over 15 years' experience in project management, technology transformation, business process reengineering, technology strategy, and data management for large scale global implementation in Public Sector and Financial industries. He was instrumental in recovery and successful realignment and delivery of projects at Workplace Safety and Insurance Board (WSIB) at Ontario. He led the project management office for Commonwealth of MA Child Support Enforcement and Deutsche Bank. He also has proficiency in leading custom application development projects in the Child Support Enforcement (WI), Health and Human Services (HHS) at Disaster Recovery (GOHSEP, Louisiana), HIX (MA), HCSIS (PA), SACWIS (DC, TN, PA-Allegheny, NJ), Transportation (PA), Taxation (OH).

Responsibilities:

- Managing all configuration activities for development, modification, and enhancement of the system components and/or applications under their supervision.
- Requirements gathering for maintenance and operations and modifications of the proposed solution.
- Routine system maintenance, changes resulting from updates to eligibility business rules, and changes required to remain compliant with federal regulations and standards.
- Manage enhancements, changes initiated by the Bureau to achieve strategic objectives, implement new programs, and mature business capabilities.

Number of Years with Company:	9	**Number of Years of Prior Experience in Position:**	• State of Ohio Integrated Eligibility and Child Support Enforcement (5 months) • State of Wisconsin Child Support Enforcement (6 months) • Commonwealth of Massachusetts Child Support Enforcement (10 months) • Province of Ontario, Canada (7 months) • Commonwealth of Massachusetts Health Exchange (4 months) • State of Louisiana (18 months) • Allegheny County PA Department of Human Services (1 year) • State of Tennessee Department of Children's Services(1 year)
Physically Located:	Onsite		

RFP Experience:

- Program Management
- Quality Assurance
- Quality Control
- Reporting
- Child Support Services

Experience with WV IES Skillset

Sadruddin Meets Appendix IV: WV IES Child Support Line of Business Manager Requirements:

- Four years of health and human services program management experience.
- Knowledgeable in quality assurance/control procedures, strong documentation, and reporting background, demonstrated proactive problem management skills, and experience with change and incident management.
- One of the four years of experience is with implementation experience in the solution and/or functionality being bid.

Sadruddin has 15 years of experience doing program management, including work across multiple states with Health and Human Services agencies. He has consistently managed teams to deliver quality outputs based on industry best practices, including managing the design and development phases of various projects, managing risks and issues, upcoming staffing allocation, and project plans.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Client relationship management
- Project management and work planning
- Operations management
- Change management
- Configuration management
- Quality management
- Incident management
- Problem management
- Defect management
- Cost management

- Service Oriented Architecture
- Enterprise Service Bus

- Child Support
- Functional architecture

Additional Capabilities:

- Enterprise hosting
- Automated Regression Testing

Other Relevant Experience Similar to WV IES

State of Ohio, Department of Children and Family – Integrated Eligibility and Child Support Enforcement – Department of Administration Program Manager (5 months)

- Managing the design, development, testing and implementation phases of interfaces, managing risks and issues, upcoming staffing allocation, reporting, briefing project executives, managing enhancements and change requests, project plan, documentation, quality assurance and day-to-day project management activities

State of Wisconsin, Department of Children and Family – Child Support Enforcement, Program Manager (6 months)

- Managing the design, development and implementation phases of Infrastructure and Integration (I&I) project, managing risks and issues, quality control, upcoming staffing allocation, and project plan

Commonwealth of Massachusetts: Department of Revenue (DOR) – Child Support Enforcement – Program Manager (10 months)

- Reporting project status to DOR leadership and executives, managing the COMETS HD project that included the SI, QA, and IV&V vendors, managing risks and issues, quality assurance, change requests, upcoming staffing allocation, and project plan

Province of Ontario, Canada: Workplace Safety and Insurance Board (WSIB), Portal Manager (7 Months)

- Led a portal assessment for WSIB that identified key issues and provided resolutions for the portal implementation. He socialized the assessment with Deloitte Canada and client leadership and established himself as a trusted advisor to the client management

Commonwealth of Massachusetts, Health Exchange (HIX) - Notices Manager (4 Months)

- Led the notices and correspondence team for both HIX and Worker Portal. He also led the overall end-to-end technical design document for notices and led a large CGI team (both on-site and offshore) to implement the solution

State of Tennessee Department of Children's Services – Technical Architect, Team Lead (1 year)

- Led team for Tennessee' Statewide Automated Child Welfare Information System (SACWIS). He conducts and facilitates JAD sessions for Technical track (includes interfacing with third party vendors like Geographical Information System, Enterprise Content Management, Address Broker, Identity Search System, etc.) with client and subject matter experts (SMEs)
- Validated requirements and performed in-depth gap analysis of technical solutions, and created both functional and technical design documentation
- Presented client with options and recommendations for implementing various technical solutions and helps them to prepare architecture and security plans to present to the state's technical committee

Education

- Masters of Science in Information Science, Drexel University
- Bachelor of Science in Chemical Engineering, Drexel University

Other Professional Qualifications

- PMI Certified Project Management Professional

WEST VIRGINIA IES PROJECT

Beryl R. Washington

CW Line of Business Manager

Key Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 14 years

Beryl Washington is a Senior Manager with fourteen years consulting experience in IT strategy, Information Technology, Reporting, and Project Management. Beryl has led onsite and remote teams focused on the requirements gathering, design, development, testing, implementation, and maintenance of large-scale applications. Beryl has widespread public sector experience in the Health and Human Service sector. Her subject matter expertise extends to Child Welfare, Adult Protective Services, Juvenile Justice, Integrated Eligibility, and Medicaid. She has worked with state and local governments in Texas, Florida, Maine, Alabama, Maryland, Pennsylvania, and the District of Columbia. Focused on Child Welfare, she has extensive knowledge of Child Welfare regulations, practice process reengineering, application development, practice model analytics, and various state and federal reporting requirements.

Responsibilities:

- Managing all configuration activities for development, modification, and enhancement of the system components and/or applications under their supervision.
- Requirements gathering for maintenance and operations and modifications of the proposed solution.
- Routine system maintenance, changes resulting from updates to business rules, and changes required to remain compliant with federal regulations and standards.
- Manage enhancements, changes initiated by the Bureau to achieve strategic objectives, implement new programs, and mature business capabilities.

Number of Years with Company:	14	**Number of Years of Prior Experience in Position:**	• District of Columbia Health and Human Services – Child Welfare Information System – Project Manager (3 years) • State Department of Child Services - Caseload and Workload Analysis – Project Manager (3 months) • Allegheny County Health and Human Services – Child Welfare Information System – Application Manager (3 years)
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Beryl Meets Appendix IV, WV IES Child Welfare Line of Business Manager Requirements:

• Four years of health and human services program management experience. • Knowledgeable in quality assurance/control procedures, strong documentation, and reporting background, demonstrated proactive problem management skills, and experience with change and incident management. • One of the four years of experience is with implementation experience in the solution and/or functionality being bid.	Beryl has more than four years experience successfully led teams through all phases of large scale application implementation projects including, requirements gathering, design, development, testing, implementation, and maintenance in the public sector. She is experienced in project management, particularly quality assurance procedures and system implementation.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Operations management
- Change management
- Configuration management
- Quality management
- Incident management
- Problem management
- Defect management
- Scope management

- Test management
- Application development

- Health and Human Services
- Child Welfare

Additional Capabilities:

- Communication management
- Change management

Other Relevant Experience Similar to WV IES

District of Columbia Health and Human Services – Child Welfare Information System – Project Manager (3 years)

- Responsible for the day-to-day management of the Child Welfare Information System project
- Managed the implementation of system changes to align with new policies, mandates and procedures
- Managed all aspects of project management including project planning, scheduling, reporting, execution, monitoring, change management, quality assurance, budgets planning and control with ability to support multiple activities simultaneously
- Served as main point of contact for all IT related matters
- Implemented strategies to increase efficiency, maintain quality, and ensure continuous improvement
- Managed and increased the effectiveness and efficiency of project team, through proactive improvements to each function as well as coordination and communication between project and business functions

State Department of Child Services - Caseload and Workload Analysis – Project Manager (3 months)

- Improve the existing caseload calculation method to increase accuracy, descriptiveness and use as a managerial tool
- Analyze case archetypes and service outcomes to determine opportunities to increase client outcomes and reduce case length
- Identify opportunities for duty reallocation potentially freeing up to 36% of worker time moving from administrative tasks to critical case management activities

Allegheny County Health and Human Services – Child Welfare Information System – Application Manager (3 years)

- Managed the KIDS project team on all aspects of day-to-day engagement delivery including project timeline, scope, resources, issue resolution, quality control and change management
- Responsible for proactive problem resolution, production support, system enhancements, training and implementation activities
- Served as subject matter expert related to Child Welfare federal standards, county DHS agency policy, and fiscal and eligibility mandates

Education

- Master of Science in Mathematics, Clark Atlanta University
- Bachelor of Science in Mathematics Education, Grambling State University

Other Professional Qualifications

- PMI Certified Project Management Professional

Rishabh Jain

CC Line of Business Manager

Key Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 8 years

Rishabh Jain is a Manager with eight years of experience in software engineering, project management and delivery. He is the application manager for the Child Care application for the Commonwealth of Virginia and has served as the Subject Matter Expert for Child Care for other projects. He has deep functional and technical knowledge of Child Care systems and is well versed with the dynamics of the program. His experience spans the entire system development life cycle from initial scoping to development and post-deployment support. He has spent last five years focused on working directly with users in both business and IT organizations to define needs and project outputs. He also brings extensive experience managing IT projects. His current experience and past roles on project makes him uniquely qualified to lead the team through the needs and challenges of this critical project

Responsibilities:

The Line of Business Manager(s) is responsible for:

- Managing all configuration activities for development, modification, and enhancement of the system components and/or applications under their supervision.
- Requirements gathering for maintenance and operations and modifications of the proposed solution.
- Routine system maintenance, changes resulting from updates to eligibility business rules, and changes required to remain compliant with federal regulations and standards.
- Manage enhancements, changes initiated by the Bureau to achieve strategic objectives, implement new programs, and mature business capabilities.

Number of Years with Company:	8	**Number of Years of Prior Experience in Position:**	• Commonwealth of Virginia Child Care (4 years) • State of Michigan HHS NextGen (8 months) • State of Kentucky Integrated Eligibility (5 months) • Commonwealth of Massachusetts – Virtual Gateway (2 months)
Physically Located:	Onsite		

RFP Experience:

- Child Care Expertise
- Quality Assurance/Control
- System Integration
- Change Management
- Reporting

Experience with WV IES Skillset

Rishabh Meets Appendix IV, WV IES Child Care Line of Business Manager Requirements:

- Four years of health and human services program management experience.
- Knowledgeable in quality assurance/control procedures, strong documentation, and reporting background, demonstrated proactive problem management skills, and experience with change and incident management.
- One of the four years of experience is with implementation experience in the solution and/or functionality being bid.

Rishabh has over 8 years of experience, with a focus on large-scale public sector HHS system integrations. Rishabh is a subject matter expert in the Child Care and early learning and HHS practice. His years of experience have given him a strong background in the skills required such as quality assurance/control, procedures, documentation and reporting.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Business planning and estimation
- Operations management
- Change management
- Problem management
- People management and coaching
- Cost management
- Schedule management
- Quality management

- Application development
- Hybrid Agile
- Cloud adoption

- Health and Human Services
- Child Care

Additional Capabilities:

- Mobile application development
- Customer centric UI design

Other Relevant Experience Similar to WV IES

Commonwealth of Virginia Child Care, Project Manager (4 years)

- Responsibilities included modules for Client Management, Vendor Management, Funds Management, Authorizations, Encumbrances, Payments and Forms, Reports, Alerts and Case notes
- Provided project/program management, quality assurance, proactive problem solving, change management and ensuring complete system documentation
- Led the security module working on security and case-related tasks

State of Michigan HHS NextGen, Developer (8 months)

- System in place conforming to the Child Care standard – to manage and track child care activities including child care subsidy, child day center, child day program, child protective services, children with special needs and other required features

State of Kentucky Integrated Eligibility, Subject Matter Expert for Child Care (5 months)

- Design the Child Care program related modules and driving the design sessions with the team to build the solution ground up for Child Care
- Drove UAT approval for the CC program by suggesting workarounds wherever possible and escalating issues/risks around the Child Care functionality

Education

- Bachelor of Technology, Computer Engineering, India

Other Professional Qualifications

- ITIL Foundation

WEST VIRGINIA IES PROJECT

Omer Enaam

WV IES System Manager

Key Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 16 years

Omer Enaam has over 16 years of experience in implementing and operating information systems. He has helped multiple healthcare, payer and public sector clients build and modernize systems. His experience encompasses planning and implementing large-scale, complex transaction processing systems and integrating on-premise and cloud-based assets. He is a certified Project Management Professional. He has experience of leading a team of more than 150 practitioners to build solutions consisting of web applications, web services/SOA, data integration, conversion and reports for Anthem. He has led a team to architect and design interfaces, data conversion, and data architecture for a statewide Medicaid eligibility system for Tennessee. In addition, he has led development of technology implementation plan for a statewide integration eligibility system including technology requirements definition, system capacity estimation, and systems and infrastructure architecture for Oregon.

Responsibilities:

- The Systems Manager is responsible for planning, developing, testing, implementing, and maintaining the West Virginia IES, as well as assisting with management of the E&E Modernization DDI and any required federal reviews.
- The Systems Manager will oversee the conversion of West Virginia's existing eligibility data for import into the modernized solution. The Systems Manager will also be responsible for all aspects of the data conversation, including, but not limited to, design, development, testing, and implementation of the data conversation approach throughout DDI and Operations.

Number of Years with Company:	9 years and 6 months	**Number of Years of Prior Experience in Position:**	• Health care clients (5 years) • State public sector (4 years) – Integrated eligibility determination systems (1 year) – Other (3 years)
Physically Located:	Onsite		

RFP Experience:

- System Management
- Eligibility Expertise
- Data Conversion
- Operations Management

Experience with WV IES Skillset

Omer Meets Appendix IV, WV IES System Manager Requirements:

A total of eight years of experience that can consist of any combination of the below: • Manager of an organizational unit within a human services agency in a U.S. state or territory; and/or • Manager of an organizational unit within an integrated eligibility engagement performing operations in a U.S. state or territory; and/or • Experience in another large healthcare eligibility determination organization.	Omer has combined 9 years of health care and state public sector experience delivering and managing large-scale systems integration project. In addition, he has worked in multi-vendor environments, led transition to new operating models and established steady state operations.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Client relationship management
- Account leadership and management
- Risk and Issue management
- Contract management
- Program and Project management
- People management and coaching
- SLA tracking and reporting
- Cost management
- Schedule management

- Technology transformation
- Technology trends and adoption

- Health and Human Services
- Operations management

Additional Capabilities:

- Technology trends and adoption

Other Relevant Experience Similar to WV IES

Anthem, Modernization of Data Integration and Healthcare Analytics – Portfolio and Delivery Manager (4 years)

- Managed a portfolio of over 50 projects across Provider, Consumer Products, Regulatory Reporting, Financials, Medical Management and others domains to help the client meet various regulatory requirements, achieve operational efficiencies and bring new products to the market
- Established trusting relationship with the executive sponsor and key stakeholders
- Built teams of 150+ practitioners for data integration, development and business intelligence

Tennessee Eligibility Determination Systems Modernization, Healthcare and Finance Administration – Integration Manager (6 months)

- Led a team to validate requirements and design for interfaces, data conversion and data architecture for a state wide Medicaid eligibility system
- Planned and executed requirements and design sessions with client leadership and other vendors
- Managed project-wide risks and issues, performance against key performance indicators (KPI), and service level agreements (SLA), data security and confidential information management

Oregon Health Authority and Human Services, State's Integrated Benefits Eligibility Systems Modernization – Technology Lead (6 months)

- Led technology team to develop technology implementation plan including technology requirements definition, system capacity estimation, and systems and infrastructure architecture
- Planned and executed working sessions with the client's leadership and Chief Operating Officer

Cardinal Health, Modernization of customer experience, order management, revenue cycle management and billing systems – Project Manager (1 year)

- Led a multi-disciplinary team to define business requirements, solution architecture, and business case for a $30 million program to transform customer experience, and modernize order management, revenue cycle management and billing systems
- As the project manager, led a team of 20 for business case, functional requirements, technology architecture and user experience (personas and journeys)

A Food Service Client, Assessment IT operating model – Overall Day to Day Lead (3 months)

- Led assessment of operating model, technology capabilities and business alignment and produced recommendations for CIO and CEO of the client's organization
- Interviewed C-suite (e.g., CEO, CAO, CIO and CFO) and senior business and IT leaders

Molina Healthcare, Assessment of Enrollment and Billing processes and IT capabilities for Medicare, Medicaid and Duals lines of business – Project Lead (3 months)

- Led a team and identified a set of improvement opportunities in the Enrollment and Billing business processes and corresponding IT capabilities.
- Prepared a set of solution options and a road-map to build new IT capabilities to bring operational intelligence, increase members' satisfaction and reduce risk of missing regulatory compliance.

PIMCO, Modernization of Trade Compliance Platform – Technical Delivery Manager (1.5 years)

- Scoped, planned and managed three projects to modernize complex trade compliance systems.
- Established trusting relationship with the executive sponsor and key stakeholders

Education

- Master of Science, Computer Science, National University of Computer and Emerging Sciences
- Bachelor of Computer Science, University of the Punjab

Other Professional Qualifications

- PMI Certified Project Management Professional

WEST VIRGINIA IES PROJECT

Megan Connors

Test Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 15 years

Megan Connors is a Senior Manager in the Technology practice with fifteen years of consulting experience at Deloitte serving Public Sector clients. Megan worked at Deloitte for five years before attending The University of Texas at Austin to complete her Masters of Business Administration degree. Megan has extensive experience focusing on system modernization and, most recently, in Deloitte's Refactoring approach to systems development. Megan's experience spans the Transportation sector in the Department of Motor Vehicle (DMV) space as well as public health and human services including programs such as Medicaid, SNAP, TANF, and Child Support. Megan has developed strong communication, organization, and project management skills by participating in all phases of the system development life cycle including requirements, design, development, testing, implementation, and maintenance. Megan has held various project positions including tester, trainer, developer, track lead, application manager, requirements manager, and deputy project manager.

Responsibilities:

- Oversee all testing of the solution.
- Facilitate State involvement in the testing effort, execute testing in a timely manner, resolve defects identified during testing.
- Provide dashboard level reporting on the testing effort the State team.

Number of Years with Company:	7	**Number of Years of Prior Experience in Position:**	• State of Texas Department of Motor Vehicles (1 year and 8 months) • State of Alaska Integrated Eligibility System (14 months) • State of Texas Child Support Division (3 years and 1 month)
Physically Located:	Onsite		

RFP Experience:

- Quality Management
- Quality Assurance
- Quality Control
- Test Management
- Training
- Project Management
- M&O

Experience with WV IES Skillset

Megan Meets Appendix IV: WV IES Test Manager Requirements:

A minimum of four years of experience within the last eight years, managing the complete testing lifecycle on an integrated eligibility or related COTS-based solution deployment.	Megan has 15 years of experience in testing, release and project management on large-scale public sector projects, including Integrated Eligibility systems.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Quality management
- Performance testing
- Automated testing
- Defect management
- Change management
- Configuration management
- Problem management

- Testing industry best practices
- Automated testing

- Health and Human Services
- Integrated Eligibility

Additional Capabilities:

- Disaster Recovery Planning Services
- Automated Regression Testing

Other Relevant Experience Similar to WV IES

State of Texas, Department of Motor Vehicles - Deputy Project Manager (1 year and 5 months) and Modernization Lead (3 months)

- Led all aspects of the modernization project including financials, staffing, and overall project management including serving as test manager throughout the entire SDLC

State of Alaska – Release Manager (8 months) and Implementation Manager (6 months)

- Implemented project management standards and processes for a successful launch of Release 2
- As Implementation Manager and then as the Release Manager, was responsible for the complete testing lifecycle prior to implementation
- Utilized an Application Lifecycle Management (ALM) suite of tools, including JIRA and Jama to manage requirements, tracking design components, manage testing activity and illustrate requirements traceability

State of Texas, Child Support Division - Deputy Project Manager (3 months); Requirements Team Manager (12 months); Establishment and Enforcement Renewal (EER) Team Lead (12 months); and Team Lead (11 months)

- Team Lead for multiple tracks for the Child Support System and responsible for complete testing lifecycle in each
- Managed project-wide risks, issues and cost, providing status reporting to executive leadership, and managing resources across Quality Assurance activities
- Managed scope, prepared for JAD sessions, utilized Rational tools for requirements management and testing activities, and communicated issues and risks across threads

State of Wisconsin, Department of Health Services (DHS) - Application Manager and Testing Lead (1 year)

- Managed maintenance related tasks for the screening and online application modules. Megan conducted requirements meetings and JAD sessions, documented detailed design, managed development teams, led testing efforts and maintenance activities
- Managed the system test team through the testing phase of the ACCESS Apply for Benefits application release. Megan managed a team of 11 to successfully complete the testing of the State's first public-facing web application which allows citizens to apply for benefits online

Education

- Master of Business Administration, Marketing and Global Business, The University of Texas at Austin
- Bachelor of Science, Management Science & Information Systems, The Pennsylvania State University

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Bharath Chari

Security Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 20 years

Bharath Chari brings more than 20 years of experience and expertise in enterprise security management, strategy, maintenance and operations (M&O), project management especially managing projects of similar size, scope, and technology as WV IES. Bharath has served as Florida's Information Security Officer and also has served as the Agency Security Officer for the Health and Human services agency in the State of Florida overseeing the Child Welfare and Integrated Eligibility programs. In addition, he has served the past 3 years as the lead Security engagement manager for Family Social Service Administration for Integrated Eligibility program. Bharath has also served as Florida's child support system as a project implementation and operations manager. Bharath has 15 years of hands on technical and operational security experience with state sector enterprise security programs and is equipped with deep industry knowledge and the technical skills to help support West Virginia's security vision.

Responsibilities:

- Lead security and data protection activities for implementation and operations support including architecture of the IES solution supports the State's security needs and that security is a primary focus during design, development and implementation.
- Managed implementation of an IAM solution for over 10,000 employees.
- Lead security compliance activities for CMS MARS-E, IRS 1075, OCSE and SSA.
- Served as the single point of contact and responsible for security program and software development, design, security management, security audits, vulnerability assessments, security production and maintenance support of security policies and system documentation, security risk and issue management and security resource management.
- Managed security project including compliance with applicable federal and state technical standards, policies, and procedures.

Number of Years with Company:	3	**Number of Years of Prior Experience in Position:**	• Family and Social Services Administration, State of Indiana (3 years) • Department of Children and Families, State of Florida (9 years) • Agency for Enterprise Information Technology, State of Florida (3 years)
Physically Located:	Onsite		

RFP Experience:

- CISSP Certified
- CISA Certified
- Enterprise Security Strategy
- Enterprise Security Assessments
- Identity and Access Management
- Infrastructure/ Network Security
- Vulnerability Management
- Disaster Recovery
- Experience working with Federal security and privacy requirements

Experience with WV IES Skillset

Bharath Meets Appendix IV, WV IES Security Manager Requirements:

- Certified Information Systems Security Professional (CISSP)
- Minimum of 5 years of IT security work on project(s) of similar size and scope.
- Familiarity with technical and risk assessment tools and practices, and experience working with federal security and privacy requirements.

- Bharath is a Certified Information Systems Security Professional, and has over 20 years of experience in enterprise information systems
- Bharath has over 15 years of experience managing security projects of similar size, scope and technology, most recently as the Security Manager for Indiana's Department of Human Services
- Bharath has over 10 years of experience developing state sector security strategies, assessing security risk, working with federal security policies and guidelines and addressing system compliance with NIST-800-53, MARS-E, and IRS 1075.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Quality management
- Security architecture and management
- Infrastructure hosting
- Security and Vulnerability testing
- Identity and Access Management
- Problem management
- Security assessment and roadmap development
- Security industry best practices
- Public sector security trends
- Health and Human Services

Other Relevant Experience Similar to WV IES

- Experience in initiation and transition from incumbent vendors on numerous projects. He has implemented IAM solution for over 10,000 users. Implemented Data Leakage Protection solution for over 10,000 users
- Has over 8 years of performing security assessments and development of roadmaps for clients
- Developed and supported disaster recovery plan for the Department of Children and Families for 5 years
- Served as the incident response coordinator for the State of Florida from 2009 to 2013
- Served as the security manager for the Child welfare system (SACWIS) from 2012 to 2013
- Served as the team lead/project manager for Child Support enforcement division from 1998 to 2005
- Experienced in assisting Agencies with Federal compliance reviews from CMS, OCSE, SSA, IRS, HIPAA, NIST, PCI, FNS and state security and privacy regulations
- Conducted disaster recovery planning and testing including table top exercises and assisting in a real disaster
- Experienced in managing large scale, multi-platform deployments of software and validating security requirements and helping to close out contracts

Education

- M.S. Project Management, NICAMR, India
- B.S. Engineering, Bangalore University, India

Other Professional Qualifications

- CISSP
- CISA
- PMI Certified Project Management Professional
- ITIL Foundation V2
- Lean Six Sigma Black Belt

WEST VIRGINIA IES PROJECT

Hannah Hass

Change Control Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 7 years

Hannah Haas is a Manager who has 7 years of experience with large-scale systems integration projects. She has experience as a track lead for multiple subsystems within projects, which have given her responsibilities including management of a team of developers and working collaboratively with client personnel. Hannah demonstrates effective communication and teamwork skills that have resulted from her variety of roles on the project and direct involvement with both the client and developers.

Responsibilities:

- The Change Control Manager oversees all change control functions and responsibilities, including creation and maintenance of the Change Management Plan; monitoring implementation of methods and processes identified in the Change Management Plan; supporting the project Change Control Board (or equivalent structure); and overseeing corrective actions.

Number of Years with Company:	7	**Number of Years of Prior Experience in Position:**	• Allegheny County Department of Human Services (10 months) • West Virginia Department of Health and Human Services (6 years)
Physically Located:	Onsite		

RFP Experience:

- Change Control Management
- System Integration
- Public Sector Experience
- System Development Lifecycle
- Process Expertise

Experience with WV IES Skillset

Hannah Meets Appendix IV, WV IES Change Control Manager Requirements:

A total of four years of experience as follows: • Experience working as an IT change control lead or manager for a vendor of HHS systems, state HHS agency, and/or large healthcare organization. • Experience in development and maintenance of an ongoing change control function that monitored and ensured the vendor followed agreed-upon change control processes across all vendor functions and teams.	Hannah has over 7 years of experience working on large scale state government HHS projects, including for the state of West Virginia. She has served as a manager on HHS systems and has experience managing ongoing changes to existing systems.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Client relationship management
- Stakeholder management
- Communication management
- Change management
- Cost management
- Schedule management

- Contract management
- SLA tracking and reporting
- Risk and issue tracking
- Deliverables management

- Health and Human Services
- Integrated Eligibility

West Virginia Experience

Other Relevant Experience Similar to WV IES

Allegheny County Department of Human Services (ACDHS) – Enterprise Initiative Lead (10 months)

- Meet frequently with client management to discuss overall status and plan for enterprise initiatives
- Lead junior resources in individual initiatives
- Manage resources through design, development testing and implementation of multiple initiatives
- Work with Deloitte and USI project management on PMO tasks including change control, task and resource planning, initiative updates and status reporting

West Virginia Department of Health and Human Services (WVDHHR) – Production Support Lead (2.5 years)

- Lead weekly meeting with the client team to triage and prioritize every production defect that arises
- Managed team of 4-10 developers to assign out and resolve production defects
- Tested and approved production defect resolutions
- Work with technical team to manage change control and weekly and monthly builds of the application to production

West Virginia Department of Health and Human Services (WVDHHR) – Track Lead (5 years)

- Manage one developer for each subsystem
- Manage the tasks associated with the ongoing maintenance and change control of the two subsystems
- Work closely with the State track leads for the same subsystems to prioritize and resolve defects and enhancement requests as they arise

West Virginia Department of Health and Human Services (WVDHHR) – Application Co-Lead (4 years)

- Work with client team to define the initial vision requirements for Release 5
- Document vision requirements in the eRAPIDS Vision Document
- Research legacy RAPIDS Caseload Management functionality to determine what is necessary to transfer to the web with eRAPIDS
- Attend county visits to assist with the implementation and rollout of Release 5 to get workers and supervisors accustomed to the new functionality
- Manage change control post go-live

Education

- Bachelor of Science, West Virginia University, WV

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Jackie Steiner

Deliverables & Requirements Manager

Key Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 7 years

Jackie Steiner is a Manager currently working in the Public Sector Health and Human Services industry. She spent 5 years working as the Track Lead for multiple subsystems on a long-standing integrated eligibility maintenance project for the State of West Virginia. Jackie led a self-service portal transfer for the State of West Virginia. The purpose of this transfer was to update the technology base for the self-service application, inROADS In addition to leading the transfer, Jacqueline also co-led the addition of the Affordable Care Act updates to the online Medicaid application, including Presumptive Eligibility and Electronic Notices. From February 2015 – May 2016, Jackie acted in a similar position as the Customer Portal track lead for the State of Georgia. She led the track through development and testing. In May 2016, she transitioned to the lead of the Eligibility Determination and Benefits Calculation (EDBC) team, where she is currently leading the team through UAT and into Production.

Responsibilities:

- The Deliverables/Requirements Manager serves as the lead for all activities related to the distribution of deliverables to the State from initial development through State review and approval.
- The Deliverables/Requirements Manager is responsible for oversight of all requirements during the DDI phase of the project, from requirements validation, through design, and finally testing to verify that the requirements have been satisfied.

Number of Years with Company:	7	**Number of Years of Prior Experience in Position:**	• State of Georgia Department of Human Services (2 years) • West Virginia Department of Health and Human Resources (5 years)
Physically Located:	Onsite		

RFP Experience:
- WV Domain Knowledge
- Requirements Management
- Deliverable Management
- System Integration

Experience with WV IES Skillset

Jackie Meets Appendix IV, WV IES Deliverables/Requirements Manager Requirements:

A total of four years of experience in: • Management of deliverables development, submission, review, and acceptance tasks for an enterprise State or territory system implementation.	Jackie has over 7 years of experience, with a focus on large-scale public sector HHS system integrations. During this time, she has had large amounts of exposure to leading and managing requirements, and deliverables. 5 of those years were spent working directly with WV DHHR.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Client relationship management
- Communication management
- Change management
- Deliverables tracking and management
- Project management
- People management and coaching
- Test management
- Schedule management

- Contract management
- SLA tracking and reporting
- Risk and issue tracking
- Deliverables management

- Health and Human Services
- Integrated Eligibility

West Virginia Experience

Other Relevant Experience Similar to WV IES

State of Georgia, Department of Human Services (DHS) – Georgia Gateway EDBC Track Lead (1 year)

- Lead and manage a team of 9 programmer/analysts, 1 Associate, 1 Consultant, and 1 Business Technology Analyst.
- Responsible for managing the UAT activities and maintaining and updating the deliverables for the EDBC track.
- Work closely with State counterparts to manage testing and defect management.
- Manage and deliver EDBC Change Requests.

State of Georgia, Department of Human Services (DHS) – Self-Service Portal Track Lead (1.5 years)

- Lead and manage a team of 17 programmer/analysts, 2 Associates, and 1 newly promoted Consultant.
- Responsible for developing the solution maintaining and updating the deliverables and resolving outstanding defects prior to a November 2015 start of User Acceptance Testing.
- Work closely with State counterparts to manage testing and defect management.
- Manage UAT and prepare for a fall 2016 go-live.

West Virginia Department of Health and Human Resources – inROADS Track Lead (5 years)

- Lead and manage a team ranging from 2 to 12 programmer/analysts.
- Responsible for planning enhancements and resolving any defects arising with the inROADS subsystem.
- Managed the creation, review, submission and overall deliverable approval process
- Work closely with State counterparts to manage and prioritize inROADS enhancements.
- Implemented requirements for the Affordable Care Act, completely redesigning the Medicaid application and creating and maintaining all deliverables for the inROADS redesign.
- Implemented requirements for the Presumptive Eligibility component of the Affordable Care Act. This involved creating a new portal for the Presumptive Eligibility workers, creating a short Presumptive Eligibility application, and implementing screening rules to determine the Presumptive Eligibility results. Also implemented a web-service to communicate with the back end system to return a Temporary Medical ID number to the Presumptive Eligibility applicant.
- Provided a level of effort for implementing a no-touch self-service application process.
- Led the implementation of Electronic Notices within the self-service portal.

Education

- Bachelor of Science, Carnegie Mellon University, PA

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Derek Lindberg

Interface Manager

Support Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 8 years

Derek Lindberg has 8 years of experience in large system integration projects. He has extensive experience implementing large-scale, web-based systems development projects to automate public health and human services programs such as Child Support, Medicaid, SNAP, and TANF. Derek specializes in helping clients migrate off of their mainframe platforms, whether that be via custom-developed solutions, COTS products, or refactoring legacy code to modern technology. Derek has spent her entire career in State Government, most notably working with departments and agencies that manage Child Support and Health and Human Services programs. Derek has developed strong communication, organization, and project management skills by leading all phases of the system development life cycle including requirements, design, development, testing, implementation, and maintenance.

Responsibilities:

- The Interface Manager is responsible for overseeing all interfaces required for the solution to seamlessly integrate with the external systems and data sources.
- The Interface Manager will be responsible for in all aspects of the external interfaces including, but not limited to, design, development, testing, and implementation.

Number of Years with Company:	8	**Number of Years of Prior Experience in Position:**	• Idaho Department of Health and Welfare (1 year) • Delaware Health and Social Services (4 years) • Texas Office of the Attorney General – Child Support (3 years)
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Derek Meets Appendix IV, WV IES Interface Manager Requirements:

• Four years of experience in the management and/or performance of system integration, messaging modules, and/or interface development.	Derek has over 8 years of experience in large system integration projects, with a focus on Health and Human Service programs. Derek has both the technical expertise to oversee all aspects the conversion as well as the necessary project management experience to oversee the project through all stages of the system development lifecycle.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- People management and coaching
- Quality management
- Data architecture and management
- Integration architecture
- Problem management

- Master Data Management
- Technology Trends and adoption
- Infrastructure hosting
- Cloud Adoption
- Performance testing
- Mobile application development

- Health and Human Services
- Integrated Eligibility
- Child Support

Additional Capabilities:

- Disaster Recovery Planning Services
- Communication management

Other Relevant Experience Similar to WV IES

State of Idaho Child Support Migration and Modernization Project – Project Manager (1 year)

- Manage the Architecture, Infrastructure, Code/Data Migration, Testing, and Development teams
- Work closely with DHW, SCO, and SR management on all aspects of project management involving State resources
- Management review and submission of all project deliverables and contract correspondences
- Secures resources with the firm to help accomplish engaged goals and objectives

State of Delaware Eligibility Modernization (DEM) Project – Interface and Benefits Manager (4 years)

- Manage the overall implementation of Architecture, Infrastructure, Application development teams for Interfaces and Benefits Management Modules
- Provide functional expertise in defining and designing modernized business processes
- Engage and coordinate with all interface partners to implement and validate over 150 exchanges

State of Texas Child Support 2.0 Project – ALM Lead and Prototype Development Lead (3 years)

- Define, enable, and roll out a modern ALM/SDLC Process for project resources and department resources
- Manage the build out and integration of COTS products to support a modern Child Support application

Education

- Bachelor of Science, Texas A&M University, TX

Other Professional Qualifications

- None

WEST VIRGINIA IES PROJECT

Mohan Krishnappa

Data Architect

Support Staff

EXCEEDS RFP REQUIREMENTS

Professional Experience: 19 years

Mohan Krishnappa is an Oracle technology architect in Deloitte for more than 11 years. Mohan specializes in Oracle Database infrastructure implementations and leading Oracle database and business applications administration for Public sector and Commercial industries. He is a Certified Professional in Oracle Database 11g, Oracle Exadata, Oracle Database Performance tuning and Oracle Applications R12, and an Oracle Partner Network (OPN) recognized professional. He has led DBA teams for State of TN TEDS, State of GA IES and State of NM UISM implementation. He designed the Oracle infrastructure for production and disaster recover sites, conventional hardware and converged infrastructure, V-Block and Oracle Exadata, including Exadata implementations.

Responsibilities:

- The Data Architect is responsible for ensuring that the proposed solution accommodates the data needs of all West Virginia programs defined as in scope for this RFP, including design of data parameters, development of the solution to align with the needs of the State, and testing of the solution.
- The Data Analyst is also responsible for ensuring that data subject to enhanced federal security controls is secured in compliance with federal requirements.

Number of Years with Company:	11 years	**Number of Years of Prior Experience in Position:**	• State of TN TennCare Eligibility Determination System (TEDS), Oracle Infrastructure lead, Lead Oracle DBA, Oracle RAC and product specialist (1.5 years) • State of GA Integrated Eligibility System (IES), Oracle Infrastructure Lead, Lead Oracle DBA, Oracle RAC & Product Specialist (3 years) • State of NM Unemployment Insurance System Modernization (UITSM), Oracle Exadata Infrastructure Lead, Lead Oracle DBA, Oracle RAC & Exadata Specialist (3 years)
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Mohan Meets Appendix IV, WV IES Data Architect Requirements:

Minimum of six years of experience in the following areas: • Implementing enterprise data architecture infrastructures in a health IT environment(s). • Data modeling and architecture, including expertise data language standards and middleware, data transfer standards, web based architecture, and entity relationship diagrams. • Data warehouse architecture and building data structures.	Mohan exceeds the RFP requirements with over 19 years of IT experience. He has worked as a database architect lead for all lifecycles of projects including database planning, design, and architect.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Quality management
- Data architecture and management
- Defect management
- Performance testing

- Architecture and design
- Data conversion and transformation
- Master Data Management
- Enterprise Data Warehousing and Management Reporting
- Integration design
- Solution Architecture

- Health and Human Services

Additional Capabilities:

- Disaster Recovery Planning Services
- Automated Regression Testing

Other Relevant Experience Similar to WV IES

State of TN (TEDS), Oracle infrastructure lead, Lead Oracle DBA, Oracle RAC and product specialist (1.5 years)

- Database Infrastructure lead, Oracle SME and advisor.
- Design and architect the infrastructure for the database systems for project implementation, production and disaster recovery.
- Design and implement database topology to support high availability architecture using RAC and data guard, multi-database function support using 12C containers, reporting capabilities using golden gate.
- Design and implement security features of transparent data encryption along with data and audit vault to secure sensitive data.
- Planning the technical environment, database design, sizing and performance is in scope along with setup and establishment of the DBA team and processes for the project execution

State of GA Integrated Eligibility System (IES), Oracle Infrastructure Lead, Lead Oracle DBA, Oracle RAC & Product Specialist (2.5 years)

- Database infrastructure lead and Oracle SME the entire project cycle; construction phase through implementation and go-live.
- Designed and architected the infrastructure for the database systems in production and disaster recovery, interviews with the vendor in the physical, logical and network design of the converged V-Block appliance
- Designed and implemented database topology to support high availability architecture using RAC and data guard, multi-database function support using 12C containers, reporting capabilities using golden gate.
- Designed and implemented security features of transparent data encryption along with data and audit vault to secure sensitive data.
- Coordinated with multiple infrastructure and data center service providers for new infrastructure fulfilment within a very large and secured data center
- Planned the technical environment, database design, sizing and performance is in scope along with setup and establishment of the DBA team and processes for the project execution

State of NM Unemployment Insurance System Modernization (UITSM), Oracle Exadata Infrastructure Lead, Lead Oracle DBA, Oracle RAC & Exadata Specialist (3 years)

- Designed the strategy and executed the migration and consolidation of State's database systems to Exadata.
- Established the database and Exadata maintenance and operations routine.
- Designed and implemented disaster recover solution for database using data guard on Exadata.
- Designed the strategy and executed the upgrade of databases from 11g to 12C along with Exadata machine upgrades.
- Implemented multi-database function support using 12C containers, security features of transparent data encryption to secure sensitive data.
- Provided advisory and Oracle SME services to the State leadership and technology team.

Education

- Bachelors in Architecture, University of Mysore

Other Professional Qualifications

- Certified Professional in Oracle Database 11g
- Certified Professional in Oracle Exadata
- Certified Professional in Oracle Database Performance Tuning
- Certified Professional in Oracle Applications R12
- Oracle Exadata 11g Certified Support, Implementation Specialist

WEST VIRGINIA IES PROJECT

Janardhana Dhage

Data Architect

Support Staff

RFP REQUIREMENTS EXCEEDS RFP REQUIREMENTS

Professional Experience: 24 years

Janardhana (Jani) Dhage is the Senior Oracle DBA for Anthem Healthcare for the Modernization Project. Prior to joining Anthem team, he worked for 2 years on DHHR RAPIDS eligibility system and also worked for more than 16 years on the DHHR FACTS Child welfare solution in a variety of roles. Jani is a strong and versatile asset with a mix of functional and technical knowledge.

Responsibilities:

- The Data Architect is responsible for ensuring that the proposed solution accommodates the data needs of all West Virginia programs defined as in scope for this RFP, including design of data parameters, development of the solution to align with the needs of the State, and testing of the solution.
- The Data Analyst is also responsible for ensuring that data subject to enhanced federal security controls is secured in compliance with federal requirements.

Number of Years with Company:	2 years, 10 months	**Number of Years of Prior Experience in Position:**	• Anthem Blue Cross Blue Shield, Senior Oracle DBA (10 months) • State of West Virginia DHHR – RAPIDS Project, Track Manager and Senior Application DBA (2 years) • State of West Virginia DHHR – FACTS Project, Senior Application DBA (2 years)
Physically Located:	Onsite		

RFP Experience:

- Technology Integration
- Risks & Issue Management
- Program Management
- Public Sector Experience
- Production Support and Operations

Experience with WV IES Skillset

Jani Meets Appendix IV, WV IES Data Architect Requirements:

Minimum of six years of experience in the following areas: • Implementing enterprise data architecture infrastructures in a health IT environment(s). • Data modeling and architecture, including expertise data language standards and middleware, data transfer standards, web based architecture, and entity relationship diagrams. • Data warehouse architecture and building data structures.	Jani has 6+ experience as in all of the required areas from working as a database administrator spanning multiple projects including previous work in West Virginia. He has had lead roles in system modernization projects, database design, and database administration.

MEETS RFP REQUIREMENTS

Experience Performing RFP Tasks:

- Project management and work planning
- Quality management
- Data architecture and management
- Defect management
- Integration architecture

- Architecture and design
- Data conversion and transformation
- Master Data Management
- Enterprise Data Warehousing and Management Reporting
- Integration design
- Solution Architecture

- Health and Human Services

Additional Capabilities:

- Enterprise infrastructure hosting

West Virginia Experience

Other Relevant Experience Similar to WV IES

Anthem Blue Cross Blue Shield, Senior Oracle DBA (10 months)

- Lead role in database design and administration of Oracle database for healthcare modernization project at enterprise scale including data modeling, standards definition, diagraming and data warehousing.
- Lead role in testing and tracking the defects and testing support.
- Lead role in the modernization of the Anthem health care system from Legacy IMS and DB2 database, COBOL, and CICS to web application
- Administer JIRA issue tracking system to manage and track the development cycle.
- PMO support for anthem project to define the stakeholder management plan

State of West Virginia DHHR – RAPIDS Project, Track Manager and Senior Application DBA (2 years)

- Monitored the reporting solution
- Manages the Ad Hoc report requests
- Performed software upgrades
- Performed QA after each major data load
- Defined requirements for new report requests
- Responded to questions and issues concerning reports

State of West Virginia DHHR – FACTS Project, Senior Application DBA (2 years)

- Oversaw design, development and maintenance of large statewide child welfare system; including managing the Oracle schemas, PL/SQL procedures, database triggers, views, materialized views, and tablespaces.
- Performed Oracle 11g Database Administration; which included database security, RMAN backup , capacity monitoring, space management, user management, and database cloning using RMAN
- Led design, develop and deployment of Oracle data warehouse system for business intelligence reports using COGNOS.
- Support the administration of the Java platform on Oracle SOA installed on the WebLogic Server
- Implemented fine-grained access using Virtual Private Database rules on some of the main tables to restricted access to sensitive data to authorized users.

Education

- Bachelor of Science in Mechanical Engineering, Bangalore University
- Master of Science in Technology Management; Concentration in Information Systems, Marshall University

Other Professional Qualifications

- PMI Certified Project Management Professional
- Oracle 11g Certified Professional
- Oracle Certified Java 8 Associate (OCJA)
- COBOL II Certification

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
Business Relationship Management (BRM)							
BRM0001	1	The solution should exchange Medicare Premium Assistance (MPA) data (for eligibility) with the Medicaid Management Information System (MMIS).	Income Maintenance Manual		X		
BRM0002	1	The solution should receive and process a monthly Master Medicare Premium Assistance (MPA) File from the Centers for Medicare and Medicaid Services (CMS).	Income Maintenance Manual	X			
BRM0003	1	The solution should deliver Medicare Premium Assistance (MPA) payments to the Social Security Administration (SSA).	Income Maintenance Manual	X			
BRM0004	1	The solution should provide notification to the authorized system users of Third Party Liability (TPL) updates, regardless of the program or source that supplied the TPL information.	Income Maintenance Manual		X		
BRM0005	1	The solution should deliver notification through an interface to the Medicaid Management Information System (MMIS) that a Qualified Medicare Beneficiary (QMB) eligible individual is receiving nursing facility services.	Income Maintenance Manual		X		
BRM0006	1	The solution should transfer Third Party Liability (TPL) information to the Medicaid Management Information System (MMIS), regardless of the program or source that supplied the TPL information.	Income Maintenance Manual		X		
BRM0007	1	The solution should electronically receive disability determination notification decisions and documentation from State authorized sources.	Income Maintenance Manual			X	
BRM0008	1	The solution should electronically transmit disability determination notification decisions and documentation from State authorized sources.	Income Maintenance Manual			X	
BRM0009	1	The solution should receive an eligibility data file from the Federally Facilitated Marketplace (FFM) in the format that meets FFM requirements.	Income Maintenance Manual	X			
BRM0010	1	The solution should send an eligibility data file to the Federally Facilitated Marketplace (FFM) in the format that meets FFM requirements.	Income Maintenance Manual	X			
BRM0011	1	The solution should provide data to the Medicaid Management Information System (MMIS) necessary for the provisioning of benefits for State designated programs.	Income Maintenance Manual	X			
BRM0012	1	The solution should accept, process, and manage data from the Social Security Administration's (SSA) Low Income Subsidy (LIS) data file.	Income Maintenance Manual	X			
BRM0013	1	The solution should deliver client eligibility data as defined by the State.	Income Maintenance Manual	X			
BRM0014	1	The solution should receive client eligibility data as defined by the State.	Income Maintenance Manual	X			
BRM0015	1	The solution should designate a data field that has been verified through electronic data exchange.	Income Maintenance Manual	X			
BRM0016	1	The Vendor should develop, maintain, and/or support all interfaces contained in the State-approved interface inventory according to West Virginia business rules.	Interface Control Documents			X	
BRM0017	1	The Vendor should develop and maintain a comprehensive interface inventory.	Not Applicable	X			
BRM0018	1	The solution should exchange information necessary to support the Treasury Offset Program (TOP).	Income Maintenance Manual	X			
BRM0019	1	The solution should receive payment information from the West Virginia Auditor's Office and update the client record with the warrant or EFT number.	Income Maintenance Manual			X	
BRM0020	1	The solution should redirect a failed direct deposit payment to the Electronic Benefits Transfer (EBT) vendor for re-issuance on an EBT card.	Income Maintenance Manual		X		
BRM0021	1	The solution should support deposit of benefits into the local office account based upon a documented request by transmitting benefit information to the West Virginia Auditor's Office, according to West Virginia business rules.	Income Maintenance Manual			X	
BRM0022	1	The solution should send client requests for Support Services payments to the Electronic Benefits Transfer (EBT) vendor.	Income Maintenance Manual			X	

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0023	1	The solution should receive service payment updates from the Electronic Benefits Transfer (EBT) vendor for processing as the need arises through an interface.	Income Maintenance Manual	X			
BRM0024	1	The solution should interface with the Federal Data Services Hub (DSH) to receive data to verify client eligibility criteria.	Income Maintenance Manual	X			
BRM0025	1	The solution should interface with the Federal Data Services Hub (DSH) to submit data for matching verification of client eligibility criteria.	Income Maintenance Manual	X			
BRM0026	1	The solution should automatically trigger a data exchange with the West Virginia Income and Eligibility Verification System (IEVS) according to West Virginia business rules based on an applicant's Social Security Number (SSN).	Income Maintenance Manual		X		
BRM0027	1	The solution should match data received through a data exchange with the Income and Eligibility Verification System (IEVS) to a client's case file(s) based on an applicant's Social Security Number (SSN)	Income Maintenance Manual		X		
BRM0028	1	The solution should generate automated alerts based on the results of data matching with external systems according to West Virginia business rules.	Income Maintenance Manual	X			
BRM0029	1	The solution should receive and track data and information on annual out-of-wedlock births from the Office of Maternal, Child and Family Health.	Code of Federal Regulations	X			
BRM0030	1	The solution should deliver client data to the Winning Intercept Network (WIN) to allow for support withholdings to be calculated before lottery payouts are generated.	BCSE Policy Manual			X	
BRM0031	1	The solution should receive a response from the Winning Intercept Network (WIN) to allow for support withholdings to be calculated before lottery payouts are generated	BCSE Policy Manual			X	
BRM0032	1	The solution should support the process of contempt proceedings according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0033	1	The solution should support the order for body attachment process according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0034	1	The solution should support the process for prosecution of criminal non-support according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0035	1	The solution should support the processes for legal action outside of Family Court, including but not limited to: employer actions, appeals, abuse and neglect actions, and motions to intervene, according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0036	1	The solution should support the Child Support program during a bankruptcy proceeding on the part of the obligee according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0037	1	The solution should support the Child Support program during a bankruptcy proceeding on the part of the obligor according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0038	1	The solution should automatically interface with the Federal Case Registry to transmit and register all new cases (IV-D) and orders (non-IV-D) and all participants associated with those cases and orders as defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement A Guide for States.	Child Support Enforcement: A Guide for States	X			
BRM0039	1	The solution should automatically transmit changes or deletions to any information previously provided to the Federal Case Registry (FCR) within five (5) business days of receipt by the IV-D agency of new or changed information.	Child Support Enforcement: A Guide for States	X			
BRM0040	1	The solution should accept and process all administrative information received from the Federal Case Registry (e.g., rejections, warnings, Social Security Number verification or identification results), including providing system- related warnings and rejections to an authorized user so that the data can be evaluated and any appropriate action taken as defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement A Guide for States.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0041	1	The solution should communicate with the Federal Case Registry via the network provided by the Federal Parent Locator System (FPLS) using the file transfer protocols required by the network provided by the FPLS.	Child Support Enforcement: A Guide for States	X			
BRM0042	1	The solution should send all required fields established in the latest version of the Administration for Children and Families Child Support Enforcement Guide for States to the Federal Case Registry to register cases and participants.	Child Support Enforcement: A Guide for States	X			
BRM0043	1	The solution should make data received from the Federal Case Registry (FCR) available online to the system user	Child Support Enforcement: A Guide for States	X			
BRM0044	1	The solution should electronically capture in the case record any data received from the Federal Case Registry (FCR).	Child Support Enforcement: A Guide for States	X			
BRM0045	1	The solution should maintain an audit trail so the State can track the status of the case on the Federal Case Registry	Child Support Enforcement: A Guide for States	X			
BRM0046	1	The solution should connect to, and retrieve information from, the National Law Enforcement Telecommunications System (NLETS).	BCSE Policy Manual	X			
BRM0047	1	The solution should connect to and retrieve information from the American Association of Motor Vehicle Administrators (AAMVA)	BCSE Policy Manual	X			
BRM0048	1	If an automated interface to support a locate request cannot be established for a specific data source, the solution should automatically prepare the case information required to submit the case to the data source through alternative means as described in the latest version of the Administration of Children and Families (ACF) Child Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
BRM0049	1	The solution should allow an authorized system user to enter into the automated case record all manual attempts to obtain information and the results if an automated interface cannot be established for a specific source	Child Support Enforcement: A Guide for States	X			
BRM0050	1	The solution should automatically follow up when locate information is solicited and no response is received within a configurable period of time, according to West Virginia business rules. The solution should:	Child Support Enforcement: A Guide for States	X			
BRM0051	2	Re-access the source using an automated interface, if available	Child Support Enforcement: A Guide for States	X			
BRM0052	2	If an automated interface is not available, notify the system user and automatically generate the documents or alerts necessary to encourage a response.	Child Support Enforcement: A Guide for States	X			
BRM0053	1	The solution should accept unsolicited locate information from the Federal Parent Locator Service (FPLS) as proactive matches occur between State participants registered through the Federal Case Registry (FCR) are matched to New Hire, Quarterly Wage, and Unemployment Insurance claim records on the National Directory of New Hires (NDNH)	Child Support Enforcement: A Guide for States	X			
BRM0054	1	The solution should make data received electronically, through any of the interfaces used to support the locate process available online, to an auth capability to electronically record in the caseorized system user, along with the record any data received through an interface.	Child Support Enforcement: A Guide for States	X			
BRM0055	1	At least quarterly, The solution should automatically resubmit all cases in locate status to Workforce West Virginia and to all other automated locate sources, with the exception of Federal Parent Locator Service (FPLS)	Child Support Enforcement: A Guide for States	X			
BRM0056	1	The solution should follow up with a locate source according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0057	1	For any persons requiring an Federal Parent Locator Service (FPLS) locate, the solution should automatically:	Child Support Enforcement: A Guide for States	X			
BRM0058	2	Prepare a Federal Case Registry (FCR) locate person transaction containing the necessary identifying information for referral.	Child Support Enforcement: A Guide for States	X			
BRM0059	2	If the client is only involved in a case not registered in the Federal Case Registry (FCR), include in the transaction case and order information necessary to register the case in the FCR.	Child Support Enforcement: A Guide for States	X			
BRM0060	2	Annotate the automated case record with the referral.	Child Support Enforcement: A Guide for States	X			
BRM0061	2	Receive automated information back from the Federal Parent Locator Service (FPLS).	Child Support Enforcement: A Guide for States	X			
BRM0062	2	Record the results of the match in the automated case record and notify the system user of the results.	Child Support Enforcement: A Guide for States	X			
BRM0063	2	Provide the data electronically online to the authorized system user along with the capability to electronically record in the case record any data received from the Federal Parent Locator Service (FPLS)	Child Support Enforcement: A Guide for States	X			
BRM0064	1	The solution should include all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States in all submissions to Federal Parent Locator Service (FPLS) for locate.	Child Support Enforcement: A Guide for States	X			
BRM0065	1	For any foster care locate only request (i.e., title IV-B), the request to Federal Parent Locator Service (FPLS) should be coded with an AD and/or conform to any other instructions established by Office of Child Support Enforcement (OCSE).	Child Support Enforcement: A Guide for States	X			
BRM0066	1	The solution should support the process of establishing paternity, including administrative processes, for all cases in which paternity has not yet been established.	Child Support Enforcement: A Guide for States	X			
BRM0067	1	The solution should accept identifying information on voluntary acknowledgments of paternity.	Child Support Enforcement: A Guide for States	X			
BRM0068	1	The solution should automatically generate completed administrative or judicial documents which are required to establish paternity.	Child Support Enforcement: A Guide for States	X			
BRM0069	1	The solution should automatically enter the date of all generated administrative or judicial documents which are required to establish paternity in the case record.	Child Support Enforcement: A Guide for States	X			
BRM0070	1	The solution should automatically enter the type of all generated administrative or judicial documents which are required to establish paternity in the case record.	Child Support Enforcement: A Guide for States	X			
BRM0071	1	The solution should initiate actions to establish paternity according to State and Federal business rules.	Child Support Enforcement: A Guide for States	X			
BRM0072	1	The solution should periodically reinitiate service-of-process for those cases where previous attempts have failed, but adequate information exists to attempt service-of-process according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
BRM0073	1	The solution should automatically generate documents required to support genetic testing as described in the most recent version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
BRM0074	1	The solution should support the 'long arm' process according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
BRM0075	1	The solution should maintain an automated case record for all cases worked using the 'long arm' statute, including actions taken and information received from the other state.	Child Support Enforcement: A Guide for States	X			
BRM0076	1	The solution should maintain data and status on Title IV-D cases where paternity establishment is handled outside of the Title IV-D agency.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0077	1	The solution should store information regarding whether a child was born out of wedlock and whether paternity was established in any state.	Child Support Enforcement: A Guide for States	X			
BRM0078	1	The solution should provide the ability to transmit information regarding whether a child was born out of wedlock and whether paternity was established in any state.	Child Support Enforcement: A Guide for States	X			
BRM0079	1	The solution should monitor paternity establishment case activities to ensure service-of-process and order establishment are completed within State and Federal time frames following the location of the alleged father or non-custodial parent as defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
BRM0080	1	The solution should automatically generate the required documents needed to establish an order of support or to serve process.	Child Support Enforcement: A Guide for States	X			
BRM0081	1	The solution should record the date and type of documents generated in the case record.	Child Support Enforcement: A Guide for States	X			
BRM0082	1	The solution should automatically generate the documents required to petition for the inclusion of medical support provisions in new or modified support orders.	Child Support Enforcement: A Guide for States	X			
BRM0083	1	The solution should deliver client data to the Medicaid Management Information System (MMIS) for the transfer of medical support information, including notifying the Title XIX agency whenever a medical support provision is included in a support order.	Child Support Enforcement: A Guide for States	X			
BRM0084	1	The solution should receive a response to the delivery of client data from the Medicaid Management Information System (MMIS) related to the transfer of medical support information.	Child Support Enforcement: A Guide for States	X			
BRM0085	1	The solution should track actions and dates to ensure that:	Child Support Enforcement: A Guide for States	X			
BRM0086	2	All cases requiring locate services are referred to the locate function (unit) according to State and federal regulations.	Child Support Enforcement: A Guide for States	X			
BRM0087	2	Incoming interstate cases are automatically referred to the State Parent Locator System (SPLS) or the appropriate processing function within 10 working days of receipt.	Child Support Enforcement: A Guide for States	X			
BRM0088	1	The solution should electronically transmit all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States to provide the Title IV-A agency with updates to Title IV-A case-related information at the time of a change.	Child Support Enforcement: A Guide for States			X	
BRM0089	1	At the time of a change, The solution should electronically transmit all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States to provide the IV-E agency with updates to Foster Care-related information.	Child Support Enforcement: A Guide for States			X	
BRM0090	1	The solution should automatically generate hard copies of Title IV-E reports.	Child Support Enforcement: A Guide for States	X			
BRM0091	1	When an order that requires medical support is established, or at the time of a subsequent change, The solution should electronically transmit all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States to provide the Medicaid Management Information System (MMIS) with updates to Medicaid-related information.	Child Support Enforcement: A Guide for States	X			
BRM0092	1	The solution should provide for management of all interstate cases.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0093	1	The solution should support all functions assigned to the Central Registry and related activities.	Child Support Enforcement: A Guide for States	X			
BRM0094	1	The solution should automatically transmit client data related to interstate referrals through the Child Support Enforcement Network (CSENet) using Direct File Transfer (Frame Relay communications) and all CSENet Standard Transactions (i.e., CSI, LO1, PAT, EST, ENF,MSC, and COL).	Child Support Enforcement: A Guide for States	X			
BRM0095	1	The solution should automatically receive client data related to interstate referrals through the Child Support Enforcement Network (CSENet) using Direct File Transfer (Frame Relay communications) and all CSENet standard transactions (i.e., CSI, LO1, PAT, EST, ENF,MSC, and COL).	Child Support Enforcement: A Guide for States	X			
BRM0096	1	The solution should automatically receive, process, access locate sources, and respond to (LO1) requests from the Child Support Enforcement Network (CSENet).	Child Support Enforcement: A Guide for States	X			
BRM0097	1	The solution should provide the system user with online access to information received in response to a locate (LO1) request, and allow the system user to electronically move selected information to the case record.	Child Support Enforcement: A Guide for States	X			
BRM0098	1	The solution should provide the system user with online access to information received in response to a Case Status Information (CSI) request, and allow the system user to electronically move selected information to the case record.	Child Support Enforcement: A Guide for States	X			
BRM0099	1	The solution should use the IV-D case identifier to identify the case in all Child Support Enforcement Network (CSENet) transactions, and on all documents generated by the solution, including documents that require a raised seal or notarization.	Child Support Enforcement: A Guide for States	X			
BRM0100	1	The solution should manage responding state case actions including, but not limited to:	Child Support Enforcement: A Guide for States	X			
BRM0101	2	The solution should automatically forward the interstate case to the appropriate processing unit with the State.	Child Support Enforcement: A Guide for States	X			
BRM0102	2	If an incoming interstate case is received with inadequate documentation, The solution should automatically, or if necessary, through system user intervention, forward the case to the appropriate function for any action that can be taken.	Child Support Enforcement: A Guide for States	X			
BRM0103	2	The solution should provide the initiating State, through Child Support Enforcement Network (CSENet), advance notice of hearings that may result in either paternity establishment or establishment/adjustment of a support order.	Child Support Enforcement: A Guide for States	X			
BRM0104	2	The solution should periodically provide case status updates to initiating states through Child Support Enforcement Network (CSENet).	Child Support Enforcement: A Guide for States	X			
BRM0105	2	The solution should automatically note all actions in the automated case record, including the transfer of the case to another state/jurisdiction if the non-custodial parent is located there.	Child Support Enforcement: A Guide for States	X			
BRM0106	2	When a case is closed by a responding state, The solution should enter the reason and date of closure in the automated case record.	Child Support Enforcement: A Guide for States	X			
BRM0107	1	The solution should manage initiating state case actions, including but not limited to:	Child Support Enforcement: A Guide for States	X			
BRM0108	2	Within ten (10) working days of receiving new case information, The solution should use the Child Support Enforcement Network (CSENet) to automatically transmit such information to the responding state and notify the authorized system user of the action.	Child Support Enforcement: A Guide for States	X			
BRM0109	1	The solution should provide for management of all Tribal Title IV-D cases as specified in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0110	1	The solution should process income withholdings transmitted in both the Cash Concentration and Disbursement Plus (CCD+) and Corporate Trade Exchange (CTX) National Automated Clearing House Association (NACHA) payment formats.	Child Support Enforcement: A Guide for States	X			
BRM0111	1	The solution should send electronic versions of the electronic income withholding order (eIWO)	Child Support Enforcement: A Guide for States	X			
BRM0112	1	The solution should receive electronic versions of the income withholding order (eIWO).	Child Support Enforcement: A Guide for States	X			
BRM0113	1	The solution should deliver client information to the State tax department to facilitate the offset of any State income tax returns due to the obligor.	BCSE Policy Manual	X			
BRM0114	1	The solution should receive a response from the State tax department to submitted requests for the offset of any State income tax returns due to the obligor.	BCSE Policy Manual	X			
BRM0115	1	The solution should accept information on children eligible for Tricare coverage from the Federal Case Registry (FCR) match with Department of Defense's Defense Enrollment Eligibility Reporting System (DEERS) system.	Child Support Enforcement: A Guide for States	X			
BRM0116	1	The solution should support the Administrative Enforcement Interstate (AEI) collections process according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
BRM0117	1	The solution should support procedures under which the State has (and uses in appropriate cases) authority to withhold, suspend, or restrict the use of driver's licenses, professional and occupational licenses, and recreational and sporting licenses of individuals who owe overdue support or who fail, after receiving appropriate notice, to comply with subpoenas or warrants related to paternity or child support proceedings	Child Support Enforcement: A Guide for States	X			
BRM0118	1	The solution should submit client data electronically regarding insurance matches to the Federal Parent Locator System (FPLS).	Child Support Enforcement: A Guide for States	X			
BRM0119	1	The solution should receive information electronically about insurance matches from the Federal Parent Locator System (FPLS)	Child Support Enforcement: A Guide for States	X			
BRM0120	1	The solution should use electronic funds transfer/electronic data interchange (EFT/EDI) procedures and formats that conform to the requirements defined by the National Automated Clearinghouse Association (NACHA) and the Accredited Standards Committee (ASC) X12 Financial Committee as stated in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
BRM0121	1	The solution should maintain all information required to complete the OCSE-157 annual data report.	Child Support Enforcement: A Guide for States	X			
BRM0122	1	The solution should receive genetic test result data from the genetic test result vendor.	Child Support Enforcement: A Guide for States	X			
BRM0123	1	The solution should generate and maintain a hearing docket according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0124	1	The solution should maintain information about all legal officers in West Virginia, including but not limited to attorneys, judges, circuit clerks, and county clerks, according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0125	1	The solution should schedule and maintain court dates at the case level according to West Virginia business rules	BCSE Policy Manual	X			
BRM0126	1	The solution should alert the client prior to the scheduled appointment/hearing date according to West Virginia business rules.	BCSE Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0127	1	The solution should deliver client data to all auxiliary Statewide customer service systems, including but not limited to, the State's Automated Voice Response System (AVRS)/Integrated Voice Response (IVR) system.	BCSE Policy Manual			X	
BRM0128	1	The solution should receive client data from all auxiliary Statewide customer service systems, including but not limited to, the State's Automated Voice Response System (AVRS)/Integrated Voice Response (IVR) system.	BCSE Policy Manual			X	
BRM0129	1	The solution should maintain fully editable court orders according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0130	1	The solution should populate appropriate data fields within the case record based on information in the system-generated court order according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0131	1	The solution should maintain a history of the court identification numbers and parties associated with each case according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0132	1	Whenever key locate data elements are added or changed due to the receipt of new information, The solution should immediately re-submit the case to all appropriate automated and manual locate sources, with the exception of Federal Parent Locator Service (FPLS).	Child Support Enforcement: A Guide for States	X			
BRM0133	1	The solution should automatically generate all other documents needed to support the license suspension process when appropriate, or prompt the system user to take action through the solution to generate documents in support of such process.	Child Support Enforcement: A Guide for States	X			
BRM0134	1	The solution should process Electronic Funds Transfer/Electronic Data Interchange (EFT/EDI) transactions received from employers, sources of income, or individuals according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
BRM0135	1	The solution should process Electronic Funds Transfer/Electronic Data Interchange (EFT/EDI) transactions received from other states.	Child Support Enforcement: A Guide for States	X			
BRM0136	1	The solution should transmit interstate collections to other states using Electronic Funds Transfer/Electronic Data Interchange (EFT/EDI) technology.	Child Support Enforcement: A Guide for States	X			
BRM0137	1	The solution should allow the system user to query the West Virginia Circuit Court System's e- filing system without exiting the solution.	BCSE Policy Manual			X	
BRM0138	1	The solution should support the process of generating court documents, conversion to .pdf format, and submitting them to the court system using the West Virginia Circuit Court's e-filing solution.	BCSE Policy Manual			X	
BRM0139	1	The solution should fully automate the credit bureau reporting process, using rules-based processing, according to West Virginia business rules.	BCSE Policy Manual	X			
BRM0140	1	The solution should update provider and child records based on data received from OASIS regarding payments made according to West Virginia business rules.	Not Applicable		X		
BRM0141	1	The solution should exchange information with Titles IV-A Temporary Assistance for Needy Families (TANF), IV-D (Office of Child Support Enforcement), and XIX (Medicaid).	Not Applicable	X			
BRM0142	1	The solution should deliver case information to the West Virginia Department of Education.	Not Applicable			X	
BRM0143	1	The solution should receive case information from the West Virginia Department of Education.	Not Applicable			X	
BRM0144	1	The solution should deliver case information to the West Virginia Circuit Court System.	Not Applicable			X	
BRM0145	1	The solution should receive case information from the West Virginia Circuit Court System.	Not Applicable			X	

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0146	1	The solution should deliver case information to the West Virginia Juvenile Justice System.	Not Applicable			X	
BRM0147	1	The solution should receive case information from the West Virginia Juvenile Justice System.	Not Applicable			X	
BRM0148	1	The solution should process contracts and contract changes related to Child Protective Services (CPS) according to West Virginia business rules.	Child Protective Services Policy		X		
BRM0149	1	The solution should record contract monitoring results related to Child Protective Services (CPS).	Not Applicable	X			
BRM0150	1	The solution should deliver case information to the Child Abuse and Neglect Data System or Central Registry.	Not Applicable		X		
BRM0151	1	The solution should receive case information to the Child Abuse and Neglect Data System or Central Registry.	Not Applicable		X		
BRM0152	1	The solution should deliver case information to the Social Security Administration in support of Child Protective Services (CPS).	Not Applicable			X	
BRM0153	1	The solution should receive case information from the Social Security Administration (SSA) in support of Child Protective Services (CPS).	Not Applicable		X		
BRM0154	1	The solution should deliver case information to the Bureau for Behavioral Health and Health Facilities in support of Child Protective Services (CPS).	Not Applicable		X		
BRM0155	1	The solution should receive case information from the Bureau for Behavioral Health and Health Facilities in support of Child Protective Services (CPS).	Not Applicable			X	
BRM0156	1	The solution should provide decision support to assist the system user in requesting issuance of an administrative subpoena according to West Virginia business rules.	Child Protective Services Policy		X		
BRM0157	1	The solution should support Adult Services reporting to the court according to West Virginia business rules.	Social Services Manual		X		
BRM0158	1	The solution should deliver case data to the National Adult Maltreatment Reporting System (NAMRS).	Not Applicable			X	
BRM0159	1	The solution should receive case data with the National Adult Maltreatment Reporting System (NAMRS).	Not Applicable			X	
BRM0160	1	The solution should deliver case information to the Administrative Service Organization (ASO).	Adoption Policy Manual			X	
BRM0161	1	The solution should receive case data from the Administrative Service Organization (ASO).	Adoption Policy Manual			X	
BRM0162	1	The solution should support the creation of the Multi-disciplinary Investigative Team (MDIT) report to the prosecutor according to West Virginia business rules.	Child Protective Services Policy		X		
BRM0163	1	The solution should deliver payment data as defined by the State.	Income Maintenance Manual	X			
BRM0164	1	The solution should receive payment data as defined by the State.	Income Maintenance Manual		X		
BRM0165	1	The solution should transmit and receive HIPAA- compliant transactions using multiple methods (e g , web-based, dial-up, batch file).	Not Applicable	X			
BRM0166	1	The solution should transmit and receive HIPAA- compliant transactions using a variety of devices including PCs and touch tone phones.	Not Applicable	X			
BRM0167	1	The solution should support the development of 1095B forms in alignment with Internal Revenue Service rules.	Internal Revenue Code	X			
BRM0168	1	The solution should deliver social services case information to the federal National Electronic Interstate Compact Enterprise (NEICE).	Not Applicable		X		
BRM0169	1	The solution should receive social services case information from the federal National Electronic Interstate Compact Enterprise (NEICE)	Not Applicable		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
BRM0170	1	The solution should automatically deliver client information to the Systematic Alien Verification of Entitlement (SAVE) system to verify immigration status.	Income Maintenance Manual	X			
BRM0171	1	The solution should automatically receive and process a response from the Systematic Alien Verification of Entitlement (SAVE) system containing immigration status results.	Income Maintenance Manual	X			
BRM0172	1	The solution should deliver client data to the Social Security Administration to verify Social Security Number (SSN).	Income Maintenance Manual	X			
BRM0173	1	The solution should receive verified Social Security Numbers (SSN) from the Social Security Administration in response to a request to verify client data.	Income Maintenance Manual	X			
BRM0174	1	The solution should deliver client data to the Social Security Administration's Qualifying Quarters of Coverage Data Exchange to support the eligibility determination process.	Income Maintenance Manual	X			
BRM0175	1	The solution should receive client data from the Social Security Administration's Qualifying Quarters of Coverage Data Exchange to support the eligibility determination process.	Income Maintenance Manual	X			
BRM0176	1	The solution should deliver client data to the Social Security Administration's Prisoner Match Data Exchange to support the eligibility determination process.	Income Maintenance Manual	X			
BRM0177	1	The solution should receive client data from the Social Security Administration's Prisoner Match Data Exchange to support the eligibility determination process.	Income Maintenance Manual	X			
BRM0178	1	The solution should deliver client data to the West Virginia State prisoner match that falls under the Department of Military Affairs and Public Safety (DMAPS), Regional Jail, Corrections Authority, and Public Safety authority.	Income Maintenance Manual		X		
BRM0179	1	The solution should receive client data from the West Virginia State prisoner match that falls under the Department of Military Affairs and Public Safety (DMAPS), Regional Jail, Corrections Authority, and Public Safety authority.	Income Maintenance Manual		X		
Client Management (CM)							
CM0001	1	The solution should open a case according to West Virginia business rules.	Not Applicable	X			
CM0002	1	The solution should close a case according to West Virginia business rules.	Not Applicable	X			
CM0003	1	The solution should re-open a case according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
CM0004	1	The solution should allow a system user to open a case for a child from another state who was referred to West Virginia for medical assistance through the Interstate Compact on Medical Assistance (ICAMA)	Adoption Policy Manual		X		
CM0005	1	The solution should create unique client IDs that can be used to track any benefit assigned to that client.	Income Maintenance Manual	X			
CM0006	1	The solution should create a unique identifier (ID) for each individual member of a case.	Not Applicable	X			
CM0007	1	The solution should create a unique identifier (ID) for each application for each program.	Not Applicable	X			
CM0008	1	The solution should allow an applicant to designate a representative to act on their behalf, also known as an authorized representative	Income Maintenance Manual	X			
CM0009	1	The solution should provide a voter registration application and declination form at any point a client engages in an application, recertification, or reports a change of address in conjunction with benefits.	Income Maintenance Manual	X			
CM0010	1	The solution should generate the DFA-HIP-1 (Certificate of Coverage) to the client at the client's request	Income Maintenance Manual		X		
CM0011	1	The solution should generate a DFA-HIP-1 (Certificate of Coverage) for any former Medicaid beneficiary dating back to July 1, 1996, upon request by the client or their authorized representative.	Income Maintenance Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
CM0012	1	The solution should transfer an existing case number from one county to another, and to maintain the original case number according to West Virginia business rules.	Income Maintenance Manual	X			
CM0013	1	The solution should store visual acuity data to be used in eligibility determinations.	Income Maintenance Manual	X			
CM0014	1	The solution should allow a flag to be entered to alert the system user that an accommodation for a client's special need may be necessary.	Income Maintenance Manual	X			
CM0015	1	The solution should allow a system user to change a payee.	Income Maintenance Manual	X			
CM0016	1	The solution should allow for tracking of timely delivery of Periodic Review Letter (PRL) notices according to West Virginia business rules.	Income Maintenance Manual	X			
CM0017	1	The solution should track the county in which the client receives benefits.	Income Maintenance Manual	X			
CM0018	1	The solution should automatically access automated data sources when completing a location request on a obligor whose Social Security Number is available according to West Virginia business rules.	BCSE Policy Manual	X			
CM0019	1	The solution should maintain case history according to the West Virginia record retention policy.	Child Support Enforcement: A Guide for States	X			
CM0020	1	The solution should update common data elements in all linked case records.	Child Support Enforcement: A Guide for States	X			
CM0021	1	The solution should identify other cases that an individual is associated with, as identifying information is entered into a new case according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
CM0022	1	The solution should capture information about a customer's attorney(s) according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
CM0023	1	The solution should capture information about a customer's Guardian Ad Litem (GAL) according to West Virginia business rules.	Child Support Enforcement: A Guide for States		X		
CM0024	1	The solution should maintain more than one Social Security Number (SSN) for an individual and track the validity of each SSN.	Child Support Enforcement: A Guide for States	X			
CM0025	1	The solution should maintain information regarding an individual's incarceration according to West Virginia business rules.	BCSE Policy Manual	X			
CM0026	1	The solution should maintain information about an individual's marital history according to West Virginia business rules.	BCSE Policy Manual	X			
CM0027	1	The solution should retain the entire history file of a closed case in an easily accessible automated manner according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
CM0028	1	The solution should allow the system user to view other cases in which the client is present.	Not Applicable	X			
CM0029	1	The solution should process changes to guardians and update personal identification numbers (PINs) according to West Virginia business rules.	West Virginia CHIP Process Flow - July 2014		X		
CM0030	1	The solution should identify individuals who are receiving West Virginia Children's Health Insurance Program (WVCHIP) benefits in more than one state at the same time.	Income Maintenance Manual	X			
CM0031	1	The solution should record client contacts.	Not Applicable	X			
CM0032	1	The solution should track a child across multiple occurrences and/or cases.	Not Applicable	X			
CM0033	1	The solution should contain validation routines that require a supervisor to review missing data or failed cross edits before a closure can occur according to West Virginia business rules.	West Virginia DHHR Annual Progress Services Report	X			
CM0034	1	The solution should allow for overrides of specified fields to edit or enter new information on a case according to West Virginia business rules.	West Virginia DHHR Annual Progress Services Report	X			
CM0035	1	The solution should, upon request, display a case record or screen as it existed at a specified time according to West Virginia business rules.	West Virginia DHHR Annual Progress Services Report	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
CM0036	1	The solution should support the documentation of education information according to West Virginia business rules.	Adoption Policy Manual	X			
CM0037	1	The solution should support the documentation of immunization and health information according to West Virginia business rules.	Adoption Policy Manual		X		
CM0038	1	The solution should allow the system user to associate forms and other case documentation with the individual(s) to whom they were distributed by case and/or by client.	Adoption Policy Manual	X			
CM0039	1	The solution should track who receives a notice of adoption proceedings.	Adoption Policy Manual		X		
CM0040	1	The solution should identify a client who is the victim of family/domestic violence.	Child Protective Services Policy	X			
CM0041	1	The solution should flag cases with clients identified as victims of family/domestic violence.	Child Protective Services Policy		X		
CM0042	1	The solution should provide decision support to assist the system user in determining if a request for case information is allowable according to West Virginia business rules.	Child Protective Services Policy		X		
CM0043	1	The solution should support the approval process of a request for case information according to West Virginia business rules.	Child Protective Services Policy		X		
CM0044	1	The solution should allow the system user to link all services to a client's case record.	Foster Care Policy		X		
CM0045	1	The solution should support the required steps to be taken upon death of a client according to West Virginia business rules.	Foster Care Policy		X		
CM0046	1	The solution should store photographs in the case record.	Foster Care Policy	X			
CM0047	1	The solution should allow the authorized system user to link all referrals, investigations, and cases for the same client identifier together according to West Virginia business rules.	Social Services Manual	X			
CM0048	1	The solution should create an adoption record for all types of adoptions according to West Virginia business rules.	Adoption Policy Manual		X		
CM0049	1	The solution should document special characteristics related to the client according to West Virginia business rules.	Child Protective Services Policy	X			
CM0050	1	The solution should document information about medications prescribed, including but not limited to, dosage, prescribing physician, and titration plan.	Foster Care Policy		X		
CM0051	1	The solution should document that a notification was made about exposure to a communicable disease.	Foster Care Policy		X		
CM0052	1	The solution should track whether a client has had a payment returned for non-sufficient funds.	Income Maintenance Manual	X			
CM0053	1	The solution should flag an individual as ineligible to submit personal checks for the purpose of resolving an over issuance.	Income Maintenance Manual		X		
CM0054	1	The solution should alert system users when they have accessed the record of a client that has a penalty in place.	Income Maintenance Manual		X		
CM0055	1	The solution should capture additional information about special living situations when a client's current situation qualifies as a special living situation according to West Virginia business rules.	Income Maintenance Manual	X			
CM0056	1	The solution should track if a client is a resident of a drug and alcohol treatment center.	Income Maintenance Manual	X			
CM0057	1	The solution should track if a client is a resident of a shelter for battered persons.	Income Maintenance Manual	X			
CM0058	1	The solution should track if a client is homeless according to West Virginia business rules.	Income Maintenance Manual	X			
CM0059	1	The solution should track if a client is a resident of a homeless shelter according to West Virginia business rules.	Income Maintenance Manual	X			
CM0060	1	The solution should track the history of a case and approval/denials.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
CM0061	1	The solution should allow the user to update the applicant's case comments with the account number, the name on the account, and if not the applicant, the relationship of this person to the applicant, according to West Virginia business rules.	Income Maintenance Manual	X			
CM0062	1	The solution should maintain a case comment log of all case comments.	Not Applicable	X			
CM0063	1	The solution should mark someone as "medically frail" according to the West Virginia business rules and criteria.	Income Maintenance Manual		X		
CM0064	1	The solution should update the 20% utility discount application with a change of address	Income Maintenance Manual		X		
Eligibility and Enrollment Management (EE)							
EE0001	1	The solution should allow clients and applicants to complete forms online through a client portal.	Income Maintenance Manual	X			
EE0002	1	The solution should provide a dynamic online application available through the client portal that aligns with the West Virginia approved online application.	State Medicaid Plan	X			
EE0003	1	The online application should support intelligent queuing of questions using prior responses from the client.	State Medicaid Plan	X			
EE0004	1	The solution should accommodate all data elements contained on all West Virginia eligibility applications.	State Medicaid Plan	X			
EE0005	1	The solution should provide the information in the client portal in Spanish.	Not Applicable	X			
EE0006	1	The solution should assist applicants and clients in calculating the gross profit for self-employment, irregular, and new business income through the client portal.	Income Maintenance Manual		X		
EE0007	1	The solution should allow an applicant to apply for and evaluate eligibility for all Department of Health and Human Resources (DHHR) assistance programs for which the applicant may qualify, even if another eligibility determination is pending.	Income Maintenance Manual	X			
EE0008	1	The solution should allow the entry of information about benefits received from another state according to West Virginia business rules.	Income Maintenance Manual	X			
EE0009	1	The solution should allow the entry of months of benefits received from another state according to West Virginia business rules.	Income Maintenance Manual	X			
EE0010	1	The solution should generate the date of application according to West Virginia business rules.	Income Maintenance Manual	X			
EE0011	1	The solution should track all asset types required to support the West Virginia eligibility determination process.	Income Maintenance Manual	X			
EE0012	1	The solution should apply assets to eligibility determinations for those programs and eligibility groups that have asset tests and assessments.	Income Maintenance Manual	X			
EE0013	1	The solution should exclude an asset determination from those programs, as well as from eligibility groups that do not include asset tests.	Income Maintenance Manual	X			
EE0014	1	The solution should accommodate specific asset handling rules, by asset type, for each West Virginia assistance program or eligibility group according to West Virginia business rules.	Income Maintenance Manual	X			
EE0015	1	The solution should allow the system user to note the method used to validate an applicant's assets.	Income Maintenance Manual	X			
EE0016	1	The solution should apply "good cause" considerations to any assets assigned to an applicant's case, resulting in a modification to the manner in which the assets are treated during the eligibility determination process for the case.	Income Maintenance Manual		X		
EE0017	1	The solution should modify the way assets are counted for an applicant or client's case based on current living arrangements according to West Virginia business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0018	1	The solution should modify the handling of any assets included on an applicant or client's case based on the presence of a completed DFA-22 form on the file.	Income Maintenance Manual	X			
EE0019	1	The solution should modify the handling of any assets included on an applicant or client's case based on the presence of an approved DFA-V-1 form, used to protest the value of a vehicle that counts as an asset.	Income Maintenance Manual	X			
EE0020	1	The solution should allow for the assignment of single and/ or multiple owners to a single asset.	Income Maintenance Manual	X			
EE0021	1	The solution should allow the full Current Market Value (CMV) of a single asset to apply to all assistance groups that include an identified owner(s) of that asset according to West Virginia business rules.	Income Maintenance Manual	X			
EE0022	1	The solution should split the Current Market Value (CMV) of an asset amongst multiple owners of the asset according to West Virginia business rules.	Income Maintenance Manual	X			
EE0023	1	The solution should modify the counting of any assets included on an applicant or client's case based on the presence of letter of disputed ownership from the individual.	Income Maintenance Manual	X			
EE0024	1	The solution should count the assets of an immigrant's sponsor on the immigrant's case.	Income Maintenance Manual	X			
EE0025	1	The solution should automatically populate the asset limit and value of the client's assets in all denial notices resulting from excessive assets.	Income Maintenance Manual		X		
EE0026	1	The solution should track the data necessary to process and determine Medicare Premium Assistance (MPA) for Medicare Part A, Part B, and Part D premiums.	Income Maintenance Manual	X			
EE0027	1	The solution should process closures prior to the scheduled end of a client's eligibility period according to West Virginia business rules.	Income Maintenance Manual	X			
EE0028	1	The solution should re-evaluate Medicaid eligibility whenever updated information that may impact eligibility is added to a client's case file.	Income Maintenance Manual	X			
EE0029	1	The solution should produce the DFA-HIP-1 (Certificate of Coverage) when a client's Medicaid coverage ends.	Income Maintenance Manual		X		
EE0030	1	The solution should allow an authorized system user to indicate that a case has an absent parent, and modify handling of the client's case based on the entry contained in that field.	Income Maintenance Manual		X		
EE0031	1	The solution should implement a postpartum eligibility period for pregnant women of a configurable duration.	Income Maintenance Manual	X			
EE0032	1	The solution should perform an automated re- determination using electronic data matches with external data sources.	Income Maintenance Manual	X			
EE0033	1	The solution should automatically close eligibility at the end of the month in which the adverse notice deadline occurred if no re-determination is completed according to West Virginia business rules.	Income Maintenance Manual	X			
EE0034	1	The solution should allow a client to report a change in circumstances during their certification period through the client portal.	Income Maintenance Manual	X			
EE0035	1	The solution should support the process for rolling renewals, which requires that clients be provided with a new certification period if they are found eligible for ongoing coverage as a result of a reported change in circumstance according to West Virginia business rules.	Income Maintenance Manual	X			
EE0036	1	The solution should support Medicaid and WVCHIP eligibility re-determination for all eligibility types based on reported changes according to West Virginia business rules.	Income Maintenance Manual	X			
EE0037	1	The solution should allow authorized system users to manually correct an incorrect eligibility period(s).	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0038	1	The solution should execute a "mass change" to apply the same change and automatically update each case in a subset of client cases selected by querying the client database for any field on the case.	Income Maintenance Manual	X			
EE0039	1	The solution should execute a "mass change" to apply the same change and automatically redetermine eligibility for each case in a sub-set of client cases selected by querying the client data base.	Income Maintenance Manual	X			
EE0040	1	The solution should support the resource development process as described in Income Maintenance Manual (IMM) Chapter Five (5).	Income Maintenance Manual		X		
EE0041	1	The solution should produce a pending Medicaid number according to West Virginia business rules.	Income Maintenance Manual	X			
EE0042	1	The solution should produce and assign a unique Medicaid identification (MA ID) number for Medicaid recipients only.	Income Maintenance Manual	X			
EE0043	1	The solution should capture multiple addresses for an individual, and identify the address type (e.g., mailing, physical, temporary, etc.).	Income Maintenance Manual	X			
EE0044	1	The solution should determine an individual eligible for Medicaid under a "pass through" according to West Virginia business rules.	Income Maintenance Manual	X			
EE0045	1	The solution should implement an integrated process to complete the disability determination according to West Virginia business rules specified in Chapter 12 of the Income Maintenance Manual (IMM).	Income Maintenance Manual			X	
EE0046	1	The solution should receive case materials from the Medical Review Team (MRT) and append these materials to the relevant client file.	Income Maintenance Manual	X			
EE0047	1	The solution should allow the system user to view and track SSI-related disability eligibility determination cases by the age of the case.	Income Maintenance Manual	X			
EE0048	1	The solution should allow for initial and final reviews of medical information and eligibility determinations.	Income Maintenance Manual	X			
EE0049	1	The solution should allow a system user to bypass certain steps in the determination of disability or blindness according to West Virginia business rules.	Income Maintenance Manual	X			
EE0050	1	The solution should allow the eligibility for all other Medicaid coverage groups for an applicant to be considered if a Medicaid application is denied or a benefit is stopped because SSA found a client not disabled for the purposes of SSI.	Income Maintenance Manual	X			
EE0051	1	The solution should track if a client has, or is currently applying for, Social Security benefits based upon their disability.	Income Maintenance Manual	X			
EE0052	1	The solution should automatically append income generated through the Children with Special Care Needs (CSCN) program to the case file and trigger an eligibility re-determination.	Income Maintenance Manual	X			
EE0053	1	The solution should compare the income/ assets of all persons in the income group against the eligibility thresholds for the number of persons in the needs group to determine those in the assistance group that are eligible for benefits according to West Virginia's business rules.	Income Maintenance Manual	X			
EE0054	1	The solution should provide a preliminary determination of whether an applicant may be required to file a federal tax return based on household size and income.	Income Maintenance Manual	X			
EE0055	1	The solution should automatically determine individuals eligible for specific Medicaid eligibility groups based on information provided by external data sources according to West Virginia business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0056	1	The solution should allow exchanging information from the Medicaid eligibility group of a client with another West Virginia assistance program to support the eligibility lifecycle of that program.	Income Maintenance Manual	X			
EE0057	1	The solution should make eligibility determinations using the Modified Adjusted Gross Income (MAGI) methodology according to West Virginia business rules.	Income Maintenance Manual	X			
EE0058	1	The solution should track the source of all income attached to an individual's case.	Income Maintenance Manual	X			
EE0059	1	The solution should be configurable to allow for income disregard amounts to be used in the eligibility determination.	Income Maintenance Manual	X			
EE0060	1	The solution should be configurable to allow for income deduction amounts to be used in the eligibility determination.	Income Maintenance Manual	X			
EE0061	1	The solution should determine eligibility using the Aid to Families with Dependent Children (AFDC) income methodology according to West Virginia business rules.	Income Maintenance Manual	X			
EE0062	1	The solution should determine eligibility for individuals who are unable to provide all data typically required to establish a complete Medicaid application.	Income Maintenance Manual	X			
EE0063	1	The solution should accept auto-enrollment in specific Medicaid eligibility groups based on data delivered by other external entities.	Income Maintenance Manual	X			
EE0064	1	The solution should track an applicant's status as a "Battered Aliens/ Aliens Subjected To Extreme Cruelty" and allow for modified handling of the case based on this status.	Income Maintenance Manual	X			
EE0065	1	The solution should require that the system user enter evidence supporting the applicant's status as a "Battered Aliens/Aliens Subjected To Extreme Cruelty".	Income Maintenance Manual	X			
EE0066	1	The solution should submit an online application for the Health Insurance Premium Payment (HIPP) program assistance for Medicaid-eligible individuals according to West Virginia business rules.	Income Maintenance Manual	X			
EE0067	1	If an applicant is found eligible for multiple coverage groups, the solution should provide the ability for an applicant to choose which eligibility group they wish to be found eligible for.	Income Maintenance Manual	X			
EE0068	1	The solution should allow a member to be enrolled in one eligibility group while awaiting a final determination of eligibility on a separate eligibility group.	Income Maintenance Manual	X			
EE0069	1	The solution should pend benefits to allow an applicant time to gather any additional documentation requested by the system user.	Income Maintenance Manual	X			
EE0070	1	The solution should evaluate all applications for all other assistance programs based on the available information.	Income Maintenance Manual	X			
EE0071	1	The solution should automatically enroll participants in Medicaid and WVCHIP using the data delivered by the Federally Facilitated Marketplace (FFM) according to West Virginia's business rules, except in cases where West Virginia business rules require that additional information be obtained from the client or manual review is required by a system user.	Income Maintenance Manual	X			
EE0072	1	The solution should allow a user to complete a re-determination online.	Income Maintenance Manual	X			
EE0073	1	The solution should allow re-determinations submitted online to be processed automatically except when West Virginia business rules require that a system user manually review the case.	Income Maintenance Manual	X			
EE0074	1	The solution should automatically evaluate eligibility for other coverage groups if a re-determination is denied.	Income Maintenance Manual	X			
EE0075	1	The solution should automatically apply the West Virginia business rules for reasonable compatibility.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0076	1	The solution should allow coverage to remain open in more than one group at the same time according to West Virginia business rules.	Income Maintenance Manual	X			
EE0077	1	The solution should allow individuals to be added to a household assistance group without completing an application form according to West Virginia business rules.	Income Maintenance Manual	X			
EE0078	1	The solution should provide the information necessary to calculate co-payment amounts to the West Virginia Medicaid Management Information System (MMIS).	Income Maintenance Manual		X		
EE0079	1	The solution should support the Children with Special Health Care Needs (CSHCN) program administered by the Office for Maternal, Child, and Family Health.	Medicaid Provider Manual Chapter 400, Member Eligibility			X	
EE0080	1	The solution should determine if the applicant is a Medicare Premium Assistance (MPA) recipient, a recipient of other Department of Health and Human Resources (DHHR) program benefits, or is unknown to the eligibility enterprise, and respond according to West Virginia business rules when a LIS file is received.	Income Maintenance Manual	X			
EE0081	1	The solution should allow a system user designated as an Authorized Employee to conduct Presumptive Eligibility determinations and submit a full Medicaid eligibility application.	Income Maintenance Manual	X			
EE0082	1	The solution should provide for a seamless transition between the Presumptive Eligibility period and the full Medicaid eligibility period.	Income Maintenance Manual	X			
EE0083	1	The solution should provide for a seamless transition between the Presumptive Eligibility application and the full Medicaid eligibility application.	Income Maintenance Manual	X			
EE0084	1	The solution should make presumptive determinations of eligibility according to West Virginia business rules.	Income Maintenance Manual	X			
EE0085	1	The solution should support an abbreviated application for use in the Presumptive Eligibility program according to West Virginia business rules.	Income Maintenance Manual	X			
EE0086	1	The Vendor should manage the authorized employee enrollment process according to West Virginia business rules.	Income Maintenance Manual		X		
EE0087	1	The solution should generate a temporary Medicaid card to support the Presumptive Eligibility program.	Medicaid Provider Manual Chapter 400, Member Eligibility	X			
EE0088	1	The solution should track presumptive eligibility components by facility and approval rating.	Medicaid Provider Manual Chapter 400, Member Eligibility		X		
EE0089	1	The solution should conduct an eligibility determination for the special pharmacy program according to West Virginia business rules.	Income Maintenance Manual		X		
EE0090	1	The solution should transfer an application for special pharmacy benefits from the solution to the Bureau for Medical Services (BMS) Medicaid policy unit for determination of eligibility.	Income Maintenance Manual			X	
EE0091	1	The solution should transfer a notification that an individual may be receiving duplicate benefits for the coverage of immunosuppressant drugs to the Bureau for Medical Services (BMS) Medicaid policy unit.	Income Maintenance Manual	X			
EE0092	1	The solution should automatically terminate eligibility for Transitional Medicaid if the client does not return any Periodic Review Letter (PRL) in a timely manner according to West Virginia business rules.	Income Maintenance Manual	X			
EE0093	1	The solution should verify an applicant's foster care status in the State of West Virginia.	Income Maintenance Manual	X			
EE0094	1	The solution should allow verified income information from one assistance program to be used for an eligibility determination for another program based on the business rules of each program.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0095	1	The solution should require that whenever a Social Security Number (SSN) is used through the client portal and the abbreviated application for Presumptive Eligibility, it is entered twice to verify that the number has been entered accurately.	Income Maintenance Manual		X		
EE0096	1	The solution should continue with an eligibility determination process even if a Social Security Number (SSN) has not yet been verified.	Income Maintenance Manual	X			
EE0097	1	The solution should allow an authorized user to view Social Services data for eligibility verification. (For example, to verify whether a child aged out of the West Virginia foster care system and to obtain provider income and client detail information.)	Income Maintenance Manual	X			
EE0098	1	The solution should view the last time a verified data element was verified with an external or internal data source.	Income Maintenance Manual	X			
EE0099	1	The solution should support the verification process for the following:	Income Maintenance Manual	X			
EE0100	2	Asset and asset disregard	Income Maintenance Manual	X			
EE0101	2	Income	Income Maintenance Manual	X			
EE0102	2	Income deductions	Income Maintenance Manual	X			
EE0103	2	Work requirements	Income Maintenance Manual	X			
EE0104	2	Enumeration	Income Maintenance Manual	X			
EE0105	2	Categorical relatedness	Income Maintenance Manual	X			
EE0106	2	General factors for all programs	Income Maintenance Manual	X			
EE0107	1	The solution should capture all of the information necessary to support the documentation, review, and eligibility determination of a pending application.	Income Maintenance Manual	X			
EE0108	1	The solution should withhold, deduct, or otherwise reduce benefits from Electronic Benefit Transfer (EBT) accounts according to West Virginia business rules.	Income Maintenance Manual	X			
EE0109	1	The solution should track the number of replacement Electronic Benefit Transfer (EBT) cards issued according to West Virginia business rules.	Income Maintenance Manual	X			
EE0110	1	The solution should generate an education letter for excess Electronic Benefit Transfer (EBT) card replacements based on West Virginia business rules.	Income Maintenance Manual		X		
EE0111	1	The solution should select a different authorized cardholder for each benefit.	Income Maintenance Manual	X			
EE0112	1	The solution should allow an authorized system user to designate, change, and remove an authorized Electronic Benefits Transfer (EBT) cardholder.	Income Maintenance Manual	X			
EE0113	1	The solution should support the ability for legal guardians to receive Electronic Benefits Transfer (EBT) cards on behalf of the client.	Income Maintenance Manual	X			
EE0114	1	The solution should support the ability for protective payees to receive Electronic Benefits Transfer (EBT) cards on behalf of the client.	Income Maintenance Manual	X			
EE0115	1	The solution should allow an authorized system user to reactivate an Electronic Benefits Transfer (EBT) account.	Income Maintenance Manual		X		
EE0116	1	The solution should allow the system user to determine whether an applicant has an existing Electronic Benefits Transfer (EBT) account.	Income Maintenance Manual	X			
EE0117	1	The solution should limit the number of Electronic Benefits Transfer (EBT) cards issued for any case according to West Virginia business rules.	Income Maintenance Manual	X			
EE0118	1	The solution should automatically disenroll the client from direct deposit whenever notification is received that their direct deposit transaction could not be completed.	Income Maintenance Manual	X			
EE0119	1	The solution should allow the system user to deactivate the Electronic Benefits Transfer (EBT) Card and/or PIN for an EBT Card and/or PIN according to West Virginia business rules.	Full Financial Clerks Manual		X		
EE0120	1	For Child Support debit cards, The solution should store notes in the customer's account and the negotiable log for the reason(s) why the card was returned.	Full Financial Clerks Manual			X	

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0121	1	The solution should create and update a "negotiable log" for entering information about Electronic Benefit Transfer (EBT) cards received by mail in the local office.	Income Maintenance Manual	X			
EE0122	1	The solution should verify residency of the deceased for burial assistance eligibility determinations.	Income Maintenance Manual	X			
EE0123	1	The solution should support assignment of support rights to the State according to West Virginia business rules.	BCSE Policy Manual	X			
EE0124	1	The solution should support continuation of Bureau for Child Support Enforcement (BCSE) services for cases tied to other state assistance programs after the client's eligibility for those programs has ended, according to West Virginia business rules.	BCSE Policy Manual	X			
EE0125	1	The solution should support the manual application process for all Bureau for Child Support Enforcement (BCSE) services, according to West Virginia business rules.	BCSE Policy Manual	X			
EE0126	1	The solution should track the target return date for all establishment forms according to West Virginia business rules.	BCSE Policy Manual	X			
EE0127	1	The solution should automatically open and assign a child support case upon receipt of a transmittal through the Federal Case Registry or Child Support Enforcement Network.	BCSE Policy Manual	X			
EE0128	1	The solution should establish a file on cases received manually from other states according to West Virginia business rules.	BCSE Policy Manual	X			
EE0129	1	The solution should allow for the capture and maintenance of the application requested date.	Child Support Enforcement: A Guide for States	X			
EE0130	1	The solution should allow for the capture and maintenance of the date the application and program information was sent to the applicant.	Child Support Enforcement: A Guide for States	X			
EE0131	1	The solution should allow for the capture and maintenance of the date the signed application and fee were received from the applicant.	Child Support Enforcement: A Guide for States	X			
EE0132	1	The solution should support the establishment of a case record within twenty (20) calendar days of receipt of a signed application.	Child Support Enforcement: A Guide for States	X			
EE0133	1	The solution should automatically submit a case to the Federal Case Registry.	Child Support Enforcement: A Guide for States	X			
EE0134	1	The solution should automatically accept automated referrals from the State IV-A agency.	Child Support Enforcement: A Guide for States	X			
EE0135	1	The solution should accept and process all required fields tied to State IV-A referrals established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0136	1	The solution should automatically accept automated referrals from the State IV-E (Foster Care) agency.	Child Support Enforcement: A Guide for States		X		
EE0137	1	The solution should automatically record, in the automated case record, the date the IV-E referral was received.	Child Support Enforcement: A Guide for States		X		
EE0138	1	The solution should accept and process all required IV-E referral information established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States		X		
EE0139	1	The solution should automatically accept automated referrals from the State Medicaid agency.	Child Support Enforcement: A Guide for States	X			
EE0140	1	The solution should automatically record, in the automated case record, the date the Medicaid referral was received.	Child Support Enforcement: A Guide for States	X			
EE0141	1	The solution should accept and process all required Medicaid referral information fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0142	1	The solution should automatically establish unique numbers (i.e., IV-D case identification numbers and participant identification numbers) that allow for case identification and the linking of cases to multiple non-custodial parents and obligations.	Child Support Enforcement: A Guide for States	X			
EE0143	1	The solution should use and include, or accept the IV-D case identifier in all scenarios established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States		X		
EE0144	1	The solution should identify all IV-D and non IV-D case types established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States, according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
EE0145	1	The solution should track whether a Medicaid- Only Title IV-D client wants services related to securing medical support.	Child Support Enforcement: A Guide for States	X			
EE0146	1	The solution should only initiate medical support services for Medicaid-Only IV-D cases, when the client indicates they only want services related to securing medical support.	Child Support Enforcement: A Guide for States	X			
EE0147	1	The solution should initiate all appropriate Title IV-D services for Medicaid-Only Title IV-D cases, if the client does not indicate that they only wish to receive medical support.	Child Support Enforcement: A Guide for States	X			
EE0148	1	The solution should provide, for automated case records, a comprehensive and chronological case history of all actions taken, whether manual or automated.	Child Support Enforcement: A Guide for States	X			
EE0149	1	The solution should track the assignment of Medical Support Rights according to West Virginia business rules.	Income Maintenance Manual			X	
EE0150	1	The solution should accept and maintain all required identifying information about the non-custodial parent established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0151	1	The solution should accept and maintain all required identifying information about the caretaker established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0152	1	The solution should accept and maintain all required identifying information about the children established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0153	1	The solution should maintain information that indicates whether a participant is subject to family violence according to West Virginia policy.	Child Support Enforcement: A Guide for States	X			
EE0154	1	The solution should accept and maintain the required information on non-IV-D orders for inclusion with IV-D cases in the State Case Registry for transmission to the Federal Case Registry as established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0155	1	The solution should accept updates to the mandatory data elements for non-IV-D cases and requests for deletion of non-IV-D orders on the version of the Administration for Children and State Case Registry as established in the latest Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
EE0156	1	The solution should support the process of initiating an interstate case simultaneously with case creation according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
EE0157	1	The solution should automatically record, in the automated case record, the date the IV-A referral was received.	Child Support Enforcement: A Guide for States	X			
EE0158	1	The solution should establish an automated case record for each application.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0159	1	The solution should establish an automated case record for each referral.	Child Support Enforcement: A Guide for States	X			
EE0160	1	The solution should capture health and safety requirements according to West Virginia business rules.	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0161	1	The solution should track health and safety requirements according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0162	1	The solution should link the provider identification (ID) number to all provider-related data and notifications.	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0163	1	The solution should allow a provider with multiple sites to have a unique identification number for each site.	Child Care Subsidy Policies and Procedures Manual	X			
EE0164	1	The solution should enable service providers to complete a letter of intent prior to completion of an application.	Child Care Center Information Packet			X	
EE0165	1	The solution should enable service providers to complete a letter of intent prior to completion of an application.	Child Care Center Information Packet			X	
EE0166	1	The solution should enable service providers to submit a letter of intent prior to completion of an application.	Child Care Center Information Packet			X	
EE0167	1	The solution should enable service providers to complete a needs assessment prior to completion of an application.	Child Care Center Information Packet			X	
EE0168	1	The solution should provide a configurable workflow for the child care license application process, including but not limited to the following:	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0169	1	Application	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0170	2	Submission	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0171	2	Review	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0172	2	Approval/denial notification	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0173	2	Issuance of license	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0174	1	The solution should receive the Application for Approval for Family Child Care.	Child Care Subsidy Policies and Procedures Manual	X			
EE0175	1	The solution should prevent the granting of an initial child care provider license until all required criteria have been entered and completed.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0176	1	The solution should support the application of variances and waivers to certain specific licensing/registration rules, according to West Virginia business rules.	Child Care Provider Regulation Policy & Procedures Manual		X		
EE0177	1	The solution should capture information about each waiver and variance.	Child Care Provider Regulation: Policy & Procedures Manual		X		
EE0178	1	The solution should support the process to review each request for a waiver or variance according to West Virginia business rules.	Child Care Provider Regulation Policy & Procedures Manual		X		
EE0179	1	The solution should support the dual provider waiver process including application, review, and approval or denial.	Child Care Provider Regulation: Policy & Procedures Manual		X		
EE0180	1	The solution should track scheduled child care provider fingerprinting according to West Virginia business rules.	Child Care Provider Regulation Policy & Procedures Manual		X		
EE0181	1	The solution should prevent the registration or licensure of any home or facility according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0182	1	The solution should inform the Child Care Resource & Referral system user when the application for registration or approval has been denied.	Child Care Provider Regulation: Policy & Procedures Manual			X	
EE0183	1	The solution should capture data related to monitoring activities, including but not limited to: data pertaining to the physical inspection of the facility and the determination of compliance with applicable rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0184	1	The solution should support the on-site evaluation process.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0185	1	The solution should capture on-site evaluation notes within the checklist of observable standards.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0186	1	The solution should maintain configurable checklists by provider type, which are completed during site visits and inspections.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0187	1	The solution should track staff investigations and inspections of all provider types, including the entry of observations, issues, and case notes.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0188	1	The solution should schedule service provider visits for establishing, postponing, or canceling visits.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0189	1	The solution should distinguish between inspection types according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0190	1	The solution should create a report of cases of observed non-compliance for reporting to the State Quality Rating and Improvement System (QRIS) Coordinator.	Child Care Provider Regulation: Policy & Procedures Manual			X	
EE0191	1	The solution should generate corrective action plans, unique to each service provider, with configurable time frame tracking based on the date of issuance.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0192	1	The solution should flag licensing requirements as needing follow-up and assign configurable timeframes for completion.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0193	1	The solution should identify all child care providers who are participating in the child care subsidy system.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0194	1	The solution should identify provider applications as invalid or withdrawn and include the reason.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0195	1	The solution should support the child care provider license revocation process.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0196	1	The solution should process a request for closure.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0197	1	The solution should generate checklists of child care regulations according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0198	1	The solution should allow authorized system users to add, modify, and delete child care regulations.	Not Applicable	X			
EE0199	1	The solution should provide worksheets for system users to complete the following, according to West Virginia business rules:	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0200	2	Capacity computations for indoor and outdoor space	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0201	2	Staffing level needed based on staff schedule and capacity by age group	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0202	2	Inventory of required equipment	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0203	1	The solution should support the provider application decision process according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0204	1	The solution should allow a system user to complete electronic inspection reports.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0205	1	The solution should allow a system user to complete the inspection checklist.	Not Applicable	X			
EE0206	1	The solution should support the child care licensing process according to West Virginia business rules.	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0207	1	The solution should prevent the printing of a license that does not have the appropriate approval.	Not Applicable	X			
EE0208	1	The solution should record serious occurrence reports made by providers according to West Virginia business rules.		X			
EE0209		Child Care Provider Regulation: Policy & Procedures Manual		X			
EE0210	1	The solution should support the emergency child care center closure process according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0211	1	The solution should allow the system user to request a certificate of registration upon completion of inspection report.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0212	1	The solution should identify incomplete fields in the provider record prior to requesting approval for issuance of a final certificate of registration or license.	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0213	1	The solution should allow authorized system users to conduct investigations in the field, with access to all worksheets that support the investigation process.	Not Applicable	X			
EE0214	1	The solution should generate a summary investigation report in a text document that includes, but is not limited to, the following information.	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0215	2	The statement of complaint	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0216	2	Dates the investigation was conducted	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0217	2	Specific violations found	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0218	2	Technical assistance provided/recommended	Child Care Provider Regulation Policy & Procedures Manual	X			
EE0219	2	Corrective action plan issued	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0220	2	Negative action recommended	Child Care Provider Regulation: Policy & Procedures Manual	X			
EE0221	1	The solution should determine a child care provider applicant's exempt status according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual		X		
EE0222	1	The solution should support the secure web-based submission and review of provider applications for quality tier ratings according to West Virginia business rules.	Child Care Licensing Policy	X			
EE0223	1	The solution should support the process of submission, review, and tracking of requests/applications for, and distributions of funds to support the cost of accreditation or to request a mentor through the Center Accreditation Support Services (CASS) program via a secure web application.	Child Care Licensing Policy			X	
EE0224	1	The solution should support the suspension process for Family Child Care according to West Virginia business rules.	Not Applicable	X			
EE0225	1	The solution should allow an applicant to complete an application for child care assistance online.	Child Care Subsidy Policies and Procedures Manual	X			
EE0226	1	The solution should receive an application for child care assistance that was completed online.	Child Care Subsidy Policies and Procedures Manual	X			
EE0227	1	The solution should support the child care assistance application process.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0228	1	The solution should support the child care assistance reapplication process.	Child Care Subsidy Policies and Procedures Manual	X			
EE0229	1	The solution should support the child care assistance status change process.	Child Care Subsidy Policies and Procedures Manual	X			
EE0230	1	The solution should support the child care assistance redetermination process.	Child Care Subsidy Policies and Procedures Manual	X			
EE0231	1	The solution should automatically close applications according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0232	1	The solution should allow a system user to update a household case when the household reports a change.	Child Care Subsidy Policies and Procedures Manual	X			
EE0233	1	The solution should allow for a client status change re-assessment of a case when certain changes are reported according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0234	1	The solution should determine a family or child's eligibility for child care services according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0235	1	The solution should determine eligibility for children in foster or kinship/relative care according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0236	1	The solution should determine a family's need for child care services according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0237	1	The solution should calculate the number of hours of child care a family is eligible for according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0238	1	The solution should determine eligibility for job search time according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0239	1	The solution should allow the system user to document the method of verification.	Child Care Subsidy Policies and Procedures Manual	X			
EE0240	1	The solution should associate verification documentation to a case record.	Income Maintenance Manual	X			
EE0241	1	The solution should capture verification of client information, including but not limited to: identity, citizenship, West Virginia residency, income, employment, school, training, WV WORKS participation, and foster parent and kinship/relative caretaker status, according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0242	1	The solution should support an approval workflow for policy exceptions according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0243	1	The solution should support the need for overnight care.	Child Care Subsidy Policies and Procedures Manual	X			
EE0244	1	The solution should determine an applicant's financial eligibility for child care services at entry according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0245	1	The solution should determine an applicant's financial eligibility for child care services at exit according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0246	1	The solution should determine a client's financial eligibility for child care services at entry according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0247	1	The solution should determine a client's financial eligibility for child care services at exit according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0248	1	The solution should determine family size according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0249	1	The solution should calculate a family's monthly gross income according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0250	1	The solution should capture all forms of countable income according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0251	1	The solution should calculate net income from self-employment according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0252	1	The solution should capture allowable deductions in calculating net income according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0253	1	The solution should calculate unearned income from all sources according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0254	1	The solution should convert income received on other than a monthly basis to a monthly income according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
EE0255	1	The solution should allow a system user to search for and identify providers who have been previously denied or terminated as a provider.	Child Care Subsidy Policies and Procedures Manual		X		
EE0256	1	The solution should track preservice orientation and training attended by providers.	Child Care Subsidy Policies and Procedures Manual		X		
EE0257	1	The solution should process the four types of child care applications, including the following:	Not Applicable	X			
EE0258	2	Application Determination	Not Applicable	X			
EE0259	2	Review	Not Applicable	X			
EE0260	2	Re-Application Determination	Not Applicable	X			
EE0261	2	Client Status Change Application	Not Applicable	X			
EE0262	1	The solution should update the reasons for needing child care.	Not Applicable	X			
EE0263	1	The solution should allow the system user to review and update the Child Care Determination.	Not Applicable	X			
EE0264	1	The solution should display the information collected during the intake process concerning family eligibility for child care services.	Not Applicable	X			
EE0265	1	The solution should allow the Early Care and Education (ECE) role to approve the Policy Exception requests.	Not Applicable		X		
EE0266	1	The solution should allow the Early Care and Education (ECE) role to view Policy Exceptions.	Not Applicable		X		
EE0267	1	The solution should allow the system user to create an intake for the child care system.	Not Applicable	X			
EE0268	1	The solution should allow the system user to create a Participating Adult-Head of Household client for child care eligibility.	Not Applicable	X			
EE0269	1	The solution should allow the system user to create a Participating Adult-Not Head of Household client for child care eligibility.	Not Applicable	X			
EE0270	1	The solution should create a Participating as Child client who needs child care for child care eligibility.	Not Applicable	X			
EE0271	1	The solution should create a Foster Child client for child care eligibility.	Not Applicable	X			
EE0272	1	The solution should create a Non-Participating Member client for child care eligibility.	Not Applicable	X			
EE0273	1	The solution should create a Department of Health and Human Resources (DHHR) Kinship Relative Child client for child care eligibility.	Not Applicable	X			
EE0274	1	The solution should allow the system user to select the reason(s) the Participating Adult-Head of Household and/or Participating Adult-Not Head of Household need child care.	Not Applicable	X			
EE0275	1	The solution should allow the system user to create a history of school attendance when Going to School is chosen as a reason for needing child care.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0276	1	The solution should allow the system user to create a history of Other Activity when WV WORKS is chosen as a reason for needing child care.	Not Applicable	X			
EE0277	1	The solution should create a Schedule for Participating Adult-Head of Household and/or Participating Adult-Not Head of Household for the purpose of viewing how much care is needed in a given week.	Not Applicable	X			
EE0278	1	The solution should display the household checklist during the creation of a child care household.	Not Applicable	X			
EE0279	1	The solution should provide the client data necessary to calculate WVCHIP premium amounts to the West Virginia Medicaid Management Information System (MMIS).	Not Applicable		X		
EE0280	1	The solution should reconcile eligibility differences between the solutions database and other systems such as the Medicaid Management Information System (MMIS) on at least a monthly basis.	West Virginia CHIP Process Flow - July 2014	X			
EE0281	1	The solution should provide a process of reconciling the West Virginia Children's Health Insurance Program (WVCHIP) coverage spans when discrepancies are identified.	West Virginia CHIP Process Flow - July 2014	X			
EE0282	1	The solution should process redeterminations for WVCHIP according to West Virginia business rules.	West Virginia CHIP Process Flow - July 2014	X			
EE0283	1	The solution should process deemed newborn children born to mothers enrolled as targeted low-income children.	West Virginia State Plan Amendment #: WV-13-0001		X		
EE0284	1	The solution should process eligibility for WVCHIP within the specified waiting period according to West Virginia business rules.	West Virginia CHIP State Plan Amendment #10		X		
EE0285	1	The solution should allow applications or re-applications to be received from any entity approved to take a WVCHIP application.	Income Maintenance Manual			X	
EE0286	1	The solution should exempt newborns from citizenship verification according to West Virginia business rules.	Income Maintenance Manual		X		
EE0287	1	The solution should modify the start of coverage according to West Virginia business rules.	Income Maintenance Manual	X			
EE0288	1	The solution should use the data delivered by the Federally Facilitated Marketplace to automatically enroll clients for WVCHIP using West Virginia's business rules, except in cases where West Virginia's business rules require that additional information be obtained from the client or manual review is required by a system user.	Income Maintenance Manual			X	
EE0289	1	The solution should support the system user in determining if the applicant meets the good cause criteria according to West Virginia business rules.	Income Maintenance Manual	X			
EE0290	1	The solution should determine initial eligibility according to Title IV-E eligibility and according to West Virginia business rules.	Not Applicable	X			
EE0291	1	The solution should record the legal requirements (judicial determinations) related to IV-E eligibility.	Not Applicable	X			
EE0292	1	The solution should track the legal requirements (judicial determinations) related to IV-E eligibility.	Not Applicable	X			
EE0293	1	The solution should, during initial eligibility determination, track a child's IV-E eligibility in an out-of-home placement.	Not Applicable	X			
EE0294	1	The solution should record eligibility determination decisions.	Not Applicable	X			
EE0295	1	The solution should generate eligibility determination documents.	Not Applicable	X			
EE0296	1	The solution should process redeterminations.	Not Applicable	X			
EE0297	1	The solution should generate eligibility redetermination documents.	Not Applicable		X		
EE0298	1	The solution should track time-sensitive actions for IV-B and IV-E cases according to West Virginia business rules.	Not Applicable				

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0299	1	The solution should maintain and link data used for determining eligibility for IV-E payments.	Not Applicable	X			
EE0300	1	The solution should support the Residential Childcare and Child Placing licensing regulatory review process according to West Virginia business rules.	Child Welfare Licensure Inquiry Information	X			
EE0301	1	The solution should provide decision support to assist the user in determining eligibility for State Paid Kinship Care Placement Payment according to West Virginia business rules.	Foster Care Policy	X			
EE0302	1	The solution should prevent the generation of multiple medical cards for one individual according to West Virginia business rules.	Foster Care Policy	X			
EE0303	1	The solution should determine a foster child's eligibility for Continued Medicaid coverage according to West Virginia business rules.	Foster Care Policy	X			
EE0304	1	The solution should establish a foster child's Continued Medicaid coverage eligibility period according to West Virginia business rules.	Foster Care Policy	X			
EE0305	1	The solution should redetermine a foster child's eligibility for Continued Medicaid coverage according to West Virginia business rules	Foster Care Policy	X			
EE0306	1	The solution should allow the system user to terminate a foster child's Continued Medicaid coverage according to West Virginia business rules	Foster Care Policy	X			
EE0307	1	The solution should allow the system user to process changes that impact a foster child's Medicaid eligibility reported by the family according to West Virginia business rules.	Foster Care Policy	X			
EE0308	1	The solution should support the Transitional Living eligibility determination process according to West Virginia business rules.	Foster Care Policy	X			
EE0309	1	The solution should allow a system user to enter all Residential Childcare and Child Placing Licensing applications according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0310	1	The solution should schedule an on-site visit	Residential Child Care Licensing Definitions	X			
EE0311	1	The solution should allow the appropriate system user to enter information about on-site visits according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0312	1	The solution should allow the appropriate system user to make a decision on an application according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0313	1	The solution should generate a list of areas of non-compliance according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0314	1	The solution should allow the system user to enter information about approved waivers and variances to specific regulations according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0315	1	The solution should allow the provider to submit a request for a waiver or variance to specific regulations according to West Virginia business rules.	Residential Child Care Licensing Definitions		X		
EE0316	1	The solution should allow the system user to record the category of the license issued according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0317	1	The solution should allow the system user to record the approval date and expiration date of the license issued according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0318	1	The solution should allow the appropriate system user to amend the license according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0319	1	The solution should support the suspension of placements process according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0320	1	The solution should allow the system user to enter required information about the license amendment or modification according to West Virginia business rules	Residential Child Care Licensing Definitions	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0321	1	The solution should allow the system user to enter required information about a suspension of placement with a provider according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0322	1	The solution should allow the system user to revoke a license according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0323	1	The solution should allow the user to enter required information about the license revocation according to West Virginia business rules.	Residential Child Care Licensing Definitions	X			
EE0324	1	The solution should allow the system user to document any delays in the home study process.	Homefinding Policy	X			
EE0325	1	The solution should allow the system user to complete the Home Study Report, pre-populating the document with previously entered data when possible, according to West Virginia business rules.	Homefinding Policy	X			
EE0326	1	The solution should support the waiver request process for providers according to West Virginia business rules.	Homefinding Policy	X			
EE0327	1	The solution should support the waiver approval process for providers according to West Virginia business rules.	Homefinding Policy	X			
EE0328	1	The solution should allow the system user to document the home study denial including the reasons for the denial according to West Virginia business rules.	Homefinding Policy	X			
EE0329	1	The solution should assist the system user with the process to review requests to be a formal or informal respite provider according to West Virginia business rules.	Homefinding Policy	X			
EE0330	1	The solution should support the provider recertification process according to West Virginia business rules.	Homefinding Policy	X			
EE0331	1	The solution should support the process to request a policy waiver to allow a provider to deliver services to more than one program simultaneously (dual provider) according to West Virginia business rules.	Homefinding Policy	X			
EE0332	1	The solution should support the process to approve a policy waiver to allow a provider to deliver services to more than one program simultaneously (dual provider) according to West Virginia business rules.	Homefinding Policy	X			
EE0333	1	The solution should maintain a control number for all Emergency Assistance applications.	Income Maintenance Manual		X		
EE0334	1	The solution should determine Emergency Assistance eligibility based on West Virginia business rules.	Income Maintenance Manual		X		
EE0335	1	The solution should determine eligibility requirements for specific items of need according to West Virginia business rules.	Income Maintenance Manual		X		
EE0336	1	The solution should include availability of income to the applicant and all other members of the AG in determining eligibility.	Income Maintenance Manual		X		
EE0337	1	The solution should deny an Emergency Assistance application if the emergency need was met by community resources.	Income Maintenance Manual		X		
EE0338	1	The solution should determine if an applicant for Emergency Assistance meets eligibility requirements for federally-matched emergency assistance (Title IV-A).	Income Maintenance Manual		X		
EE0339	1	The solution should support the complete eligibility lifecycle for the Supplemental Nutrition Assistance Program (SNAP) according to West Virginia business rules.	Income Maintenance Manual	X			
EE0340	1	The solution should capture if an applicant or client is meeting work requirements through WV WORKS, and automatically update work requirements for the Supplemental Nutrition Assistance Program (SNAP) accordingly.	Income Maintenance Manual	X			
EE0341	1	The solution should identify and distinguish between an individual who is an undocumented alien and an alien under the five-year ban.	Income Maintenance Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0342	1	The solution should prevent multiple parents or stepparents from claiming exempt status for work requirements based upon the Care For A Disabled Family Member exemption.	Income Maintenance Manual	X			
EE0343	1	The solution should make Disaster Supplemental Nutrition Assistance Program (D-SNAP) eligibility determinations in accordance with unique disaster-specific eligibility criteria configured by the State according to West Virginia business rules.	Income Maintenance Manual	X			
EE0344	1	The solution should track whether a disaster declaration has been made.	Income Maintenance Manual	X			
EE0345	1	The solution should restrict Disaster Supplemental Nutrition Assistance Program (D-SNAP) eligibility determinations to a specific time period during which the D-SNAP program is authorized.	Income Maintenance Manual		X		
EE0346	1	The solution should implement the unique eligibility criteria established in response to a disaster within 24 hours of the authorization to implement the Disaster Supplemental Nutrition Assistance Program (D-SNAP).	Income Maintenance Manual	X			
EE0347	1	The solution should limit Disaster Supplemental Nutrition Assistance Program (D-SNAP) eligibility to clients living or working within specific geographic areas impacted by the disaster.	Income Maintenance Manual	X			
EE0348	1	The solution should allow the Disaster Supplemental Nutrition Assistance Program (D-SNAP) eligibility criteria to vary depending on specific eligibility guidance provided in response to the disaster.	Income Maintenance Manual			X	
EE0349	1	The solution should automatically notify the correct county office when a client has been screened for Supplemental Nutrition Assistance Program (SNAP) Expedited Service eligibility.	Income Maintenance Manual		X		
EE0350	1	The solution should support the combined issuance process according to West Virginia business rules.	Income Maintenance Manual	X			
EE0351	1	The solution should receive a completed joint Supplemental Security Income (SSI) / Supplemental Nutrition Assistance Program (SNAP) application from the local Social Security Administration (SSA) office within one working day.	Income Maintenance Manual	X			
EE0352	1	The solution should redetermine the period of ineligibility based upon a request by a client.	Income Maintenance Manual	X			
EE0353	1	The solution should allow the system user to manually override the default eligibility redetermination date.	Income Maintenance Manual	X			
EE0354	1	The solution should provide system users with a list of upcoming redeterminations according to West Virginia business rules.	Income Maintenance Manual	X			
EE0355	1	The solution should support the benefit aging cycle according to West Virginia business rules.	Income Maintenance Manual	X			
EE0356	1	The solution should track the reason individuals who reside with an assistance group (AG) are not considered AG members according to West Virginia business rules.	Income Maintenance Manual	X			
EE0357	1	The solution should track the reason individuals who reside with an assistance group (AG) are ineligible to be included in the AG according to West Virginia business rules.	Income Maintenance Manual	X			
EE0358	1	The solution should average fluctuating expenses to support the eligibility lifecycle for the WV WORKS program and the Supplemental Nutrition Assistance Program (SNAP).	Income Maintenance Manual	X			
EE0359	1	The solution should maintain a LIEAP application register or log that captures, at a minimum, the name of the applicant, how and when the application was received and if the application is regular or emergency LIEAP, and any other information according to West Virginia business rules.	Income Maintenance Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0360	1	The solution should accept LIEAP application from outside agencies or sub-grantee agencies electronically.	Income Maintenance Manual			X	
EE0361	1	The solution should tag a case or application as a life-threatening emergency for prioritization.	Income Maintenance Manual		X		
EE0362	1	The solution should ensure cases or applications tagged as life-threatening emergencies are prioritized and resolved within the time frame according to West Virginia business rules.	Income Maintenance Manual		X		
EE0363	1	The solution should determine eligibility for regular LIEAP according to West Virginia business rules.	Income Maintenance Manual	X			
EE0364	1	The solution should determine eligibility for emergency LIEAP according to West Virginia business rules.	Income Maintenance Manual	X			
EE0365	1	The solution should establish the LIEAP assistance group (AG) according to West Virginia business rules.	Income Maintenance Manual	X			
EE0366	1	The solution should allow supervisory approval to override certain eligibility criteria which would make an applicant ineligible according to West Virginia business rules.	Income Maintenance Manual	X			
EE0367	1	The solution should prevent final determinations from being made by other agencies or sub-grantee agencies.	Income Maintenance Manual	X			
EE0368	1	The solution should determine if an applicant is considered "vulnerable" or "invulnerable" according to West Virginia business rules.	Income Maintenance Manual		X		
EE0369	1	The solution should set maximum allowable income amounts for eligibility for assistance programs according to West Virginia business rules.	Income Maintenance Manual	X			
EE0370	1	The solution should calculate gross monthly income according to West Virginia business rules.	Income Maintenance Manual	X			
EE0371	1	The solution should identify if the primary source of home heating indicated in an application differs from the primary source of home heating indicated on a previous application from the same applicant.	Income Maintenance Manual		X		
EE0372	1	The solution should determine if an applicant is using a PSC-regulated utility vendor according to West Virginia business rules.	Income Maintenance Manual	X			
EE0373	1	The solution should allow a system user to make corrections in a case denied in error.	Income Maintenance Manual	X			
EE0374	1	The solution should allow the system user portal to be accessed from mobile devices.	Income Maintenance Manual			X	
EE0375	1	The solution should maintain denial reason codes specific to LIEAP.	Not Applicable	X			
EE0376	1	The solution should allow the user to enter case comments on any screen (so the system user does not have to jump to another screen).	Not Applicable	X			
EE0377	1	The solution should track identified asset transfers from a client's spouse to another person according to West Virginia business rules.	Income Maintenance Manual	X			
EE0378	1	The solution should enter an exclusion for the client's homestead as a countable asset according to West Virginia business rules.	Income Maintenance Manual	X			
EE0379	1	The solution should apply multiple penalties for the same annuity according to the West Virginia business rules.	Income Maintenance Manual	X			
EE0380	1	The solution should apply partial penalties for asset transfers according to the West Virginia business rules.	Income Maintenance Manual	X			
EE0381	1	The solution should make eligibility determinations using the Supplemental Security Income (SSI) methodology according to West Virginia's business rules.	Income Maintenance Manual	X			
EE0382	1	The solution should adjust or waive enrollment fees in accordance with West Virginia business rules as needed.	Income Maintenance Manual	X			
EE0383	1	The solution should verify citizenship through data exchange.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
EE0384	1	The solution should allow an Assistance Group ineligible for WV WORKS to submit an application to be evaluated for West Virginia School Clothes Allowance.	Income Maintenance Manual			X	
EE0385	1	The solution should keep a log of receipt of School Clothes Allowance applications.	Income Maintenance Manual	X			
EE0386	1	The solution should support the processing of all School Clothes Allowance applications by August 31 of the program year.	Income Maintenance Manual	X			
EE0387	1	The solution should support the processing of all School Clothes Allowance applications within 30 days of the date of application.	Income Maintenance Manual	X			
EE0388	1	The solution should create an Application Register containing client information according to West Virginia business rules.	Income Maintenance Manual	X			
EE0389	1	The solution should provide a Medicaid and WVCHIP applicant with a copy of the Department's Notice of Privacy Practices (NOPP) at the time of application or redetermination.	Income Maintenance Manual	X			
EE0390	1	The solution should generate a rights and responsibilities form for applicants to review and sign each time an application or review is completed, when appropriate, according to West Virginia business rules.	Income Maintenance Manual	X			
EE0391	1	The solution should determine School Clothes Allowance eligibility based on WV business rules.	Income Maintenance Manual	X			
EE0392	1	The solution should determine the appropriate School Clothes Allowance benefit for each household according to West Virginia business rules.	Income Maintenance Manual	X			
EE0393	1	The solution should verify income eligibility for School Clothes Allowance based only on the month of July of the current program year according to West Virginia business rules.	Income Maintenance Manual			X	
EE0394	1	The solution should support the direct certification process with the National School Lunch Program (NSLP) according to West Virginia business rules and federal regulations.	USDA Administrative Notice 26-2013	X			
EE0395	1	The solution should assist the system user in determining the category a qualified alien falls into in order to qualify for benefits.	Income Maintenance Manual	X			
EE0396	1	The solution should track the category that a qualified alien falls into in order to receive SNAP benefits.	Income Maintenance Manual	X			
EE0397	1	The solution should collect and report information on Non-custodial parents.	eCFR - Part 265 Code of Federal Regulations - Data Collection and Reporting Requirements	X			
EE0398	1	The solution should support the eligibility lifecycle for WV WORKS according to West Virginia business rules.	Income Maintenance Manual	X			
EE0399	1	The solution should support the eligibility lifecycle for the Special Needs WV WORKS category.	Income Maintenance Manual			X	
EE0400	1	The solution should support the eligibility life cycle for the Employment Assistance Program (EAP) WV WORKS category.	Income Maintenance Manual		X		
EE0401	1	The solution should direct systems users, clients, and providers to the appropriate web portal according to West Virginia business rules.	Not Applicable			X	
Financial Management (FM)							
FM0001	1	The solution should capture information related to burial payments reported on the DFA-67-A.	Income Maintenance Manual		X		
FM0002	1	The solution should capture information about overdue fees.	Child Care Subsidy Policies and Procedures Manual	X			
FM0003	1	The solution should support the accounts payable process.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
FM0004	1	The solution should transmit case information in support of the accounts payable process.	Not Applicable	X			
FM0005	1	The solution should receive case information in support of the accounts payable process.	Not Applicable	X			
FM0006	1	The solution should support the accounts receivable process according to West Virginia business rules, which includes, but is not limited to: overpayments, trust funds, and other income or resources.	Not Applicable	X			
FM0007	1	The solution should transmit case information in support of the accounts receivable process.	Not Applicable	X			
FM0008	1	The solution should receive case information in support of the accounts receivable process.	Not Applicable	X			
FM0009	1	The solution should process and maintain financial reconciliation of payments, overpayments, and recovery payments.	Not Applicable	X			
FM0010	1	The solution should support the boarding care payment process according to West Virginia business rules.	Adoption Policy Manual		X		
FM0011	1	The solution should support the provision of the initial clothing allowance process according to West Virginia business rules.	Adoption Policy Manual		X		
FM0012	1	The solution should support the provision of the school clothing allowance process according to West Virginia business rules.	Adoption Policy Manual		X		
FM0013	1	The solution should determine if payments are eligible for federal reimbursement.	Adoption Policy Manual	X			
FM0014	1	The solution should document the amount and duration of the adoption assistance payment based on West Virginia business rules.	Adoption Policy Manual		X		
FM0015	1	The solution should document information about changes made to the adoption assistance payment.	Adoption Policy Manual		X		
FM0016	1	The solution should support the process for reimbursement of non-recurring adoption expenses according to West Virginia business rules.	Adoption Policy Manual		X		
FM0017	1	The solution should allow an authorized user to create a 'vendor for' payment.	Adoption Policy Manual		X		
FM0018	1	The solution should support the tracking of Gibson payments according to West Virginia business rules.	Child Protective Services Policy		X		
FM0019	1	The solution should support the request for, and approval of, a demand payment according to West Virginia business rules.	Child Protective Services Policy		X		
FM0020	1	The solution should generate the BA-67 voucher according to West Virginia business rules.	Foster Care Policy		X		
FM0021	1	The solution should generate multiple BA-67 vouchers to separate vendors according to West Virginia business rules.	Foster Care Policy		X		
FM0022	1	The solution should allow the system user to track deposits to the individual's centralized account.	Foster Care Policy		X		
FM0023	1	The solution should allow the system user to add a comment onto each transaction made on the centralized account.	Foster Care Policy	X			
FM0024	1	The solution should allow the system user to add a comment onto the client account record.	Foster Care Policy	X			
FM0025	1	The solution should allow the system user to track disbursements from the individual's centralized account.	Foster Care Policy		X		
FM0026	1	The solution should allow the system user to track and disburse interest earned on the individual's centralized account according to West Virginia business rules.	Foster Care Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
FM0027	1	The solution should apply the interest calculation to the centralized account according to West Virginia business rules.	Foster Care Policy		X		
FM0028	1	The solution should allow the system user to track the priority order of transactions within an individual's account according to West Virginia business rules.	Foster Care Policy		X		
FM0029	1	The solution should generate and track the provision of additional payments according to West Virginia business rules.	Foster Care Policy		X		
FM0030	1	The solution should document the amount of the pre-placement activities/start-up money payments.	Foster Care Policy		X		
FM0031	1	The solution should track provider payments for supervision and services according to West Virginia business rules.	Foster Care Policy		X		
FM0032	1	The solution should support the process of providing and tracking the distribution of Education and Training Funding Vouchers according to West Virginia business rules.	Foster Care Policy		X		
FM0033	1	The solution should generate payment agreements between the Department and Assisted Living Providers in accordance with West Virginia business rules.	Social Services Manual		X		
FM0034	1	The solution should allow update of the payment agreement according to West Virginia business rules.	Social Services Manual		X		
FM0035	1	The solution should support the reconciliation of Personal Care Home Provider invoices for payment in accordance with West Virginia business rules.	Social Services Manual		X		
FM0036	1	The solution should support the reconciliation of Assisted Living demand payment invoices in accordance with West Virginia business rules.	Social Services Manual		X		
FM0037	1	The solution should allow the user to document the representative payee on a client's financial account according to West Virginia business rules.	Legal Guardianship Policy		X		
FM0038	1	The solution should separate the subsidy amount when a youth in foster care has an infant child of their own and the child is removed from his/her custody according to West Virginia business rules.	Legal Guardianship Policy		X		
FM0039	1	The solution should make a non-child specific payment to a provider according to West Virginia business rules.	Homefinding Policy		X		
FM0040	1	The solution should track all payments made to a provider according to West Virginia business rules.	Homefinding Policy		X		
FM0041	1	The solution should generate a payment for Homeless Services in accordance with West Virginia business rules.	Homeless Services Policy		X		
FM0042	1	The solution should support the completion and approval of the voucher Authorization for Payment Form.	Homeless Services Policy	X			
FM0043	1	The solution should generate automatic payments to providers based on West Virginia business rules.	Foster Care Policy		X		
FM0044	1	The solution should identify accounts involved and total payments for each payment run.	Foster Care Policy		X		
FM0045	1	The solution should generate the Emergency Assistance Voucher (DFA-67).	Income Maintenance Manual	X			
FM0046	1	The solution should generate, store, and retrieve a correspondence list per child account.	Full Financial Clerks Manual		X		
FM0047	1	The solution should determine the threshold methodology prescribed by the federal government for tracking the enhanced Federal Medical Assistance Percentages (FMAP) for newly eligible clients.	Income Maintenance Manual	X			
FM0048	1	The solution should store the Federal Medical Assistance Percentages (FMAP) classification for each client.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
FM0049	1	The solution should deliver the Federal Medical Assistance Percentages (FMAP) category for each client to the Medicaid Management Information System (MMIS).	Income Maintenance Manual		X		
FM0050	1	The solution should facilitate repayment of outstanding claims with WV WORKS, school clothing, and supportive payment.	Income Maintenance Manual	X			
FM0051	1	The solution should capture the disposition for a returned benefit.	Income Maintenance Manual	X			
FM0052	1	The solution should support the process of issuing supplemental LIEAP payments	Income Maintenance Manual	X			
FM0053	1	The solution should prevent LIEAP payments from being split to cover two types of bills (e.g., electric and gas).	Income Maintenance Manual	X			
FM0054	1	The solution should allow payments to be applied to old bills or to reinstate service according to West Virginia business rules.	Income Maintenance Manual	X			
FM0055	1	The solution should allow payments to be authorized to cover repairs according to West Virginia business rules.	Income Maintenance Manual	X			
FM0056	1	The solution should assist the system user in determining if the payment should be made to the utility vendor or directly to the client, according to West Virginia business rules.	Income Maintenance Manual	X			
FM0057	1	The solution should allow payments to be made to the utility vendor.	Income Maintenance Manual	X			
FM0058	1	The solution should allow payments to be made directly to a client according to West Virginia business rules	Income Maintenance Manual	X			
FM0059	1	The solution should allow a system user to correct a payment.	Income Maintenance Manual	X			
FM0060	1	The solution should allow a system user to credit an account.	Income Maintenance Manual	X			
FM0061	1	The solution should allow a system user to adjust a LIEAP payment amount according to West Virginia business rules.	Income Maintenance Manual	X			
FM0062	1	The solution should carry out the repayment process for payments made in error to recoup funds according to West Virginia business rules.	Income Maintenance Manual	X			
FM0063	1	The solution should allow for payments to be received from a client or vendor.	Income Maintenance Manual	X			
FM0064	1	The solution should reduce a payment by the amount of a previous unpaid repayment and pay the client only the balance	Income Maintenance Manual	X			
FM0065	1	The solution should reissue a check if payment was made to the wrong vendor.	Income Maintenance Manual	X			
FM0066	1	The solution should change the name of the payee according to West Virginia business rules.	Income Maintenance Manual	X			
FM0067	1	The solution should allow a system user to request that a stop payment action is made on a lost, stolen, or destroyed check.	Income Maintenance Manual	X			
FM0068	1	The solution should track repayments owed by a client.	Income Maintenance Manual	X			
FM0069	1	The solution should generate and issue a School Clothes Allowance Voucher to the primary person in the case for each eligible child according to West Virginia business rules.	Income Maintenance Manual		X		
FM0070	1	The solution should generate a School Clothes Allowance Voucher which includes the following information on the voucher.	Income Maintenance Manual	X			
FM0071	2	Case name and address	Income Maintenance Manual	X			
FM0072	2	Denomination of the voucher	Income Maintenance Manual	X			
FM0073	2	The individual benefit and voucher number assigned by the data system	Income Maintenance Manual	X			
FM0074	1	The solution should generate School Clothes Allowance (SCA) vouchers according to West Virginia business rules, with only up to five SCA vouchers in one envelope	Income Maintenance Manual	X			
FM0075	1	The solution should generate School Clothes Allowance vouchers with the appropriate instruction sheet and letter from the Governor.	Income Maintenance Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
FM0076	1	The solution should generate School Clothes Allowance benefit checks to foster parents according to West Virginia business rules.	Income Maintenance Manual	X			
FM0077	1	The solution should pay vendors who accept School Clothes Allowance vouchers.	Income Maintenance Manual		X		
FM0078	1	The solution should issue replacement School Clothes Allowance vouchers according to West Virginia business rules.	Income Maintenance Manual	X			
General Technical (GT)							
GT0001	1	The solution should create flags and send alerts, according to West Virginia business rules.	Not Applicable	X			
GT0002	1	The solution should set time requirements for a user to perform certain actions, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0003	1	The solution should generate alerts based on configurable proximities to any established time requirement.	Income Maintenance Manual	X			
GT0004	1	The solution should allow users to override certain alerts and warnings, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0005	1	The solution should have configurable alerts to notify users if actions taken are being attempted before allowed, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0006	1	The solution should automatically generate alerts, according to West Virginia business rules.	Not Applicable	X			
GT0007	1	The solution should create and distribute broadcast message alerts to groups of system users based on role, to individual system users, or to all users.	Income Maintenance Manual	X			
GT0008	1	The solution should include in alerts the reason for the alert and any relevant information related to required next steps, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0009	1	The solution should alert users if they attempt to take an action without completing all prerequisite steps for that action.	Income Maintenance Manual	X			
GT0010	1	The solution should alert a user, who may or may not override the alert based on security role, if a decision or determination appears to go against established West Virginia business rules.	Not Applicable	X			
GT0011	1	The Vendor should maintain an up-to-date inventory of alerts used in the solution and make this inventory available to the State upon request. The inventory should contain related programs and system components, a definition of the alert's purpose, and the creator of the alert.	Not Applicable	X			
GT0012	1	The solution should seamlessly integrate the generation of alerts into the workflow management process.	Not Applicable	X			
GT0013	1	The solution should allow authorized system users to create ad-hoc alerts.	Not Applicable	X			
GT0014	1	The solution should allow configuration of alerts to be in the following formats including, but not limited to:	Not Applicable		X		
GT0015	2	Email	Not Applicable		X		
GT0016	2	Application Pop-Up Box	Not Applicable	X			
GT0017	2	Automatic Reports	Not Applicable	X			
GT0018	1	The solution should allow the user to create custom "ticklers" to alert the system user to take an action.	Child Care Subsidy Policies and Procedures Manual	X			
GT0019	1	The solution should automatically reset alerts when changes are made to a case, according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
GT0020	1	The solution should generate alerts identifying data conflicts.	Not Applicable	X			
GT0021	1	The solution should support graphical display of alerts, according to West Virginia business rules.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0022	1	The solution should send an alert to the appropriate users when any form is changed.	Not Applicable	X			
GT0023	1	The solution should interface with the State's Asset Verification System (AVS) according to West Virginia business rules.	Not Applicable	X			
GT0024	1	The solution should be able to receive and store data from the State's Asset Verification System (AVS) according to West Virginia business rules.	Not Applicable	X			
GT0025	1	The solution should be able to transmit data to the State's Asset Verification System (AVS) according to West Virginia business rules.	Social Security Act, Section 1940	X			
GT0026	1	The solution should store all data delivered by participating sources in a manner that makes the data accessible to authorized viewers of the related client record.	Social Security Act, Section 1940	X			
GT0027	1	The solution should consolidate the outcomes of verifications completed in a single location defined by the State for use by authorized system users.	Social Security Act, Section 1940	X			
GT0028	1	The solution should provide seamless integration of data delivered through the State's Asset Verification System (AVS) and the data delivered through other data verification sources required by the State.	Social Security Act, Section 1940		X		
GT0029	1	The solution should deliver the aggregated results of all data verifications to the system user in a format agreed upon with the State.	Social Security Act, Section 1940	X			
GT0030	1	The Asset Verification System (AVS) should electronically process all responses to verification requests and supporting documentation delivered by participating data sources.	Social Security Act, Section 1940	X			
GT0031	1	The solution should accept all responses to verification queries electronically in cases that the financial institution (FI) has the capability to deliver an electronic response.	Social Security Act, Section 1940	X			
GT0032	1	The solution should create a log of all verification requests that take place, and should include the date and time of the request, the requestor's name, all responses (regardless of whether data was returned), and supporting documentation delivered with the response	Social Security Act, Section 1940	X			
GT0033	1	The solution should query all participating data sources for each applicant for whom verification is required (not only those data sources that the client reports doing business with), according to West Virginia business rules.	Social Security Act, Section 1940	X			
GT0034	1	The Vendor should make available to the State a list of all data sources queried according to West Virginia business rules.	Social Security Act, Section 1940	X			
GT0035	1	The solution should provide ad hoc reporting of all data related to the requests and responses processed through the Asset Verification System (AVS) to authorized users.	Social Security Act, Section 1940	X			
GT0036	1	The solution should maintain the database of participating financial institutions over the life of the contract.	Social Security Act, Section 1940	X			
GT0037	1	The solution should provide the capability to request data going back five (5) years from the client's date of application.	Social Security Act, Section 1940	X			
GT0038	1	The solution should provide data on the following account types:	Social Security Act, Section 1940	X			
GT0039	2	Checking Accounts	Social Security Act, Section 1940	X			
GT0040	2	Savings Accounts	Social Security Act, Section 1940	X			
GT0041	2	Investment Accounts	Social Security Act, Section 1940	X			
GT0042	2	Individual Retirement Accounts	Social Security Act, Section 1940	X			
GT0043	2	Treasury Notes	Social Security Act, Section 1940		X		
GT0044	2	Certificates of Deposit	Social Security Act, Section 1940	X			
GT0045	2	Annuities	Social Security Act, Section 1940	X			
GT0046	2	Other assets held or managed by the financial institution	Social Security Act, Section 1940	X			
GT0047	1	The solution should receive, transmit, and process address changes.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0048	1	The solution should capture and track information about mail returned from a bad address.	Not Applicable			X	
GT0049	1	The Vendor should provide a Business Rules Engine (BRE) and migrate existing business rules to this BRE.	Not Applicable	X			
GT0050	1	The Vendor should implement business rules in the BRE for all human services programs not included in the business rules migration.	Not Applicable			X	
GT0051	1	The Vendor should provide an Enterprise Service Bus (ESB) solution to support the West Virginia Integrated Eligibility Solution.	Not Applicable	X			
GT0052	1	The solution should provide a Technical Support Call Center.	Not Applicable	X			
GT0053	1	The Vendor should maintain staff and systems to manage, track, and report on user support services via multiple channels, including:	SLA 005	X			
GT0054	2	Telephone	SLA 005	X			
GT0055	2	Client Portal	SLA 005	X			
GT0056	2	E-mail	SLA 005	X			
GT0057	2	Mail	SLA 005	X			
GT0058	1	The Vendor should provide an integrated contact management system that tracks and manages user contacts from all channels.	SLA 005			X	
GT0059	1	The Vendor should provide an integrated contact management system that provides reporting on user contact metrics based on user-defined queries.	SLA 005			X	
GT0060	1	The solution should provide electronic call answering methods for callers to a toll-free phone line to leave messages during hours when the Call Center is not staffed.	SLA 005	X			
GT0061	1	The Technical Support Call Center for State users should be available Monday through Friday from 7:00 a.m. to 7:00 p.m. Eastern Time, excluding State holidays, and on an emergency basis as requested by the State.	SLA 005	X			
GT0062	1	The Vendor should provide an afterhours contact for technical support during all non-business hours, seven (7) days a week, 365 days a year. The afterhours contact should respond to all verbal (telephone) inquiries from State staff within two hours of receipt.	SLA 005		X		
GT0063	1	The Technical Support Call Center for client users should be available Monday through Friday, from 7:00 a.m. to 7:00 p.m. Eastern Time.	SLA 005	X			
GT0064	1	The client solution should provide electronic call answering methods for callers to a toll-free phone line to leave messages during hours when the Technical Support Call Center is not staffed.	SLA 005	X			
GT0065	1	The Vendor's staff should return all after-hours client calls on the next business day, in the caller's choice of language, or provide oral interpretation services.	SLA 005		X		
GT0066	1	The Technical Support Call Center should be located within the State of West Virginia.	Not Applicable		X		
GT0067	1	The vendor's solution should provide client user Technical Support Call Center functions, including live representative customer service, for the State and other client users.	Not Applicable	X			
GT0068	1	The solution should provide functionality that creates, edits, sorts, and filters tickets or electronic records of calls made to the Technical Support Call Center to be used by both Vendor Technical Support Call Center and State staff.	Not Applicable	X			
GT0069	1	The solution should track the following:	Not Applicable	X			
GT0070	2	The caller	Not Applicable	X			
GT0071	2	The question(s) and/or issue(s)	Not Applicable	X			
GT0072	2	The Vendor and/or State staff responding to the ticket	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0073	2	The date(s)	Not Applicable	X			
GT0074	2	The time(s)	Not Applicable	X			
GT0075	2	The status (opened or closed)	Not Applicable	X			
GT0076	1	The solution should add electronic attachments to a ticket	Not Applicable	X			
GT0077	1	The solution should allow configuration of call routing and delegation criteria and severity, prioritization, and escalation criteria.	Not Applicable		X		
GT0078	1	The solution should have a central database for call tracking records that can be queried by both Vendor and State users.	Not Applicable		X		
GT0079	1	The solution should use State data repositories to automatically display information regarding the caller when applicable.	Not Applicable		X		
GT0080	1	The vendor's Technical Support Call Center should capture date-specific and user-specific free-form text for each call center ticket.	Not Applicable	X			
GT0081	1	The solution should provide separate toll-free Technical Support Call Center telephone numbers for the State users, client users, and other entities as identified by the State.	Not Applicable	X			
GT0082	1	The solution should authenticate the caller/user (per State specified criteria).	Not Applicable			X	
GT0083	1	The solution should, as applicable, auto-populate call center screens with caller information when the call representative answers the call. This would include the ability to access contact and correspondence history.	Not Applicable		X		
GT0084	1	The solution should repeat call options automatically.	Not Applicable	X			
GT0085	1	The solution should integrate with an automated phone messaging system.	Not Applicable	X			
GT0086	1	The solution should use automated message purge function with activity reporting.	Not Applicable	X			
GT0087	1	The solution should define phone routing that allows the system to forward calls to the individual/entity (internal and external agencies included) capable of handling the caller's needs.	Not Applicable	X			
GT0088	1	The solution should configure navigation paths and prompts based on the caller's selection.	Not Applicable	X			
GT0089	1	The solution should record customized messages directed to selected State or client groups.	Not Applicable	X			
GT0090	1	The Vendor should maintain sufficient staff and telephone lines to perform all required Technical Support Call Center functions required in this Request for Proposal (RFP).	Not Applicable		X		
GT0091	1	The Vendor should utilize the same telephone system for all Technical Support Call Center users (Clients and the State) and should record and report statistics, as defined by the State.	Not Applicable		X		
GT0092	1	The solution should use separate, dedicated toll-free telephone numbers for use by State users, client users, and other stakeholders, as defined by the State.	Not Applicable	X			
GT0093	1	The solution should provide tools and processes for monitoring and reporting the following call metrics:	Not Applicable		X		
GT0094	2	Call Abandonment Rate	Not Applicable		X		
GT0095	2	Call Length	Not Applicable		X		
GT0096	2	Hold Time	Not Applicable		X		
GT0097	2	Ring Busy Rate	Not Applicable		X		
GT0098	2	Peak Hour Statistics	Not Applicable		X		
GT0099	2	Speed of Answer	Not Applicable		X		
GT0100	1	The solution should provide a voice messaging system for afterhours callers, indicating hours of operation and providing options for leaving messages, in addition to a voice messaging option at State-designated intervals during the queue hold times.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0101	1	The Vendor should obtain State approval of all scripts to be used in the call center.	Not Applicable		X		
GT0102	1	The Vendor should review call scripts monthly to determine if revisions are necessary and report recommendations to the State.	Not Applicable		X		
GT0103	1	The solution should document call information, as specified by the State.	Not Applicable		X		
GT0104	1	The Vendor should monitor, record, and audit calls for quality control, customer service, and training purposes The vendor should document and retain results on all calls and submit documentation to the State upon request.	Not Applicable		X		
GT0105	1	The solution should provide random sampling with variable characteristic selections for audit purposes.	Not Applicable		X		
GT0106	1	The Vendor should perform online backups without interruption to production operations.	Not Applicable	X			
GT0107	1	The solution should save incomplete eligibility determinations and to bring the end user back to the location at the time of the save when they continue work on the determination.	Not Applicable	X			
GT0108	1	The solution should document when a delay in eligibility determination is beyond the Department's control.	Income Maintenance Manual		X		
GT0109	1	The solution should allow a system user to override processing time requirements if certain conditions are met, according to West Virginia business rules.	Income Maintenance Manual		X		
GT0110	1	The solution should record the total processing time of eligibility determinations with the start and end times according to West Virginia business rules.	Income Maintenance Manual		X		
GT0111	1	The solution should direct a user to the location of a potential error in an eligibility determination process.	Not Applicable	X			
GT0112	1	The solution should identify individuals by eligibility group and program.	Income Maintenance Manual	X			
GT0113	1	The solution should provide a Current Market Value (CMV) calculator providing the end user with the ability to identify the CMV of any asset (for which CMV is applicable) and program or eligibility group combination according to West Virginia business rules.	Income Maintenance Manual			X	
GT0114	1	The solution should allow a case to be flagged with a domestic/ family violence indicator.	Income Maintenance Manual	X			
GT0115	1	The solution should allow for modified access, maintenance, and processing of client records flagged with the domestic/ family violence indicator, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0116	1	The solution should allow a case to be flagged with a drug abuse indicator, when appropriate.	Income Maintenance Manual	X			
GT0117	1	The solution should allow system users, with appropriate permissions, to disagree with eligibility decisions and send the decision back for reconsideration, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0118	1	The solution should make automated real-time eligibility determinations in the event that there are no triggers in the case that require system user intervention.	West Virginia CHIP Process Flow - July 2014	X			
GT0119	1	The solution should configure reason codes for denials or pendings, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0120	1	The solution should allow authorized system users to terminate eligibility at any time during the client's coverage period.	Income Maintenance Manual	X			
GT0121	1	The solution should require that, when a client's eligibility is terminated during their coverage period, a reason for the termination be entered by the authorized system user.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0122	1	The solution should allow the authorized system user to redact information contained in any form, letter, or report, and save the redacted version to the case as a new file.	Not Applicable		X		
GT0123	1	The solution should allow printing of a blank version of all forms, letters, and other case documents.	Not Applicable	X			
GT0124	1	The solution should pre-populate forms, correspondence, applications, and other system-generated documents with selected information from the electronic case record.	Not Applicable		X		
GT0125	1	The solution should set parameters on fields to prevent system users from entering information outside of those parameters.	Income Maintenance Manual	X			
GT0126	1	The solution should generate variable length reports and forms, when applicable.	Not Applicable	X			
GT0127	1	All client-facing content produced by The Vendor should be written at no greater than an eighth grade reading level.	Not Applicable	X			
GT0128	1	The solution should generate all forms and program applications used by the West Virginia enterprise.	Income Maintenance Manual		X		
GT0129	2	The solution should generate the data file containing forms and applications for delivery to the printing vendor for print and distribution.	Income Maintenance Manual		X		
GT0130	1	The Vendor should maintain an up-to-date inventory of all forms utilized and make this inventory available to the State upon request.	Not Applicable		X		
GT0131	1	The solution should allow updates to form templates by both State and/ or vendor system support staff.	Not Applicable		X		
GT0132	1	The solution should group forms with related correspondence to ensure that all relevant materials are delivered to the client in a single mailing, or posting to their client portal account.	Not Applicable		X		
GT0133	1	The solution should allow the end user to modify any and/or all text of a form in a rich text format as identified by the State.	Not Applicable		X		
GT0134	1	The solution should generate and supply forms in the following methods, including, but not limited to:	Not Applicable		X		
GT0135	2	Email	Not Applicable		X		
GT0136	2	Portable Document Format (PDF)	Not Applicable		X		
GT0137	2	Electronic File Exchange	Not Applicable		X		
GT0138	1	The solution should generate machine-readable barcodes on forms.	Not Applicable		X		
GT0139	1	The solution should generate machine-readable Quick Response (QR) codes on forms.	Not Applicable		X		
GT0140	1	The solution should populate information on authorizations or forms being issued as defined by the State.	Income Maintenance Manual			X	
GT0141	1	The solution should allow users to override and change pre-populated information in forms, when appropriate, according to West Virginia business rules.	Income Maintenance Manual	X			
GT0142	1	The solution should generate complete and incomplete forms based on ad-hoc client requests.	Income Maintenance Manual		X		
GT0143	1	The solution should generate batch forms, according to West Virginia business rules.	Not Applicable	X			
GT0144	1	The solution should make certain fields required in forms according to West Virginia business rules.	Income Maintenance Manual	X			
GT0145	1	The solution should identify which fields in forms are required and which are optional.	Income Maintenance Manual	X			
GT0146	1	The solution should save delivered forms to the client's case record.	Income Maintenance Manual		X		
GT0147	1	The solution should track if the client has signed necessary forms prior to taking actions that require the form to be completed.	Income Maintenance Manual	X			
GT0148	1	The solution should allow users view any form listed in the case record.	Income Maintenance Manual	X			
GT0149	1	The solution should allow users to print any form listed in the case record.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0150	1	The solution should employ online real-time or batch updates of data between the eligibility solution and other systems, depending on the interface requirements.	Not Applicable	X			
GT0151	1	The solution should make information about data exchange errors and discrepancies available to the appropriate system users.	Income Maintenance Manual	X			
GT0152	1	The solution should allow authorized system users to schedule and modify system events as defined by the State.	Income Maintenance Manual	X			
GT0153	1	The Vendors should provide technical specifications associated with the solution. The technical specifications should include:	Not Applicable	X			
GT0154	2	Complete listing of all software, hardware, and configurations that are required to establish fully functional installations in each of the required environments.	Not Applicable	X			
GT0155	2	Complete specifications for all software, environments, and hardware used to support the solution.	Not Applicable	X			
GT0156	2	Complete inventory of development tools that are provided with the solution and any that Department of Health and Human Resources (DHHR) should establish and maintain separately, as well as the necessary skill sets that users should develop to use vendor-owned tools.	Not Applicable		X		
GT0157	2	The vendor should provide Department of Health and Human Resources (DHHR) with a capacity analysis report for the solution and the hosted environment (including hardware, environment, and network specifications).	Not Applicable		X		
GT0158	1	The Vendor should provide capacity estimates for proposed processor, memory, and storage for the hosted environment.	Not Applicable		X		
GT0159	1	The Vendor should provide capacity and input/output per second (IOPS) estimates for the hosted environment.	Not Applicable		X		
GT0160	1	The Vendors should include a complete licensing inventory of all components, modules, and programs indicating whether licenses should be purchased. The inventory should include the number of licenses that should be purchased for each component, module, and program, including zero licenses for those areas that do not require licenses.	Not Applicable		X		
GT0161	1	The Vendor should be responsible for the implementation and integration of all third-party software used in support of the solution.	Not Applicable	X			
GT0162	1	The Vendor should be responsible for managing the procurement process and include the State in the selection of any software or hardware that will be used to support the West Virginia solution.	Not Applicable	X			
GT0163	1	The Vendor should provide a data governance plan that establishes the vendor's approach to managing the varying types of data owned by the multiple State agencies and programs that should be stored within the solution.	Not Applicable	X			
GT0164	1	The Vendor should provide a Master Data Management (MDM) solution to support the West Virginia enterprise.	Not Applicable	X			
GT0165	1	The Vendor should resolve existing data inconsistencies in the Master Data Management (MDM) solution through a collaborative review and reconciliation process with State stakeholders.	Not Applicable	X			
GT0166	1	The Vendor should integrate client data for all human services programs served by the West Virginia Integrated Eligibility Solution into the Master Data Management (MDM) platform.	Not Applicable			X	
GT0167	1	The solution should merge duplicate clients and cases, according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0168	1	The solution should unmerge duplicate clients and cases according to West Virginia business rules.	Not Applicable	X			
GT0169	1	The solution should merge all data in the client or case record, creating a single consolidated record.	Not Applicable		X		
GT0170	1	The solution should unmerge all data in the client or case record, creating multiple independent records.	Not Applicable		X		
GT0171	1	The solution should maintain an accurate, unduplicated count of clients receiving benefits for each program in the West Virginia Enterprise.	Not Applicable	X			
GT0172	1	The solution should automatically generate all required correspondence to individuals within the designated timeframes required by State and Federal regulations and policies.	Not Applicable		X		
GT0173	1	The solution should generate the data file containing all notices for delivery to the printing vendor for printing and distribution.	Not Applicable	X			
GT0174	1	The solution should generate all notices, forms, and letters as requested in Spanish.	Not Applicable	X			
GT0175	1	The solution should track metrics for each type of correspondence generated in the solution.	Not Applicable	X			
GT0176	1	The Vendor should provide correspondence metric reports upon request by the State.	Not Applicable	X			
GT0177	1	The Vendor should develop and maintain an inventory of all correspondence stored in the system.	Not Applicable	X			
GT0178	1	The solution should view any correspondence listed on the case file.	Income Maintenance Manual	X			
GT0179	1	The solution should track the status of notices that are moving through the generation process.	Not Applicable	X			
GT0180	1	The solution should post finalized correspondence in real time, when appropriate, to the client portal, according to West Virginia business rules.	Income Maintenance Manual		X		
GT0181	1	The solution should notify system users when a system-generated correspondence that has not been finalized is approaching the predetermined delivery timeframe required by West Virginia business rules.	Income Maintenance Manual	X			
GT0182	1	The Vendor should facilitate mass e-mail and fax notifications.	Not Applicable		X		
GT0183	1	The solution should store the date that the notice was delivered for printing.	BCSE Policy Manual		X		
GT0184	1	The solution should generate machine-readable barcodes on notices.	Not Applicable	X			
GT0185	1	The solution should generate machine-readable Quick Response codes on notices.	Not Applicable	X			
GT0186	1	The solution should reissue any correspondence or form as defined by the State.	Income Maintenance Manual	X			
GT0187	1	The solution should track when any correspondence or form has been reissued, as defined by the State.	Income Maintenance Manual	X			
GT0188	1	The solution should produce all correspondence in a printer friendly 8.5 x 11 format in landscape or portrait orientation according to West Virginia business rules.	Not Applicable	X			
GT0189	1	The solution should produce all correspondence in Portable Document Format (PDF) format.	Income Maintenance Manual	X			
GT0190	1	The solution should automatically save a Portable Document Format (PDF) copy of each final correspondence in the client case record.	Income Maintenance Manual	X			
GT0191	1	The solution should produce specified correspondence to clients at configurable intervals in advance of actions which result in benefit changes according to West Virginia business rules.	Income Maintenance Manual	X			
GT0192	1	The solution should populate fields in correspondence with appropriate information on local or regional organizations which are closest to the client based on the client's zip code, location of the organization, and on West Virginia's business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0193	1	The solution should allow clients, providers, and employers as identified by the State to choose if correspondence should be sent via post mail or via electronic methods.	Income Maintenance Manual	X			
GT0194	1	In the event that a client, provider, or employer has elected to receive electronic correspondence, the solution should automatically post final notices to the appropriate portal of the intended notice recipient.	Income Maintenance Manual	X			
GT0195	1	The solution should automatically send an email notifying the client a piece of correspondence is available in their client portal account if the client has requested to receive correspondence electronically.	Income Maintenance Manual	X			
GT0196	1	The solution should deliver correspondence data files for printing within 24 hours of the correspondence becoming final according to West Virginia business rules.	Income Maintenance Manual	X			
GT0197	1	The solution should generate correspondence using pre-defined templates according to West Virginia business rules.	Income Maintenance Manual	X			
GT0198	1	The solution should provide automatic default file names for saved correspondence that contain the date of the notice, the related program, and the title of the correspondence, using a standard naming convention to be agreed-upon with the State.	Income Maintenance Manual	X			
GT0199	1	The solution should generate, save, and post or queue for printing automatic system-generated correspondence based on West Virginia business rules.	Income Maintenance Manual	X			
GT0200	1	The solution should set time parameters for production of correspondence.	Income Maintenance Manual	X			
GT0201	1	The solution should allow users to override and change pre-populated information in correspondence, when appropriate, according to West Virginia business rules.	Income Maintenance Manual			X	
GT0202	1	The solution should convert auto-populated fields to mixed case if appropriate in correspondence according to West Virginia business rules.	Income Maintenance Manual		X		
GT0203	1	The solution should allow authorized users to override the generation of specific correspondence.	Not Applicable	X			
GT0204	1	The solution should associate correspondence with a case, according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
GT0205	1	The solution should assist system users in identifying which sections of correspondence should be filled in manually.	Income Maintenance Manual	X			
GT0206	1	The solution should categorize and classify types of correspondence, using parameters agreed upon with the State.	Not Applicable	X			
GT0207	1	The solution should reference the Income Maintenance Manual section upon which a decision is based in correspondence, according to West Virginia business rules.	Income Maintenance Manual		X		
GT0208	1	The solution should assist system users in determining the correct correspondence to use in a situation according to West Virginia business rules.	Income Maintenance Manual	X			
GT0209	1	The solution should determine the appropriate notices and forms which will be sent to a client or applicant.	Income Maintenance Manual	X			
GT0210	1	The solution should create a single notice, which maintains compliance with all applicable noticing requirements, for benefit changes that occur on a client's case in a single business day.	Income Maintenance Manual	X			
GT0211	1	The solution should allow a system user to attach electronic supporting documentation to a case record.	Income Maintenance Manual	X			
GT0212	1	The solution should allow users to add free form text to individual or groups of correspondence.	Not Applicable		X		
GT0213	1	The solution should assign time requirements for certain actions or approvals to be carried out, according to West Virginia business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0214	1	The solution should provide flexible web-based reporting that meets external reporting needs and requirements defined by State.	Not Applicable	X			
GT0215	1	The solution should generate standard reports (as defined by the State during DDI) and customized West Virginia-specific reports.	Not Applicable	X			
GT0216	1	The solution should provide for the electronic delivery of reports to identified destinations and recipients.	Not Applicable		X		
GT0217	1	The solution should generate user-defined and ad-hoc reports from all data captured in the solution, including but not limited to: eligibility data, case management data, solution performance data, and solution use data.	Not Applicable	X			
GT0218	1	The solution should schedule any report to be run at varying levels of immediacy, frequency, or user-defined condition	Not Applicable	X			
GT0219	1	The solution should correct, rerun, verify, and distribute a report for which a problem occurred, for any period in which a problem occurred, or a specified point in time.	Not Applicable	X			
GT0220	1	The solution should produce all reports as defined by the State.	Not Applicable		X		
GT0221	1	The solution should allow, initially, up to 25 State-authorized users to create ad-hoc reports.	Not Applicable		X		
GT0222	1	The solution should report on both duplicate and unduplicated counts.	Not Applicable	X			
GT0223	1	The solution should display to the user the number of pages that should be printed before the user proceeds with printing a report.	Not Applicable	X			
GT0224	1	The Vendor should maintain a comprehensive list of all reports and their intended use (business area supported).	Not Applicable	X			
GT0225	1	The Vendor should maintain a list of users and owners of each standard report.	Not Applicable		X		
GT0226	1	The solution should retain and maintain access to reports for the period of time specified by the report owner.	Not Applicable		X		
GT0227	1	The solution should generate reports in Portable Document Formation (PDF), Excel, and Word formats, as agreed upon with the State.	Not Applicable		X		
GT0228	1	The solution should export reports for enhanced manipulation and analysis.	Not Applicable		X		
GT0229	1	The solution should provide integrated print capability for any report.	Not Applicable	X			
GT0230	1	The Vendor should provide a searchable data dictionary.	Not Applicable	X			
GT0231	1	The solution should allow multiple simultaneous users to create and run, in near real-time, ad-hoc and canned reports, without going through a formal change control process.	Not Applicable	X			
GT0232	1	The solution should provide for the electronic delivery of reports to identified destinations.	Not Applicable		X		
GT0233	1	The solution should produce multi-dimensional, flexible, ad-hoc reports that meet reporting needs, across business functions.	Not Applicable		X		
GT0234	1	The solution should generate a listing of all standard online reports available, the description of each report, and provide a link to the most recent report for role-based report access.	Not Applicable	X			
GT0235	1	The solution should provide a process by which reports may be delivered by email, in accordance with Health Insurance Portability and Accountability Act (HIPAA), Federal Tax Information (FTI), and all Federal and State rules.	Not Applicable		X		
GT0236	1	The solution should provide archival storage of reports that complies with the State's records retention standards	Not Applicable		X		
GT0237	1	The solution should store reports for rapid retrieval.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0238	1	The solution should allow for users to extract data, manipulate the extracted data, and specify the desired format and media of the output.	Not Applicable	X			
GT0239	1	The solution should display consistent State-approved headers and footers.	Not Applicable	X			
GT0240	1	The solution should identify and use consistent report fields.	Not Applicable	X			
GT0241	1	The solution should use consistent data schemes and version control.	Not Applicable	X			
GT0242	1	The solution should provide a way to schedule when, with what frequency, or on what regular days within a month all reports are generated and distributed.	Not Applicable		X		
GT0243	1	The solution should track and store detailed information regarding all reporting requests, including, but not limited to:	Not Applicable	X			
GT0244	2	Who requested the information	Not Applicable	X			
GT0245	2	Date of request	Not Applicable	X			
GT0246	2	Time of request	Not Applicable	X			
GT0247	2	What data the report included	Not Applicable	X			
GT0248	2	Report storage upon completion	Not Applicable	X			
GT0249	2	Route the entire history of the generated report online	Not Applicable	X			
GT0250	1	The solution should categorize and organize reports by source system, data content, purpose, frequency, and other staff-selected options.	Not Applicable	X			
GT0251	1	The solution should search the reports repository by date, time, report title, report ID, run date, report requester, and keywords.	Not Applicable		X		
GT0252	1	The solution should highlight, cut, paste, and print any selection of the report.	Not Applicable	X			
GT0253	1	The solution should provide a control to restrict highlighting, cutting, copying, and modifying reports based on roles.	Not Applicable		X		
GT0254	1	The solution should sort the reports list by date, time, report title, run date, and other criteria, as defined by the State.	Not Applicable	X			
GT0255	1	The solution should establish and apply archival and purge parameters to reports, as defined by the State.	Not Applicable	X			
GT0256	1	The solution should easily and flexibly create new reports through an automated report writer tool that is designed for use by non-technical state staff who are not trained in SQL or other query languages.	Not Applicable	X			
GT0257	1	The solution should use identifiers, mathematical functions, and formatting, and manipulate data within reports.	Not Applicable	X			
GT0258	1	The solution should customize and define frequency for individual performance reports.	Not Applicable	X			
GT0259	1	The solution should provide role-based access to run and view reports.	Not Applicable	X			
GT0260	1	The solution should track client attendance for scheduled events.	Not Applicable	X			
GT0261	1	The solution should allow system users to check-in and check-out a client or visitor when they have arrived or departed from the office.	Not Applicable			X	
GT0262	1	The solution should notify the responsible system user when a client has checked in for an appointment with them.	Not Applicable			X	
GT0263	1	The solution should check availability for system users prior to scheduling appointments.	Not Applicable	X			
GT0264	1	The solution should alert users when they have scheduled an appointment outside the allowable timeframe based on West Virginia business rules for timeliness.	Not Applicable		X		
GT0265	1	The solution should provide an inventory of standard meeting types, which are tied to specific program business rules.	Not Applicable	X			
GT0266	1	The solution should track client waiting times.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0267	1	The solution should provide a schedule history, allowing authorized users to review a comprehensive schedule history.	Not Applicable	X			
GT0268	1	The solution should automatically update client case records with all scheduling information.	Not Applicable	X			
GT0269	1	The solution should provide daily, weekly, monthly, and annual schedule views.	Not Applicable		X		
GT0270	1	The solution should allow clients to schedule appointments with their local county office via self-service.	Not Applicable			X	
GT0271	1	The solution should track appointments made by the system user and automatically deliver schedule information to their electronic calendar.	Income Maintenance Manual	X			
GT0272	1	The Vendor should comply with any request from the State to remove any resource from the project for any reason	Not Applicable	X			
GT0273	1	The Vendor should provide staff at the quantity and skill levels necessary to meet agreed-upon project scope and schedule of the contract as outlined in the approved Staffing Management Plan.	Not Applicable	X			
GT0274	1	The Vendor should maintain compliance with the approved Staffing Management Plan for the full duration of the contract	Not Applicable	X			
GT0275	1	The Staffing Management Plan should at a minimum:	Not Applicable	X			
GT0276	2	The vendor should include an organizational chart illustrating project reporting lines of authority, displaying the project team by role with the name of the individual filling each role for positions designated in the RFP as "Key", and the touchpoints with State staff and members of the vendor's organization outside the project	Not Applicable	X			
GT0277	2	The vendor should include a staffing matrix which identifies each key and support staff project role, number of individuals allocated to that role, percent allocation to the project by individual by project phase, and whether the role is to be filled by an employee of the vendor's organization or a subcontractor.	Not Applicable	X			
GT0278	2	Explain the planned use of subcontractors (individuals and/or firms) and the vendor's subcontractor management plan.	Not Applicable	X			
GT0279	2	The vendor should include an approach to acquiring and replacing staff for the project team.	Not Applicable	X			
GT0280	2	The vendor should include a description of alternative actions, or contingency plans, if the vendor is unable to recruit sufficient numbers of adequately trained staff for each functional or operational area on a timely basis, or if the vendor's original staffing estimates are too low.	Not Applicable	X			
GT0281	2	The solution should include a description of the process to onboard and orient new team members to the project.	Not Applicable	X			
GT0282	2	The solution should include a description of project roles and responsibilities for each project role identified in the organizational chart.	Not Applicable	X			
GT0283	2	The solution should describe the overall approach for management of project resource needs, allocation of staff to each project phase, transition of staff between phases, and the processes and tools used for resource management.	Not Applicable	X			
GT0284	1	The Vendor should take the following actions prior to making any changes in individuals filling Key Staff positions:	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0285	2	The vendor should provide a written request to the State Project Sponsor for approval of a change in individual for any "Key Staff" at least four (4) business weeks prior to the identified date for the individual's last day on the project, including a justification for the change, at least one replacement candidate resume, and a replacement and transition plan with timeline.	Not Applicable		X		
GT0286	2	When it is not possible to provide four (4) weeks advance notice of a change in a Key Staff position (such as in the event of a death or unexpected departure from the vendor's organization), the vendor should notify the State immediately with the information related to the change, and present a transition and replacement plan within five (5) business days.	Not Applicable		X		
GT0287	2	The vendor should obtain State approval of the change and the new resource proposed.	Not Applicable	X			
GT0288	1	A Key Staff position should not remain vacant for more than 30 calendar days. In the event the vacancy extends past the 30 days The Vendor should provide written notification to the State.	Not Applicable	X			
GT0289	1	The State reserves the right to interview and reject replacement candidates for Key Staff.	Not Applicable	X			
GT0290	1	The State reserves the right to reject a request for a change in Key Staff when the request does not involve a death or departure from the organization.	Not Applicable	X			
GT0291	1	All Key Staff should be employees of the prime vendor's organization, or should provide a letter of commitment to become employed by the vendor by the contract start date.	Not Applicable		X		
GT0292	1	The Vendor should name a temporary replacement acceptable to the State within three business days of the date any Key Staff position becomes vacant.	Not Applicable	X			
GT0293	1	The Vendor should ensure that any individuals replacing staff overlap with their predecessor by at least one week to transition knowledge and information before the departing member leaves the project/role, except in the event of death, departure from the vendor's company, or when otherwise approved by the State.	Not Applicable		X		
GT0294	1	The solution should allow the system user to record case activity in the form of case notes.	Income Maintenance Manual	X			
GT0295	1	The solution should query case notes in client case records.	Income Maintenance Manual	X			
GT0296	1	The solution should allow authorized system users to identify data elements that have been verified either through external data sources or through supporting data provided by the client.	Not Applicable	X			
GT0297	1	The solution should provide context-sensitive help to system users from all screens.	Not Applicable	X			
GT0298	1	The solution should display the verification history of a data element consisting of the date, source of verification, and requestor of verification.	Not Applicable	X			
GT0299	1	The solution should cross-reference the applicant's ID number or case type with other State and Federal Programs if the ID number is different for the other program(s).	Not Applicable		X		
GT0300	1	The solution should perform a provider payment search based on provider specific criteria.	Not Applicable	X			
GT0301	1	The solution should review staff payment search results.	Not Applicable		X		
GT0302	1	The solution should allow a case to be assigned/reassigned, according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
GT0303	1	The solution should associate a child with a provider.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0304	1	The solution should allow an authorized system user to print the entire case record.	Child Care Subsidy Policies and Procedures Manual	X			
GT0305	1	The solution should initiate a mass change to static data, such as provider reimbursement levels or income eligibility levels.	Child Care Subsidy Policies and Procedures Manual		X		
GT0306	1	The solution should maintain a complete and accurate case history file.	Child Support Enforcement: A Guide for States	X			
GT0307	1	The solution should maintain the data elements defined in the Federal Child Support Enforcement Data Standards Registry.	Child Support Enforcement: A Guide for States	X			
GT0308	1	The solution should contain spell-check functionality for free text fields.	Not Applicable	X			
GT0309	1	The solution should allow various types of signatures for applications, according to West Virginia business rules, including, but not limited to, electronic, and telephonic.	Income Maintenance Manual	X			
GT0310	1	The solution should enable authorized system users to query the solution, using selected data elements captured in the solution.	Income Maintenance Manual	X			
GT0311	1	The solution should make accessible all application materials submitted by the client in the client's case record.	Not Applicable	X			
GT0312	1	The solution should capture case comments from the system user.	Income Maintenance Manual	X			
GT0313	1	The solution should prevent certain decisions and fields from being overridden by system users, according to West Virginia business rules.	Income Maintenance Manual			X	
GT0314	1	The solution should provide real-time solution performance data.	Not Applicable	X			
GT0315	1	The solution should report on total processing times at the aggregate level to find trends and report median, mean, and outlier times.	Not Applicable	X			
GT0316	1	The solution should report on total processing times based on user-defined queries.	Not Applicable	X			
GT0317	1	The solution should allow an authorized system user to remove view access to any data within the solution in a manner that supersedes the existing permissions for any role.	Not Applicable		X		
GT0318	1	The solution should allow an authorized system user to remove edit access to any data within the solution in a manner that supersedes the existing permissions for any role.	Not Applicable		X		
GT0319	1	The solution should allow configured reminders for time-sensitive workflows and events.	Not Applicable	X			
GT0320	1	The solution should provide workflow functionality that supports the escalation of overdue user alerts and lists items based on configurable business rules.	Not Applicable		X		
GT0321	1	The solution should provide workflow functionality that supports a variety of mechanisms to initiate workflows, such as inbound communication events (email, document upload, form submissions, or phone), system-generated events, user-triggered events, or exception-processing events.	Not Applicable			X	
GT0322	1	The solution should provide workflow functionality that supports a variety of mechanisms to route an activity to the next step in the workflow, such as inbound communication events (email, document upload, form submissions, or phone), system-generated events, user-initiated events, or exception-processing events.	Not Applicable			X	
GT0323	1	The solution should resume suspended workflows, as defined by the State.	Not Applicable			X	
GT0324	1	The solution should support configuration of custom status values for a workflow or workflow step, as defined by the State.	Not Applicable			X	
GT0325	1	The solution should include comprehensive workflow management functionality that supports:	Not Applicable	X			
GT0326	2	The solution should provide definition and modeling of workflow processes and their constituent activities.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0327	2	The solution should provide run-time control functions concerned with managing the workflow process in the State environment and sequencing the various activities to be handled as part of each process.	Not Applicable	X			
GT0328	2	The solution should provide run-time interactions with users, information technology (IT) application tools, and IT services for processing the various activity steps.	Not Applicable	X			
GT0329	1	The solution should support development of new processes, leading the user through the steps of defining the workflow associated with a business process and capturing all the information needed by the workflow engine to execute that process to include:	Not Applicable	X			
GT0330	2	Start and completion conditions	Not Applicable	X			
GT0331	2	Activities and rules for navigation between the work flow steps	Not Applicable	X			
GT0332	2	Tasks to be undertaken by State staff involved in the process	Not Applicable	X			
GT0333	2	Authorized approvers	Not Applicable	X			
GT0334	2	References to user action, Information Technology (IT) applications, IT tools, or IT services that may be invoked	Not Applicable	X			
GT0335	2	Definition of other workflow-relevant data	Not Applicable	X			
GT0336	1	The solution should support workflow management for multiple simultaneous processes, each with multiple simultaneous instances of execution.	Not Applicable	X			
GT0337	1	The solution should incorporate simple low-level workflow processes into more complex higher-level workflow processes.	Not Applicable	X			
GT0338	1	The solution should support supervisory operations for the management of workflows including:	Not Applicable	X			
GT0339	2	View caseload statistics (e.g., system user, office, region, state, client, case, applications, etc.)	Not Applicable		X		
GT0340	2	The solution should provide authorized users with visibility and monitoring of application-processing statistical information and should comply with Federal and State standards and court decrees (e g , timeliness, error rate, actions taken, actions pending, etc)	Not Applicable		X		
GT0341	2	The solution should provide a mechanism to view all tasks assigned to any individual or group, based on user role and program rule.	Not Applicable		X		
GT0342	2	Assignments/reassignments and priorities	Not Applicable		X		
GT0343	2	Assignment history	Not Applicable	X			
GT0344	2	Status querying and monitoring of individual work flow executions	Not Applicable	X			
GT0345	2	Work allocation and load balancing	Not Applicable		X		
GT0346	2	Approval for work assignments and work deliverables	Not Applicable	X			
GT0347	1	The solution should take necessary action or provide notification when corrective action is needed, including the ability to modify or abort a workflow process.	Not Applicable	X			
GT0348	1	The solution should monitor key information regarding a process in execution, including the following:	Not Applicable		X		
GT0349	2	Estimated time to completion	Not Applicable		X		
GT0350	2	Staff assigned to various process activities	Not Applicable		X		
GT0351	2	Any error conditions	Not Applicable		X		
GT0352	1	The solution should utilize an automated workflow to transfer documents to other systems for review, editing, and approval, and back to external stakeholders for rewrites and production.	Not Applicable			X	
GT0353	1	The solution should use workflow management functionality to route and assign activities to the appropriate State entity (e.g., agency, office, staff, or staff), according to West Virginia business rules.	Not Applicable		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0354	1	The solution should allow a system user to drill down into the inbox/ queue to see detailed lists, according to West Virginia business rules	Not Applicable	X			
GT0355	1	The solution should provide a mechanism to drill down into detailed lists and display data by selected characteristics to be defined by the State.	Not Applicable	X			
GT0356	1	The solution should provide a mechanism to display system user name and location of case in queue while it is currently being worked on	Not Applicable		X		
GT0357	1	The system should provide a mechanism to associate tasks with a case so that they will be moved upon reassignment of case.	Not Applicable	X			
GT0358	1	The system should provide a mechanism to create reports of tasks (e.g., date range, task type, system user, location, etc.), based on user role and program rules.	Not Applicable	X			
GT0359	1	The system should provide a mechanism to compare statistical data of tasks based on user role and program rules.	Not Applicable	X			
GT0360	1	The solution should provide a workflow management function that includes a mechanism to close all activities related to a case when the case is closed.	Not Applicable	X			
GT0361	1	The system should provide a mechanism to calculate, track participation time, track activity time limits, and provide historical information.	Not Applicable	X			
GT0362	1	The solution should generate receipts for all physical documentation provided by clients	Full Financial Clerks Manual		X		
GT0363	1	The solution should distinguish between, and incorporate, business days, weekends, and holidays in all time-related functions in the system.	Income Maintenance Manual	X			
GT0364	1	The solution should provide an automated software modifications change request tracking system.	Not Applicable	X			
GT0365	1	The solution should enable the Department of Health and Human Resources (DHHR) to control and monitor system change requests.	Not Applicable	X			
GT0366	1	Change requests are expected to include all necessary documentation (as defined by the Department of Health and Human Resources (DHHR) Change Management Plan).	Not Applicable	X			
GT0367	1	The solution should allow the Department of Health and Human Resources (DHHR) to set and change priority levels on individual change requests.	Not Applicable	X			
GT0368	1	The solution should allow the Department of Health and Human Resources (DHHR) to track process metrics and other detail, including the following:	Not Applicable	X			
GT0369	2	The estimated and actual hours allocated to each change request	Not Applicable	X			
GT0370	2	Specific personnel assigned to each change request	Not Applicable	X			
GT0371	2	Scheduled completion date for each change request	Not Applicable	X			
GT0372	2	Total cost (if maximum allowed hours exceeded)	Not Applicable	X			
GT0373	2	Total approved operations charge increase (if any)	Not Applicable	X			
GT0374	2	A separate total for equipment requirements (if applicable) related to the modification	Not Applicable	X			
GT0375	1	The solution should ensure that data is retained, archived, protected from destruction, and accessible, according to State and Federal requirements and in accordance with the Department of Health and Human Resources (DHHR) Data Retention Policy.	Not Applicable	X			
GT0376	1	The Vendor should ensure that hard copy documents are retained, stored, imaged, archived, and destroyed according to State and Federal requirements and in accordance with the Department of Health and Human Resources (DHHR) Data Retention Policy.	Not Applicable	X			
GT0377	1	The solution should allow the Department of Health and Human Resources (DHHR) to specify/ modify auto archive rules.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0378	1	The solution should provide archival and purge processes that do not degrade or interrupt the system	Not Applicable	X			
GT0379	1	The solution should easily retrieve archived data for online review, export, and reporting.	Not Applicable		X		
GT0380	1	The solution should restore archived data for reviewing, copying, and printing	Not Applicable	X			
GT0381	1	The solution should provide a Disaster Recovery/ Business Continuity Plan that complies with Federal, State, Department and Bureau rules, regulations and applicable policies and procedures, including at a minimum:	Not Applicable	X			
GT0382	2	Daily back-up which is adequate and secure for all computer software and operating programs, databases, files, and system, operation, and user documentation (in electronic and non-electronic form)	Not Applicable	X			
GT0383	1	Full and complete back-up copies of all data and software on tape and/or disk	Not Applicable	X			
GT0384	1	Storage of all back-up copies in a secure off-site location	Not Applicable	X			
GT0385	1	Routine testing to verify the completeness, integrity, and availability of back-up information	Not Applicable	X			
GT0386	1	Support for immediate restoration and recovery of lost or corrupted data or software from a disaster event	Not Applicable	X			
GT0387	1	Provide for back-up processing at a remote site(s) from the primary site(s) such that normal payment processing, as well as other State defined systems and services can continue in the event of a disaster or major hardware problem at the primary site(s).	Not Applicable	X			
GT0388	1	The solution should provide sufficient transaction logging and database back-up to allow it to be restored. If multiple databases are used for work item routing and program data, restoration should ensure that databases are synchronized to prevent data corruption	Not Applicable	X			
GT0389	1	The solution should provide point-in-time recovery of data to the last committed transaction.	Not Applicable	X			
GT0390	1	The solution should allow for continued use of the system during back-up.	Not Applicable		X		
GT0391	1	The Vendor should perform back-ups during non-peak processing hours, minimizing the impact to operational activities.	Not Applicable	X			
GT0392	1	The solution should write all errors to an error log	Not Applicable	X			
GT0393	1	The solution should allow for a Department of Health and Human Resources (DHHR) administrator to view, filter, sort, and search the error log.	Not Applicable	X			
GT0394	1	The solution should allow for an administrator (Vendor personnel) to archive error log entries based upon user-defined criteria	Not Applicable	X			
GT0395	1	The solution should allow for a user to define an alert message to be executed upon the occurrence of an error.	Not Applicable			X	
GT0396	1	Major releases should be evaluated and approved by the Department of Health and Human Resources (DHHR) prior to application	Not Applicable	X			
GT0397	1	The Vendor should send notification to the Department of Health and Human Resources (DHHR) when releases are available to be evaluated.	Not Applicable	X			
GT0398	1	The Vendor should provide the Department of Health and Human Resources (DHHR) with detailed documentation that lists all fixes and functionality for each release	Not Applicable	X			
GT0399	1	The Vendor should proactively notify the System Administrator regarding which releases of third-party software (JAVA virtual machine, Internet Explorer, Mozilla, Safari, etc.) are known to create problems with the current version of the vendor software.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0400	1	The Vendor should maintain version control and provide the Department of Health and Human Resources (DHHR) with current system and user documentation, and operating procedures manuals.	Not Applicable	X			
GT0401	1	The solution should allow centralized deployment of system updates and system maintenance.	Not Applicable	X			
GT0402	1	The solution should provide the following three types of controls to maintain the integrity, availability, and confidentiality of Protected Health Information (PHI) data contained within the system. These controls are to be in place at all appropriate points of processing.	Not Applicable	X			
GT0403	2	Preventive Controls: Controls designed to prevent errors and unauthorized events from occurring.	Not Applicable	X			
GT0404	2	Detective Controls: Controls designed to identify errors and unauthorized transactions which have occurred in the system	Not Applicable	X			
GT0405	2	Corrective Controls: Controls to ensure that the problems identified by the detective controls are corrected.	Not Applicable	X			
GT0406	1	The solution should allow properly authorized users to configure and maintain all system settings from any workstation on the local/ wide area network using a browser	Not Applicable	X			
GT0407	1	The solution should allow local/ central System Security Administrators to add and change permissions for local/ central system access.	Not Applicable	X			
GT0408	1	The solution should allow System Administrator to re-set user passwords.	Not Applicable	X			
GT0409	1	The solution should allow users to change their passwords.	Not Applicable	X			
GT0410	1	The solution should generate a periodic report (as scheduled by DHHR) of upcoming user account terminations	Not Applicable		X		
GT0411	1	The solution should be flexible and readily adaptable to changing State and Federal requirements.	Not Applicable		X		
GT0412	1	The Vendor should support current technologies for data interchange (e.g., XML).	Not Applicable	X			
GT0413	1	The Vendor should provide web-based support, with a searchable database of common problems, to assist end-user in facilitating resolution of error messages.	Not Applicable	X			
GT0414	1	Ability to allow for DHHR-defined severity levels for support.	Not Applicable	X			
GT0415	1	Integrated Eligibility Solution (IES) modules and applications are to integrate successfully and effectively with minimal or no customization.	Not Applicable		X		
GT0416	1	The solution should utilize open architecture standards and scalability to promote integration throughout all Integrated Eligibility Solution (IES) business processes and sub-processes.	Not Applicable	X			
GT0417	1	The solution should provide a common "look and feel" which gives users a seamless Integration Eligibility Solution (IES) experience across the "core system," including (at a minimum) the Client Portal, Provider Portal, and other system user facing modules, and maintains common user elements across the entire IES whenever possible.	Not Applicable	X			
GT0418	1	Data changes made in one part of the solution should automatically populate other parts of the system so as to avoid duplicate data entry.	Not Applicable	X			
GT0419	1	All on-line information is to be available to authorized users regardless of the functional business area where the data is stored.	Not Applicable	X			
GT0420	1	The solution should maintain a master client index of client information, including a single unique identifier (which is not the SSN), for all clients.	Not Applicable	X			
GT0421	1	The solution should maintain an integrated repository of provider information, including a single unique identifier, for all providers.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0422	1	The solution should produce required Federal and State data sharing.	Not Applicable	X			
GT0423	1	The solution should use high speed data transfer functionality to send and receive information (where available).	Not Applicable	X			
GT0424	1	The Vendor should ensure that file standardization is supported by all interfaces, so that data standards are maintained according to DHHR-specified and Federally mandated file specifications for data element lengths, field format, and type.	Not Applicable	X			
GT0425	1	The solution should use FTP, web interface, or other industry standard electronic means (such as Gentran, Connect: Direct) or media to transfer files, as approved by the Department of Health and Human Resources (DHHR).	Not Applicable	X			
GT0426	1	The solution should schedule and support file transfer as requested and agreed upon by the Department.	Not Applicable	X			
GT0427	1	The solution should generate exception files, when necessary, for manual edits, error corrections, and additions to the interface records by Vendor or State users, prior to being loaded within the Master Client Index (MCI)/ Master Data Management (MDM).	Not Applicable		X		
GT0428	1	The Vendor should implement edits, processes, and reporting to eliminate undesired duplication of records and transactions, including.	Not Applicable		X		
GT0429	2	Automatically edit fields for reasonableness, validity, format, and consistency with other data present in update transaction.	Not Applicable		X		
GT0430	1	Transaction reconciliation reporting for file/ data reconciliation with external data sources (e.g., totals and detail information, difference reports, change reports)	Not Applicable		X		
GT0431	1	The solution should generate error reports at the summary and detail levels that include all data necessary to resolve errors.	Not Applicable		X		
GT0432	1	The solution should reload or resend records if they have not been applied correctly to the appropriate data repository.	Not Applicable		X		
GT0433	1	The solution should detect duplicate files or records and isolate them for manual review and further processing.	Not Applicable		X		
GT0434	1	The solution should incorporate a method to view and edit interface files for investigation and further processing.	Not Applicable		X		
GT0435	1	The solution should create messages that accurately describe errors received as a result of a data transfer.	Not Applicable	X			
GT0436	1	The solution should export records identified by the Department of Health and Human Resources, when required by the DHHR.	Not Applicable	X			
GT0437	1	The solution should create and retain an audit trail of all interface activity in accordance with the Department of Health and Human Resources (DHHR) Data Retention Policy.	Not Applicable	X			
GT0438	1	The training environment should include all data elements that are in the production region, and contain sufficient and representative data records for training purposes. Vendors are not to invoke additional license fees for the test, User Acceptance Testing (UAT), and training environments.	Not Applicable	X			
GT0439	1	The Vendor should use a User Acceptance Testing (UAT) environment that would mirror all programs in production through the life cycle of the claim, to include reports and the financial records.	Not Applicable	X			
GT0440	1	The Vendor should use utilities to assist in identifying selected claim samples to use for testing (i.e., identify claims that currently test true for a specified edit).	Not Applicable	X			
GT0441	1	The solution should create Integrated Eligibility Solution (IES) data (provider or client) in a test environment, as needed for testing.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0442	1	The solution should modify Integrated Eligibility Solution (IES) data (provider or client) in a test environment, as needed for testing, in compliance with Federal guidelines.	Not Applicable	X			
GT0443	1	The solution should maintain a test case library with search capability that is cross-referenced to the code (i.e., edit) that it tests.	Not Applicable		X		
GT0444	1	The solution should allow callers using the contact/call center management system to transfer to the State's Automated Voice Response System (AVRS) system.	Not Applicable	X			
GT0445	1	The solution should use automated menus, including an easily accessible option for reaching a live operator.	Not Applicable	X			
GT0446	1	The solution should route or transfer calls, as defined by the system user, without having to redial (e.g., call may be transferred to an external agency, such as an enrollment broker, without additional phone charges to the caller).	Not Applicable	X			
GT0447	1	The solution should configure navigation paths and prompts based on information from the Integrated Eligibility Solution (IES).	Not Applicable	X			
GT0448	1	The solution should manage all Integrated Eligibility Solution (IES) related contacts (telephone, email, web portal, mail, fax, etc.)	Not Applicable	X			
GT0449	1	The solution should maintain a record, including an audit trail, of all contacts.	Not Applicable	X			
GT0450	1	The solution should identify and maintain a record of the format/media of incoming communications.	Not Applicable	X			
GT0451	2	The solution should provide inquiry responses to the requestor in the same mode that it was received.	Not Applicable	X			
GT0452	1	The solution should query on the history of each contact.	Not Applicable	X			
GT0453	1	The solution should view related contact records from a single contact record.	Not Applicable		X		
GT0454	1	The solution should assign a unique tracking number or control number to each contact.	Not Applicable	X			
GT0455	1	The solution should accommodate searches on contact records by characteristics such as contact type, client ID, caller phone number, provider phone number, provider name, contact tracking/control number, and any combinations thereof.	Not Applicable	X			
GT0456	1	The solution should use caller phone number and/or ID number to access related Integrated Eligibility Solution (IES) data and previous contacts.	Not Applicable		X		
GT0457	1	The solution should upload attachments to contact records.	Not Applicable	X			
GT0458	1	The solution should link scanned images to contact records to provide one view of all related materials (e.g , images, letters, and interactions).	Not Applicable	X			
GT0459	1	The solution should incorporate systems navigation technology that allows all users to move freely throughout the system.	Not Applicable	X			
GT0460	1	The solution should provide a system user interface that is compatible with user defined display settings.	Not Applicable	X			
GT0461	1	The solution should provide integrated print capability for any page within the Integrated Eligibility Solution (IES).	Not Applicable	X			
GT0462	1	The solution should include at minimum the following features and capabilities:	Not Applicable	X			
GT0463	2	Drill down and look up functionality to minimize re-entry of information across multiple screens	Not Applicable	X			
GT0464	2	Multi-tasking and multiple window capability, including split screens	Not Applicable	X			
GT0465	1	The solution should provide menus that are understandable by non-technical users and provide secure access to all functional areas.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0466	1	The solution should incorporate a non-restrictive environment for experienced users to directly access (direct call) a screen or to move from one screen to another without reverting to the menu structure	Not Applicable	X			
GT0467	1	The solution should generate drop-down lists to identify options available, valid values, and code descriptions, by screen field.	Not Applicable	X			
GT0468	1	The solution should utilize the following standards for all system screens, windows, and reports:	Not Applicable	X			
GT0469	2	All headings and footers standardized	Not Applicable	X			
GT0470	2	Current date and local time displayed	Not Applicable	X			
GT0471	2	All references to dates displayed consistently throughout the system	Not Applicable	X			
GT0472	2	All data labels and definitions consistent throughout the system and clearly defined in user manuals and data element dictionaries	Not Applicable		X		
GT0473	2	All Integrated Eligibility Solution (IES) generated messages should be clear and sufficiently descriptive to provide enough information for problem correction and be written in full English text	Not Applicable		X		
GT0474	1	The solution should generate alerts to notify staff of possible options when known running process(es) may result in problems (e.g., timeouts, slowed processing)	Not Applicable		X		
GT0475	1	The solution should generate alerts when changes are made to policies and procedures and system tables or functionality.	Not Applicable		X		
GT0476	1	The solution should generate alerts when the anticipated return time on a query or report job exceeds a defined time limit.	Not Applicable		X		
GT0477	1	The solution should generate alerts that assist in monitoring time-sensitive activities.	Not Applicable		X		
GT0478	1	The solution should generate alerts to a system user-defined group or individual	Not Applicable	X			
GT0479	1	The solution should generate alerts to notify staff when they need to take action in connection with workflow events.	Not Applicable		X		
GT0480	1	The vendor should provide and maintain a secure website with authentication and encryption to protect interactions and transactions. This should include, at a minimum, the use of Secure Sockets Layer, or SSL. The authentication process should be verified through a third party that has registered and identified the server.	Not Applicable	X			
GT0481	1	The vendor should provide web portal functionality that addresses the needs of a variety of entities/stakeholders, including human services program clients, providers, and other business partners as specified by the Department of Health and Human Resources (DHHR).	Not Applicable	X			
GT0482	1	The vendor should provide web applications that satisfy the Priority 1 Checkpoints from the Web Content Accessibility Guidelines 1.0 developed by the World Wide Web Consortium (W3C), as detailed at http://www.w3.org/TR/WCAG10/full-checklist.html.	World Wide Web Consortium (W3C)	X			
GT0483	1	The vendor should ensure web portal design, development, implementation and operations are in accordance with State and Federal regulations and guidelines related to security, accessibility, confidentiality, and auditing.	Not Applicable		X		
GT0484	1	The vendor should, for information and documentation captured via the web portal, conform to the user access, user inquiry, update, retention, archival, and other relevant data management specifications outlined in this RFP.	Not Applicable		X		
GT0485	1	The vendor should include secure and non-secure tabs for the web portal.	Not Applicable		X		
GT0486	1	The vendor should provide public information without requiring authentication for the web portal.	Not Applicable		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0487	1	The vendor should, for the web portal, provide Internet security functionality to include firewalls, intrusion detection, and encrypted network/secure socket layer.	Not Applicable	X			
GT0488	1	The vendor should, for the web portal, handle protected health information (PHI) through authentication, along with encryption methods to secure PHI.	Not Applicable		X		
GT0489	1	The vendor should, for the web portal, handle personally identifiable information (PII) through authentication, along with encryption methods to secure PII.	Not Applicable		X		
GT0490	1	The vendor should, for the web portal, handle federal tax information (FTI) through authentication, along with encryption methods to secure FTI.	Not Applicable	X			
GT0491	1	The vendor should, for the web portal, display and require the user to accept web site terms of agreement when entering the web portal.	Not Applicable		X		
GT0492	1	The vendor should, for the web portal, utilize an authentication process to handle multiple layers of security levels as defined by the Department of Health and Human Resources (DHHR).	Not Applicable		X		
GT0493	1	The vendor should, for the web portal, establish user access to predefined Department of Health and Human Resources (DHHR) levels such as page level, field and data element level.	Not Applicable	X			
GT0494	1	The vendor should, for the web portal, provide a protected web site with secure passwords and log-ons to include:	Not Applicable		X		
GT0495	2	Instructions on how to use the secure site	Not Applicable		X		
GT0496	2	Site map	Not Applicable		X		
GT0497	2	Contact information	Not Applicable		X		
GT0498	1	The vendor should, for the web portal, send users their initial password via email and require that they change their password at next sign-on.	Not Applicable		X		
GT0499	1	The vendor should, for the web portal, provide the ability to expire a password in a given number of days according to Department of Health and Human Resources (DHHR) standards.	Not Applicable	X			
GT0500	1	The vendor should, for the web portal, provide self-service password resets.	Not Applicable	X			
GT0501	1	The vendor should, for the web portal, prohibit the display of passwords at the sign-on screen when entered by the user.	Not Applicable	X			
GT0502	1	The vendor should, for the web portal, notify Integrated Eligibility Solution (IES) users at regular intervals defined by the Department of Health and Human Resources (DHHR) that security access tables are to be cleared unless otherwise directed. (This is in reference to any security access tables the Vendor may propose as part of their solution, where an example may be a user log table)	Not Applicable			X	
GT0503	1	The vendor should, for the web portal, require qualifying information (e.g., provider number, prior authorization number, client number, date of service, or claim number) to access various information via the web portal.	Not Applicable		X		
GT0504	1	The vendor should, for the web portal, include static and easily updated web pages.	Not Applicable	X			
GT0505	1	The vendor should, for the web portal, include a desktop environment with browser capability for easy navigation.	Not Applicable	X			
GT0506	1	The vendor should, for the web portal, provide a user interface that allows all users to move easily throughout the system.	Not Applicable	X			
GT0507	1	The vendor should, for the web portal, support a menu and control system with highly flexible navigation.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0508	1	The vendor should, for the web portal, provide a menu system that is navigable by the non-technical user while not restricting direct access to any screen to experienced users.	Not Applicable	X			
GT0509	1	The vendor should, for the web portal, provide user interface features and capabilities including:	Not Applicable	X			
GT0510	2	Pull down menus and window tabs	Not Applicable	X			
GT0511	2	Scalable true type screen and printing fonts	Not Applicable	X			
GT0512	2	Upper and lower case alphabetic characters	Not Applicable	X			
GT0513	2	Ability to tab and mouse-click through data fields and screens	Not Applicable	X			
GT0514	1	The vendor should, for the web portal, use the following standards for all system screens, windows, and reports:	Not Applicable	X			
GT0515	2	Maintain a consistent theme throughout the site and standardize all headings and footers with index tabs as identified by the Department of Health and Human Resources (DHHR).	Not Applicable	X			
GT0516	2	Display current date and time in a system-wide consistent format.	Not Applicable	X			
GT0517	2	Utilize data labels and definitions in a system-wide consistent manner and as defined in user manuals and data element dictionaries.	Not Applicable		X		
GT0518	2	Generated messages are to be available in both mixed font and mixed case formats.	Not Applicable	X			
GT0519	2	Screens should distinguish between production and test environments.	Not Applicable		X		
GT0520	2	Comply with the American Disabilities Act (ADA) standards for user screens, where applicable.	Not Applicable	X			
GT0521	2	Comply with the older Americans Act standards for user screens, where applicable.	Not Applicable	X			
GT0522	2	All generated messages are to be clear and sufficiently descriptive to provide enough information for problem correction and be written in full English text.	Not Applicable	X			
GT0523	2	Conform to any State, Department, or Bureau specified standards regarding the look and feel of the web.	Not Applicable		X		
GT0524	1	The vendor should, for the web portal, support multiple communication lines and provide fail-over capability.	Not Applicable		X		
GT0525	1	The vendor should, for the web portal, provide growth capacity for high volumes of activity.	Not Applicable	X			
GT0526	1	The vendor should, for the web portal, interface, receive, send, and download specified content and reporting information directly from/to entities such as provider associations, vendors, and other State agencies.	Not Applicable		X		
GT0527	1	The vendor should, for the web portal, include email address in the authorization table. The confidentiality of email addresses is to be protected and only used for official State business.	Not Applicable			X	
GT0528	1	The vendor should, for the web portal, allow for (HIPAA-compliant) email submission by user initiated from a link on the website.	Not Applicable		X		
GT0529	1	The vendor should ensure that web portal field definitions comply with system field definitions.	Not Applicable		X		
GT0530	1	The vendor should, for the web portal, allow users to download or print a copy of completed submitted forms.	Not Applicable	X			
GT0531	1	The vendor should, for the web portal, provide the capability to display confirmation messages for requestor transactions.	Not Applicable		X		
GT0532	1	The vendor should, for the web portal, provide an online option for end-users to report any technical problems with the web application and web pages.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
GT0533	1	The vendor should report and maintain web portal activity statistics (as defined by the Department). For instance: new and repeat visitors, number/percent of abandoned enrollment applications, etc.	Not Applicable	X			
Operations Management (OM)							
OM0001	1	The solution should generate a pro-rated first month's client contribution amount based on the number of days the client was located in the nursing facility and the cost of the nursing facility.	Income Maintenance Manual	X			
OM0002	1	The solution should generate a pro-rated last month's client contribution amount based on the number of days the client was located in the nursing facility and the cost of the nursing facility.	Income Maintenance Manual	X			
OM0003	1	The solution should process spend downs according to West Virginia business rules.	Income Maintenance Manual	X			
OM0004	1	The solution should report the timeline for processing of Supplemental Security Income (SSI) related disability applications using the Holcomb Log Sheet format.	Income Maintenance Manual			X	
OM0005	1	The Vendor should manage the process to suspend the ability of specified users to conduct Presumptive Eligibility determinations based on information received from the Bureau for Medical Services (BMS).	Medicaid Provider Manual Chapter 400, Member Eligibility		X		
OM0006	1	The solution should capture multiple levels of supervisory approvals according to West Virginia business rules.	Income Maintenance Manual	X			
OM0007	1	The solution should allow the system user to submit a background check waiver request, with all of the documentation required for the waiver request.	Not Applicable		X		
OM0008	1	The solution should allow the system user to review and respond to the background check waiver request, and document the waiver request decision.	Not Applicable		X		
OM0009	1	The solution should allow the system user to document information concerning a new hire's "supervision safety plan."	Not Applicable		X		
OM0010	1	The solution should support role-based authorized hearings process users from accessing any external case data and non- hearings process users from accessing hearings- related information.	Not Applicable		X		
OM0011	1	The solution should calculate the caseload reduction credit for the State according to West Virginia business rules.	eCFR — 261 Code of Federal Regulations - Ensuring that Recipients Work	X			
OM0012	1	The solution should generate a monthly case load reduction report.	Not Applicable	X			
OM0013	1	The solution should produce and maintain data necessary for "child care subsidy measure" as defined by the federal requirements.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
OM0014	1	The solution should allow a special assignment of a child support case according to West Virginia business rules.	BCSE Policy Manual	X			
OM0015	1	The solution should generate an alert when a case involves a Bureau for Child Support Enforcement (BCSE) employee according to West Virginia business rules.	BCSE Policy Manual	X			
OM0016	1	The solution should prohibit a system user from viewing their own case.	BCSE Policy Manual	X			
OM0017	1	The solution should track the reason that a case is re-assigned.	BCSE Policy Manual	X			
OM0018	1	The solution should route a case to the appropriate process unit based on the caseload distribution.	Child Support Enforcement: A Guide for States	X			
OM0019	1	The solution should maintain all information required to complete the Office of Child Support Enforcement's OCSE-34A collections report.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OM0020	1	The solution and/or the State's accounts management system should maintain all information required to complete the Office of Child Support Enforcement's OCSE-396A expenditures report.	Child Support Enforcement: A Guide for States	X			
OM0021	1	The solution should provide a daily automated online worklist to each system user in the scenarios listed in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
OM0022	1	The solution should allow authorized system users to create and modify form templates.	Not Applicable	X			
OM0023	1	The solution should maintain all information necessary to complete any federal reporting requirement(s) defined as necessary by the Office of Child Support Enforcement (OCSE) in issued written instructions.	Child Support Enforcement: A Guide for States	X			
OM0024	1	The solution should provide a dashboard for workload management.	Not Applicable	X			
OM0025	1	The solution should provide onscreen help functionality.	Not Applicable	X			
OM0026	1	The solution should manage user accounts.	Not Applicable	X			
OM0027	1	The solution should determine the correct parent fee in cases where parents have joint custody or share custody of their children and both parents are eligible to receive child care assistance.	Child Care Subsidy Policies and Procedures Manual	X			
OM0028	1	The solution should allow fees for services to be waived according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
OM0029	1	The solution should allow the system user to document the reason fees for services were waived.	Child Care Subsidy Policies and Procedures Manual	X			
OM0030	1	The solution should automatically change the payment rate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
OM0031	1	The solution should calculate the Child Fee according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
OM0032	1	The solution should produce the Child Care and Development Fund (CCDF) Administrative Data Reporting Estimates.	Not Applicable	X			
OM0033	1	The solution should display household records assigned to a specific system user.	Not Applicable	X			
OM0034	1	The solution should allow the appropriate system user to view and approve Household Closure requests for approval.	Not Applicable		X		
OM0035	1	The solution should allow the appropriate system user to view and approve policy exception requests for approval.	Not Applicable		X		
OM0036	1	The solution should allow the appropriate system user to review the Report on Day Care Activities (RODCA).	Not Applicable	X			
OM0037	1	The solution should allow the system user to update and submit the Report on Day Care Activities (RODCA) time study details.	Not Applicable	X			
OM0038	1	The solution should support the Report on Day Care Activities (RODCA) calendar.	Not Applicable	X			
OM0039	1	The solution should access the Report on Day Care Activities (RODCA) Reports.	Not Applicable	X			
OM0040	1	The solution should display the assignment history and detailed information for a household.	Not Applicable	X			
OM0041	1	The solution should allow a system user to make new assignments.	Not Applicable	X			
OM0042	1	The solution should allow the system user to review the intake workload.	Not Applicable	X			
OM0043	1	The solution should allow the system user to review cases assigned to a specific system user.	Not Applicable	X			
OM0044	1	The solution should allow the system user to view sliding fee scale rates.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OM0045	1	The solution should provide data freezing of changes in eligibility according to West Virginia business rules.	Not Applicable	X			
OM0046	1	The solution should process provider claims.	Not Applicable			X	
OM0047	1	The solution should record and update employee information demographics according to West Virginia business rules.	Not Applicable	X			
OM0048	1	The solution should record and update employee information background checks according to West Virginia business rules.	Not Applicable		X		
OM0049	1	The solution should record and track case management according to West Virginia business rules.	Not Applicable	X			
OM0050	1	The solution should provide procedures for supervisory oversight and authorization related to casefile review according to West Virginia business rules.	Not Applicable	X			
OM0051	1	The solution should record and track the results of audits.	Not Applicable			X	
OM0052	1	The solution should record and track the results of corrective actions.	Not Applicable			X	
OM0053	1	The solution should allow for data entry of claims and payments for providers and clients.	Not Applicable	X			
OM0054	1	The solution should ensure accuracy, completeness, and compliance with federal requirements and standards and according to West Virginia business rules.	Not Applicable	X			
OM0055	1	The solution should generate a data extract containing all known cases in the AFCARS report, including cases with incomplete data, according to West Virginia business rules.	Not Applicable		X		
OM0056	2	The solution should capture information about the primary and secondary system users, their responsibilities, and the approvals.	Adoption Policy Manual		X		
OM0057	2	The solution should support the automatic routing of cases to the appropriate unit or individual according to West Virginia business rules.	Child Protective Services Policy		X		
OM0058	2	The solution should support the routing of reports through the Field Operations Chain of Command according to West Virginia business rules.	Child Protective Services Policy		X		
OM0059	1	The solution should support a database of all child fatalities.	Child Protective Services Policy		X		
OM0060	1	The solution should support the system user during the process of transferring a case across phases according to West Virginia business rules.	Child Protective Services Policy		X		
OM0061	1	The solution should capture information about the results of background checks performed on all members in the home according to West Virginia business rules.	Specialized Family Care Program Policy		X		
OM0062	1	The solution should capture information about the results of background checks performed on all State and vendor staff according to West Virginia business rules.	Specialized Family Care Program Policy	X			
OM0063	1	The solution should capture information about the results of protective services checks performed on all members in the home according to West Virginia business rules.	Specialized Family Care Program Policy		X		
OM0064	1	The solution should capture information about the results of protective services checks performed on all State and vendor staff according to West Virginia business rules.	Specialized Family Care Program Policy		X		
OM0065	1	The solution should support the administration of the background check process according to West Virginia business rules.	Specialized Family Care Program Policy		X		
OM0066	1	The solution should create a waiting list of referrals for which no placement is currently available for all programs and placement types.	Specialized Family Care Program Policy		X		
OM0067	1	The solution should allow a primary and multiple secondary assignment system users to be associated with a case.	Not Applicable		X		
OM0068	1	The solution should provide information to the system user about how to reduce the spenddown according to West Virginia business rules.	Income Maintenance Manual	X			
OM0069	1	The solution should generate workloads for Office of Child, Family, and Maternal Health liaisons to conduct a Health Check according to West Virginia business rules.	Foster Care Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OM0070	1	The solution should generate workloads for Office of Child, Family, and Maternal Health liaisons to conduct medical home case management according to West Virginia business rules	Foster Care Policy		X		
Program Management (PG)							
PG0001	1	The solution should support the eligibility lifecycle for all Medicaid eligibility groups that exist in West Virginia business rules, with unique eligibility and verification requirements for each group. The solution should include the following eligibility groups, at a minimum:	Income Maintenance Manual		X		
PG0002	2	IV-E Adoptive Assistance, Foster care	Income Maintenance Manual	X			
PG0003	2	Non IV-E Adoptive Assistance, Foster care	Income Maintenance Manual	X			
PG0004	2	Refugee MA	Income Maintenance Manual	X			
PG0005	2	Intermediate Care Facility / Intellectual / Developmentally Disabled (ICF/IDD)	Income Maintenance Manual	X			
PG0006	2	Special Pharmacy	Income Maintenance Manual		X		
PG0007	2	Nursing Home	Income Maintenance Manual	X			
PG0008	2	Adult Group	Income Maintenance Manual	X			
PG0009	2	Parents/ Caretaker Relatives	Income Maintenance Manual	X			
PG0010	2	Deemed Aid to Dependent Families with Children (AFDC)	Income Maintenance Manual	X			
PG0011	2	Transitional Medicaid Phase 1	Income Maintenance Manual	X			
PG0012	2	Transitional Medicaid Phase 2	Income Maintenance Manual	X			
PG0013	2	Categories for Children under Age 19	Income Maintenance Manual	X			
PG0014	2	Pregnant Women	Income Maintenance Manual	X			
PG0015	2	Continuously Eligible Newborn Children	Income Maintenance Manual	X			
PG0016	2	Supplemental Security Income (SSI) Recipients	Income Maintenance Manual	X			
PG0017	2	Categories of Deemed Supplemental Security Income (SSI) Recipients	Income Maintenance Manual	X			
PG0018	2	Disabled Adult Children	Income Maintenance Manual	X			
PG0019	2	Substantial Gainful Activity	Income Maintenance Manual	X			
PG0020	2	Essential Spouses	Income Maintenance Manual		X		
PG0021	2	Pass-Throughs	Income Maintenance Manual		X		
PG0022	2	Pickle Amendment Coverage (PAC)	Income Maintenance Manual	X			
PG0023	2	Disabled Widows and Widowers	Income Maintenance Manual	X			
PG0024	2	Drug Addicts and Alcoholics	Income Maintenance Manual		X		
PG0025	2	Qualified Medicare Beneficiaries (QMB)	Income Maintenance Manual	X			
PG0026	2	Specified Low-Income Medicare Beneficiaries (SLIMB)	Income Maintenance Manual	X			
PG0027	2	Qualified Individuals (QI-1)	Income Maintenance Manual	X			
PG0028	2	Qualified Disabled Working Individuals (QDWI)	Income Maintenance Manual	X			
PG0029	2	Illegal Aliens Emergency Coverage	Income Maintenance Manual	X			
PG0030	2	Individuals Receiving Home- and Community- based Waiver Services Under Title XIX Waivers	Income Maintenance Manual	X			
PG0031	2	Aged and Disabled Waiver (Title XIX Waiver)	Income Maintenance Manual	X			
PG0032	2	Intellectual / Developmental Disabled (Title XIX Waiver)	Income Maintenance Manual	X			
PG0033	2	Traumatic Brain Injury (Title XIX Waiver)	Income Maintenance Manual	X			
PG0034	2	Children with Disabilities Community Service Program (CDCS)	Income Maintenance Manual	X			
PG0035	2	AIDS Program	Income Maintenance Manual		X		
PG0036	2	Aid to Families with Dependent Children (AFDC)- Related, Medically Needy (Spend-down)	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PG0037	2	Supplemental Security Income (SSI)-Related, Medically Needy (Spend-down)	Income Maintenance Manual	X			
PG0038	2	Supplemental Security Income (SSI)-Related / Non-Cash Assistance	Income Maintenance Manual	X			
PG0039	2	Former West Virginia Foster Children	Income Maintenance Manual	X			
PG0040	2	Medicaid Work Incentive (M-WIN)	Income Maintenance Manual	X			
PG0041	2	Breast and Cervical Cancer (BCC)	Income Maintenance Manual	X			
PG0042	2	Essential Spouses Of Supplemental Security Income (SSI) Recipients (MSS) eligibility group based on data delivered by the Social Security Administration (SSA).	Income Maintenance Manual	X			
PG0043	1	The solution should create unique assistance groups for each Medicaid eligibility group according to West Virginia business rules.	Income Maintenance Manual	X			
PG0044	1	The solution should create unique income groups for each Medicaid eligibility group according to West Virginia business rules.	Income Maintenance Manual	X			
PG0045	1	The solution should create unique needs groups for each Medicaid eligibility group according to West Virginia business rules.	Income Maintenance Manual	X			
PG0046	1	The solution should provide the flexibility to accommodate an unlimited number of Medicaid eligibility groups, as required by West Virginia business rules.	Income Maintenance Manual	X			
PG0047	1	The solution should indicate which sections of forms are to be completed by a physician.	Income Maintenance Manual		X		
PG0048	1	The solution should modify the premium amount based upon a reported income or household change.	Income Maintenance Manual	X			
PG0049	1	The solution should support the eligibility lifecycle for all West Virginia Children's Health Insurance Program (WVCHIP) eligibility groups, with unique eligibility and verification requirements for each group.	West Virginia State Plan Amendment #: WV-13-0001	X			
PG0050	1	The solution should include the following West Virginia Children's Health Insurance Program (WVCHIP) eligibility groups, including but not limited to:	West Virginia State Plan Amendment #: WV-13-0001		X		
PG0051	2	Exempt Coverage	West Virginia State Plan Amendment #: WV-13-0001		X		
PG0052	2	Blue Coverage	West Virginia State Plan Amendment #: WV-13-0001		X		
PG0053	2	Gold Coverage	West Virginia State Plan Amendment #: WV-13-0001		X		
PG0054	2	Premium Coverage	West Virginia State Plan Amendment #: WV-13-0001		X		
PG0055	1	The solution should accommodate an unlimited number of West Virginia Children's Health Insurance Program (WVCHIP) eligibility groups, according to West Virginia business rules.	Income Maintenance Manual	X			
PG0056	1	The solution should establish a configurable lifetime limit (currently 60 months) for WV WORKS eligibility according to West Virginia business rules.	Income Maintenance Manual	X			
PG0057	1	The solution should calculate the provider payment amount per child according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0058	1	The solution should pay two providers for one child according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0059	1	The solution should track the base rate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0060	1	The solution should calculate the base rate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PG0061	1	The solution should apply the base rate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0062	1	The solution should track the special needs supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0063	1	The solution should calculate the special needs supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0064	1	The solution should apply the special needs supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0065	1	The solution should track the tiered reimbursement supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0066	1	The solution should calculate the tiered reimbursement supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0067	1	The solution should apply the tiered reimbursement supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0068	1	The solution should track the shift differential rate supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0069	1	The solution should calculate the shift differential rate supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0070	1	The solution should apply the shift differential rate supplement according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0071	1	The solution should support the use of daily rate tables.	Child Care Subsidy Policies and Procedures Manual	X			
PG0072	1	The solution should support the use of monthly rate tables.	Child Care Subsidy Policies and Procedures Manual	X			
PG0073	1	The solution should select and apply the per day rate or the monthly rate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0074	1	The solution should calculate one or more types of partial days according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0075	1	The solution should convert partial days to full days according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0076	1	The solution should deduct the parent fee according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0077	1	The solution should calculate the total number of days for payment according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
PG0078	1	The solution should allow providers to submit payment information via a secure web portal.	Child Care Subsidy Policies and Procedures Manual	X			
PG0079	1	The solution should produce the Annual Aggregate Child Care Data Report (ACF-800) with all proposed changes by the Child Care and Development Block Grant (CCDBG).	Not Applicable	X			
PG0080	1	The solution should produce the Child Care Monthly Case Record Report (ACF-801) with all proposed changes by the Child Care and Development Block Grant (CCDBG)	Not Applicable	X			
PG0081	1	The solution should allow the system user to enter daily and weekly provider rates.	Not Applicable	X			
PG0082	1	The solution should keep a log for burial payments for each local office according to West Virginia business rules.	Income Maintenance Manual	X			
PG0083	1	The solution should create a log of burial assistance applications for each local office.	Income Maintenance Manual	X			
Provider Management (PM)							

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PM0001	1	The solution should allow for attributes to be created and stored for vendors according to West Virginia business rules, including but not limited to, the following:	Full Financial Clerks Manual	X			
PM0002	2	Vendor Number (System-generated)	Full Financial Clerks Manual	X			
PM0003	2	Vendor Name	Full Financial Clerks Manual	X			
PM0004	2	Vendor Address	Full Financial Clerks Manual	X			
PM0005	2	Vendor Phone Number	Full Financial Clerks Manual	X			
PM0006	2	Vendor Tax Identification Number / Social Security Number	Full Financial Clerks Manual	X			
PM0007	2	Vendor Type	Full Financial Clerks Manual	X			
PM0008	1	The solution should store the results of child care provider background checks, including criminal history record, child or adult protective services records, and sexual offender registry, according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0009	1	The solution should flag providers with findings in their background checks.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0010	1	The solution should track provider staff qualifications and requirements, including but not limited to: health assessment, tuberculin risk assessment, documentation of credentials, criminal history background check, and child abuse or neglect background check.	Child Care Center Information Packet	X			
PM0011	1	The solution should distinguish between various child care licensing and certificate types, including but not limited to: initial, provisional, registration, and regular license, according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0012	1	The solution should distinguish between various child care service provider types including but not limited to: family child care home, family child care facility, child care center, Head Start/Child Care Center, and out-of-school time.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0013	1	The solution should capture information about child care licensing inquiries when there is no information in the system about the provider.	Not Applicable			X	
PM0014	1	The solution should allow the system user to search for an approved child care provider.	Not Applicable	X			
PM0015	1	The solution should support the entry of child/staff ratios, categorized by age of children in years and/or months.	Child Care Center Information Packet	X			
PM0016	1	The solution should capture information about all technical assistance activities provided to a child care provider.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0017	1	The solution should record information on the provider's total capacity.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0018	1	The solution should record information on the provider's capacity by age grouping.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0019	1	The solution should record information on the business ownership type for all provider types according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0020	1	The solution should record information on a provider's employees according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0021	1	The solution should record information on the child care services offered by the provider, including but not limited to:	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0022	2	Evening or night time care	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0023	2	Pre-kindergarten	Child Care Provider Regulation: Policy & Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PM0024	2	Standard curriculum	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0025	2	Transportation	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0026	1	The solution should record the provider address, physical location, mailing address, email address, and directions to the location.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0027	1	The solution should track the number of subsidized children served by the provider.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0028	1	The solution should support the provider inquiry according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0029	1	The solution should track child care center types, based upon the total capacity of the center, according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0030	1	The solution should track negative actions according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0031	1	The solution should flag child care providers as one of the following:	Not Applicable	X			
PM0032	2	For referral	Not Applicable	X			
PM0033	2	Private referrals only	Not Applicable	X			
PM0034	2	Not for referral	Not Applicable	X			
PM0035	1	The solution should flag self-certified service providers for on-site evaluation based on a random selection of five (5) percent of the total number of registered informal, relative, and family child care homes.	Child Care Provider Regulation: Policy & Procedures Manual		X		
PM0036	1	The solution should allow providers to submit requests for hearings within approved timeframes according to West Virginia business rules.	Child Care Provider Regulation: Policy & Procedures Manual			X	
PM0037	1	The solution should track hearing activities, including but not limited to, scheduling and hearing results.	Child Care Provider Regulation: Policy & Procedures Manual			X	
PM0038	1	The solution should allow the system user to view standard payment rates for child care providers.	Not Applicable	X			
PM0039	1	The solution should allow the system user to view miscellaneous payment rates for child care providers.	Not Applicable	X			
PM0040	1	The solution should associate employees and volunteers with a provider record.	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0041	1	The solution should accommodate a rules-based complaint workflow, including the following elements with configurable deadline timeframes:	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0042	2	Initial submission of the complaint	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0043	2	Tracking all actions	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0044	2	Tracking results of the complaint investigation	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0045	2	Technical assistance	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0046	2	Follow up	Child Care Provider Regulation: Policy & Procedures Manual	X			
PM0047	1	The solution should track information about a provider's attendance in payment enrollment training.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PM0048	1	The solution should allow providers to view payment details via a secure web portal.	Child Care Subsidy Policies and Procedures Manual	X			
PM0049	1	The solution should allow providers to view information about approved children, hours, and rates via a secure web portal.	Child Care Subsidy Policies and Procedures Manual	X			
PM0050	1	The solution should log and maintain provider contacts.	Child Care Subsidy Policy & Procedures Manual	X			
PM0051	1	The solution should maintain provider contacts.	Child Care Subsidy Policy & Procedures Manual	X			
PM0052	1	The solution should allow the system user to view provider rate specifics including, but not limited to, the following:	Not Applicable	X			
PM0053	2	Agency name	Not Applicable	X			
PM0054	2	Provider name	Not Applicable	X			
PM0055	2	Provider identifier (ID)	Not Applicable	X			
PM0056	2	Provider type	Not Applicable	X			
PM0057	2	Quality tier level	Not Applicable	X			
PM0058	2	Market rate ceiling	Not Applicable	X			
PM0059	2	Age range	Not Applicable	X			
PM0060	2	Age start date	Not Applicable	X			
PM0061	2	Age end date	Not Applicable	X			
PM0062	1	The solution should hold all payments to a particular provider type.	Not Applicable	X			
PM0063	1	The solution should hold a particular invoice to a particular provider.	Not Applicable	X			
PM0064	1	The solution should allow the system user to approve a regular demand payment invoice.	Not Applicable	X			
PM0065	1	The solution should display a Kinship/Relative Provider Record	Adoption Policy Manual	X			
PM0066	1	The solution should allow providers to be associated with cases according to West Virginia business rules.	Foster Care Policy	X			
PM0067	1	The solution should allow authorized system users to search open and closed provider records.	Foster Care Policy	X			
PM0068	1	The solution should support the completion of tax information in the provider record according to West Virginia business rules.	Foster Care Policy		X		
PM0069	1	The solution should support the approval of tax information in the provider record according to West Virginia business rules.	Foster Care Policy		X		
PM0070	1	The solution should maintain a history of the tax information in the provider record according to West Virginia business rules.	Foster Care Policy		X		
PM0071	1	The solution should capture and update provider information.	Not Applicable	X			
PM0072	1	The solution should record and track provider training.	Not Applicable		X		
PM0073	1	The solution should maintain and update foster care and adoptive home information according to West Virginia business rules, including, but not limited to, the following:	Not Applicable		X		
PM0074	2	Licensing Decisions	Not Applicable		X		
PM0075	2	Violations and Revocations	Not Applicable		X		
PM0076	2	Required Adoption and Foster Care Analysis and Reporting System (AFCARS information)	Not Applicable	X			
PM0077	2	Completed Training	Not Applicable		X		
PM0078	1	The solution should store the following information about Socially Necessary Services (SNS) providers according to West Virginia business rules:	Communication Protocol for Socially Necessary Services	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PM0079	2	Authorization Results	Communication Protocol for Socially Necessary Services	X			
PM0080	2	Start and End Dates	Communication Protocol for Socially Necessary Services	X			
PM0081	2	Corrective Action Plans	Communication Protocol for Socially Necessary Services	X			
PM0082	1	The solution should allow a provider to submit monthly reports electronically.	Communication Protocol for Socially Necessary Services		X		
PM0083	1	The solution should support the waiver review and approval process according to West Virginia business rules.	Standard Operating Procedure Socially Necessary Services Crimes and Waivers		X		
PM0084	1	The solution should support the completion of investigations involving informal, unlicensed/unregistered child care settings.	Child Protective Services Policy	X			
PM0085	1	The solution should capture health and medical information about placement providers according to West Virginia business rules.	Specialized Family Care Program Policy		X		
PM0086	1	The solution should support the process of collecting information about home standards and safety features according to West Virginia business rules.	Specialized Family Care Program Policy	X			
PM0087	1	The solution should allow a user to document if the Adult Protective Services Corrective Action Plan was approved according to West Virginia business rules.	Social Services Manual	X			
PM0088	1	The solution should allow a system user to document if the approved Adult Protective Services Corrective Action Plan was fully implemented according to West Virginia business rules.	Social Services Manual	X			
PM0089	1	The solution should allow a system user to document that an Assisted Living Provider has been licensed, certified, or registered according to West Virginia business rules.	Social Services Manual	X			
PM0090	1	The solution should document that a signed Internal Revenue Service (IRS) Form W-9 was received.	Social Services Manual		X		
PM0091	1	The solution should document the amount and type of training received by Assisted Living staff each quarter.	Social Services Manual		X		
PM0092	1	The solution should allow a system user to document if a provider is to be closed.	Social Services Manual	X			
PM0093	1	The solution should allow the system user to document the reference information according to West Virginia business rules.	Homefinding Policy	X			
PM0094	1	The solution should allow the system user to prepare the provider certificate according to West Virginia business rules.	Homefinding Policy	X			
PM0095	1	The solution should assist the system user with provider development according to West Virginia business rules.	Homefinding Policy	X			
PM0096	1	The solution should allow the system user to document the corrective action plan according to West Virginia business rules.	Homefinding Policy	X			
PM0097	1	The solution should route complaint referrals according to West Virginia business rules.	Homefinding Policy	X			
PM0098	1	The solution should support provider service administration functions according to West Virginia business rules including, but not limited to, the following: services offered, service restrictions, catchment area, and admission criteria.	Not Applicable		X		
PM0099	1	The solution should display the history of all children, placements, and services associated with a provider.	Not Applicable	X			
PM0100	1	The solution should support the development of the provider emergency plan.	Not Applicable	X			
PM0101	1	The solution should support the storage of current and historical provider rates.	Foster Care Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
PM0102	1	The solution should associate more than one provider rate with the same provider record according to West Virginia business rules.	Foster Care Policy	X			
PM0103	1	The solution should allow authorized system users to make changes to provider rates according to West Virginia business rules.	Foster Care Policy	X			
PM0104	1	The solution should allow authorized system users to merge provider records according to West Virginia business rules.	Not Applicable	X			
PM0105	1	The solution should document information about providers opened outside of Department of Health and Human Resources (DHHR) policy.	Not Applicable		X		
PM0106	1	The solution should bi-directionally interface with the DHHR provider module according to West Virginia business rules.	Not Applicable		X		
Security (SC)							
SC0001	1	The Vendor should establish Business Associate Agreements (BAA) or contractual agreements with any subcontractors that have access to data subject to protection by the Health Insurance Portability and Accountability Act (HIPAA). The BAA should contain the following elements at a minimum:	West Virginia Business Associate Agreement	X			
SC0002	2	The content of the Business Associate Agreement (BAA) should be consistent with the West Virginia State standard Business Associate Addendum.	West Virginia Business Associate Agreement	X			
SC0003	2	The vendor should establish Business Associate Agreement (BAA) or contractual agreements with the State to data subject to protection by the Health Insurance Portability and Accountability Act (HIPAA)	West Virginia Business Associate Agreement	X			
SC0004	2	The solution should warn the user about accessing federally protected data and allow the user to confirm and proceed with such actions.	West Virginia Business Associate Agreement	X			
SC0005	2	The vendor should ensure that its employees and sub-contractors complete and maintain required security training and follow State policies regarding security. This should be done, at a minimum, on an annual basis and for all new hires within five (5) business days of being hired.	State IT Policy Documents	X			
SC0006	1	The Vendor should comply with, and maintain, all standards and requirements of the latest version of the FNS Handbook 901. The Vendor should demonstrate (provide proof of) their compliance.	FNS Handbook 901	X			
SC0007	1	The solution should conduct manual overrides in accordance with the approved Change Management Plan.	Not Applicable	X			
SC0008	1	The solution should log manual overrides and report on them at timed intervals as determined by the State.	Not Applicable	X			
SC0009	1	The solution should provide role-based security using unique identifiers (IDs), mandatory password standards, and profile or group access assignments.	Not Applicable	X			
SC0010	1	The solution should authenticate all users when establishing a connection to the Integrated Eligibility Solution.	Not Applicable	X			
SC0011	1	The solution should establish a staggered expiration schedule for required passwords that allows appropriate system users and/or automated system changes or updates.	Not Applicable	X			
SC0012	1	The solution should store passwords in encrypted form.	Not Applicable	X			
SC0013	1	The solution should prohibit the display of passwords on the sign-on screen when entered by the user.	Not Applicable	X			
SC0014	1	The Vendor should enforce password policies for character requirements and updates for all system users as defined by the State and federal requirements.	Not Applicable	X			
SC0015	1	The solution should provide a mechanism to limit access to information based on system user role and program rules.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SC0016	1	The solution should provide role-based access to all system components; create, delete, modify, and assign role-based security to grant view; and modify privileges to individual window, report, data element, cases, and field levels.	Not Applicable	X			
SC0017	1	The solution should update all security roles automatically when a change in the "master" role is made.	Not Applicable	X			
SC0018	1	The solution should allow access and role changes to be made in real-time.	Not Applicable	X			
SC0019	1	The solution should perform multiple levels of workflow approvals for tasks, based on security/role profile and other user-defined criteria.	Not Applicable	X			
SC0020	1	The solution should restrict specific roles from concurrent log-ons (i.e., multiple log-ins to the same user account).	Not Applicable	X			
SC0021	1	The solution should allow self-service password resets by system users.	Not Applicable	X			
SC0022	1	The Vendor should deactivate all system access for system users in real-time upon notification of termination, departure, or reassignment.	Not Applicable	X			
SC0023	1	The solution should send system-generated email notifications of password change events and expiration warnings at configurable intervals.	Not Applicable		X		
SC0024	1	The Vendor should provide a secure web-based method to receive requests for authorization to access the solution.	Not Applicable			X	
SC0025	1	The solution should control access to reports by role.	Not Applicable	X			
SC0026	1	The Vendor should provide Single Sign-On (SSO) capability for authentication and authorization across the enterprise solution.	Not Applicable	X			
SC0027	1	The solution should support member delegated authority according to West Virginia business rules (e.g., assistors, authorized representatives).	Not Applicable	X			
SC0028	1	The solution should support a limit of unsuccessful attempts to access the solution after which the system user account should be locked out.	Not Applicable	X			
SC0029	1	When a system user is locked out as a result of exceeding the number of sign-in attempts, the solution should create a log of access attempts and generate a report to the vendor security management team. A copy of the report should also be sent to a designated State resource for review.	Not Applicable		X		
SC0030	1	The solution should inform system users of privacy policy regulations enforced by the application, including the logging of system users' access attempts to PII/PHI and other actions taken within the application that are subject to privacy reporting and disclosure notification.	Not Applicable	X			
SC0031	1	The solution should automatically suspend all system users who have not accessed the solution within a specified period of time as defined by the State. The suspension requirements should be configurable and distinct for each system environment and user role.	Not Applicable	X			
SC0032	1	The solution should terminate authorized sessions after thirty (30) minutes of inactivity, after a warning message is displayed to the user informing them that the session will terminate in an identified period of time. The timeout requirements should be configurable and distinct for each system environment and user role.	Not Applicable	X			
SC0033	1	The solution should support archiving of user profiles, to be stored for a period of time to be specified by the State.	Not Applicable	X			
SC0034	1	The solution should provide Internal Revenue Service (IRS) approved multi-factor authentication for remote access for authorized system users.	IRS Publication 1075	X			
SC0035	1	The Vendor should protect vendor office locations against intrusion at all times and maintain a surveillance alarm/system that is linked to a manned monitoring center.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SC0036	1	The Vendor should provide 'panic bar' door releases on all locked doors that serve as points of egress in the event of an emergency.	Not Applicable	X			
SC0037	1	The Vendor should disable building access in real-time for staff upon termination, departure, or reassignment from the project.	Not Applicable	X			
SC0038	1	When visiting State facilities, the Vendor staff should adhere to all State security requirements.	Not Applicable	X			
SC0039	1	The Vendor should not attach any non-State owned equipment to any State network without prior permission from the State and an assurance that the equipment meets State security standards. The State, at its discretion, may perform simple network scans that would identify non-State devices.	Not Applicable	X			
SC0040	1	The Vendor should log the entry and exit of visitors and messengers by visitor name, agency represented, date and time of arrival and departure, and the name of the individual to whom the visit is made. Identification and credentials of all visitors should be checked.	Not Applicable	X			
SC0041	1	The Vendor should maintain an operational back- up power supply capable of supporting vital functions.	Not Applicable	X			
SC0042	1	The Vendor should protect the vendor's data center location(s) against intrusion at all times and maintain a surveillance alarm/system that is linked to a manned monitoring center.	Not Applicable	X			
SC0043	1	The Vendor should provide the State access to all facilities to conduct announced and unannounced visits of vendor's facilities	Not Applicable	X			
SC0044	1	The Vendor should maintain a current database of individuals who have access to its facilities. The database should be available for State inspection upon request.	Not Applicable	X			
SC0045	1	The solution should audit and track all activity specific to each user, including but not limited to:	Not Applicable	X			
SC0046	2	Invalid log-in attempts	Not Applicable	X			
SC0047	2	Transaction activities	Not Applicable	X			
SC0048	2	Track adds, changes, and deletes of individual member data	Not Applicable	X			
SC0049	2	Password changes	Not Applicable	X			
SC0050	2	Security Question / Key Creation	Not Applicable	X			
SC0051	2	Updates to Security Questions	Not Applicable	X			
SC0052	2	User Navigation History	Not Applicable	X			
SC0053	2	Comprehensive History of Assigned Cases	Not Applicable	X			
SC0054	2	Other elements as defined by the State.	Not Applicable	X			
SC0055	1	The solution should collect sufficient detail to produce an immutable audit log of all system activity (both manual and automated), including the following elements:	Not Applicable	X			
SC0056	2	User Identification	Not Applicable	X			
SC0057	2	Machine/Internet Protocol Address Identification	Not Applicable	X			
SC0058	2	Time and Date of Action	Not Applicable	X			
SC0059	2	Actions Performed	Not Applicable	X			
SC0060	2	Other elements as defined by the State.	Not Applicable	X			
SC0061	1	The Vendor should provide authorized requestors a report containing the security profile for an individual or role.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SC0062	1	The solution should record an immutable audit log of security role assignment and revocation activities performed within the solution and changes to security role assignments on servers and in databases.	Not Applicable	X			
SC0063	1	The solution should generate audit reports and based on a request from authorized requestors at the State.	Not Applicable		X		
SC0064	1	The Vendor should provide a Disaster Recovery Plan and maintain the plan with at least annual updates.	Not Applicable	X			
SC0065	2	The Contingency Plan should include: - Established processes for business impact analysis that determine the severity and impact of an emergency event; - Provision of an analysis of operational capabilities to the State immediately following any emergency event; and - Recommendations and associated risks to the State following any emergency event	Not Applicable	X			
SC0066	2	The established Emergency Plan should include: - Communication plans (should be updated and distributed on a quarterly basis); - Processes for remote support; and - Back-up procedures	Not Applicable	X			
SC0067	2	A structured contingency and escalation process in the case of system outage	Not Applicable	X			
SC0068	1	The Vendor should maintain the same level of security compliance during any interruption of normal operations as outlined in the Contract.	Not Applicable	X			
SC0069	1	The solution should provide a process for accessing all data in the event of an emergency while also maintaining confidentiality and integrity of said data during emergency operations	Not Applicable	X			
SC0070	1	The Vendor should equip facilities with proper safeguards for fire prevention, fire detection, and fire suppression that are consistent with local fire codes.	Not Applicable	X			
SC0071	1	The Vendor should equip fire detection and alarm systems with uninterruptable power supply	Not Applicable	X			
SC0072	1	The Vendor should conduct a disaster recovery exercise and provide the results to the designated State staff on an annually agreed- upon basis. State staff should be included in the exercise.	Not Applicable	X			
SC0073	1	The Vendor should have a remote backup facility at least fifty (50) miles away from the primary data center.	Not Applicable	X			
SC0074	1	The Vendor should provide a Business Continuity Plan explaining business processing in the event of an interruption of normal operations. This plan should be updated annually.	Not Applicable	X			
SC0075	1	The Vendor should deliver reporting on all unauthorized disclosures of Protected Health Information (PHI) immediately upon discovery	HIPAA	X			
SC0076	1	The solution should perform data mapping to identify the Protected Health Information (PHI) contained in the system, the flow of that data through the system, and where that data resides.	HIPAA	X			
SC0077	1	The Vendor should deliver reporting on all unauthorized disclosures of Personally Identifiable Information (PII) immediately upon discovery	HIPAA	X			
SC0078	1	The Vendor should deliver reporting on all unauthorized disclosures of Federal Tax Information (FTI) immediately upon discovery.	IRS Publication 1075	X			
SC0079	1	The Vendor should deliver reporting on all unauthorized disclosures of data immediately upon discovery	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SC0080	1	The solution should monitor, detect, and report malicious software.	Not Applicable	X			
SC0081	1	The Vendor should conduct penetration testing of the solution. The results should be delivered to the State.	Not Applicable	X			
SC0082	1	The Vendor should deliver a Security, Privacy, and Confidentiality Plan and maintain the plan with at least annual updates.	Not Applicable	X			
SC0083	2	The solution should provide security incident reporting inclusive of mitigation measures to address the reported incident.	Not Applicable	X			
SC0084	2	The Security, Privacy, and Confidentiality Plan should include an incident response plan that aligns with State and federal requirements.	Not Applicable	X			
SC0085	1	The Vendor should deliver the system architectural activity and process diagrams that detail security and privacy controls.	Not Applicable	X			
SC0086	1	The solution should ensure administrative interfaces are not accessible from the public internet portal.	Not Applicable	X			
SC0087	1	All vendor-owned computers and devices should:	Not Applicable	X			
SC0088	2	Be protected by industry standard virus protection software, which is automatically updated with a State approved scan schedule.	Not Applicable	X			
SC0089	2	Install all security patches that are relevant to the applicable operating system and all other system software.	Not Applicable	X			
SC0090	2	The vendor should maintain compatibility with State software and systems.	Not Applicable	X			
SC0091	2	The vendor should utilize only licensed software and hardware solutions that have not been classified as End-of-Life (EOL)	Not Applicable	X			
SC0092	1	The Vendor should sign any documents and agreements that are necessary to keep the vendor in compliance with the State Information Technology Security Policies.	WVOT Information Technology Security Policies	X			
SC0093	1	The solution should provide complete logical and physical segregation of the West Virginia Integrated Eligibility Solution data and files from the data and files of other vendor/vendor customers.	Not Applicable	X			
SC0094	1	The vendor should provide State-designated resources with necessary access to components of the solution.	Not Applicable	X			
SC0095	1	The Vendor should conduct information security assessments and audits of the solution (to be conducted internally by the vendor, by the State, or by an external entity hired by the State) as directed by the State.	Not Applicable	X			
SC0096	1	The Vendor should conduct semi-annual security assessments, the results of which should be delivered to the State. The results should include a plan and schedule to mitigate and resolve any findings and workarounds to mitigate the finding during implementation of the permanent fix.	Not Applicable	X			
SC0097	1	The Vendor should conduct a security assessment of any new functionality prior to its deployment to production, the results of which should be delivered to the State. The Vendor should obtain State approval for proposed resolutions to all assessment findings prior to deployment to production.	Not Applicable	X			
SC0098	1	All security assessments conducted by the Vendor should be inclusive of vulnerability scans of the solution and the results of the vulnerability scan should be included with the security assessment results.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SC0099	1	The solution should utilize a Security Information and Event Management (SIEM) solution that generates alerts for attempts to access unauthorized databases and systems from both internal and external sources and monitors and reports on an ongoing basis. Copies of the reports should be provided to the State on a monthly basis.	Not Applicable	X			
SC0100	1	The Vendor should maintain documentation of encryption keys, interface credentials, and service account credentials. The Vendor should provide this documentation to the State any time an update is made.	Not Applicable	X			
SC0101	1	The Vendor should provide continuous monitoring of the solution using Intrusion Detection Software (IDS).	Not Applicable	X			
SC0102	1	The Vendor should provide reports at intervals determined by the State from the Intrusion Detection Software (IDS).	Not Applicable	X			
SC0103	1	The Vendor should provide continuous monitoring of the solution using Intrusion Protection Software (IPS).	Not Applicable	X			
SC0104	1	The Vendor should provide reports at intervals determined by the State from the Intrusion Protection Software (IPS).	Not Applicable	X			
SC0105	1	The solution should allow a case to be designated as confidential according to West Virginia business rules.	Income Maintenance Manual	X			
SC0106	1	The solution should allow for modified access, maintenance, and processing of client records flagged as confidential according to West Virginia business rules.	Income Maintenance Manual	X			
SC0107	1	The solution should mark a case or specific client data within a record confidential on a case-by- case basis according to West Virginia business rules.	BCSE Policy Manual	X			
SC0108	1	The solution should support non-disclosure of information.	BCSE Policy Manual	X			
SC0109	1	The solution should allow an authorized system user to review all case actions and activities that occur in, or are processed by, the solution.	Child Support Enforcement: A Guide for States	X			
SC0110	1	The solution should retain records according to West Virginia policy and regulations.	Child Care Subsidy Policies and Procedures Manual	X			
SC0111	1	The solution should support data freezing according to West Virginia business rules.	Not Applicable		X		
Service Management (SM)							
SM0001	1	The solution should refer individuals who meet all other Qualified Medicare Beneficiary (QMB), Special Low Income Medicare Beneficiary (SLIMB), and Qualified Individual (QI-1) eligibility requirements, but who are not yet enrolled in Medicare Part B, to the Bureau for Medical Services (BMS) Medicare Premium Assistance Unit.	Income Maintenance Manual	X			
SM0002	1	The solution should produce a re-referral to the Medical Review Team (MRT).	Income Maintenance Manual	X			
SM0003	1	The solution should show the user how much more time a case has before a time limit is reached according to West Virginia business rules.	Income Maintenance Manual		X		
SM0004	1	The solution should track the following disability characteristics	Income Maintenance Manual	X			
SM0005	2	Source of Disability Determination	Income Maintenance Manual	X			
SM0006	2	Date of Disability	Income Maintenance Manual	X			
SM0007	2	Type of Disability (total and permanent or occupational)	Income Maintenance Manual	X			
SM0008	2	Disability decision outcome	Income Maintenance Manual	X			
SM0009	2	Most recent contact with client doctor	Income Maintenance Manual		X		
SM0010	2	Disability or incapacity description	Income Maintenance Manual	X			
SM0011	1	The solution should allow for manual overrides of disability determinations according to West Virginia business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0012	1	The solution should allow a system user to refer, or re-refer, a client to the Social Security Administration (SSA).	Income Maintenance Manual			X	
SM0013	1	The solution should re-open, or modify, approved Medicaid case files according to West Virginia business rules.	Income Maintenance Manual	X			
SM0014	1	The solution should track date ranges individuals were in hospitals or facilities for an episode of care.	Income Maintenance Manual	X			
SM0015	1	The solution should capture the primary care physician and current physicians overseeing care.	Income Maintenance Manual		X		
SM0016	1	The solution should capture whether or not the client would like to make their own physician appointments in support of the disability determination process.	Income Maintenance Manual		X		
SM0017	1	The solution should track a beneficiary's employment status.	Income Maintenance Manual	X			
SM0018	1	The solution should assist the system user in determining a client's monthly participation obligation for work activities according to West Virginia business rules and Federal regulations.	Income Maintenance Manual	X			
SM0019	1	The solution should generate and print accounting computations according to West Virginia business rules.	BCSE Policy Manual	X			
SM0020	1	The solution should allow an authorized system user to generate case notes.	BCSE Policy Manual	X			
SM0021	1	The solution should allow an authorized system user to electronically complete and append a case note to one or more case files.	BCSE Policy Manual	X			
SM0022	1	The solution should allow one order to be associated with multiple children according to West Virginia business rules.	BCSE Policy Manual	X			
SM0023	1	The solution should allow one order to be associated with multiple cases according to West Virginia business rules.	BCSE Policy Manual	X			
SM0024	1	The solution should support recording the information required for the fair hearing process.	BCSE Policy Manual	X			
SM0025	1	The solution should support the case lifecycle for all qualifying populations served by the Bureau for Child Support Enforcement (BCSE) according to West Virginia business rules.	BCSE Policy Manual	X			
SM0026	1	The solution should support case changes that result from interstate movement of obligees or obligors according to West Virginia business rules.	BCSE Policy Manual	X			
SM0027	1	The solution should document and track caretaker cooperation with the Bureau for Child Support Enforcement (BCSE).	BCSE Policy Manual	X			
SM0028	1	The solution should support the intake timeframes according to West Virginia business rules.	BCSE Policy Manual	X			
SM0029	1	The solution should support the initial assessment process according to West Virginia business rules.	BCSE Policy Manual	X			
SM0030	1	The solution should track whether the obligor's and/or obligee's address has been verified.	BCSE Policy Manual	X			
SM0031	1	The solution should assist the system user in selection of the correct sources to be checked in response to a locate request.	BCSE Policy Manual	X			
SM0032	1	The solution should allow a system user to conduct obligee locate requests without the case actually being placed into a locate status.	BCSE Policy Manual	X			
SM0033	1	The solution should automatically populate the log used to track locate activity with all automated activity taken to support completion of a locate request.	BCSE Policy Manual	X			
SM0034	1	The solution should query against executed paternity affidavits that do not have active Bureau for Child Support Enforcement (BCSE) cases when initiating a new case.	BCSE Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0035	1	The solution should track the reason that a child has been removed from a case.	BCSE Policy Manual	X			
SM0036	1	The solution should track the total amount of retroactive reimbursement support the obligor is ordered to pay.	BCSE Policy Manual	X			
SM0037	1	The solution should track a Request to Choose an Insurance Plan related to the Child Support program.	BCSE Policy Manual	X			
SM0038	1	The solution should track claimed medical bills.	BCSE Policy Manual	X			
SM0039	1	The solution should update the child support award amount based on medical bills according to West Virginia business rules.	BCSE Policy Manual	X			
SM0040	1	The solution should allow for a person to be appointed as an administrator according to West Virginia business rules.	BCSE Policy Manual	X			
SM0041	1	The solution should document the source used to verify a client's death.	BCSE Policy Manual	X			
SM0042	1	The solution should track the date of death for the client.	BCSE Policy Manual	X			
SM0043	1	The solution should send payments to the administrator of the estate if such monies are due.	BCSE Policy Manual	X			
SM0044	1	The solution should backdate the support obligation according to West Virginia business rules.	BCSE Policy Manual	X			
SM0045	1	The solution should modify obligations to be retroactive according to West Virginia business rules.	BCSE Policy Manual	X			
SM0046	1	The solution should specify an end date for each obligation within an order according to West Virginia business rules.	BCSE Policy Manual	X			
SM0047	1	The solution should allow the system user to enter any type of order according to West Virginia business rules.	BCSE Policy Manual	X			
SM0048	1	The solution should automatically calculate and track interest on arrearages according to West Virginia business rules.	BCSE Policy Manual	X			
SM0049	1	The solution should support the amnesty program for obligors who agree to pay arrearages in a specified period of time according to West Virginia business rules.	BCSE Policy Manual	X			
SM0050	1	The solution should support the suspension of interest according to West Virginia business rules.	BCSE Policy Manual	X			
SM0051	1	The solution should automatically terminate income withholding if the current order has been satisfied in full based on the terms of the order and all arrearages are paid.	BCSE Policy Manual	X			
SM0052	1	The solution should allow the system user to enter and track support withholdings from all sources according to West Virginia business rules.	BCSE Policy Manual	X			
SM0053	1	The solution should allow the system user to override the payment allocation hierarchy in order to make separate payments to the client's attorney.	BCSE Policy Manual	X			
SM0054	1	The solution should calculate the amount of an obligor's lottery winnings that should be paid to offset arrearages.	BCSE Policy Manual	X			
SM0055	1	The solution should support the tax offset administrative review process according to West Virginia business rules.	BCSE Policy Manual	X			
SM0056	1	The solution should allow a system user to enter the date the writ of execution was served.	BCSE Policy Manual	X			
SM0057	1	The solution should support the child support processes during a bankruptcy proceeding on the part of the employer in accordance with West Virginia business rules.	BCSE Policy Manual	X			
SM0058	1	The solution should support the process of monitoring a payment plan according to West Virginia business rules.	BCSE Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0059	1	The solution should support the capture of all information related to the service process according to West Virginia business rules.	BCSE Policy Manual	X			
SM0060	1	The solution should support intergovernmental processes for administrative enforcement according to West Virginia business rules.	BCSE Policy Manual	X			
SM0061	1	The solution should support intergovernmental processes for registration for modification and enforcement according to West Virginia business rules.	BCSE Policy Manual	X			
SM0062	1	The solution should support the use of appropriate foreign currency exchange rates on intergovernmental processes with foreign countries.	BCSE Policy Manual	X			
SM0063	1	The solution should support intergovernmental processes for limited services cases according to West Virginia business rules.	BCSE Policy Manual	X			
SM0064	1	The solution should support retroactive modification of support according to West Virginia business rules.	BCSE Policy Manual	X			
SM0065	1	The solution should support reverse income withholding according to West Virginia business rules.	BCSE Policy Manual	X			
SM0066	1	The solution should determine and maintain the current period, case, and total Unreimbursed Assistance (URA).	BCSE Policy Manual	X			
SM0067	1	The solution should support the determination and distribution of pass-through payments.	BCSE Policy Manual	X			
SM0068	1	The solution should determine the allocation of support payments in accordance with the allocation hierarchies according to West Virginia business rules.	BCSE Policy Manual	X			
SM0069	1	The solution should permit manual adjustment of the default allocation according to West Virginia business rules.	BCSE Policy Manual	X			
SM0070	1	The solution should support the manual allocation process according to West Virginia business rules.	BCSE Policy Manual	X			
SM0071	1	The solution should support the distribution of voluntary support according to West Virginia business rules.	BCSE Policy Manual	X			
SM0072	1	The solution should support the distribution of support payments to multiple obligees according to West Virginia business rules.	BCSE Policy Manual	X			
SM0073	1	The solution should calculate arrearages according to West Virginia business rules.	BCSE Policy Manual	X			
SM0074	1	The solution should support the processing of payments made to local offices according to West Virginia business rules.	BCSE Policy Manual	X			
SM0075	1	The solution should support the process for replacing lost and stolen checks according to West Virginia business rules.	BCSE Policy Manual	X			
SM0076	1	The solution should support the processes for correcting incorrect disbursements to caretakers according to West Virginia business rules.	BCSE Policy Manual	X			
SM0077	1	The solution should support the recoupment of an incorrect disbursement according to West Virginia business rules.	BCSE Policy Manual	X			
SM0078	1	The solution should transmit a completed Temporary Assistance for Needy Families (TANF) referral to the Investigations and Fraud Management Office (IFM)	BCSE Policy Manual	X			
SM0079	1	The solution should track all months in which payments were sent to the obligee when he/she also received Temporary Assistance for Needy Families (TANF).	BCSE Policy Manual	X			
SM0080	1	The solution should refund an obligor according to West Virginia business rules.	BCSE Policy Manual	X			
SM0081	1	The solution should support adjustments to payments and debts due to tax reversals according to West Virginia business rules.	BCSE Policy Manual	X			
SM0082	1	The solution should accept and track changes in an obligor's employment status.	BCSE Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0083	1	The solution should issue and track the following disbursements to third party payers according to West Virginia business rules:	BCSE Policy Manual	X			
SM0084	2	Social Security Administration (SSA)	BCSE Policy Manual	X			
SM0085	2	Employers	BCSE Policy Manual	X			
SM0086	2	Other sources of income	BCSE Policy Manual	X			
SM0087	1	The solution should support the process of suspending allocations and disbursements according to West Virginia business rules.	BCSE Policy Manual	X			
SM0088	1	The solution should identify all cases associated with an individual payor	BCSE Policy Manual	X			
SM0089	1	The solution should maintain a log of cases for which a "stop payment" has been issued.	BCSE Policy Manual	X			
SM0090	1	The solution should issue a disbursement pull request for a case prior to issue according to West Virginia business rules	BCSE Policy Manual	X			
SM0091	1	The solution should track payments returned to the Bureau for Child Support Enforcement (BCSE) due to insufficient funds or fraudulent activity according to West Virginia business rules.	BCSE Policy Manual	X			
SM0092	1	The solution should refer cases between units within the Bureau for Child Support Enforcement (BCSE)	BCSE Policy Manual	X			
SM0093	1	The solution should allow authorized system users to adjust balances within a case according to West Virginia business rules.	BCSE Policy Manual	X			
SM0094	1	The solution should accept, refer, and track parental kidnapping, child custody, and visitation determination locate requests according to West Virginia business rules.	BCSE Policy Manual	X			
SM0095	1	The solution should designate cases as having good cause for non-cooperation with the Bureau for Child Support Enforcement (BCSE) pursuit of support according to West Virginia business rules.	BCSE Policy Manual	X			
SM0096	1	The solution should prevent specific system transactions for cases designated as having good cause for non-cooperation with the Bureau for Child Support Enforcement (BCSE) pursuit of support according to West Virginia business rules.	BCSE Policy Manual	X			
SM0097	1	The solution should support a unique identifier (closure code) detailing the reason for closing a case according to West Virginia business rules.	BCSE Policy Manual	X			
SM0098	1	The solution should reduce the Bureau for Child Support Enforcement (BCSE) services within a case, without closing the case, according to West Virginia business rules.	BCSE Policy Manual	X			
SM0099	1	The solution should automatically close the Bureau for Child Support Enforcement (BCSE) case following the distribution of the 60-Day Closure letter according to West Virginia business rules.	BCSE Policy Manual	X			
SM0100	1	The solution should access closed cases once they have been purged according to West Virginia business rules	BCSE Policy Manual	X			
SM0101	1	The solution should re-open closed cases once they have been purged according to West Virginia business rules.	BCSE Policy Manual	X			
SM0102	1	The solution should support the submission of manual locate request to several sources, even if an automated method exists	Child Support Enforcement: A Guide for States	X			
SM0103	1	The solution should record locate activities to ensure compliance with program standards as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0104	1	The solution should maintain locate activities to ensure compliance with program standards as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0105	1	The solution should track locate activities to ensure compliance with program standards as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0106	1	The solution should initiate necessary actions to meet the State's guidelines for diligent efforts to serve process.	Child Support Enforcement: A Guide for States	X			
SM0107	1	The solution should record the time from successful service-of-process to obligation establishment or other case disposition, regardless of whether paternity needs to be established, to ensure that the following expedited process timeframes are met: -75 percent in 6 months -90 percent in 12 months	Child Support Enforcement: A Guide for States	X			
SM0108	1	The solution should initiate actions based on the time from successful service-of-process to obligation establishment or other case disposition, regardless of whether paternity needs to be established, to ensure that the following expedited process timeframes are met: -75 percent in 6 months -90 percent in 12 months	Child Support Enforcement: A Guide for States	X			
SM0109	1	The solution should track the time from successful service-of-process to obligation establishment or other case disposition, regardless of whether paternity needs to be established, to ensure that the following expedited process timeframes are met: -75 percent in 6 months -90 percent in 12 months	Child Support Enforcement: A Guide for States	X			
SM0110	1	The solution should support the maintenance of a code in the automated case record to indicate reason for dismissal of a support order petition and a date when the State can re-seek an order.	Child Support Enforcement: A Guide for States	X			
SM0111	1	The solution should automatically calculate the support obligation amount using the State's approved child support guidelines.	Child Support Enforcement: A Guide for States	X			
SM0112	1	The solution should maintain the case data required by the Administration for Children and Families (ACF) Child Support Enforcement Guide for States on the application of the calculation guidelines and deviations from the guidelines.	Child Support Enforcement: A Guide for States	X			
SM0113	1	The solution should include all required fields when an order is established, as defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0114	1	The solution should maintain a history of all previously established orders.	Child Support Enforcement: A Guide for States	X			
SM0115	1	The solution should individually identify and link multiple obligations (support orders).	Child Support Enforcement: A Guide for States	X			
SM0116	1	The solution should identify the type of obligation, including but not limited to voluntary, administrative, or court ordered, according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0117	1	The solution should automatically identify IV-A, Foster Care, and Non-IV-A Title XIX-only cases requiring medical support services to determine those cases in which:	Child Support Enforcement: A Guide for States	X			
SM0118	2	The custodial parent, in cases other than Title IV- E Foster Care, and child(ren) do not have satisfactory health insurance other than Title XIX.	Child Support Enforcement: A Guide for States	X			
SM0119	2	Health insurance is available to the non-custodial parent at reasonable cost.	Child Support Enforcement: A Guide for States	X			
SM0120	1	The solution should automatically identify additional cases based on State criteria where there is a high potential for obtaining medical support based on the following:	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0121	2	Evidence that health insurance may be available to the non-custodial parent at reasonable cost.	Child Support Enforcement: A Guide for States	X			
SM0122	2	Facts, as defined by the State, are sufficient to warrant modification of the support order to include health insurance.	Child Support Enforcement: A Guide for States	X			
SM0123	1	The solution should automatically direct the case to the appropriate function upon case initiation, e.g., locate, paternity establishment, and initiate the appropriate case action.	Child Support Enforcement: A Guide for States	X			
SM0124	1	The solution should automatically direct the case to the next appropriate function and initiate the appropriate case action after each function is completed.	Child Support Enforcement: A Guide for States	X			
SM0125	1	The solution should update automated case information received from other programs supported by the Solution (e.g., system users, locate requests, Title IV-A, Title IV-E, Title XIX, etc.) according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0126	1	The solution should track whether data received from the National Directory of New Hires (NDNH), Federal Case Registry (FCR), Internal Revenue Service (IRS), or Asset Verification System (AVS) has been independently verified.	Child Support Enforcement: A Guide for States	X			
SM0127	1	The solution should disallow sharing of client data received from the National Directory of New Hires (NDNH), Federal Case Registry (FCR), Internal Revenue Service (IRS), or Asset Verification System (AVS) that has not been independently verified, with the exception of data from the National Directory of New Hires (NDNH) and Federal Case Registry (FCRF) shared with Title IV-A agencies.	Child Support Enforcement: A Guide for States	X			
SM0128	1	The solution should perform initial edit/validation checks, including numeric and character checks and cross references, to ensure the accuracy and completeness of fields.	Child Support Enforcement: A Guide for States	X			
SM0129	1	The solution should have data elements that identify the source of information or when the source of sensitive information is derived from National Directory of New Hires (NDNH), Federal Case Registry (FCR), IRS, or Financial Institution Data Match (FIDM).	Child Support Enforcement: A Guide for States	X			
SM0130	1	The solution should have an indicator to identify if information has been independently verified.	Child Support Enforcement: A Guide for States	X			
SM0131	1	The solution should accept entry of information on actions taken outside of the solution by the system user.	Child Support Enforcement: A Guide for States	X			
SM0132	1	The solution should prevent the manual editing of records on manually initiated actions not to exceed the end of the business day during which the data was entered in the solution or as established by the State.	Child Support Enforcement: A Guide for States	X			
SM0133	1	The solution should perform case monitoring to ensure that case actions are accomplished within required timeframes.	Child Support Enforcement: A Guide for States	X			
SM0134	1	The solution should track dates to ensure that the timeframes for expedited process, locate, paternity establishment, support order establishment, review and adjustment, and enforcement (including wage withholding) are met.	Child Support Enforcement: A Guide for States	X			
SM0135	1	The solution should automatically initiate the next step in case processing without being prompted by the system user in all scenarios established in the latest version of the Administration of Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0136	1	The solution should notify the system user of any actions automatically initiated that involve the scenarios established in the latest version of the Administration of Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0137	1	The solution should identify and submit for review and adjustment support obligation cases that meet any of the following criteria:	Child Support Enforcement: A Guide for States	X			
SM0138	2	Upon the request of either parent	Child Support Enforcement: A Guide for States	X			
SM0139	2	The case is active TANF, Foster Care or Medicaid and has support rights assigned to the State, and 36 months (or less, based on State option) have elapsed since either the order was established or the most recent review	Child Support Enforcement: A Guide for States	X			
SM0140	1	The solution should track the review and adjustment process to ensure that the following timeframes are met:	Child Support Enforcement: A Guide for States	X			
SM0141	2	Within 180 calendar days of determining that a review should be conducted or locating the non- requesting parent, whichever occurs later, the solution should complete the review and adjustment process.	Child Support Enforcement: A Guide for States	X			
SM0142	1	Within fourteen (14) days after issuance of any order modifying a child support obligation or a determination of no change in the amount of child support, The solution should:	Child Support Enforcement: A Guide for States	X			
SM0143	2	Alert the system user to provide each party with a copy of the order	Child Support Enforcement: A Guide for States	X			
SM0144	2	In the case of a petition for modification, the solution should generate a notice of determination that there should be no change in the amount of the child support award.	Child Support Enforcement: A Guide for States	X			
SM0145	1	The solution should identify cases in which the order does not include health insurance or medical coverage.	Child Support Enforcement: A Guide for States	X			
SM0146	1	For cases in which either parent requests a review, the solution should determine if a review is appropriate based on the age of the order or other criteria according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0147	1	The solution should refer cases to the locate function to locate the parents or the parents' assets according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0148	1	The solution should collect income, asset, employment, and health insurance information through automated interfaces.	Child Support Enforcement: A Guide for States	X			
SM0149	1	The solution should provide a means for entry and edit of data received (including the input of manually obtained financial information), both from interfaces and financial affidavits received from other sources.	Child Support Enforcement: A Guide for States	X			
SM0150	1	The solution should perform all necessary guideline calculations.	Child Support Enforcement: A Guide for States	X			
SM0151	1	The solution should compare guideline calculation against quantitative standard developed by West Virginia.	Child Support Enforcement: A Guide for States	X			
SM0152	1	The solution should provide all information and calculations to the system user for determination of whether an adjustment should be pursued.	Child Support Enforcement: A Guide for States	X			
SM0153	1	The solution should generate all notices to inform parents of proposed actions and their right to challenge such actions.	Child Support Enforcement: A Guide for States	X			
SM0154	1	The solution should generate any documents necessary to seek an adjustment or handle an appeal of such action.	Child Support Enforcement: A Guide for States	X			
SM0155	1	The solution should record all information received and actions taken.	Child Support Enforcement: A Guide for States	X			
SM0156	1	The solution should identify cases eligible for case closure under criteria at 45 Code of Federal Regulation (CFR) 303.11(b)(1), (3), (4), (8), (9), & (10).	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0157	1	For cases eligible for case closure, The solution should initiate the case closure process, or alert the system user to review the case, and, if appropriate, initiate case closure.	Child Support Enforcement: A Guide for States	X			
SM0158	1	The solution should provide for supervisory review of cases either prior to or following closure, and should notify the system user of adecision not to close a case, or a determination that the case was improperly closed	Child Support Enforcement: A Guide for States	X			
SM0159	2	For cases closed under criteria in 45 CFR §303.11 (b)(1) through (6) and (10) through (12), the solution should generate a notice to the service recipient, except that for paragraph (b)(12), the notice should be sent to the initiating State, regarding the intent to close the case, at least 60 days prior to closure.	Child Support Enforcement: A Guide for States	X			
SM0160	1	The solution should identify information in an online index on closed cases, such as parent and child names, Social Security Numbers, and dates of birth, with all case data maintained in an automated format that can be easily retrieved	Child Support Enforcement: A Guide for States	X			
SM0161	1	If any litigation, claim, negotiation, or other action has started prior to the expiration of the three-year period, The solution should maintain records until final disposition or the end of the three-year period, whichever is later.	Child Support Enforcement: A Guide for States	X			
SM0162	1	The solution should contain data elements necessary to identify a case as interstate and identify the other State and its Federal Information Processing Standard (FIPS)	Child Support Enforcement: A Guide for States	X			
SM0163	1	The solution should automatically take the following actions to monitor and enforce support obligations:	Child Support Enforcement: A Guide for States	X			
SM0164	2	The solution should record and maintain the date the non-custodial parent fails to make payments in an amount equal to the support payable for one month or an earlier date in accordance with State law	Child Support Enforcement: A Guide for States	X			
SM0165	2	The solution should automatically initiate income withholding and other appropriate enforcement actions by the beginning of the month following the month in which the non-custodial parent failed to make a payment equal to the support payable for one month.	Child Support Enforcement: A Guide for States	X			
SM0166	2	The solution should continue to automatically monitor compliance with the support order provisions after enforcement action has been initiated	Child Support Enforcement: A Guide for States	X			
SM0167	2	The solution should initiate additional action when appropriate, e.g., liens and bonds, if monitoring reveals that the enforcement action is not effective.	Child Support Enforcement: A Guide for States	X			
SM0168	1	The solution should automatically initiate income withholding and enforcement according to West Virginia business rules	Child Support Enforcement: A Guide for States	X			
SM0169	1	The solution should maintain information in the automated case record on the documents generated in support of income withholding including the documents identified in the latest version of the Administration of Children and Families (ACF) Child Support Enforcement Guide for States	Child Support Enforcement: A Guide for States	X			
SM0170	1	The solution should allow for all federal offset submittal information, actions, and results defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States to be entered in the automated case history	Child Support Enforcement: A Guide for States	X			
SM0171	1	The solution should automatically identify cases that the State has determined are appropriate for state tax refund offset.	Child Support Enforcement: A Guide for States	X			
SM0172	1	All State offset submittal information, actions, and results should be entered in the automated client record including all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States and according to West Virginia business rules	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0173	1	The solution should automatically identify, initiate, and maintain information on cases for which it would be appropriate, under State guidelines, to use a lien or secure a bond.	Child Support Enforcement: A Guide for States	X			
SM0174	1	The solution should automatically generate the required documentation to remove the lien and/or restore the bond when the past-due support is received.	Child Support Enforcement: A Guide for States	X			
SM0175	1	The solution should automatically track the National Medical Support Notice in accordance with policy for all support orders with a provision for health insurance coverage unless a court or administrative order indicates alternative health care coverage rather than employer-based coverage.	Child Support Enforcement: A Guide for States	X			
SM0176	1	The solution should support the State's procedures for passport denial as identified in the Administration for Children and Families Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0177	1	The solution should automatically generate billing notices to non-custodial parents and employers, including a Statement of account containing the correct amount of current and past-due support.	Child Support Enforcement: A Guide for States	X			
SM0178	1	The solution-generated bill should support varied payment/collection cycles (e.g., weekly, monthly, etc.).	Child Support Enforcement: A Guide for States	X			
SM0179	1	The solution-generated bill should provide for payment identification (e.g., return stubs or coupons) supporting various payment cycles.	Child Support Enforcement: A Guide for States	X			
SM0180	1	The solution should accept and uniquely identify all payments.	Child Support Enforcement: A Guide for States	X			
SM0181	1	The solution should provide financial controls for posting and balancing all payment transactions.	Child Support Enforcement: A Guide for States	X			
SM0182	1	The solution should generate documents required to support the deposit of payments/collections to financial institutions in accordance with written procedures.	Child Support Enforcement: A Guide for States	X			
SM0183	1	The solution should accept and process unidentified and/or suspended payments in accordance with State written procedures and should support the identification of such payments.	Child Support Enforcement: A Guide for States	X			
SM0184	1	The solution should automatically record the receipt of payments on fees including interest or late payment penalties and fees and the recovery of costs in the automated case record and in the State's accounting subsystem.	Child Support Enforcement: A Guide for States	X			
SM0185	1	The solution should separately record charges and payments associated with the payment of fees for the costs of genetic tests.	Child Support Enforcement: A Guide for States	X			
SM0186	1	The solution should maintain a genetic testing log to track all actions taken for the establishment of paternity.	BCSE Policy Manual	X			
SM0187	1	The solution should allow the system user to enter notations in the financial portion of the automated case record.	Child Support Enforcement: A Guide for States	X			
SM0188	1	The solution should distribute and disburse support collections in accordance with 45 Code of Federal Regulations (CFR) 302.32, 302.51, 302.52, Office of Child Support Enforcement (OCSE) AT-97-17, OCSE AT-98-24, OCSE AT-07-05, OCSE AT-08-09, and any other relevant regulations and instructions issued by OCSE and/or West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0189	1	The solution should calculate and/or record in the case record all fees, itemized by type, according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0190	1	When a collection is received, the solution should automatically produce a monthly notice of assigned support collections for Title IV-A and former Title IV-A custodial parents who continue to receive Title IV-D services and have outstanding arrearages that have been assigned to the State as described in the latest version of the Administration for Children and Families Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0191	1	The solution should allow the user to enter information about the locate response according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0192	1	The solution should meet all timeframes for all activities as specified in the latest version of the Administration of Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0193	1	The solution should support the process related to the seizure of personal property held by the obligor according to West Virginia business rules.	BCSE Policy Manual	X			
SM0194	1	The solution should record and maintain charges associated with interest, late payment penalties, and/or fees	BCSE Policy Manual	X			
SM0195	1	The solution should support the State's process of managing payment of and recording the mandatory fee for never assistance cases according to State and Federal regulations.	BCSE Policy Manual	X			
SM0196	1	The solution should allow authorized system users to correct misidentified payment information according to West Virginia business rules.	BCSE Policy Manual	X			
SM0197	1	The solution should support the process to itemize the obligation(s) owed on individual cases according to West Virginia business rules including, but not limited to, the following:	BCSE Policy Manual	X			
SM0198	2	Obligation type	BCSE Policy Manual	X			
SM0199	2	Obligation amount	BCSE Policy Manual	X			
SM0200	2	Start and end dates	BCSE Policy Manual	X			
SM0201	1	The solution should support the monitoring of aging of obligations across multiple court orders within a case according to West Virginia business rules.	BCSE Policy Manual	X			
SM0202	1	The solution should maintain information about all agencies related to customer cases according to West Virginia business rules including, but not limited to, the following:	BCSE Policy Manual	X			
SM0203	2	Employers	BCSE Policy Manual	X			
SM0204	2	Other Child Support agencies	BCSE Policy Manual	X			
SM0205	2	Locate sources	BCSE Policy Manual	X			
SM0206	2	Law enforcement	BCSE Policy Manual	X			
SM0207	1	The solution should maintain multiple addresses for all agency types according to West Virginia business rules.	BCSE Policy Manual	X			
SM0208	1	The solution should support the suspension of individual and batch enforcement actions according to West Virginia business rules.	BCSE Policy Manual	X			
SM0209	1	The solution should associate an individual with one or more employers.	BCSE Policy Manual	X			
SM0210	1	The solution should capture and update information about the customer's chosen disbursement method according to West Virginia business rules including, but not limited to, the following:	BCSE Policy Manual	X			
SM0211	2	Direct deposit	BCSE Policy Manual	X			
SM0212	2	Debit card	BCSE Policy Manual	X			
SM0213	2	Paper check	BCSE Policy Manual	X			
SM0214	1	The solution should support the process of monitoring, tracking, and resolving disbursement status according to West Virginia business rules.	BCSE Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0215	1	The solution should allow a payment to be assigned to an alternate payee.	BCSE Policy Manual	X			
SM0216	1	The solution should capture information about a power of attorney.	BCSE Policy Manual	X			
SM0217	1	The solution should accept, maintain, and process information concerning established support orders.	Child Support Enforcement: A Guide for States	X			
SM0218	1	In establishing support orders, The solution should use the State's approved child support guidelines to automatically calculate the support obligation amount.	Child Support Enforcement: A Guide for States	X			
SM0219	1	The solution should maintain documents generated, critical data element changes, all positive locate and asset interface actions, and a monthly summary of all interface activities.	Child Support Enforcement: A Guide for States	X			
SM0220	1	If the system user has multiple options for case action, The solution should do the following:	Child Support Enforcement. A Guide for States	X			
SM0221	2	Notify the system user of the action needed	Child Support Enforcement: A Guide for States	X			
SM0222	2	Identify any default action that the solution should take in the absence of system user action.	Child Support Enforcement: A Guide for States	X			
SM0223	1	Whenever the Title IV-D agency is expecting a response from another party, (e.g., a locate source or a responding State in an interstate case) and the response is late according to West Virginia business rules, the solution should initiate follow-up action, (such as automatic document generation or system user intervention) in order to encourage a response from the other party.	Child Support Enforcement: A Guide for States	X			
SM0224	1	The solution should automatically support Federal tax refund offset.	Child Support Enforcement: A Guide for States	X			
SM0225	1	Prior to submittal, The solution should automatically verify the non-custodial parent's name, Social Security Number, and amount referred for offset, using automated interfaces (where applicable) with State agencies and other sources.	Child Support Enforcement: A Guide for States	X			
SM0226	1	The solution should automatically identify and maintain information on cases for which it would be appropriate, under State guidelines, to use a lien or secured bond.	Child Support Enforcement: A Guide for States	X			
SM0227	1	The solution should automatically generate documents required to impose a lien or secure a bond.	Child Support Enforcement: A Guide for States	X			
SM0228	1	The solution should support the enforcement of spousal support.	Child Support Enforcement: A Guide for States	X			
SM0229	1	The solution should record and monitor spousal support obligations in the scenarios identified in the latest version of the Administration of Children and Families (ACF) Child Support Enforcement: A Guide for States.	Child Support Enforcement: A Guide for States	X			
SM0230	1	The solution should initiate necessary enforcement actions when a delinquency is identified.	Child Support Enforcement: A Guide for States	X			
SM0231	1	The solution should automatically identify cases that meet the State's criteria for matching of other State's financial institutions or other entities where assets may be found.	Child Support Enforcement: A Guide for States	X			
SM0232	1	The solution should provide for supervisory-authorized review of billing suppression or adjustments according to West Virginia business rules, and should notify the system user of decision not to suppress or adjust billing, or determine that billing suppression or adjustment was inappropriate.	Child Support Enforcement. A Guide for States	X			
SM0233	1	The solution should adjust previously processed payments, with supervisory approval, and should notify the system user of decision regarding the requested adjustment, or determination that the adjustment was inappropriate.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0234	1	The solution should maintain a payment history for each case, containing the amount of payment, date of collection, method of payment, date of receipt by the State Disbursement Unit (SDU) vendor, and date of disbursement.	Child Support Enforcement: A Guide for States	X			
SM0235	1	The solution should record and track collections associated with a posted bond.	Child Support Enforcement: A Guide for States	X			
SM0236	1	The solution should record charges and payments associated with the payment of fees for Federal Parent Locator Service (FPLS).	Child Support Enforcement: A Guide for States	X			
SM0237	1	The solution should maintain charges and payments associated with the payment of fees for Federal Parent Locator Service (FPLS).	Child Support Enforcement: A Guide for States	X			
SM0238	1	The solution should within two business days after receipt from employer or other source of periodic income, in other than current IV-A and IV-E cases, distribute and disburse all payments if sufficient information identifying the payee is provided.	Child Support Enforcement: A Guide for States	X			
SM0239	1	The solution should automatically record the payment in the automated case record according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0240	1	The solution should calculate Federal and State collection shares according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0241	1	If costs or fees are imposed on the non-custodial parent, The solution should ensure that the monthly support obligation and any arrearage is satisfied prior to retaining the cost or fee.	Child Support Enforcement: A Guide for States	X			
SM0242	1	In interstate cases, The solution should provide for disbursement to the initiating State within two business days of receipt.	Child Support Enforcement: A Guide for States	X			
SM0243	1	The solution should record in or link to the automated case record the required data about all inter-state transfers.	Child Support Enforcement: A Guide for States	X			
SM0244	1	The solution should recompute the distribution of all collections, when payments are made in the month when due but are received in a later month by the State Disbursement Unit (SDU) vendor.	Child Support Enforcement: A Guide for States	X			
SM0245	1	The solution should recompute distribution with respect to unidentified payments when identifying information is received in a later month according to West Virginia business rules.	Child Support Enforcement: A Guide for States	X			
SM0246	1	The solution should provide the IV-A agency the federally-required information on the amount of monthly support collections received for each IV- A case using an automated interface.	Child Support Enforcement: A Guide for States	X			
SM0247	1	When appropriate, The solution should calculate federal, state, and local collection shares.	Child Support Enforcement: A Guide for States	X			
SM0248	1	The solution should support cost recovery according to West Virginia and federal business rules.	Child Support Enforcement: A Guide for States	X			
SM0249	1	The solution should provide for automatic and continuous monitoring of 'service of process.'	BCSE Policy Manual	X			
SM0250	1	The solution should capture a legal process summary, including but not limited to the following data: hearing dates, service of process activities, hearing type, and hearing results.	BCSE Policy Manual	X			
SM0251	1	The solution should receive and track requests made by parents for lists of substantiated complaints on a child care provider.	Child Care Provider Regulation: Policy & Procedures Manual	X			
SM0252	1	The solution should process requests for Medical Card replacement.	Income Maintenance Manual	X			
SM0253	1	The solution should track the number of years an immigrant has received benefits.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0254	1	The solution should generate a list of referrals sent to Office of Maternal, Child, and Family Health (OMCFH) due to denial of a coverage as a pregnant woman or a pregnant child under West Virginia Children Health Insurance Program (WVCHIP) or Children's Medicaid.	Income Maintenance Manual		X		
SM0255	1	The solution should support the State's process to reimburse a client for out-of-pocket expenses according to West Virginia business rules.	Income Maintenance Manual	X			
SM0256	1	The solution should allow an authorized system user to change the following:	Income Maintenance Manual	X			
SM0257	2	Period of Consideration (POC)	Income Maintenance Manual	X			
SM0258	2	Period of Eligibility (POE)	Income Maintenance Manual	X			
SM0259	2	Certification Period dates	Income Maintenance Manual	X			
SM0260	1	The solution should allow a child care certificate to be re-issued.	Child Care Subsidy Policies and Procedures Manual	X			
SM0261	1	The solution should archive approved child care certificates.	Child Care Subsidy Policies and Procedures Manual	X			
SM0262	1	The solution should maintain a record of the date and reason a new approved child care certificate was issued or an existing child care certificate was re-issued	Child Care Subsidy Policies and Procedures Manua	X			
SM0263	1	The solution should allow the system user to manually change the child care certificate according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0264	1	The solution should track the status of a Bureau for Child Support Enforcement (BCSE) case across all programs according to West Virginia business rules	Income Maintenance Manual			X	
SM0265	1	The solution should allow authorized users to back-date Medicaid eligibility for a configurable amount of time.	Income Maintenance Manual	X			
SM0266	1	The solution should set the schedule for future re-determinations after eligibility is determined according to West Virginia business rules.	Income Maintenance Manual	X			
SM0267	1	The solution should support the State's appeals process according to West Virginia business rules.	State Medicaid Plan	X			
SM0268	1	The solution should support West Virginia business rules for the Early and Periodic Screening, Diagnosis, and Treatment program.	Medicaid Provider Manual Chapter 400, Member Eligibility	X			
SM0269	1	The solution should document the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) results.	Not Applicable	X			
SM0270	1	The solution should set the services start and end date based on West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0271	1	The solution should support the process for documenting and approving all reason(s) for care including, but not limited to, the following:	Child Care Subsidy Policies and Procedures Manual	X			
SM0272	2	Working	Child Care Subsidy Policies and Procedures Manual	X			
SM0273	2	WV WORKS	Child Care Subsidy Policies and Procedures Manual	X			
SM0274	2	Going to school	Child Care Subsidy Policies and Procedures Manual	X			
SM0275	2	Self-employment	Child Care Subsidy Policies and Procedures Manual	X			
SM0276	2	Medical condition	Child Care Subsidy Policies and Procedures Manual	X			
SM0277	2	Child Protective Services (CPS) Safety Plan	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0278	2	Protective Capacities Family Assessment	Child Care Subsidy Policies and Procedures Manual	X			
SM0279	2	Court Order received	Child Care Subsidy Policies and Procedures Manual	X			
SM0280	1	The solution should track approved job search time.	Child Care Subsidy Policies and Procedures Manual	X			
SM0281	1	The solution should allow the user to document the activity schedule of the parent.	Child Care Subsidy Policies and Procedures Manual	X			
SM0282	1	The solution should support the process for verifying and documenting satisfactory progress and attendance for parents with an approved job training/education activity according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0283	1	The solution should support the granting and tracking of an "improvement period" for students according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual		X		
SM0284	1	The solution should support the approval and tracking of interim child care according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual		X		
SM0285	1	The solution should capture information about all family members according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0286	1	The solution should allow the user to verify all forms of income.	Child Care Subsidy Policies and Procedures Manual	X			
SM0287	1	The solution should automatically end date certain elements at case closure according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0288	1	The solution should allow the system user to manually close a case according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0289	1	The solution should allow a system user to add an individual to a case.	Child Care Subsidy Policies and Procedures Manual	X			
SM0290	1	The solution should allow the system user to make changes in the days and/or hours of care during the certificate period.	Child Care Subsidy Policies and Procedures Manual	X			
SM0291	1	The solution should allow a child to be connected to a child care provider with an eligibility period.	Child Care Subsidy Policies and Procedures Manual	X			
SM0292	1	The solution should capture information about negative actions.	Child Care Subsidy Policies and Procedures Manual	X			
SM0293	1	The solution should support the intake of all regulatory complaints regardless of provider type.	Child Care Subsidy Policies and Procedures Manual		X		
SM0294	1	The solution should capture information related to a hearing/grievance.	Child Care Subsidy Policies and Procedures Manual		X		
SM0295	1	The solution should assign the complaint according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual		X		
SM0296	1	The solution should capture information about pre-hearing conferences and hearings.	Child Care Subsidy Policies and Procedures Manual		X		
SM0297	1	The solution should notify the appropriate Early Care and Education (ECE) technical assistance specialist whenever a client or provider requests a hearing.	Child Care Subsidy Policies and Procedures Manual		X		
SM0298	1	The solution should process approval for payments to providers by child according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0299	1	The solution should check the approved days against those entered for payment.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0300	1	The solution should produce the written notification to a provider that a manual payment will be processed.	Child Care Subsidy Policies and Procedures Manual	X			
SM0301	1	The solution should send the payment request to the supervisor for approval in real time.	Child Care Subsidy Policies and Procedures Manual	X			
SM0302	1	The solution should authorize and track a partial payment.	Child Care Subsidy Policies and Procedures Manual	X			
SM0303	1	The solution should allow the system user to backdate payments according to West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual	X			
SM0304	1	The solution should pay Early Head Start and Head Start Programs based on West Virginia business rules.	Child Care Subsidy Policies and Procedures Manual		X		
SM0305	1	The solution should reverse payments per child per amount.	Not Applicable	X			
SM0306	1	The solution should capture information about partial payment reversals per child.	Not Applicable	X			
SM0307	1	The solution should allow for an override of payment.	Not Applicable	X			
SM0308	1	The solution should require the system user to select a specific reason for an override based according to West Virginia business rules.	Not Applicable	X			
SM0309	1	The solution should document contact and allowable utilization information for a primary and a back-up provider.	Child Care Subsidy Policies and Procedures Manual	X			
SM0310	1	The solution should generate a list of substantiated complaints on any licensed or registered provider.	Child Care Subsidy Policies and Procedures Manual	X			
SM0311	1	The solution should create and display the assessment checklist during the creation of a child care assessment.	Not Applicable	X			
SM0312	1	The solution should allow the system user to enter eligible approved child care hours on the child page.	Not Applicable	X			
SM0313	1	The solution should display an overview of the following Child Care assessment details including, but not limited to:	Not Applicable	X			
SM0314	2	Assessment start date	Not Applicable	X			
SM0315	2	Creation date	Not Applicable	X			
SM0316	2	Assessment Date	Not Applicable	X			
SM0317	2	Assessment Status	Not Applicable	X			
SM0318	1	The solution should display the Child Care Service Log.	Not Applicable	X			
SM0319	1	The solution should update the Child Care Service Log.	Not Applicable	X			
SM0320	1	The solution should provide a link on the determination page that allows the viewing of schedule details on the main client schedule page.	Not Applicable	X			
SM0321	1	The solution should produce a Child Care Assessment Completed Signoff document.	Not Applicable	X			
SM0322	1	The solution should capture and retain the signed Child Care Assessment Completed Signoff document.	Not Applicable	X			
SM0323	1	The solution should screen an applicant for (Supplemental Nutrition Assistance Program) SNAP Expedited Service eligibility.	Income Maintenance Manual	X			
SM0324	1	The solution should view and update closure specifics on the household.	Not Applicable	X			
SM0325	1	The solution should provide a process for viewing the checklist for child care case management.	Not Applicable	X			
SM0326	1	The solution should display details of all documents for intake and case management.	Not Applicable	X			
SM0327	1	The solution should allow the system user to enter document tracking information.	Not Applicable	X			
SM0328	1	The solution should allow the system user to complete the case connection for a Child Care intake.	Not Applicable	X			
SM0329	1	The solution should allow the system user to complete the policy exception page.	Not Applicable		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0330	1	The solution should create a contact in the Child Care intake.	Not Applicable	X			
SM0331	1	The solution should allow the system user to review a single contact or all contacts in the Child Care intake.	Not Applicable	X			
SM0332	1	The solution should display in read-only the Quality Tier and Shift Differential Payment Rates for each provider type.	Not Applicable		X		
SM0333	1	The solution should allow the system user to review/access Child Care Demand Payments.	Not Applicable		X		
SM0334	1	The solution should allow the system user to view the invoice client list.	Not Applicable	X			
SM0335	1	The solution should allow the system user to view client payment history within the household record.	Not Applicable	X			
SM0336	1	The solution should create a Child Care Demand Payment.	Not Applicable		X		
SM0337	1	The solution should create an Office of Social Services (OSS) Demand Payment.	Not Applicable		X		
SM0338	1	The solution should allow the system user to review and update Office of Social Services (OSS) Demand Payments.	Not Applicable		X		
SM0339	1	The solution should display the list of clients being paid for in an individual notice for the Office of Social Services (OSS) Demand Payment.	Not Applicable		X		
SM0340	1	The solution should add a new Office of Social Services (OSS) Demand Payment.	Not Applicable		X		
SM0341	1	The solution should allow the system user to review a previously entered Office of Social Services (OSS) Demand Payment marked as verified.	Not Applicable		X		
SM0342	1	The solution should allow the system user to review and/or update a previously entered Office of Social Services (OSS) Demand Payment that is not marked as verified.	Not Applicable		X		
SM0343	1	The solution should record contact/referral information.	Not Applicable	X			
SM0344	1	The solution should collect intake/referral information.	Not Applicable	X			
SM0345	1	The solution should perform searches for prior history of persons or incidents.	Not Applicable		X		
SM0346	1	The solution should record "information only" requests.	Not Applicable		X		
SM0347	1	The solution should evaluate intake information according to West Virginia business rules.	Child Protective Services Policy		X		
SM0348	1	The solution should record the results of the screening evaluation.	Not Applicable	X			
SM0349	1	The solution should establish a case record(s) according to West Virginia business rules.	Child Protective Services Policy		X		
SM0350	1	The solution should refer a case or application for investigation and/or services, as appropriate, according to West Virginia business rules.	Child Protective Services Policy		X		
SM0351	1	The solution should collect and record investigation information according to West Virginia business rules.	Child Protective Services Policy		X		
SM0352	1	The solution should record the investigation decision.	Not Applicable	X			
SM0353	1	The solution should generate specified documents as required in response to an investigation according to West Virginia business rules.	Child Protective Services Policy		X		
SM0354	1	The solution should determine and record risk assessments according to West Virginia business rules.	Child Protective Services Policy		X		
SM0355	1	The solution should perform risk assessments according to West Virginia business rules.	Child Protective Services Policy		X		
SM0356	1	The solution should collect and record special needs/problems information.	Not Applicable	X			
SM0357	1	The solution should determine and record the needed services.	Not Applicable		X		
SM0358	1	The solution should prepare and record referrals to other agencies according to West Virginia business rules.	Not Applicable		X		
SM0359	1	The solution should collect and record further case information.	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0360	1	The solution should identify and match services to meet the client's case plan needs.	Not Applicable		X		
SM0361	1	The solution should record contact with and acquisition of needed resources and services.	Not Applicable	X			
SM0362	1	The solution should track and update the service/case plan(s).	Not Applicable	X			
SM0363	1	The solution should match client(s) to placement alternatives, if needed, according to West Virginia business rules.	Not Applicable		X		
SM0364	1	The solution should generate service/case plan documents, as needed, according to West Virginia business rules.	Not Applicable		X		
SM0365	1	The solution should request and record supervisory approval of a plan.	Not Applicable	X			
SM0366	1	The solution should estimate and track actual costs of resources/services.	Not Applicable	X			
SM0367	1	The solution should identify program outcome measures.	Not Applicable	X			
SM0368	1	The solution should record collateral contacts.	Not Applicable	X			
SM0369	1	The solution should track and record services identified in the service/case plan.	Not Applicable		X		
SM0370	1	The solution should generate documents, notices, and reports on the monitoring service/case plan services.	Not Applicable		X		
SM0371	1	The solution should record the following:	Not Applicable	X			
SM0372	2	Maltreatment in care	Not Applicable	X			
SM0373	2	Investigation results	Not Applicable	X			
SM0374	1	The solution should monitor and track court related events.	Not Applicable		X		
SM0375	1	The solution should automatically request an investigation and track the case to its completion when dealing with cases involving an apparent problem of abuse or neglect in a foster home.	Not Applicable		X		
SM0376	1	The solution should capture and maintain all data necessary to effectively manage a case.	Not Applicable		X		
SM0377	1	The solution should support a formalized process of making Child Protective Services/Adult Protective Services investigation data corrections.	West Virginia DHHR Annual Progress Services Report		X		
SM0378	1	The solution should capture all of the reasons for children entering care according to West Virginia business rules.	West Virginia DHHR Annual Progress Services Report		X		
SM0379	1	The solution should capture data on disrupted adoptions, including international adoptions.	West Virginia DHHR Annual Progress Services Report		X		
SM0380	1	The solution should automatically check for newly closed investigations/assessments and generate notifications about the closures according to West Virginia business rules.	Child Protective Services Policy		X		
SM0381	1	The solution should capture the initial services authorization information including the following:	Socially Necessary UM Manual	X			
SM0382	2	Date authorized	Socially Necessary UM Manual	X			
SM0383	2	The individual who authorized the services	Socially Necessary UM Manual	X			
SM0384	2	The services start date	Socially Necessary UM Manual	X			
SM0385	2	The services end date for each Socially Necessary Service at the client level.	Socially Necessary UM Manual	X			
SM0386	1	The solution should maintain the initial services authorization information including number of days and number of units for each Socially Necessary Service (SNS).	Socially Necessary UM Manual	X			
SM0387	1	The solution should support the documentation of the review process for authorization of services that exceed the maximum total authorizations available according to West Virginia business rules.	Socially Necessary UM Manual		X		
SM0388	1	The solution should support the administration of the strengths and needs assessments according to West Virginia business rules.	Social Services Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0389	1	The solution should capture information related to a relinquishment according to West Virginia business rules.	Adoption Policy Manual		X		
SM0390	1	The solution should capture information and recommendations collected during the Comprehensive Assessment and Planning System (CAPS) process according to West Virginia business rules.	Adoption Policy Manual		X		
SM0391	1	The solution should capture information related to the child's relatives, results of a diligent search for additional relatives, and the results of communications with relatives.	Adoption Policy Manual		X		
SM0392	1	The solution should document all placement types according to West Virginia business rules.	Adoption Policy Manual		X		
SM0393	1	The solution should track occurrences where a child was placed with a non-certified kinship/relative(s).	Adoption Policy Manual		X		
SM0394	1	The solution should support the documentation of all placement contacts including progress reports and case staffing according to West Virginia business rules.	Adoption Policy Manual		X		
SM0395	1	The solution should support the documentation of contacts related to attempts to place children with their siblings including the reasons why siblings are not placed together.	Adoption Policy Manual		X		
SM0396	1	The solution should capture all of the information required in the Child, Youth and Family Case Plan according to West Virginia business rules.	Adoption Policy Manual		X		
SM0397	1	The solution should print the Child, Youth and Family Case Plan into a file format that can be edited by the user.	Adoption Policy Manual		X		
SM0398	1	The solution should pre-populate the Child, Youth and Family Case Plan.	Adoption Policy Manual		X		
SM0399	1	The solution should maintain the version history of the Child, Youth, and Family Case Plan.	Adoption Policy Manual		X		
SM0400	1	The solution should allow the user to enter information about changes or modifications made to a new version of the Child, Youth, and Family Case Plan.	Adoption Policy Manual	X			
SM0401	1	The solution should capture all of the information required by the Youth Services case plans and assessments.	Adoption Policy Manual		X		
SM0402	1	The solution should capture all of the information required when a child enters foster case through a voluntary placement.	Adoption Policy Manual		X		
SM0403	1	The solution should capture all of the information required when a child enters foster care according to West Virginia business rules.	Adoption Policy Manual		X		
SM0404	1	The solution should generate a list of Multi- Disciplinary Team (MDT) participants for the confidentiality signature sheet according to West Virginia business rules	Adoption Policy Manual		X		
SM0405	1	The solution should capture information about the Multi-disciplinary Team (MDT) according to West Virginia business rules.	Adoption Policy Manual		X		
SM0406	1	The solution should allow the user to document outcomes of hearings.	Adoption Policy Manual	X			
SM0407	1	The solution should allow the user to document requests for court orders.	Adoption Policy Manual	X			
SM0408	1	The solution should capture if there is an obligation for the parents to continue payment of child support after termination of parental rights.	Adoption Policy Manual		X		
SM0409	1	The solution should allow the user to complete the Transfer Plan according to West Virginia business rules.	Adoption Policy Manual		X		
SM0410	1	The solution should allow the user to create a State Ward Record.	Adoption Policy Manual		X		
SM0411	1	The solution should support the Adoption Resource Network (ARN) referral process according to West Virginia business rules.	Adoption Policy Manual		X		
SM0412	1	The solution should document the consent or approval of a child twelve (12) years of age or older to be placed on the Adoption Resource Network.	Adoption Policy Manual		X		
SM0413	1	The solution should capture the following information:	Adoption Policy Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0414	2	All placement choices	Adoption Policy Manual		X		
SM0415	2	Decisions made by the Multi-Disciplinary Treatment Team (MDT) and/or Adoption Review Committee	Adoption Policy Manual		X		
SM0416	2	Actions taken with each placement choice	Adoption Policy Manual	X			
SM0417	2	The Visitation Plan	Adoption Policy Manual	X			
SM0418	2	Actual visits	Adoption Policy Manual	X			
SM0419	1	The solution should capture information about referrals for out-of-state placement in West Virginia received through the Interstate Compact on the Placement of Children (ICPC).	ICPC Process for DHHR Staff		X		
SM0420	1	The solution should create custom dashboards based on user roles for Interstate Compact on the Placement of Children (ICPC) cases.	ICPC Process for DHHR Staff		X		
SM0421	1	The solution should allow the system user to record information about contacts throughout the case process according to West Virginia business rules.	Adoption Policy Manual	X			
SM0422	1	The solution should edit/modify a contact within the system according to West Virginia business rules.	Adoption Policy Manual	X			
SM0423	1	The solution should copy a contact across cases according to West Virginia business rules.	Adoption Policy Manual		X		
SM0424	1	The solution should filter contacts as defined by the State.	Adoption Policy Manual		X		
SM0425	1	The solution should support the permanency placement review process according to West Virginia business rules.	Adoption Policy Manual		X		
SM0426	1	The solution should support documentation of all information related to the court review according to West Virginia business rules.	Adoption Policy Manual	X			
SM0427	1	The solution should support the life skills assessment process.	Adoption Policy Manual		X		
SM0428	1	The solution should modify the life skills assessment	Adoption Policy Manual		X		
SM0429	1	The solution should allow the user to complete the Learning Plan and allow the system user to update it.	Adoption Policy Manual		X		
SM0430	1	The solution should allow the user to generate the Learning Plan and allow the system user to update it	Adoption Policy Manual		X		
SM0431	1	The solution should allow the user to complete the Transition Plan and allow the system user to update it.	Adoption Policy Manual		X		
SM0432	1	The solution should allow the user to generate the Transition Plan and allow the system user to update it.	Adoption Policy Manual		X		
SM0433	1	The solution should allow the user to complete the Application for Adoption Services.	Adoption Policy Manual	X			
SM0434	1	The solution should track the status of the petition for adoption according to West Virginia business rules.	Adoption Policy Manual		X		
SM0435	1	The solution should allow the user to complete the confidential report to be submitted to the judge prior to the hearing.	Adoption Policy Manual		X		
SM0436	1	The solution should allow the user to generate the confidential report to be submitted to the judge prior to the hearing.	Adoption Policy Manual		X		
SM0437	1	The solution should notify the child support enforcement program when an adoption is final according to West Virginia business rules.	Adoption Policy Manual		X		
SM0438	1	The solution should document the reason a child is eligible for adoption assistance payments according to West Virginia business rules.	Adoption Policy Manual		X		
SM0439	1	The solution should track requests from adoptive parents to extend the subsidy.	Adoption Policy Manual		X		
SM0440	1	The solution should document a parent's refusal of extended Medicaid coverage	Adoption Policy Manual		X		
SM0441	1	The solution should determine eligibility for the Chafee Education and Training Voucher.	Adoption Policy Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0442	1	The solution should track the Chafee Education and Training Voucher expenditures.	Adoption Policy Manual		X		
SM0443	1	The solution should track children who meet the criteria for the Children with Special Health Care Needs Program.	Adoption Policy Manual		X		
SM0444	1	The solution should track appeals and/or grievances and appeal and/or grievance decisions according to West Virginia business rules.	Adoption Policy Manual		X		
SM0445	1	The solution should support the Mutual Consent Adoption Registry process according to West Virginia business rules.	Adoption Policy Manual		X		
SM0446	1	The solution should support the user in determining the appropriate actions based on the nature of the referral according to West Virginia business rules.	Child Protective Services Policy		X		
SM0447	1	The solution should maintain the current state statutes pertaining to Child Protective Services (CPS).	Child Protective Services Policy		X		
SM0448	1	The solution should automatically conduct a search at intake of available databases for any prior involvement with Department of Health and Human Resources (DHHR) as defined by the State.	Child Protective Services Policy		X		
SM0449	1	The solution should support the completion of the protection plan according to West Virginia business rules.	Child Protective Services Policy		X		
SM0450	1	The solution should support the storage of the protection plan according to West Virginia business rules.	Child Protective Services Policy	X			
SM0451	1	The solution should support the completion of the written report of the investigation.	Child Protective Services Policy		X		
SM0452	1	The solution should support the storage of the written report of the investigation.	Child Protective Services Policy	X			
SM0453	1	The solution should allow the user to complete the Disposition of Child Protective Services Investigation Report for Family and Circuit Court form.	Child Protective Services Policy		X		
SM0454	1	The solution should support the collection of all data required during the intake process according to West Virginia business rules.	Child Protective Services Policy		X		
SM0455	1	The solution should provide decision support to assist the user in determining if an assessment should be performed according to West Virginia business rules.	Child Protective Services Policy		X		
SM0456	1	The solution should provide decision support to assist the user in determining the appropriate response times for various actions according to West Virginia business rules.	Child Protective Services Policy		X		
SM0457	1	The solution should allow the user to complete the Child Protective Services Report for Law Enforcement.	Child Protective Services Policy		X		
SM0458	1	The solution should allow the user to merge Child Protective Services and/or Adult Protective Services referrals according to West Virginia business rules.	Child Protective Services Policy			X	
SM0459	1	The solution should create a notification when referrals are merged according to West Virginia business rules.	Child Protective Services Policy		X		
SM0460	1	The solution should allow the user to screen out duplicate referrals according to West Virginia business rules.	Child Protective Services Policy	X			
SM0461	1	The solution should support all of the reasons for accepting and screening out a referral according to West Virginia business rules.	Child Protective Services Policy	X			
SM0462	1	The solution should allow the user to connect referrals to the assessment/open case.	Child Protective Services Policy	X			
SM0463	1	The solution should support the user in determining whether to accept a referral and complete a new assessment according to West Virginia business rules.	Child Protective Services Policy		X		
SM0464	1	The solution should allow the user to view all records associated with an individual.	Child Protective Services Policy	X			
SM0465	1	The solution should support the completion of the Initial Critical Incident Reporting form.	Child Protective Services Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0466	1	The solution should allow the user to identify a report during intake as a "Critical Incident."	Child Protective Services Policy	X			
SM0467	1	The solution should capture all of the information required about an alleged maltreater according to West Virginia business rules.	Child Protective Services Policy		X		
SM0468	1	The solution should allow the user to restrict access to the case or provider record according to West Virginia business rules.	Child Protective Services Policy		X		
SM0469	1	The solution should support all of the "Role in Intake" options according to West Virginia business rules.	Child Protective Services Policy	X			
SM0470	1	The solution should allow the user to select more than one "Role in Intake" option according to West Virginia business rules.	Child Protective Services Policy		X		
SM0471	1	The solution should capture an individual's medical and health information according to West Virginia business rules.	Child Protective Services Policy	X			
SM0472	1	The solution should support all of the "allegation of maltreatment" categories and types according to West Virginia business rules.	Child Protective Services Policy	X			
SM0473	1	The solution should support the intake of cases involving the Institutional Investigative Unit (IIU) format.	Child Protective Services Policy	X			
SM0474	1	The solution should document the Institutional Investigative Unit (IIU) setting for the investigation according to West Virginia business rules.	Child Protective Services Policy		X		
SM0475	1	The solution should allow the user to document the results of a search of the West Virginia State Police Sex Offender Registry.	Child Protective Services Policy		X		
SM0476	1	The solution should create a letter to distribute reports of child abuse and neglect convictions according to West Virginia business rules.	Child Protective Services Policy		X		
SM0477	1	The solution should maintain a record of the child abuse and neglect convictions letters sent.	Child Protective Services Policy		X		
SM0478	1	The solution should review the intake for thoroughness according to West Virginia business rules.	Child Protective Services Policy		X		
SM0479	1	The solution should provide decision support to assist the user in preparing for and developing a plan for completion of an assessment.	Child Protective Services Policy		X		
SM0480	1	The solution should allow the user to enter information about an unlimited number of individuals associated with the case and identify their type according to West Virginia business rules.	Child Protective Services Policy	X			
SM0481	1	The solution should allow the user to enter interview results for any individuals associated with the record.	Child Protective Services Policy		X		
SM0482	1	The solution should support the steps involved in completing an assessment of immediate danger according to West Virginia business rules.	Child Protective Services Policy		X		
SM0483	1	The solution should support the steps involved in developing the Temporary Protection Plan according to West Virginia business rules.	Child Protective Services Policy		X		
SM0484	1	The solution should support the steps involved in evaluating safety throughout the life of the case according to West Virginia business rules.	Child Protective Services Policy		X		
SM0485	1	The solution should capture the findings of the maltreatment allegation according to West Virginia business rules.	Child Protective Services Policy		X		
SM0486	1	The solution should support the process of determining whether or not maltreatment has occurred according to West Virginia business rules.	Child Protective Services Policy		X		
SM0487	1	The solution should record the decision resulting from the assessment, the reasons, and the family's response, according to West Virginia business rules.	Child Protective Services Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0488	1	The solution should trigger the appropriate next steps based on the decision resulting from the assessment according to West Virginia business rules.	Child Protective Services Policy		X		
SM0489	1	The solution should support the steps involved in conducting Safety Analysis and Safety Planning, including the creation of the in-home safety plan and the out-of-home safety plan, according to West Virginia business rules.	Child Protective Services Policy		X		
SM0490	1	The solution should allow the user to indicate when the provision for dispute resolution has been initiated.	Child Protective Services Policy		X		
SM0491	1	The solution should look-up service providers and auto-fill contact information based on the look-up results.	Child Protective Services Policy	X			
SM0492	1	The solution should support the process related to petitioning according to West Virginia business rules.	Child Protective Services Policy		X		
SM0493	1	The solution should provide decision support to assist the user in determining if an identified youth is appropriate to begin the wraparound process according to West Virginia business rules.	Child Protective Services Policy			X	
SM0494	1	The solution should provide decision support to assist the user in determining if the assistance of the Circuit Court should be sought according to West Virginia business rules.	Child Protective Services Policy			X	
SM0495	1	The solution should support the creation of the order ratifying the emergency custody of the child pending the filing of a petition according to West Virginia business rules.	Child Protective Services Policy		X		
SM0496	1	The solution should provide decision support to assist the user in determining whether parents who are not the subject of the assessment should be notified if their children are unsafe or have been maltreated according to West Virginia business rules.	Child Protective Services Policy		X		
SM0497	1	The solution should guide the user through the next steps for all of the possible outcomes upon completion of the assessment.	Child Protective Services Policy		X		
SM0498	1	The solution should allow the user to document when an administrative subpoena was issued according to West Virginia business rules.	Child Protective Services Policy			X	
SM0499	1	The solution should support the completion of the assessment where children are determined to be abused or neglected, but safe.	Child Protective Services Policy	X			
SM0500	1	The solution should provide decision support to guide the user in determining whether reasonable efforts to prevent removal are required.	Child Protective Services Policy		X		
SM0501	1	The solution should provide decision support to guide the user in determining whether a petition to terminate parental rights should be filed.	Child Protective Services Policy		X		
SM0502	1	The solution should allow the user to document the reason for an incomplete assessment according to West Virginia business rules.	Child Protective Services Policy	X			
SM0503	1	The solution should allow the user to record critical information about child deaths due maltreatment and the alleged maltreater.	Child Protective Services Policy	X			
SM0504	1	The solution should support the documentation of medical neglect of a disabled child	Child Protective Services Policy	X			
SM0505	1	The solution should support the documentation of drug-affected infants and/or infants/children suffering from Fetal Alcohol Spectrum Disorder according to West Virginia business rules.	Child Protective Services Policy		X		
SM0506	1	The solution should support the process of conducting investigations involving the Institutional Investigative Unit (IIU) for all settings according to West Virginia business rules.	Child Protective Services Policy		X		
SM0507	1	The solution should support the completion of the family assessment according to West Virginia business rules.	Child Protective Services Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0508	1	The solution should support the completion of the treatment plan according to West Virginia business rules.	Child Protective Services Policy		X		
SM0509	1	The solution should support the completion of the treatment plan evaluation process according to West Virginia business rules.	Child Protective Services Policy		X		
SM0510	1	The solution should auto-populate information on the Court Approved Unified Child and Families Case Plan as specified by the State.	Child Protective Services Policy		X		
SM0511	1	The solution should support the completion of the Court Approved Unified Child and Families Case Plan according to West Virginia business rules.	Child Protective Services Policy		X		
SM0512	1	The solution should support the modification of the Court Approved Unified Child and Families Case Plan according to West Virginia business rules	Child Protective Services Policy		X		
SM0513	1	The solution should populate blank fields in the case record based on information entered in the Court Approved Unified Child and Families Case Plan.	Child Protective Services Policy		X		
SM0514	1	The solution should auto-populate information on the Case Plan Progress Report as specified by the State.	Child Protective Services Policy		X		
SM0515	1	The solution should support the completion of the Case Plan Progress Report according to West Virginia business rules.	Child Protective Services Policy	X			
SM0516	1	The solution should support the modification of the Case Plan Progress Report according to West Virginia business rules.	Child Protective Services Policy	X			
SM0517	1	The solution should populate blank fields in the case record based on information contained in the Case Plan Progress Report.	Child Protective Services Policy		X		
SM0518	1	The solution should support the reunification with caregivers process according to West Virginia business rules	Child Protective Services Policy	X			
SM0519	1	The solution should support the final safety evaluation process prior to case closure according to West Virginia business rules.	Child Protective Services Policy		X		
SM0520	1	The solution should support the provision of Child Protective Services (CPS) ongoing services to children abused or neglected, but not unsafe, according to West Virginia business rules	Child Protective Services Policy	X			
SM0521	1	The solution should support the identification and tracking of maltreatment only cases according to West Virginia business rules.	Child Protective Services Policy	X			
SM0522	1	The solution should document and track information related to the hearing process for the client and the provider.	Child Protective Services Policy	X			
SM0523	1	The solution should support the user in determining if a request for a Gibson payment for on-going services should be made according to West Virginia business rules.	Child Protective Services Policy		X		
SM0524	1	The solution should provide decision support to assist the user in determining eligibility for payment for medical services with a Special Medical Card according to West Virginia business rules.	Child Protective Services Policy			X	
SM0525	1	The solution should support the request for and approval of a Special Medical Card according to West Virginia business rules.	Child Protective Services Policy			X	
SM0526	1	The solution should allow the user to capture the following information about the issuance of the Special Medical Card:	Child Protective Services Policy	X			
SM0527	2	Start and end dates	Child Protective Services Policy	X			
SM0528	2	Reason for issuing	Child Protective Services Policy	X			
SM0529	2	Approved services	Child Protective Services Policy	X			
SM0530	1	The solution should support the Special Medical Authorization process according to West Virginia business rules.	Homeless Services Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0531	1	The solution should allow the creation of a Special Medical Authorization according to West Virginia business rules.	Homeless Services Policy		X		
SM0532	1	The solution should allow approval of a Special Medical Authorization according to West Virginia business rules.	Homeless Services Policy		X		
SM0533	1	The solution should support the voluntary placement of a child in the custody of the department process according to West Virginia business rules.	Child Protective Services Policy	X			
SM0534	1	The solution should support the emergency custody processes according to West Virginia business rules.	Child Protective Services Policy	X			
SM0535	1	The solution should document the reasons why visitation is denied or limited according to West Virginia business rules.	Child Protective Services Policy	X			
SM0536	1	The solution should document the reasons why telephone calls are denied or limited according to West Virginia business rules.	Child Protective Services Policy	X			
SM0537	1	The solution should support the participation in and documentation of the court hearing processes according to West Virginia business rules.	Child Protective Services Policy	X			
SM0538	1	The solution should allow the user to record information about parental compliance of child support orders.	Child Protective Services Policy	X			
SM0539	1	The solution should support the documentation of whether or not a parent is responsible for child support according to West Virginia business rules.	Child Protective Services Policy	X			
SM0540	1	The solution should support the completion and transmission of the Foster Care Referral form according to West Virginia business rules.	Child Protective Services Policy		X		
SM0541	1	The solution should allow the user to transmit the Interstate Compact on the Placement of Children (ICPC) Supervision Report.	ICPC Process for DHHR Staff	X			
SM0542	1	The solution should support the referral approval workflow of the youth for the Safe at Home program according to West Virginia business rules.	Safe at Home West Virginia Program Manual			X	
SM0543	1	The solution should support the documentation of all activities for the four phases of the wraparound process.	Safe at Home West Virginia Program Manual	X			
SM0544	1	The solution should support the preparation of the initial wraparound plan.	Safe at Home West Virginia Program Manual	X			
SM0545	1	The solution should allow the wraparound plan to be updated.	Safe at Home West Virginia Program Manual	X			
SM0546	1	The solution should support the preparation of the crisis plan.	Safe at Home West Virginia Program Manual	X			
SM0547	1	The solution should support the generation of the crisis plan.	Safe at Home West Virginia Program Manual	X			
SM0548	1	The solution should support the preparation of the Safe at Home West Virginia Wraparound Monthly Summary form.	Safe at Home West Virginia Program Manual			X	
SM0549	1	The solution should allow the system user to link the qualifying child to the Local Coordinating Agency.	Safe at Home West Virginia Program Manual	X			
SM0550	1	The solution should allow the system user to search the system to determine if the family is already receiving Administrative Service Organization (ASO) services.	Safe at Home West Virginia Program Manual	X			
SM0551	1	The solution should notify the system user when a client in a case with wraparound approval is already receiving Administrative Service Organization (ASO) services.	Safe at Home West Virginia Program Manual	X			
SM0552	1	The solution should guide the system user through the steps that must be taken after the referral has been accepted according to West Virginia business rules.	Safe at Home West Virginia Program Manual			X	
SM0553	1	The solution should support all foster care intake types according to West Virginia business rules.	Foster Care Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0554	1	The solution should provide decision support to assist the system user in determining whether or not to accept a voluntary relinquishment.	Foster Care Policy	X			
SM0555	1	The solution should support the preparation of the Voluntary Relinquishment Agreement.	Foster Care Policy	X			
SM0556	1	The solution should support the documentation of the custody status according to West Virginia business rules.	Foster Care Policy	X			
SM0557	1	The solution should support the preparation of the Child Assessment Form.	Foster Care Policy	X			
SM0558	1	The solution should provide decision support to assist the system user in matching the child's needs to an appropriate placement resource.	Foster Care Policy	X			
SM0559	1	The solution should allow the user to generate referrals to providers selected from the results returned from the placement resource match.	Foster Care Policy	X			
SM0560	1	The solution should support the documentation of children claiming American Indian heritage according to West Virginia business rules.	Foster Care Policy	X			
SM0561	1	The solution should support the creation of the family visitation log at the child and case record level.	Foster Care Policy	X			
SM0562	1	The solution should allow the user to document information about the pre-placement or trial visit.	Foster Care Policy	X			
SM0563	1	The solution should clearly identify an emergency custody status regardless of the placement type.	Foster Care Policy	X			
SM0564	1	The solution should alert the user to change the emergency status according to West Virginia business rules.	Foster Care Policy	X			
SM0565	1	The solution should capture the following, regarding a foster care placement, according to West Virginia business rules:	Foster Care Policy	X			
SM0566	2	The placement recommendation	Foster Care Policy	X			
SM0567	2	Reasons the recommendation is appropriate	Foster Care Policy	X			
SM0568	2	The provider recommendation	Foster Care Policy	X			
SM0569	1	The solution should allow the user to document the placement referral according to West Virginia business rules.	Foster Care Policy	X			
SM0570	1	The solution should trigger the home study application process when information from the kinship/relative safety screen is entered.	Foster Care Policy	X			
SM0571	1	The solution should allow the user to create and transmit the Mentoring and Oversight for Developing Independence with Foster Youth (MODIFY) program referral form according to West Virginia business rules.	Foster Care Policy			X	
SM0572	1	The solution should support the automated placement referral process according to West Virginia business rules.	Foster Care Policy			X	
SM0573	1	The solution should support the request and approval process for use of additional social service funds to pay for specialized family care according to West Virginia business rules.	Foster Care Policy		X		
SM0574	1	The solution should support the process of securing the necessary approvals for Psychiatric Residential Treatment Facility (PRTF) placement.	Foster Care Policy	X			
SM0575	1	The solution should allow the user to create the of the Out of State Placement/ Interstate Compact on Placement of Children (ICPC) program referral packet according to West Virginia business rules including the following:	ICPC Process for DHHR Staff	X			
SM0576	2	The solution should support the system user in tracking the completion of the documentation needed for the Interstate Compact on the Placement of Children (ICPC) Referral Packet.	ICPC Process for DHHR Staff	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0577	2	The solution should allow the user to designate a client record as a West Virginia youth in an out- of-state placement.	ICPC Process for DHHR Staff	X			
SM0578	2	The solution should allow the user to designate a client record as an out-of-state youth placed in West Virginia.	ICPC Process for DHHR Staff	X			
SM0579	2	The solution should allow the system user to record responses from relatives.	Foster Care Policy	X			
SM0580	1	The solution should determine the amount of the State Paid Kinship Care Placement Payment according to West Virginia business rules.	Foster Care Policy			X	
SM0581	1	The solution should support the scheduling of the initial required Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) HealthCheck appointment according to West Virginia business rules.	Foster Care Policy		X		
SM0582	1	The solution should capture all of the information required to determine client eligibility for Title-IV E according to West Virginia business rules.	Foster Care Policy	X			
SM0583	1	The solution should capture all of the information required to determine provider eligibility for Title- IV E according to West Virginia business rules.	Foster Care Policy	X			
SM0584	1	The solution should determine eligibility for Title- IV E funds according to West Virginia business rules.	Foster Care Policy	X			
SM0585	1	The solution should determine eligibility for Title- IV E reimburseability according to West Virginia business rules.	Foster Care Policy	X			
SM0586	1	The solution should identify youth referred to the Regional Clinical Review Process according to West Virginia business rules.	Foster Care Policy			X	
SM0587	1	The solution should support the documentation of all information related to the Regional Clinical Review process according to West Virginia business rules including, but not limited to, the following:	Foster Care Policy			X	
SM0588	2	The referral date	Foster Care Policy	X			
SM0589	2	The review date	Foster Care Policy	X			
SM0590	2	The results of the review	Foster Care Policy	X			
SM0591	1	The solution should capture information about the Inter-Disciplinary Team (IDT) composition and meetings.	Foster Care Policy	X			
SM0592	1	The solution should support the system user in the development of the primary and concurrent permanency plans according to West Virginia business rules.	Foster Care Policy	X			
SM0593	1	The solution should support the documentation of system user visits with children in foster care according to West Virginia business rules.	Foster Care Policy	X			
SM0594	1	The solution should allow the tracking and monitoring of system user visits by system user by case to ensure State and Federal requirements are being met.	Foster Care Policy	X			
SM0595	1	The solution should document the parent's death certificate.	Foster Care Policy	X			
SM0596	1	The solution should allow the system user to document the individual's eligibility for the Medicaid Home and Community Based Waiver (Medley).	Foster Care Policy	X			
SM0597	1	The solution should allow the system user to document if the individual is enrolled in the Medicaid Home and Community Based Waiver.	Foster Care Policy	X			
SM0598	1	The solution should allow the system user to document the individual's eligibility for the Medicaid Personal Care Services (Medley)	Foster Care Policy	X			
SM0599	1	The solution should allow the system user to document if the individual is enrolled in Medicaid Personal Care Services (Medley).	Foster Care Policy	X			
SM0600	1	The solution should allow the system user to document information about medical and health events that occurred while an individual is in temporary custody or permanent guardianship of the department.	Foster Care Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0601	1	The solution should allow the system user to document receipts.	Foster Care Policy	X			
SM0602	1	The solution should allow the system user to document invoices.	Foster Care Policy	X			
SM0603	1	The solution should allow the system user to document if a child is receiving child care assistance.	Foster Care Policy	X			
SM0604	1	The solution should track foster/adoptive parent's use of respite care days	Foster Care Policy	X			
SM0605	1	The solution should allow the system user to document all of the financial resources available to meet the individual's needs according to West Virginia business rules.	Foster Care Policy		X		
SM0606	1	The solution should support the filing of a cause of action lawsuit or claim for a client according to West Virginia business rules.	Foster Care Policy		X		
SM0607	1	The solution should support the process for documenting and tracking a missing, abducted, or runaway client according to West Virginia business rules.	Foster Care Policy	X			
SM0608	1	The solution should support a management view for reported missing, abducted, or runaway clients.	Foster Care Policy	X			
SM0609	1	The solution should document when the runaway, missing, or abducted client has been found.	Foster Care Policy	X			
SM0610	1	The solution should document the request for a consumer credit check report for the client.	Foster Care Policy	X			
SM0611	1	The solution should document the results of the consumer credit check report for the client according to West Virginia business rules.	Foster Care Policy			X	
SM0612	1	The solution should support the submission, review, and approval of the Transitional Living Subsidy Placement Payment according to West Virginia business rules.	Foster Care Policy		X		
SM0613	1	The solution should trigger a IV-E determination according to West Virginia business rules.	Foster Care Policy	X			
SM0614	1	The solution should support the process of assisting a youth to obtain financial assistance for post-secondary education according to West Virginia business rules.	Foster Care Policy			X	
SM0615	1	The solution should support all phases of case planning for foster care cases according to West Virginia business rules.	Foster Care Policy	X			
SM0616	1	The solution should identify if the reporter is a mandatory reporter according to West Virginia business rules.	Social Services Manual	X			
SM0617	1	The solution should support the user in determining if the reporter is a mandatory reporter according to West Virginia business rules.	Social Services Manual	X			
SM0618	1	The solution should allow a user to document that a report of suspected animal cruelty has been made to the county humane officer according to West Virginia business rules	Social Services Manual		X		
SM0619	1	The solution should allow a user to document that a report has been made to the medical examiner according to West Virginia business rules.	Social Services Manual		X		
SM0620	1	The solution should support the process of assessing eligibility for adult services according to West Virginia business rules	Social Services Manual		X		
SM0621	1	The solution should allow a user to input all the required information for an in-home adult protective services referral according to West Virginia business rules.	Social Services Manual		X		
SM0622	1	The solution should allow a user to input all the required information for an institutional/out-of- home adult protective services referral according to West Virginia business rules.	Social Services Manual		X		
SM0623	1	The solution should allow a user to indicate the estimated degree of danger and the reasons for so indicating according to West Virginia business rules.	Social Services Manual	X			
SM0624	1	The solution should trigger a response time appropriate to the estimated degree of danger according to West Virginia business rules	Social Services Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0625	1	The solution should allow the system user to link between the referral and the provider record.	Social Services Manual	X			
SM0626	1	The solution should allow a system user to identify if a referral involves specific situations according to West Virginia business rules.	Social Services Manual		X		
SM0627	1	The solution should allow a system user to document if an interview is not possible according to West Virginia business rules.	Social Services Manual		X		
SM0628	1	The solution should allow a system user to document the reason an interview is not possible according to West Virginia business rules.	Social Services Manual		X		
SM0629	1	The solution should allow a system user to track all documents obtained/reviewed during an investigation.	Social Services Manual	X			
SM0630	1	The solution should allow a system user to create a short-term service plan according to West Virginia business rules.	Social Services Manual		X		
SM0631	1	The solution should allow a system user to close an investigation according to West Virginia business rules.	Social Services Manual	X			
SM0632	1	The solution should allow a user to establish a record on an institution/facility and link it to the investigation according to West Virginia business rules.	Social Services Manual	X			
SM0633	1	The solution should support the process of generating the required notices on disposition of an investigation according to West Virginia business rules.	Social Services Manual		X		
SM0634	1	The solution should support the case review process according to West Virginia business rules.	Social Services Manual		X		
SM0635	1	The solution should allow the system user to document the results of the initial screening, including reasons for screening out the request.	Social Services Manual	X			
SM0636	1	The solution should document and track timeframes for the completion of assessments according to West Virginia business rules.	Social Services Manual		X		
SM0637	1	The solution should support the process of requesting timeframe extensions for the completion of assessments according to West Virginia business rules.	Social Services Manual		X		
SM0638	1	The solution should allow the user to document that a placement is appropriate according to West Virginia business rules.	Social Services Manual	X			
SM0639	1	The solution should document that a trial visit to a provider has occurred according to West Virginia business rules.	Social Services Manual	X			
SM0640	1	The solution should support the process for completion of all provider assessments according to West Virginia business rules.	Social Services Manual		X		
SM0641	1	The solution should allow the system user to document when a patient is being placed in a private pay arrangement.	Social Services Manual	X			
SM0642	1	The solution should allow the system user to document that an Agreement for Participation was completed and signed.	Social Services Manual	X			
SM0643	1	The solution should generate an Agreement for Participation according to West Virginia business rules.	Social Services Manual		X		
SM0644	1	The solution should calculate the rate of payment to Adult Service Placement Providers according to West Virginia business rules.	Social Services Manual	X			
SM0645	1	The solution should allow the system user to document resource deductions according to West Virginia business rules.	Social Services Manual		X		
SM0646	1	The solution should allow the system user to document the amount of client personal expense allowance according to West Virginia business rules.	Social Services Manual		X		
SM0647	1	The solution should document if a client is receiving sheltered employment income and the amount of income received.	Social Services Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0648	1	The solution should document a bed hold if the client must be out of assisted living for a brief period of time according to West Virginia business rules.	Social Services Manual	X			
SM0649	1	The solution should document if a client is eligible for special medical authorization according to West Virginia business rules.	Social Services Manual		X		
SM0650	1	The solution should support the system user in determining if a child is eligible for legal guardianship according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0651	1	The solution should support the system user with the compilation and submission of the documents for review and approval of the consent for transfer according to West Virginia business rules.	Legal Guardianship Policy		X		
SM0652	1	The solution should generate the request for consent to transfer custody from the Department of Health and Human Resources (DHHR) to the legal guardian according to West Virginia business rules.	Legal Guardianship Policy			X	
SM0653	1	The solution should generate the request for consent to transfer guardianship from the Department of Health and Human Resources (DHHR) to the legal guardian according to West Virginia business rules.	Legal Guardianship Policy			X	
SM0654	1	The solution should support the system user to determine a child's eligibility for subsidized legal guardianship according to West Virginia business rules.	Legal Guardianship Policy		X		
SM0655	1	The solution should support the system user to request and obtain approval for an extension of the subsidy payment according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0656	1	The solution should allow the system user to capture the court sanction date according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0657	1	The solution should allow the system user to document the removal and placement information when legal guardianship is disrupted according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0658	1	The solution should allow the system user to enter the disruption date according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0659	1	The solution should automatically end date the subsidy according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0660	1	The solution should recalculate the subsidy amount when a youth in foster care has an infant child of their own according to West Virginia business rules.	Foster Care Policy		X		
SM0661	1	The solution should receive an initial inquiry about foster/adoptive care according to West Virginia business rules.	Homefinding Policy	X			
SM0662	1	The solution should document an initial inquiry about foster/adoptive care according to West Virginia business rules.	Homefinding Policy	X			
SM0663	1	The solution should determine if the individual inquiring about foster/adoptive care has an existing record.	Homefinding Policy	X			
SM0664	1	The solution should allow the system user to document the date the application was received from the prospective foster/adoptive parent.	Homefinding Policy	X			
SM0665	1	The solution should allow the system user to document the date the foster/adoptive parent training was completed.	Homefinding Policy	X			
SM0666	1	The solution should support the system user in determining an applicant's eligibility to become a foster/adoptive parent according to West Virginia business rules.	Homefinding Policy	X			
SM0667	1	The solution should support the system user in documenting an applicant's eligibility to become a foster/adoptive parent according to West Virginia business rules.	Homefinding Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0668	1	The solution should transmit client information using electronic data sources to verify an applicant's citizenship (e.g. through the Social Security Administration or other sources)	Homefinding Policy	X			
SM0669	1	The solution should receive a response to requests for citizenship verification from electronic data sources (e.g., through the Social Security Administration or other sources).	Homefinding Policy	X			
SM0670	1	The solution should transmit a request using electronic data sources to verify an applicant's residency (e.g. through the DMV, Vital Statistics, or other sources)	Homefinding Policy	X			
SM0671	1	The solution should receive a response to requests for residency verification from electronic data sources (e.g., through the DMV, Vital Statistics, or other sources).	Homefinding Policy	X			
SM0672	1	The solution should check the West Virginia Statewide Immunization Information System (WVSIIS) to verify the immunizations of all household members	Homefinding Policy			X	
SM0673	1	The solution should guide the system user through the completion of the home study process according to West Virginia business rules.	Homefinding Policy	X			
SM0674	1	The solution should allow the system user to complete the Statement of Criminal Record according to West Virginia business rules	Homefinding Policy			X	
SM0675	1	The solution should allow the system user to request contracted services according to West Virginia business rules.	Homefinding Policy	X			
SM0676	1	The solution should allow the system user to document the Journey Placement Notebook was provided to the foster/adoptive parents	Homefinding Policy	X			
SM0677	1	The solution should allow the system user to document information about the placement according to West Virginia business rules.	Homefinding Policy	X			
SM0678	1	The solution should allow the system user to document the placement effective date and time	Homefinding Policy	X			
SM0679	1	The solution should date and time stamp the date of data entry of the placement effective date and time.	Homefinding Policy	X			
SM0680	1	The solution should allow the system user to document the placement exit date and time.	Homefinding Policy	X			
SM0681	1	The solution should date and time stamp the date of data entry of the placement exit date and time.	Homefinding Policy	X			
SM0682	1	The solution should allow the system user to document placement with specific caretakers in a contracted agency home	Homefinding Policy	X			
SM0683	1	The solution should automatically notify the Institutional Investigative Unit (IIU) when a Child Protective Services (CPS) complaint on a provider is received according to West Virginia business rules.	Homefinding Policy		X		
SM0684	1	The solution should automatically notify the provider system user and client system user when an Institutional Investigative Unit (IIU) referral on a provider is received according to West Virginia business rules	Homefinding Policy		X		
SM0685	1	The solution should automatically notify the provider system user and client system user when an Institutional Investigative Unit (IIU) referral on a provider is completed according to West Virginia business rules.	Homefinding Policy		X		
SM0686	1	The solution should support the collection of all required information during the intake process according to West Virginia business rules	Youth Services Policy	X			
SM0687	1	The solution should support the documentation of all required information during the intake process according to West Virginia business rules.	Youth Services Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0688	1	The solution should allow the system user to document where information is unavailable or incomplete and the reasons according to West Virginia business rules.	Youth Services Policy		X		
SM0689	1	The solution should support the screening process according to West Virginia business rules.	Youth Services Policy	X			
SM0690	1	The solution should track petitions and ratifications that have been filed according to West Virginia business rules.	Youth Services Policy		X		
SM0691	1	The solution should support the completion of a Youth Services Assessment according to West Virginia business rules.	Youth Services Policy		X		
SM0692	1	The solution should support the approval of a Youth Services Assessment according to West Virginia business rules.	Youth Services Policy		X		
SM0693	1	The solution should allow the system user to document a refusal to cooperate.	Youth Services Policy	X			
SM0694	1	The solution should document the risks and needs assessment according to West Virginia business rules.	Youth Services Policy		X		
SM0695	1	The solution should allow the system user to indicate an assessment is incomplete and record the reason according to West Virginia business rules.	Youth Services Policy		X		
SM0696	1	The solution should support the completion and approval of a Youth Services Safety Plan according to West Virginia business rules.	Youth Services Policy		X		
SM0697	1	The solution should support the completion of a Treatment/Service Plan according to West Virginia business rules.	Youth Services Policy		X		
SM0698	1	The solution should support the approval of a Treatment/Service Plan according to West Virginia business rules.	Youth Services Policy		X		
SM0699	1	The solution should support a Treatment/Service Plan evaluation review and approval process according to West Virginia business rules.	Youth Services Policy		X		
SM0700	1	The solution should support a youth services court case planning process according to West Virginia business rules.	Youth Services Policy		X		
SM0701	1	The solution should support a youth services court case submission process according to West Virginia business rules.	Youth Services Policy		X		
SM0702	1	The solution should allow the system user to update a Case Plan according to West Virginia business rules.	Youth Services Policy		X		
SM0703	1	The solution should support a youth services court case plan review process according to West Virginia business rules.	Youth Services Policy		X		
SM0704	1	The solution should generate the Understanding of the Parties for Foster Care Services Agreement (FC-18) according to West Virginia business rules.	Social Services Manual		X		
SM0705	1	The solution should support the documentation of all items on a Personal Exchange Document Discharge list according to West Virginia business rules.	Social Services Manual		X		
SM0706	1	The solution should support the system user in the completion of an 18+ Discharge Plan according to West Virginia business rules.	Social Services Manual		X		
SM0707	1	The solution should support the documentation of permanent connections according to West Virginia business rules.	Social Services Manual		X		
SM0708	1	The solution should support referral and transition to Adult Services according to West Virginia business rules.	Social Services Manual		X		
SM0709	1	The solution should support the process that allows a youth to apply to return to foster care (FC-18) according to West Virginia business rules.	Social Services Manual		X		
SM0710	1	The solution should allow the system user to receive a referral to Youth Services according to West Virginia business rules.	Youth Services Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0711	1	The solution should generate a Treatment/Service Plan according to West Virginia business rules.	Youth Services Policy		X		
SM0712	1	The solution should generate a Treatment/Service Plan Evaluation according to West Virginia business rules	Youth Services Policy		X		
SM0713	1	The solution should allow a system user to complete an Intake for all Adult Services Programs according to West Virginia business rules.	Social Services Manual		X		
SM0714	1	The solution should allow a system user to indicate if there is imminent danger or potential for imminent danger triggering response times according to West Virginia business rules	Social Services Manual		X		
SM0715	1	The solution should trigger referral disposition response times according to West Virginia business rules.	Social Services Manual	X			
SM0716	1	The solution should allow a system user to submit a mandated reporter form with a time and date stamp according to West Virginia business rules	Social Services Manual	X			
SM0717	1	The solution should receive a mandated reporter form with a time and date stamp according to West Virginia business rules.	Social Services Manual	X			
SM0718	1	The solution should allow a system user to document a client's decision-making capacity according to West Virginia business rules	Social Services Manual		X		
SM0719	1	The solution should provide the capability to pre- populate other required data fields throughout the case record according to West Virginia business rules.	Social Services Manual	X			
SM0720	1	The solution should support the process for filing a guardianship petition in according to West Virginia business rules	Social Services Manual	X			
SM0721	1	The solution should provide decision support to assist the system user in making guardianship decisions on behalf of the client, including:	Social Services Manual	X			
SM0722	2	Organ Donation	Social Services Manual	X			
SM0723	2	Placement Decisions	Social Services Manual	X			
SM0724	2	Medical Decisions	Social Services Manual	X			
SM0725	2	End-of-Life Decisions	Social Services Manual	X			
SM0726	2	Do Not Resuscitate (DNR) Order	Social Services Manual	X			
SM0727	2	Relationship Decisions	Social Services Manual	X			
SM0728	2	Supportive Services Decisions	Social Services Manual	X			
SM0729	1	The solution should support the transition of a client from Foster Care to Adult Guardianship according to West Virginia business rules.	Social Services Manual		X		
SM0730	1	The solution should allow a system user to dispose of a request according to West Virginia business rules	Social Services Manual		X		
SM0731	1	The solution should allow a system user to open a case for all Adult Services Programs according to West Virginia business rules.	Social Services Manual		X		
SM0732	1	The solution should support the referral screening process according to West Virginia business rules	Homeless Services Policy	X			
SM0733	1	The solution should support all initial disposition options according to West Virginia business rules.	Homeless Services Policy		X		
SM0734	1	The solution should support the completion of the Service Plan according to West Virginia business rules	Homeless Services Policy		X		
SM0735	1	The solution should support the authorization of all types of vendor payments according to West Virginia business rules.	Homeless Services Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0736	1	The solution should support the imposition of sanctions according to West Virginia business rules.	Homeless Services Policy		X		
SM0737	1	The solution should allow the provider to impose sanctions according to West Virginia business rules.	Homeless Services Policy		X		
SM0738	1	The solution should allow a system user to enter all required intake information according to West Virginia business rules.	Social Services Manual		X		
SM0739	1	The solution should support the processes related to all required assessments according to West Virginia business rules.	Social Services Manual		X		
SM0740	1	The solution should support the process of donating a body as an anatomical gift according to West Virginia business rules.	Social Services Manual		X		
SM0741	1	The solution should support the services authorization process from referral to payment according to West Virginia business rules.	Adoption Policy Manual	X			
SM0742	1	The solution should support the administration of the Interstate Compact Placement of Children (ICPC) process.	ICPC Process for DHHR Staff	X			
SM0743	1	The solution should track referrals to the Social Security Administration.	Not Applicable	X			
SM0744	1	The solution should create a new subsidy agreement for the same child throughout the life of the case according to West Virginia business rules.	Adoption Policy Manual	X			
SM0745	1	The solution should send a notification of basic demographic information to the West Virginia State Police for entry into National Crime Information Center (NCIC) when a child or adult in State care or guardianship has been determined to be missing.	West Virginia Crime Identification Bureau (CIB) Background Checks Policy			X	
SM0746	1	The solution should configure lists of collaterals by county and associate the lists with any record.	Not Applicable	X			
SM0747	1	The solution should generate payments outside of the case realm according to West Virginia business rules.	Financial Clerk Manual		X		
SM0748	1	The solution should generate the discharge summary report according to West Virginia business rules.	Foster Care Policy		X		
SM0749	1	The solution should allow the system user to open a case for a child received through Interstate Compact on the Placement of Children (ICPC) according to West Virginia business rules.	ICPC Process for DHHR Staff	X			
SM0750	1	The solution should allow the system user to designate a provider record as providing Interstate Compact on the Placement of Children (ICPC) services.	ICPC Process for DHHR Staff	X			
SM0751	1	The solution should allow the system user to configure an alert to track the receipt of the Interstate Compact on the Placement of Children (ICPC) 100B Form.	ICPC Process for DHHR Staff	X			
SM0752	1	The solution should capture and retain the history Title-IV E reimburseability for all Title-IV E placements and service providers.	Foster Care Policy	X			
SM0753	1	The solution should generate Medicaid eligibility for the adoption and subsidized legal guardianship programs based on medical subsidy dates according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0754	1	The solution should identify children with special health care needs.	Not Applicable	X			
SM0755	1	The solution should track successor guardianship agreements according to West Virginia business rules.	Legal Guardianship Policy	X			
SM0756	1	The solution should allow the system user to document an extended stay placement according to West Virginia business rules.	Foster Care Policy	X			
SM0757	1	The solution should track when unmet service needs and placements have been identified.	Foster Care Policy	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0758	1	The solution should support the documentation of Adult Services court/legal processes according to West Virginia business rules.	Social Services Manual		X		
SM0759	1	The solution should support the tracking of Adult Services court/legal processes according to West Virginia business rules.	Social Services Manual		X		
SM0760	1	The solution should support the management of system user visitation.	Not Applicable	X			
SM0761	1	The solution should document client information, based on the type of case being opened, including but not limited to the following:	Not Applicable	X			
SM0762	2	Education	Not Applicable	X			
SM0763	2	Income	Not Applicable	X			
SM0764	2	Demographics	Not Applicable	X			
SM0765	2	Employment	Not Applicable	X			
SM0766	2	Disability	Not Applicable	X			
SM0767	2	Assets	Not Applicable	X			
SM0768	1	The solution should support the creation of the visitation plan.	Not Applicable	X			
SM0769	1	The solution should support the Mentoring and Oversight for Developing Independence with Foster Youth (MODIFY) program eligibility determination and referral process.	Not Applicable			X	
SM0770	1	The solution should allow the system user to make a final decision on the application once it is determined that the applicant actually received the benefits from a community resource and the emergency was eliminated or prevented.	Income Maintenance Manual	X			
SM0771	1	The solution should file a copy of the notification for referral to a community agency in the case record.	Income Maintenance Manual	X			
SM0772	1	The solution should generate a collateral contract for the use of verifying Emergency Assistance needs.	Income Maintenance Manual	X			
SM0773	1	The solution should generate individual entries for each type of benefit received for a particular child when the local office receives children's checks.	Full Financial Clerks Manual	X			
SM0774	1	The solution should store individual entries for each type of benefit received for a particular child when the local office receives children's checks.	Full Financial Clerks Manual	X			
SM0775	1	The solution should retrieve individual entries for each type of benefit received for a particular child when children's checks are received by local offices.	Full Financial Clerks Manual	X			
SM0776	1	The solution should support the encumbrance process according West Virginia business rules.	Full Financial Clerks Manual			X	
SM0777	1	The solution should hold a payment according to West Virginia business rules.	Full Financial Clerks Manual	X			
SM0778	1	The solution should release or delete a held payment according to West Virginia business rules.	Full Financial Clerks Manual	X			
SM0779	1	The solution should allocate payments to the appropriate accounts according to West Virginia business rules.	Full Financial Clerks Manual		X		
SM0780	1	The solution should maintain a history of all payment allocations.	Full Financial Clerks Manual	X			
SM0781	1	The solution should support the work participation program in order for clients to maintain eligibility for SNAP and WV WORKS.	Income Maintenance Manual	X			
SM0782	1	The solution should allow system users to track work activities for WV WORKS recipients according to West Virginia business rules.	Income Maintenance Manual	X			
SM0783	1	The solution should allow authorized system users to update work activities for WV WORKS recipients.	Income Maintenance Manual	X			
SM0784	1	The solution should allow system users to track time clients spend on tasks that support their self-sufficiency goals.	Income Maintenance Manual	X			
SM0785	1	The solution should develop the client's Self- Sufficiency Plan (SSP).	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0786	1	The solution should maintain the Self-Sufficiency Plan (SSP) according to West Virginia business rules.	Income Maintenance Manual	X			
SM0787	1	The solution should generate a separate Self- Sufficiency Plan (SSP) for each work-eligible individual in a household.	Income Maintenance Manual	X			
SM0788	1	The solution should allow an authorized system user to revise the Self-Sufficiency Plan (SSP).	Income Maintenance Manual	X			
SM0789	1	The solution should require that an initial Self- Sufficiency Plan (SSP) be completed during the application process for applicable programs according to West Virginia business rules.	Income Maintenance Manual	X			
SM0790	1	The solution should require that a full Self- Sufficiency Plan (SSP) be completed for applicable programs according to West Virginia business rules.	Income Maintenance Manual	X			
SM0791	1	The solution should support the process for replacement of destroyed food purchased with SNAP benefits according to West Virginia business rules.	Income Maintenance Manual	X			
SM0792	1	The solution should stop SNAP and WV Works issuances according to West Virginia business rules.	Income Maintenance Manual	X			
SM0793	1	The solution should track the client referrals to the Treasury Offset Program (TOP).	Income Maintenance Manual	X			
SM0794	1	The solution should provide an indicator to identify an applicant as being institutionalized.	Income Maintenance Manual	X			
SM0795	1	The solution should modify the way assets are counted on an applicant or client's case based on the presence of the institutionalized indicator.	Income Maintenance Manual	X			
SM0796	1	The solution should provide a means of recording a personal needs allowance for institutionalized individuals	State Medicaid Plan	X			
SM0797	1	The solution should determine accessibility of assets for the SNAP program according to West Virginia business rules.	Income Maintenance Manual	X			
SM0798	1	The solution should process loss or damage settlements according to West Virginia business rules.	Income Maintenance Manual	X			
SM0799	1	The solution should apply a configurable permissible asset transfer timeline, according to West Virginia business rules.	Income Maintenance Manual	X			
SM0800	1	The solution should apply penalties for asset transfers according to West Virginia business rules.	Income Maintenance Manual	X			
SM0801	1	The solution should track past asset transfers for the WV WORKS program over a configurable period of time (Look-Back Period) when determining asset transfer penalties.	Income Maintenance Manual	X			
SM0802	1	The solution should distinguish between permissible and non-permissible asset transfers when determining penalties for asset transfers according to West Virginia business rules.	Income Maintenance Manual	X			
SM0803	1	The solution should retroactively apply benefits according to West Virginia business rules.	Income Maintenance Manual	X			
SM0804	1	The solution should assist system users with determining if an applicant is required to comply with work requirements.	Income Maintenance Manual	X			
SM0805	1	The solution should determine whether an applicant is excluded from work requirements according to West Virginia business rules.	Income Maintenance Manual	X			
SM0806	1	The solution should capture if an applicant or client is exempt from WV WORKS work requirements.	Income Maintenance Manual	X			
SM0807	1	The solution should automatically update SNAP work requirements when an applicant or client becomes exempt from a WV WORKS work requirement.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0808	1	The solution should assist in determining the appropriate SNAP penalty according to West Virginia business rules.	Income Maintenance Manual	X			
SM0809	1	The solution should assist system users in determining if an action by the applicant or client is a "voluntary quit" from a job.	Income Maintenance Manual	X			
SM0810	1	The solution should assist the system user in determining if the applicant or client had "good cause" for voluntarily quitting a job.	Income Maintenance Manual	X			
SM0811	1	The solution should track WorkForce West Virginia registration.	Income Maintenance Manual		X		
SM0812	1	The solution should track a configurable time period after a client is found eligible for SNAP, within which the client must register with WorkForce West Virginia.	Income Maintenance Manual		X		
SM0813	1	The solution should override the default timeline for WorkForce West Virginia registration.	Income Maintenance Manual		X		
SM0814	1	The solution should track the client's required WorkForce West Virginia renewal date	Income Maintenance Manual		X		
SM0815	1	The solution should support the process for restoration of lost benefits according to West Virginia business rules.	Income Maintenance Manual	X			
SM0816	1	The solution should assist system users in determining if an applicant or client meets exemption criteria for a work requirement according to West Virginia business rules.	Income Maintenance Manual	X			
SM0817	1	The solution should lift a sanction when the offender becomes a Supplemental Security Income (SSI) recipient.	Income Maintenance Manual	X			
SM0818	1	The solution should capture supervisor approvals based upon permission types prior to second and subsequent sanction approvals.	Income Maintenance Manual	X			
SM0819	1	The solution should capture the Division of Family Assistance Temporary Assistance for Needy Families (TANF) Policy Unit approvals based upon permission types prior to a fourth and subsequent sanction.	Income Maintenance Manual	X			
SM0820	1	The solution should automatically delay a sanction according to West Virginia business rules.	Income Maintenance Manual	X			
SM0821	1	The solution should place all mandatory work- eligible clients into a relevant and current work component for tracking and monitoring purposes.	Income Maintenance Manual	X			
SM0822	1	The solution should enroll clients in other work activities components to capture time the system user spends with the client	Income Maintenance Manual	X			
SM0823	1	The solution should allow a client to turn over all of or part of their SNAP benefits to a group living facility (GLF).	Income Maintenance Manual	X			
SM0824	1	The solution should track the number of residents in a specific group living facility (GLF) that have elected to have the facility act as an authorized representative.	Income Maintenance Manual		X		
SM0825	1	The solution should track the number of Supplemental Nutrition Assistance Program (SNAP) recipients residing within a Group Living Facility (GLF).	Income Maintenance Manual		X		
SM0826	1	The solution should track an inventory of group living facilities (GLF) approved as retail food stores	Income Maintenance Manual		X		
SM0827	1	The solution should pro-rate benefits for the initial month based on the date of application and the number of days remaining in the month.	Income Maintenance Manual	X			
SM0828	1	The solution should be configured to automatically stop benefits, according to West Virginia business rules.	Income Maintenance Manual	X			
SM0829	1	The solution should determine if a client has outstanding claims with WV WORKS.	Income Maintenance Manual	X			
SM0830	1	The solution should support configurable benefit waiting periods based on West Virginia business rules.	Income Maintenance Manual	X			
SM0831	1	The solution should allow an authorized user to manually update the benefit issuance history to indicate a direct deposit was returned.	Income Maintenance Manual		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0832	1	The solution should identify the reason that the benefit was returned.	Income Maintenance Manual		X		
SM0833	1	The solution should notify an authorized system user whether a client requesting Diversionary Cash Assistance (DCA) has any attributes in their case that would render them ineligible for this form of cash assistance.	Income Maintenance Manual	X			
SM0834	1	The solution should allow the system user to indicate if Diversionary Cash Assistance (DCA) has been issued, and the amount issued at the income group member-level.	Income Maintenance Manual	X			
SM0835	1	The solution should allow the system user to calculate the maximum Diversionary Cash Assistance (DCA) payment according to West Virginia business rules.	Income Maintenance Manual	X			
SM0836	1	The solution should notify an authorized system user whether each income group member is eligible for a Diversionary Cash Assistance (DCA) payment in accordance with West Virginia business rules.	Income Maintenance Manual	X			
SM0837	1	The solution should provide an indicator for cases that have received a Diversionary Cash Assistance (DCA) payment, to ensure that these payments are only made to each income group member one time.	Income Maintenance Manual	X			
SM0838	1	The solution should develop and maintain a queriable inventory of local services contacts, to be populated with local resources provided by the county offices.	Income Maintenance Manual	X			
SM0839	1	The Vendor should maintain the list of local resources with quarterly updates provided by the county offices.	Income Maintenance Manual	X			
SM0840	1	The solution should allow the system user to reinstate benefits according to West Virginia business rules.	Income Maintenance Manual	X			
SM0841	1	The solution should support the issuance of auxiliary benefits according to West Virginia business rules.	Income Maintenance Manual	X			
SM0842	1	The solution should support the expungement process based on West Virginia business rules.	Income Maintenance Manual	X			
SM0843	1	The solution should expunge benefits that have been available for more than 365 days on a daily basis according to West Virginia business rules.	Income Maintenance Manual	X			
SM0844	1	The solution should offset existing claims against a client prior to delivering restored benefits to the client.	Income Maintenance Manual	X			
SM0845	1	The solution should support the SNAP and WV WORKS judicial action process(es) according to West Virginia business rules.	Income Maintenance Manual	X			
SM0846	1	The solution should support the SNAP Fair Hearing process according to West Virginia business rules.	Income Maintenance Manual	X			
SM0847	1	The solution should support the Administrative Disqualification Hearing process according to West Virginia business rules.	Income Maintenance Manual	X			
SM0848	1	The solution should restore lost benefits by the following means.	Income Maintenance Manual		X		
SM0849	2	One-time allotments	Income Maintenance Manual	X			
SM0850	2	Monthly installments	Income Maintenance Manual		X		
SM0851	1	The solution should allow the system user to place a client's case in protective payment status, and as a result, update the payee for the client's benefits.	Income Maintenance Manual	X			
SM0852	1	The solution should designate a substitute payee according to West Virginia business rules.	Income Maintenance Manual	X			
SM0853	1	The solution should designate a vendor recipient for a client's WV WORKS benefit, according to West Virginia business rules.	Income Maintenance Manual	X			
SM0854	1	The solution should support the issuance of corrective payments according to West Virginia business rules.	Income Maintenance Manual	X			
SM0855	1	The solution should track monthly benefit overpayments paid to WV WORKS clients.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0856	1	The solution should track monthly benefit underpayments paid to WV WORKS clients	Income Maintenance Manual	X			
SM0857	1	The solution should track corrective payments paid to SNAP and WV WORKS clients.	Income Maintenance Manual	X			
SM0858	1	The solution should track support services overpayments paid on behalf of WV WORKS clients	Income Maintenance Manual	X			
SM0859	1	The solution should calculate the amount of retroactive payments according to West Virginia business rules.	Income Maintenance Manual	X			
SM0860	1	The solution should track the status of client appeals	Income Maintenance Manual	X			
SM0861	1	The solution should track the total number of months that a client has received WV WORKS benefits.	Income Maintenance Manual	X			
SM0862	1	The solution should automatically update the benefits issuance history with any direct deposits that cannot be completed	Income Maintenance Manual	X			
SM0863	1	The solution should support the Child Support Excess Payment process.	Income Maintenance Manual	X			
SM0864	1	The solution should allow the system user to process a client request for Support Services payments	Income Maintenance Manual	X			
SM0865	1	The solution should allow system users to extend support services during any month for which a WV WORKS payment is made.	Income Maintenance Manual	X			
SM0866	1	The solution should allow the system user to capture Support Service Payment eligibility and set-up payment categories to be processed during the needs assessment interview process.	Income Maintenance Manual	X			
SM0867	1	The solution should allow the system user to reopen a case in order to process Support Service Payments requiring Supervisory approval.	Income Maintenance Manual	X			
SM0868	1	The solution should allow a system user to process Support Service Payments for multiple activity categories not to exceed a configurable maximum payment for each type of expense.	Income Maintenance Manual	X			
SM0869	1	The solution should restrict Support Service Payments from being delivered by direct deposit.	Income Maintenance Manual	X			
SM0870	1	The solution should require that each Support Service Payment be assigned a payment purpose from a defined list of acceptable payment purposes	Income Maintenance Manual	X			
SM0871	1	The solution should limit the type of utility payments may be used for.	Income Maintenance Manual	X			
SM0872	1	The solution should disallow alternate heat sources	Income Maintenance Manual	X			
SM0873	1	The solution should allow alternate heat sources if approved by an individual with the appropriate permissions according to West Virginia business rules.	Income Maintenance Manual	X			
SM0874	1	The solution should track the status of a fair hearing	Income Maintenance Manual	X			
SM0875	1	The solution should log all applications, regardless of how they were received on the Application Register.	Income Maintenance Manual	X			
SM0876	1	The solution should create a Home Visit Register according to West Virginia business rules	Income Maintenance Manual		X		
SM0877	1	The solution should allow the user to create a user-defined register.	Income Maintenance Manual	X			
SM0878	1	The solution should track WV WORKS payments paid to a refugee	Income Maintenance Manual	X			
SM0879	1	The solution should issue mass auxiliary payments to a set of client cases selected by querying the client data base for field(s) on the case.	Income Maintenance Manual	X			
SM0880	1	The solution should allow an authorized system user to refer a Supplemental Nutrition Assistance Program (SNAP) client to the SNAP Employment and Training (E&T) program.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0881	1	The solution should allow the system user to identify clients who are exempt from referral to the Employment and Training (E&T) program according to West Virginia business rules.	Income Maintenance Manual	X			
SM0882	1	The solution should document when an exempt client has volunteered for the Employment and Training (E&T) program.	Income Maintenance Manual	X			
SM0883	1	The solution should track clients in all of the Supplemental Nutrition Assistance Program Employment and Training (SNAP E&T) activities.	Income Maintenance Manual	X			
SM0884	1	The solution should limit the client's participation in the Job Search activity to one month.	Income Maintenance Manual	X			
SM0885	1	The solution should allow the system user to document employer contacts reported by the client.	Income Maintenance Manual	X			
SM0886	1	The solution should document that a client received a transportation reimbursement in a configurable amount according to West Virginia business rules.	Income Maintenance Manual	X			
SM0887	1	The solution should track clients in all SNAP Employment and Training (E&T) activities according to West Virginia business rules.	Income Maintenance Manual	X			
SM0888	1	The solution should allow the system user to document that the client submitted a time sheet, signed by an Employment and Training (E&T) service provider or community partner, each month.	Income Maintenance Manual	X			
SM0889	1	The solution should allow the system user to document monthly Employment and Training (E&T) reports completed by a service provider or community partner.	Income Maintenance Manual	X			
SM0890	1	The solution should track the number of SNAP replacement payments for a client within a configurable period of time according to West Virginia business rules	Income Maintenance Manual	X			
SM0891	1	The solution should create a report based upon the number of SNAP replacement payments for a client within a configurable period of time according to West Virginia business rules.	Income Maintenance Manual		X		
SM0892	1	The solution should process requests to replace any of the following if they are lost, stolen, or damaged:	Income Maintenance Manual	X			
SM0893	2	Support Service Check	Income Maintenance Manual	X			
SM0894	2	Electronic Benefit Transfer (EBT) Cards	Income Maintenance Manual	X			
SM0895	2	Unsuccessful Direct Debit Transactions	Income Maintenance Manual	X			
SM0896	2	Found Original Checks	Income Maintenance Manual	X			
SM0897	1	The solution should allow the user to inquire on a benefit issuance history.	Income Maintenance Manual	X			
SM0898	1	The solution should support the Family Violence Option (FVO) according to West Virginia business rules.	eCFR — 260 Code of Federal Regulations - General Temporary Assistance for Needy Families (TANF) Provisions	X			
SM0899	1	The solution should support the process for referring individuals to counseling and supportive services.	eCFR — 260 Code of Federal Regulations - General Temporary Assistance for Needy Families (TANF) Provisions	X			
SM0900	1	The solution should count work activities according to West Virginia business rules.	eCFR — 261 Code of Federal Regulations - Ensuring that Recipients Work	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
SM0901	1	The solution should have the ability of counting work activities as defined by federal regulations.	eCFR — 261 Code of Federal Regulations - Ensuring that Recipients Work	X			
SM0902	1	The solution should determine eligibility for participation in Individual Development Accounts (IDAs).	eCFR — 263 Code of Federal Regulations - Expenditures of State and Federal TANF Funds	X			
SM0903	1	The solution should provide a screening tool to assist the system user in evaluating clients for reasonable suspicion of drug use.	Not Applicable	X			
SM0904	1	The solution should track whether a client is found to have a reasonable suspicion of drug use.	Not Applicable	X			
SM0905	1	The solution should track the results of required drug tests for clients that are found to have a reasonable suspicion of drug use.	Not Applicable	X			
SM0906	1	The solution should track whether a client who has been found to have a reasonable suspicion of drug use has been referred to treatment.	Not Applicable	X			
SM0907	1	The solution should conduct computation of participation requirement.	Income Maintenance Manual	X			
SM0908	1	The solution should track participation computation results.	Income Maintenance Manual	X			
SM0909	1	The solution should track actual participation obtained by client.	Income Maintenance Manual	X			
SM0910	1	The solution should ensure that scheduled hours do not exceed actual minimum monthly participation rate requirements.	Income Maintenance Manual	X			
SM0911	1	The solution should compare required participation against actual work experience to determine whether client meets participation requirements.	Income Maintenance Manual	X			
Performance / Utilization Management (UM)							
UM0001	1	The solution should allow the system to track any savings that have been generated from any discrepancy resolved using external data sources and subsequent benefit adjustment.	Income Maintenance Manual		X		
UM0002	1	The solution should provide a means of tracking and reporting a determination of the cost effectiveness of caring for certain disabled children at home.	State Medicaid Plan			X	
UM0003	1	The solution should allow a flag to be entered to track cases for federal reporting requirements.	Income Maintenance Manual	X			
UM0004	1	The solution should establish an Unintentional Household Error claim.	Income Maintenance Manual	X			
UM0005	1	The solution should establish an Intentional Program Violation (IPV) claim.	Income Maintenance Manual	X			
UM0006	1	The solution should track an over issuance claim.	Income Maintenance Manual	X			
UM0007	1	The solution should track the disposition of an over issuance claim.	Income Maintenance Manual	X			
UM0008	1	The solution should establish an Agency Error claim.	Income Maintenance Manual	X			
UM0009	1	The solution should track an Agency Error claim.	Income Maintenance Manual	X			
UM0010	1	The solution should create referrals to the Investigations and Fraud Management (IFM) Claims and Collection Unit for Repayment Investigator (RI) review.	Income Maintenance Manual	X			
UM0011	1	The solution should process referrals to the Investigations and Fraud Management (IFM) Claims and Collection Unit for Repayment Investigator (RI) review.	Income Maintenance Manual	X			
UM0012	1	The solution should track repayment of a SNAP benefit over issuance.	Income Maintenance Manual	X			
UM0013	1	The solution should offset lost benefits according to West Virginia business rules.	Income Maintenance Manual	X			
UM0014	1	The solution should determine the client's repayment amount to offset an over issuance according to West Virginia business rules.	Income Maintenance Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0015	1	The solution should track lump sum payments submitted by a client to resolve an over issuance	Income Maintenance Manual	X			
UM0016	1	The solution should track monthly installment payments submitted by a client to resolve an over issuance.	Income Maintenance Manual	X			
UM0017	1	The solution should process payments according to West Virginia business rules and Federal regulations.	Income Maintenance Manual	X			
UM0018	1	The solution should determine the length of the Supplemental Nutrition Assistance Program (SNAP) disqualification period that results from improper transferal of assets according to West Virginia business rules.	Income Maintenance Manual	X			
UM0019	1	The solution should apply penalties at the individual client level.	Income Maintenance Manual	X			
UM0020	1	The solution should track the history of penalties at the individual client level.	Income Maintenance Manual	X			
UM0021	1	The solution should adjust a client's eligibility based on the number of penalties they have on their client record according to West Virginia business rules.	Income Maintenance Manual	X			
UM0022	1	The solution should automatically end a penalty according to West Virginia business rules.	Income Maintenance Manual	X			
UM0023	1	The solution should apply benefit sanctions according to West Virginia business rules.	Income Maintenance Manual	X			
UM0024	1	The solution should set sanction periods according to West Virginia business rules.	Income Maintenance Manual	X			
UM0025	1	The solution should prevent a sanction from being stopped according to West Virginia business rules	Income Maintenance Manual	X			
UM0026	1	The solution should trigger related Supplemental Nutrition Assistance Program (SNAP) penalties that result from WV WORKS sanctions.	Income Maintenance Manual	X			
UM0027	1	The solution should support the creation and maintenance of an Internal Revenue Service (IRS) Safeguard Log	Income Maintenance Manual	X			
UM0028	1	The solution should support the active case review process for all programs.	Not Applicable	X			
UM0029	1	The solution should allow the system user to record the results of a field investigation.	Not Applicable	X			
UM0030	1	The solution should support the negative case review process for all programs.	Not Applicable	X			
UM0031	1	The solution should run simulations to determine overpayments based on user-defined variables	Not Applicable	X			
UM0032	1	The solution should maintain a history of data exchanged with the Federal Electronic Disqualified Recipient System (eDRS) in each individual's case record.	Not Applicable	X			
UM0033	1	The solution should support the Investigations and Fraud Management (IFM) process of levying sanctions according to state and federal regulations and policies.	Not Applicable	X			
UM0034	1	The solution should enter a continuous referral period regardless of any breaks in benefits.	Not Applicable	X			
UM0035	1	The solution should support the collection and reporting of information about disqualified individuals according to federal regulations and policies and according to West Virginia business rules (366B Reporting)	Not Applicable	X			
UM0036	1	The solution should allow appropriate system users to update the individual program sanction data field with a required reason notation.	Not Applicable	X			
UM0037	1	The solution should capture all benefits awarded to refugees.	Not Applicable	X			
UM0038	1	The solution should track configurable client Supplemental Nutrition Assistance Program Employment and Training (SNAP E&T) data based on federal regulations and according to West Virginia business rules.	Income Maintenance Manual	X			
UM0039	1	The solution should determine the State's overall work participation rate according to federal guidelines.	eCFR — 261 Code of Federal Regulations - Ensuring that Recipients Work	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0040	1	The solution should determine the State's overall work participation rate.	Not Applicable	X			
UM0041	1	The solution should maintain information about West Virginia's basic Maintenance of Effort (MOE) according to West Virginia business rules.	eCFR — 263 Code of Federal Regulations - Expenditures of State and Federal TANF Funds	X			
UM0042	1	The solution should produce and maintain "work measures" data necessary to apply for bonus awards, as specified by Administration for Children Families (ACF).	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0043	1	The solution should produce and maintain data necessary for "measures of participation by low- income working households in the SNAP Program" as defined by federal requirements and according to West Virginia business rules.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0044	1	The solution should produce, maintain, and store data necessary for "measures of participation by low-income families in the Medicaid/SCHIP Programs" as defined by the Federal requirements.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0045	1	The solution should produce and maintain data necessary for "family formation and stability measure" as defined by federal requirements.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0046	1	The solution should compare the State's performance on the "family formation and stability measure" to the State's performance in the previous year.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0047	1	The solution should produce and submit data requested by the State on a time frame determined by the State.	eCFR — 270 Code of Federal Regulations - High Performance Bonus Awards	X			
UM0048	1	The solution should monitor and identify cases to support the State's review and modification procedures.	Child Support Enforcement: A Guide for States	X			
UM0049	1	The solution should support the data required to effectively monitor program time standards according to State and Federal business rules.	Child Support Enforcement: A Guide for States	X			
UM0050	1	The solution should prohibit edits to system initiated actions as defined in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States, including but not limited to the following:	Child Support Enforcement: A Guide for States	X			
UM0051	2	Time limits based on Federal performance standards	Child Support Enforcement: A Guide for States	X			
UM0052	2	Case activity level based on Federal performance standards	Child Support Enforcement: A Guide for States	X			
UM0053	2	Case messages based on Federal performance standards	Child Support Enforcement: A Guide for States	X			
UM0054	1	The solution should provide online electronic employee performance reports that provide information as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
UM0055	1	The solution should provide online electronic office/unit performance reports that provide information as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
UM0056	1	The solution should generate statistics regarding form usage.	Not Applicable	X			
UM0057	1	The solution should ensure the completeness and reliability of, and ready access to, the data used to compute the performance levels for the five measures as described in 45 Code of Federal Regulations (CFR) 305.2 and 45 CFR 305.32.	Child Support Enforcement: A Guide for States	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0058	1	The solution should limit payments to eligible children and providers only.	Child Care Subsidy Policies and Procedures Manual	X			
UM0059	1	The solution should extract and store the data submitted in the monthly reports in a way that it can be used for reporting and analysis.	Communication Protocol for Socially Necessary Services	X			
UM0060	1	The solution should indicate payments made as a result of misrepresentation in the client case and the provider case.	Child Care Subsidy Policies and Procedures Manual		X		
UM0061	1	The solution should indicate payments made as a result of programmatic infractions in the client case and the provider case.	Child Care Subsidy Policies and Procedures Manual		X		
UM0062	1	The solution should indicate payments referred to Investigation and Fraud Management (IFM) for collection in the client case and the provider case.	Child Care Subsidy Policies and Procedures Manual		X		
UM0063	1	The solution should identify youth to complete the National Youth in Transition Database (NYTD) surveys according to West Virginia business rules.	Foster Care Policy	X			
UM0064	1	The solution should allow the system user to document the youth's participation decision for the National Youth in Transition Database (NYTD) survey.	Foster Care Policy	X			
UM0065	1	The solution should allow the system user to document if the youth is incapacitated, incarcerated, on runaway, or deceased for the National Youth in Transition Database (NYTD) surveys.	Foster Care Policy	X			
UM0066	1	The solution should allow the system user to document the National Youth in Transition Database (NYTD) survey results.	Foster Care Policy	X			
UM0067	1	The solution should upload data from the National Youth in Transition Database (NYTD) surveys when completed online.	Foster Care Policy	X			
UM0068	1	The solution should generate reports based on the survey data entered for the National Youth in Transition Database (NYTD).	Foster Care Policy	X			
UM0069	1	The solution should allow the system user to document evidence of provider non-compliance according to West Virginia business rules.	Homefinding Policy		X		
UM0070	1	The solution should allow a system user to flag a client and/or provider with a substantiated misrepresentation.	Child Care Subsidy Policies and Procedures Manual		X		
UM0071	1	The solution should prevent payment to providers flagged as having a substantiated misrepresentation.	Child Care Subsidy Policies and Procedures Manual		X		
UM0072	1	The solution should track the approval of a one- time waiver for individuals with a substantiated misrepresentation.	Child Care Subsidy Policies and Procedures Manual		X		
UM0073	1	The solution should prevent linking to a provider flagged as having a substantiated misrepresentation.	Not Applicable		X		
UM0074	1	The solution should allow a system user to enter information for the National Youth in Transition Database (NYTD) surveys for a closed case.	Not Applicable	X			
UM0075	1	The solution should record in the automated case record all required fields established in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States to allow the tracking of compliance with program performance standards.	Child Support Enforcement: A Guide for States	X			
UM0076	1	The solution should support the Subsidy Corrective Action Plan process.	Child Care Subsidy Policies and Procedures Manual			X	
UM0077	1	The solution should support the creation of the Subsidy Corrective Action Plan.	Child Care Subsidy Policies and Procedures Manual			X	
UM0078	1	The solution should track when a provider has submitted an incorrect request for payment or attendance sheet, or has violated the service agreement.	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0079	1	The solution should ensure that providers owning multiple sites who have had their Provider Services Agreement revoked at one site shall also have all other subsequent site Provider Services Agreements revoked.	Child Care Subsidy Policies and Procedures Manual		X		
UM0080	1	The solution should allow the system user to flag a provider prohibited from participation in the subsidy system due to "striking out."	Child Care Subsidy Policies and Procedures Manual		X		
UM0081	1	The solution should allow the system user to set a start and end date of the prohibition period for a provider prohibited from participation in the subsidy system due to "striking out."	Child Care Subsidy Policies and Procedures Manual		X		
UM0082	1	The solution, or an auxiliary financial system, should provide documentation needed to obtain and verify claims for Federal financial participation (FFP) and to facilitate the following:	Child Support Enforcement: A Guide for States	X			
UM0083	2	Payment of incentive payments	Child Support Enforcement: A Guide for States	X			
UM0084	2	Receipt of incentive payments	Child Support Enforcement: A Guide for States	X			
UM0085	2	Distribution of incentive payments	Child Support Enforcement: A Guide for States	X			
UM0086	1	The solution should process and record the results of a case review or evaluation according to West Virginia business rules.	Not Applicable	X			
UM0087	1	The solution should generate documents on the case review or evaluation according to West Virginia business rules.	Not Applicable	X			
UM0088	1	The solution should generate notices on the case review or evaluation according to West Virginia business rules.	Not Applicable	X			
UM0089	1	The solution should generate reports on the case review or evaluation according to West Virginia business rules.	Not Applicable	X			
UM0090	1	The solution should provide online electronic workload management reports that provide information to an employee as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
UM0091	1	The solution should provide online electronic workload management reports that provide information to an office/unit manager as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
UM0092	1	The solution should provide online electronic workload management reports that provide information at the program level as described in the latest version of the Administration for Children and Families (ACF) Child Support Enforcement Guide for States.	Child Support Enforcement: A Guide for States	X			
UM0093	1	The solution should track employee training and performance	Not Applicable		X		
UM0094	1	The solution should use data quality utilities to check the status of data elements, according to West Virginia business rules, for the following reports:	West Virginia DHHR Annual Progress Services Report		X		
UM0095	2	Adoption and Foster Care Analysis and Reporting System (AFCARS)	West Virginia DHHR Annual Progress Services Report	X			
UM0096	2	National Child Abuse and Neglect Data System (NCANDS)	West Virginia DHHR Annual Progress Services Report	X			
UM0097	2	National Youth in Transition Database (NYTD)	West Virginia DHHR Annual Progress Services Report	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0098	2	IV-B reporting	West Virginia DHHR Annual Progress Services Report	X			
UM0099	2	IV-E quarterly reporting	West Virginia DHHR Annual Progress Services Report	X			
UM0100	2	IRS reporting	West Virginia DHHR Annual Progress Services Report	X			
UM0101	1	The solution should provide processes for the following reports, including but not limited to:	Not Applicable			X	
UM0102	2	Adoption and Foster Care Analysis and Reporting System (AFCARS)	Not Applicable	X			
UM0103	2	National Child Abuse and Neglect Data System (NCANDS)	Not Applicable	X			
UM0104	2	National Youth in Transition Database (NYTD)	Not Applicable	X			
UM0105	2	Regular state reports	Not Applicable			X	
UM0106	2	Ad hoc state reports	Not Applicable			X	
UM0107	2	Statistical reports	Not Applicable			X	
UM0108	2	Internal Revenue Service (IRS) fiscal reporting	Not Applicable	X			
UM0109	2	IV-B reporting including monthly client visits and Child Protective Services	Not Applicable	X			
UM0110	2	IV-E quarterly reporting	Not Applicable	X			
UM0111	1	The solution should support the 45 Code of Federal Regulations (CFR) Part 303 - Standards for Program Operations.	Child Support Enforcement: A Guide for States	X			
UM0112	1	The solution should support the 45 Code of Federal Regulations (CFR) Part 304 - Federal Financial Participation.	Child Support Enforcement: A Guide for States	X			
UM0113	1	The solution should support the 45 Code of Federal Regulations (CFR) Part 305 - Program Performance Measures, Standards, Financial Incentives, and Penalties	Child Support Enforcement: A Guide for States	X			
UM0114	1	The solution should support the 45 Code of Federal Regulations (CFR) Part 307 - Computerized Support Enforcement Systems.	Child Support Enforcement: A Guide for States	X			
UM0115	1	The solution should support the 45 Code of Federal Regulations (CFR) Part 308 - Annual State Self-Assessment Review and Report.	Child Support Enforcement: A Guide for States	X			
UM0116	1	The solution should maintain the requisite data on State performance with respect to paternity establishment, support order establishment, collections, and administrative costs necessary to calculate, for each fiscal year, the State performance level for each of the five performance measures of paternity establishment, support order establishment, current collections, arrears collections, and cost effectiveness used in the child support incentive system, and for medical support.	Child Support Enforcement: A Guide for States	X			
UM0117	1	The solution should facilitate the establishment of outcome measures by program managers.	Not Applicable			X	
UM0118	1	The solution should track outcome measures by program managers.	Not Applicable			X	
UM0119	1	The solution should support trend analysis of the results of the outcome measures by program managers.	Not Applicable			X	
UM0120	1	The solution should support the thirty day penalty closure policy option.	Child Care Subsidy Policies and Procedures Manual	X			
UM0121	1	The solution should track providers with Corrective Action Plans.	Child Protective Services Policy			X	
UM0122	1	The solution should support the repayment procedures for recovery of payments from parents and providers.	Child Care Subsidy Policies and Procedures Manual	X			
UM0123	1	The solution should indicate that the client or provider has a Child Care Benefit Repayment Agreement in the client and/or provider case	Child Care Subsidy Policies and Procedures Manual	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
UM0124	1	The solution should track repayment payments received.	Child Care Subsidy Policies and Procedures Manual	X			
UM0125	1	The solution should calculate the outstanding repayment balance.	Child Care Subsidy Policies and Procedures Manual	X			
UM0126	1	The solution should support the creation of a repayment schedule.	Not Applicable	X			
UM0127	1	The solution should collect data needed to meet the requirements for the Juvenile Justice Reform Oversight Commission according to West Virginia business rules.	Youth Services Policy		X		
UM0128	1	The solution should submit data needed to meet the requirements for the Juvenile Justice Reform Oversight Commission according to West Virginia business rules.	Youth Services Policy		X		

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OPP0001	1	The vendor facility should be linked to the State network via a secure high-speed internet with 24/7 accessibility.	Not Applicable	X			
OPP0002	1	The Vendor should provide 24/7 secure guest wireless internet connectivity that is isolated from the hosted network infrastructure	Not Applicable	X			
OPP0003	1	The solution should generate the file for client ID cards within the timeline agreed upon with the State.	Not Applicable	X			
OPP0004	1	The Vendor should follow configuration management to maintain the solution and document changes to design that occur during operations throughout the life of the contract	Not Applicable	X			
OPP0005	1	The Vendor should manage the operations phase of the West Virginia Integrated Eligibility Solution project in accordance with the processes defined in the approved Operations Phase Project Management Plan deliverables.	Not Applicable	X			
OPP0006	1	The Vendor should provide, as defined by the State, all versions of all deliverables and artifacts required under this contract in a State-owned document repository	Not Applicable	X			
OPP0007	1	The Vendor should keep business process models updated to align with State policy and procedure	Not Applicable	X			
OPP0008	1	The Vendor should provide technical support services to system users for all issues related to the vendor's solution, including indirect issues related to the software or hardware used by the system user requesting support, Monday through Friday from 7:00 a.m. to 7:00 p.m. Eastern Time, excluding State holidays or any other day State offices close, and on an emergency basis, as requested by the State	Not Applicable	X			
OPP0009	1	The Vendor should provide technical support for system issue resolution 24 hours per day, seven days per week, as needed.	Not Applicable	X			
OPP0010	1	The Vendor should publish an escalation process to facilitate timely resolution of support issues that cannot be resolved by support personnel assigned to the toll free support number	Not Applicable	X			
OPP0011	1	The Vendor should provide the capability to perform troubleshooting and diagnostic support, in accordance with federal and State Information Technology policies, to system users located remotely at no additional cost to the State.	Not Applicable	X			
OPP0012	1	The Vendor should create, maintain, and deliver to the State a monthly operations processes calendar, inclusive of all data exchanges scheduled for the month	Not Applicable	X			
OPP0013	1	The Vendor should maintain and deliver to the State, upon request, an updated inventory of all hardware, software, and solution licenses required to operate the solution.	Not Applicable	X			
OPP0014	1	The Vendor should provide the State with an annual calendar of scheduled system down time and obtain approval no later than 30 days prior to the beginning of the new year	Not Applicable	X			
OPP0015	1	The Vendor should provide performance tuning of all hardware, software, and environments for the RAPIDS, FACTS, and OSCAR systems, and all their component subsystems to ensure continued operations beginning in Year 2 of the contract and continuing until all programs supported by each respective system have been deployed in the West Virginia Integrated Eligibility Solution.	Not Applicable		X		
OPP0016	1	The Vendor should provide overall systems health monitoring support and create a monitoring plan for current State systems including, but not limited to, the following	Not Applicable	X			
OPP0017	2	WebLogic	Not Applicable	X			
OPP0018	2	JConsole	Not Applicable	X			
OPP0019	2	eRAPIDS	Not Applicable	X			
OPP0020	2	inROADS	Not Applicable	X			
OPP0021	1	The Vendor should perform all maintenance and product upgrades to all modernized environments and hardware at no additional cost so that the system is operating on the latest version of each product release and all software patches are applied.	Not Applicable	X			
OPP0022	1	The Vendor should apply all updates and patches to the solution within a defined timeline, to be agreed upon between the State and vendor	Not Applicable	X			
OPP0023	1	The Vendor should coordinate with the West Virginia Office of Technology to support remote installation or deployment of components that require distribution or maintenance for all Statewide	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OPP0024	1	The Vendor should provide a monitoring solution to provide for identification of system outages across the modernized enterprise.	Not Applicable	X			
OPP0025	1	The solution should conduct adequate backup of the solution to ensure that the solution can be recovered in the event of system failure.	Not Applicable	X			
OPP0026	1	The solution should conduct adequate backup of the solution to ensure that the solution can be recovered in the event of system failure.	Not Applicable	X			
OPP0027	1	The solution should monitor for successful completion of all solution back-ups.	Not Applicable	X			
OPP0028	1	The Vendor should validate, at least quarterly, completion of all back-up processes.	Not Applicable	X			
OPP0029	1	The Vendor should provide an outcome report for each failed back-up to the State.	Not Applicable	X			
OPP0030	1	The Vendor should implement all federal and State rate changes, as directed by the State, at no additional cost to the State, including the following:	Not Applicable	X			
OPP0031	2	Cost-of-Living Adjustments (COLA)	Not Applicable	X			
OPP0032	2	Federal Poverty Level (FPL) Updates	Not Applicable	X			
OPP0033	2	SNAP mass changes including changes in SNAP amounts, federal poverty levels, and utility	Not Applicable	X			
OPP0034	2	Cost-of-Living Adjustment (COLA) Mass Changes	Not Applicable	X			
OPP0035	2	Annual SSI/Spousal Impoverishment Updates	Not Applicable	X			
OPP0036	2	Medicare Premium Assistance Resources Limits	Not Applicable	X			
OPP0037	2	Medicare Premium Updates	Not Applicable	X			
OPP0038	2	Nursing Home Rates Updates	Not Applicable	X			
OPP0039	1	The Vendor should provide maintenance of all interfaces required to operate the eligibility enterprise.	Not Applicable	X			
OPP0040	1	The Vendor should provide for the set-up and maintenance of the following environments in support of the modernized solution for the life of the contract:	Not Applicable	X			
OPP0041	2	Development and Unit Testing	Not Applicable	X			
OPP0042	2	System Integration Testing	Not Applicable	X			
OPP0043	2	User Acceptance Testing	Not Applicable	X			
OPP0044	2	End-user Training	Not Applicable	X			
OPP0045	2	Disaster Recovery	Not Applicable	X			
OPP0046	2	Production	Not Applicable	X			
OPP0047	1	The Vendor should make all environments available to the State Project Team, the State Project Management Team, and the Independent Verification and Validation team.	Not Applicable	X			
OPP0048	1	The Vendor should deploy all product updates and patches without interruption of service to system users and clients, unless the State explicitly authorizes an interruption in service.	Not Applicable	X			
OPP0049	1	The Vendor should provide notification to the State of all planned updates, patches, and other deployments to the production environment at an agreed-upon interval prior to deployment.	Not Applicable	X			
OPP0050	1	The Vendor should conduct penetration testing of the solution immediately following any major deployment of new functionality to the production environment or, at a minimum, on an annual basis. Results should be presented to the State within thirty (30) days.	Not Applicable	X			
OPP0051	1	The Vendor should document its approach to penetration testing during operations in the Privacy, Security, and Confidentiality Plan deliverable.	Not Applicable	X			
OPP0052	1	The Vendor should document its approach to vulnerability scans during operations in the Privacy, Security, and Confidentiality Plan deliverable	Not Applicable	X			
OPP0053	1	The Vendor should conduct vulnerability scans of the solution including vendor system user workstations on a monthly basis. Results should be presented to the State within thirty (30) days.	Not Applicable	X			
OPP0054	1	The Vendor should provide overall solution health monitoring support and create a Solution Health Monitoring Plan that should govern the approach to health monitoring during the operations phase	Not Applicable	X			

Specification ID	Hierarchy Level	Specification	Procurement Library Reference	Yes, Native	Yes, Config	Yes, Coding	No
OPP0055	1	The Vendor should review all established key performance indicators (KPIs) and metrics with Office of Management Information Systems (OMIS) prior to commencement of operations to determine if revisions are needed.	Not Applicable	X			
OPP0056	1	The solution should relate trends to performance outcome measures (e.g., increased caseload size may cause increase in errors, etc.).	Not Applicable	X			
OPP0057	1	The solution should, for tracking purposes, maintain the history of key performance indicators with a format approved by Office of Management Information Systems (OMIS).	Not Applicable	X			
OPP0058	1	The solution should track, view, and report on performance standards at multiple levels.	Not Applicable	X			
OPP0059	1	The solution should provide notifications of system outages and other events according to the approved communication plan.	Not Applicable	X			
OPP0060	1	The Vendor should perform database backups and all maintenance activities as per the State approved maintenance schedule.	Not Applicable	X			
OPP0061	1	The Vendor should store all solution documentation in a location accessible to, and agreed-upon by,	Not Applicable	X			
OPP0062	1	The Vendor should produce the agreed-upon operational reports to demonstrate compliance with the key performance indicators associated with each service level agreement (SLA)	Not Applicable	X			
OPP0063	1	The Vendor should submit the initial operational service level agreement (SLA) reports no later than the seventh business day of the month. The Vendor should submit the final SLA report no later than the tenth business day of the month and prior to submission of any monthly invoices.	Not Applicable	X			
OPP0064	1	The Vendor should review all established key performance indicators (KPIs) and metrics with the Office of Management Information Systems (OMIS) annually, upon implementation of a change that impacts existing KPIs, and/or at the request of OMIS.	Not Applicable	X			
OPP0065	1	The solution should create caseload management reports to track program performance measures by user, by county, and Statewide as defined by the State.	Not Applicable	X			
OPP0066	1	The Vendor should follow all of the State approved project management plans.	Not Applicable	X			
OPP0067	1	The Vendor should recover the solution and make it fully operational in the event of a disaster to the primary physical hosting site, within 24 hours from the time of the disaster event.	Not Applicable	X			

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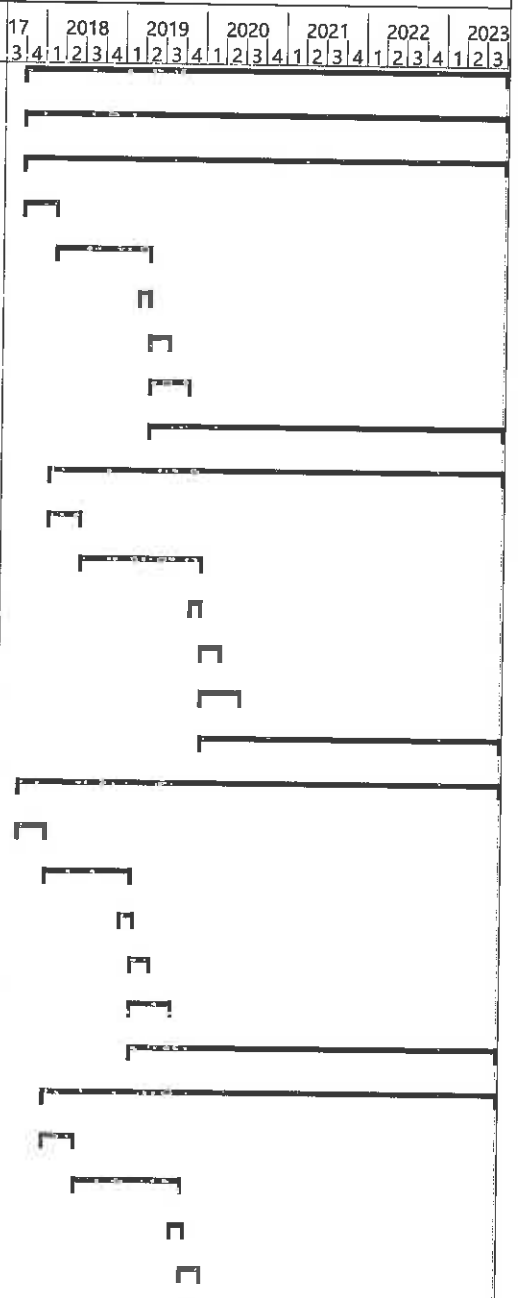
WV IES

High-Level Draft Project Schedule

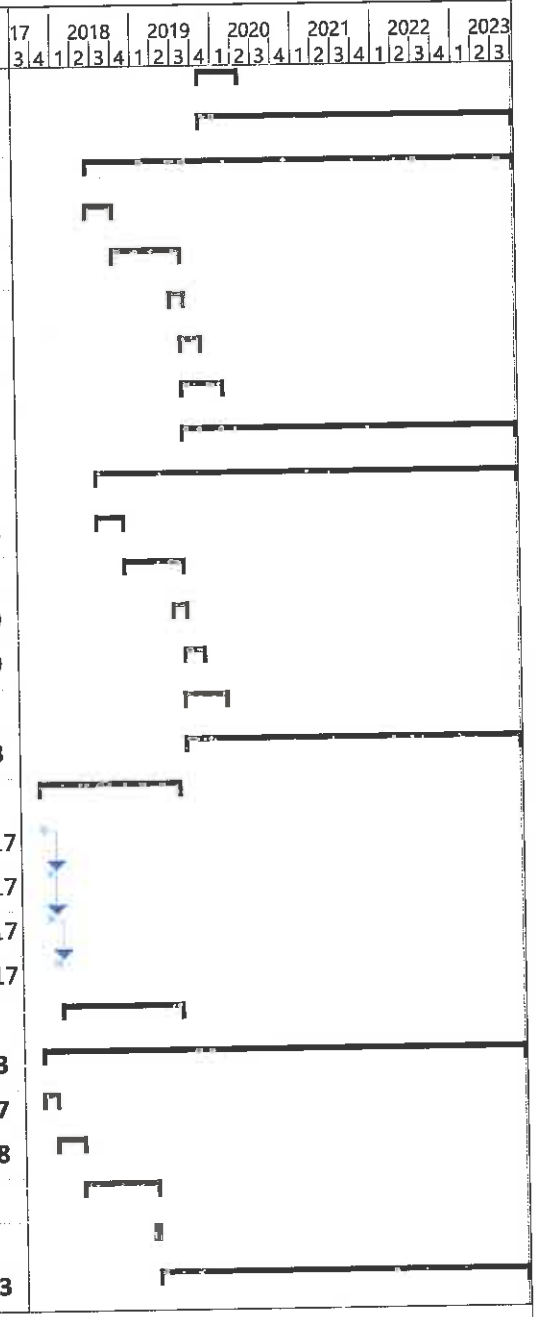
West Virginia IES Project Plan

ID	WBS	Task Name	Duration	Start	Finish
1	1	West Virginia Human Services Platform (WV HSP) Enablement	1565 days	10/2/2017	9/29/2023
2	1.1	Project Start Up and Project Planning	1565 days	10/2/2017	9/29/2023
175	1.2	RAPIDS Modernization Phase 1- Technology Platform Modernizatio	1565 days	10/2/2017	9/29/2023
176	1.2.1	Discovery	109 days	10/2/2017	3/1/2018
248	1.2.2	Development, Configuration and Testing	306 days	3/2/2018	5/3/2019
557	1.2.3	Implementation Readiness	35 days	3/18/2019	5/3/2019
645	1.2.4	Pilot	65 days	5/6/2019	8/2/2019
649	1.2.5	Warranty	130 days	5/6/2019	11/1/2019
652	1.2.6	Ongoing Maintenance and Operations	1150 days	5/6/2019	9/29/2023
658	1.3	RAPIDS Modernization Phase 2- Business Application Modernizatio	1475 days	2/5/2018	9/29/2023
659	1.3.1	Discovery	105 days	2/5/2018	6/29/2018
730	1.3.2	Development, Configuration and Testing	395 days	7/2/2018	1/3/2020
1141	1.3.3	Implementation Readiness	35 days	11/18/2019	1/3/2020
1229	1.3.4	Pilot	65 days	1/6/2020	4/3/2020
1233	1.3.5	Warranty	130 days	1/6/2020	7/3/2020
1236	1.3.6	Ongoing Maintenance and Operations	975 days	1/6/2020	9/29/2023
1242	1.4	OSCAR Modernization Phase 1- Technology Platform Modernization	1565 days	10/2/2017	9/29/2023
1243	1.4.1	Discovery	90 days	10/2/2017	2/2/2018
1315	1.4.2	Development, Configuration and Testing	280 days	2/5/2018	3/1/2019
1596	1.4.3	Implementation Readiness	45 days	1/14/2019	3/15/2019
1684	1.4.4	Pilot	65 days	3/4/2019	5/31/2019
1688	1.4.5	Warranty	135 days	3/4/2019	9/6/2019
1691	1.4.6	Ongoing Maintenance and Operations	1195 days	3/4/2019	9/29/2023
1697	1.5	OSCAR Modernization Phase 2- Business Application Modernization	1475 days	2/5/2018	9/29/2023
1698	1.5.1	Discovery	105 days	2/5/2018	6/29/2018
1769	1.5.2	Development, Configuration and Testing	350 days	7/2/2018	11/1/2019
2134	1.5.3	Implementation Readiness	45 days	9/16/2019	11/15/2019
2222	1.5.4	Pilot	65 days	11/4/2019	1/31/2020



West Virginia IES Project Plan

ID	WBS	Task Name	Duration	Start	Finish
2226	1.5.5	Warranty	130 days	11/4/2019	5/1/2020
2229	1.5.6	Ongoing Maintenance and Operations	1020 days	11/4/2019	9/29/2023
2235	1.6	FACTS Child Welfare - Technology Platform and Business Applicatior	1390 days	6/4/2018	9/29/2023
2236	1.6.1	Discovery	85 days	6/4/2018	9/28/2018
2307	1.6.2	Development, Configuration and Testing	220 days	10/1/2018	8/2/2019
2532	1.6.3	Implementation Readiness	45 days	6/17/2019	8/16/2019
2620	1.6.4	Pilot	65 days	8/5/2019	11/1/2019
2624	1.6.5	Warranty	135 days	8/5/2019	2/7/2020
2627	1.6.6	Ongoing Maintenance and Operations	1085 days	8/5/2019	9/29/2023
2633	1.7	FACTS Child Care - Technology Platform and Business Application M	1370 days	7/2/2018	9/29/2023
2634	1.7.1	Discovery	90 days	7/2/2018	11/2/2018
2705	1.7.2	Development, Configuration and Testing	195 days	11/5/2018	8/2/2019
2902	1.7.3	Implementation Readiness	45 days	6/17/2019	8/16/2019
2990	1.7.4	Pilot	65 days	8/5/2019	11/1/2019
2994	1.7.5	Warranty	135 days	8/5/2019	2/7/2020
2997	1.7.6	Ongoing Maintenance and Operations	1085 days	8/5/2019	9/29/2023
3003	1.8	RAPIDS Integrity Eligibility Maintenance and Support (Legacy)	456 days	10/2/2017	7/1/2019
3004	1.8.1	RAPIDS Knowledge Transfer (Legacy)	20 days	10/2/2017	10/27/2017
3005	1.8.2	RAPIDS Operational Planning (Legacy)	20 days	10/30/2017	11/24/2017
3006	1.8.3	RAPIDS Transition Planning (Legacy)	20 days	10/30/2017	11/24/2017
3007	1.8.4	RAPIDS Transition (Legacy)	25 days	11/27/2017	12/29/2017
3008	1.8.5	Ongoing RAPIDS Maintenance and Operations Support	391 days	1/1/2018	7/1/2019
3013	1.9	WV HSP Call Center	1565 days	10/2/2017	9/29/2023
3014	1.9.1	Requirements Validations	45 days	10/2/2017	12/1/2017
3026	1.9.2	Design	85 days	12/4/2017	3/30/2018
3059	1.9.3	Development, Configuration and Testing	240 days	4/2/2018	3/1/2019
3070	1.9.4	Implementation Readiness	15 days	2/11/2019	3/1/2019
3113	1.9.5	Call Center Operations Support	1195 days	3/4/2019	9/29/2023



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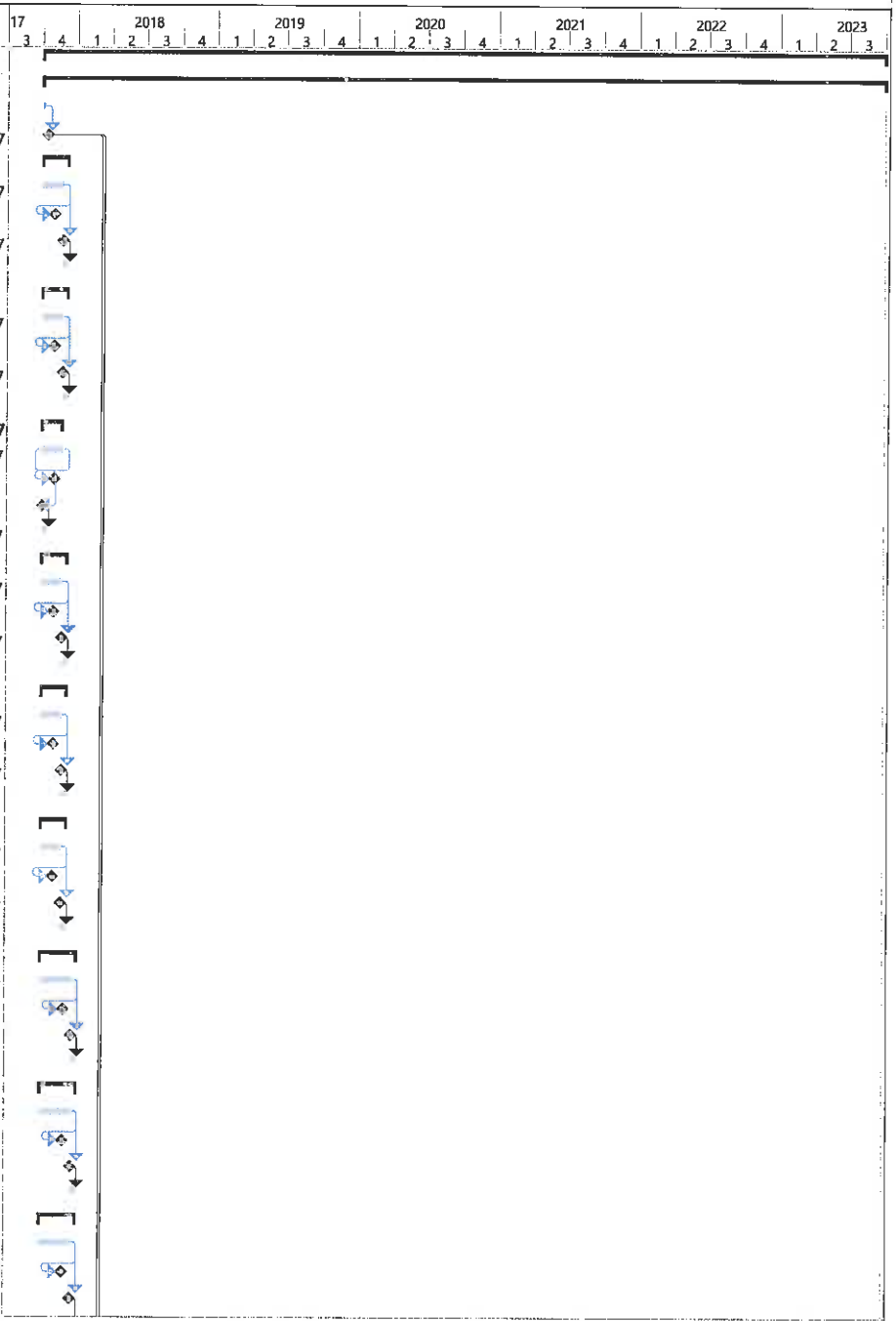
WV IES

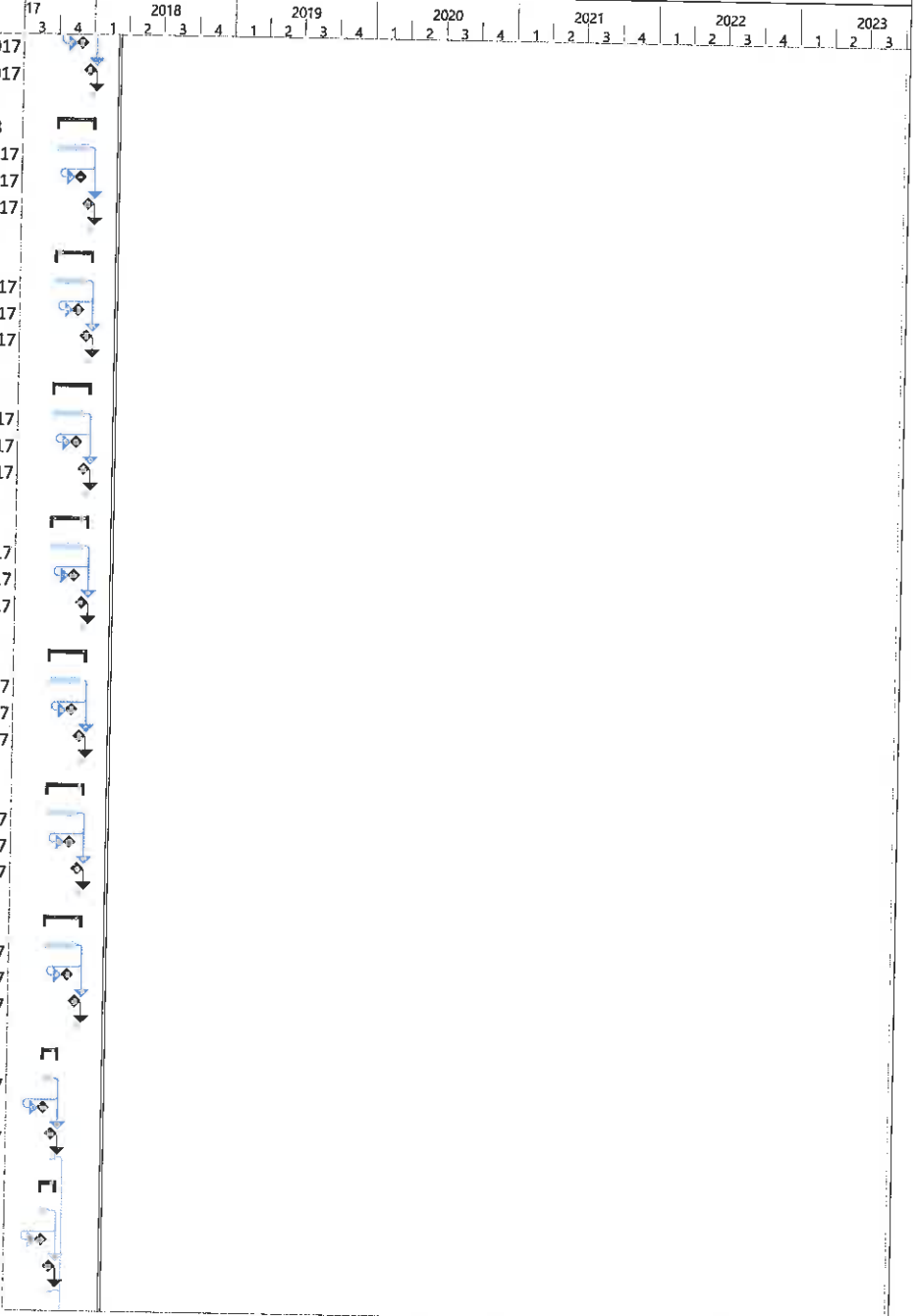
Detailed Draft Project Schedule

ID	WBS	Task Name	Duration	Start	Finish
1	1	**West Virginia Human Services Platform (WV HSP) Enablement**	**1565 days**	**10/2/2017**	**9/29/2023**
2	1.1	**Project Start Up and Project Planning**	**1565 days**	**10/2/2017**	**9/29/2023**
3	1.1.1	Establish Facility	5 days	10/2/2017	10/6/2017
4	1.1.2	Project kick-off	0 days	10/13/2017	10/13/2017
5	1.1.3	**Develop Project Charter**	**48 days**	**10/2/2017**	**12/6/2017**
6	1.1.3.1	Develop Project Charter	38 days	10/2/2017	11/22/2017
7	1.1.3.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
8	1.1.3.3	Submit deliverable for review	0 days	11/22/2017	11/22/2017
9	1.1.3.4	Receive deliverable client approval	10 days	11/23/2017	12/6/2017
10	1.1.4	**Stakeholder Analysis**	**48 days**	**10/2/2017**	**12/6/2017**
11	1.1.4.1	Develop Stakeholder Analysis	38 days	10/2/2017	11/22/2017
12	1.1.4.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
13	1.1.4.3	Submit deliverable for review	0 days	11/22/2017	11/22/2017
14	1.1.4.4	Receive deliverable client approval	10 days	11/23/2017	12/6/2017
15	1.1.5	**Stakeholder Management Plan**	**38 days**	**10/2/2017**	**11/22/2017**
16	1.1.5.1	Develop Stakeholder Management Plan	38 days	10/2/2017	11/22/2017
17	1.1.5.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
18	1.1.5.3	Submit deliverable for review	0 days	10/2/2017	10/2/2017
19	1.1.5.4	Receive deliverable client approval	10 days	10/2/2017	10/13/2017
20	1.1.6	**Facility Management Plan**	**48 days**	**10/2/2017**	**12/6/2017**
21	1.1.6.1	Develop Facility Management Plan	38 days	10/2/2017	11/22/2017
22	1.1.6.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
23	1.1.6.3	Submit deliverable for review	0 days	11/22/2017	11/22/2017
24	1.1.6.4	Receive deliverable client approval	10 days	11/23/2017	12/6/2017
25	1.1.7	**Staffing Management Plan**	**48 days**	**10/2/2017**	**12/6/2017**
26	1.1.7.1	Develop Staffing Management Plan	38 days	10/2/2017	11/22/2017
27	1.1.7.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
28	1.1.7.3	Submit deliverable for review	0 days	11/22/2017	11/22/2017
29	1.1.7.4	Receive deliverable client approval	10 days	11/23/2017	12/6/2017
30	1.1.8	**Documentation Management Plan**	**48 days**	**10/2/2017**	**12/6/2017**
31	1.1.8.1	Develop Documentation Management Plan	38 days	10/2/2017	11/22/2017
32	1.1.8.2	Interim draft deliverable submission	0 days	11/2/2017	11/2/2017
33	1.1.8.3	Submit deliverable for review	0 days	11/22/2017	11/22/2017
34	1.1.8.4	Receive deliverable client approval	10 days	11/23/2017	12/6/2017
35	1.1.9	**Training Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
36	1.1.9.1	Develop Training Management Plan	58 days	10/2/2017	12/20/2017
37	1.1.9.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
38	1.1.9.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
39	1.1.9.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
40	1.1.10	**Testing Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
41	1.1.10.1	Develop Testing Management Plan	58 days	10/2/2017	12/20/2017
42	1.1.10.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
43	1.1.10.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
44	1.1.10.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
45	1.1.11	**Scope Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
46	1.1.11.1	Develop Scope Management Plan	58 days	10/2/2017	12/20/2017
47	1.1.11.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
48	1.1.11.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017

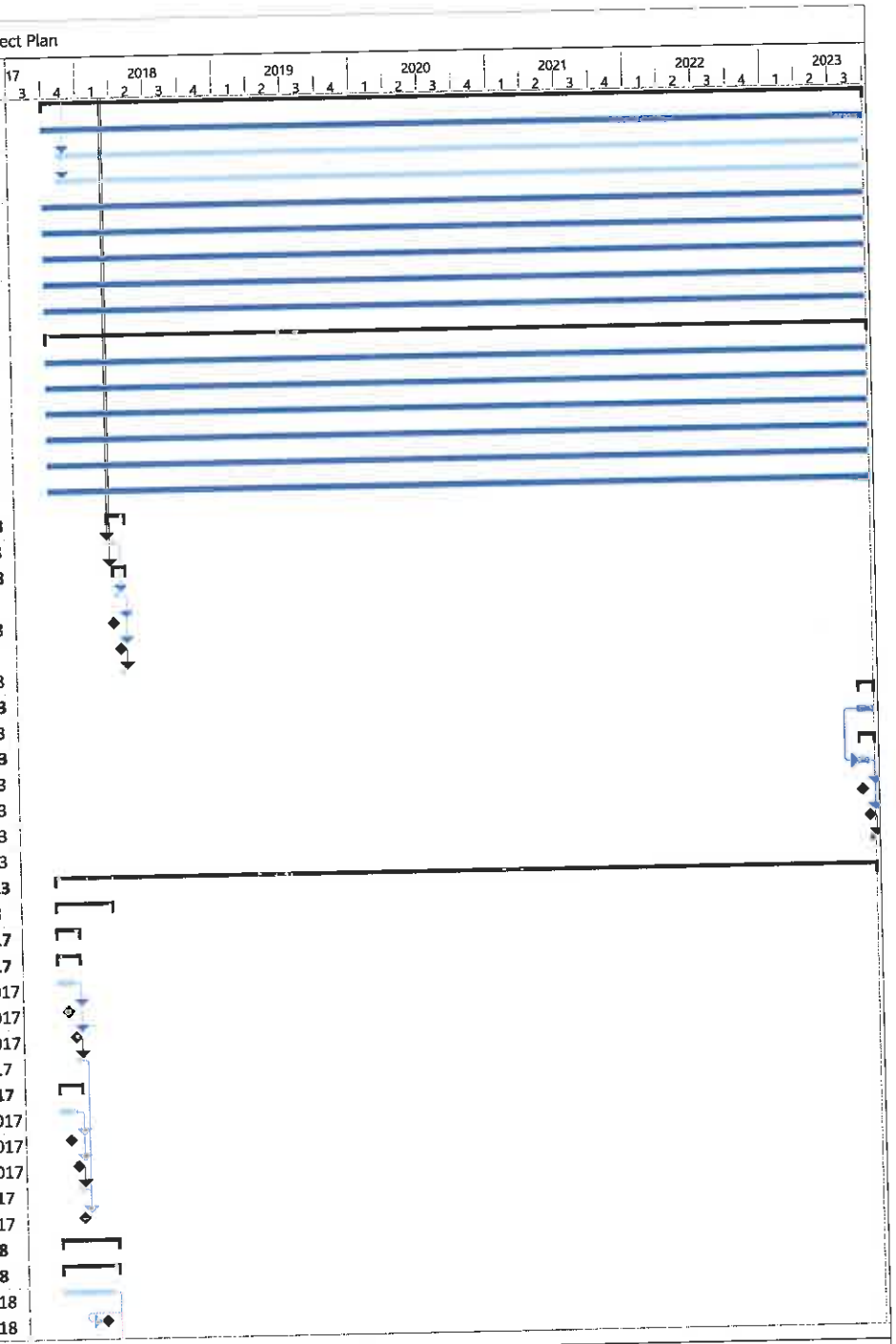


ID	WBS	Task Name	Duration	Start	Finish
49	1.1.11.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
50	**1.1.12**	**Deliverable Dictionary**	**68 days**	**10/2/2017**	**1/3/2018**
51	1.1.12.1	Develop Deliverable Dictionary	58 days	10/2/2017	12/20/2017
52	1.1.12.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
53	1.1.12.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
54	1.1.12.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
55	**1.1.13**	**Schedule Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
56	1.1.13.1	Develop Schedule Management Plan	58 days	10/2/2017	12/20/2017
57	1.1.13.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
58	1.1.13.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
59	1.1.13.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
60	**1.1.14**	**Project Schedule**	**68 days**	**10/2/2017**	**1/3/2018**
61	1.1.14.1	Develop Project Schedule	58 days	10/2/2017	12/20/2017
62	1.1.14.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
63	1.1.14.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
64	1.1.14.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
65	**1.1.15**	**Cost Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
66	1.1.15.1	Develop Cost Management Plan	58 days	10/2/2017	12/20/2017
67	1.1.15.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
68	1.1.15.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
69	1.1.15.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
70	**1.1.16**	**Quality Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
71	1.1.16.1	Develop Quality Management Plan	58 days	10/2/2017	12/20/2017
72	1.1.16.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
73	1.1.16.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
74	1.1.16.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
75	**1.1.17**	**Human Resources Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
76	1.1.17.1	Develop Human Resources Management Plan	58 days	10/2/2017	12/20/2017
77	1.1.17.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
78	1.1.17.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
79	1.1.17.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
80	**1.1.18**	**Communication Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
81	1.1.18.1	Develop Communication Management Plan	58 days	10/2/2017	12/20/2017
82	1.1.18.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
83	1.1.18.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
84	1.1.18.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
85	**1.1.19**	**Risk Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
86	1.1.19.1	Develop Risk Management Plan	58 days	10/2/2017	12/20/2017
87	1.1.19.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
88	1.1.19.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
89	1.1.19.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
90	**1.1.20**	**Issue Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
91	1.1.20.1	Develop Issue Management Plan	58 days	10/2/2017	12/20/2017
92	1.1.20.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
93	1.1.20.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
94	1.1.20.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
95	**1.1.21**	**Change Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
96	1.1.21.1	Develop Change Management Plan	58 days	10/2/2017	12/20/2017

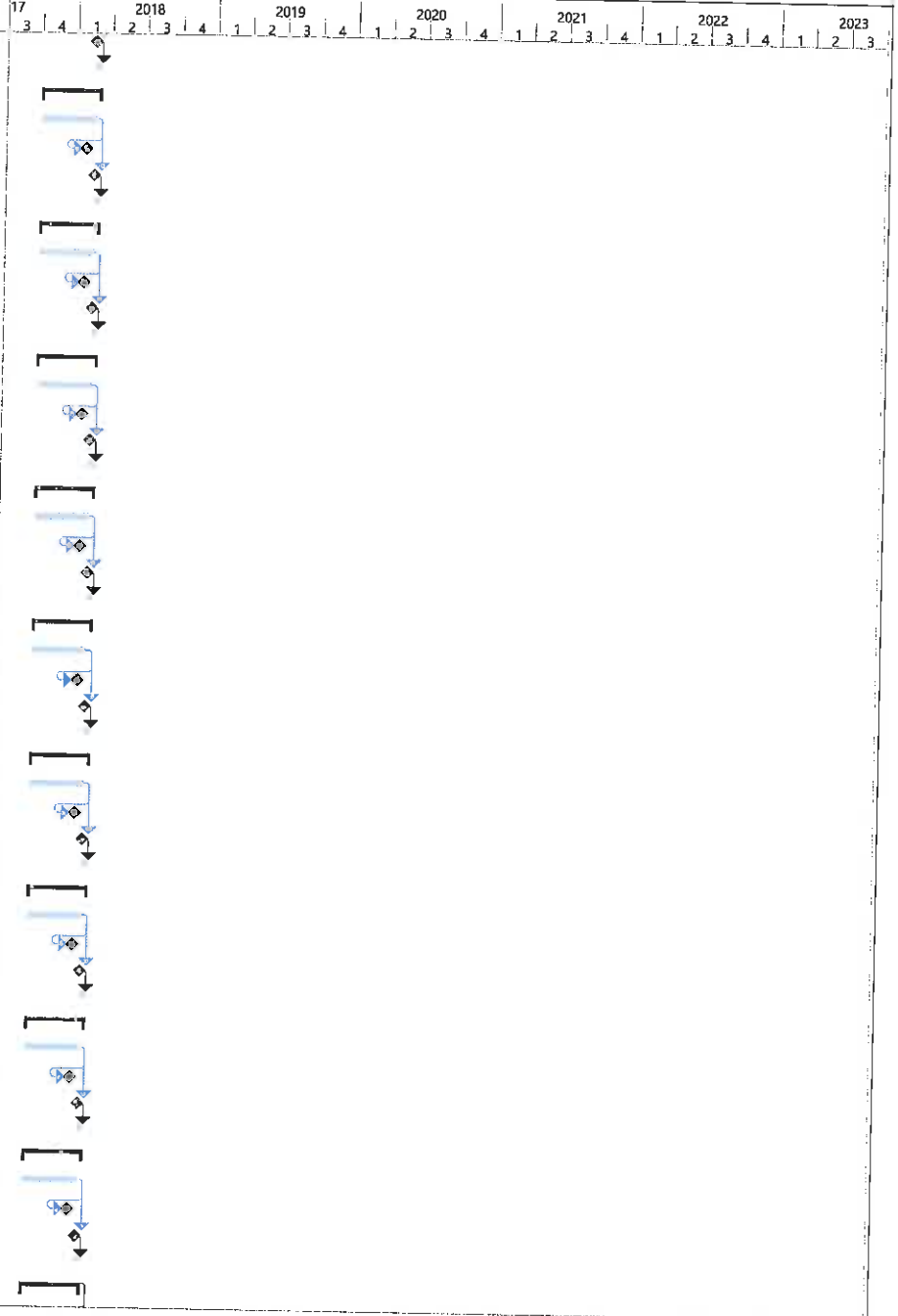
ID	WBS	Task Name	Duration	Start	Finish
97	1.1.21.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
98	1.1.21.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
99	1.1.21.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
100	**1.1.22**	**Security, Privacy, and confidentiality management plan**	**68 days**	**10/2/2017**	**1/3/2018**
101	1.1.22.1	Develop Security, Privacy, and confidentiality management plan	58 days	10/2/2017	12/20/2017
102	1.1.22.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
103	1.1.22.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
104	1.1.22.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
105	**1.1.23**	**Configuration Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
106	1.1.23.1	Develop Configuration Management Plan	58 days	10/2/2017	12/20/2017
107	1.1.23.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
108	1.1.23.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
109	1.1.23.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
110	**1.1.24**	**Data Conversion Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
111	1.1.24.1	Develop Data Conversion Management Plan	58 days	10/2/2017	12/20/2017
112	1.1.24.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
113	1.1.24.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
114	1.1.24.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
115	**1.1.25**	**Disaster Recovery and Business Continuity Plan**	**68 days**	**10/2/2017**	**1/3/2018**
116	1.1.25.1	Develop Disaster Recovery and Business Continuity Plan	58 days	10/2/2017	12/20/2017
117	1.1.25.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
118	1.1.25.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
119	1.1.25.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
120	**1.1.26**	**Integration Management Plan**	**68 days**	**10/2/2017**	**1/3/2018**
121	1.1.26.1	Develop Integration Management Plan	58 days	10/2/2017	12/20/2017
122	1.1.26.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
123	1.1.26.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
124	1.1.26.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
125	**1.1.27**	**Data Quality and Governance Plan**	**68 days**	**10/2/2017**	**1/3/2018**
126	1.1.27.1	Develop Data Quality and Governance Plan	58 days	10/2/2017	12/20/2017
127	1.1.27.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
128	1.1.27.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
129	1.1.27.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
130	**1.1.28**	**System Back-Up and Record Retention Plan**	**68 days**	**10/2/2017**	**1/3/2018**
131	1.1.28.1	Develop System Back-Up and Record Retention Plan	58 days	10/2/2017	12/20/2017
132	1.1.28.2	Interim draft deliverable submission	0 days	11/30/2017	11/30/2017
133	1.1.28.3	Submit deliverable for review	0 days	12/20/2017	12/20/2017
134	1.1.28.4	Receive deliverable client approval	10 days	12/21/2017	1/3/2018
135	**1.1.29**	**Weekly Project Status Report Template**	**28 days**	**10/2/2017**	**11/8/2017**
136	1.1.29.1	Develop Weekly Project Status Report Template	18 days	10/2/2017	10/25/2017
137	1.1.29.2	Interim draft deliverable submission	0 days	10/5/2017	10/5/2017
138	1.1.29.3	Submit deliverable for review	0 days	10/25/2017	10/25/2017
139	1.1.29.4	Receive deliverable client approval	10 days	10/26/2017	11/8/2017
140	**1.1.30**	**Monthly Project Status Report Template**	**28 days**	**10/2/2017**	**11/8/2017**
141	1.1.30.1	Develop Monthly Project Status Report Template	18 days	10/2/2017	10/25/2017
142	1.1.30.2	Interim draft deliverable submission	0 days	10/5/2017	10/5/2017
143	1.1.30.3	Submit deliverable for review	0 days	10/25/2017	10/25/2017
144	1.1.30.4	Receive deliverable client approval	10 days	10/26/2017	11/8/2017



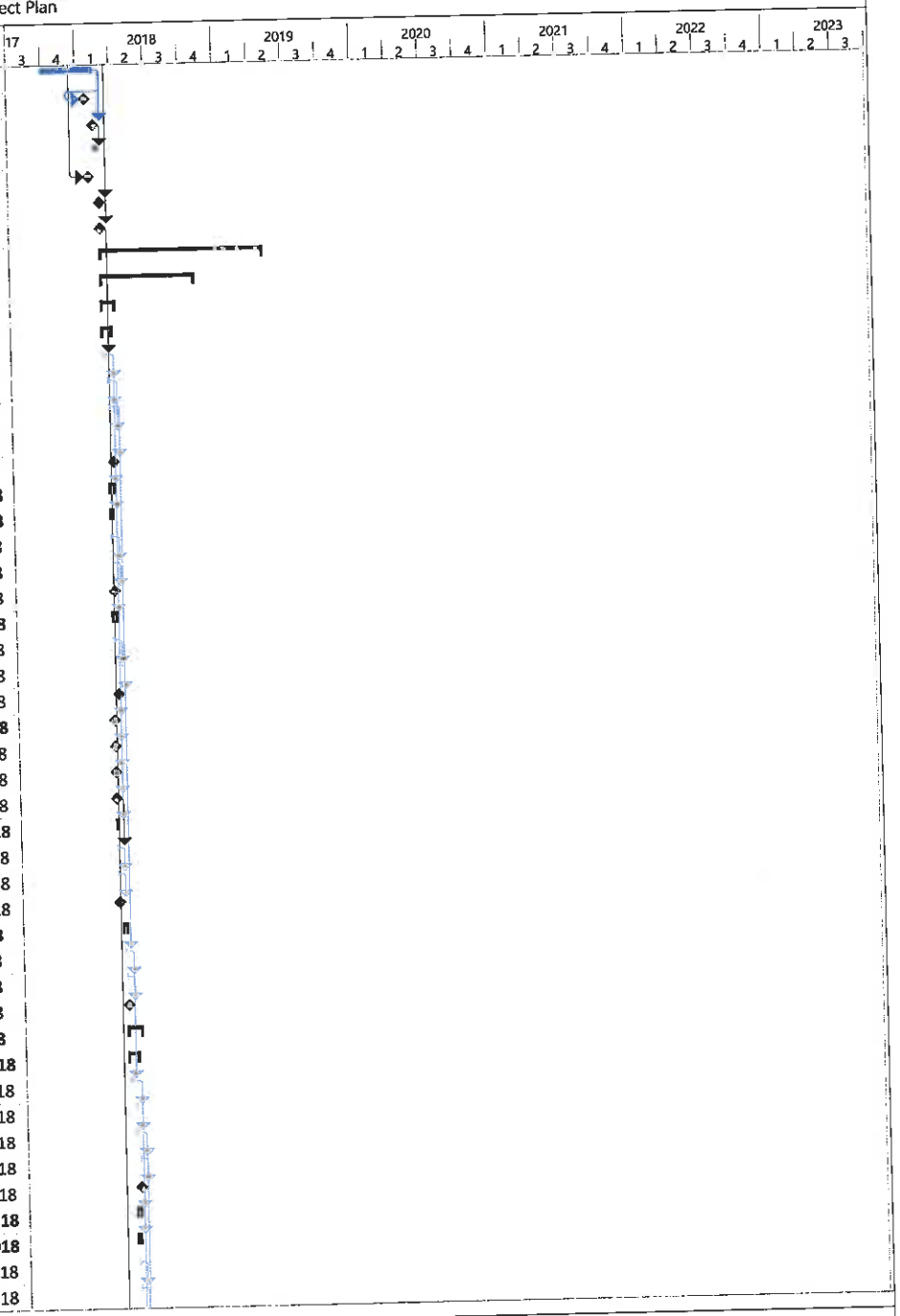
ID	WBS	Task Name	Duration	Start	Finish
145	**1.1.31**	**Recurring PM Reporting (as applicable)**	**1565 days**	**10/2/2017**	**9/29/2023**
146	1.1.31.1	Project Risks & Issues Log (Weekly)	1565 days	10/2/2017	9/29/2023
147	1.1.31.2	Weekly Project Status Report	1532 days	11/9/2017	9/22/2023
148	1.1.31.3	Monthly Project Status Report	1532 days	11/9/2017	9/22/2023
149	1.1.31.4	Financial Status Report (Weekly/Monthly)	1565 days	10/2/2017	9/29/2023
150	1.1.31.5	SLA System Performance (Monthly)	1565 days	10/2/2017	9/29/2023
151	1.1.31.6	System Incident and Corrective Maintenance Reports (Monthly)	1565 days	10/2/2017	9/29/2023
152	1.1.31.7	Operations Report (Daily/Monthly)	1565 days	10/2/2017	9/29/2023
153	1.1.31.8	Contractor System Deliverables Report (Biweekly)	1565 days	10/2/2017	9/29/2023
154	**1.1.32**	**Recurring PM Meetings (as applicable)**	**1565 days**	**10/2/2017**	**9/29/2023**
155	1.1.32.1	Executive Steering Committee Meeting (Monthly)	1565 days	10/2/2017	9/29/2023
156	1.1.32.2	Contractor Status Report Meeting (Biweekly)	1565 days	10/2/2017	9/29/2023
157	1.1.32.3	Contractor Risk, Issues, and Action Items Focus Meeting (Biweek	1565 days	10/2/2017	9/29/2023
158	1.1.32.4	Contractor State Business Owners Status Report Meeting (Biwee	1565 days	10/2/2017	9/29/2023
159	1.1.32.5	CIO Status Report Meeting (Weekly)	1565 days	10/2/2017	9/29/2023
160	1.1.32.6	Technical Infrastructure Touch Point Meeting (Weekly)	1565 days	10/2/2017	9/29/2023
161	**1.1.33**	**Project Rebaseline**	**35 days**	**3/5/2018**	**4/20/2018**
162	1.1.33.1	Assess Project schedule Planned Vs Actual	15 days	3/5/2018	3/23/2018
163	**1.1.33.2**	**Develop Rebaselined Project Schedule**	**25 days**	**3/19/2018**	**4/20/2018**
164	1.1.33.2.1	Develop Rebaselined Project Schedule	10 days	3/26/2018	4/6/2018
165	1.1.33.2.2	Interim draft deliverable submission	0 days	3/19/2018	3/19/2018
166	1.1.33.2.3	Submit deliverable for review	0 days	4/6/2018	4/6/2018
167	1.1.33.2.4	Receive deliverable client approval	10 days	4/9/2018	4/20/2018
168	**1.1.34**	**Project Closeout**	**30 days**	**8/21/2023**	**9/29/2023**
169	1.1.34.1	Execute Turnover and project closeout activities	30 days	8/21/2023	9/29/2023
170	**1.1.34.2**	**Turnover and Closeout Management Plan**	**30 days**	**8/21/2023**	**9/29/2023**
171	1.1.34.2.1	Develop Turnover and Closeout Management Plan	20 days	8/21/2023	9/15/2023
172	1.1.34.2.2	Interim draft deliverable submission	0 days	8/28/2023	8/28/2023
173	1.1.34.2.3	Submit deliverable for review	0 days	9/15/2023	9/15/2023
174	1.1.34.2.4	Receive deliverable client approval	10 days	9/18/2023	9/29/2023
175	**1.2**	**RAPIDS Modernization Phase 1- Technology Platform Modernizatio**	**1565 days**	**10/2/2017**	**9/29/2023**
176	**1.2.1**	**Discovery**	**109 days**	**10/2/2017**	**3/1/2018**
177	**1.2.1.1**	**Requirements Validations**	**45 days**	**10/2/2017**	**12/1/2017**
178	**1.2.1.1.1**	**Requirements Traceability Matrix (RTM)**	**45 days**	**10/2/2017**	**12/1/2017**
179	1.2.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	35 days	10/2/2017	11/17/2017
180	1.2.1.1.1.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
181	1.2.1.1.1.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017
182	1.2.1.1.1.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017
183	**1.2.1.1.2**	**Requirements Specification Document (RSD)**	**45 days**	**10/2/2017**	**12/1/2017**
184	1.2.1.1.2.1	Develop Requirements Specification Document (RSD)	35 days	10/2/2017	11/17/2017
185	1.2.1.1.2.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
186	1.2.1.1.2.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017
187	1.2.1.1.2.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017
188	1.2.1.1.3	Overall completion of Requirements Validation	0 days	12/1/2017	12/1/2017
189	**1.2.1.2**	**Design**	**109 days**	**10/2/2017**	**3/1/2018**
190	**1.2.1.2.1**	**Requirements Gap Analysis Document**	**109 days**	**10/2/2017**	**3/1/2018**
191	1.2.1.2.1.1	Develop Requirements Gap Analysis Document	99 days	10/2/2017	2/15/2018
192	1.2.1.2.1.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018



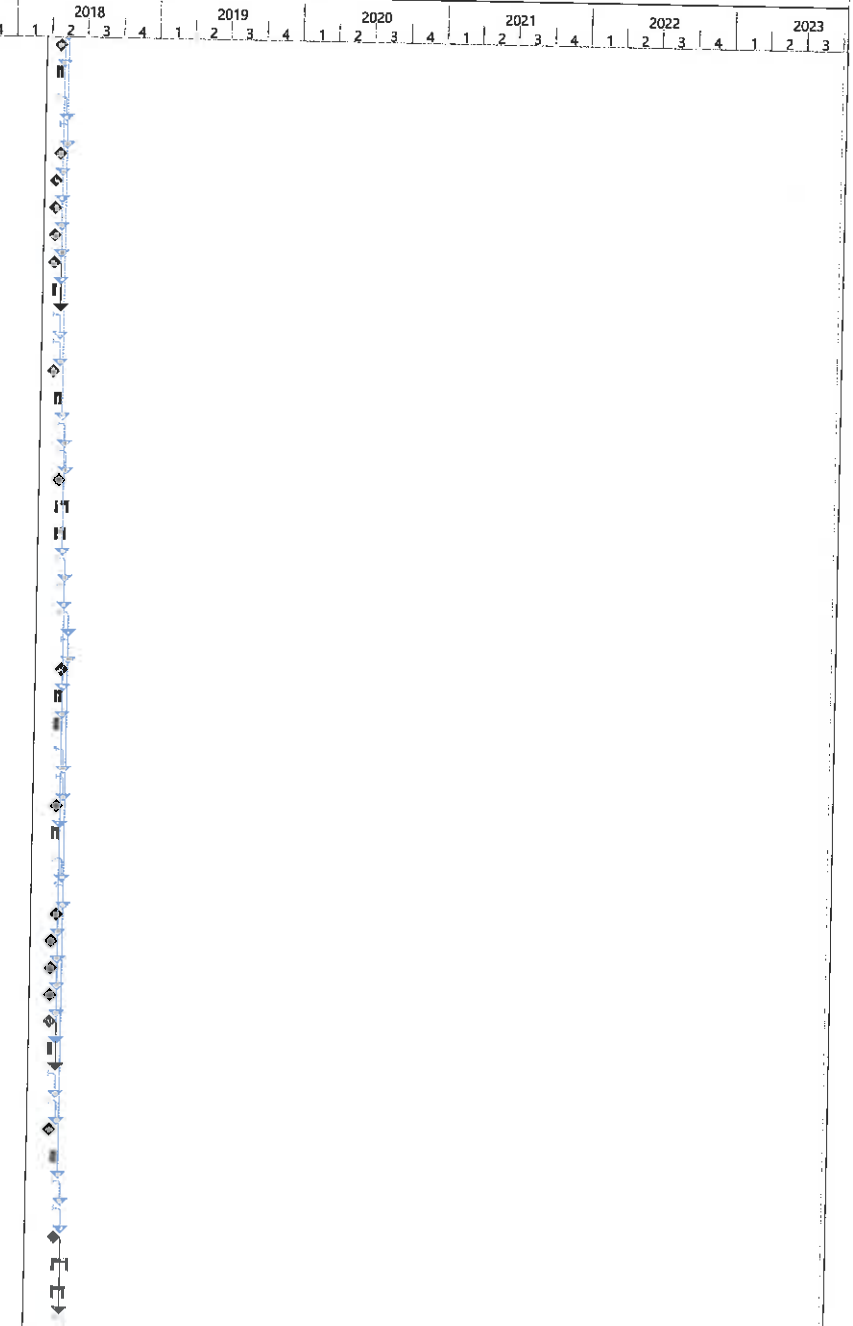
ID	WBS	Task Name	Duration	Start	Finish
193	1.2.1.2.1.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
194	1.2.1.2.1.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
195	**1.2.1.2.2**	**Business Process Models**	**109 days**	**10/2/2017**	**3/1/2018**
196	1.2.1.2.2.1	Develop Business Process Models	99 days	10/2/2017	2/15/2018
197	1.2.1.2.2.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
198	1.2.1.2.2.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
199	1.2.1.2.2.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
200	**1.2.1.2.3**	**Detailed System Design (DSD) Document**	**109 days**	**10/2/2017**	**3/1/2018**
201	1.2.1.2.3.1	Develop Detailed System Design (DSD) Document	99 days	10/2/2017	2/15/2018
202	1.2.1.2.3.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
203	1.2.1.2.3.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
204	1.2.1.2.3.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
205	**1.2.1.2.4**	**Data Dictionary**	**109 days**	**10/2/2017**	**3/1/2018**
206	1.2.1.2.4.1	Develop Data Dictionary	99 days	10/2/2017	2/15/2018
207	1.2.1.2.4.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
208	1.2.1.2.4.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
209	1.2.1.2.4.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
210	**1.2.1.2.5**	**Data Models**	**109 days**	**10/2/2017**	**3/1/2018**
211	1.2.1.2.5.1	Develop Data Models	99 days	10/2/2017	2/15/2018
212	1.2.1.2.5.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
213	1.2.1.2.5.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
214	1.2.1.2.5.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
215	**1.2.1.2.6**	**Reports Inventory**	**109 days**	**10/2/2017**	**3/1/2018**
216	1.2.1.2.6.1	Develop Reports Inventory	99 days	10/2/2017	2/15/2018
217	1.2.1.2.6.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
218	1.2.1.2.6.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
219	1.2.1.2.6.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
220	**1.2.1.2.7**	**Correspondence Inventory**	**109 days**	**10/2/2017**	**3/1/2018**
221	1.2.1.2.7.1	Develop Correspondence Inventory	99 days	10/2/2017	2/15/2018
222	1.2.1.2.7.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
223	1.2.1.2.7.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
224	1.2.1.2.7.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
225	**1.2.1.2.8**	**Forms Inventory**	**109 days**	**10/2/2017**	**3/1/2018**
226	1.2.1.2.8.1	Develop Forms Inventory	99 days	10/2/2017	2/15/2018
227	1.2.1.2.8.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
228	1.2.1.2.8.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
229	1.2.1.2.8.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
230	**1.2.1.2.9**	**Interface Inventory**	**109 days**	**10/2/2017**	**3/1/2018**
231	1.2.1.2.9.1	Develop Interface Inventory	99 days	10/2/2017	2/15/2018
232	1.2.1.2.9.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
233	1.2.1.2.9.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
234	1.2.1.2.9.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
235	**1.2.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**109 days**	**10/2/2017**	**3/1/2018**
236	1.2.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	99 days	10/2/2017	2/15/2018
237	1.2.1.2.10.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
238	1.2.1.2.10.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
239	1.2.1.2.10.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
240	**1.2.1.2.11**	**Data Cleansing and Conversion Specification Document**	**109 days**	**10/2/2017**	**3/1/2018**



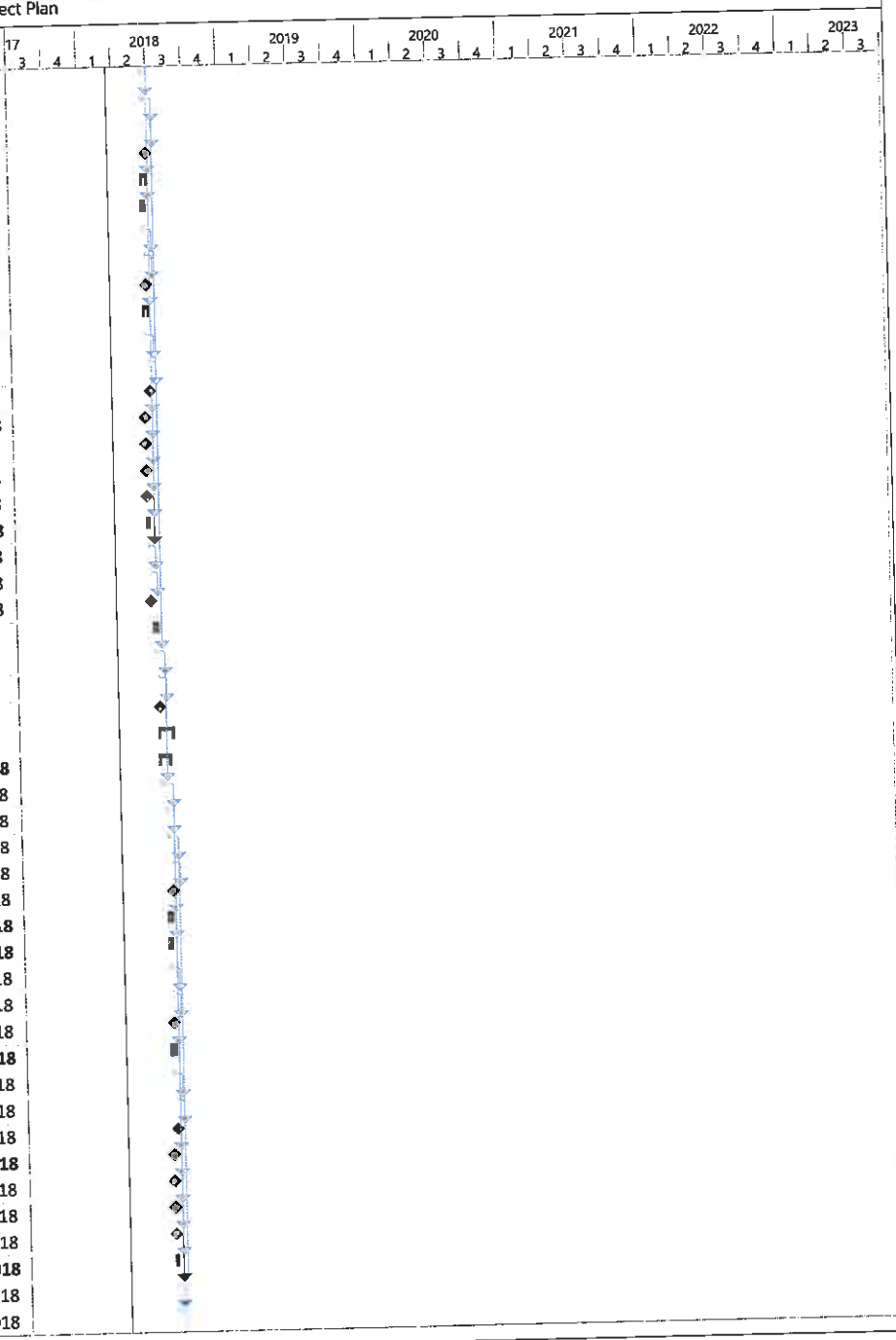
ID	WBS	Task Name	Duration	Start	Finish
241	1.2.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	99 days	10/2/2017	2/15/2018
242	1.2.1.2.11.2	Interim draft deliverable submission	0 days	1/26/2018	1/26/2018
243	1.2.1.2.11.3	Submit deliverable for review	0 days	2/15/2018	2/15/2018
244	1.2.1.2.11.4	Receive deliverable client approval	10 days	2/16/2018	3/1/2018
245	1.2.1.2.12	Implement legacy system code-freeze	0 days	2/2/2018	2/2/2018
246	1.2.1.2.13	Overall completion of Data Conversion Design	0 days	3/1/2018	3/1/2018
247	1.2.1.2.14	Overall completion of Design Phase	0 days	3/1/2018	3/1/2018
248	**1.2.2**	**Development, Configuration and Testing**	**306 days**	**3/2/2018**	**5/3/2019**
249	**1.2.2.1**	**Sprint Development**	**176 days**	**3/2/2018**	**11/2/2018**
250	**1.2.2.1.1**	**Sprint 1**	**24 days**	**3/2/2018**	**4/4/2018**
251	**1.2.2.1.1.1**	**Sprint Execution**	**17 days**	**3/2/2018**	**3/26/2018**
252	1.2.2.1.1.1.1	Build	9 days	3/2/2018	3/14/2018
253	1.2.2.1.1.1.2	Write UAT Tests	5 days	3/15/2018	3/21/2018
254	1.2.2.1.1.1.3	System Testing&Defect Remediation	8 days	3/15/2018	3/26/2018
255	1.2.2.1.1.1.4	Review	1 day	3/22/2018	3/22/2018
256	1.2.2.1.1.1.5	Retrospective/Backlog Refinement	0 days	3/26/2018	3/26/2018
257	**1.2.2.1.1.2**	**Sprint OWPs**	**8 days**	**3/14/2018**	**3/26/2018**
258	**1.2.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**3/15/2018**	**3/21/2018**
259	1.2.2.1.1.2.1	Submission	4 days	3/15/2018	3/20/2018
260	1.2.2.1.1.2.1	DHHR Review	1 day	3/21/2018	3/21/2018
261	1.2.2.1.1.2.1	DHHR Signoff	0 days	3/21/2018	3/21/2018
262	**1.2.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**3/15/2018**	**3/26/2018**
263	1.2.2.1.1.2.2	Submission	5 days	3/15/2018	3/21/2018
264	1.2.2.1.1.2.2	DHHR Review	3 days	3/22/2018	3/26/2018
265	1.2.2.1.1.2.2	DHHR Signoff	0 days	3/26/2018	3/26/2018
266	**1.2.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**3/14/2018**	**3/14/2018**
267	1.2.2.1.1.2.3	Unit Test Results	0 days	3/14/2018	3/14/2018
268	1.2.2.1.1.2.3	String / System Test Results	0 days	3/14/2018	3/14/2018
269	1.2.2.1.1.2.3	Integration and Regression Test Scripts	0 days	3/14/2018	3/14/2018
270	**1.2.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**3/15/2018**	**3/16/2018**
271	1.2.2.1.1.2.4	Developed Components	1 day	3/15/2018	3/15/2018
272	1.2.2.1.1.2.4	Sprint Review	1 day	3/16/2018	3/16/2018
273	1.2.2.1.1.2.4	Sprint Retrospective	0 days	3/16/2018	3/16/2018
274	**1.2.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**3/27/2018**	**4/4/2018**
275	1.2.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	3/27/2018	4/2/2018
276	1.2.2.1.1.3.2	DHHR Code Review	2 days	4/3/2018	4/4/2018
277	1.2.2.1.1.3.3	Sprint Acceptance	0 days	4/4/2018	4/4/2018
278	**1.2.2.1.2**	**Sprint 2**	**25 days**	**4/3/2018**	**5/7/2018**
279	**1.2.2.1.2.1**	**Sprint Execution**	**19 days**	**4/3/2018**	**4/27/2018**
280	1.2.2.1.2.1.1	Build	10 days	4/3/2018	4/16/2018
281	1.2.2.1.2.1.2	Write UAT Tests	5 days	4/17/2018	4/23/2018
282	1.2.2.1.2.1.3	System Testing&Defect Remediation	8 days	4/17/2018	4/26/2018
283	1.2.2.1.2.1.4	Review	1 day	4/27/2018	4/27/2018
284	1.2.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	4/27/2018	4/27/2018
285	**1.2.2.1.2.2**	**Sprint OWPs**	**8 days**	**4/16/2018**	**4/26/2018**
286	**1.2.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**4/17/2018**	**4/23/2018**
287	1.2.2.1.2.2.1	Submission	4 days	4/17/2018	4/20/2018
288	1.2.2.1.2.2.1	DHHR Review	1 day	4/23/2018	4/23/2018



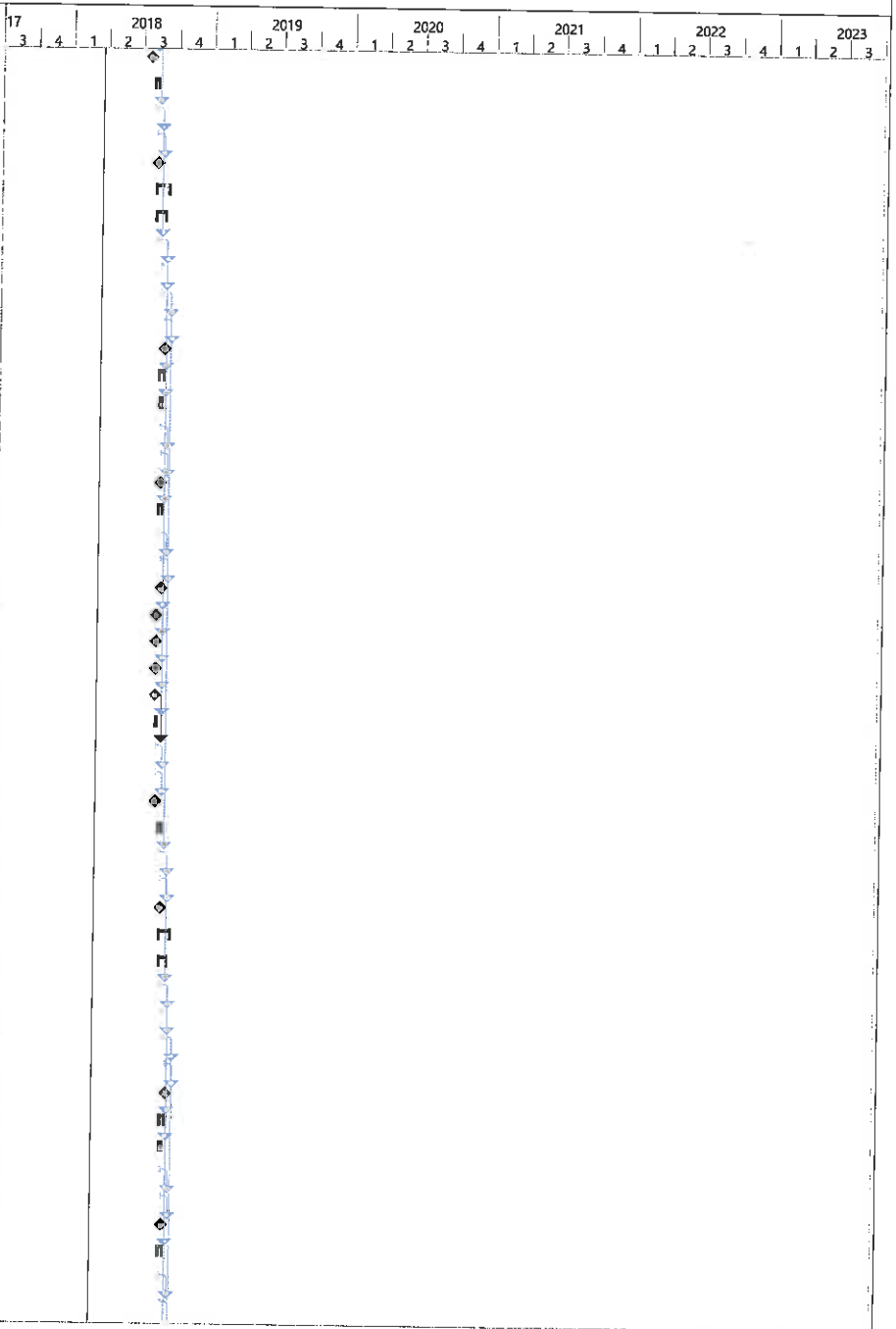
ID	WBS	Task Name	Duration	Start	Finish
289	1.2.2.1.2.2.1	DHHR Signoff	0 days	4/23/2018	4/23/2018
290	**1.2.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**4/17/2018**	**4/26/2018**
291	1.2.2.1.2.2.2	Submission	5 days	4/17/2018	4/23/2018
292	1.2.2.1.2.2.2	DHHR Review	3 days	4/24/2018	4/26/2018
293	1.2.2.1.2.2.2	DHHR Signoff	0 days	4/26/2018	4/26/2018
294	**1.2.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**4/16/2018**	**4/16/2018**
295	1.2.2.1.2.2.3	Unit Test Results	0 days	4/16/2018	4/16/2018
296	1.2.2.1.2.2.3	String / System Test Results	0 days	4/16/2018	4/16/2018
297	1.2.2.1.2.2.3	Integration and Regression Test Scripts	0 days	4/16/2018	4/16/2018
298	**1.2.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**4/17/2018**	**4/18/2018**
299	1.2.2.1.2.2.4	Developed Components	1 day	4/17/2018	4/17/2018
300	1.2.2.1.2.2.4	Sprint Review	1 day	4/18/2018	4/18/2018
301	1.2.2.1.2.2.4	Sprint Retrospective	0 days	4/18/2018	4/18/2018
302	**1.2.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**4/27/2018**	**5/7/2018**
303	1.2.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	4/27/2018	5/3/2018
304	1.2.2.1.2.3.2	DHHR Code Review	2 days	5/4/2018	5/7/2018
305	1.2.2.1.2.3.3	Sprint Acceptance	0 days	5/7/2018	5/7/2018
306	**1.2.2.1.3**	**Sprint 3**	**20 days**	**5/4/2018**	**5/31/2018**
307	**1.2.2.1.3.1**	**Sprint Execution**	**14 days**	**5/4/2018**	**5/23/2018**
308	1.2.2.1.3.1.1	Build	5 days	5/4/2018	5/10/2018
309	1.2.2.1.3.1.2	Write UAT Tests	5 days	5/11/2018	5/17/2018
310	1.2.2.1.3.1.3	System Testing&Defect Remediation	8 days	5/11/2018	5/22/2018
311	1.2.2.1.3.1.4	Review	1 day	5/23/2018	5/23/2018
312	1.2.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	5/23/2018	5/23/2018
313	**1.2.2.1.3.2**	**Sprint OWPs**	**8 days**	**5/10/2018**	**5/22/2018**
314	**1.2.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**5/11/2018**	**5/17/2018**
315	1.2.2.1.3.2.1	Submission	4 days	5/11/2018	5/16/2018
316	1.2.2.1.3.2.1	DHHR Review	1 day	5/17/2018	5/17/2018
317	1.2.2.1.3.2.1	DHHR Signoff	0 days	5/17/2018	5/17/2018
318	**1.2.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**5/11/2018**	**5/22/2018**
319	1.2.2.1.3.2.2	Submission	5 days	5/11/2018	5/17/2018
320	1.2.2.1.3.2.2	DHHR Review	3 days	5/18/2018	5/22/2018
321	1.2.2.1.3.2.2	DHHR Signoff	0 days	5/22/2018	5/22/2018
322	**1.2.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**5/10/2018**	**5/10/2018**
323	1.2.2.1.3.2.3	Unit Test Results	0 days	5/10/2018	5/10/2018
324	1.2.2.1.3.2.3	String / System Test Results	0 days	5/10/2018	5/10/2018
325	1.2.2.1.3.2.3	Integration and Regression Test Scripts	0 days	5/10/2018	5/10/2018
326	**1.2.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**5/11/2018**	**5/14/2018**
327	1.2.2.1.3.2.4	Developed Components	1 day	5/11/2018	5/11/2018
328	1.2.2.1.3.2.4	Sprint Review	1 day	5/14/2018	5/14/2018
329	1.2.2.1.3.2.4	Sprint Retrospective	0 days	5/14/2018	5/14/2018
330	**1.2.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**5/23/2018**	**5/31/2018**
331	1.2.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	5/23/2018	5/29/2018
332	1.2.2.1.3.3.2	DHHR Code Review	2 days	5/30/2018	5/31/2018
333	1.2.2.1.3.3.3	Sprint Acceptance	0 days	5/31/2018	5/31/2018
334	**1.2.2.1.4**	**Hardening Sprint**	**25 days**	**6/1/2018**	**7/5/2018**
335	**1.2.2.1.4.1**	**Sprint Execution**	**19 days**	**6/1/2018**	**6/27/2018**
336	1.2.2.1.4.1.1	Build	10 days	6/1/2018	6/14/2018



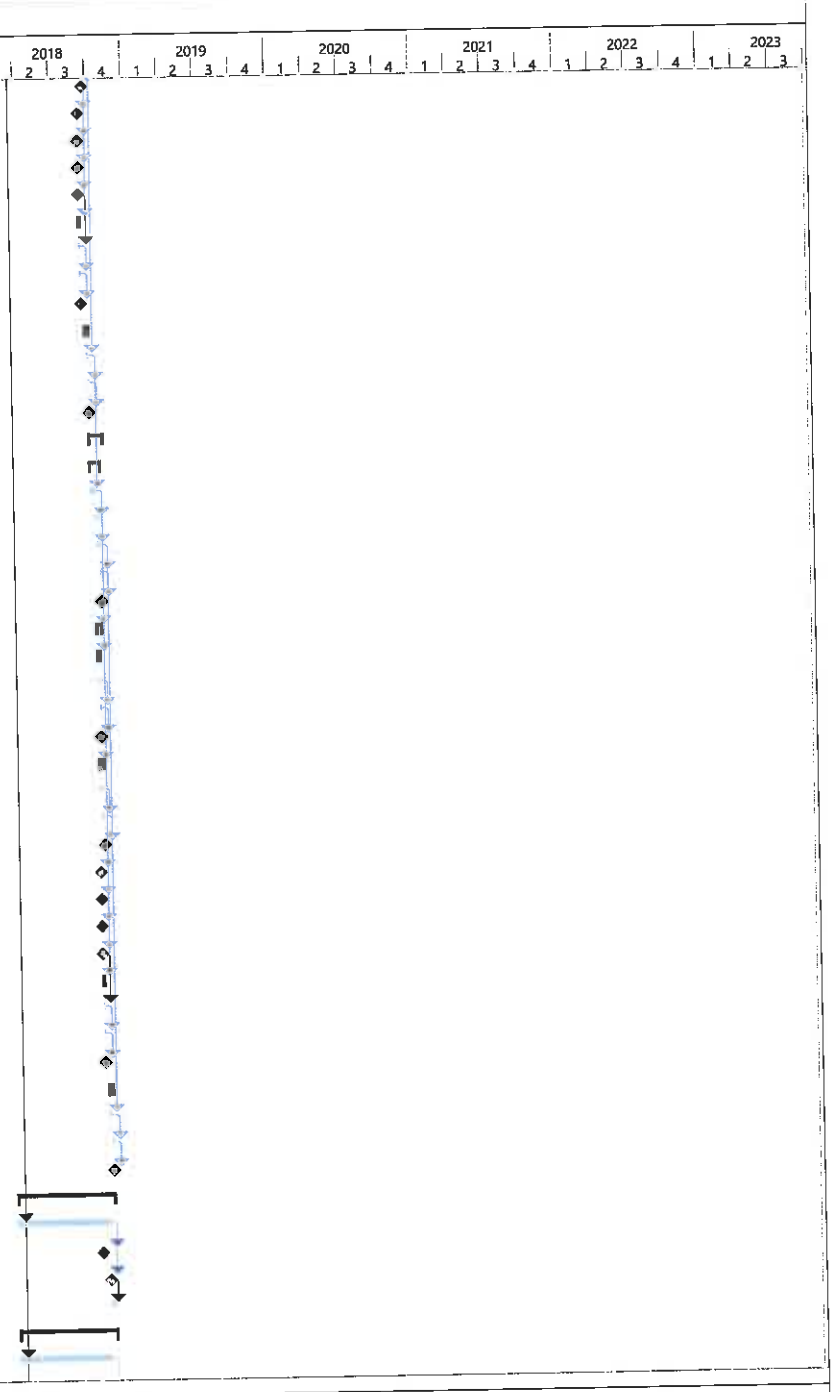
ID	WBS	Task Name	Duration	Start	Finish
337	1.2.2.1.4.1.2	Write UAT Tests	5 days	6/15/2018	6/21/2018
338	1.2.2.1.4.1.3	System Testing&Defect Remediation	8 days	6/15/2018	6/26/2018
339	1.2.2.1.4.1.4	Review	1 day	6/27/2018	6/27/2018
340	1.2.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	6/27/2018	6/27/2018
341	**1.2.2.1.4.2**	**Sprint OWPs**	**8 days**	**6/14/2018**	**6/26/2018**
342	**1.2.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**6/15/2018**	**6/21/2018**
343	1.2.2.1.4.2.1	Submission	4 days	6/15/2018	6/20/2018
344	1.2.2.1.4.2.1	DHHR Review	1 day	6/21/2018	6/21/2018
345	1.2.2.1.4.2.1	DHHR Signoff	0 days	6/21/2018	6/21/2018
346	**1.2.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**6/15/2018**	**6/26/2018**
347	1.2.2.1.4.2.2	Submission	5 days	6/15/2018	6/21/2018
348	1.2.2.1.4.2.2	DHHR Review	3 days	6/22/2018	6/26/2018
349	1.2.2.1.4.2.2	DHHR Signoff	0 days	6/26/2018	6/26/2018
350	**1.2.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**6/14/2018**	**6/14/2018**
351	1.2.2.1.4.2.3	Unit Test Results	0 days	6/14/2018	6/14/2018
352	1.2.2.1.4.2.3	String / System Test Results	0 days	6/14/2018	6/14/2018
353	1.2.2.1.4.2.3	Integration and Regression Test Scripts	0 days	6/14/2018	6/14/2018
354	**1.2.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**6/15/2018**	**6/18/2018**
355	1.2.2.1.4.2.4	Developed Components	1 day	6/15/2018	6/15/2018
356	1.2.2.1.4.2.4	Sprint Review	1 day	6/18/2018	6/18/2018
357	1.2.2.1.4.2.4	Sprint Retrospective	0 days	6/18/2018	6/18/2018
358	**1.2.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**6/27/2018**	**7/5/2018**
359	1.2.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	6/27/2018	7/3/2018
360	1.2.2.1.4.3.2	DHHR Code Review	2 days	7/4/2018	7/5/2018
361	1.2.2.1.4.3.3	Sprint Acceptance	0 days	7/5/2018	7/5/2018
362	**1.2.2.1.5**	**Sprint 4**	**25 days**	**7/4/2018**	**8/7/2018**
363	**1.2.2.1.5.1**	**Sprint Execution**	**19 days**	**7/4/2018**	**7/30/2018**
364	1.2.2.1.5.1.1	Build	10 days	7/4/2018	7/17/2018
365	1.2.2.1.5.1.2	Write UAT Tests	5 days	7/18/2018	7/24/2018
366	1.2.2.1.5.1.3	System Testing&Defect Remediation	8 days	7/18/2018	7/27/2018
367	1.2.2.1.5.1.4	Review	1 day	7/30/2018	7/30/2018
368	1.2.2.1.5.1.5	Retrospective/Backlog Refinement	0 days	7/30/2018	7/30/2018
369	**1.2.2.1.5.2**	**Sprint OWPs**	**8 days**	**7/17/2018**	**7/27/2018**
370	**1.2.2.1.5.2.1**	**Create Sprint Backlog**	**5 days**	**7/18/2018**	**7/24/2018**
371	1.2.2.1.5.2.1	Submission	4 days	7/18/2018	7/23/2018
372	1.2.2.1.5.2.1	DHHR Review	1 day	7/24/2018	7/24/2018
373	1.2.2.1.5.2.1	DHHR Signoff	0 days	7/24/2018	7/24/2018
374	**1.2.2.1.5.2.2**	**Design Specification (Sprint Features)**	**8 days**	**7/18/2018**	**7/27/2018**
375	1.2.2.1.5.2.2	Submission	5 days	7/18/2018	7/24/2018
376	1.2.2.1.5.2.2	DHHR Review	3 days	7/25/2018	7/27/2018
377	1.2.2.1.5.2.2	DHHR Signoff	0 days	7/27/2018	7/27/2018
378	**1.2.2.1.5.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**7/17/2018**	**7/17/2018**
379	1.2.2.1.5.2.3	Unit Test Results	0 days	7/17/2018	7/17/2018
380	1.2.2.1.5.2.3	String / System Test Results	0 days	7/17/2018	7/17/2018
381	1.2.2.1.5.2.3	Integration and Regression Test Scripts	0 days	7/17/2018	7/17/2018
382	**1.2.2.1.5.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**7/18/2018**	**7/19/2018**
383	1.2.2.1.5.2.4	Developed Components	1 day	7/18/2018	7/18/2018
384	1.2.2.1.5.2.4	Sprint Review	1 day	7/19/2018	7/19/2018



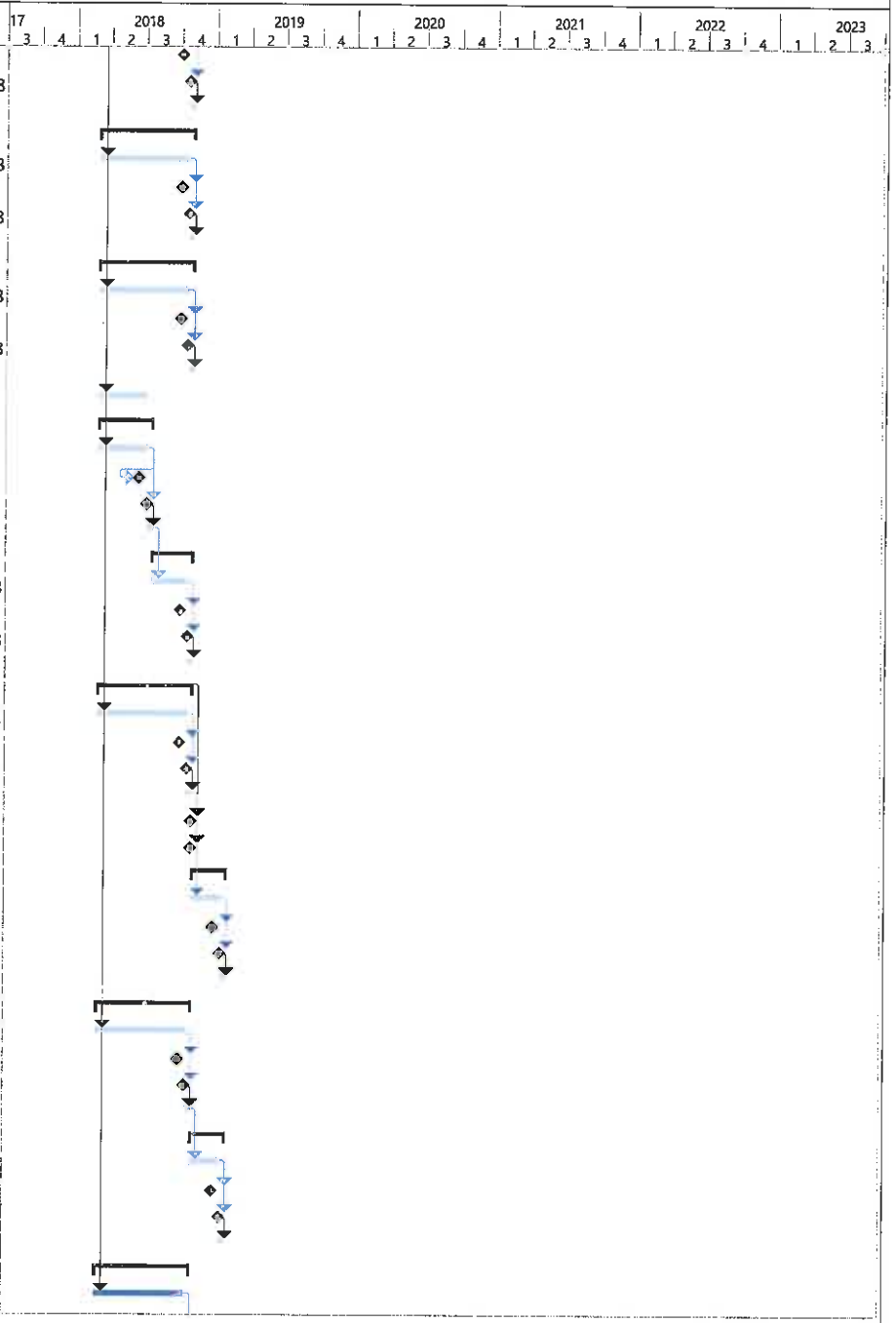
ID	WBS	Task Name	Duration	Start	Finish
385	1.2.2.1.5.2.4	Sprint Retrospective	0 days	7/19/2018	7/19/2018
386	**1.2.2.1.5.3**	**DHHR Sprint Acceptance**	**7 days**	**7/30/2018**	**8/7/2018**
387	1.2.2.1.5.3.1	Perform DHHR Acceptance Tests	5 days	7/30/2018	8/3/2018
388	1.2.2.1.5.3.2	DHHR Code Review	2 days	8/6/2018	8/7/2018
389	1.2.2.1.5.3.3	Sprint Acceptance	0 days	8/7/2018	8/7/2018
390	**1.2.2.1.6**	**Sprint 5**	**25 days**	**8/6/2018**	**9/7/2018**
391	**1.2.2.1.6.1**	**Sprint Execution**	**19 days**	**8/6/2018**	**8/30/2018**
392	1.2.2.1.6.1.1	Build	10 days	8/6/2018	8/17/2018
393	1.2.2.1.6.1.2	Write UAT Tests	5 days	8/20/2018	8/24/2018
394	1.2.2.1.6.1.3	System Testing&Defect Remediation	8 days	8/20/2018	8/29/2018
395	1.2.2.1.6.1.4	Review	1 day	8/30/2018	8/30/2018
396	1.2.2.1.6.1.5	Retrospective/Backlog Refinement	0 days	8/30/2018	8/30/2018
397	**1.2.2.1.6.2**	**Sprint OWPs**	**8 days**	**8/17/2018**	**8/29/2018**
398	**1.2.2.1.6.2.1**	**Create Sprint Backlog**	**5 days**	**8/20/2018**	**8/24/2018**
399	1.2.2.1.6.2.1	Submission	4 days	8/20/2018	8/23/2018
400	1.2.2.1.6.2.1	DHHR Review	1 day	8/24/2018	8/24/2018
401	1.2.2.1.6.2.1	DHHR Signoff	0 days	8/24/2018	8/24/2018
402	**1.2.2.1.6.2.2**	**Design Specification (Sprint Features)**	**8 days**	**8/20/2018**	**8/29/2018**
403	1.2.2.1.6.2.2	Submission	5 days	8/20/2018	8/24/2018
404	1.2.2.1.6.2.2	DHHR Review	3 days	8/27/2018	8/29/2018
405	1.2.2.1.6.2.2	DHHR Signoff	0 days	8/29/2018	8/29/2018
406	**1.2.2.1.6.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**8/17/2018**	**8/17/2018**
407	1.2.2.1.6.2.3	Unit Test Results	0 days	8/17/2018	8/17/2018
408	1.2.2.1.6.2.3	String / System Test Results	0 days	8/17/2018	8/17/2018
409	1.2.2.1.6.2.3	Integration and Regression Test Scripts	0 days	8/17/2018	8/17/2018
410	**1.2.2.1.6.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**8/20/2018**	**8/21/2018**
411	1.2.2.1.6.2.4	Developed Components	1 day	8/20/2018	8/20/2018
412	1.2.2.1.6.2.4	Sprint Review	1 day	8/21/2018	8/21/2018
413	1.2.2.1.6.2.4	Sprint Retrospective	0 days	8/21/2018	8/21/2018
414	**1.2.2.1.6.3**	**DHHR Sprint Acceptance**	**7 days**	**8/30/2018**	**9/7/2018**
415	1.2.2.1.6.3.1	Perform DHHR Acceptance Tests	5 days	8/30/2018	9/5/2018
416	1.2.2.1.6.3.2	DHHR Code Review	2 days	9/6/2018	9/7/2018
417	1.2.2.1.6.3.3	Sprint Acceptance	0 days	9/7/2018	9/7/2018
418	**1.2.2.1.7**	**Sprint 6**	**20 days**	**9/6/2018**	**10/3/2018**
419	**1.2.2.1.7.1**	**Sprint Execution**	**14 days**	**9/6/2018**	**9/25/2018**
420	1.2.2.1.7.1.1	Build	5 days	9/6/2018	9/12/2018
421	1.2.2.1.7.1.2	Write UAT Tests	5 days	9/13/2018	9/19/2018
422	1.2.2.1.7.1.3	System Testing&Defect Remediation	8 days	9/13/2018	9/24/2018
423	1.2.2.1.7.1.4	Review	1 day	9/25/2018	9/25/2018
424	1.2.2.1.7.1.5	Retrospective/Backlog Refinement	0 days	9/25/2018	9/25/2018
425	**1.2.2.1.7.2**	**Sprint OWPs**	**8 days**	**9/12/2018**	**9/24/2018**
426	**1.2.2.1.7.2.1**	**Create Sprint Backlog**	**5 days**	**9/13/2018**	**9/19/2018**
427	1.2.2.1.7.2.1	Submission	4 days	9/13/2018	9/18/2018
428	1.2.2.1.7.2.1	DHHR Review	1 day	9/19/2018	9/19/2018
429	1.2.2.1.7.2.1	DHHR Signoff	0 days	9/19/2018	9/19/2018
430	**1.2.2.1.7.2.2**	**Design Specification (Sprint Features)**	**8 days**	**9/13/2018**	**9/24/2018**
431	1.2.2.1.7.2.2	Submission	5 days	9/13/2018	9/19/2018
432	1.2.2.1.7.2.2	DHHR Review	3 days	9/20/2018	9/24/2018



ID	WBS	Task Name	Duration	Start	Finish
433	1.2.2.1.7.2.2	DHHR Signoff	0 days	9/24/2018	9/24/2018
434	**1.2.2.1.7.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**9/12/2018**	**9/12/2018**
435	1.2.2.1.7.2.3	Unit Test Results	0 days	9/12/2018	9/12/2018
436	1.2.2.1.7.2.3	String / System Test Results	0 days	9/12/2018	9/12/2018
437	1.2.2.1.7.2.3	Integration and Regression Test Scripts	0 days	9/12/2018	9/12/2018
438	**1.2.2.1.7.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**9/13/2018**	**9/14/2018**
439	1.2.2.1.7.2.4	Developed Components	1 day	9/13/2018	9/13/2018
440	1.2.2.1.7.2.4	Sprint Review	1 day	9/14/2018	9/14/2018
441	1.2.2.1.7.2.4	Sprint Retrospective	0 days	9/14/2018	9/14/2018
442	**1.2.2.1.7.3**	**DHHR Sprint Acceptance**	**7 days**	**9/25/2018**	**10/3/2018**
443	1.2.2.1.7.3.1	Perform DHHR Acceptance Tests	5 days	9/25/2018	10/1/2018
444	1.2.2.1.7.3.2	DHHR Code Review	2 days	10/2/2018	10/3/2018
445	1.2.2.1.7.3.3	Sprint Acceptance	0 days	10/3/2018	10/3/2018
446	**1.2.2.1.8**	**Hardening Sprint**	**24 days**	**10/2/2018**	**11/2/2018**
447	**1.2.2.1.8.1**	**Sprint Execution**	**18 days**	**10/2/2018**	**10/25/2018**
448	1.2.2.1.8.1.1	Build	9 days	10/2/2018	10/12/2018
449	1.2.2.1.8.1.2	Write UAT Tests	5 days	10/15/2018	10/19/2018
450	1.2.2.1.8.1.3	System Testing&Defect Remediation	8 days	10/15/2018	10/24/2018
451	1.2.2.1.8.1.4	Review	1 day	10/25/2018	10/25/2018
452	1.2.2.1.8.1.5	Retrospective/Backlog Refinement	0 days	10/25/2018	10/25/2018
453	**1.2.2.1.8.2**	**Sprint OWPs**	**8 days**	**10/12/2018**	**10/24/2018**
454	**1.2.2.1.8.2.1**	**Create Sprint Backlog**	**5 days**	**10/15/2018**	**10/19/2018**
455	1.2.2.1.8.2.1	Submission	4 days	10/15/2018	10/18/2018
456	1.2.2.1.8.2.1	DHHR Review	1 day	10/19/2018	10/19/2018
457	1.2.2.1.8.2.1	DHHR Signoff	0 days	10/19/2018	10/19/2018
458	**1.2.2.1.8.2.2**	**Design Specification (Sprint Features)**	**8 days**	**10/15/2018**	**10/24/2018**
459	1.2.2.1.8.2.2	Submission	5 days	10/15/2018	10/19/2018
460	1.2.2.1.8.2.2	DHHR Review	3 days	10/22/2018	10/24/2018
461	1.2.2.1.8.2.2	DHHR Signoff	0 days	10/24/2018	10/24/2018
462	**1.2.2.1.8.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**10/12/2018**	**10/12/2018**
463	1.2.2.1.8.2.3	Unit Test Results	0 days	10/12/2018	10/12/2018
464	1.2.2.1.8.2.3	String / System Test Results	0 days	10/12/2018	10/12/2018
465	1.2.2.1.8.2.3	Integration and Regression Test Scripts	0 days	10/12/2018	10/12/2018
466	**1.2.2.1.8.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**10/15/2018**	**10/16/2018**
467	1.2.2.1.8.2.4	Developed Components	1 day	10/15/2018	10/15/2018
468	1.2.2.1.8.2.4	Sprint Review	1 day	10/16/2018	10/16/2018
469	1.2.2.1.8.2.4	Sprint Retrospective	0 days	10/16/2018	10/16/2018
470	**1.2.2.1.8.3**	**DHHR Sprint Acceptance**	**7 days**	**10/25/2018**	**11/2/2018**
471	1.2.2.1.8.3.1	Perform DHHR Acceptance Tests	5 days	10/25/2018	10/31/2018
472	1.2.2.1.8.3.2	DHHR Code Review	2 days	11/1/2018	11/2/2018
473	1.2.2.1.8.3.3	Sprint Acceptance	0 days	11/2/2018	11/2/2018
474	**1.2.2.2**	**System Documentation**	**176 days**	**3/2/2018**	**11/2/2018**
475	1.2.2.2.1	Develop System Documentation	166 days	3/2/2018	10/19/2018
476	1.2.2.2.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
477	1.2.2.2.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
478	1.2.2.2.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
479	**1.2.2.3**	**System Security Plan (SSP)**	**176 days**	**3/2/2018**	**11/2/2018**
480	1.2.2.3.1	Develop System Security Plan (SSP)	166 days	3/2/2018	10/19/2018

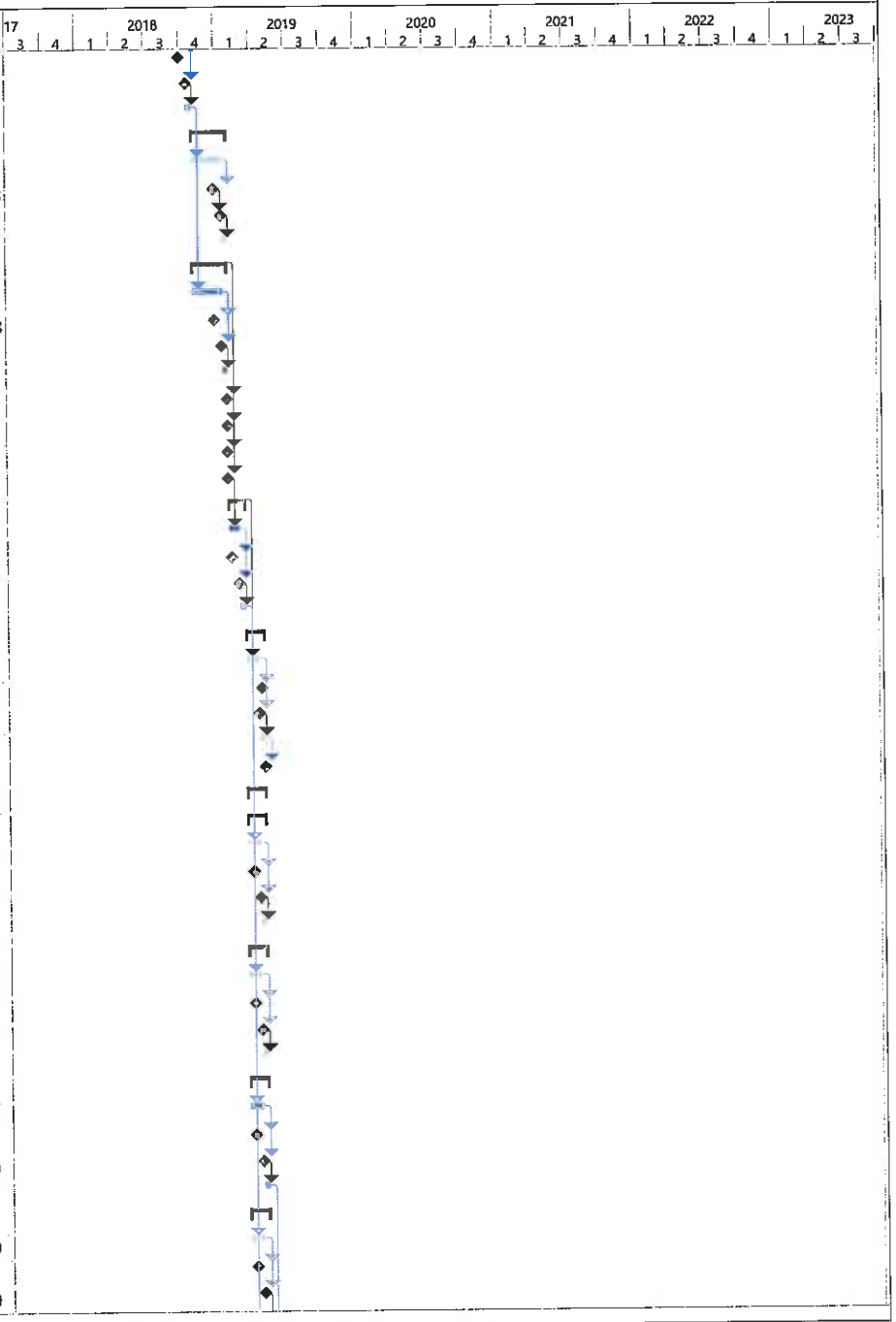


ID	WBS	Task Name	Duration	Start	Finish
481	1.2.2.3.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
482	1.2.2.3.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
483	1.2.2.3.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
484	**1.2.2.4**	**Safeguard Procedures Report**	**176 days**	**3/2/2018**	**11/2/2018**
485	1.2.2.4.1	Develop Safeguard Procedures Report	166 days	3/2/2018	10/19/2018
486	1.2.2.4.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
487	1.2.2.4.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
488	1.2.2.4.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
489	**1.2.2.5**	**User Documentation**	**176 days**	**3/2/2018**	**11/2/2018**
490	1.2.2.5.1	Develop User Documentation	166 days	3/2/2018	10/19/2018
491	1.2.2.5.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
492	1.2.2.5.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
493	1.2.2.5.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
494	1.2.2.6	Execute Automated Data Conversion process	90 days	3/2/2018	7/5/2018
495	**1.2.2.7**	**Data Conversion System Integration Test Cases**	**100 days**	**3/2/2018**	**7/19/2018**
496	1.2.2.7.1	Develop Data Conversion System Integration Test Cases	90 days	3/2/2018	7/5/2018
497	1.2.2.7.2	Interim draft deliverable submission	0 days	6/15/2018	6/15/2018
498	1.2.2.7.3	Submit deliverable for review	0 days	7/5/2018	7/5/2018
499	1.2.2.7.4	Receive deliverable client approval	10 days	7/6/2018	7/19/2018
500	**1.2.2.8**	**Data Conversion System Integration Test Results**	**76 days**	**7/20/2018**	**11/2/2018**
501	1.2.2.8.1	Develop Data Conversion System Integration Test Results	66 days	7/20/2018	10/19/2018
502	1.2.2.8.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
503	1.2.2.8.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
504	1.2.2.8.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
505	**1.2.2.9**	**System Integration Test Cases**	**176 days**	**3/2/2018**	**11/2/2018**
506	1.2.2.9.1	Develop System Integration Test Cases	166 days	3/2/2018	10/19/2018
507	1.2.2.9.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
508	1.2.2.9.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
509	1.2.2.9.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
510	1.2.2.10	Completion of Data Conversion Trial Run in Test Environment	0 days	11/2/2018	11/2/2018
511	1.2.2.11	Overall completion of Development and Configuration	0 days	11/2/2018	11/2/2018
512	**1.2.2.12**	**System Integration Test Results**	**65 days**	**11/5/2018**	**2/1/2019**
513	1.2.2.12.1	Develop System Integration Test Results	55 days	11/5/2018	1/18/2019
514	1.2.2.12.2	Interim draft deliverable submission	0 days	12/31/2018	12/31/2018
515	1.2.2.12.3	Submit deliverable for review	0 days	1/18/2019	1/18/2019
516	1.2.2.12.4	Receive deliverable client approval	10 days	1/21/2019	2/1/2019
517	**1.2.2.13**	**Regression Test Cases**	**176 days**	**3/2/2018**	**11/2/2018**
518	1.2.2.13.1	Develop Regression Test Cases	166 days	3/2/2018	10/19/2018
519	1.2.2.13.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
520	1.2.2.13.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
521	1.2.2.13.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
522	**1.2.2.14**	**Regression Test Results**	**65 days**	**11/5/2018**	**2/1/2019**
523	1.2.2.14.1	Develop Regression Test Results	55 days	11/5/2018	1/18/2019
524	1.2.2.14.2	Interim draft deliverable submission	0 days	12/31/2018	12/31/2018
525	1.2.2.14.3	Submit deliverable for review	0 days	1/18/2019	1/18/2019
526	1.2.2.14.4	Receive deliverable client approval	10 days	1/21/2019	2/1/2019
527	**1.2.2.15**	**Load/Stress Test Cases**	**176 days**	**3/2/2018**	**11/2/2018**
528	1.2.2.15.1	Develop Load/Stress Test Cases	166 days	3/2/2018	10/19/2018

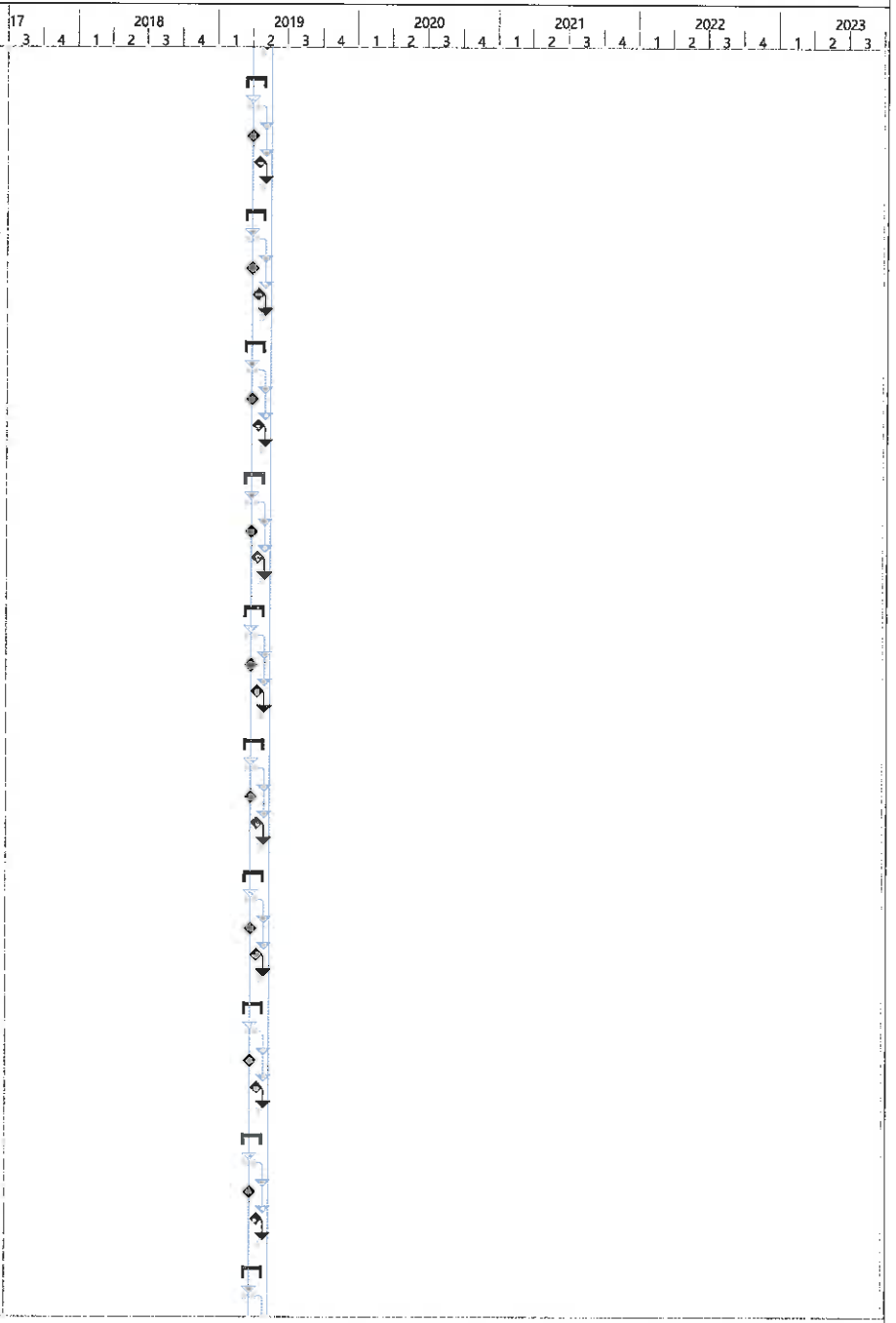


West Virginia IES Project Plan

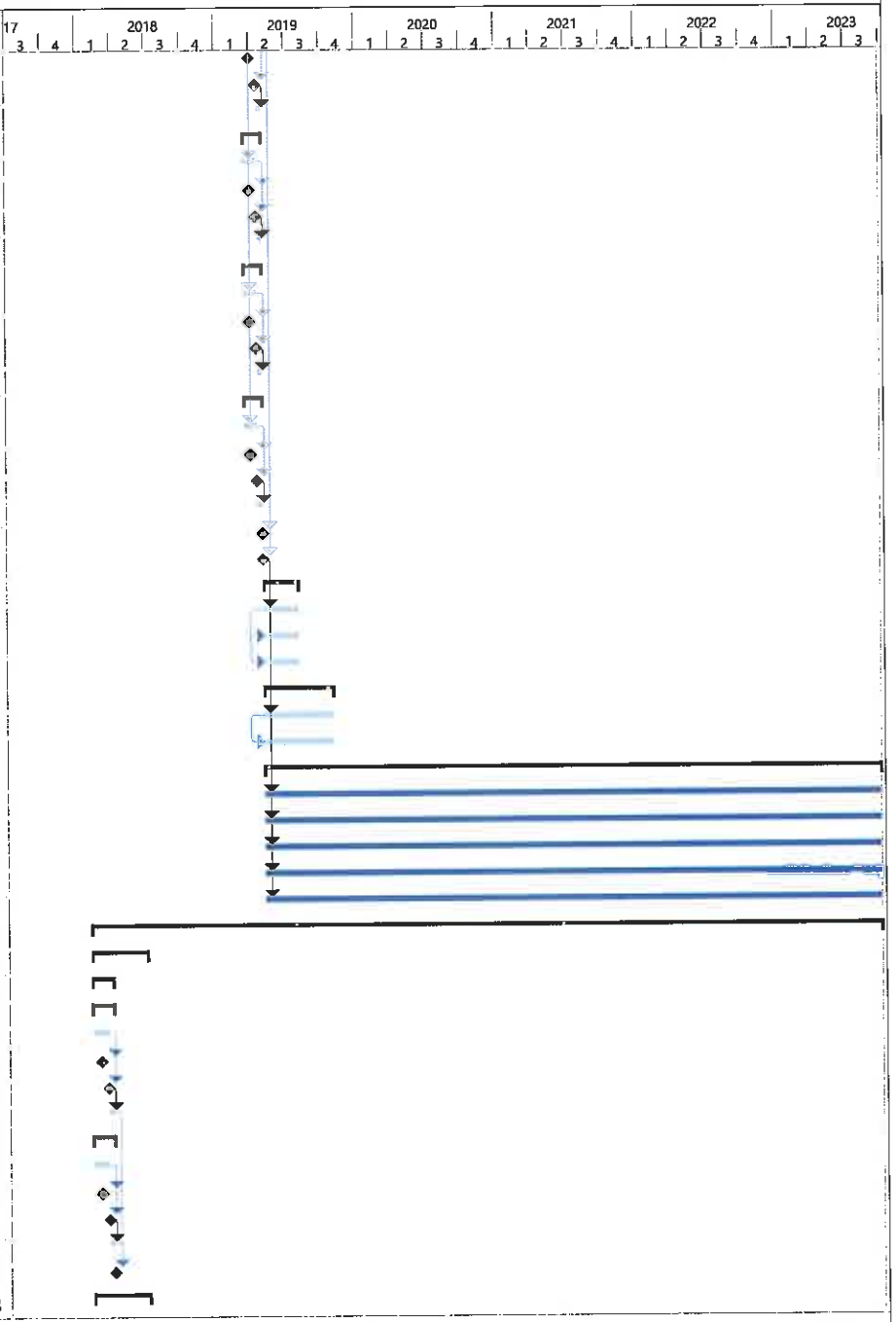
ID	WBS	Task Name	Duration	Start	Finish
529	1.2.2.15.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
530	1.2.2.15.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
531	1.2.2.15.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
532	**1.2.2.16**	**Load/Stress Test Results**	**65 days**	**11/5/2018**	**2/1/2019**
533	1.2.2.16.1	Develop Load/Stress Test Cases	55 days	11/5/2018	1/18/2019
534	1.2.2.16.2	Interim draft deliverable submission	0 days	12/31/2018	12/31/2018
535	1.2.2.16.3	Submit deliverable for review	0 days	1/18/2019	1/18/2019
536	1.2.2.16.4	Receive deliverable client approval	10 days	1/21/2019	2/1/2019
537	**1.2.2.17**	**Capacity Analysis Report**	**65 days**	**11/5/2018**	**2/1/2019**
538	1.2.2.17.1	Develop Capacity Analysis Report	55 days	11/5/2018	1/18/2019
539	1.2.2.17.2	Interim draft deliverable submission	0 days	12/31/2018	12/31/2018
540	1.2.2.17.3	Submit deliverable for review	0 days	1/18/2019	1/18/2019
541	1.2.2.17.4	Receive deliverable client approval	10 days	1/21/2019	2/1/2019
542	1.2.2.18	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	2/1/2019	2/1/2019
543	1.2.2.19	Update Business Continuity Plan	0 days	2/1/2019	2/1/2019
544	1.2.2.20	Execute Disaster Recovery Test	0 days	2/1/2019	2/1/2019
545	1.2.2.21	Overall completion of System Testing	0 days	2/1/2019	2/1/2019
546	**1.2.2.22**	**User Acceptance Test Cases**	**30 days**	**2/4/2019**	**3/15/2019**
547	1.2.2.22.1	Develop User Acceptance Test Cases	20 days	2/4/2019	3/1/2019
548	1.2.2.22.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
549	1.2.2.22.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
550	1.2.2.22.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
551	**1.2.2.23**	**User Acceptance Test Results**	**35 days**	**3/18/2019**	**5/3/2019**
552	1.2.2.23.1	Develop User Acceptance Test Results	25 days	3/18/2019	4/19/2019
553	1.2.2.23.2	Interim draft deliverable submission	0 days	4/26/2019	4/26/2019
554	1.2.2.23.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
555	1.2.2.23.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
556	1.2.2.24	Overall completion of Acceptance Testing	0 days	5/3/2019	5/3/2019
557	**1.2.3**	**Implementation Readiness**	**35 days**	**3/18/2019**	**5/3/2019**
558	**1.2.3.1**	**Operational Readiness Plan**	**35 days**	**3/18/2019**	**5/3/2019**
559	1.2.3.1.1	Develop Operational Readiness Plan	25 days	3/18/2019	4/19/2019
560	1.2.3.1.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
561	1.2.3.1.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
562	1.2.3.1.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
563	**1.2.3.2**	**Operational Readiness Test Scripts**	**35 days**	**3/18/2019**	**5/3/2019**
564	1.2.3.2.1	Develop Operational Readiness Test Scripts	25 days	3/18/2019	4/19/2019
565	1.2.3.2.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
566	1.2.3.2.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
567	1.2.3.2.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
568	**1.2.3.3**	**Operational Readiness Test Results**	**35 days**	**3/18/2019**	**5/3/2019**
569	1.2.3.3.1	Develop Operational Readiness Test Results	25 days	3/18/2019	4/19/2019
570	1.2.3.3.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
571	1.2.3.3.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
572	1.2.3.3.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
573	**1.2.3.4**	**Updated Training Management Plan**	**35 days**	**3/18/2019**	**5/3/2019**
574	1.2.3.4.1	Develop Updated Training Management Plan	25 days	3/18/2019	4/19/2019
575	1.2.3.4.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
576	1.2.3.4.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019



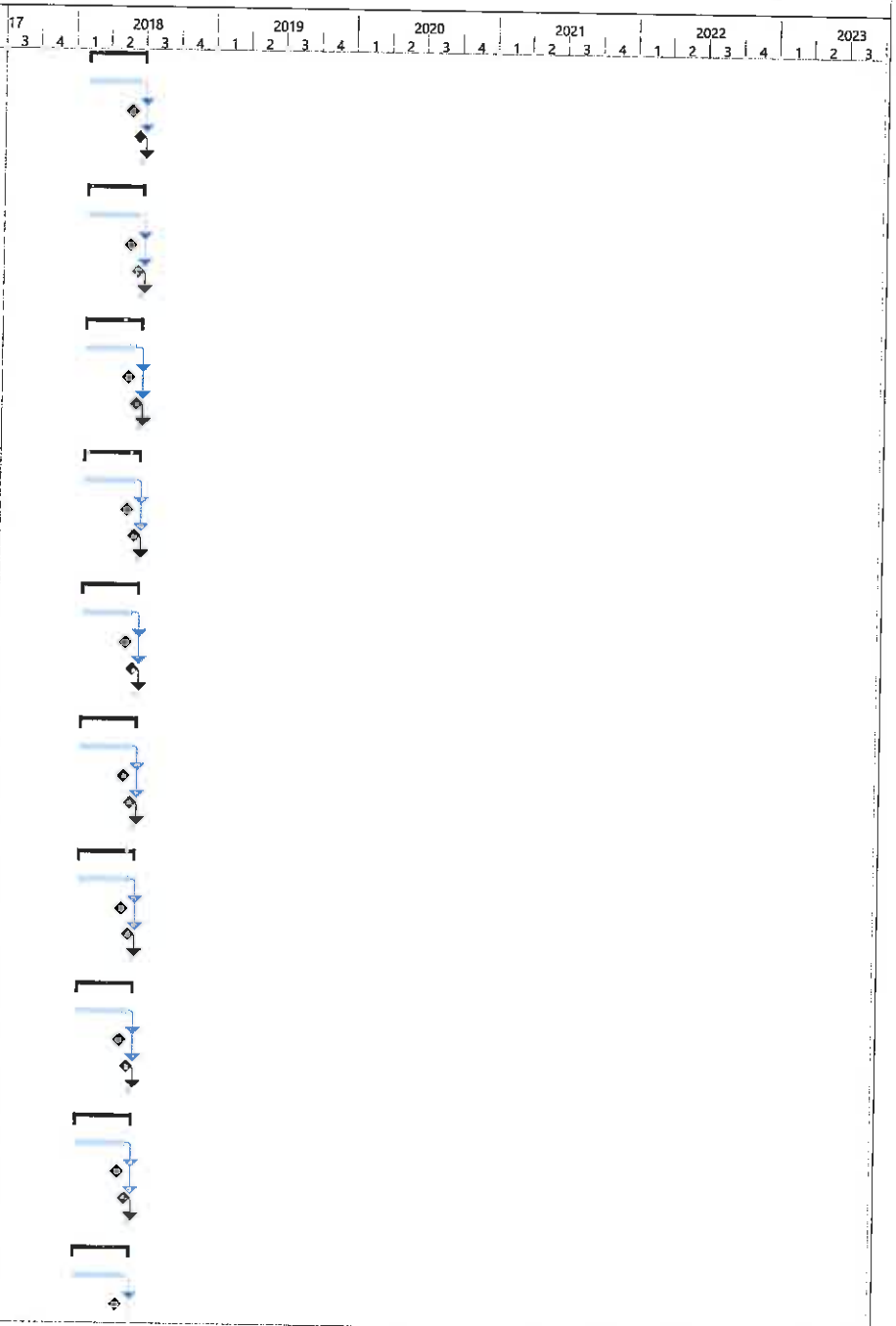
ID	WBS	Task Name	Duration	Start	Finish
577	1.2.3.4.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
578	**1.2.3.5**	**Training Schedule**	**35 days**	**3/18/2019**	**5/3/2019**
579	1.2.3.5.1	Develop Training Schedule	25 days	3/18/2019	4/19/2019
580	1.2.3.5.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
581	1.2.3.5.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
582	1.2.3.5.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
583	**1.2.3.6**	**Training Materials**	**35 days**	**3/18/2019**	**5/3/2019**
584	1.2.3.6.1	Develop Training Materials	25 days	3/18/2019	4/19/2019
585	1.2.3.6.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
586	1.2.3.6.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
587	1.2.3.6.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
588	**1.2.3.7**	**Training Report**	**35 days**	**3/18/2019**	**5/3/2019**
589	1.2.3.7.1	Develop Training Report	25 days	3/18/2019	4/19/2019
590	1.2.3.7.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
591	1.2.3.7.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
592	1.2.3.7.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
593	**1.2.3.8**	**Implementation Plan**	**35 days**	**3/18/2019**	**5/3/2019**
594	1.2.3.8.1	Develop Implementation Plan	25 days	3/18/2019	4/19/2019
595	1.2.3.8.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
596	1.2.3.8.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
597	1.2.3.8.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
598	**1.2.3.9**	**Cut-Over Play Book**	**35 days**	**3/18/2019**	**5/3/2019**
599	1.2.3.9.1	Develop Cut-Over Play Book	25 days	3/18/2019	4/19/2019
600	1.2.3.9.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
601	1.2.3.9.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
602	1.2.3.9.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
603	**1.2.3.10**	**Report Distribution Schedule**	**35 days**	**3/18/2019**	**5/3/2019**
604	1.2.3.10.1	Develop Report Distribution Schedule	25 days	3/18/2019	4/19/2019
605	1.2.3.10.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
606	1.2.3.10.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
607	1.2.3.10.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
608	**1.2.3.11**	**Operations Project Management Plans**	**35 days**	**3/18/2019**	**5/3/2019**
609	1.2.3.11.1	Develop Operations Project Management Plans	25 days	3/18/2019	4/19/2019
610	1.2.3.11.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
611	1.2.3.11.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
612	1.2.3.11.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
613	**1.2.3.12**	**Solution health Monitoring Plan**	**35 days**	**3/18/2019**	**5/3/2019**
614	1.2.3.12.1	Develop Solution health Monitoring Plan	25 days	3/18/2019	4/19/2019
615	1.2.3.12.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
616	1.2.3.12.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
617	1.2.3.12.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
618	**1.2.3.13**	**Federal Certification and Review Management Plan**	**35 days**	**3/18/2019**	**5/3/2019**
619	1.2.3.13.1	Develop Federal Certification and Review Management Plan	25 days	3/18/2019	4/19/2019
620	1.2.3.13.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
621	1.2.3.13.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
622	1.2.3.13.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
623	**1.2.3.14**	**ACF Certification Documentation**	**35 days**	**3/18/2019**	**5/3/2019**
624	1.2.3.14.1	Obtain ACF Certification Documentation	25 days	3/18/2019	4/19/2019



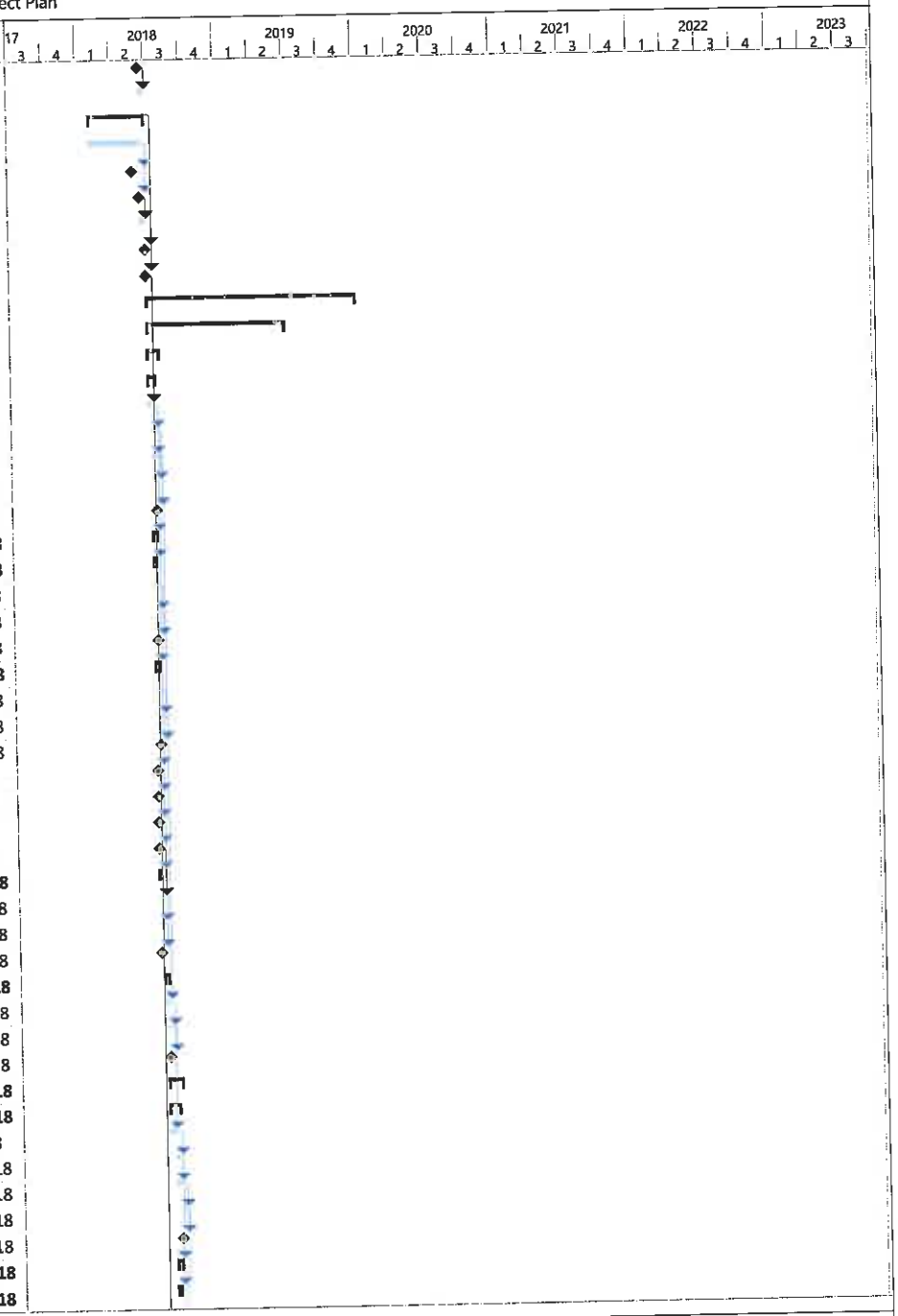
ID	WBS	Task Name	Duration	Start	Finish
625	1.2.3.14.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
626	1.2.3.14.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
627	1.2.3.14.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
628	**1.2.3.15**	**Federal Review Supporting Documentation**	**35 days**	**3/18/2019**	**5/3/2019**
629	1.2.3.15.1	Obtain Federal Review Supporting Documentation	25 days	3/18/2019	4/19/2019
630	1.2.3.15.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
631	1.2.3.15.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
632	1.2.3.15.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
633	**1.2.3.16**	**Social Security Administration Certification Documentation**	**35 days**	**3/18/2019**	**5/3/2019**
634	1.2.3.16.1	Obtain Social Security Administration Certification Document:	25 days	3/18/2019	4/19/2019
635	1.2.3.16.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
636	1.2.3.16.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
637	1.2.3.16.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
638	**1.2.3.17**	**Implementation Certification Letter**	**35 days**	**3/18/2019**	**5/3/2019**
639	1.2.3.17.1	Obtain Implementation Certification Letter	25 days	3/18/2019	4/19/2019
640	1.2.3.17.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
641	1.2.3.17.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
642	1.2.3.17.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
643	1.2.3.18	Overall completion of Implementation Readiness	0 days	5/3/2019	5/3/2019
644	1.2.3.19	Overall completion of deployment to production	0 days	5/3/2019	5/3/2019
645	**1.2.4**	**Pilot**	**65 days**	**5/6/2019**	**8/2/2019**
646	1.2.4.1	Support Pilot rollout	65 days	5/6/2019	8/2/2019
647	1.2.4.2	Develop Statewide rollout strategy	65 days	5/6/2019	8/2/2019
648	1.2.4.3	Defect resolution support for Pilot county/counties	65 days	5/6/2019	8/2/2019
649	**1.2.5**	**Warranty**	**130 days**	**5/6/2019**	**11/1/2019**
650	1.2.5.1	Support Warranty activities	130 days	5/6/2019	11/1/2019
651	1.2.5.2	Defect resolution support	130 days	5/6/2019	11/1/2019
652	**1.2.6**	**Ongoing Maintenance and Operations**	**1150 days**	**5/6/2019**	**9/29/2023**
653	1.2.6.1	Ongoing Maintenance and Operations	1150 days	5/6/2019	9/29/2023
654	1.2.6.2	Defect resolution support	1150 days	5/6/2019	9/29/2023
655	1.2.6.3	Quarterly Maintenance Software upgrades	1150 days	5/6/2019	9/29/2023
656	1.2.6.4	Incident Management Support	1150 days	5/6/2019	9/29/2023
657	1.2.6.5	Ongoing Operations Support	1150 days	5/6/2019	9/29/2023
658	**1.3**	**RAPIDS Modernization Phase 2- Business Application Modernizatio**	**1475 days**	**2/5/2018**	**9/29/2023**
659	**1.3.1**	**Discovery**	**105 days**	**2/5/2018**	**6/29/2018**
660	**1.3.1.1**	**Requirements Validations**	**40 days**	**2/5/2018**	**3/30/2018**
661	**1.3.1.1.1**	**Requirements Traceability Matrix (RTM)**	**40 days**	**2/5/2018**	**3/30/2018**
662	1.3.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	30 days	2/5/2018	3/16/2018
663	1.3.1.1.1.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
664	1.3.1.1.1.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
665	1.3.1.1.1.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
666	**1.3.1.1.2**	**Requirements Specification Document (RSD)**	**40 days**	**2/5/2018**	**3/30/2018**
667	1.3.1.1.2.1	Develop Requirements Specification Document (RSD)	30 days	2/5/2018	3/16/2018
668	1.3.1.1.2.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
669	1.3.1.1.2.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
670	1.3.1.1.2.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
671	1.3.1.1.3	Overall completion of Requirements Validation	0 days	3/30/2018	3/30/2018
672	**1.3.1.2**	**Design**	**105 days**	**2/5/2018**	**6/29/2018**



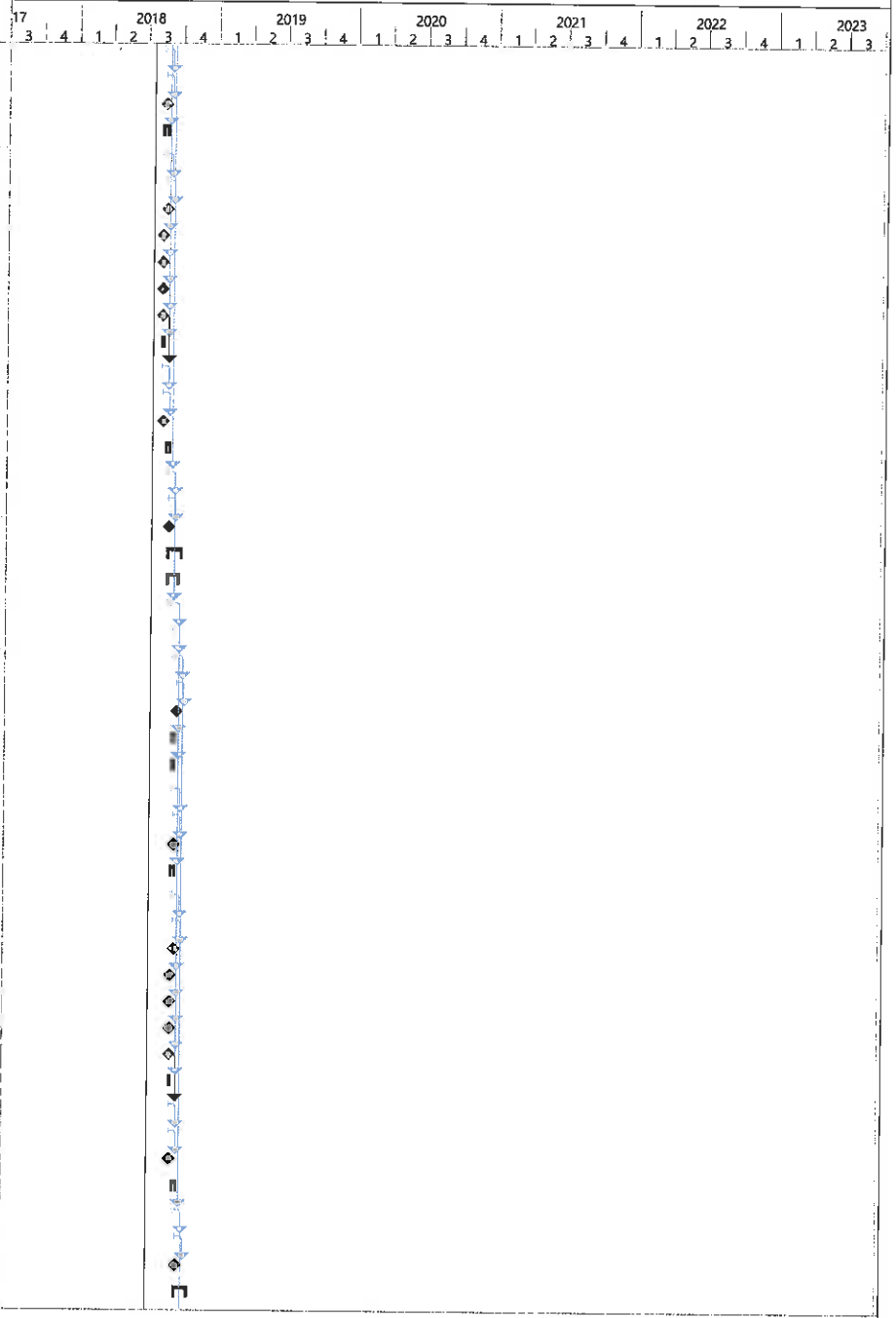
ID	WBS	Task Name	Duration	Start	Finish
673	**1.3.1.2.1**	**Requirements Gap Analysis Document**	**105 days**	**2/5/2018**	**6/29/2018**
674	1.3.1.2.1.1	Develop Requirements Gap Analysis Document	95 days	2/5/2018	6/15/2018
675	1.3.1.2.1.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
676	1.3.1.2.1.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
677	1.3.1.2.1.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
678	**1.3.1.2.2**	**Business Process Models**	**105 days**	**2/5/2018**	**6/29/2018**
679	1.3.1.2.2.1	Develop Business Process Models	95 days	2/5/2018	6/15/2018
680	1.3.1.2.2.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
681	1.3.1.2.2.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
682	1.3.1.2.2.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
683	**1.3.1.2.3**	**Detailed System Design (DSD) Document**	**105 days**	**2/5/2018**	**6/29/2018**
684	1.3.1.2.3.1	Develop Detailed System Design (DSD) Document	95 days	2/5/2018	6/15/2018
685	1.3.1.2.3.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
686	1.3.1.2.3.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
687	1.3.1.2.3.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
688	**1.3.1.2.4**	**Data Dictionary**	**105 days**	**2/5/2018**	**6/29/2018**
689	1.3.1.2.4.1	Develop Data Dictionary	95 days	2/5/2018	6/15/2018
690	1.3.1.2.4.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
691	1.3.1.2.4.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
692	1.3.1.2.4.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
693	**1.3.1.2.5**	**Data Models**	**105 days**	**2/5/2018**	**6/29/2018**
694	1.3.1.2.5.1	Develop Data Models	95 days	2/5/2018	6/15/2018
695	1.3.1.2.5.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
696	1.3.1.2.5.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
697	1.3.1.2.5.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
698	**1.3.1.2.6**	**Reports Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
699	1.3.1.2.6.1	Develop Reports Inventory	95 days	2/5/2018	6/15/2018
700	1.3.1.2.6.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
701	1.3.1.2.6.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
702	1.3.1.2.6.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
703	**1.3.1.2.7**	**Correspondence Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
704	1.3.1.2.7.1	Develop Correspondence Inventory	95 days	2/5/2018	6/15/2018
705	1.3.1.2.7.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
706	1.3.1.2.7.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
707	1.3.1.2.7.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
708	**1.3.1.2.8**	**Forms Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
709	1.3.1.2.8.1	Develop Forms Inventory	95 days	2/5/2018	6/15/2018
710	1.3.1.2.8.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
711	1.3.1.2.8.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
712	1.3.1.2.8.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
713	**1.3.1.2.9**	**Interface Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
714	1.3.1.2.9.1	Develop Interface Inventory	95 days	2/5/2018	6/15/2018
715	1.3.1.2.9.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
716	1.3.1.2.9.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
717	1.3.1.2.9.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
718	**1.3.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**105 days**	**2/5/2018**	**6/29/2018**
719	1.3.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	95 days	2/5/2018	6/15/2018
720	1.3.1.2.10.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018



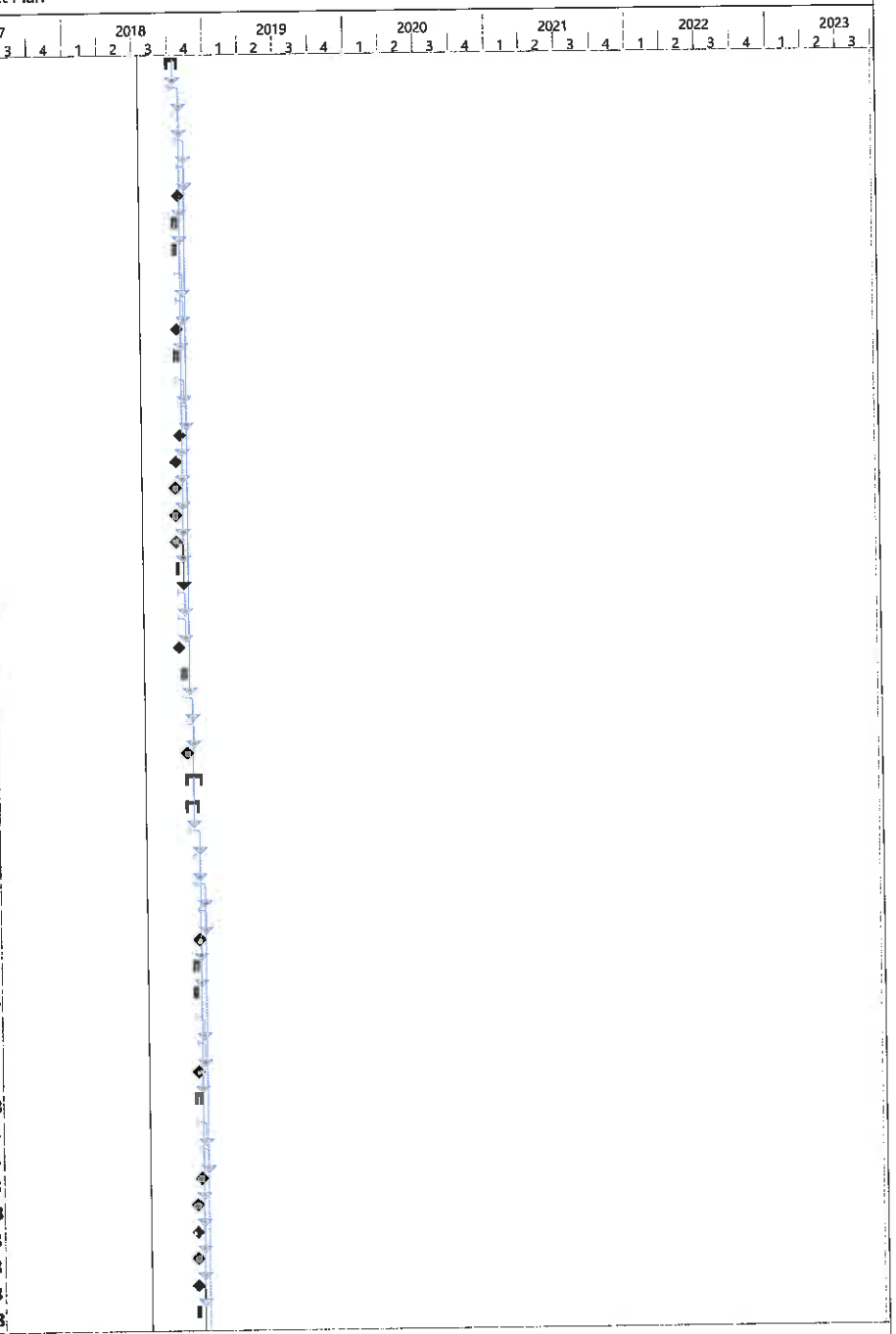
ID	WBS	Task Name	Duration	Start	Finish
721	1.3.1.2.10.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
722	1.3.1.2.10.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
723	**1.3.1.2.11**	**Data Cleansing and Conversion Specification Document**	**105 days**	**2/5/2018**	**6/29/2018**
724	1.3.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	95 days	2/5/2018	6/15/2018
725	1.3.1.2.11.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
726	1.3.1.2.11.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
727	1.3.1.2.11.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
728	1.3.1.2.12	Overall completion of Data Conversion Design	0 days	6/29/2018	6/29/2018
729	1.3.1.2.13	Overall completion of Design Phase	0 days	6/29/2018	6/29/2018
730	**1.3.2**	**Development, Configuration and Testing**	**395 days**	**7/2/2018**	**1/3/2020**
731	**1.3.2.1**	**Sprint Development**	**260 days**	**7/2/2018**	**6/28/2019**
732	**1.3.2.1.1**	**Sprint 1**	**21 days**	**7/2/2018**	**7/30/2018**
733	**1.3.2.1.1.1**	**Sprint Execution**	**14 days**	**7/2/2018**	**7/19/2018**
734	1.3.2.1.1.1.1	Build	6 days	7/2/2018	7/9/2018
735	1.3.2.1.1.1.2	Write UAT Tests	5 days	7/10/2018	7/16/2018
736	1.3.2.1.1.1.3	System Testing&Defect Remediation	8 days	7/10/2018	7/19/2018
737	1.3.2.1.1.1.4	Review	1 day	7/17/2018	7/17/2018
738	1.3.2.1.1.1.5	Retrospective/Backlog Refinement	0 days	7/19/2018	7/19/2018
739	**1.3.2.1.1.2**	**Sprint OWPs**	**8 days**	**7/9/2018**	**7/19/2018**
740	**1.3.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**7/10/2018**	**7/16/2018**
741	1.3.2.1.1.2.1	Submission	4 days	7/10/2018	7/13/2018
742	1.3.2.1.1.2.1	DHHR Review	1 day	7/16/2018	7/16/2018
743	1.3.2.1.1.2.1	DHHR Signoff	0 days	7/16/2018	7/16/2018
744	**1.3.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**7/10/2018**	**7/19/2018**
745	1.3.2.1.1.2.2	Submission	5 days	7/10/2018	7/16/2018
746	1.3.2.1.1.2.2	DHHR Review	3 days	7/17/2018	7/19/2018
747	1.3.2.1.1.2.2	DHHR Signoff	0 days	7/19/2018	7/19/2018
748	**1.3.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**7/9/2018**	**7/9/2018**
749	1.3.2.1.1.2.3	Unit Test Results	0 days	7/9/2018	7/9/2018
750	1.3.2.1.1.2.3	String / System Test Results	0 days	7/9/2018	7/9/2018
751	1.3.2.1.1.2.3	Integration and Regression Test Scripts	0 days	7/9/2018	7/9/2018
752	**1.3.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**7/10/2018**	**7/11/2018**
753	1.3.2.1.1.2.4	Developed Components	1 day	7/10/2018	7/10/2018
754	1.3.2.1.1.2.4	Sprint Review	1 day	7/11/2018	7/11/2018
755	1.3.2.1.1.2.4	Sprint Retrospective	0 days	7/11/2018	7/11/2018
756	**1.3.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**7/20/2018**	**7/30/2018**
757	1.3.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	7/20/2018	7/26/2018
758	1.3.2.1.1.3.2	DHHR Code Review	2 days	7/27/2018	7/30/2018
759	1.3.2.1.1.3.3	Sprint Acceptance	0 days	7/30/2018	7/30/2018
760	**1.3.2.1.2**	**Sprint 2**	**25 days**	**7/27/2018**	**8/30/2018**
761	**1.3.2.1.2.1**	**Sprint Execution**	**19 days**	**7/27/2018**	**8/22/2018**
762	1.3.2.1.2.1.1	Build	10 days	7/27/2018	8/9/2018
763	1.3.2.1.2.1.2	Write UAT Tests	5 days	8/10/2018	8/16/2018
764	1.3.2.1.2.1.3	System Testing&Defect Remediation	8 days	8/10/2018	8/21/2018
765	1.3.2.1.2.1.4	Review	1 day	8/22/2018	8/22/2018
766	1.3.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	8/22/2018	8/22/2018
767	**1.3.2.1.2.2**	**Sprint OWPs**	**8 days**	**8/9/2018**	**8/21/2018**
768	**1.3.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**8/10/2018**	**8/16/2018**



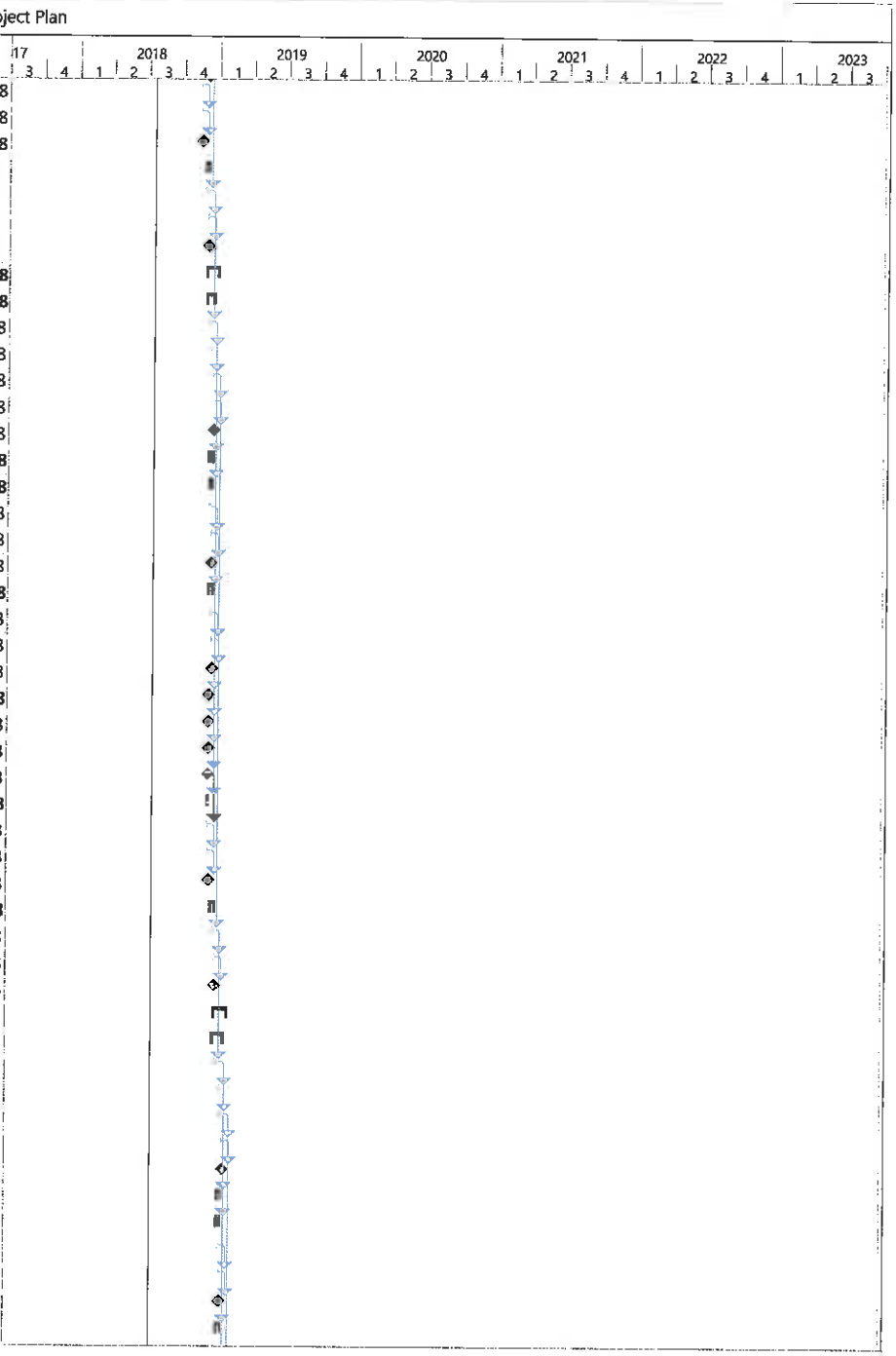
ID	WBS	Task Name	Duration	Start	Finish
769	1.3.2.1.2.2.1	Submission	4 days	8/10/2018	8/15/2018
770	1.3.2.1.2.2.1	DHHR Review	1 day	8/16/2018	8/16/2018
771	1.3.2.1.2.2.1	DHHR Signoff	0 days	8/16/2018	8/16/2018
772	**1.3.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**8/10/2018**	**8/21/2018**
773	1.3.2.1.2.2.2	Submission	5 days	8/10/2018	8/16/2018
774	1.3.2.1.2.2.2	DHHR Review	3 days	8/17/2018	8/21/2018
775	1.3.2.1.2.2.2	DHHR Signoff	0 days	8/21/2018	8/21/2018
776	**1.3.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**8/9/2018**	**8/9/2018**
777	1.3.2.1.2.2.3	Unit Test Results	0 days	8/9/2018	8/9/2018
778	1.3.2.1.2.2.3	String / System Test Results	0 days	8/9/2018	8/9/2018
779	1.3.2.1.2.2.3	Integration and Regression Test Scripts	0 days	8/9/2018	8/9/2018
780	**1.3.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**8/10/2018**	**8/13/2018**
781	1.3.2.1.2.2.4	Developed Components	1 day	8/10/2018	8/10/2018
782	1.3.2.1.2.2.4	Sprint Review	1 day	8/13/2018	8/13/2018
783	1.3.2.1.2.2.4	Sprint Retrospective	0 days	8/13/2018	8/13/2018
784	**1.3.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**8/22/2018**	**8/30/2018**
785	1.3.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	8/22/2018	8/28/2018
786	1.3.2.1.2.3.2	DHHR Code Review	2 days	8/29/2018	8/30/2018
787	1.3.2.1.2.3.3	Sprint Acceptance	0 days	8/30/2018	8/30/2018
788	**1.3.2.1.3**	**Sprint 3**	**25 days**	**8/29/2018**	**10/2/2018**
789	**1.3.2.1.3.1**	**Sprint Execution**	**19 days**	**8/29/2018**	**9/24/2018**
790	1.3.2.1.3.1.1	Build	10 days	8/29/2018	9/11/2018
791	1.3.2.1.3.1.2	Write UAT Tests	5 days	9/12/2018	9/18/2018
792	1.3.2.1.3.1.3	System Testing&Defect Remediation	8 days	9/12/2018	9/21/2018
793	1.3.2.1.3.1.4	Review	1 day	9/24/2018	9/24/2018
794	1.3.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	9/24/2018	9/24/2018
795	**1.3.2.1.3.2**	**Sprint OWPs**	**8 days**	**9/11/2018**	**9/21/2018**
796	**1.3.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**9/12/2018**	**9/18/2018**
797	1.3.2.1.3.2.1	Submission	4 days	9/12/2018	9/17/2018
798	1.3.2.1.3.2.1	DHHR Review	1 day	9/18/2018	9/18/2018
799	1.3.2.1.3.2.1	DHHR Signoff	0 days	9/18/2018	9/18/2018
800	**1.3.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**9/12/2018**	**9/21/2018**
801	1.3.2.1.3.2.2	Submission	5 days	9/12/2018	9/18/2018
802	1.3.2.1.3.2.2	DHHR Review	3 days	9/19/2018	9/21/2018
803	1.3.2.1.3.2.2	DHHR Signoff	0 days	9/21/2018	9/21/2018
804	**1.3.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**9/11/2018**	**9/11/2018**
805	1.3.2.1.3.2.3	Unit Test Results	0 days	9/11/2018	9/11/2018
806	1.3.2.1.3.2.3	String / System Test Results	0 days	9/11/2018	9/11/2018
807	1.3.2.1.3.2.3	Integration and Regression Test Scripts	0 days	9/11/2018	9/11/2018
808	**1.3.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**9/12/2018**	**9/13/2018**
809	1.3.2.1.3.2.4	Developed Components	1 day	9/12/2018	9/12/2018
810	1.3.2.1.3.2.4	Sprint Review	1 day	9/13/2018	9/13/2018
811	1.3.2.1.3.2.4	Sprint Retrospective	0 days	9/13/2018	9/13/2018
812	**1.3.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**9/24/2018**	**10/2/2018**
813	1.3.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	9/24/2018	9/28/2018
814	1.3.2.1.3.3.2	DHHR Code Review	2 days	10/1/2018	10/2/2018
815	1.3.2.1.3.3.3	Sprint Acceptance	0 days	10/2/2018	10/2/2018
816	**1.3.2.1.4**	**Sprint 4**	**25 days**	**10/1/2018**	**11/2/2018**



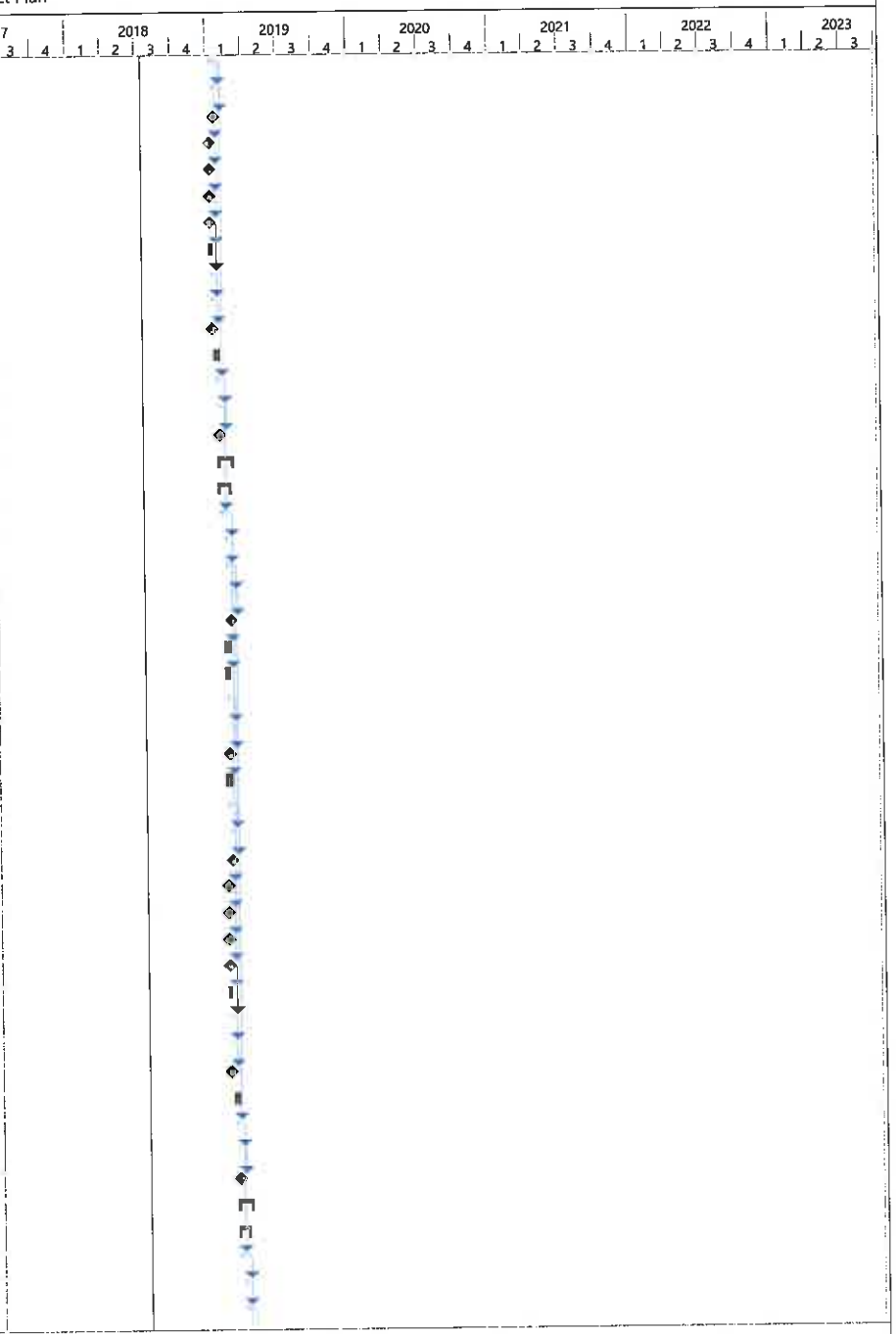
ID	WBS	Task Name	Duration	Start	Finish
817	**1.3.2.1.4.1**	**Sprint Execution**	**19 days**	**10/1/2018**	**10/25/2018**
818	1.3.2.1.4.1.1	Build	10 days	10/1/2018	10/12/2018
819	1.3.2.1.4.1.2	Write UAT Tests	5 days	10/15/2018	10/19/2018
820	1.3.2.1.4.1.3	System Testing&Defect Remediation	8 days	10/15/2018	10/24/2018
821	1.3.2.1.4.1.4	Review	1 day	10/25/2018	10/25/2018
822	1.3.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	10/25/2018	10/25/2018
823	**1.3.2.1.4.2**	**Sprint OWPs**	**8 days**	**10/12/2018**	**10/24/2018**
824	**1.3.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**10/15/2018**	**10/19/2018**
825	1.3.2.1.4.2.1	Submission	4 days	10/15/2018	10/18/2018
826	1.3.2.1.4.2.1	DHHR Review	1 day	10/19/2018	10/19/2018
827	1.3.2.1.4.2.1	DHHR Signoff	0 days	10/19/2018	10/19/2018
828	**1.3.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**10/15/2018**	**10/24/2018**
829	1.3.2.1.4.2.2	Submission	5 days	10/15/2018	10/19/2018
830	1.3.2.1.4.2.2	DHHR Review	3 days	10/22/2018	10/24/2018
831	1.3.2.1.4.2.2	DHHR Signoff	0 days	10/24/2018	10/24/2018
832	**1.3.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**10/12/2018**	**10/12/2018**
833	1.3.2.1.4.2.3	Unit Test Results	0 days	10/12/2018	10/12/2018
834	1.3.2.1.4.2.3	String / System Test Results	0 days	10/12/2018	10/12/2018
835	1.3.2.1.4.2.3	Integration and Regression Test Scripts	0 days	10/12/2018	10/12/2018
836	**1.3.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**10/15/2018**	**10/16/2018**
837	1.3.2.1.4.2.4	Developed Components	1 day	10/15/2018	10/15/2018
838	1.3.2.1.4.2.4	Sprint Review	1 day	10/16/2018	10/16/2018
839	1.3.2.1.4.2.4	Sprint Retrospective	0 days	10/16/2018	10/16/2018
840	**1.3.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**10/25/2018**	**11/2/2018**
841	1.3.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	10/25/2018	10/31/2018
842	1.3.2.1.4.3.2	DHHR Code Review	2 days	11/1/2018	11/2/2018
843	1.3.2.1.4.3.3	Sprint Acceptance	0 days	11/2/2018	11/2/2018
844	**1.3.2.1.5**	**Hardening Sprint**	**25 days**	**11/1/2018**	**12/5/2018**
845	**1.3.2.1.5.1**	**Sprint Execution**	**19 days**	**11/1/2018**	**11/27/2018**
846	1.3.2.1.5.1.1	Build	10 days	11/1/2018	11/14/2018
847	1.3.2.1.5.1.2	Write UAT Tests	5 days	11/15/2018	11/21/2018
848	1.3.2.1.5.1.3	System Testing&Defect Remediation	8 days	11/15/2018	11/26/2018
849	1.3.2.1.5.1.4	Review	1 day	11/27/2018	11/27/2018
850	1.3.2.1.5.1.5	Retrospective/Backlog Refinement	0 days	11/27/2018	11/27/2018
851	**1.3.2.1.5.2**	**Sprint OWPs**	**8 days**	**11/14/2018**	**11/26/2018**
852	**1.3.2.1.5.2.1**	**Create Sprint Backlog**	**5 days**	**11/15/2018**	**11/21/2018**
853	1.3.2.1.5.2.1	Submission	4 days	11/15/2018	11/20/2018
854	1.3.2.1.5.2.1	DHHR Review	1 day	11/21/2018	11/21/2018
855	1.3.2.1.5.2.1	DHHR Signoff	0 days	11/21/2018	11/21/2018
856	**1.3.2.1.5.2.2**	**Design Specification (Sprint Features)**	**8 days**	**11/15/2018**	**11/26/2018**
857	1.3.2.1.5.2.2	Submission	5 days	11/15/2018	11/21/2018
858	1.3.2.1.5.2.2	DHHR Review	3 days	11/22/2018	11/26/2018
859	1.3.2.1.5.2.2	DHHR Signoff	0 days	11/26/2018	11/26/2018
860	**1.3.2.1.5.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**11/14/2018**	**11/14/2018**
861	1.3.2.1.5.2.3	Unit Test Results	0 days	11/14/2018	11/14/2018
862	1.3.2.1.5.2.3	String / System Test Results	0 days	11/14/2018	11/14/2018
863	1.3.2.1.5.2.3	Integration and Regression Test Scripts	0 days	11/14/2018	11/14/2018
864	**1.3.2.1.5.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**11/15/2018**	**11/16/2018**



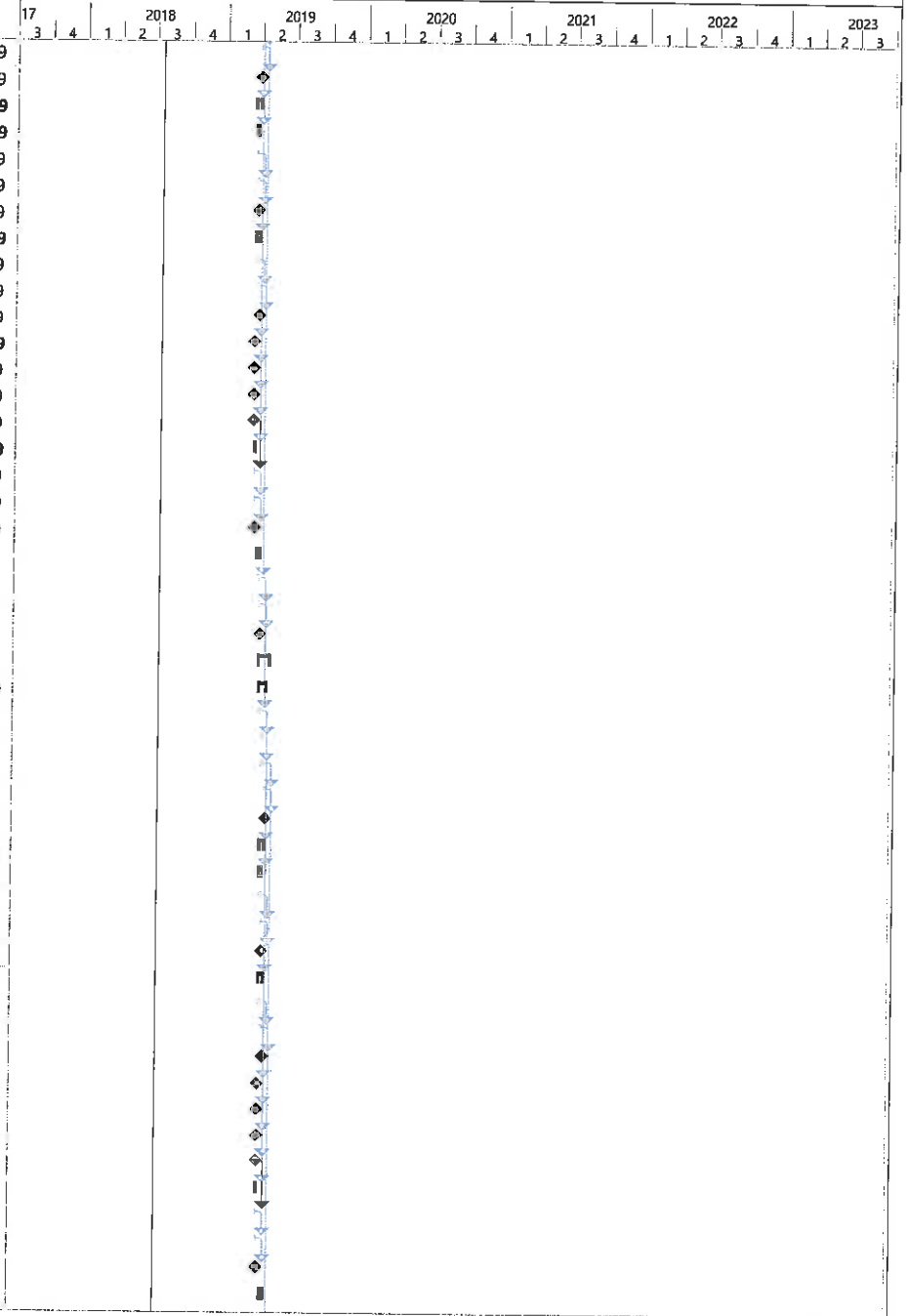
ID	WBS	Task Name	Duration	Start	Finish
865	1.3.2.1.5.2.4	Developed Components	1 day	11/15/2018	11/15/2018
866	1.3.2.1.5.2.4	Sprint Review	1 day	11/16/2018	11/16/2018
867	1.3.2.1.5.2.4	Sprint Retrospective	0 days	11/16/2018	11/16/2018
868	**1.3.2.1.5.3**	**DHHR Sprint Acceptance**	**7 days**	**11/27/2018**	**12/5/2018**
869	1.3.2.1.5.3.1	Perform DHHR Acceptance Tests	5 days	11/27/2018	12/3/2018
870	1.3.2.1.5.3.2	DHHR Code Review	2 days	12/4/2018	12/5/2018
871	1.3.2.1.5.3.3	Sprint Acceptance	0 days	12/5/2018	12/5/2018
872	**1.3.2.1.6**	**Sprint 5**	**20 days**	**12/4/2018**	**12/31/2018**
873	**1.3.2.1.6.1**	**Sprint Execution**	**14 days**	**12/4/2018**	**12/21/2018**
874	1.3.2.1.6.1.1	Build	5 days	12/4/2018	12/10/2018
875	1.3.2.1.6.1.2	Write UAT Tests	5 days	12/11/2018	12/17/2018
876	1.3.2.1.6.1.3	System Testing&Defect Remediation	8 days	12/11/2018	12/20/2018
877	1.3.2.1.6.1.4	Review	1 day	12/21/2018	12/21/2018
878	1.3.2.1.6.1.5	Retrospective/Backlog Refinement	0 days	12/21/2018	12/21/2018
879	**1.3.2.1.6.2**	**Sprint OWPs**	**8 days**	**12/10/2018**	**12/20/2018**
880	**1.3.2.1.6.2.1**	**Create Sprint Backlog**	**5 days**	**12/11/2018**	**12/17/2018**
881	1.3.2.1.6.2.1	Submission	4 days	12/11/2018	12/14/2018
882	1.3.2.1.6.2.1	DHHR Review	1 day	12/17/2018	12/17/2018
883	1.3.2.1.6.2.1	DHHR Signoff	0 days	12/17/2018	12/17/2018
884	**1.3.2.1.6.2.2**	**Design Specification (Sprint Features)**	**8 days**	**12/11/2018**	**12/20/2018**
885	1.3.2.1.6.2.2	Submission	5 days	12/11/2018	12/17/2018
886	1.3.2.1.6.2.2	DHHR Review	3 days	12/18/2018	12/20/2018
887	1.3.2.1.6.2.2	DHHR Signoff	0 days	12/20/2018	12/20/2018
888	**1.3.2.1.6.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**12/10/2018**	**12/10/2018**
889	1.3.2.1.6.2.3	Unit Test Results	0 days	12/10/2018	12/10/2018
890	1.3.2.1.6.2.3	String / System Test Results	0 days	12/10/2018	12/10/2018
891	1.3.2.1.6.2.3	Integration and Regression Test Scripts	0 days	12/10/2018	12/10/2018
892	**1.3.2.1.6.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**12/11/2018**	**12/12/2018**
893	1.3.2.1.6.2.4	Developed Components	1 day	12/11/2018	12/11/2018
894	1.3.2.1.6.2.4	Sprint Review	1 day	12/12/2018	12/12/2018
895	1.3.2.1.6.2.4	Sprint Retrospective	0 days	12/12/2018	12/12/2018
896	**1.3.2.1.6.3**	**DHHR Sprint Acceptance**	**7 days**	**12/21/2018**	**12/31/2018**
897	1.3.2.1.6.3.1	Perform DHHR Acceptance Tests	5 days	12/21/2018	12/27/2018
898	1.3.2.1.6.3.2	DHHR Code Review	2 days	12/28/2018	12/31/2018
899	1.3.2.1.6.3.3	Sprint Acceptance	0 days	12/31/2018	12/31/2018
900	**1.3.2.1.7**	**Sprint 6**	**25 days**	**12/28/2018**	**1/31/2019**
901	**1.3.2.1.7.1**	**Sprint Execution**	**19 days**	**12/28/2018**	**1/23/2019**
902	1.3.2.1.7.1.1	Build	10 days	12/28/2018	1/10/2019
903	1.3.2.1.7.1.2	Write UAT Tests	5 days	1/11/2019	1/17/2019
904	1.3.2.1.7.1.3	System Testing&Defect Remediation	8 days	1/11/2019	1/22/2019
905	1.3.2.1.7.1.4	Review	1 day	1/23/2019	1/23/2019
906	1.3.2.1.7.1.5	Retrospective/Backlog Refinement	0 days	1/23/2019	1/23/2019
907	**1.3.2.1.7.2**	**Sprint OWPs**	**8 days**	**1/10/2019**	**1/22/2019**
908	**1.3.2.1.7.2.1**	**Create Sprint Backlog**	**5 days**	**1/11/2019**	**1/17/2019**
909	1.3.2.1.7.2.1	Submission	4 days	1/11/2019	1/16/2019
910	1.3.2.1.7.2.1	DHHR Review	1 day	1/17/2019	1/17/2019
911	1.3.2.1.7.2.1	DHHR Signoff	0 days	1/17/2019	1/17/2019
912	**1.3.2.1.7.2.2**	**Design Specification (Sprint Features)**	**8 days**	**1/11/2019**	**1/22/2019**



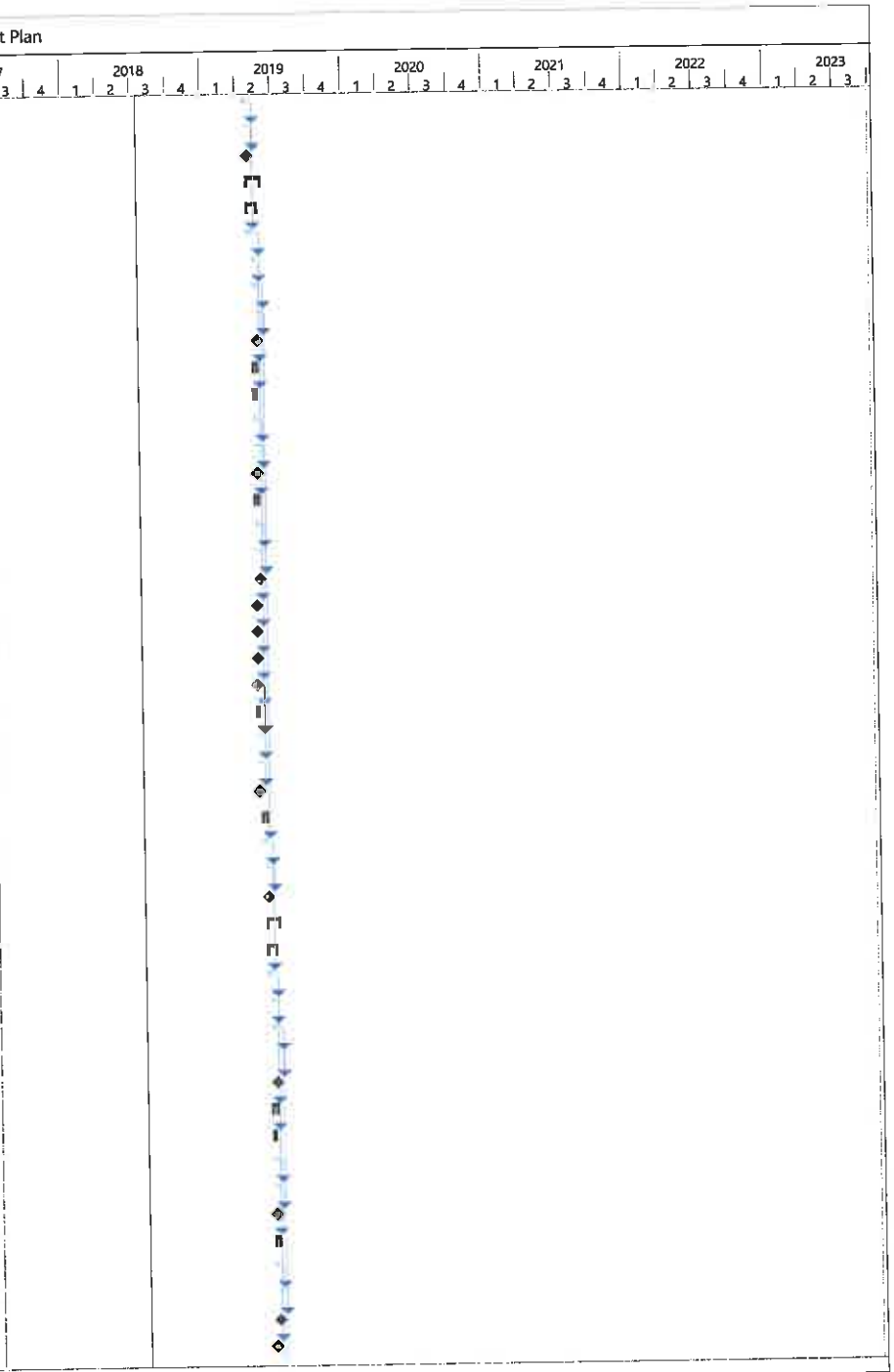
ID	WBS	Task Name	Duration	Start	Finish
913	1.3.2.1.7.2.2	Submission	5 days	1/11/2019	1/17/2019
914	1.3.2.1.7.2.2	DHHR Review	3 days	1/18/2019	1/22/2019
915	1.3.2.1.7.2.2	DHHR Signoff	0 days	1/22/2019	1/22/2019
916	**1.3.2.1.7.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**1/10/2019**	**1/10/2019**
917	1.3.2.1.7.2.3	Unit Test Results	0 days	1/10/2019	1/10/2019
918	1.3.2.1.7.2.3	String / System Test Results	0 days	1/10/2019	1/10/2019
919	1.3.2.1.7.2.3	Integration and Regression Test Scripts	0 days	1/10/2019	1/10/2019
920	**1.3.2.1.7.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**1/11/2019**	**1/14/2019**
921	1.3.2.1.7.2.4	Developed Components	1 day	1/11/2019	1/11/2019
922	1.3.2.1.7.2.4	Sprint Review	1 day	1/14/2019	1/14/2019
923	1.3.2.1.7.2.4	Sprint Retrospective	0 days	1/14/2019	1/14/2019
924	**1.3.2.1.7.3**	**DHHR Sprint Acceptance**	**7 days**	**1/23/2019**	**1/31/2019**
925	1.3.2.1.7.3.1	Perform DHHR Acceptance Tests	5 days	1/23/2019	1/29/2019
926	1.3.2.1.7.3.2	DHHR Code Review	2 days	1/30/2019	1/31/2019
927	1.3.2.1.7.3.3	Sprint Acceptance	0 days	1/31/2019	1/31/2019
928	**1.3.2.1.8**	**Sprint 7**	**25 days**	**1/30/2019**	**3/5/2019**
929	**1.3.2.1.8.1**	**Sprint Execution**	**19 days**	**1/30/2019**	**2/25/2019**
930	1.3.2.1.8.1.1	Build	10 days	1/30/2019	2/12/2019
931	1.3.2.1.8.1.2	Write UAT Tests	5 days	2/13/2019	2/19/2019
932	1.3.2.1.8.1.3	System Testing&Defect Remediation	8 days	2/13/2019	2/22/2019
933	1.3.2.1.8.1.4	Review	1 day	2/25/2019	2/25/2019
934	1.3.2.1.8.1.5	Retrospective/Backlog Refinement	0 days	2/25/2019	2/25/2019
935	**1.3.2.1.8.2**	**Sprint OWPs**	**8 days**	**2/12/2019**	**2/22/2019**
936	**1.3.2.1.8.2.1**	**Create Sprint Backlog**	**5 days**	**2/13/2019**	**2/19/2019**
937	1.3.2.1.8.2.1	Submission	4 days	2/13/2019	2/18/2019
938	1.3.2.1.8.2.1	DHHR Review	1 day	2/19/2019	2/19/2019
939	1.3.2.1.8.2.1	DHHR Signoff	0 days	2/19/2019	2/19/2019
940	**1.3.2.1.8.2.2**	**Design Specification (Sprint Features)**	**8 days**	**2/13/2019**	**2/22/2019**
941	1.3.2.1.8.2.2	Submission	5 days	2/13/2019	2/19/2019
942	1.3.2.1.8.2.2	DHHR Review	3 days	2/20/2019	2/22/2019
943	1.3.2.1.8.2.2	DHHR Signoff	0 days	2/22/2019	2/22/2019
944	**1.3.2.1.8.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**2/12/2019**	**2/12/2019**
945	1.3.2.1.8.2.3	Unit Test Results	0 days	2/12/2019	2/12/2019
946	1.3.2.1.8.2.3	String / System Test Results	0 days	2/12/2019	2/12/2019
947	1.3.2.1.8.2.3	Integration and Regression Test Scripts	0 days	2/12/2019	2/12/2019
948	**1.3.2.1.8.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**2/13/2019**	**2/14/2019**
949	1.3.2.1.8.2.4	Developed Components	1 day	2/13/2019	2/13/2019
950	1.3.2.1.8.2.4	Sprint Review	1 day	2/14/2019	2/14/2019
951	1.3.2.1.8.2.4	Sprint Retrospective	0 days	2/14/2019	2/14/2019
952	**1.3.2.1.8.3**	**DHHR Sprint Acceptance**	**7 days**	**2/25/2019**	**3/5/2019**
953	1.3.2.1.8.3.1	Perform DHHR Acceptance Tests	5 days	2/25/2019	3/1/2019
954	1.3.2.1.8.3.2	DHHR Code Review	2 days	3/4/2019	3/5/2019
955	1.3.2.1.8.3.3	Sprint Acceptance	0 days	3/5/2019	3/5/2019
956	**1.3.2.1.9**	**Sprint 8**	**25 days**	**3/4/2019**	**4/5/2019**
957	**1.3.2.1.9.1**	**Sprint Execution**	**19 days**	**3/4/2019**	**3/28/2019**
958	1.3.2.1.9.1.1	Build	10 days	3/4/2019	3/15/2019
959	1.3.2.1.9.1.2	Write UAT Tests	5 days	3/18/2019	3/22/2019
960	1.3.2.1.9.1.3	System Testing&Defect Remediation	8 days	3/18/2019	3/27/2019



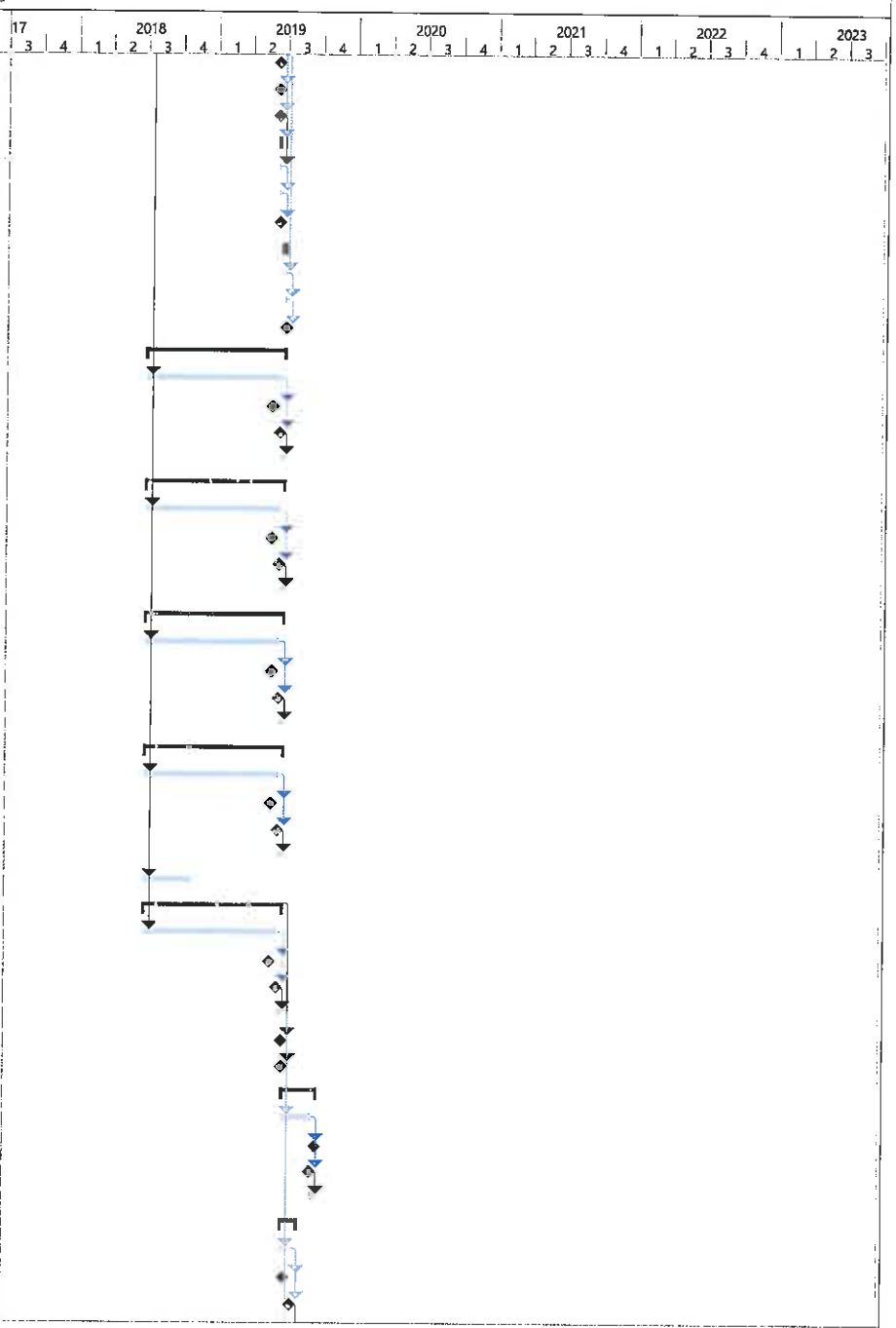
ID	WBS	Task Name	Duration	Start	Finish
961	1.3.2.1.9.1.4	Review	1 day	3/28/2019	3/28/2019
962	1.3.2.1.9.1.5	Retrospective/Backlog Refinement	0 days	3/28/2019	3/28/2019
963	**1.3.2.1.9.2**	**Sprint OWPs**	**8 days**	**3/15/2019**	**3/27/2019**
964	**1.3.2.1.9.2.1**	**Create Sprint Backlog**	**5 days**	**3/18/2019**	**3/22/2019**
965	1.3.2.1.9.2.1	Submission	4 days	3/18/2019	3/21/2019
966	1.3.2.1.9.2.1	DHHR Review	1 day	3/22/2019	3/22/2019
967	1.3.2.1.9.2.1	DHHR Signoff	0 days	3/22/2019	3/22/2019
968	**1.3.2.1.9.2.2**	**Design Specification (Sprint Features)**	**8 days**	**3/18/2019**	**3/27/2019**
969	1.3.2.1.9.2.2	Submission	5 days	3/18/2019	3/22/2019
970	1.3.2.1.9.2.2	DHHR Review	3 days	3/25/2019	3/27/2019
971	1.3.2.1.9.2.2	DHHR Signoff	0 days	3/27/2019	3/27/2019
972	**1.3.2.1.9.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**3/15/2019**	**3/15/2019**
973	1.3.2.1.9.2.3	Unit Test Results	0 days	3/15/2019	3/15/2019
974	1.3.2.1.9.2.3	String / System Test Results	0 days	3/15/2019	3/15/2019
975	1.3.2.1.9.2.3	Integration and Regression Test Scripts	0 days	3/15/2019	3/15/2019
976	**1.3.2.1.9.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**3/18/2019**	**3/19/2019**
977	1.3.2.1.9.2.4	Developed Components	1 day	3/18/2019	3/18/2019
978	1.3.2.1.9.2.4	Sprint Review	1 day	3/19/2019	3/19/2019
979	1.3.2.1.9.2.4	Sprint Retrospective	0 days	3/19/2019	3/19/2019
980	**1.3.2.1.9.3**	**DHHR Sprint Acceptance**	**7 days**	**3/28/2019**	**4/5/2019**
981	1.3.2.1.9.3.1	Perform DHHR Acceptance Tests	5 days	3/28/2019	4/3/2019
982	1.3.2.1.9.3.2	DHHR Code Review	2 days	4/4/2019	4/5/2019
983	1.3.2.1.9.3.3	Sprint Acceptance	0 days	4/5/2019	4/5/2019
984	**1.3.2.1.10**	**Sprint 9**	**20 days**	**4/4/2019**	**5/1/2019**
985	**1.3.2.1.10.1**	**Sprint Execution**	**14 days**	**4/4/2019**	**4/23/2019**
986	1.3.2.1.10.1.	Build	5 days	4/4/2019	4/10/2019
987	1.3.2.1.10.1.	Write UAT Tests	5 days	4/11/2019	4/17/2019
988	1.3.2.1.10.1.	System Testing&Defect Remediation	8 days	4/11/2019	4/22/2019
989	1.3.2.1.10.1.	Review	1 day	4/23/2019	4/23/2019
990	1.3.2.1.10.1.	Retrospective/Backlog Refinement	0 days	4/23/2019	4/23/2019
991	**1.3.2.1.10.2**	**Sprint OWPs**	**8 days**	**4/10/2019**	**4/22/2019**
992	**1.3.2.1.10.2**	**Create Sprint Backlog**	**5 days**	**4/11/2019**	**4/17/2019**
993	1.3.2.1.10.2.	Submission	4 days	4/11/2019	4/16/2019
994	1.3.2.1.10.2.	DHHR Review	1 day	4/17/2019	4/17/2019
995	1.3.2.1.10.2.	DHHR Signoff	0 days	4/17/2019	4/17/2019
996	**1.3.2.1.10.2**	**Design Specification (Sprint Features)**	**8 days**	**4/11/2019**	**4/22/2019**
997	1.3.2.1.10.2.	Submission	5 days	4/11/2019	4/17/2019
998	1.3.2.1.10.2.	DHHR Review	3 days	4/18/2019	4/22/2019
999	1.3.2.1.10.2.	DHHR Signoff	0 days	4/22/2019	4/22/2019
1000	**1.3.2.1.10.2**	**Logical Data Model (Sprint Features)**	**0 days**	**4/10/2019**	**4/10/2019**
1001	1.3.2.1.10.2.	Unit Test Results	0 days	4/10/2019	4/10/2019
1002	1.3.2.1.10.2.	String / System Test Results	0 days	4/10/2019	4/10/2019
1003	1.3.2.1.10.2.	Integration and Regression Test Scripts	0 days	4/10/2019	4/10/2019
1004	**1.3.2.1.10.2**	**Burndown Chart and Velocity Summary**	**2 days**	**4/11/2019**	**4/12/2019**
1005	1.3.2.1.10.2.	Developed Components	1 day	4/11/2019	4/11/2019
1006	1.3.2.1.10.2.	Sprint Review	1 day	4/12/2019	4/12/2019
1007	1.3.2.1.10.2.	Sprint Retrospective	0 days	4/12/2019	4/12/2019
1008	**1.3.2.1.10.3**	**DHHR Sprint Acceptance**	**7 days**	**4/23/2019**	**5/1/2019**



ID	WBS	Task Name	Duration	Start	Finish
1009	1.3.2.1.10.3.	Perform DHHR Acceptance Tests	5 days	4/23/2019	4/29/2019
1010	1.3.2.1.10.3.	DHHR Code Review	2 days	4/30/2019	5/1/2019
1011	1.3.2.1.10.3.	Sprint Acceptance	0 days	5/1/2019	5/1/2019
1012	**1.3.2.1.11**	**Sprint 10**	**25 days**	**4/30/2019**	**6/3/2019**
1013	**1.3.2.1.11.1**	**Sprint Execution**	**19 days**	**4/30/2019**	**5/24/2019**
1014	1.3.2.1.11.1.	Build	10 days	4/30/2019	5/13/2019
1015	1.3.2.1.11.1.	Write UAT Tests	5 days	5/14/2019	5/20/2019
1016	1.3.2.1.11.1.	System Testing&Defect Remediation	8 days	5/14/2019	5/23/2019
1017	1.3.2.1.11.1.	Review	1 day	5/24/2019	5/24/2019
1018	1.3.2.1.11.1.	Retrospective/Backlog Refinement	0 days	5/24/2019	5/24/2019
1019	**1.3.2.1.11.2**	**Sprint OWPs**	**8 days**	**5/13/2019**	**5/23/2019**
1020	**1.3.2.1.11.2**	**Create Sprint Backlog**	**5 days**	**5/14/2019**	**5/20/2019**
1021	1.3.2.1.11.2.	Submission	4 days	5/14/2019	5/17/2019
1022	1.3.2.1.11.2.	DHHR Review	1 day	5/20/2019	5/20/2019
1023	1.3.2.1.11.2.	DHHR Signoff	0 days	5/20/2019	5/20/2019
1024	**1.3.2.1.11.2**	**Design Specification (Sprint Features)**	**8 days**	**5/14/2019**	**5/23/2019**
1025	1.3.2.1.11.2.	Submission	5 days	5/14/2019	5/20/2019
1026	1.3.2.1.11.2.	DHHR Review	3 days	5/21/2019	5/23/2019
1027	1.3.2.1.11.2.	DHHR Signoff	0 days	5/23/2019	5/23/2019
1028	**1.3.2.1.11.2**	**Logical Data Model (Sprint Features)**	**0 days**	**5/13/2019**	**5/13/2019**
1029	1.3.2.1.11.2.	Unit Test Results	0 days	5/13/2019	5/13/2019
1030	1.3.2.1.11.2.	String / System Test Results	0 days	5/13/2019	5/13/2019
1031	1.3.2.1.11.2.	Integration and Regression Test Scripts	0 days	5/13/2019	5/13/2019
1032	**1.3.2.1.11.2**	**Burndown Chart and Velocity Summary**	**2 days**	**5/14/2019**	**5/15/2019**
1033	1.3.2.1.11.2.	Developed Components	1 day	5/14/2019	5/14/2019
1034	1.3.2.1.11.2.	Sprint Review	1 day	5/15/2019	5/15/2019
1035	1.3.2.1.11.2.	Sprint Retrospective	0 days	5/15/2019	5/15/2019
1036	**1.3.2.1.11.3**	**DHHR Sprint Acceptance**	**7 days**	**5/24/2019**	**6/3/2019**
1037	1.3.2.1.11.3.	Perform DHHR Acceptance Tests	5 days	5/24/2019	5/30/2019
1038	1.3.2.1.11.3.	DHHR Code Review	2 days	5/31/2019	6/3/2019
1039	1.3.2.1.11.3.	Sprint Acceptance	0 days	6/3/2019	6/3/2019
1040	**1.3.2.1.12**	**Hardening Sprint**	**21 days**	**5/31/2019**	**6/28/2019**
1041	**1.3.2.1.12.1**	**Sprint Execution**	**15 days**	**5/31/2019**	**6/20/2019**
1042	1.3.2.1.12.1.	Build	6 days	5/31/2019	6/7/2019
1043	1.3.2.1.12.1.	Write UAT Tests	5 days	6/10/2019	6/14/2019
1044	1.3.2.1.12.1.	System Testing&Defect Remediation	8 days	6/10/2019	6/19/2019
1045	1.3.2.1.12.1.	Review	1 day	6/20/2019	6/20/2019
1046	1.3.2.1.12.1.	Retrospective/Backlog Refinement	0 days	6/20/2019	6/20/2019
1047	**1.3.2.1.12.2**	**Sprint OWPs**	**8 days**	**6/7/2019**	**6/19/2019**
1048	**1.3.2.1.12.2**	**Create Sprint Backlog**	**5 days**	**6/10/2019**	**6/14/2019**
1049	1.3.2.1.12.2.	Submission	4 days	6/10/2019	6/13/2019
1050	1.3.2.1.12.2.	DHHR Review	1 day	6/14/2019	6/14/2019
1051	1.3.2.1.12.2.	DHHR Signoff	0 days	6/14/2019	6/14/2019
1052	**1.3.2.1.12.2**	**Design Specification (Sprint Features)**	**8 days**	**6/10/2019**	**6/19/2019**
1053	1.3.2.1.12.2.	Submission	5 days	6/10/2019	6/14/2019
1054	1.3.2.1.12.2.	DHHR Review	3 days	6/17/2019	6/19/2019
1055	1.3.2.1.12.2.	DHHR Signoff	0 days	6/19/2019	6/19/2019
1056	**1.3.2.1.12.2**	**Logical Data Model (Sprint Features)**	**0 days**	**6/7/2019**	**6/7/2019**

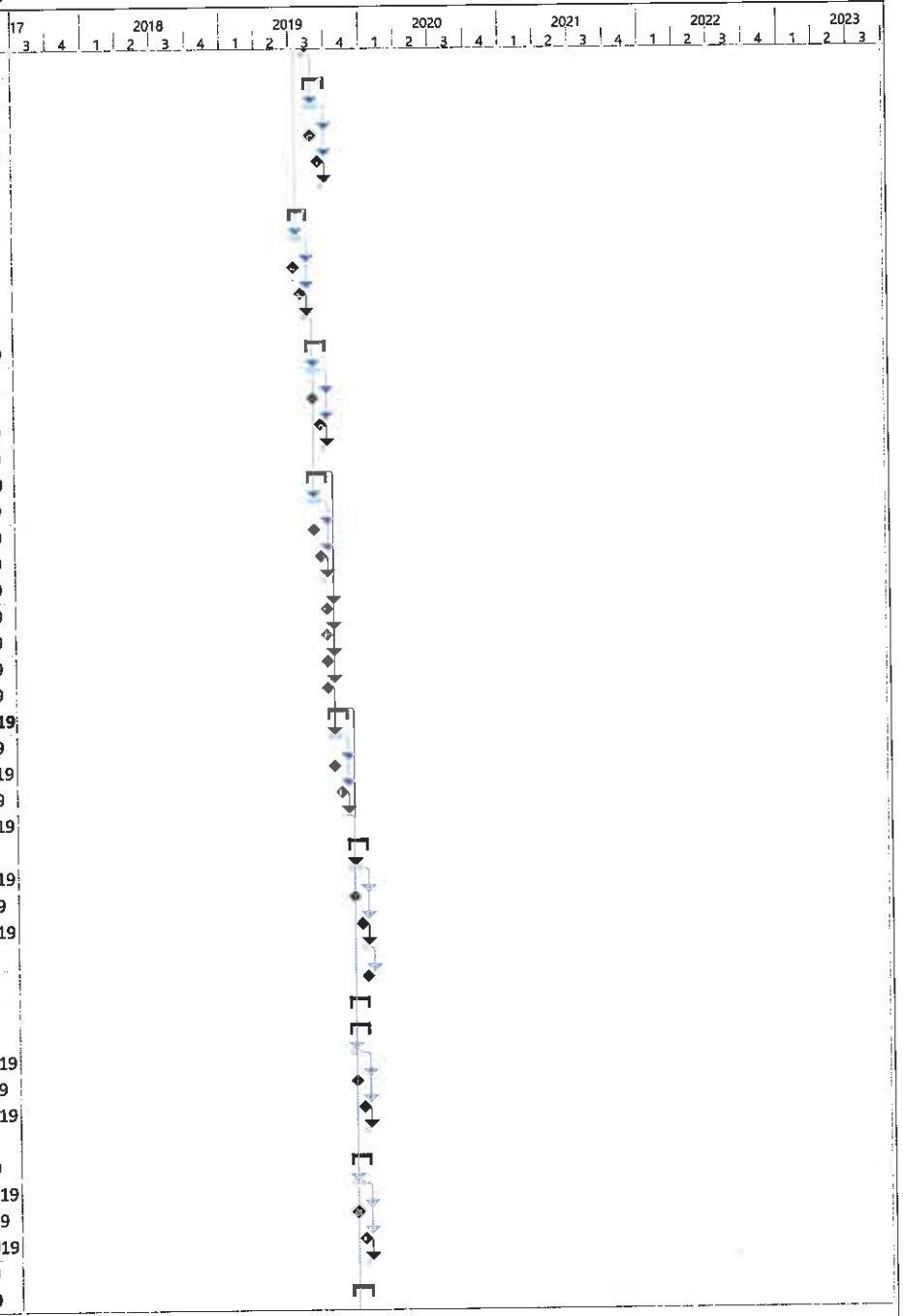


ID	WBS	Task Name	Duration	Start	Finish
1057	1.3.2.1.12.2.	Unit Test Results	0 days	6/7/2019	6/7/2019
1058	1.3.2.1.12.2.	String / System Test Results	0 days	6/7/2019	6/7/2019
1059	1.3.2.1.12.2.	Integration and Regression Test Scripts	0 days	6/7/2019	6/7/2019
1060	**1.3.2.1.12.2**	**Burndown Chart and Velocity Summary**	**2 days**	**6/10/2019**	**6/11/2019**
1061	1.3.2.1.12.2.	Developed Components	1 day	6/10/2019	6/10/2019
1062	1.3.2.1.12.2.	Sprint Review	1 day	6/11/2019	6/11/2019
1063	1.3.2.1.12.2.	Sprint Retrospective	0 days	6/11/2019	6/11/2019
1064	**1.3.2.1.12.3**	**DHHR Sprint Acceptance**	**7 days**	**6/20/2019**	**6/28/2019**
1065	1.3.2.1.12.3.	Perform DHHR Acceptance Tests	5 days	6/20/2019	6/26/2019
1066	1.3.2.1.12.3.	DHHR Code Review	2 days	6/27/2019	6/28/2019
1067	1.3.2.1.12.3.	Sprint Acceptance	0 days	6/28/2019	6/28/2019
1068	**1.3.2.2**	**System Documentation**	**260 days**	**7/2/2018**	**6/28/2019**
1069	1.3.2.2.1	Develop System Documentation	250 days	7/2/2018	6/14/2019
1070	1.3.2.2.2	Interim draft deliverable submission	0 days	5/27/2019	5/27/2019
1071	1.3.2.2.3	Submit deliverable for review	0 days	6/14/2019	6/14/2019
1072	1.3.2.2.4	Receive deliverable client approval	10 days	6/17/2019	6/28/2019
1073	**1.3.2.3**	**System Security Plan (SSP)**	**260 days**	**7/2/2018**	**6/28/2019**
1074	1.3.2.3.1	Develop System Security Plan (SSP)	250 days	7/2/2018	6/14/2019
1075	1.3.2.3.2	Interim draft deliverable submission	0 days	5/27/2019	5/27/2019
1076	1.3.2.3.3	Submit deliverable for review	0 days	6/14/2019	6/14/2019
1077	1.3.2.3.4	Receive deliverable client approval	10 days	6/17/2019	6/28/2019
1078	**1.3.2.4**	**Safeguard Procedures Report**	**260 days**	**7/2/2018**	**6/28/2019**
1079	1.3.2.4.1	Develop Safeguard Procedures Report	250 days	7/2/2018	6/14/2019
1080	1.3.2.4.2	Interim draft deliverable submission	0 days	5/27/2019	5/27/2019
1081	1.3.2.4.3	Submit deliverable for review	0 days	6/14/2019	6/14/2019
1082	1.3.2.4.4	Receive deliverable client approval	10 days	6/17/2019	6/28/2019
1083	**1.3.2.5**	**User Documentation**	**260 days**	**7/2/2018**	**6/28/2019**
1084	1.3.2.5.1	Develop User Documentation	250 days	7/2/2018	6/14/2019
1085	1.3.2.5.2	Interim draft deliverable submission	0 days	5/27/2019	5/27/2019
1086	1.3.2.5.3	Submit deliverable for review	0 days	6/14/2019	6/14/2019
1087	1.3.2.5.4	Receive deliverable client approval	10 days	6/17/2019	6/28/2019
1088	1.3.2.6	Execute Automated Data Conversion process	90 days	7/2/2018	11/2/2018
1089	**1.3.2.7**	**System Integration Test Cases**	**260 days**	**7/2/2018**	**6/28/2019**
1090	1.3.2.7.1	Develop System Integration Test Cases	250 days	7/2/2018	6/14/2019
1091	1.3.2.7.2	Interim draft deliverable submission	0 days	5/27/2019	5/27/2019
1092	1.3.2.7.3	Submit deliverable for review	0 days	6/14/2019	6/14/2019
1093	1.3.2.7.4	Receive deliverable client approval	10 days	6/17/2019	6/28/2019
1094	1.3.2.8	Completion of Data Conversion Trial Run in Test Environment	0 days	6/28/2019	6/28/2019
1095	1.3.2.9	Overall completion of Development and Configuration	0 days	6/28/2019	6/28/2019
1096	**1.3.2.10**	**System Integration Test Results**	**65 days**	**7/1/2019**	**9/27/2019**
1097	1.3.2.10.1	Develop System Integration Test Results	55 days	7/1/2019	9/13/2019
1098	1.3.2.10.2	Interim draft deliverable submission	0 days	9/27/2019	9/27/2019
1099	1.3.2.10.3	Submit deliverable for review	0 days	9/13/2019	9/13/2019
1100	1.3.2.10.4	Receive deliverable client approval	10 days	9/16/2019	9/27/2019
1101	**1.3.2.11**	**Regression Test Cases**	**30 days**	**7/1/2019**	**8/9/2019**
1102	1.3.2.11.1	Develop Regression Test Cases	20 days	7/1/2019	7/26/2019
1103	1.3.2.11.2	Interim draft deliverable submission	0 days	7/8/2019	7/8/2019
1104	1.3.2.11.3	Submit deliverable for review	0 days	7/26/2019	7/26/2019

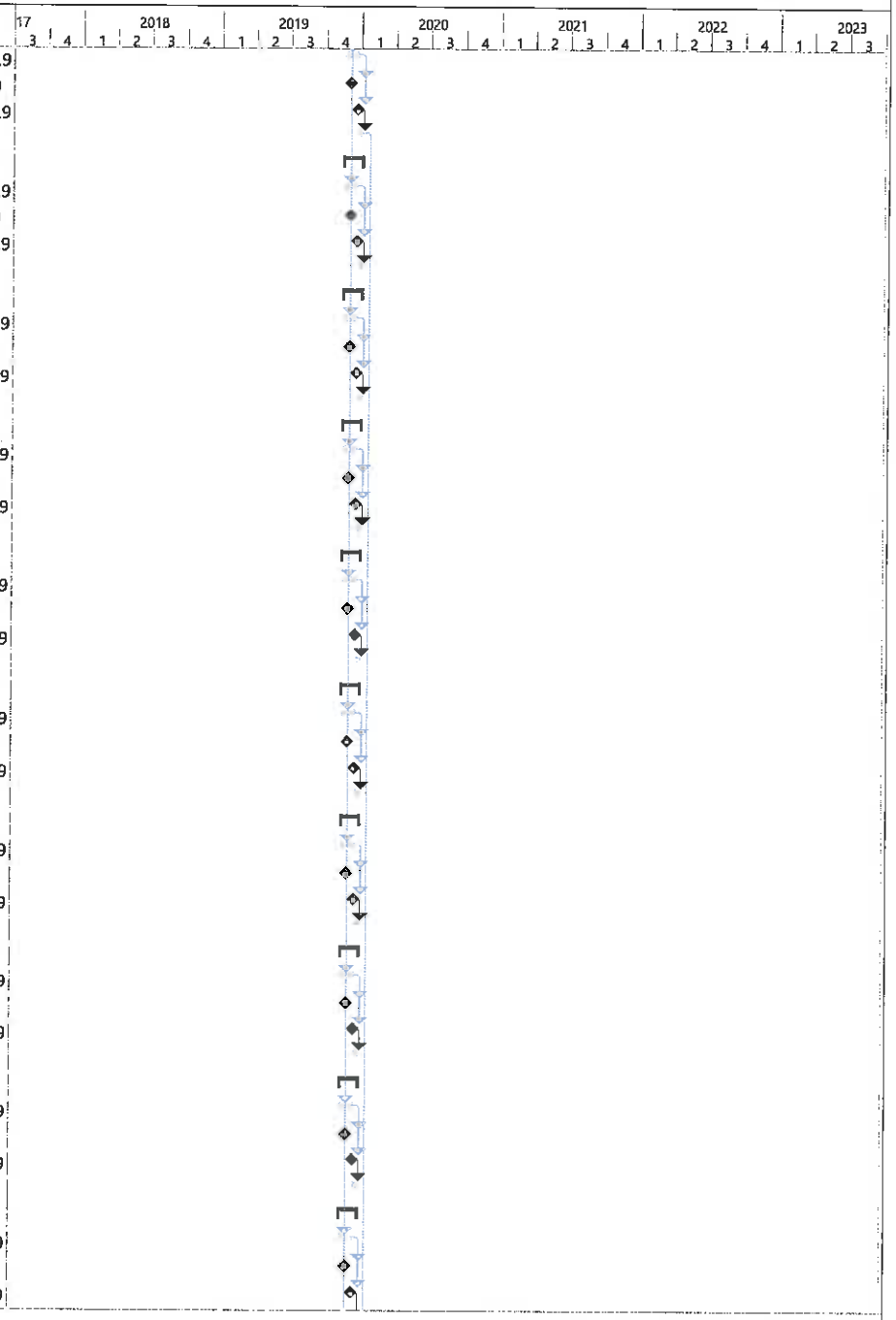


West Virginia IES Project Plan

ID	WBS	Task Name	Duration	Start	Finish
1105	1.3.2.11.4	Receive deliverable client approval	10 days	7/29/2019	8/9/2019
1106	**1.3.2.12**	**Regression Test Results**	**35 days**	**8/12/2019**	**9/27/2019**
1107	1.3.2.12.1	Develop Regression Test Results	25 days	8/12/2019	9/13/2019
1108	1.3.2.12.2	Interim draft deliverable submission	0 days	8/26/2019	8/26/2019
1109	1.3.2.12.3	Submit deliverable for review	0 days	9/13/2019	9/13/2019
1110	1.3.2.12.4	Receive deliverable client approval	10 days	9/16/2019	9/27/2019
1111	**1.3.2.13**	**Load/Stress Test Cases**	**30 days**	**7/1/2019**	**8/9/2019**
1112	1.3.2.13.1	Develop Load/Stress Test Cases	20 days	7/1/2019	7/26/2019
1113	1.3.2.13.2	Interim draft deliverable submission	0 days	7/8/2019	7/8/2019
1114	1.3.2.13.3	Submit deliverable for review	0 days	7/26/2019	7/26/2019
1115	1.3.2.13.4	Receive deliverable client approval	10 days	7/29/2019	8/9/2019
1116	**1.3.2.14**	**Load/Stress Test Results**	**35 days**	**8/12/2019**	**9/27/2019**
1117	1.3.2.14.1	Develop Load/Stress Test Cases	25 days	8/12/2019	9/13/2019
1118	1.3.2.14.2	Interim draft deliverable submission	0 days	8/26/2019	8/26/2019
1119	1.3.2.14.3	Submit deliverable for review	0 days	9/13/2019	9/13/2019
1120	1.3.2.14.4	Receive deliverable client approval	10 days	9/16/2019	9/27/2019
1121	**1.3.2.15**	**Capacity Analysis Report**	**35 days**	**8/12/2019**	**9/27/2019**
1122	1.3.2.15.1	Develop Capacity Analysis Report	25 days	8/12/2019	9/13/2019
1123	1.3.2.15.2	Interim draft deliverable submission	0 days	8/26/2019	8/26/2019
1124	1.3.2.15.3	Submit deliverable for review	0 days	9/13/2019	9/13/2019
1125	1.3.2.15.4	Receive deliverable client approval	10 days	9/16/2019	9/27/2019
1126	1.3.2.16	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	9/27/2019	9/27/2019
1127	1.3.2.17	Update Business Continuity Plan	0 days	9/27/2019	9/27/2019
1128	1.3.2.18	Execute Disaster Recovery Test	0 days	9/27/2019	9/27/2019
1129	1.3.2.19	Overall completion of System Testing	0 days	9/27/2019	9/27/2019
1130	**1.3.2.20**	**User Acceptance Test Cases**	**35 days**	**9/30/2019**	**11/15/2019**
1131	1.3.2.20.1	Develop User Acceptance Test Cases	25 days	9/30/2019	11/1/2019
1132	1.3.2.20.2	Interim draft deliverable submission	0 days	10/14/2019	10/14/2019
1133	1.3.2.20.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
1134	1.3.2.20.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
1135	**1.3.2.21**	**User Acceptance Test Results**	**35 days**	**11/18/2019**	**1/3/2020**
1136	1.3.2.21.1	Develop User Acceptance Test Results	25 days	11/18/2019	12/20/2019
1137	1.3.2.21.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1138	1.3.2.21.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1139	1.3.2.21.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1140	1.3.2.22	Overall completion of Acceptance Testing	0 days	1/3/2020	1/3/2020
1141	**1.3.3**	**Implementation Readiness**	**35 days**	**11/18/2019**	**1/3/2020**
1142	**1.3.3.1**	**Operational Readiness Plan**	**35 days**	**11/18/2019**	**1/3/2020**
1143	1.3.3.1.1	Develop Operational Readiness Plan	25 days	11/18/2019	12/20/2019
1144	1.3.3.1.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1145	1.3.3.1.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1146	1.3.3.1.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1147	**1.3.3.2**	**Operational Readiness Test Scripts**	**35 days**	**11/18/2019**	**1/3/2020**
1148	1.3.3.2.1	Develop Operational Readiness Test Scripts	25 days	11/18/2019	12/20/2019
1149	1.3.3.2.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1150	1.3.3.2.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1151	1.3.3.2.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1152	**1.3.3.3**	**Operational Readiness Test Results**	**35 days**	**11/18/2019**	**1/3/2020**

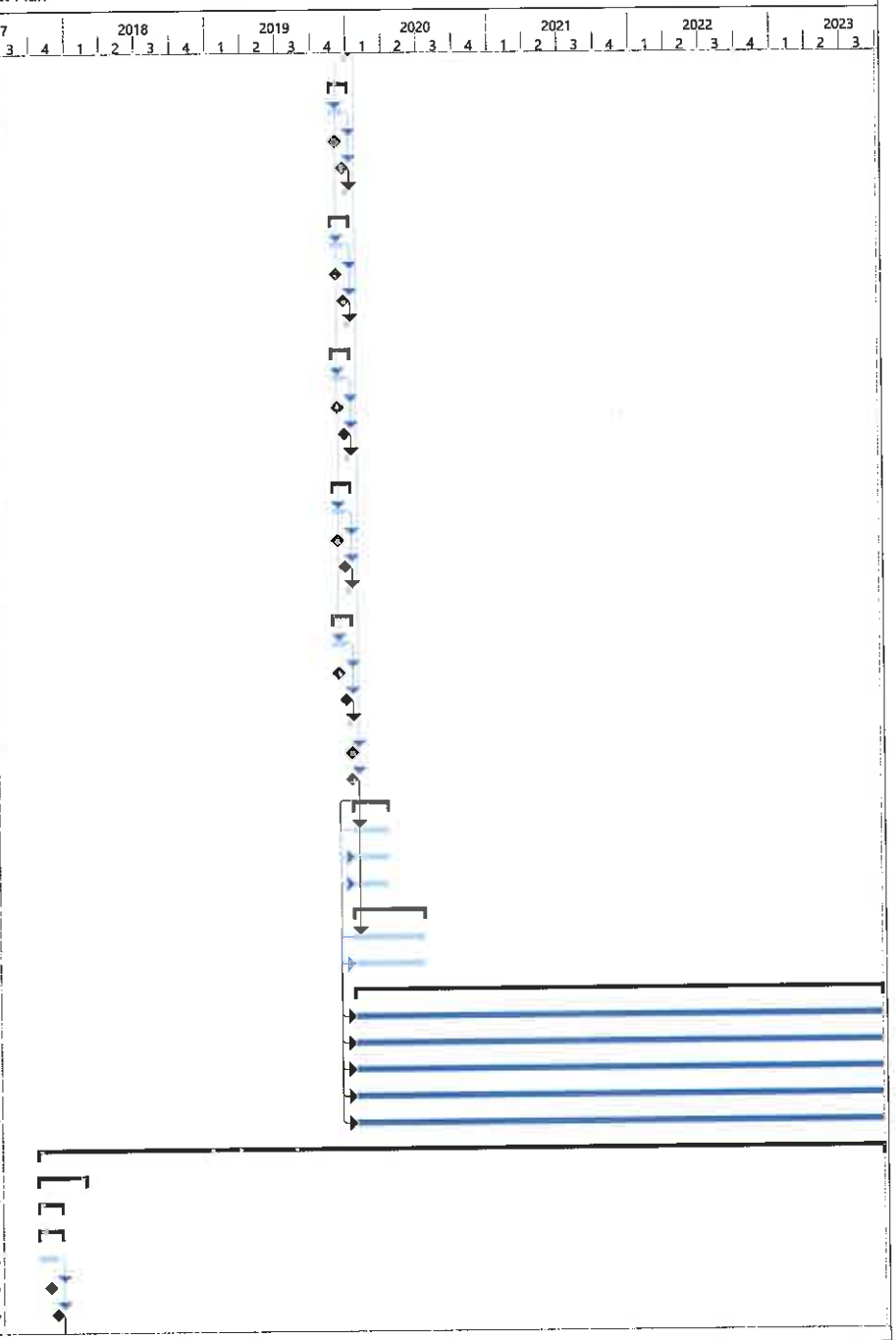


ID	WBS	Task Name	Duration	Start	Finish
1153	1.3.3.3.1	Develop Operational Readiness Test Results	25 days	11/18/2019	12/20/2019
1154	1.3.3.3.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1155	1.3.3.3.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1156	1.3.3.3.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1157	**1.3.3.4**	**Updated Training Management Plan**	**35 days**	**11/18/2019**	**1/3/2020**
1158	1.3.3.4.1	Develop Updated Training Management Plan	25 days	11/18/2019	12/20/2019
1159	1.3.3.4.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1160	1.3.3.4.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1161	1.3.3.4.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1162	**1.3.3.5**	**Training Schedule**	**35 days**	**11/18/2019**	**1/3/2020**
1163	1.3.3.5.1	Develop Training Schedule	25 days	11/18/2019	12/20/2019
1164	1.3.3.5.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1165	1.3.3.5.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1166	1.3.3.5.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1167	**1.3.3.6**	**Training Materials**	**35 days**	**11/18/2019**	**1/3/2020**
1168	1.3.3.6.1	Develop Training Materials	25 days	11/18/2019	12/20/2019
1169	1.3.3.6.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1170	1.3.3.6.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1171	1.3.3.6.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1172	**1.3.3.7**	**Training Report**	**35 days**	**11/18/2019**	**1/3/2020**
1173	1.3.3.7.1	Develop Training Report	25 days	11/18/2019	12/20/2019
1174	1.3.3.7.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1175	1.3.3.7.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1176	1.3.3.7.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1177	**1.3.3.8**	**Implementation Plan**	**35 days**	**11/18/2019**	**1/3/2020**
1178	1.3.3.8.1	Develop Implementation Plan	25 days	11/18/2019	12/20/2019
1179	1.3.3.8.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1180	1.3.3.8.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1181	1.3.3.8.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1182	**1.3.3.9**	**Cut-Over Play Book**	**35 days**	**11/18/2019**	**1/3/2020**
1183	1.3.3.9.1	Develop Cut-Over Play Book	25 days	11/18/2019	12/20/2019
1184	1.3.3.9.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1185	1.3.3.9.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1186	1.3.3.9.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1187	**1.3.3.10**	**Report Distribution Schedule**	**35 days**	**11/18/2019**	**1/3/2020**
1188	1.3.3.10.1	Develop Report Distribution Schedule	25 days	11/18/2019	12/20/2019
1189	1.3.3.10.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1190	1.3.3.10.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1191	1.3.3.10.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1192	**1.3.3.11**	**Operations Project Management Plans**	**35 days**	**11/18/2019**	**1/3/2020**
1193	1.3.3.11.1	Develop Operations Project Management Plans	25 days	11/18/2019	12/20/2019
1194	1.3.3.11.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1195	1.3.3.11.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1196	1.3.3.11.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1197	**1.3.3.12**	**Solution health Monitoring Plan**	**35 days**	**11/18/2019**	**1/3/2020**
1198	1.3.3.12.1	Develop Solution health Monitoring Plan	25 days	11/18/2019	12/20/2019
1199	1.3.3.12.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1200	1.3.3.12.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019

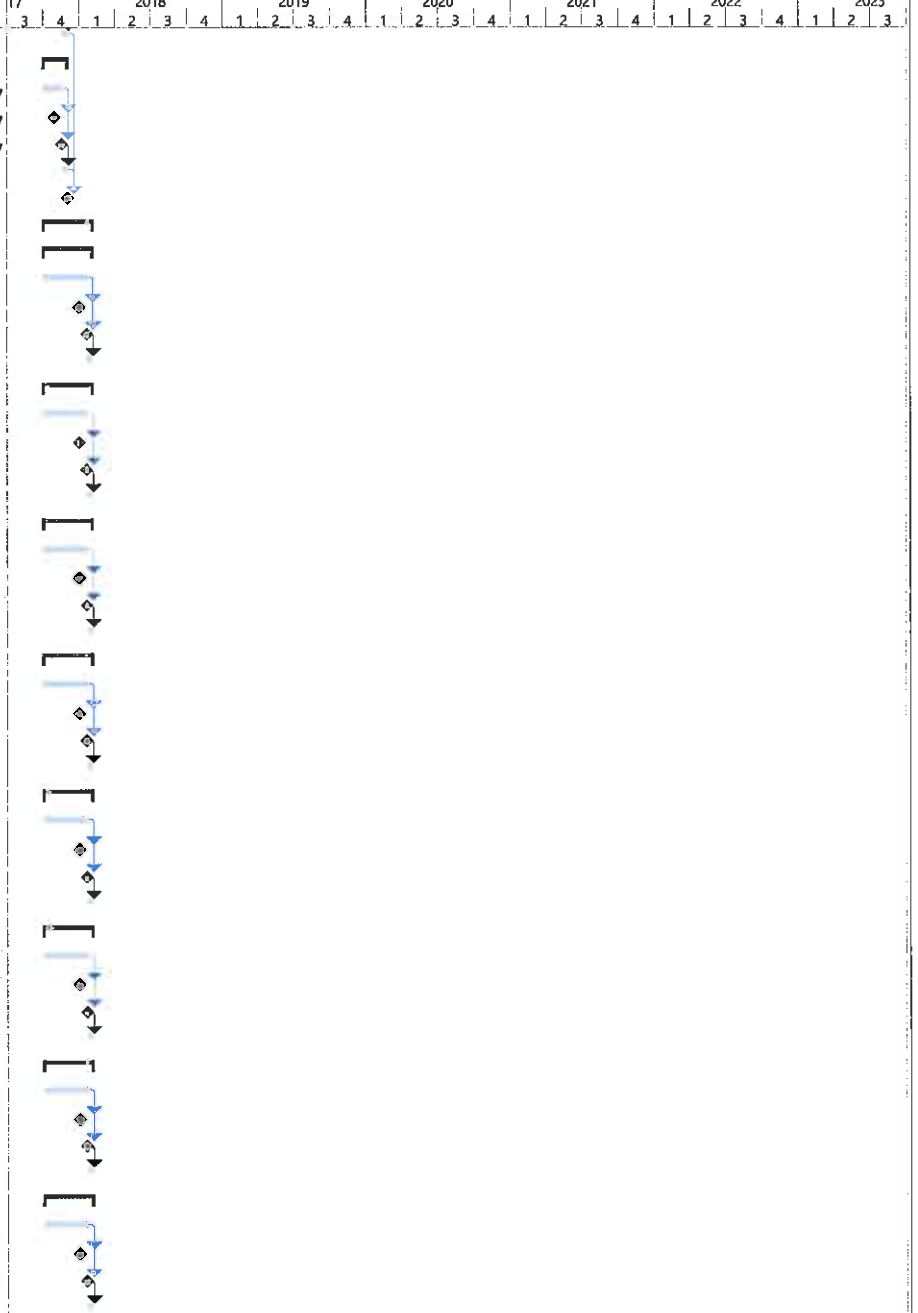


West Virginia IES Project Plan

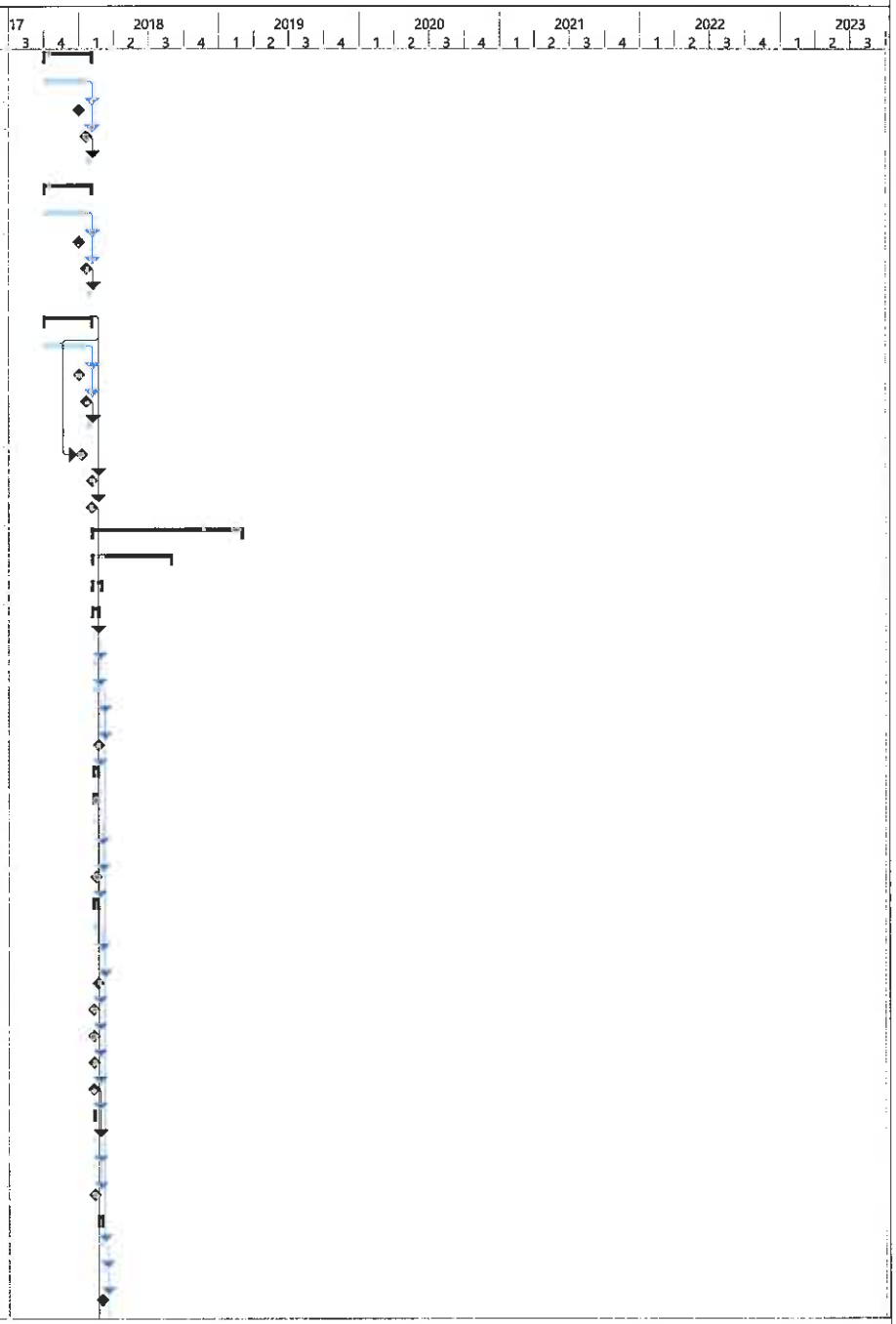
ID	WBS	Task Name	Duration	Start	Finish
1201	1.3.3.12.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1202	**1.3.3.13**	**Federal Certification and Review Management Plan**	**35 days**	**11/18/2019**	**1/3/2020**
1203	1.3.3.13.1	Develop Federal Certification and Review Management Plan	25 days	11/18/2019	12/20/2019
1204	1.3.3.13.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1205	1.3.3.13.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1206	1.3.3.13.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1207	**1.3.3.14**	**ACF Certification Documentation**	**35 days**	**11/18/2019**	**1/3/2020**
1208	1.3.3.14.1	Obtain ACF Certification Documentation	25 days	11/18/2019	12/20/2019
1209	1.3.3.14.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1210	1.3.3.14.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1211	1.3.3.14.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1212	**1.3.3.15**	**Federal Review Supporting Documentation**	**35 days**	**11/18/2019**	**1/3/2020**
1213	1.3.3.15.1	Obtain Federal Review Supporting Documentation	25 days	11/18/2019	12/20/2019
1214	1.3.3.15.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1215	1.3.3.15.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1216	1.3.3.15.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1217	**1.3.3.16**	**Social Security Administration Certification Documentation**	**35 days**	**11/18/2019**	**1/3/2020**
1218	1.3.3.16.1	Obtain Social Security Administration Certification Document	25 days	11/18/2019	12/20/2019
1219	1.3.3.16.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1220	1.3.3.16.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1221	1.3.3.16.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1222	**1.3.3.17**	**Implementation Certification Letter**	**35 days**	**11/18/2019**	**1/3/2020**
1223	1.3.3.17.1	Obtain Implementation Certification Letter	25 days	11/18/2019	12/20/2019
1224	1.3.3.17.2	Interim draft deliverable submission	0 days	12/2/2019	12/2/2019
1225	1.3.3.17.3	Submit deliverable for review	0 days	12/20/2019	12/20/2019
1226	1.3.3.17.4	Receive deliverable client approval	10 days	12/23/2019	1/3/2020
1227	1.3.3.18	Overall completion of Implementation Readiness	0 days	1/3/2020	1/3/2020
1228	1.3.3.19	Overall completion of deployment to production	0 days	1/3/2020	1/3/2020
1229	**1.3.4**	**Pilot**	**65 days**	**1/6/2020**	**4/3/2020**
1230	1.3.4.1	Support Pilot rollout	65 days	1/6/2020	4/3/2020
1231	1.3.4.2	Develop Statewide rollout strategy	65 days	1/6/2020	4/3/2020
1232	1.3.4.3	Defect resolution support for Pilot county/counties	65 days	1/6/2020	4/3/2020
1233	**1.3.5**	**Warranty**	**130 days**	**1/6/2020**	**7/3/2020**
1234	1.3.5.1	Support Warranty activities	130 days	1/6/2020	7/3/2020
1235	1.3.5.2	Defect resolution support	130 days	1/6/2020	7/3/2020
1236	**1.3.6**	**Ongoing Maintenance and Operations**	**975 days**	**1/6/2020**	**9/29/2023**
1237	1.3.6.1	Ongoing Maintenance and Operations	975 days	1/6/2020	9/29/2023
1238	1.3.6.2	Defect resolution support	975 days	1/6/2020	9/29/2023
1239	1.3.6.3	Quarterly Maintenance Software upgrades	975 days	1/6/2020	9/29/2023
1240	1.3.6.4	Incident Management Support	975 days	1/6/2020	9/29/2023
1241	1.3.6.5	Ongoing Operations Support	975 days	1/6/2020	9/29/2023
1242	**1.4**	**OSCAR Modernization Phase 1- Technology Platform Modernization**	**1565 days**	**10/2/2017**	**9/29/2023**
1243	**1.4.1**	**Discovery**	**90 days**	**10/2/2017**	**2/2/2018**
1244	**1.4.1.1**	**Requirements Validations**	**45 days**	**10/2/2017**	**12/1/2017**
1245	**1.4.1.1.1**	**Requirements Traceability Matrix (RTM)**	**45 days**	**10/2/2017**	**12/1/2017**
1246	1.4.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	35 days	10/2/2017	11/17/2017
1247	1.4.1.1.1.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
1248	1.4.1.1.1.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017



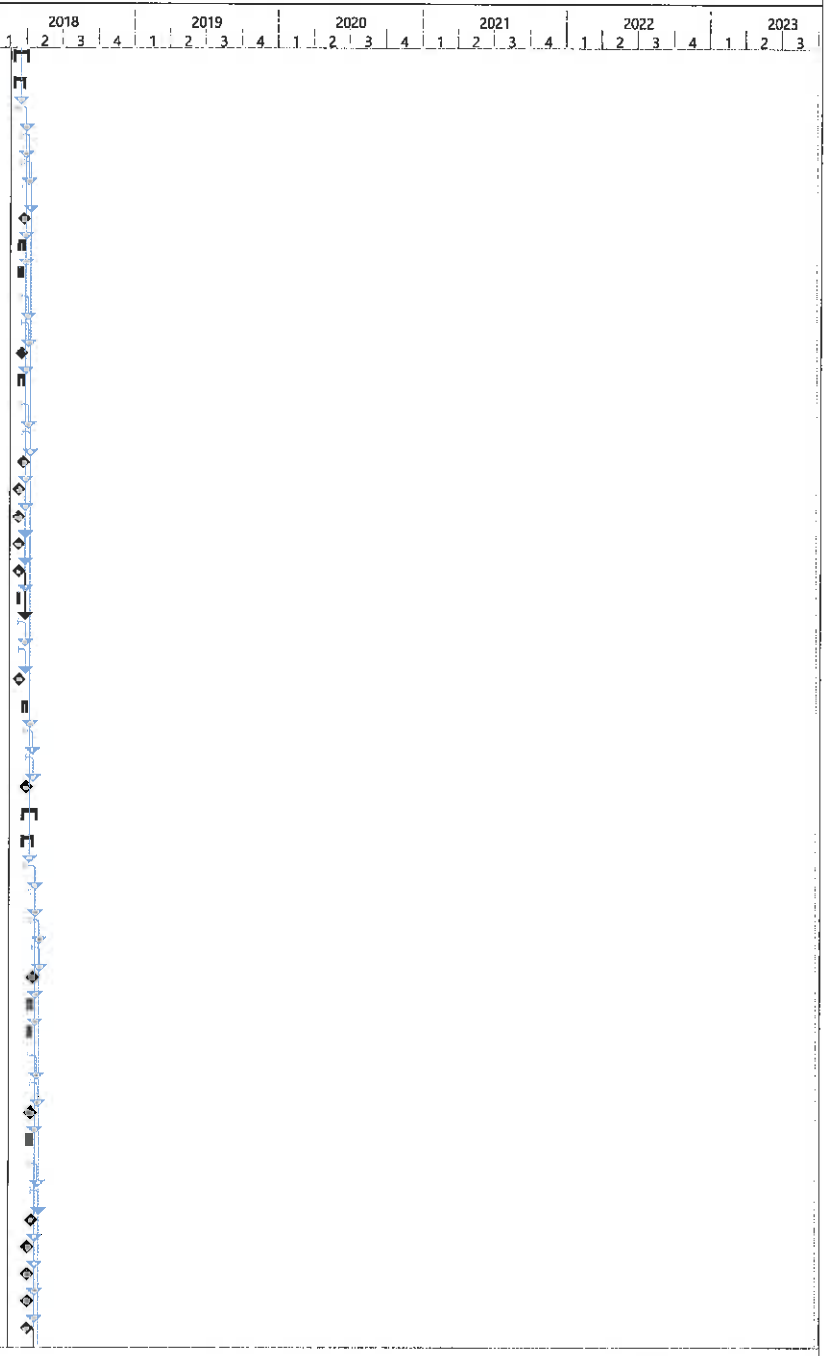
ID	WBS	Task Name	Duration	Start	Finish
1249	1.4.1.1.1.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017
1250	**1.4.1.1.2**	**Requirements Specification Document (RSD)**	**45 days**	**10/2/2017**	**12/1/2017**
1251	1.4.1.1.2.1	Develop Requirements Specification Document (RSD)	35 days	10/2/2017	11/17/2017
1252	1.4.1.1.2.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
1253	1.4.1.1.2.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017
1254	1.4.1.1.2.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017
1255	1.4.1.1.3	Overall completion of Requirements Validation	0 days	12/1/2017	12/1/2017
1256	**1.4.1.2**	**Design**	**90 days**	**10/2/2017**	**2/2/2018**
1257	**1.4.1.2.1**	**Requirements Gap Analysis Document**	**90 days**	**10/2/2017**	**2/2/2018**
1258	1.4.1.2.1.1	Develop Requirements Gap Analysis Document	80 days	10/2/2017	1/19/2018
1259	1.4.1.2.1.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1260	1.4.1.2.1.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1261	1.4.1.2.1.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1262	**1.4.1.2.2**	**Business Process Models**	**90 days**	**10/2/2017**	**2/2/2018**
1263	1.4.1.2.2.1	Develop Business Process Models	80 days	10/2/2017	1/19/2018
1264	1.4.1.2.2.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1265	1.4.1.2.2.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1266	1.4.1.2.2.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1267	**1.4.1.2.3**	**Detailed System Design (DSD) Document**	**90 days**	**10/2/2017**	**2/2/2018**
1268	1.4.1.2.3.1	Develop Detailed System Design (DSD) Document	80 days	10/2/2017	1/19/2018
1269	1.4.1.2.3.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1270	1.4.1.2.3.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1271	1.4.1.2.3.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1272	**1.4.1.2.4**	**Data Dictionary**	**90 days**	**10/2/2017**	**2/2/2018**
1273	1.4.1.2.4.1	Develop Data Dictionary	80 days	10/2/2017	1/19/2018
1274	1.4.1.2.4.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1275	1.4.1.2.4.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1276	1.4.1.2.4.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1277	**1.4.1.2.5**	**Data Models**	**90 days**	**10/2/2017**	**2/2/2018**
1278	1.4.1.2.5.1	Develop Data Models	80 days	10/2/2017	1/19/2018
1279	1.4.1.2.5.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1280	1.4.1.2.5.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1281	1.4.1.2.5.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1282	**1.4.1.2.6**	**Reports Inventory**	**90 days**	**10/2/2017**	**2/2/2018**
1283	1.4.1.2.6.1	Develop Reports Inventory	80 days	10/2/2017	1/19/2018
1284	1.4.1.2.6.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1285	1.4.1.2.6.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1286	1.4.1.2.6.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1287	**1.4.1.2.7**	**Correspondence Inventory**	**90 days**	**10/2/2017**	**2/2/2018**
1288	1.4.1.2.7.1	Develop Correspondence Inventory	80 days	10/2/2017	1/19/2018
1289	1.4.1.2.7.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1290	1.4.1.2.7.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1291	1.4.1.2.7.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1292	**1.4.1.2.8**	**Forms Inventory**	**90 days**	**10/2/2017**	**2/2/2018**
1293	1.4.1.2.8.1	Develop Forms Inventory	80 days	10/2/2017	1/19/2018
1294	1.4.1.2.8.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1295	1.4.1.2.8.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1296	1.4.1.2.8.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018



ID	WBS	Task Name	Duration	Start	Finish
1297	**1.4.1.2.9**	**Interface Inventory**	**90 days**	**10/2/2017**	**2/2/2018**
1298	1.4.1.2.9.1	Develop Interface Inventory	80 days	10/2/2017	1/19/2018
1299	1.4.1.2.9.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1300	1.4.1.2.9.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1301	1.4.1.2.9.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1302	**1.4.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**90 days**	**10/2/2017**	**2/2/2018**
1303	1.4.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	80 days	10/2/2017	1/19/2018
1304	1.4.1.2.10.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1305	1.4.1.2.10.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1306	1.4.1.2.10.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1307	**1.4.1.2.11**	**Data Cleansing and Conversion Specification Document**	**90 days**	**10/2/2017**	**2/2/2018**
1308	1.4.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	80 days	10/2/2017	1/19/2018
1309	1.4.1.2.11.2	Interim draft deliverable submission	0 days	1/1/2018	1/1/2018
1310	1.4.1.2.11.3	Submit deliverable for review	0 days	1/19/2018	1/19/2018
1311	1.4.1.2.11.4	Receive deliverable client approval	10 days	1/22/2018	2/2/2018
1312	1.4.1.2.12	Implement legacy system code-freeze	0 days	1/8/2018	1/8/2018
1313	1.4.1.2.13	Overall completion of Data Conversion Design	0 days	2/2/2018	2/2/2018
1314	1.4.1.2.14	Overall completion of Design Phase	0 days	2/2/2018	2/2/2018
1315	**1.4.2**	**Development, Configuration and Testing**	**280 days**	**2/5/2018**	**3/1/2019**
1316	**1.4.2.1**	**Sprint Development**	**148 days**	**2/5/2018**	**8/29/2018**
1317	**1.4.2.1.1**	**Sprint 1**	**18 days**	**2/5/2018**	**2/28/2018**
1318	**1.4.2.1.1.1**	**Sprint Execution**	**12 days**	**2/5/2018**	**2/20/2018**
1319	1.4.2.1.1.1.1	Build	3 days	2/5/2018	2/7/2018
1320	1.4.2.1.1.1.2	Write UAT Tests	5 days	2/8/2018	2/14/2018
1321	1.4.2.1.1.1.3	System Testing&Defect Remediation	8 days	2/8/2018	2/19/2018
1322	1.4.2.1.1.1.4	Review	1 day	2/20/2018	2/20/2018
1323	1.4.2.1.1.1.5	Retrospective/Backlog Refinement	0 days	2/20/2018	2/20/2018
1324	**1.4.2.1.1.2**	**Sprint OWPs**	**8 days**	**2/7/2018**	**2/19/2018**
1325	**1.4.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**2/8/2018**	**2/14/2018**
1326	1.4.2.1.1.2.1	Submission	4 days	2/8/2018	2/13/2018
1327	1.4.2.1.1.2.1	DHHR Review	1 day	2/14/2018	2/14/2018
1328	1.4.2.1.1.2.1	DHHR Signoff	0 days	2/14/2018	2/14/2018
1329	**1.4.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**2/8/2018**	**2/19/2018**
1330	1.4.2.1.1.2.2	Submission	5 days	2/8/2018	2/14/2018
1331	1.4.2.1.1.2.2	DHHR Review	3 days	2/15/2018	2/19/2018
1332	1.4.2.1.1.2.2	DHHR Signoff	0 days	2/19/2018	2/19/2018
1333	**1.4.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**2/7/2018**	**2/7/2018**
1334	1.4.2.1.1.2.3	Unit Test Results	0 days	2/7/2018	2/7/2018
1335	1.4.2.1.1.2.3	String / System Test Results	0 days	2/7/2018	2/7/2018
1336	1.4.2.1.1.2.3	Integration and Regression Test Scripts	0 days	2/7/2018	2/7/2018
1337	**1.4.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**2/8/2018**	**2/9/2018**
1338	1.4.2.1.1.2.4	Developed Components	1 day	2/8/2018	2/8/2018
1339	1.4.2.1.1.2.4	Sprint Review	1 day	2/9/2018	2/9/2018
1340	1.4.2.1.1.2.4	Sprint Retrospective	0 days	2/9/2018	2/9/2018
1341	**1.4.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**2/20/2018**	**2/28/2018**
1342	1.4.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	2/20/2018	2/26/2018
1343	1.4.2.1.1.3.2	DHHR Code Review	2 days	2/27/2018	2/28/2018
1344	1.4.2.1.1.3.3	Sprint Acceptance	0 days	2/28/2018	2/28/2018

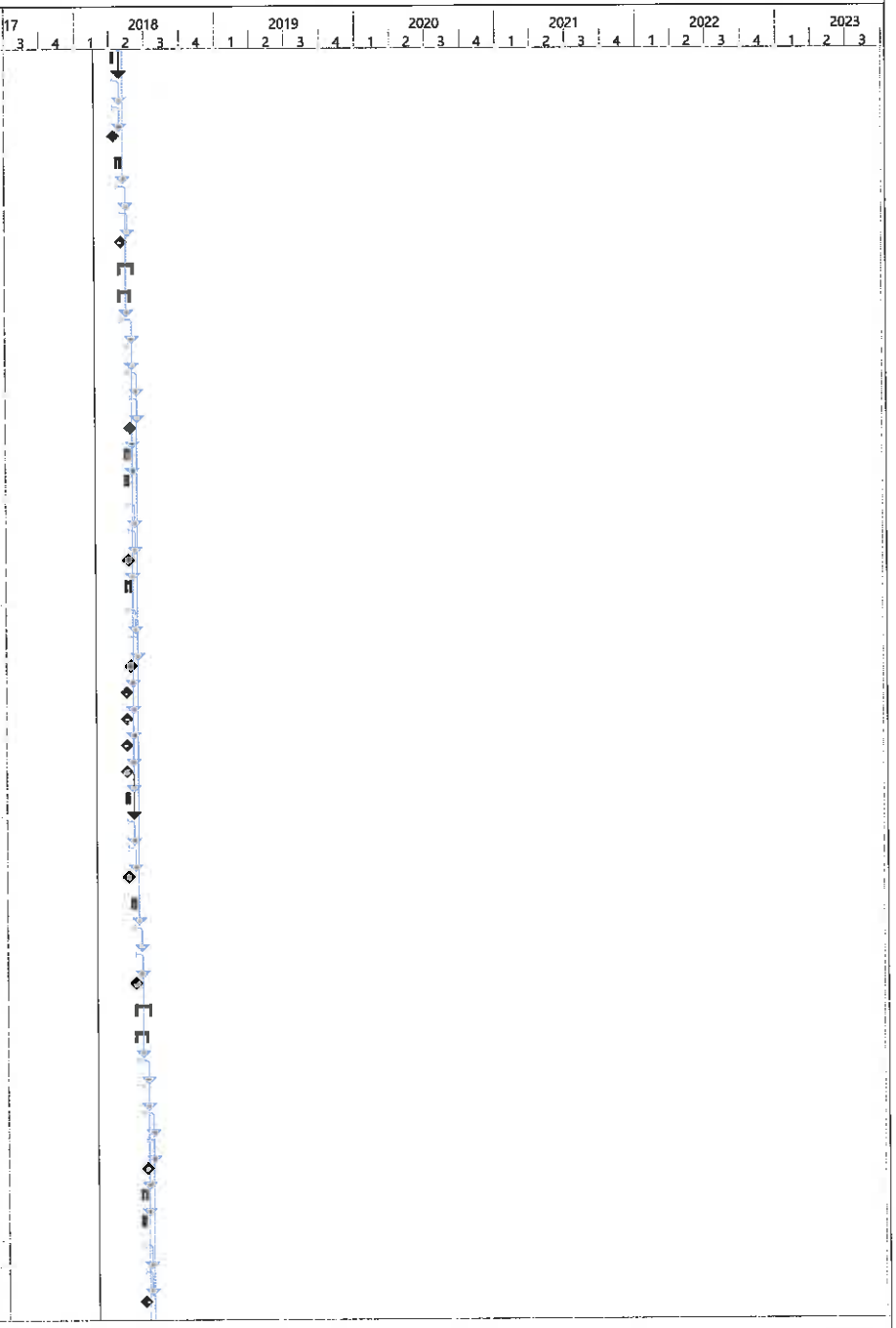


ID	WBS	Task Name	Duration	Start	Finish
1345	**1.4.2.1.2**	**Sprint 2**	**25 days**	**3/1/2018**	**4/4/2018**
1346	**1.4.2.1.2.1**	**Sprint Execution**	**18 days**	**3/1/2018**	**3/26/2018**
1347	1.4.2.1.2.1.1	Build	10 days	3/1/2018	3/14/2018
1348	1.4.2.1.2.1.2	Write UAT Tests	5 days	3/15/2018	3/21/2018
1349	1.4.2.1.2.1.3	System Testing&Defect Remediation	8 days	3/15/2018	3/26/2018
1350	1.4.2.1.2.1.4	Review	1 day	3/22/2018	3/22/2018
1351	1.4.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	3/26/2018	3/26/2018
1352	**1.4.2.1.2.2**	**Sprint OWPs**	**8 days**	**3/14/2018**	**3/26/2018**
1353	**1.4.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**3/15/2018**	**3/21/2018**
1354	1.4.2.1.2.2.1	Submission	4 days	3/15/2018	3/20/2018
1355	1.4.2.1.2.2.1	DHHR Review	1 day	3/21/2018	3/21/2018
1356	1.4.2.1.2.2.1	DHHR Signoff	0 days	3/21/2018	3/21/2018
1357	**1.4.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**3/15/2018**	**3/26/2018**
1358	1.4.2.1.2.2.2	Submission	5 days	3/15/2018	3/21/2018
1359	1.4.2.1.2.2.2	DHHR Review	3 days	3/22/2018	3/26/2018
1360	1.4.2.1.2.2.2	DHHR Signoff	0 days	3/26/2018	3/26/2018
1361	**1.4.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**3/14/2018**	**3/14/2018**
1362	1.4.2.1.2.2.3	Unit Test Results	0 days	3/14/2018	3/14/2018
1363	1.4.2.1.2.2.3	String / System Test Results	0 days	3/14/2018	3/14/2018
1364	1.4.2.1.2.2.3	Integration and Regression Test Scripts	0 days	3/14/2018	3/14/2018
1365	**1.4.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**3/15/2018**	**3/16/2018**
1366	1.4.2.1.2.2.4	Developed Components	1 day	3/15/2018	3/15/2018
1367	1.4.2.1.2.2.4	Sprint Review	1 day	3/16/2018	3/16/2018
1368	1.4.2.1.2.2.4	Sprint Retrospective	0 days	3/16/2018	3/16/2018
1369	**1.4.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**3/27/2018**	**4/4/2018**
1370	1.4.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	3/27/2018	4/2/2018
1371	1.4.2.1.2.3.2	DHHR Code Review	2 days	4/3/2018	4/4/2018
1372	1.4.2.1.2.3.3	Sprint Acceptance	0 days	4/4/2018	4/4/2018
1373	**1.4.2.1.3**	**Sprint 3**	**25 days**	**3/27/2018**	**4/30/2018**
1374	**1.4.2.1.3.1**	**Sprint Execution**	**19 days**	**3/27/2018**	**4/20/2018**
1375	1.4.2.1.3.1.1	Build	10 days	3/27/2018	4/9/2018
1376	1.4.2.1.3.1.2	Write UAT Tests	5 days	4/10/2018	4/16/2018
1377	1.4.2.1.3.1.3	System Testing&Defect Remediation	8 days	4/10/2018	4/19/2018
1378	1.4.2.1.3.1.4	Review	1 day	4/20/2018	4/20/2018
1379	1.4.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	4/20/2018	4/20/2018
1380	**1.4.2.1.3.2**	**Sprint OWPs**	**8 days**	**4/9/2018**	**4/19/2018**
1381	**1.4.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**4/10/2018**	**4/16/2018**
1382	1.4.2.1.3.2.1	Submission	4 days	4/10/2018	4/13/2018
1383	1.4.2.1.3.2.1	DHHR Review	1 day	4/16/2018	4/16/2018
1384	1.4.2.1.3.2.1	DHHR Signoff	0 days	4/16/2018	4/16/2018
1385	**1.4.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**4/10/2018**	**4/19/2018**
1386	1.4.2.1.3.2.2	Submission	5 days	4/10/2018	4/16/2018
1387	1.4.2.1.3.2.2	DHHR Review	3 days	4/17/2018	4/19/2018
1388	1.4.2.1.3.2.2	DHHR Signoff	0 days	4/19/2018	4/19/2018
1389	**1.4.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**4/9/2018**	**4/9/2018**
1390	1.4.2.1.3.2.3	Unit Test Results	0 days	4/9/2018	4/9/2018
1391	1.4.2.1.3.2.3	String / System Test Results	0 days	4/9/2018	4/9/2018
1392	1.4.2.1.3.2.3	Integration and Regression Test Scripts	0 days	4/9/2018	4/9/2018

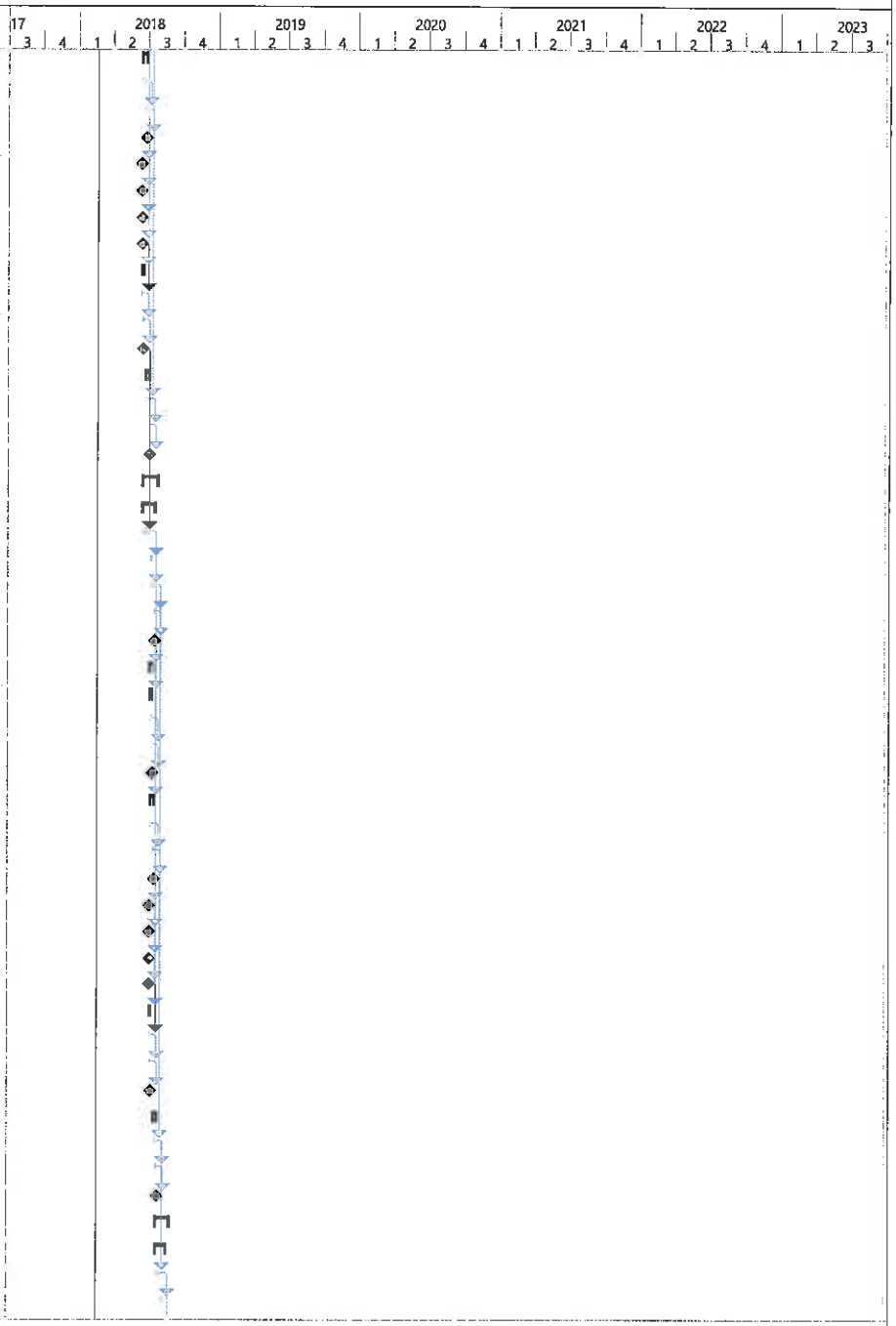


West Virginia IES Project Plan

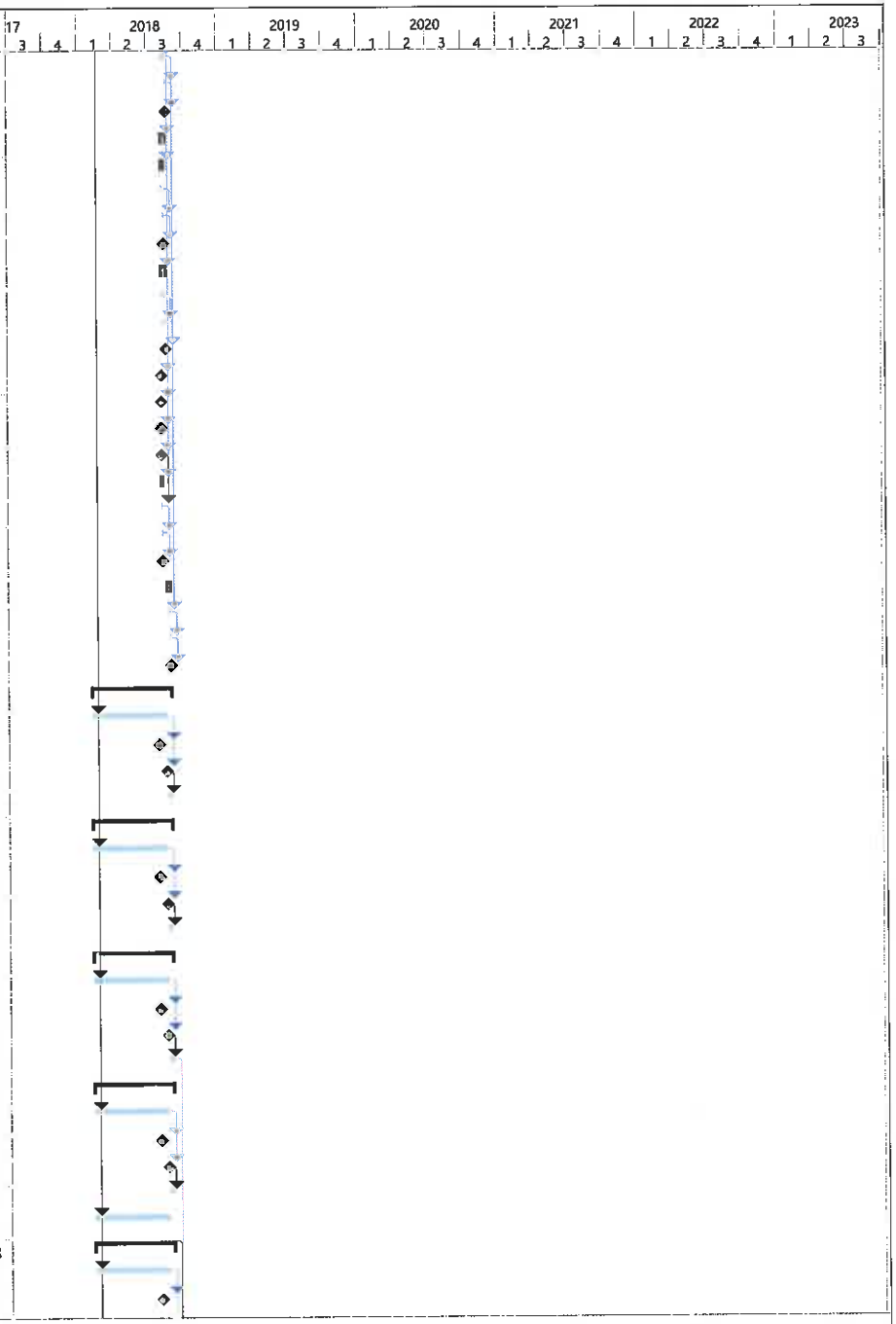
ID	WBS	Task Name	Duration	Start	Finish
1393	**1.4.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**4/10/2018**	**4/11/2018**
1394	1.4.2.1.3.2.4	Developed Components	1 day	4/10/2018	4/10/2018
1395	1.4.2.1.3.2.4	Sprint Review	1 day	4/11/2018	4/11/2018
1396	1.4.2.1.3.2.4	Sprint Retrospective	0 days	4/11/2018	4/11/2018
1397	**1.4.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**4/20/2018**	**4/30/2018**
1398	1.4.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	4/20/2018	4/26/2018
1399	1.4.2.1.3.3.2	DHHR Code Review	2 days	4/27/2018	4/30/2018
1400	1.4.2.1.3.3.3	Sprint Acceptance	0 days	4/30/2018	4/30/2018
1401	**1.4.2.1.4**	**Hardening Sprint**	**25 days**	**4/27/2018**	**5/31/2018**
1402	**1.4.2.1.4.1**	**Sprint Execution**	**19 days**	**4/27/2018**	**5/23/2018**
1403	1.4.2.1.4.1.1	Build	10 days	4/27/2018	5/10/2018
1404	1.4.2.1.4.1.2	Write UAT Tests	5 days	5/11/2018	5/17/2018
1405	1.4.2.1.4.1.3	System Testing&Defect Remediation	8 days	5/11/2018	5/22/2018
1406	1.4.2.1.4.1.4	Review	1 day	5/23/2018	5/23/2018
1407	1.4.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	5/23/2018	5/23/2018
1408	**1.4.2.1.4.2**	**Sprint OWPs**	**8 days**	**5/10/2018**	**5/22/2018**
1409	**1.4.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**5/11/2018**	**5/17/2018**
1410	1.4.2.1.4.2.1	Submission	4 days	5/11/2018	5/16/2018
1411	1.4.2.1.4.2.1	DHHR Review	1 day	5/17/2018	5/17/2018
1412	1.4.2.1.4.2.1	DHHR Signoff	0 days	5/17/2018	5/17/2018
1413	**1.4.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**5/11/2018**	**5/22/2018**
1414	1.4.2.1.4.2.2	Submission	5 days	5/11/2018	5/17/2018
1415	1.4.2.1.4.2.2	DHHR Review	3 days	5/18/2018	5/22/2018
1416	1.4.2.1.4.2.2	DHHR Signoff	0 days	5/22/2018	5/22/2018
1417	**1.4.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**5/10/2018**	**5/10/2018**
1418	1.4.2.1.4.2.3	Unit Test Results	0 days	5/10/2018	5/10/2018
1419	1.4.2.1.4.2.3	String / System Test Results	0 days	5/10/2018	5/10/2018
1420	1.4.2.1.4.2.3	Integration and Regression Test Scripts	0 days	5/10/2018	5/10/2018
1421	**1.4.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**5/11/2018**	**5/14/2018**
1422	1.4.2.1.4.2.4	Developed Components	1 day	5/11/2018	5/11/2018
1423	1.4.2.1.4.2.4	Sprint Review	1 day	5/14/2018	5/14/2018
1424	1.4.2.1.4.2.4	Sprint Retrospective	0 days	5/14/2018	5/14/2018
1425	**1.4.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**5/23/2018**	**5/31/2018**
1426	1.4.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	5/23/2018	5/29/2018
1427	1.4.2.1.4.3.2	DHHR Code Review	2 days	5/30/2018	5/31/2018
1428	1.4.2.1.4.3.3	Sprint Acceptance	0 days	5/31/2018	5/31/2018
1429	**1.4.2.1.5**	**Sprint 4**	**25 days**	**6/1/2018**	**7/5/2018**
1430	**1.4.2.1.5.1**	**Sprint Execution**	**19 days**	**6/1/2018**	**6/27/2018**
1431	1.4.2.1.5.1.1	Build	10 days	6/1/2018	6/14/2018
1432	1.4.2.1.5.1.2	Write UAT Tests	5 days	6/15/2018	6/21/2018
1433	1.4.2.1.5.1.3	System Testing&Defect Remediation	8 days	6/15/2018	6/26/2018
1434	1.4.2.1.5.1.4	Review	1 day	6/27/2018	6/27/2018
1435	1.4.2.1.5.1.5	Retrospective/Backlog Refinement	0 days	6/27/2018	6/27/2018
1436	**1.4.2.1.5.2**	**Sprint OWPs**	**8 days**	**6/14/2018**	**6/26/2018**
1437	**1.4.2.1.5.2.1**	**Create Sprint Backlog**	**5 days**	**6/15/2018**	**6/21/2018**
1438	1.4.2.1.5.2.1	Submission	4 days	6/15/2018	6/20/2018
1439	1.4.2.1.5.2.1	DHHR Review	1 day	6/21/2018	6/21/2018
1440	1.4.2.1.5.2.1	DHHR Signoff	0 days	6/21/2018	6/21/2018



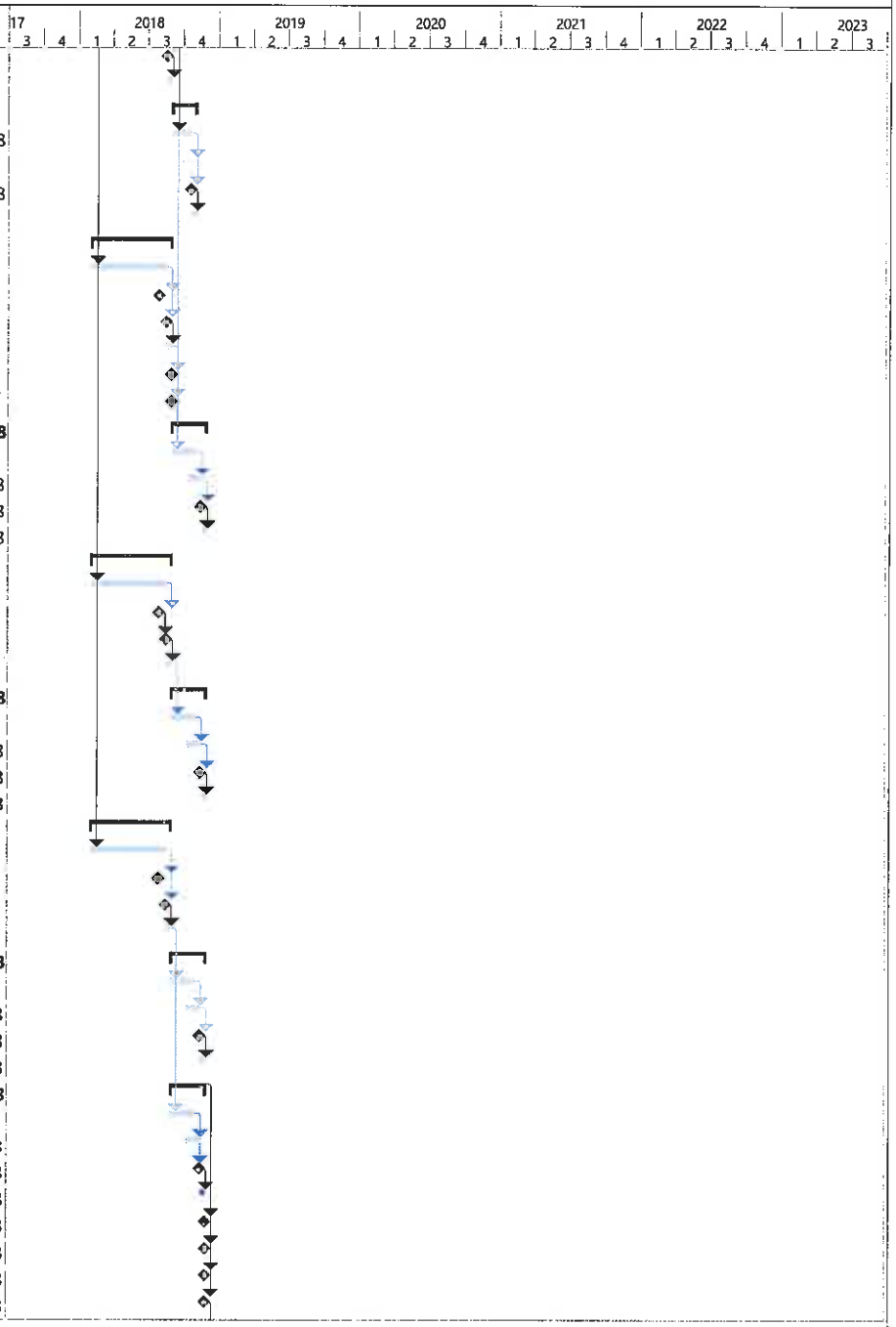
ID	WBS	Task Name	Duration	Start	Finish
1441	**1.4.2.1.5.2.2**	**Design Specification (Sprint Features)**	**8 days**	**6/15/2018**	**6/26/2018**
1442	1.4.2.1.5.2.2	Submission	5 days	6/15/2018	6/21/2018
1443	1.4.2.1.5.2.2	DHHR Review	3 days	6/22/2018	6/26/2018
1444	1.4.2.1.5.2.2	DHHR Signoff	0 days	6/26/2018	6/26/2018
1445	**1.4.2.1.5.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**6/14/2018**	**6/14/2018**
1446	1.4.2.1.5.2.3	Unit Test Results	0 days	6/14/2018	6/14/2018
1447	1.4.2.1.5.2.3	String / System Test Results	0 days	6/14/2018	6/14/2018
1448	1.4.2.1.5.2.3	Integration and Regression Test Scripts	0 days	6/14/2018	6/14/2018
1449	**1.4.2.1.5.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**6/15/2018**	**6/18/2018**
1450	1.4.2.1.5.2.4	Developed Components	1 day	6/15/2018	6/15/2018
1451	1.4.2.1.5.2.4	Sprint Review	1 day	6/18/2018	6/18/2018
1452	1.4.2.1.5.2.4	Sprint Retrospective	0 days	6/18/2018	6/18/2018
1453	**1.4.2.1.5.3**	**DHHR Sprint Acceptance**	**7 days**	**6/27/2018**	**7/5/2018**
1454	1.4.2.1.5.3.1	Perform DHHR Acceptance Tests	5 days	6/27/2018	7/3/2018
1455	1.4.2.1.5.3.2	DHHR Code Review	2 days	7/4/2018	7/5/2018
1456	1.4.2.1.5.3.3	Sprint Acceptance	0 days	7/5/2018	7/5/2018
1457	**1.4.2.1.6**	**Sprint 5**	**29 days**	**6/19/2018**	**7/27/2018**
1458	**1.4.2.1.6.1**	**Sprint Execution**	**23 days**	**6/19/2018**	**7/19/2018**
1459	1.4.2.1.6.1.1	Build	14 days	6/19/2018	7/6/2018
1460	1.4.2.1.6.1.2	Write UAT Tests	5 days	7/9/2018	7/13/2018
1461	1.4.2.1.6.1.3	System Testing&Defect Remediation	8 days	7/9/2018	7/18/2018
1462	1.4.2.1.6.1.4	Review	1 day	7/19/2018	7/19/2018
1463	1.4.2.1.6.1.5	Retrospective/Backlog Refinement	0 days	7/19/2018	7/19/2018
1464	**1.4.2.1.6.2**	**Sprint OWPs**	**8 days**	**7/6/2018**	**7/18/2018**
1465	**1.4.2.1.6.2.1**	**Create Sprint Backlog**	**5 days**	**7/9/2018**	**7/13/2018**
1466	1.4.2.1.6.2.1	Submission	4 days	7/9/2018	7/12/2018
1467	1.4.2.1.6.2.1	DHHR Review	1 day	7/13/2018	7/13/2018
1468	1.4.2.1.6.2.1	DHHR Signoff	0 days	7/13/2018	7/13/2018
1469	**1.4.2.1.6.2.2**	**Design Specification (Sprint Features)**	**8 days**	**7/9/2018**	**7/18/2018**
1470	1.4.2.1.6.2.2	Submission	5 days	7/9/2018	7/13/2018
1471	1.4.2.1.6.2.2	DHHR Review	3 days	7/16/2018	7/18/2018
1472	1.4.2.1.6.2.2	DHHR Signoff	0 days	7/18/2018	7/18/2018
1473	**1.4.2.1.6.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**7/6/2018**	**7/6/2018**
1474	1.4.2.1.6.2.3	Unit Test Results	0 days	7/6/2018	7/6/2018
1475	1.4.2.1.6.2.3	String / System Test Results	0 days	7/6/2018	7/6/2018
1476	1.4.2.1.6.2.3	Integration and Regression Test Scripts	0 days	7/6/2018	7/6/2018
1477	**1.4.2.1.6.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**7/9/2018**	**7/10/2018**
1478	1.4.2.1.6.2.4	Developed Components	1 day	7/9/2018	7/9/2018
1479	1.4.2.1.6.2.4	Sprint Review	1 day	7/10/2018	7/10/2018
1480	1.4.2.1.6.2.4	Sprint Retrospective	0 days	7/10/2018	7/10/2018
1481	**1.4.2.1.6.3**	**DHHR Sprint Acceptance**	**7 days**	**7/19/2018**	**7/27/2018**
1482	1.4.2.1.6.3.1	Perform DHHR Acceptance Tests	5 days	7/19/2018	7/25/2018
1483	1.4.2.1.6.3.2	DHHR Code Review	2 days	7/26/2018	7/27/2018
1484	1.4.2.1.6.3.3	Sprint Acceptance	0 days	7/27/2018	7/27/2018
1485	**1.4.2.1.7**	**Hardening Sprint**	**25 days**	**7/26/2018**	**8/29/2018**
1486	**1.4.2.1.7.1**	**Sprint Execution**	**19 days**	**7/26/2018**	**8/21/2018**
1487	1.4.2.1.7.1.1	Build	10 days	7/26/2018	8/8/2018
1488	1.4.2.1.7.1.2	Write UAT Tests	5 days	8/9/2018	8/15/2018



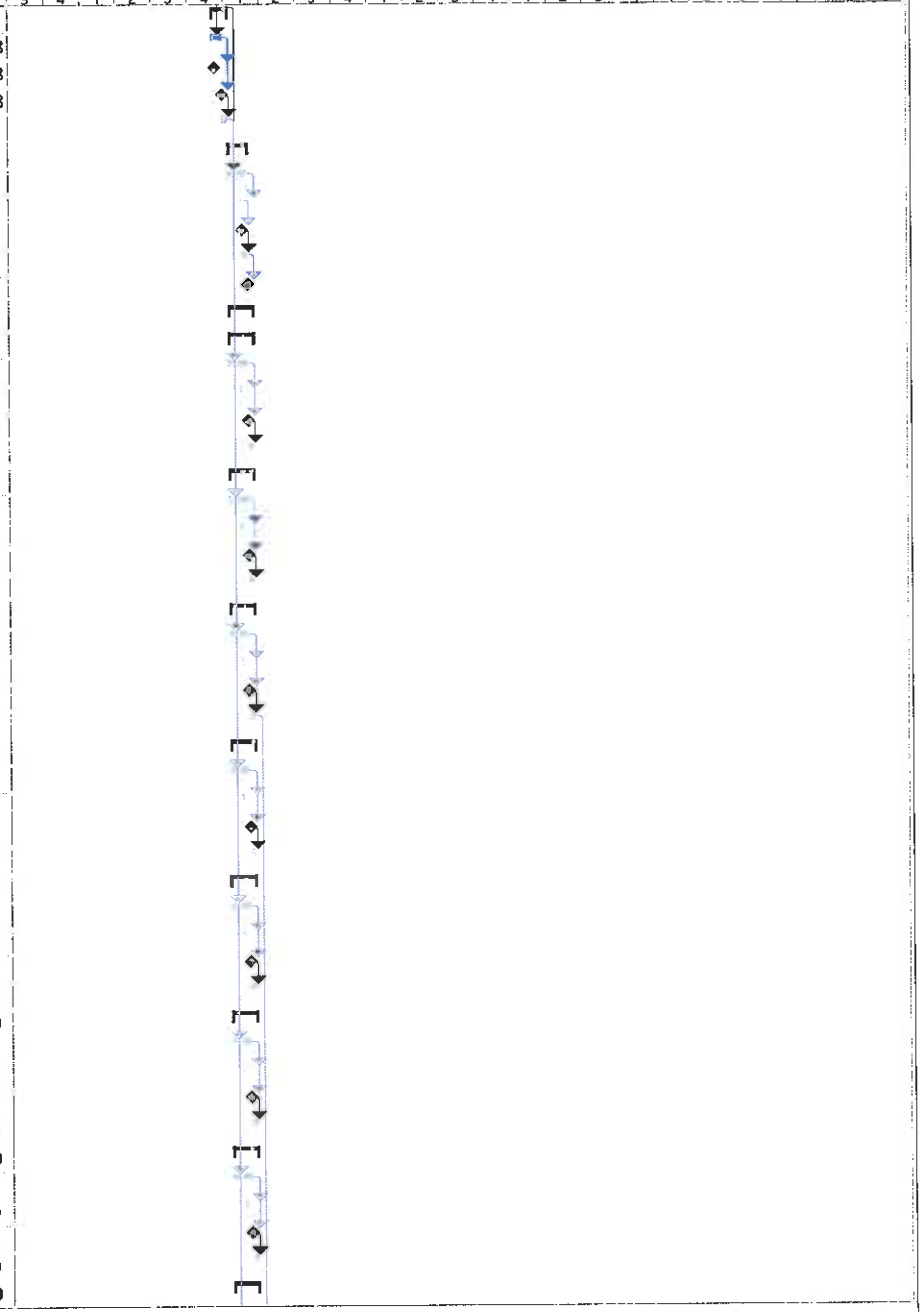
ID	WBS	Task Name	Duration	Start	Finish
1489	1.4.2.1.7.1.3	System Testing&Defect Remediation	8 days	8/9/2018	8/20/2018
1490	1.4.2.1.7.1.4	Review	1 day	8/21/2018	8/21/2018
1491	1.4.2.1.7.1.5	Retrospective/Backlog Refinement	0 days	8/21/2018	8/21/2018
1492	**1.4.2.1.7.2**	**Sprint OWPs**	**8 days**	**8/8/2018**	**8/20/2018**
1493	**1.4.2.1.7.2.1**	**Create Sprint Backlog**	**5 days**	**8/9/2018**	**8/15/2018**
1494	1.4.2.1.7.2.1	Submission	4 days	8/9/2018	8/14/2018
1495	1.4.2.1.7.2.1	DHHR Review	1 day	8/15/2018	8/15/2018
1496	1.4.2.1.7.2.1	DHHR Signoff	0 days	8/15/2018	8/15/2018
1497	**1.4.2.1.7.2.2**	**Design Specification (Sprint Features)**	**8 days**	**8/9/2018**	**8/20/2018**
1498	1.4.2.1.7.2.2	Submission	5 days	8/9/2018	8/15/2018
1499	1.4.2.1.7.2.2	DHHR Review	3 days	8/16/2018	8/20/2018
1500	1.4.2.1.7.2.2	DHHR Signoff	0 days	8/20/2018	8/20/2018
1501	**1.4.2.1.7.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**8/8/2018**	**8/8/2018**
1502	1.4.2.1.7.2.3	Unit Test Results	0 days	8/8/2018	8/8/2018
1503	1.4.2.1.7.2.3	String / System Test Results	0 days	8/8/2018	8/8/2018
1504	1.4.2.1.7.2.3	Integration and Regression Test Scripts	0 days	8/8/2018	8/8/2018
1505	**1.4.2.1.7.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**8/9/2018**	**8/10/2018**
1506	1.4.2.1.7.2.4	Developed Components	1 day	8/9/2018	8/9/2018
1507	1.4.2.1.7.2.4	Sprint Review	1 day	8/10/2018	8/10/2018
1508	1.4.2.1.7.2.4	Sprint Retrospective	0 days	8/10/2018	8/10/2018
1509	**1.4.2.1.7.3**	**DHHR Sprint Acceptance**	**7 days**	**8/21/2018**	**8/29/2018**
1510	1.4.2.1.7.3.1	Perform DHHR Acceptance Tests	5 days	8/21/2018	8/27/2018
1511	1.4.2.1.7.3.2	DHHR Code Review	2 days	8/28/2018	8/29/2018
1512	1.4.2.1.7.3.3	Sprint Acceptance	0 days	8/29/2018	8/29/2018
1513	**1.4.2.2**	**System Documentation**	**150 days**	**2/5/2018**	**8/31/2018**
1514	1.4.2.2.1	Develop System Documentation	140 days	2/5/2018	8/17/2018
1515	1.4.2.2.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1516	1.4.2.2.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1517	1.4.2.2.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1518	**1.4.2.3**	**System Security Plan (SSP)**	**150 days**	**2/5/2018**	**8/31/2018**
1519	1.4.2.3.1	Develop System Security Plan (SSP)	140 days	2/5/2018	8/17/2018
1520	1.4.2.3.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1521	1.4.2.3.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1522	1.4.2.3.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1523	**1.4.2.4**	**Safeguard Procedures Report**	**150 days**	**2/5/2018**	**8/31/2018**
1524	1.4.2.4.1	Develop Safeguard Procedures Report	140 days	2/5/2018	8/17/2018
1525	1.4.2.4.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1526	1.4.2.4.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1527	1.4.2.4.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1528	**1.4.2.5**	**User Documentation**	**150 days**	**2/5/2018**	**8/31/2018**
1529	1.4.2.5.1	Develop User Documentation	140 days	2/5/2018	8/17/2018
1530	1.4.2.5.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1531	1.4.2.5.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1532	1.4.2.5.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1533	1.4.2.6	Execute Automated Data Migration process	140 days	2/5/2018	8/17/2018
1534	**1.4.2.7**	**Data Conversion System Integration Test Cases**	**150 days**	**2/5/2018**	**8/31/2018**
1535	1.4.2.7.1	Develop Data Conversion System Integration Test Cases	140 days	2/5/2018	8/17/2018
1536	1.4.2.7.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018



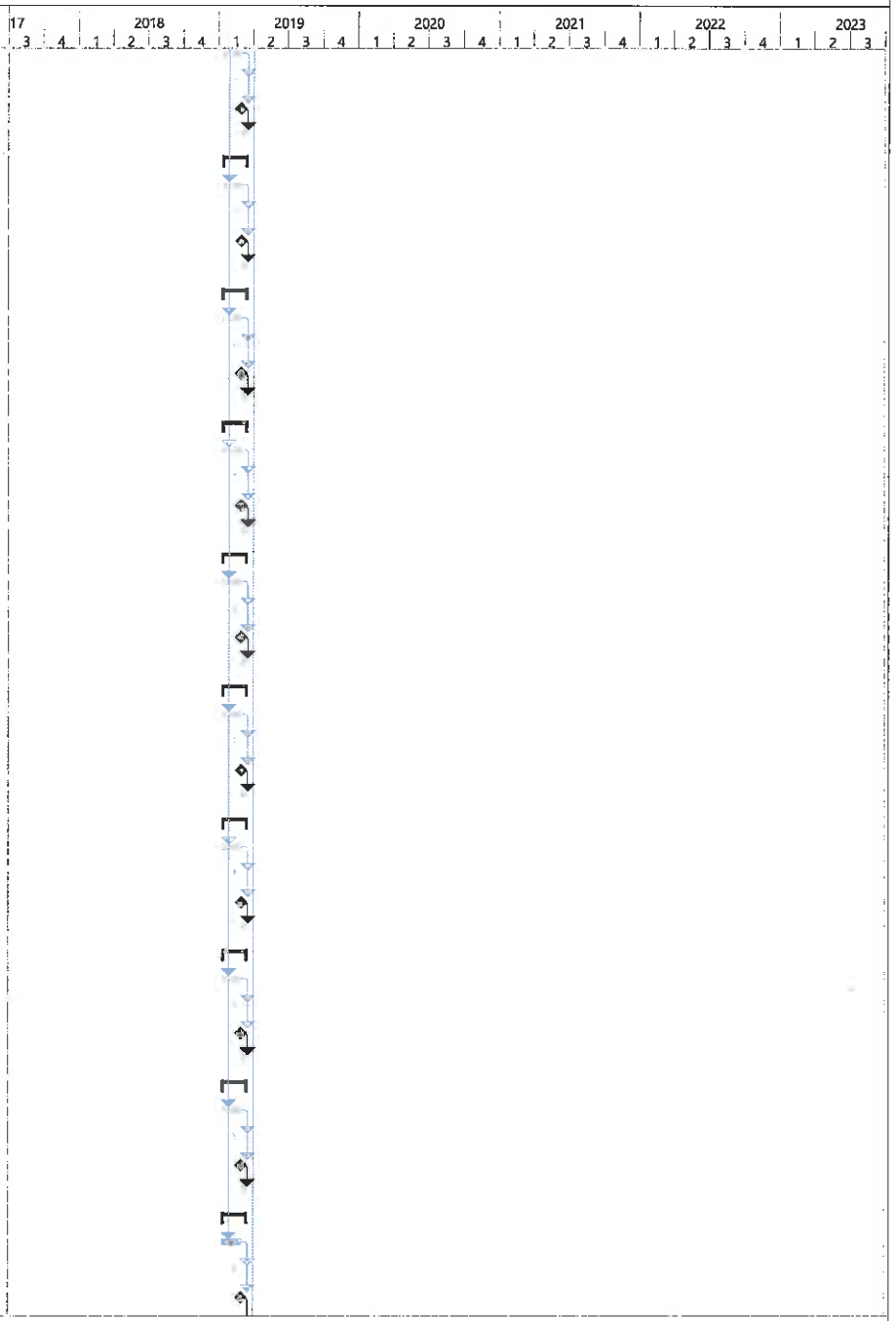
ID	WBS	Task Name	Duration	Start	Finish
1537	1.4.2.7.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1538	1.4.2.7.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1539	**1.4.2.8**	**Data Conversion System Integration Test Results**	**45 days**	**9/3/2018**	**11/2/2018**
1540	1.4.2.8.1	Develop Data Conversion System Integration Test Results	35 days	9/3/2018	10/19/2018
1541	1.4.2.8.2	Interim draft deliverable submission	1 day	10/1/2018	10/1/2018
1542	1.4.2.8.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
1543	1.4.2.8.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
1544	**1.4.2.9**	**System Integration Test Cases**	**150 days**	**2/5/2018**	**8/31/2018**
1545	1.4.2.9.1	Develop System Integration Test Cases	140 days	2/5/2018	8/17/2018
1546	1.4.2.9.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1547	1.4.2.9.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1548	1.4.2.9.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1549	1.4.2.10	Completion of Data Conversion Trial Run in Test Environment	0 days	8/31/2018	8/31/2018
1550	1.4.2.11	Overall completion of Development and Configuration	0 days	8/31/2018	8/31/2018
1551	**1.4.2.12**	**System Integration Test Results**	**65 days**	**9/3/2018**	**11/30/2018**
1552	1.4.2.12.1	Develop System Integration Test Results	45 days	9/3/2018	11/2/2018
1553	1.4.2.12.2	Interim draft deliverable submission	25 days	10/15/2018	11/16/2018
1554	1.4.2.12.3	Submit deliverable for review	0 days	11/16/2018	11/16/2018
1555	1.4.2.12.4	Receive deliverable client approval	10 days	11/19/2018	11/30/2018
1556	**1.4.2.13**	**Regression Test Cases**	**150 days**	**2/5/2018**	**8/31/2018**
1557	1.4.2.13.1	Develop Regression Test Cases	140 days	2/5/2018	8/17/2018
1558	1.4.2.13.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1559	1.4.2.13.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1560	1.4.2.13.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1561	**1.4.2.14**	**Regression Test Results**	**65 days**	**9/3/2018**	**11/30/2018**
1562	1.4.2.14.1	Develop Regression Test Results	45 days	9/3/2018	11/2/2018
1563	1.4.2.14.2	Interim draft deliverable submission	25 days	10/15/2018	11/16/2018
1564	1.4.2.14.3	Submit deliverable for review	0 days	11/16/2018	11/16/2018
1565	1.4.2.14.4	Receive deliverable client approval	10 days	11/19/2018	11/30/2018
1566	**1.4.2.15**	**Load/Stress Test Cases**	**150 days**	**2/5/2018**	**8/31/2018**
1567	1.4.2.15.1	Develop Load/Stress Test Cases	140 days	2/5/2018	8/17/2018
1568	1.4.2.15.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
1569	1.4.2.15.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
1570	1.4.2.15.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
1571	**1.4.2.16**	**Load/Stress Test Results**	**65 days**	**9/3/2018**	**11/30/2018**
1572	1.4.2.16.1	Develop Load/Stress Test Cases	45 days	9/3/2018	11/2/2018
1573	1.4.2.16.2	Interim draft deliverable submission	25 days	10/15/2018	11/16/2018
1574	1.4.2.16.3	Submit deliverable for review	0 days	11/16/2018	11/16/2018
1575	1.4.2.16.4	Receive deliverable client approval	10 days	11/19/2018	11/30/2018
1576	**1.4.2.17**	**Capacity Analysis Report**	**65 days**	**9/3/2018**	**11/30/2018**
1577	1.4.2.17.1	Develop Capacity Analysis Report	45 days	9/3/2018	11/2/2018
1578	1.4.2.17.2	Interim draft deliverable submission	25 days	10/15/2018	11/16/2018
1579	1.4.2.17.3	Submit deliverable for review	0 days	11/16/2018	11/16/2018
1580	1.4.2.17.4	Receive deliverable client approval	10 days	11/19/2018	11/30/2018
1581	1.4.2.18	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	11/30/2018	11/30/2018
1582	1.4.2.19	Update Business Continuity Plan	0 days	11/30/2018	11/30/2018
1583	1.4.2.20	Execute Disaster Recovery Test	0 days	11/30/2018	11/30/2018
1584	1.4.2.21	Overall completion of System Testing	0 days	11/30/2018	11/30/2018



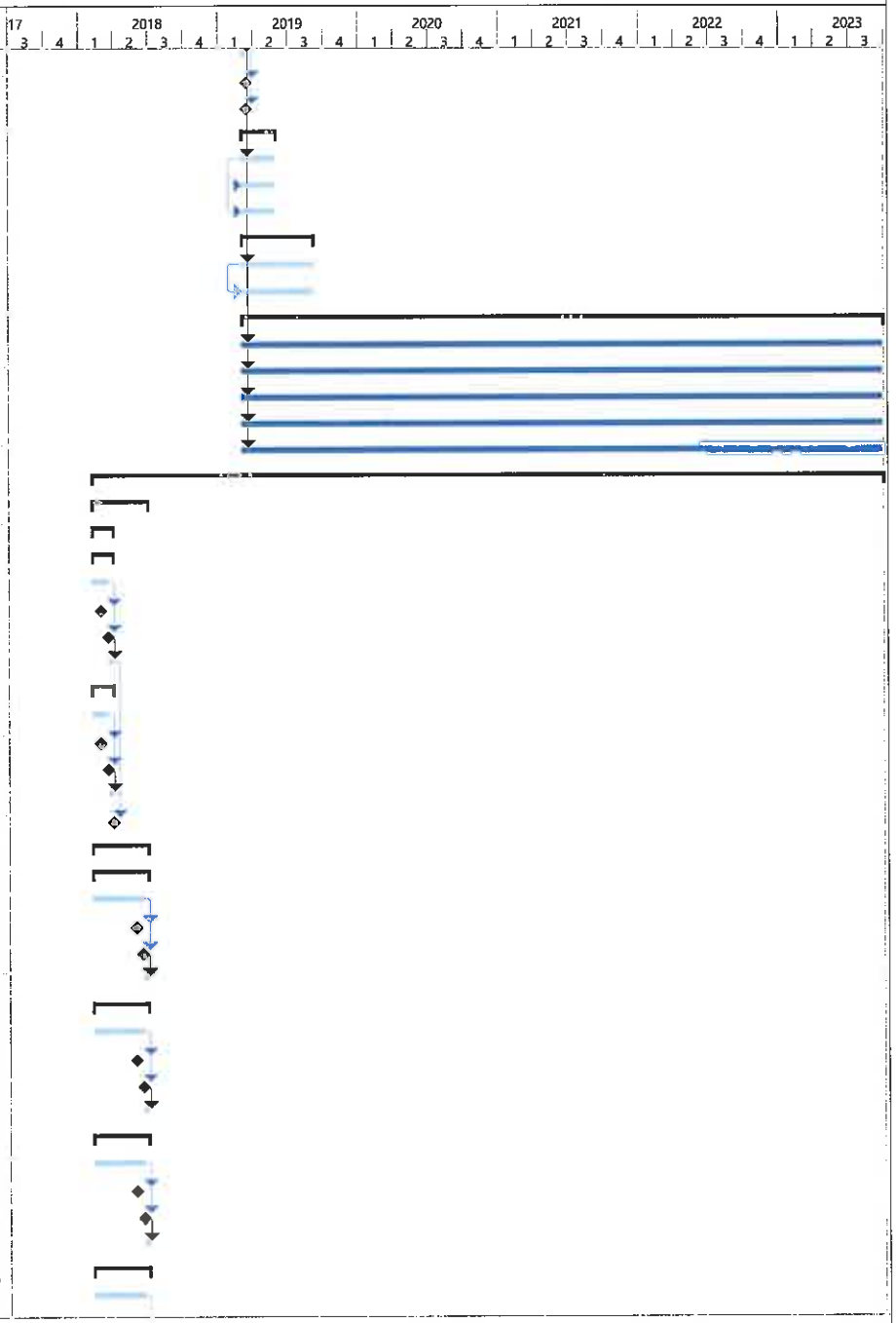
ID	WBS	Task Name	Duration	Start	Finish
1585	**1.4.2.22**	**User Acceptance Test Cases**	**30 days**	**12/3/2018**	**1/11/2019**
1586	1.4.2.22.1	Develop User Acceptance Test Cases	20 days	12/3/2018	12/28/2018
1587	1.4.2.22.2	Interim draft deliverable submission	0 days	12/10/2018	12/10/2018
1588	1.4.2.22.3	Submit deliverable for review	0 days	12/28/2018	12/28/2018
1589	1.4.2.22.4	Receive deliverable client approval	10 days	12/31/2018	1/11/2019
1590	**1.4.2.23**	**User Acceptance Test Results**	**35 days**	**1/14/2019**	**3/1/2019**
1591	1.4.2.23.1	Develop User Acceptance Test Results	35 days	1/14/2019	3/1/2019
1592	1.4.2.23.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1593	1.4.2.23.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
1594	1.4.2.23.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
1595	1.4.2.24	Overall completion of Acceptance Testing	0 days	3/1/2019	3/1/2019
1596	**1.4.3**	**Implementation Readiness**	**45 days**	**1/14/2019**	**3/15/2019**
1597	**1.4.3.1**	**Operational Readiness Plan**	**45 days**	**1/14/2019**	**3/15/2019**
1598	1.4.3.1.1	Develop Operational Readiness Plan	35 days	1/14/2019	3/1/2019
1599	1.4.3.1.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1600	1.4.3.1.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1601	1.4.3.1.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1602	**1.4.3.2**	**Operational Readiness Test Scripts**	**45 days**	**1/14/2019**	**3/15/2019**
1603	1.4.3.2.1	Develop Operational Readiness Test Scripts	35 days	1/14/2019	3/1/2019
1604	1.4.3.2.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1605	1.4.3.2.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1606	1.4.3.2.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1607	**1.4.3.3**	**Operational Readiness Test Results**	**45 days**	**1/14/2019**	**3/15/2019**
1608	1.4.3.3.1	Develop Operational Readiness Test Results	35 days	1/14/2019	3/1/2019
1609	1.4.3.3.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1610	1.4.3.3.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1611	1.4.3.3.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1612	**1.4.3.4**	**Updated Training Management Plan**	**45 days**	**1/14/2019**	**3/15/2019**
1613	1.4.3.4.1	Develop Updated Training Management Plan	35 days	1/14/2019	3/1/2019
1614	1.4.3.4.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1615	1.4.3.4.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1616	1.4.3.4.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1617	**1.4.3.5**	**Training Schedule**	**45 days**	**1/14/2019**	**3/15/2019**
1618	1.4.3.5.1	Develop Training Schedule	35 days	1/14/2019	3/1/2019
1619	1.4.3.5.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1620	1.4.3.5.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1621	1.4.3.5.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1622	**1.4.3.6**	**Training Materials**	**45 days**	**1/14/2019**	**3/15/2019**
1623	1.4.3.6.1	Develop Training Materials	35 days	1/14/2019	3/1/2019
1624	1.4.3.6.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1625	1.4.3.6.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1626	1.4.3.6.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1627	**1.4.3.7**	**Training Report**	**45 days**	**1/14/2019**	**3/15/2019**
1628	1.4.3.7.1	Develop Training Report	35 days	1/14/2019	3/1/2019
1629	1.4.3.7.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1630	1.4.3.7.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1631	1.4.3.7.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1632	**1.4.3.8**	**Implementation Plan**	**45 days**	**1/14/2019**	**3/15/2019**



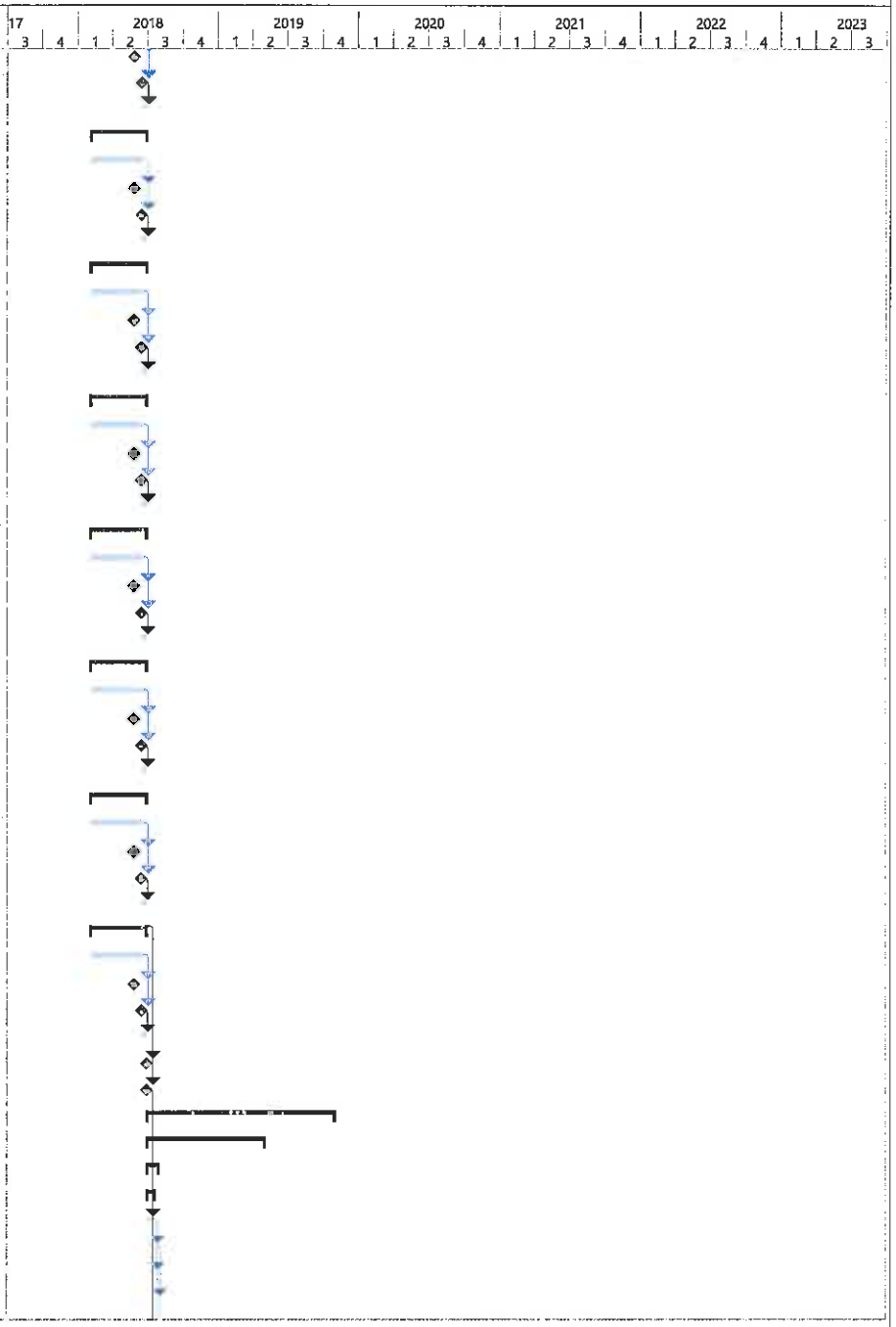
ID	WBS	Task Name	Duration	Start	Finish
1633	1.4.3.8.1	Develop Implementation Plan	35 days	1/14/2019	3/1/2019
1634	1.4.3.8.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1635	1.4.3.8.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1636	1.4.3.8.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1637	**1.4.3.9**	**Cut-Over Play Book**	**45 days**	**1/14/2019**	**3/15/2019**
1638	1.4.3.9.1	Develop Cut-Over Play Book	35 days	1/14/2019	3/1/2019
1639	1.4.3.9.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1640	1.4.3.9.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1641	1.4.3.9.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1642	**1.4.3.10**	**Report Distribution Schedule**	**45 days**	**1/14/2019**	**3/15/2019**
1643	1.4.3.10.1	Develop Report Distribution Schedule	35 days	1/14/2019	3/1/2019
1644	1.4.3.10.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1645	1.4.3.10.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1646	1.4.3.10.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1647	**1.4.3.11**	**Operations Project Management Plans**	**45 days**	**1/14/2019**	**3/15/2019**
1648	1.4.3.11.1	Develop Operations Project Management Plans	35 days	1/14/2019	3/1/2019
1649	1.4.3.11.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1650	1.4.3.11.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1651	1.4.3.11.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1652	**1.4.3.12**	**Solution health Monitoring Plan**	**45 days**	**1/14/2019**	**3/15/2019**
1653	1.4.3.12.1	Develop Solution health Monitoring Plan	35 days	1/14/2019	3/1/2019
1654	1.4.3.12.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1655	1.4.3.12.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1656	1.4.3.12.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1657	**1.4.3.13**	**Federal Certification and Review Management Plan**	**45 days**	**1/14/2019**	**3/15/2019**
1658	1.4.3.13.1	Develop Federal Certification and Review Management Plan	35 days	1/14/2019	3/1/2019
1659	1.4.3.13.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1660	1.4.3.13.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1661	1.4.3.13.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1662	**1.4.3.14**	**ACF Certification Documentation**	**45 days**	**1/14/2019**	**3/15/2019**
1663	1.4.3.14.1	Obtain ACF Certification Documentation	35 days	1/14/2019	3/1/2019
1664	1.4.3.14.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1665	1.4.3.14.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1666	1.4.3.14.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1667	**1.4.3.15**	**Federal Review Supporting Documentation**	**45 days**	**1/14/2019**	**3/15/2019**
1668	1.4.3.15.1	Obtain Federal Review Supporting Documentation	35 days	1/14/2019	3/1/2019
1669	1.4.3.15.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1670	1.4.3.15.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1671	1.4.3.15.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1672	**1.4.3.16**	**Social Security Administration Certification Documentation**	**45 days**	**1/14/2019**	**3/15/2019**
1673	1.4.3.16.1	Obtain Social Security Administration Certification Document	35 days	1/14/2019	3/1/2019
1674	1.4.3.16.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1675	1.4.3.16.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
1676	1.4.3.16.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1677	**1.4.3.17**	**Implementation Certification Letter**	**45 days**	**1/14/2019**	**3/15/2019**
1678	1.4.3.17.1	Obtain Implementation Certification Letter	35 days	1/14/2019	3/1/2019
1679	1.4.3.17.2	Interim draft deliverable submission	5 days	2/11/2019	2/15/2019
1680	1.4.3.17.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019



ID	WBS	Task Name	Duration	Start	Finish
1681	1.4.3.17.4	Receive deliverable client approval	10 days	3/4/2019	3/15/2019
1682	1.4.3.18	Overall completion of Implementation Readiness	0 days	3/15/2019	3/15/2019
1683	1.4.3.19	Overall completion of deployment to production	0 days	3/15/2019	3/15/2019
1684	**1.4.4**	**Pilot**	**65 days**	**3/4/2019**	**5/31/2019**
1685	1.4.4.1	Support Pilot rollout	65 days	3/4/2019	5/31/2019
1686	1.4.4.2	Develop Statewide rollout strategy	65 days	3/4/2019	5/31/2019
1687	1.4.4.3	Defect resolution support for Pilot county/counties	65 days	3/4/2019	5/31/2019
1688	**1.4.5**	**Warranty**	**135 days**	**3/4/2019**	**9/6/2019**
1689	1.4.5.1	Support Warranty activities	135 days	3/4/2019	9/6/2019
1690	1.4.5.2	Defect resolution support	135 days	3/4/2019	9/6/2019
1691	**1.4.6**	**Ongoing Maintenance and Operations**	**1195 days**	**3/4/2019**	**9/29/2023**
1692	1.4.6.1	Ongoing Maintenance and Operations	1195 days	3/4/2019	9/29/2023
1693	1.4.6.2	Defect resolution support	1195 days	3/4/2019	9/29/2023
1694	1.4.6.3	Quarterly Maintenance Software upgrades	1195 days	3/4/2019	9/29/2023
1695	1.4.6.4	Incident Management Support	1195 days	3/4/2019	9/29/2023
1696	1.4.6.5	Ongoing Operations Support	1195 days	3/4/2019	9/29/2023
1697	**1.5**	**OSCAR Modernization Phase 2- Business Application Modernization**	**1475 days**	**2/5/2018**	**9/29/2023**
1698	**1.5.1**	**Discovery**	**105 days**	**2/5/2018**	**6/29/2018**
1699	**1.5.1.1**	**Requirements Validations**	**40 days**	**2/5/2018**	**3/30/2018**
1700	**1.5.1.1.1**	**Requirements Traceability Matrix (RTM)**	**40 days**	**2/5/2018**	**3/30/2018**
1701	1.5.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	30 days	2/5/2018	3/16/2018
1702	1.5.1.1.1.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
1703	1.5.1.1.1.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
1704	1.5.1.1.1.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
1705	**1.5.1.1.2**	**Requirements Specification Document (RSD)**	**40 days**	**2/5/2018**	**3/30/2018**
1706	1.5.1.1.2.1	Develop Requirements Specification Document (RSD)	30 days	2/5/2018	3/16/2018
1707	1.5.1.1.2.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
1708	1.5.1.1.2.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
1709	1.5.1.1.2.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
1710	1.5.1.1.3	Overall completion of Requirements Validation	0 days	3/30/2018	3/30/2018
1711	**1.5.1.2**	**Design**	**105 days**	**2/5/2018**	**6/29/2018**
1712	**1.5.1.2.1**	**Requirements Gap Analysis Document**	**105 days**	**2/5/2018**	**6/29/2018**
1713	1.5.1.2.1.1	Develop Requirements Gap Analysis Document	95 days	2/5/2018	6/15/2018
1714	1.5.1.2.1.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1715	1.5.1.2.1.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1716	1.5.1.2.1.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1717	**1.5.1.2.2**	**Business Process Models**	**105 days**	**2/5/2018**	**6/29/2018**
1718	1.5.1.2.2.1	Develop Business Process Models	95 days	2/5/2018	6/15/2018
1719	1.5.1.2.2.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1720	1.5.1.2.2.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1721	1.5.1.2.2.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1722	**1.5.1.2.3**	**Detailed System Design (DSD) Document**	**105 days**	**2/5/2018**	**6/29/2018**
1723	1.5.1.2.3.1	Develop Detailed System Design (DSD) Document	95 days	2/5/2018	6/15/2018
1724	1.5.1.2.3.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1725	1.5.1.2.3.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1726	1.5.1.2.3.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1727	**1.5.1.2.4**	**Data Dictionary**	**105 days**	**2/5/2018**	**6/29/2018**
1728	1.5.1.2.4.1	Develop Data Dictionary	95 days	2/5/2018	6/15/2018

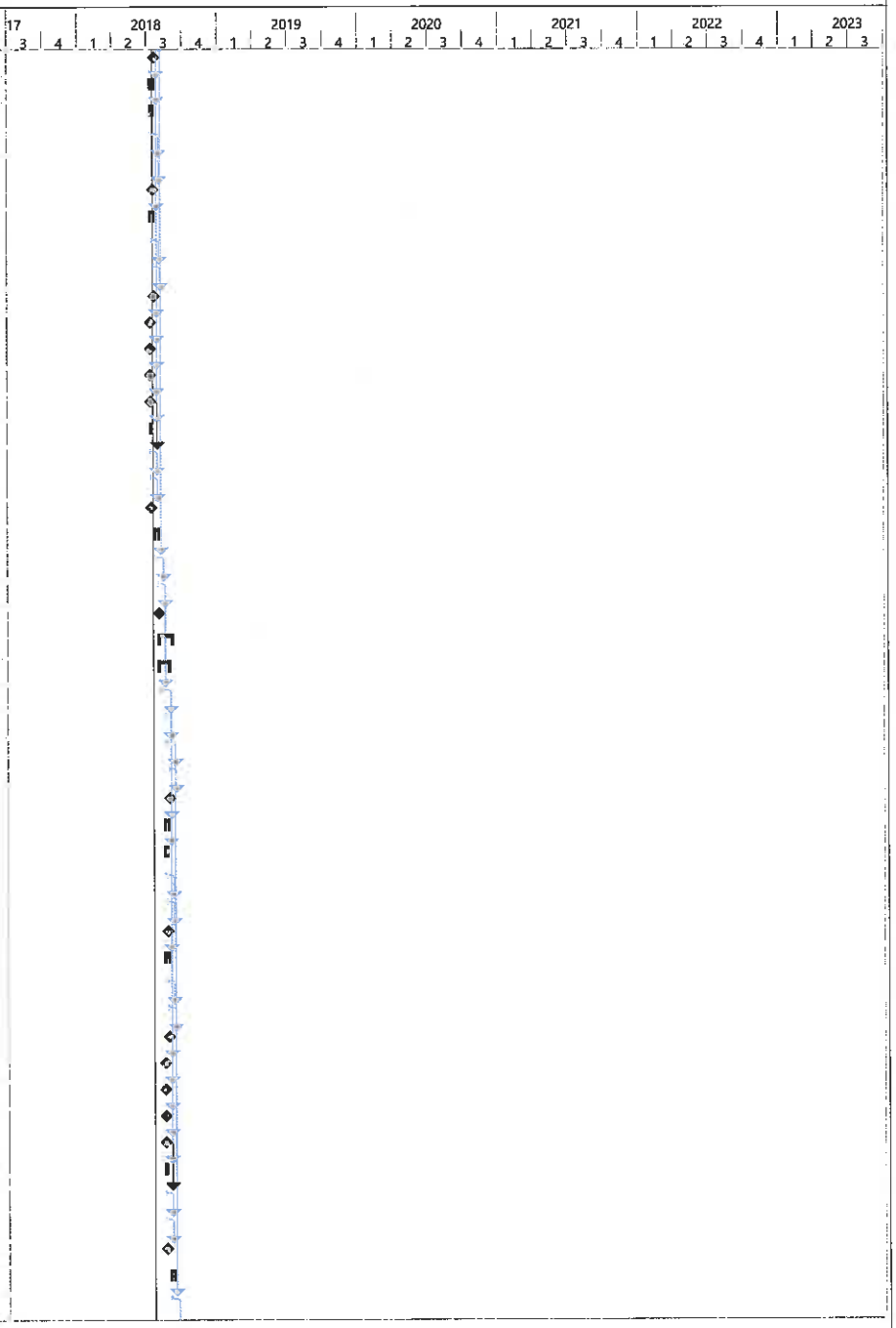


ID	WBS	Task Name	Duration	Start	Finish
1729	1.5.1.2.4.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1730	1.5.1.2.4.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1731	1.5.1.2.4.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1732	**1.5.1.2.5**	**Data Models**	**105 days**	**2/5/2018**	**6/29/2018**
1733	1.5.1.2.5.1	Develop Data Models	95 days	2/5/2018	6/15/2018
1734	1.5.1.2.5.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1735	1.5.1.2.5.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1736	1.5.1.2.5.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1737	**1.5.1.2.6**	**Reports Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
1738	1.5.1.2.6.1	Develop Reports Inventory	95 days	2/5/2018	6/15/2018
1739	1.5.1.2.6.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1740	1.5.1.2.6.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1741	1.5.1.2.6.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1742	**1.5.1.2.7**	**Correspondence Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
1743	1.5.1.2.7.1	Develop Correspondence Inventory	95 days	2/5/2018	6/15/2018
1744	1.5.1.2.7.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1745	1.5.1.2.7.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1746	1.5.1.2.7.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1747	**1.5.1.2.8**	**Forms Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
1748	1.5.1.2.8.1	Develop Forms Inventory	95 days	2/5/2018	6/15/2018
1749	1.5.1.2.8.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1750	1.5.1.2.8.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1751	1.5.1.2.8.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1752	**1.5.1.2.9**	**Interface Inventory**	**105 days**	**2/5/2018**	**6/29/2018**
1753	1.5.1.2.9.1	Develop Interface Inventory	95 days	2/5/2018	6/15/2018
1754	1.5.1.2.9.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1755	1.5.1.2.9.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1756	1.5.1.2.9.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1757	**1.5.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**105 days**	**2/5/2018**	**6/29/2018**
1758	1.5.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	95 days	2/5/2018	6/15/2018
1759	1.5.1.2.10.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1760	1.5.1.2.10.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1761	1.5.1.2.10.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1762	**1.5.1.2.11**	**Data Cleansing and Conversion Specification Document**	**105 days**	**2/5/2018**	**6/29/2018**
1763	1.5.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	95 days	2/5/2018	6/15/2018
1764	1.5.1.2.11.2	Interim draft deliverable submission	0 days	5/28/2018	5/28/2018
1765	1.5.1.2.11.3	Submit deliverable for review	0 days	6/15/2018	6/15/2018
1766	1.5.1.2.11.4	Receive deliverable client approval	10 days	6/18/2018	6/29/2018
1767	1.5.1.2.12	Overall completion of Data Conversion Design	0 days	6/29/2018	6/29/2018
1768	1.5.1.2.13	Overall completion of Design Phase	0 days	6/29/2018	6/29/2018
1769	**1.5.2**	**Development, Configuration and Testing**	**350 days**	**7/2/2018**	**11/1/2019**
1770	**1.5.2.1**	**Sprint Development**	**220 days**	**7/2/2018**	**5/3/2019**
1771	**1.5.2.1.1**	**Sprint 1**	**22 days**	**7/2/2018**	**7/31/2018**
1772	**1.5.2.1.1.1**	**Sprint Execution**	**15 days**	**7/2/2018**	**7/20/2018**
1773	1.5.2.1.1.1.1	Build	7 days	7/2/2018	7/10/2018
1774	1.5.2.1.1.1.2	Write UAT Tests	5 days	7/11/2018	7/17/2018
1775	1.5.2.1.1.1.3	System Testing&Defect Remediation	8 days	7/11/2018	7/20/2018
1776	1.5.2.1.1.1.4	Review	1 day	7/18/2018	7/18/2018

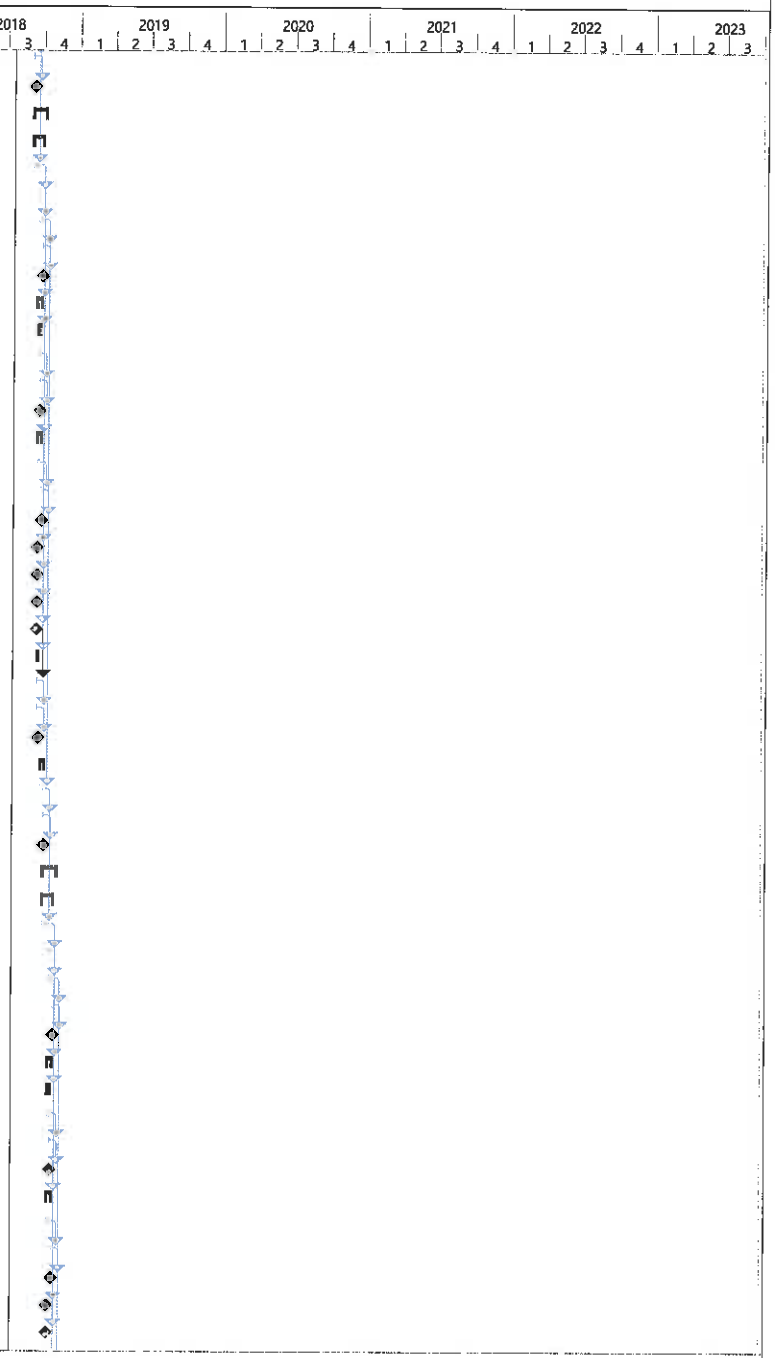


West Virginia IES Project Plan

ID	WBS	Task Name	Duration	Start	Finish
1777	1.5.2.1.1.5	Retrospective/Backlog Refinement	0 days	7/20/2018	7/20/2018
1778	**1.5.2.1.1.2**	**Sprint OWPs**	**8 days**	**7/10/2018**	**7/20/2018**
1779	**1.5.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**7/11/2018**	**7/17/2018**
1780	1.5.2.1.1.2.1	Submission	4 days	7/11/2018	7/16/2018
1781	1.5.2.1.1.2.1	DHHR Review	1 day	7/17/2018	7/17/2018
1782	1.5.2.1.1.2.1	DHHR Signoff	0 days	7/17/2018	7/17/2018
1783	**1.5.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**7/11/2018**	**7/20/2018**
1784	1.5.2.1.1.2.2	Submission	5 days	7/11/2018	7/17/2018
1785	1.5.2.1.1.2.2	DHHR Review	3 days	7/18/2018	7/20/2018
1786	1.5.2.1.1.2.2	DHHR Signoff	0 days	7/20/2018	7/20/2018
1787	**1.5.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**7/10/2018**	**7/10/2018**
1788	1.5.2.1.1.2.3	Unit Test Results	0 days	7/10/2018	7/10/2018
1789	1.5.2.1.1.2.3	String / System Test Results	0 days	7/10/2018	7/10/2018
1790	1.5.2.1.1.2.3	Integration and Regression Test Scripts	0 days	7/10/2018	7/10/2018
1791	**1.5.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**7/11/2018**	**7/12/2018**
1792	1.5.2.1.1.2.4	Developed Components	1 day	7/11/2018	7/11/2018
1793	1.5.2.1.1.2.4	Sprint Review	1 day	7/12/2018	7/12/2018
1794	1.5.2.1.1.2.4	Sprint Retrospective	0 days	7/12/2018	7/12/2018
1795	**1.5.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**7/23/2018**	**7/31/2018**
1796	1.5.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	7/23/2018	7/27/2018
1797	1.5.2.1.1.3.2	DHHR Code Review	2 days	7/30/2018	7/31/2018
1798	1.5.2.1.1.3.3	Sprint Acceptance	0 days	7/31/2018	7/31/2018
1799	**1.5.2.1.2**	**Sprint 2**	**25 days**	**8/1/2018**	**9/4/2018**
1800	**1.5.2.1.2.1**	**Sprint Execution**	**19 days**	**8/1/2018**	**8/27/2018**
1801	1.5.2.1.2.1.1	Build	10 days	8/1/2018	8/14/2018
1802	1.5.2.1.2.1.2	Write UAT Tests	5 days	8/15/2018	8/21/2018
1803	1.5.2.1.2.1.3	System Testing&Defect Remediation	8 days	8/15/2018	8/24/2018
1804	1.5.2.1.2.1.4	Review	1 day	8/27/2018	8/27/2018
1805	1.5.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	8/27/2018	8/27/2018
1806	**1.5.2.1.2.2**	**Sprint OWPs**	**8 days**	**8/14/2018**	**8/24/2018**
1807	**1.5.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**8/15/2018**	**8/21/2018**
1808	1.5.2.1.2.2.1	Submission	4 days	8/15/2018	8/20/2018
1809	1.5.2.1.2.2.1	DHHR Review	1 day	8/21/2018	8/21/2018
1810	1.5.2.1.2.2.1	DHHR Signoff	0 days	8/21/2018	8/21/2018
1811	**1.5.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**8/15/2018**	**8/24/2018**
1812	1.5.2.1.2.2.2	Submission	5 days	8/15/2018	8/21/2018
1813	1.5.2.1.2.2.2	DHHR Review	3 days	8/22/2018	8/24/2018
1814	1.5.2.1.2.2.2	DHHR Signoff	0 days	8/24/2018	8/24/2018
1815	**1.5.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**8/14/2018**	**8/14/2018**
1816	1.5.2.1.2.2.3	Unit Test Results	0 days	8/14/2018	8/14/2018
1817	1.5.2.1.2.2.3	String / System Test Results	0 days	8/14/2018	8/14/2018
1818	1.5.2.1.2.2.3	Integration and Regression Test Scripts	0 days	8/14/2018	8/14/2018
1819	**1.5.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**8/15/2018**	**8/16/2018**
1820	1.5.2.1.2.2.4	Developed Components	1 day	8/15/2018	8/15/2018
1821	1.5.2.1.2.2.4	Sprint Review	1 day	8/16/2018	8/16/2018
1822	1.5.2.1.2.2.4	Sprint Retrospective	0 days	8/16/2018	8/16/2018
1823	**1.5.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**8/27/2018**	**9/4/2018**
1824	1.5.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	8/27/2018	8/31/2018

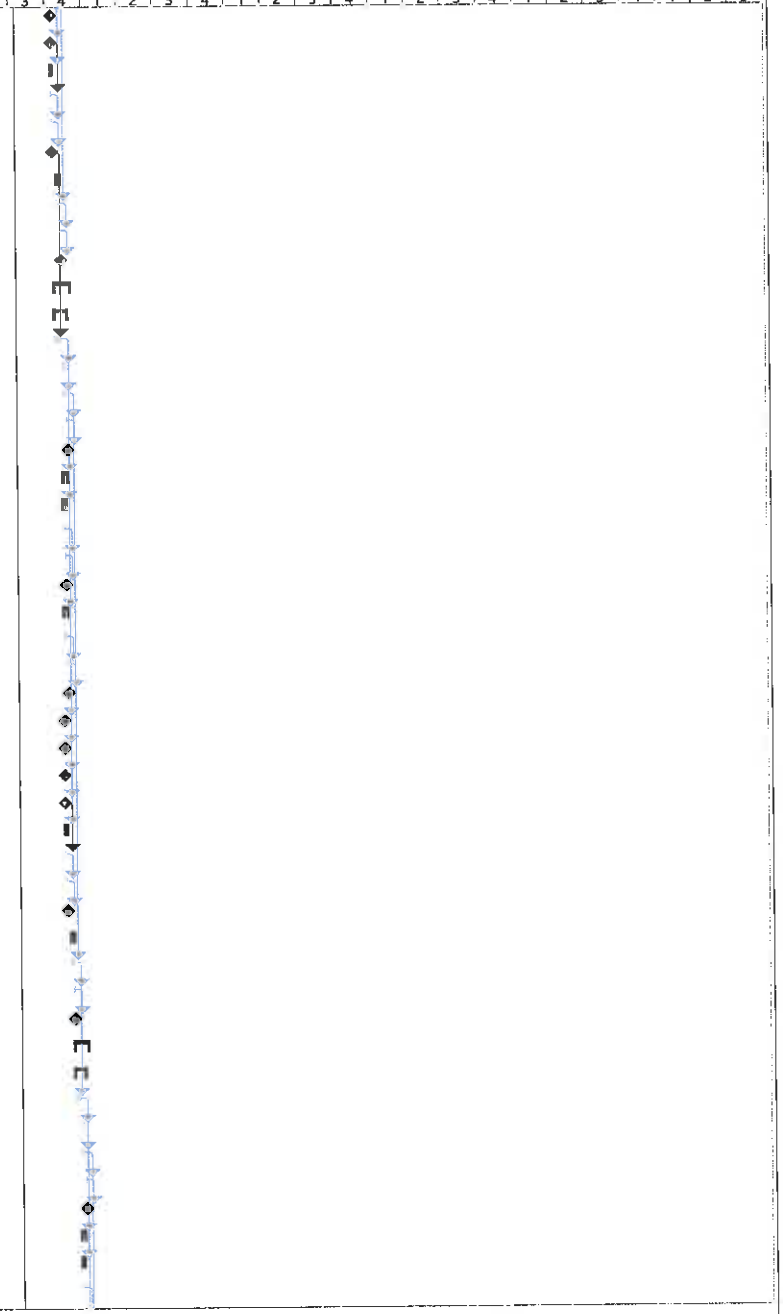


ID	WBS	Task Name	Duration	Start	Finish
1825	1.5.2.1.2.3.2	DHHR Code Review	2 days	9/3/2018	9/4/2018
1826	1.5.2.1.2.3.3	Sprint Acceptance	0 days	9/4/2018	9/4/2018
1827	**1.5.2.1.3**	**Sprint 3**	**25 days**	**9/3/2018**	**10/5/2018**
1828	**1.5.2.1.3.1**	**Sprint Execution**	**19 days**	**9/3/2018**	**9/27/2018**
1829	1.5.2.1.3.1.1	Build	10 days	9/3/2018	9/14/2018
1830	1.5.2.1.3.1.2	Write UAT Tests	5 days	9/17/2018	9/21/2018
1831	1.5.2.1.3.1.3	System Testing&Defect Remediation	8 days	9/17/2018	9/26/2018
1832	1.5.2.1.3.1.4	Review	1 day	9/27/2018	9/27/2018
1833	1.5.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	9/27/2018	9/27/2018
1834	**1.5.2.1.3.2**	**Sprint OWPs**	**8 days**	**9/14/2018**	**9/26/2018**
1835	**1.5.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**9/17/2018**	**9/21/2018**
1836	1.5.2.1.3.2.1	Submission	4 days	9/17/2018	9/20/2018
1837	1.5.2.1.3.2.1	DHHR Review	1 day	9/21/2018	9/21/2018
1838	1.5.2.1.3.2.1	DHHR Signoff	0 days	9/21/2018	9/21/2018
1839	**1.5.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**9/17/2018**	**9/26/2018**
1840	1.5.2.1.3.2.2	Submission	5 days	9/17/2018	9/21/2018
1841	1.5.2.1.3.2.2	DHHR Review	3 days	9/24/2018	9/26/2018
1842	1.5.2.1.3.2.2	DHHR Signoff	0 days	9/26/2018	9/26/2018
1843	**1.5.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**9/14/2018**	**9/14/2018**
1844	1.5.2.1.3.2.3	Unit Test Results	0 days	9/14/2018	9/14/2018
1845	1.5.2.1.3.2.3	String / System Test Results	0 days	9/14/2018	9/14/2018
1846	1.5.2.1.3.2.3	Integration and Regression Test Scripts	0 days	9/14/2018	9/14/2018
1847	**1.5.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**9/17/2018**	**9/18/2018**
1848	1.5.2.1.3.2.4	Developed Components	1 day	9/17/2018	9/17/2018
1849	1.5.2.1.3.2.4	Sprint Review	1 day	9/18/2018	9/18/2018
1850	1.5.2.1.3.2.4	Sprint Retrospective	0 days	9/18/2018	9/18/2018
1851	**1.5.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**9/27/2018**	**10/5/2018**
1852	1.5.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	9/27/2018	10/3/2018
1853	1.5.2.1.3.3.2	DHHR Code Review	2 days	10/4/2018	10/5/2018
1854	1.5.2.1.3.3.3	Sprint Acceptance	0 days	10/5/2018	10/5/2018
1855	**1.5.2.1.4**	**Hardening Sprint**	**25 days**	**10/4/2018**	**11/7/2018**
1856	**1.5.2.1.4.1**	**Sprint Execution**	**19 days**	**10/4/2018**	**10/30/2018**
1857	1.5.2.1.4.1.1	Build	10 days	10/4/2018	10/17/2018
1858	1.5.2.1.4.1.2	Write UAT Tests	5 days	10/18/2018	10/24/2018
1859	1.5.2.1.4.1.3	System Testing&Defect Remediation	8 days	10/18/2018	10/29/2018
1860	1.5.2.1.4.1.4	Review	1 day	10/30/2018	10/30/2018
1861	1.5.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	10/30/2018	10/30/2018
1862	**1.5.2.1.4.2**	**Sprint OWPs**	**8 days**	**10/17/2018**	**10/29/2018**
1863	**1.5.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**10/18/2018**	**10/24/2018**
1864	1.5.2.1.4.2.1	Submission	4 days	10/18/2018	10/23/2018
1865	1.5.2.1.4.2.1	DHHR Review	1 day	10/24/2018	10/24/2018
1866	1.5.2.1.4.2.1	DHHR Signoff	0 days	10/24/2018	10/24/2018
1867	**1.5.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**10/18/2018**	**10/29/2018**
1868	1.5.2.1.4.2.2	Submission	5 days	10/18/2018	10/24/2018
1869	1.5.2.1.4.2.2	DHHR Review	3 days	10/25/2018	10/29/2018
1870	1.5.2.1.4.2.2	DHHR Signoff	0 days	10/29/2018	10/29/2018
1871	**1.5.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**10/17/2018**	**10/17/2018**
1872	1.5.2.1.4.2.3	Unit Test Results	0 days	10/17/2018	10/17/2018

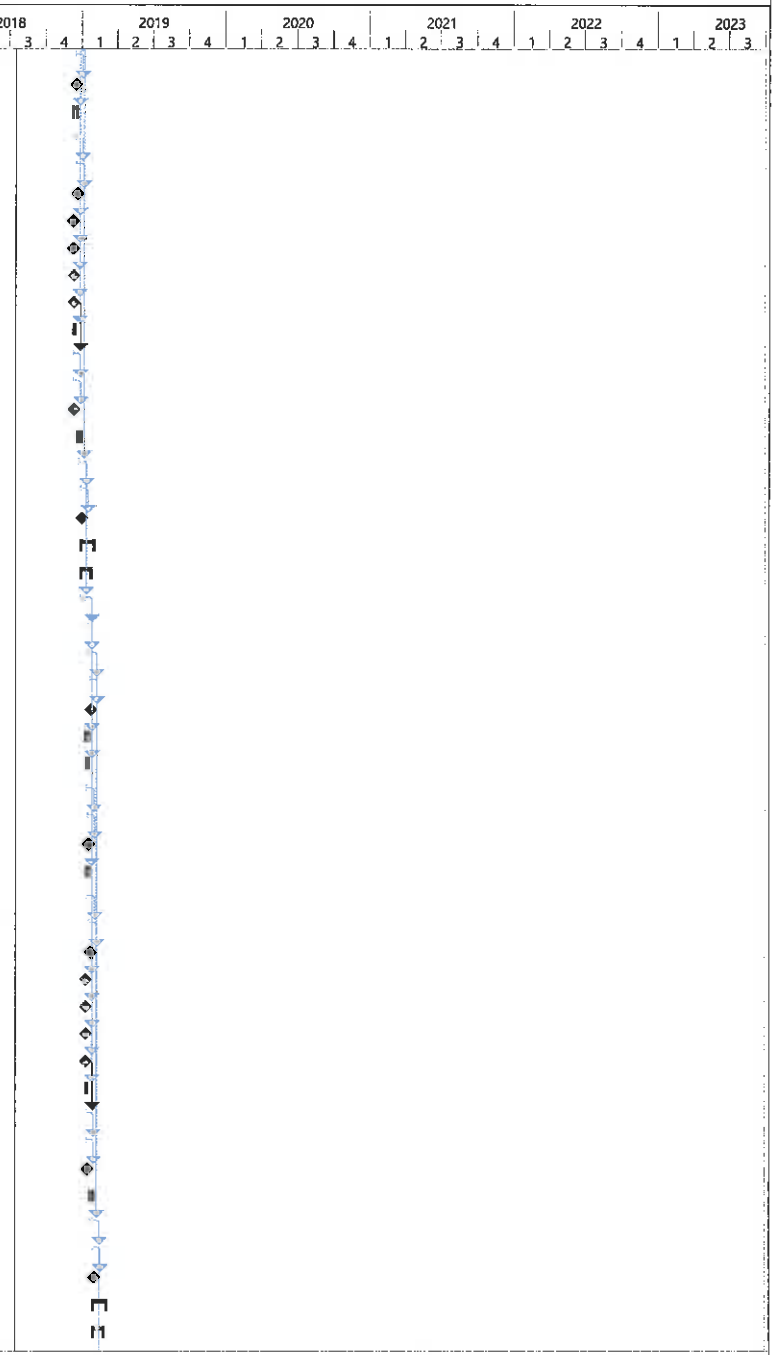


West Virginia IES Project Plan

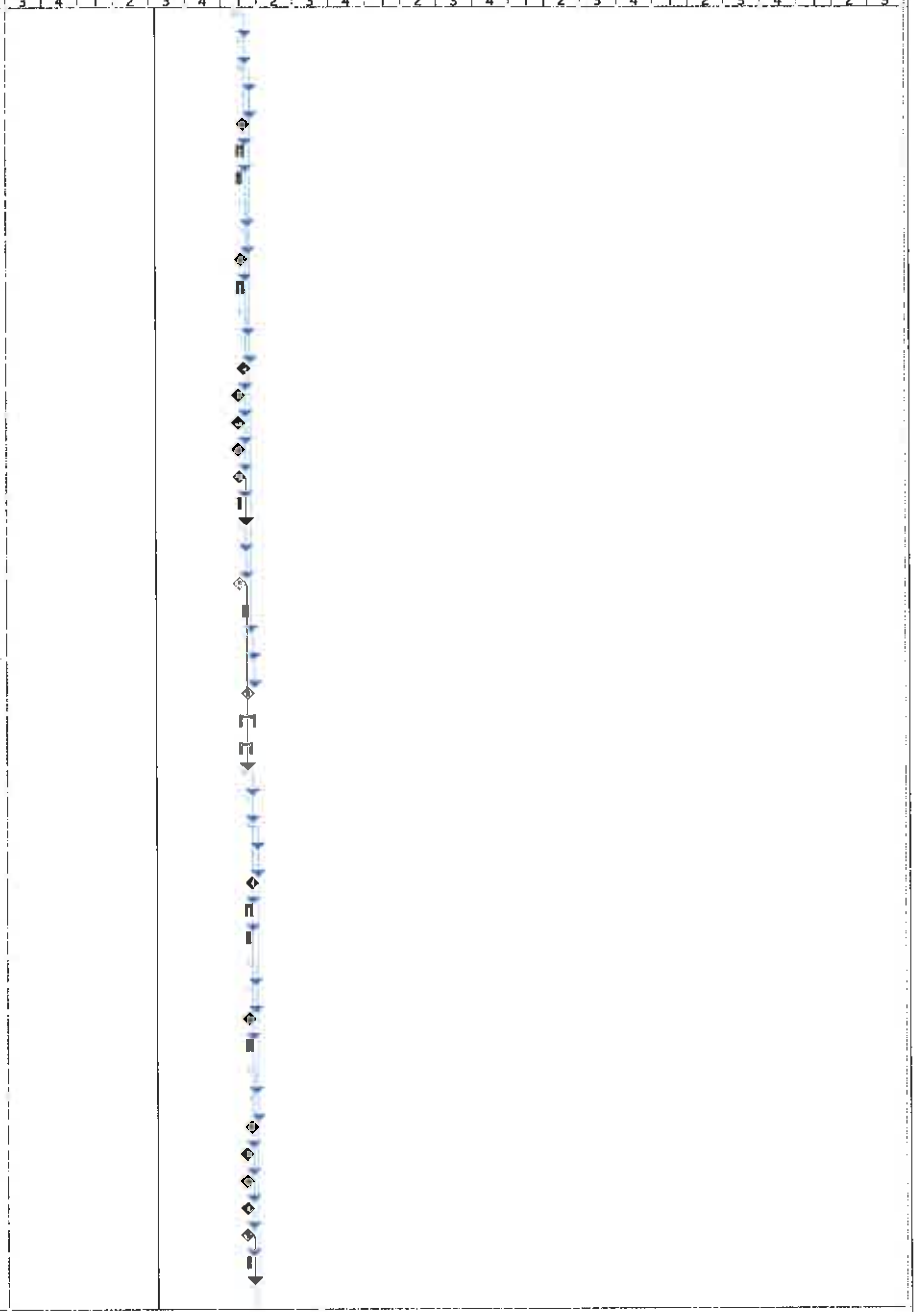
ID	WBS	Task Name	Duration	Start	Finish
1873	1.5.2.1.4.2.3	String / System Test Results	0 days	10/17/2018	10/17/2018
1874	1.5.2.1.4.2.3	Integration and Regression Test Scripts	0 days	10/17/2018	10/17/2018
1875	**1.5.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**10/18/2018**	**10/19/2018**
1876	1.5.2.1.4.2.4	Developed Components	1 day	10/18/2018	10/18/2018
1877	1.5.2.1.4.2.4	Sprint Review	1 day	10/19/2018	10/19/2018
1878	1.5.2.1.4.2.4	Sprint Retrospective	0 days	10/19/2018	10/19/2018
1879	**1.5.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**10/30/2018**	**11/7/2018**
1880	1.5.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	10/30/2018	11/5/2018
1881	1.5.2.1.4.3.2	DHHR Code Review	2 days	11/6/2018	11/7/2018
1882	1.5.2.1.4.3.3	Sprint Acceptance	0 days	11/7/2018	11/7/2018
1883	**1.5.2.1.5**	**Sprint 4**	**29 days**	**10/22/2018**	**11/29/2018**
1884	**1.5.2.1.5.1**	**Sprint Execution**	**23 days**	**10/22/2018**	**11/21/2018**
1885	1.5.2.1.5.1.1	Build	14 days	10/22/2018	11/8/2018
1886	1.5.2.1.5.1.2	Write UAT Tests	5 days	11/9/2018	11/15/2018
1887	1.5.2.1.5.1.3	System Testing&Defect Remediation	8 days	11/9/2018	11/20/2018
1888	1.5.2.1.5.1.4	Review	1 day	11/21/2018	11/21/2018
1889	1.5.2.1.5.1.5	Retrospective/Backlog Refinement	0 days	11/21/2018	11/21/2018
1890	**1.5.2.1.5.2**	**Sprint OWPs**	**8 days**	**11/8/2018**	**11/20/2018**
1891	**1.5.2.1.5.2.1**	**Create Sprint Backlog**	**5 days**	**11/9/2018**	**11/15/2018**
1892	1.5.2.1.5.2.1	Submission	4 days	11/9/2018	11/14/2018
1893	1.5.2.1.5.2.1	DHHR Review	1 day	11/15/2018	11/15/2018
1894	1.5.2.1.5.2.1	DHHR Signoff	0 days	11/15/2018	11/15/2018
1895	**1.5.2.1.5.2.2**	**Design Specification (Sprint Features)**	**8 days**	**11/9/2018**	**11/20/2018**
1896	1.5.2.1.5.2.2	Submission	5 days	11/9/2018	11/15/2018
1897	1.5.2.1.5.2.2	DHHR Review	3 days	11/16/2018	11/20/2018
1898	1.5.2.1.5.2.2	DHHR Signoff	0 days	11/20/2018	11/20/2018
1899	**1.5.2.1.5.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**11/8/2018**	**11/8/2018**
1900	1.5.2.1.5.2.3	Unit Test Results	0 days	11/8/2018	11/8/2018
1901	1.5.2.1.5.2.3	String / System Test Results	0 days	11/8/2018	11/8/2018
1902	1.5.2.1.5.2.3	Integration and Regression Test Scripts	0 days	11/8/2018	11/8/2018
1903	**1.5.2.1.5.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**11/9/2018**	**11/12/2018**
1904	1.5.2.1.5.2.4	Developed Components	1 day	11/9/2018	11/9/2018
1905	1.5.2.1.5.2.4	Sprint Review	1 day	11/12/2018	11/12/2018
1906	1.5.2.1.5.2.4	Sprint Retrospective	0 days	11/12/2018	11/12/2018
1907	**1.5.2.1.5.3**	**DHHR Sprint Acceptance**	**7 days**	**11/21/2018**	**11/29/2018**
1908	1.5.2.1.5.3.1	Perform DHHR Acceptance Tests	5 days	11/21/2018	11/27/2018
1909	1.5.2.1.5.3.2	DHHR Code Review	2 days	11/28/2018	11/29/2018
1910	1.5.2.1.5.3.3	Sprint Acceptance	0 days	11/29/2018	11/29/2018
1911	**1.5.2.1.6**	**Sprint 5**	**25 days**	**11/28/2018**	**1/1/2019**
1912	**1.5.2.1.6.1**	**Sprint Execution**	**19 days**	**11/28/2018**	**12/24/2018**
1913	1.5.2.1.6.1.1	Build	10 days	11/28/2018	12/11/2018
1914	1.5.2.1.6.1.2	Write UAT Tests	5 days	12/12/2018	12/18/2018
1915	1.5.2.1.6.1.3	System Testing&Defect Remediation	8 days	12/12/2018	12/21/2018
1916	1.5.2.1.6.1.4	Review	1 day	12/24/2018	12/24/2018
1917	1.5.2.1.6.1.5	Retrospective/Backlog Refinement	0 days	12/24/2018	12/24/2018
1918	**1.5.2.1.6.2**	**Sprint OWPs**	**8 days**	**12/11/2018**	**12/21/2018**
1919	**1.5.2.1.6.2.1**	**Create Sprint Backlog**	**5 days**	**12/12/2018**	**12/18/2018**
1920	1.5.2.1.6.2.1	Submission	4 days	12/12/2018	12/17/2018



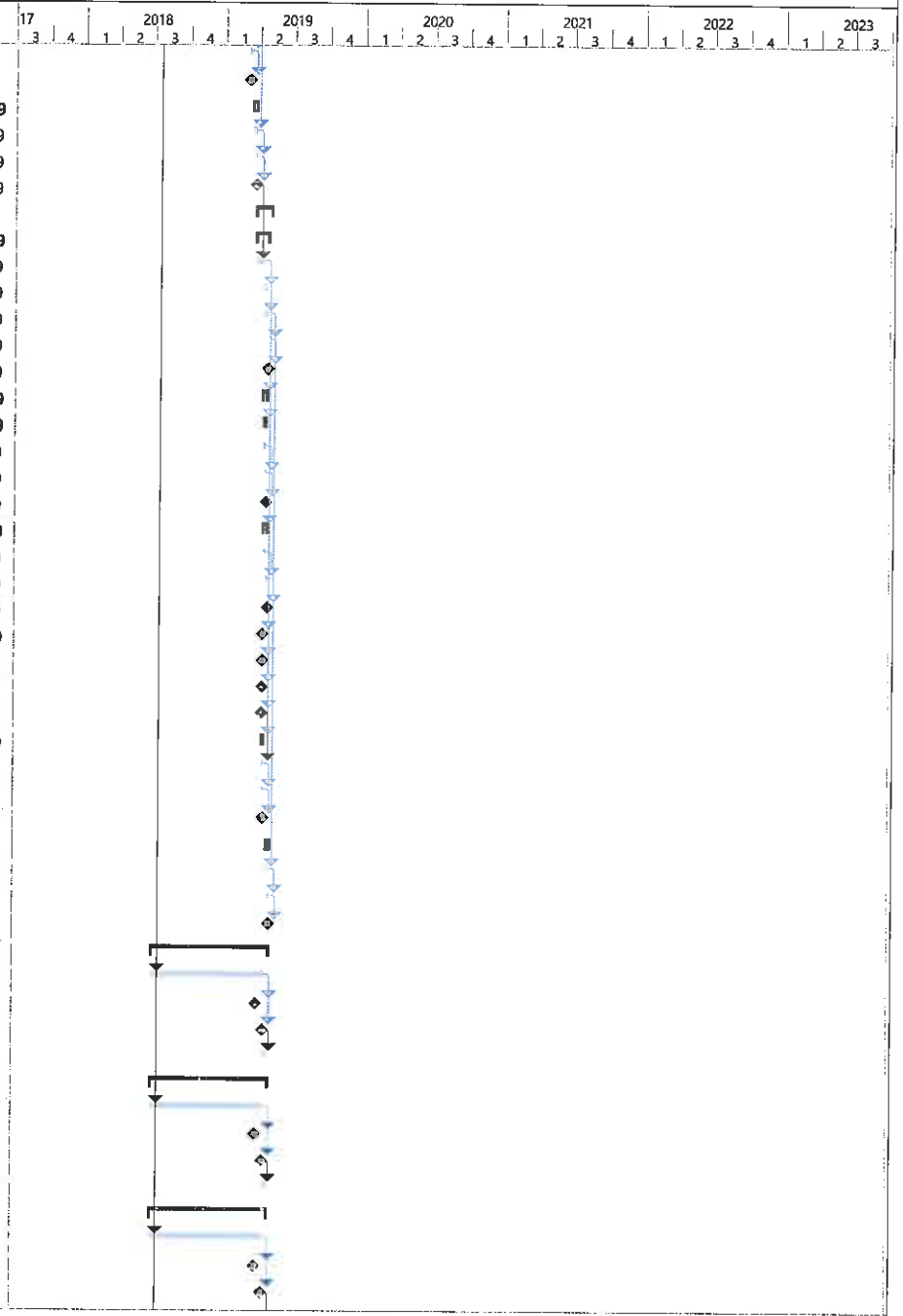
ID	WBS	Task Name	Duration	Start	Finish
1921	1.5.2.1.6.2.1	DHHR Review	1 day	12/18/2018	12/18/2018
1922	1.5.2.1.6.2.1	DHHR Signoff	0 days	12/18/2018	12/18/2018
1923	**1.5.2.1.6.2.2**	**Design Specification (Sprint Features)**	**8 days**	**12/12/2018**	**12/21/2018**
1924	1.5.2.1.6.2.2	Submission	5 days	12/12/2018	12/18/2018
1925	1.5.2.1.6.2.2	DHHR Review	3 days	12/19/2018	12/21/2018
1926	1.5.2.1.6.2.2	DHHR Signoff	0 days	12/21/2018	12/21/2018
1927	**1.5.2.1.6.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**12/11/2018**	**12/11/2018**
1928	1.5.2.1.6.2.3	Unit Test Results	0 days	12/11/2018	12/11/2018
1929	1.5.2.1.6.2.3	String / System Test Results	0 days	12/11/2018	12/11/2018
1930	1.5.2.1.6.2.3	Integration and Regression Test Scripts	0 days	12/11/2018	12/11/2018
1931	**1.5.2.1.6.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**12/12/2018**	**12/13/2018**
1932	1.5.2.1.6.2.4	Developed Components	1 day	12/12/2018	12/12/2018
1933	1.5.2.1.6.2.4	Sprint Review	1 day	12/13/2018	12/13/2018
1934	1.5.2.1.6.2.4	Sprint Retrospective	0 days	12/13/2018	12/13/2018
1935	**1.5.2.1.6.3**	**DHHR Sprint Acceptance**	**7 days**	**12/24/2018**	**1/1/2019**
1936	1.5.2.1.6.3.1	Perform DHHR Acceptance Tests	5 days	12/24/2018	12/28/2018
1937	1.5.2.1.6.3.2	DHHR Code Review	2 days	12/31/2018	1/1/2019
1938	1.5.2.1.6.3.3	Sprint Acceptance	0 days	1/1/2019	1/1/2019
1939	**1.5.2.1.7**	**Sprint 6**	**25 days**	**12/31/2018**	**2/1/2019**
1940	**1.5.2.1.7.1**	**Sprint Execution**	**19 days**	**12/31/2018**	**1/24/2019**
1941	1.5.2.1.7.1.1	Build	10 days	12/31/2018	1/11/2019
1942	1.5.2.1.7.1.2	Write UAT Tests	5 days	1/14/2019	1/18/2019
1943	1.5.2.1.7.1.3	System Testing&Defect Remediation	8 days	1/14/2019	1/23/2019
1944	1.5.2.1.7.1.4	Review	1 day	1/24/2019	1/24/2019
1945	1.5.2.1.7.1.5	Retrospective/Backlog Refinement	0 days	1/24/2019	1/24/2019
1946	**1.5.2.1.7.2**	**Sprint OWPs**	**8 days**	**1/11/2019**	**1/23/2019**
1947	**1.5.2.1.7.2.1**	**Create Sprint Backlog**	**5 days**	**1/14/2019**	**1/18/2019**
1948	1.5.2.1.7.2.1	Submission	4 days	1/14/2019	1/17/2019
1949	1.5.2.1.7.2.1	DHHR Review	1 day	1/18/2019	1/18/2019
1950	1.5.2.1.7.2.1	DHHR Signoff	0 days	1/18/2019	1/18/2019
1951	**1.5.2.1.7.2.2**	**Design Specification (Sprint Features)**	**8 days**	**1/14/2019**	**1/23/2019**
1952	1.5.2.1.7.2.2	Submission	5 days	1/14/2019	1/18/2019
1953	1.5.2.1.7.2.2	DHHR Review	3 days	1/21/2019	1/23/2019
1954	1.5.2.1.7.2.2	DHHR Signoff	0 days	1/23/2019	1/23/2019
1955	**1.5.2.1.7.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**1/11/2019**	**1/11/2019**
1956	1.5.2.1.7.2.3	Unit Test Results	0 days	1/11/2019	1/11/2019
1957	1.5.2.1.7.2.3	String / System Test Results	0 days	1/11/2019	1/11/2019
1958	1.5.2.1.7.2.3	Integration and Regression Test Scripts	0 days	1/11/2019	1/11/2019
1959	**1.5.2.1.7.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**1/14/2019**	**1/15/2019**
1960	1.5.2.1.7.2.4	Developed Components	1 day	1/14/2019	1/14/2019
1961	1.5.2.1.7.2.4	Sprint Review	1 day	1/15/2019	1/15/2019
1962	1.5.2.1.7.2.4	Sprint Retrospective	0 days	1/15/2019	1/15/2019
1963	**1.5.2.1.7.3**	**DHHR Sprint Acceptance**	**7 days**	**1/24/2019**	**2/1/2019**
1964	1.5.2.1.7.3.1	Perform DHHR Acceptance Tests	5 days	1/24/2019	1/30/2019
1965	1.5.2.1.7.3.2	DHHR Code Review	2 days	1/31/2019	2/1/2019
1966	1.5.2.1.7.3.3	Sprint Acceptance	0 days	2/1/2019	2/1/2019
1967	**1.5.2.1.8**	**Sprint 7**	**25 days**	**1/31/2019**	**3/6/2019**
1968	**1.5.2.1.8.1**	**Sprint Execution**	**19 days**	**1/31/2019**	**2/26/2019**



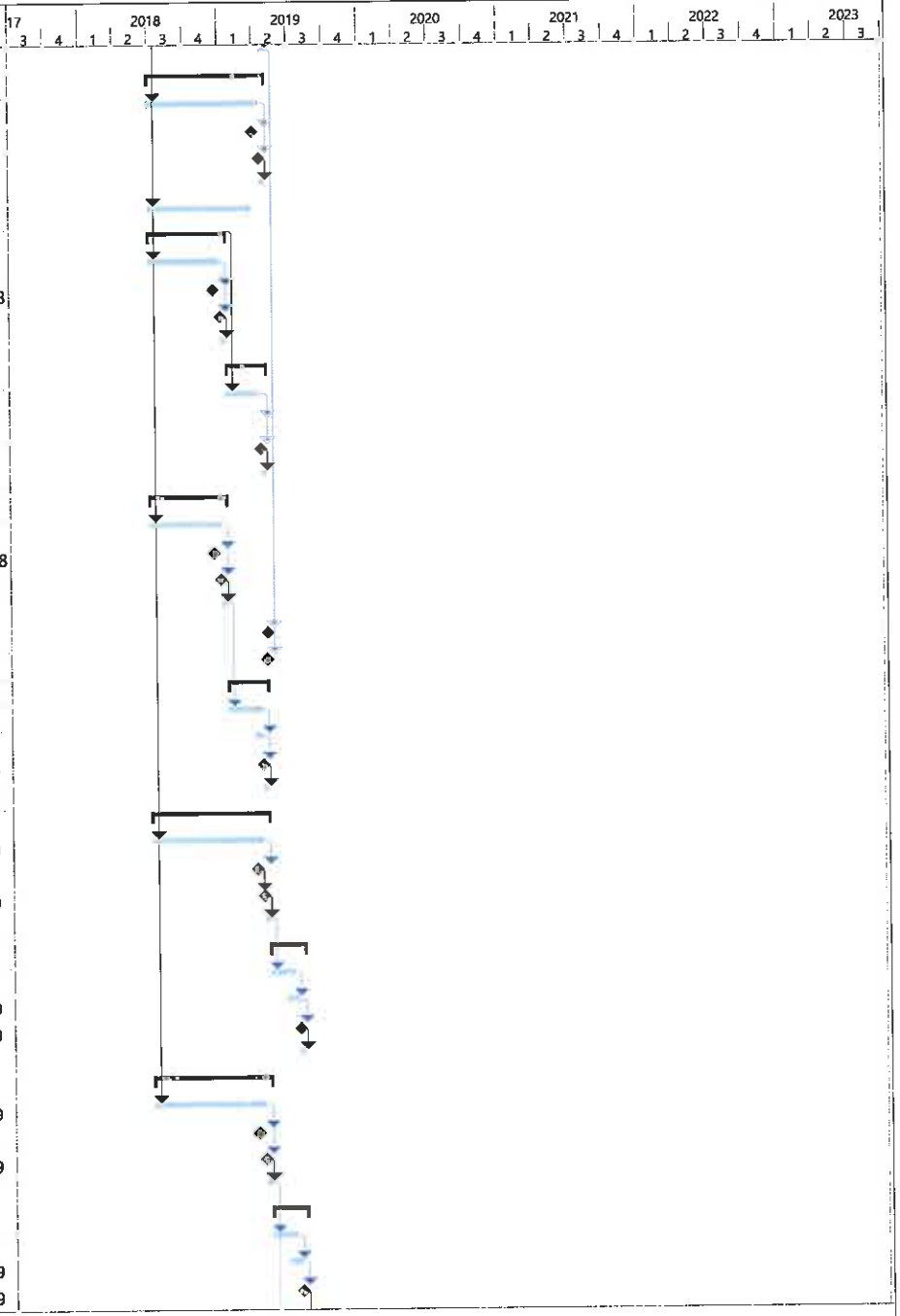
ID	WBS	Task Name	Duration	Start	Finish
1969	1.5.2.1.8.1.1	Build	10 days	1/31/2019	2/13/2019
1970	1.5.2.1.8.1.2	Write UAT Tests	5 days	2/14/2019	2/20/2019
1971	1.5.2.1.8.1.3	System Testing&Defect Remediation	8 days	2/14/2019	2/25/2019
1972	1.5.2.1.8.1.4	Review	1 day	2/26/2019	2/26/2019
1973	1.5.2.1.8.1.5	Retrospective/Backlog Refinement	0 days	2/26/2019	2/26/2019
1974	**1.5.2.1.8.2**	**Sprint OWPs**	**8 days**	**2/13/2019**	**2/25/2019**
1975	**1.5.2.1.8.2.1**	**Create Sprint Backlog**	**5 days**	**2/14/2019**	**2/20/2019**
1976	1.5.2.1.8.2.1	Submission	4 days	2/14/2019	2/19/2019
1977	1.5.2.1.8.2.1	DHHR Review	1 day	2/20/2019	2/20/2019
1978	1.5.2.1.8.2.1	DHHR Signoff	0 days	2/20/2019	2/20/2019
1979	**1.5.2.1.8.2.2**	**Design Specification (Sprint Features)**	**8 days**	**2/14/2019**	**2/25/2019**
1980	1.5.2.1.8.2.2	Submission	5 days	2/14/2019	2/20/2019
1981	1.5.2.1.8.2.2	DHHR Review	3 days	2/21/2019	2/25/2019
1982	1.5.2.1.8.2.2	DHHR Signoff	0 days	2/25/2019	2/25/2019
1983	**1.5.2.1.8.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**2/13/2019**	**2/13/2019**
1984	1.5.2.1.8.2.3	Unit Test Results	0 days	2/13/2019	2/13/2019
1985	1.5.2.1.8.2.3	String / System Test Results	0 days	2/13/2019	2/13/2019
1986	1.5.2.1.8.2.3	Integration and Regression Test Scripts	0 days	2/13/2019	2/13/2019
1987	**1.5.2.1.8.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**2/14/2019**	**2/15/2019**
1988	1.5.2.1.8.2.4	Developed Components	1 day	2/14/2019	2/14/2019
1989	1.5.2.1.8.2.4	Sprint Review	1 day	2/15/2019	2/15/2019
1990	1.5.2.1.8.2.4	Sprint Retrospective	0 days	2/15/2019	2/15/2019
1991	**1.5.2.1.8.3**	**DHHR Sprint Acceptance**	**7 days**	**2/26/2019**	**3/6/2019**
1992	1.5.2.1.8.3.1	Perform DHHR Acceptance Tests	5 days	2/26/2019	3/4/2019
1993	1.5.2.1.8.3.2	DHHR Code Review	2 days	3/5/2019	3/6/2019
1994	1.5.2.1.8.3.3	Sprint Acceptance	0 days	3/6/2019	3/6/2019
1995	**1.5.2.1.9**	**Sprint 8**	**25 days**	**2/18/2019**	**3/22/2019**
1996	**1.5.2.1.9.1**	**Sprint Execution**	**19 days**	**2/18/2019**	**3/14/2019**
1997	1.5.2.1.9.1.1	Build	10 days	2/18/2019	3/1/2019
1998	1.5.2.1.9.1.2	Write UAT Tests	5 days	3/4/2019	3/8/2019
1999	1.5.2.1.9.1.3	System Testing&Defect Remediation	8 days	3/4/2019	3/13/2019
2000	1.5.2.1.9.1.4	Review	1 day	3/14/2019	3/14/2019
2001	1.5.2.1.9.1.5	Retrospective/Backlog Refinement	0 days	3/14/2019	3/14/2019
2002	**1.5.2.1.9.2**	**Sprint OWPs**	**8 days**	**3/1/2019**	**3/13/2019**
2003	**1.5.2.1.9.2.1**	**Create Sprint Backlog**	**5 days**	**3/4/2019**	**3/8/2019**
2004	1.5.2.1.9.2.1	Submission	4 days	3/4/2019	3/7/2019
2005	1.5.2.1.9.2.1	DHHR Review	1 day	3/8/2019	3/8/2019
2006	1.5.2.1.9.2.1	DHHR Signoff	0 days	3/8/2019	3/8/2019
2007	**1.5.2.1.9.2.2**	**Design Specification (Sprint Features)**	**8 days**	**3/4/2019**	**3/13/2019**
2008	1.5.2.1.9.2.2	Submission	5 days	3/4/2019	3/8/2019
2009	1.5.2.1.9.2.2	DHHR Review	3 days	3/11/2019	3/13/2019
2010	1.5.2.1.9.2.2	DHHR Signoff	0 days	3/13/2019	3/13/2019
2011	**1.5.2.1.9.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**3/1/2019**	**3/1/2019**
2012	1.5.2.1.9.2.3	Unit Test Results	0 days	3/1/2019	3/1/2019
2013	1.5.2.1.9.2.3	String / System Test Results	0 days	3/1/2019	3/1/2019
2014	1.5.2.1.9.2.3	Integration and Regression Test Scripts	0 days	3/1/2019	3/1/2019
2015	**1.5.2.1.9.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**3/4/2019**	**3/5/2019**
2016	1.5.2.1.9.2.4	Developed Components	1 day	3/4/2019	3/4/2019



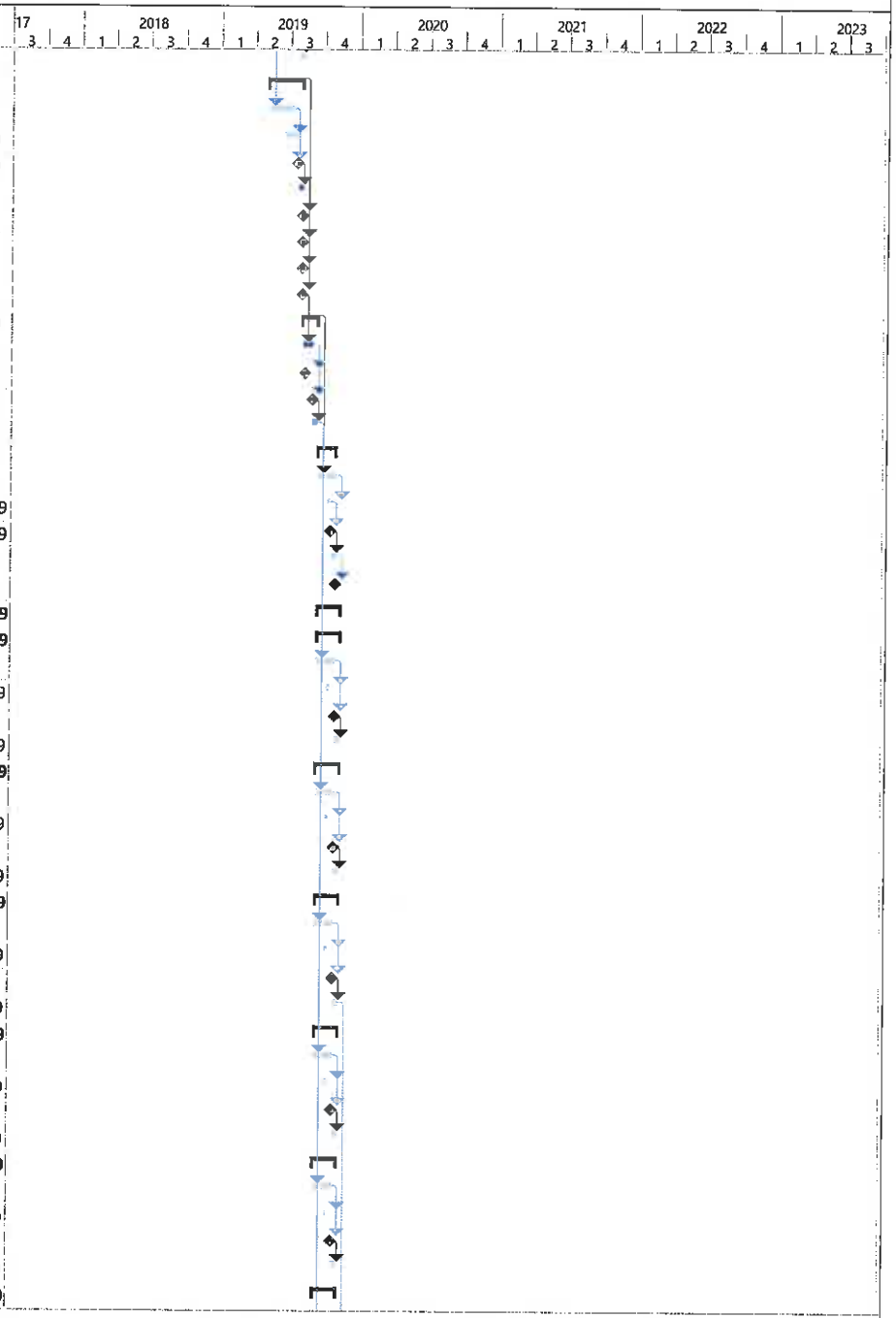
ID	WBS	Task Name	Duration	Start	Finish
2017	1.5.2.1.9.2.4	Sprint Review	1 day	3/5/2019	3/5/2019
2018	1.5.2.1.9.2.4	Sprint Retrospective	0 days	3/5/2019	3/5/2019
2019	**1.5.2.1.9.3**	**DHHR Sprint Acceptance**	**7 days**	**3/14/2019**	**3/22/2019**
2020	1.5.2.1.9.3.1	Perform DHHR Acceptance Tests	5 days	3/14/2019	3/20/2019
2021	1.5.2.1.9.3.2	DHHR Code Review	2 days	3/21/2019	3/22/2019
2022	1.5.2.1.9.3.3	Sprint Acceptance	0 days	3/22/2019	3/22/2019
2023	**1.5.2.1.10**	**Hardening Sprint**	**30 days**	**3/25/2019**	**5/3/2019**
2024	**1.5.2.1.10.1**	**Sprint Execution**	**24 days**	**3/25/2019**	**4/25/2019**
2025	1.5.2.1.10.1.	Build	15 days	3/25/2019	4/12/2019
2026	1.5.2.1.10.1.	Write UAT Tests	5 days	4/15/2019	4/19/2019
2027	1.5.2.1.10.1.	System Testing&Defect Remediation	8 days	4/15/2019	4/24/2019
2028	1.5.2.1.10.1.	Review	1 day	4/25/2019	4/25/2019
2029	1.5.2.1.10.1.	Retrospective/Backlog Refinement	0 days	4/25/2019	4/25/2019
2030	**1.5.2.1.10.2**	**Sprint OWPs**	**8 days**	**4/12/2019**	**4/24/2019**
2031	**1.5.2.1.10.2**	**Create Sprint Backlog**	**5 days**	**4/15/2019**	**4/19/2019**
2032	1.5.2.1.10.2.	Submission	4 days	4/15/2019	4/18/2019
2033	1.5.2.1.10.2.	DHHR Review	1 day	4/19/2019	4/19/2019
2034	1.5.2.1.10.2.	DHHR Signoff	0 days	4/19/2019	4/19/2019
2035	**1.5.2.1.10.2**	**Design Specification (Sprint Features)**	**8 days**	**4/15/2019**	**4/24/2019**
2036	1.5.2.1.10.2.	Submission	5 days	4/15/2019	4/19/2019
2037	1.5.2.1.10.2.	DHHR Review	3 days	4/22/2019	4/24/2019
2038	1.5.2.1.10.2.	DHHR Signoff	0 days	4/24/2019	4/24/2019
2039	**1.5.2.1.10.2**	**Logical Data Model (Sprint Features)**	**0 days**	**4/12/2019**	**4/12/2019**
2040	1.5.2.1.10.2.	Unit Test Results	0 days	4/12/2019	4/12/2019
2041	1.5.2.1.10.2.	String / System Test Results	0 days	4/12/2019	4/12/2019
2042	1.5.2.1.10.2.	Integration and Regression Test Scripts	0 days	4/12/2019	4/12/2019
2043	**1.5.2.1.10.2**	**Burndown Chart and Velocity Summary**	**2 days**	**4/15/2019**	**4/16/2019**
2044	1.5.2.1.10.2.	Developed Components	1 day	4/15/2019	4/15/2019
2045	1.5.2.1.10.2.	Sprint Review	1 day	4/16/2019	4/16/2019
2046	1.5.2.1.10.2.	Sprint Retrospective	0 days	4/16/2019	4/16/2019
2047	**1.5.2.1.10.3**	**DHHR Sprint Acceptance**	**7 days**	**4/25/2019**	**5/3/2019**
2048	1.5.2.1.10.3.	Perform DHHR Acceptance Tests	5 days	4/25/2019	5/1/2019
2049	1.5.2.1.10.3.	DHHR Code Review	2 days	5/2/2019	5/3/2019
2050	1.5.2.1.10.3.	Sprint Acceptance	0 days	5/3/2019	5/3/2019
2051	**1.5.2.2**	**System Documentation**	**220 days**	**7/2/2018**	**5/3/2019**
2052	1.5.2.2.1	Develop System Documentation	210 days	7/2/2018	4/19/2019
2053	1.5.2.2.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2054	1.5.2.2.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2055	1.5.2.2.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2056	**1.5.2.3**	**System Security Plan (SSP)**	**220 days**	**7/2/2018**	**5/3/2019**
2057	1.5.2.3.1	Develop System Security Plan (SSP)	210 days	7/2/2018	4/19/2019
2058	1.5.2.3.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2059	1.5.2.3.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2060	1.5.2.3.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2061	**1.5.2.4**	**Safeguard Procedures Report**	**220 days**	**7/2/2018**	**5/3/2019**
2062	1.5.2.4.1	Develop Safeguard Procedures Report	210 days	7/2/2018	4/19/2019
2063	1.5.2.4.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2064	1.5.2.4.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019



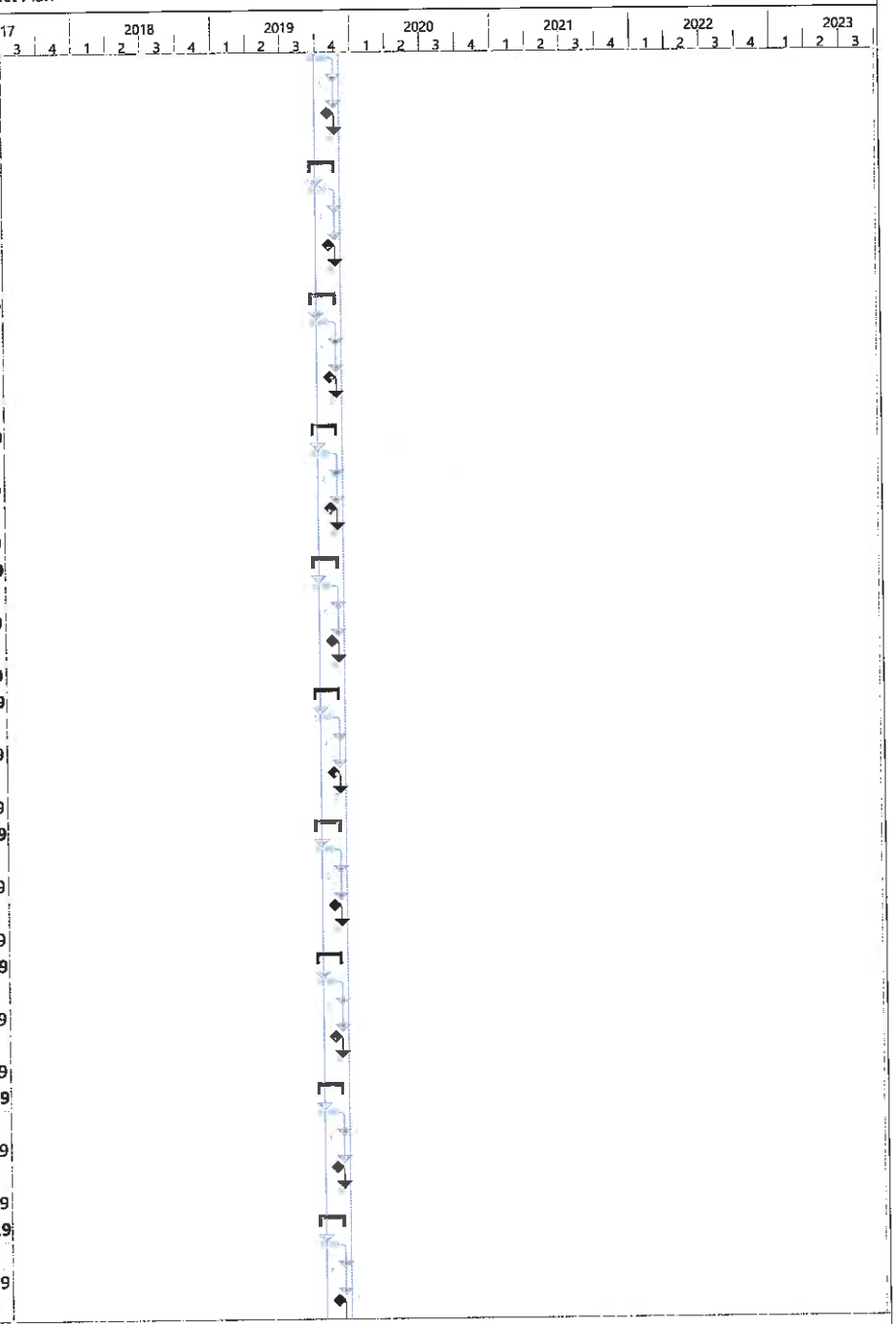
ID	WBS	Task Name	Duration	Start	Finish
2065	1.5.2.4.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2066	**1.5.2.5**	**User Documentation**	**220 days**	**7/2/2018**	**5/3/2019**
2067	1.5.2.5.1	Develop User Documentation	210 days	7/2/2018	4/19/2019
2068	1.5.2.5.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2069	1.5.2.5.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2070	1.5.2.5.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2071	1.5.2.6	Execute Automated Data Migration process	195 days	7/2/2018	3/29/2019
2072	**1.5.2.7**	**Data Conversion System Integration Test Cases**	**145 days**	**7/2/2018**	**1/18/2019**
2073	1.5.2.7.1	Develop Data Conversion System Integration Test Cases	135 days	7/2/2018	1/4/2019
2074	1.5.2.7.2	Interim draft deliverable submission	0 days	12/17/2018	12/17/2018
2075	1.5.2.7.3	Submit deliverable for review	0 days	1/4/2019	1/4/2019
2076	1.5.2.7.4	Receive deliverable client approval	10 days	1/7/2019	1/18/2019
2077	**1.5.2.8**	**Data Conversion System Integration Test Results**	**75 days**	**1/21/2019**	**5/3/2019**
2078	1.5.2.8.1	Develop Data Conversion System Integration Test Results	65 days	1/21/2019	4/19/2019
2079	1.5.2.8.2	Interim draft deliverable submission	1 day	4/1/2019	4/1/2019
2080	1.5.2.8.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2081	1.5.2.8.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2082	**1.5.2.9**	**System Integration Test Cases**	**145 days**	**7/2/2018**	**1/18/2019**
2083	1.5.2.9.1	Develop System Integration Test Cases	135 days	7/2/2018	1/4/2019
2084	1.5.2.9.2	Interim draft deliverable submission	0 days	12/17/2018	12/17/2018
2085	1.5.2.9.3	Submit deliverable for review	0 days	1/4/2019	1/4/2019
2086	1.5.2.9.4	Receive deliverable client approval	10 days	1/7/2019	1/18/2019
2087	1.5.2.10	Completion of Data Conversion Trial Run in Test Environment	0 days	5/3/2019	5/3/2019
2088	1.5.2.11	Overall completion of Development and Configuration	0 days	5/3/2019	5/3/2019
2089	**1.5.2.12**	**System Integration Test Results**	**75 days**	**1/21/2019**	**5/3/2019**
2090	1.5.2.12.1	Develop System Integration Test Results	65 days	1/21/2019	4/19/2019
2091	1.5.2.12.2	Interim draft deliverable submission	15 days	4/1/2019	4/19/2019
2092	1.5.2.12.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2093	1.5.2.12.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2094	**1.5.2.13**	**Regression Test Cases**	**220 days**	**7/2/2018**	**5/3/2019**
2095	1.5.2.13.1	Develop Regression Test Cases	210 days	7/2/2018	4/19/2019
2096	1.5.2.13.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2097	1.5.2.13.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2098	1.5.2.13.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2099	**1.5.2.14**	**Regression Test Results**	**65 days**	**5/6/2019**	**8/2/2019**
2100	1.5.2.14.1	Develop Regression Test Results	45 days	5/6/2019	7/5/2019
2101	1.5.2.14.2	Interim draft deliverable submission	25 days	6/17/2019	7/19/2019
2102	1.5.2.14.3	Submit deliverable for review	0 days	7/19/2019	7/19/2019
2103	1.5.2.14.4	Receive deliverable client approval	10 days	7/22/2019	8/2/2019
2104	**1.5.2.15**	**Load/Stress Test Cases**	**220 days**	**7/2/2018**	**5/3/2019**
2105	1.5.2.15.1	Develop Load/Stress Test Cases	210 days	7/2/2018	4/19/2019
2106	1.5.2.15.2	Interim draft deliverable submission	0 days	4/1/2019	4/1/2019
2107	1.5.2.15.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2108	1.5.2.15.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2109	**1.5.2.16**	**Load/Stress Test Results**	**65 days**	**5/6/2019**	**8/2/2019**
2110	1.5.2.16.1	Develop Load/Stress Test Cases	45 days	5/6/2019	7/5/2019
2111	1.5.2.16.2	Interim draft deliverable submission	25 days	6/17/2019	7/19/2019
2112	1.5.2.16.3	Submit deliverable for review	0 days	7/19/2019	7/19/2019



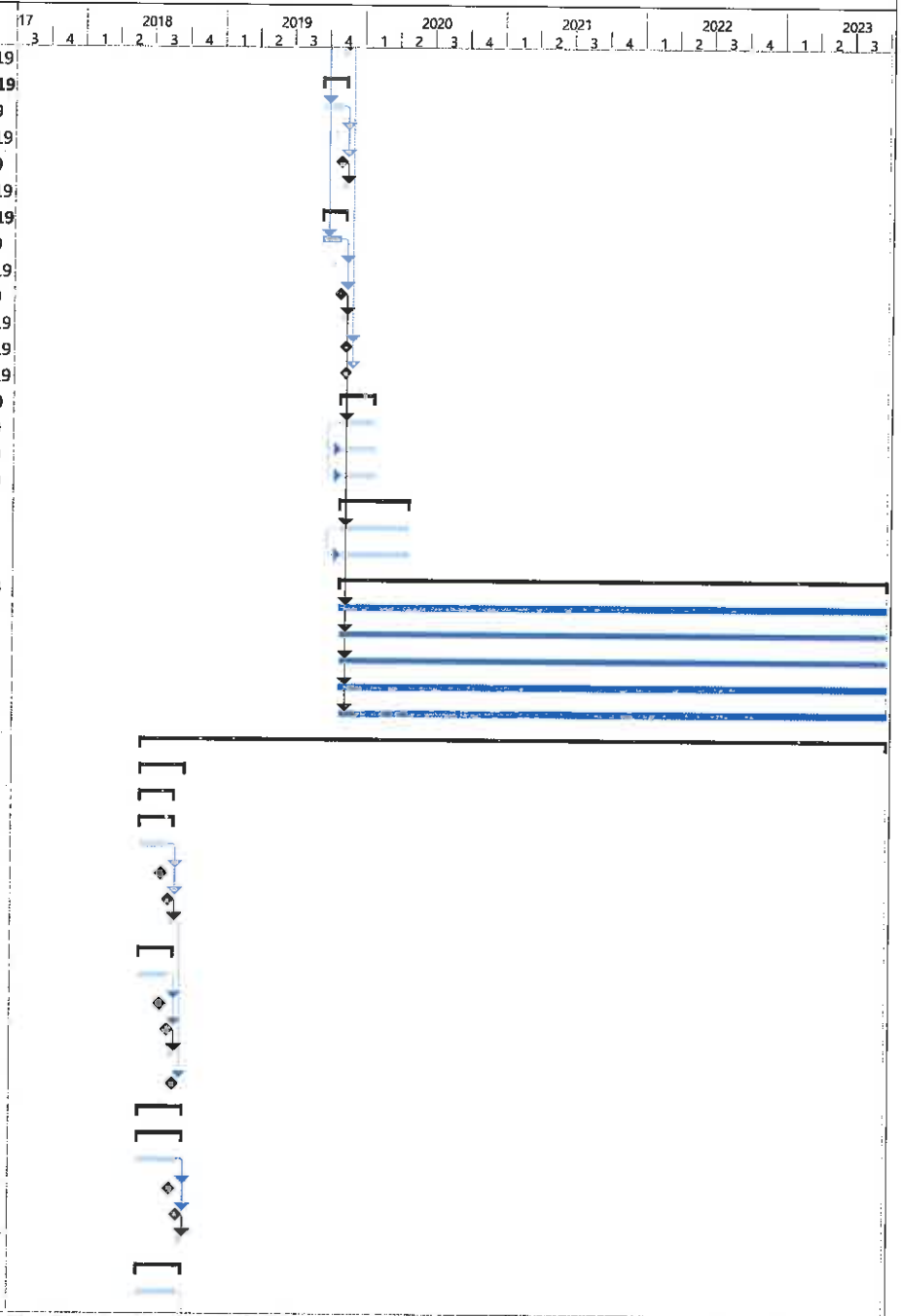
ID	WBS	Task Name	Duration	Start	Finish
2113	1.5.2.16.4	Receive deliverable client approval	10 days	7/22/2019	8/2/2019
2114	**1.5.2.17**	**Capacity Analysis Report**	**65 days**	**5/6/2019**	**8/2/2019**
2115	1.5.2.17.1	Develop Capacity Analysis Report	45 days	5/6/2019	7/5/2019
2116	1.5.2.17.2	Interim draft deliverable submission	25 days	6/17/2019	7/19/2019
2117	1.5.2.17.3	Submit deliverable for review	0 days	7/19/2019	7/19/2019
2118	1.5.2.17.4	Receive deliverable client approval	10 days	7/22/2019	8/2/2019
2119	1.5.2.18	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	8/2/2019	8/2/2019
2120	1.5.2.19	Update Business Continuity Plan	0 days	8/2/2019	8/2/2019
2121	1.5.2.20	Execute Disaster Recovery Test	0 days	8/2/2019	8/2/2019
2122	1.5.2.21	Overall completion of System Testing	0 days	8/2/2019	8/2/2019
2123	**1.5.2.22**	**User Acceptance Test Cases**	**30 days**	**8/5/2019**	**9/13/2019**
2124	1.5.2.22.1	Develop User Acceptance Test Cases	20 days	8/5/2019	8/30/2019
2125	1.5.2.22.2	Interim draft deliverable submission	0 days	8/12/2019	8/12/2019
2126	1.5.2.22.3	Submit deliverable for review	0 days	8/30/2019	8/30/2019
2127	1.5.2.22.4	Receive deliverable client approval	10 days	9/2/2019	9/13/2019
2128	**1.5.2.23**	**User Acceptance Test Results**	**35 days**	**9/16/2019**	**11/1/2019**
2129	1.5.2.23.1	Develop User Acceptance Test Results	35 days	9/16/2019	11/1/2019
2130	1.5.2.23.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2131	1.5.2.23.3	Submit deliverable for review	0 days	10/18/2019	10/18/2019
2132	1.5.2.23.4	Receive deliverable client approval	10 days	10/21/2019	11/1/2019
2133	1.5.2.24	Overall completion of Acceptance Testing	0 days	11/1/2019	11/1/2019
2134	**1.5.3**	**Implementation Readiness**	**45 days**	**9/16/2019**	**11/15/2019**
2135	**1.5.3.1**	**Operational Readiness Plan**	**45 days**	**9/16/2019**	**11/15/2019**
2136	1.5.3.1.1	Develop Operational Readiness Plan	35 days	9/16/2019	11/1/2019
2137	1.5.3.1.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2138	1.5.3.1.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2139	1.5.3.1.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2140	**1.5.3.2**	**Operational Readiness Test Scripts**	**45 days**	**9/16/2019**	**11/15/2019**
2141	1.5.3.2.1	Develop Operational Readiness Test Scripts	35 days	9/16/2019	11/1/2019
2142	1.5.3.2.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2143	1.5.3.2.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2144	1.5.3.2.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2145	**1.5.3.3**	**Operational Readiness Test Results**	**45 days**	**9/16/2019**	**11/15/2019**
2146	1.5.3.3.1	Develop Operational Readiness Test Results	35 days	9/16/2019	11/1/2019
2147	1.5.3.3.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2148	1.5.3.3.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2149	1.5.3.3.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2150	**1.5.3.4**	**Updated Training Management Plan**	**45 days**	**9/16/2019**	**11/15/2019**
2151	1.5.3.4.1	Develop Updated Training Management Plan	35 days	9/16/2019	11/1/2019
2152	1.5.3.4.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2153	1.5.3.4.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2154	1.5.3.4.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2155	**1.5.3.5**	**Training Schedule**	**45 days**	**9/16/2019**	**11/15/2019**
2156	1.5.3.5.1	Develop Training Schedule	35 days	9/16/2019	11/1/2019
2157	1.5.3.5.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2158	1.5.3.5.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2159	1.5.3.5.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2160	**1.5.3.6**	**Training Materials**	**45 days**	**9/16/2019**	**11/15/2019**



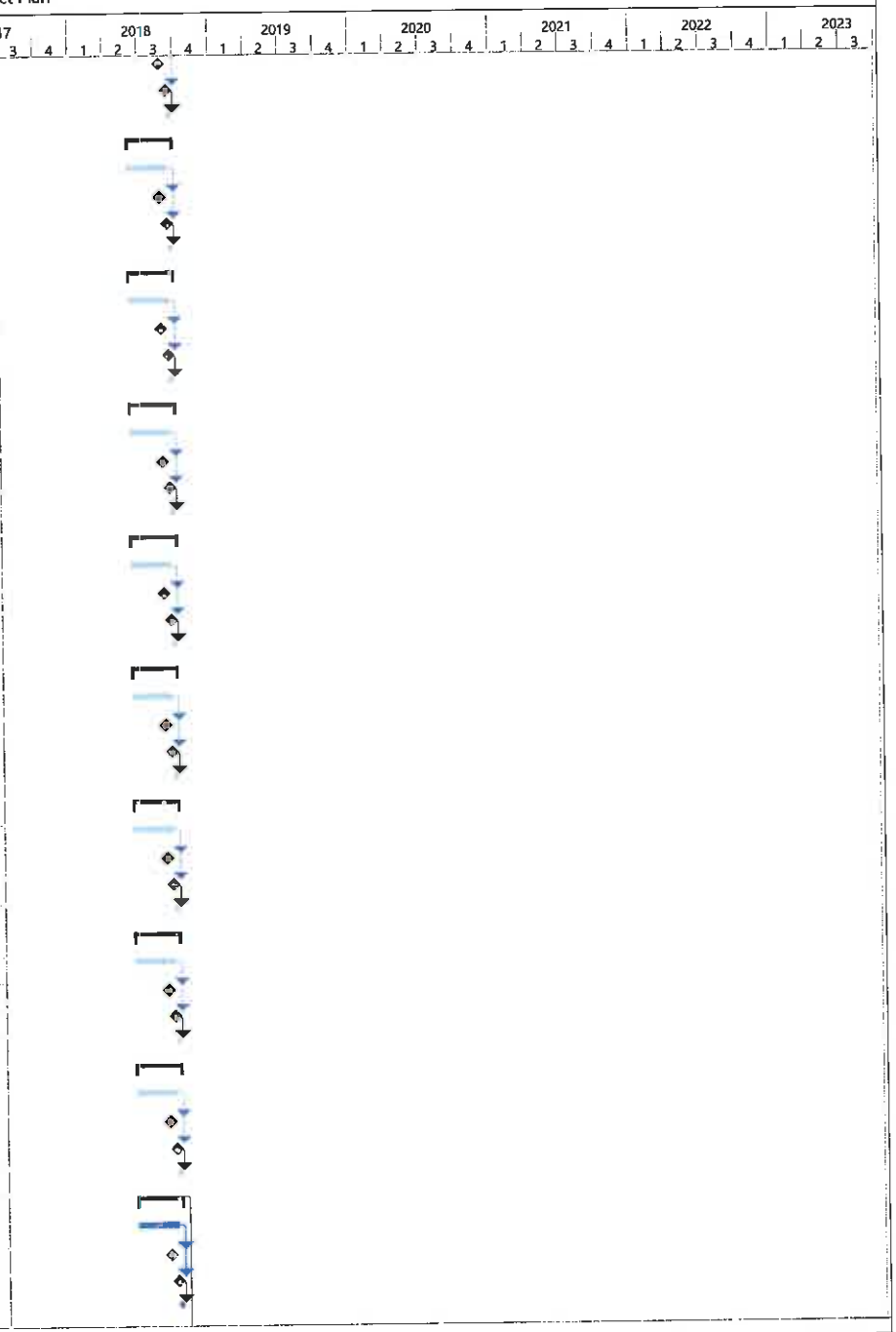
ID	WBS	Task Name	Duration	Start	Finish
2161	1.5.3.6.1	Develop Training Materials	35 days	9/16/2019	11/1/2019
2162	1.5.3.6.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2163	1.5.3.6.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2164	1.5.3.6.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2165	**1.5.3.7**	**Training Report**	**45 days**	**9/16/2019**	**11/15/2019**
2166	1.5.3.7.1	Develop Training Report	35 days	9/16/2019	11/1/2019
2167	1.5.3.7.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2168	1.5.3.7.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2169	1.5.3.7.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2170	**1.5.3.8**	**Implementation Plan**	**45 days**	**9/16/2019**	**11/15/2019**
2171	1.5.3.8.1	Develop Implementation Plan	35 days	9/16/2019	11/1/2019
2172	1.5.3.8.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2173	1.5.3.8.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2174	1.5.3.8.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2175	**1.5.3.9**	**Cut-Over Play Book**	**45 days**	**9/16/2019**	**11/15/2019**
2176	1.5.3.9.1	Develop Cut-Over Play Book	35 days	9/16/2019	11/1/2019
2177	1.5.3.9.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2178	1.5.3.9.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2179	1.5.3.9.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2180	**1.5.3.10**	**Report Distribution Schedule**	**45 days**	**9/16/2019**	**11/15/2019**
2181	1.5.3.10.1	Develop Report Distribution Schedule	35 days	9/16/2019	11/1/2019
2182	1.5.3.10.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2183	1.5.3.10.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2184	1.5.3.10.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2185	**1.5.3.11**	**Operations Project Management Plans**	**45 days**	**9/16/2019**	**11/15/2019**
2186	1.5.3.11.1	Develop Operations Project Management Plans	35 days	9/16/2019	11/1/2019
2187	1.5.3.11.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2188	1.5.3.11.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2189	1.5.3.11.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2190	**1.5.3.12**	**Solution health Monitoring Plan**	**45 days**	**9/16/2019**	**11/15/2019**
2191	1.5.3.12.1	Develop Solution health Monitoring Plan	35 days	9/16/2019	11/1/2019
2192	1.5.3.12.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2193	1.5.3.12.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2194	1.5.3.12.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2195	**1.5.3.13**	**Federal Certification and Review Management Plan**	**45 days**	**9/16/2019**	**11/15/2019**
2196	1.5.3.13.1	Develop Federal Certification and Review Management Plan	35 days	9/16/2019	11/1/2019
2197	1.5.3.13.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2198	1.5.3.13.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2199	1.5.3.13.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2200	**1.5.3.14**	**ACF Certification Documentation**	**45 days**	**9/16/2019**	**11/15/2019**
2201	1.5.3.14.1	Obtain ACF Certification Documentation	35 days	9/16/2019	11/1/2019
2202	1.5.3.14.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2203	1.5.3.14.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2204	1.5.3.14.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2205	**1.5.3.15**	**Federal Review Supporting Documentation**	**45 days**	**9/16/2019**	**11/15/2019**
2206	1.5.3.15.1	Obtain Federal Review Supporting Documentation	35 days	9/16/2019	11/1/2019
2207	1.5.3.15.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2208	1.5.3.15.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019



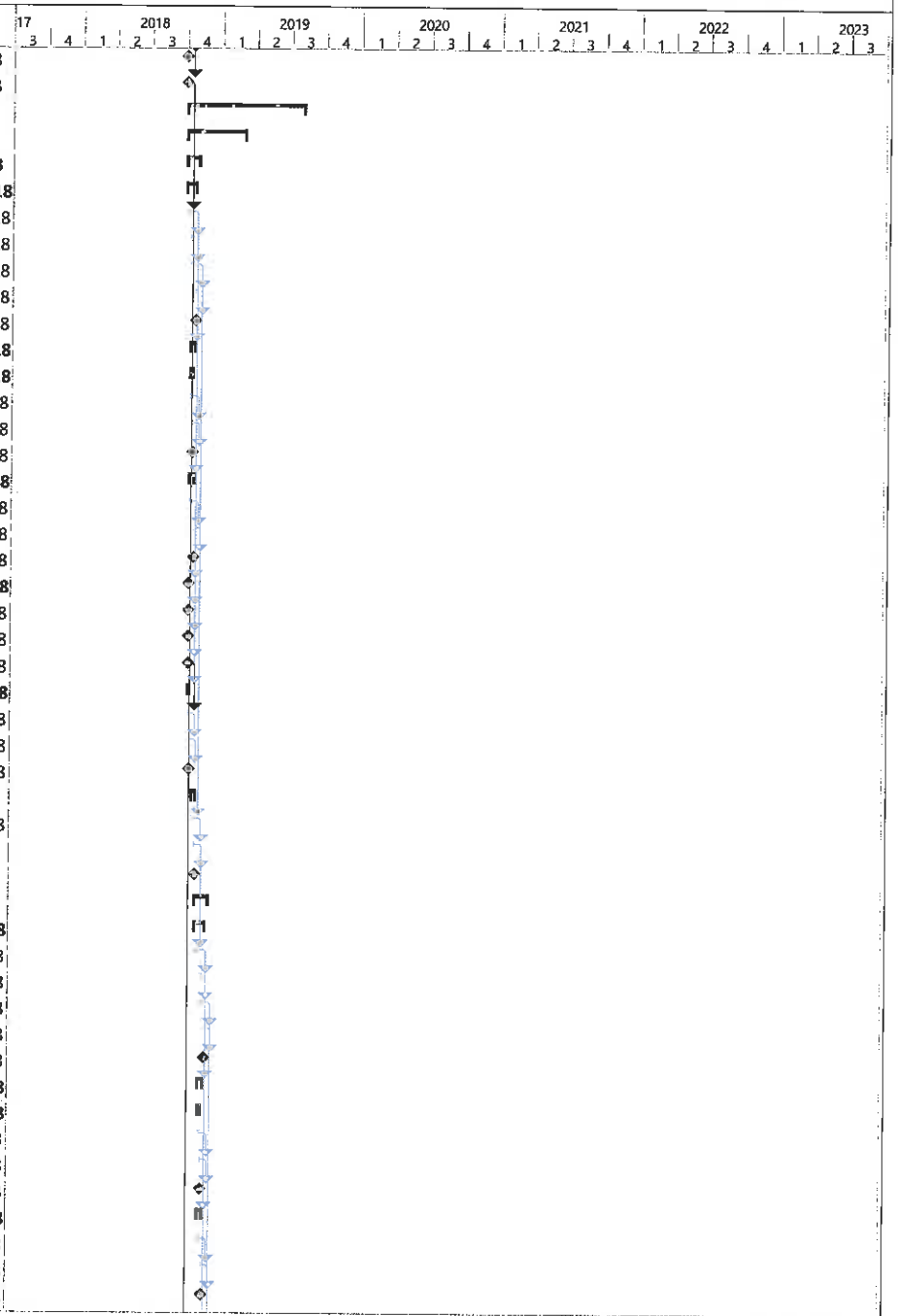
ID	WBS	Task Name	Duration	Start	Finish
2209	1.5.3.15.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2210	**1.5.3.16**	**Social Security Administration Certification Documentation**	**45 days**	**9/16/2019**	**11/15/2019**
2211	1.5.3.16.1	Obtain Social Security Administration Certification Document	35 days	9/16/2019	11/1/2019
2212	1.5.3.16.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2213	1.5.3.16.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2214	1.5.3.16.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2215	**1.5.3.17**	**Implementation Certification Letter**	**45 days**	**9/16/2019**	**11/15/2019**
2216	1.5.3.17.1	Obtain Implementation Certification Letter	35 days	9/16/2019	11/1/2019
2217	1.5.3.17.2	Interim draft deliverable submission	5 days	10/14/2019	10/18/2019
2218	1.5.3.17.3	Submit deliverable for review	0 days	11/1/2019	11/1/2019
2219	1.5.3.17.4	Receive deliverable client approval	10 days	11/4/2019	11/15/2019
2220	1.5.3.18	Overall completion of Implementation Readiness	0 days	11/15/2019	11/15/2019
2221	1.5.3.19	Overall completion of deployment to production	0 days	11/15/2019	11/15/2019
2222	**1.5.4**	**Pilot**	**65 days**	**11/4/2019**	**1/31/2020**
2223	1.5.4.1	Support Pilot rollout	65 days	11/4/2019	1/31/2020
2224	1.5.4.2	Develop Statewide rollout strategy	65 days	11/4/2019	1/31/2020
2225	1.5.4.3	Defect resolution support for Pilot county/counties	65 days	11/4/2019	1/31/2020
2226	**1.5.5**	**Warranty**	**130 days**	**11/4/2019**	**5/1/2020**
2227	1.5.5.1	Support Warranty activities	130 days	11/4/2019	5/1/2020
2228	1.5.5.2	Defect resolution support	130 days	11/4/2019	5/1/2020
2229	**1.5.6**	**Ongoing Maintenance and Operations**	**1020 days**	**11/4/2019**	**9/29/2023**
2230	1.5.6.1	Ongoing Maintenance and Operations	1020 days	11/4/2019	9/29/2023
2231	1.5.6.2	Defect resolution support	1020 days	11/4/2019	9/29/2023
2232	1.5.6.3	Quarterly Maintenance Software upgrades	1020 days	11/4/2019	9/29/2023
2233	1.5.6.4	Incident Management Support	1020 days	11/4/2019	9/29/2023
2234	1.5.6.5	Ongoing Operations Support	1020 days	11/4/2019	9/29/2023
2235	**1.6**	**FACTS Child Welfare - Technology Platform and Business Applicatio**	**1390 days**	**6/4/2018**	**9/29/2023**
2236	**1.6.1**	**Discovery**	**85 days**	**6/4/2018**	**9/28/2018**
2237	**1.6.1.1**	**Requirements Validations**	**65 days**	**6/4/2018**	**8/31/2018**
2238	**1.6.1.1.1**	**Requirements Traceability Matrix (RTM)**	**65 days**	**6/4/2018**	**8/31/2018**
2239	1.6.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	55 days	6/4/2018	8/17/2018
2240	1.6.1.1.1.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
2241	1.6.1.1.1.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
2242	1.6.1.1.1.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
2243	**1.6.1.1.2**	**Requirements Specification Document (RSD)**	**65 days**	**6/4/2018**	**8/31/2018**
2244	1.6.1.1.2.1	Develop Requirements Specification Document (RSD)	55 days	6/4/2018	8/17/2018
2245	1.6.1.1.2.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
2246	1.6.1.1.2.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
2247	1.6.1.1.2.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
2248	1.6.1.1.3	Overall completion of Requirements Validation	0 days	8/31/2018	8/31/2018
2249	**1.6.1.2**	**Design**	**85 days**	**6/4/2018**	**9/28/2018**
2250	**1.6.1.2.1**	**Requirements Gap Analysis Document**	**85 days**	**6/4/2018**	**9/28/2018**
2251	1.6.1.2.1.1	Develop Requirements Gap Analysis Document	75 days	6/4/2018	9/14/2018
2252	1.6.1.2.1.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2253	1.6.1.2.1.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2254	1.6.1.2.1.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2255	**1.6.1.2.2**	**Business Process Models**	**85 days**	**6/4/2018**	**9/28/2018**
2256	1.6.1.2.2.1	Develop Business Process Models	75 days	6/4/2018	9/14/2018



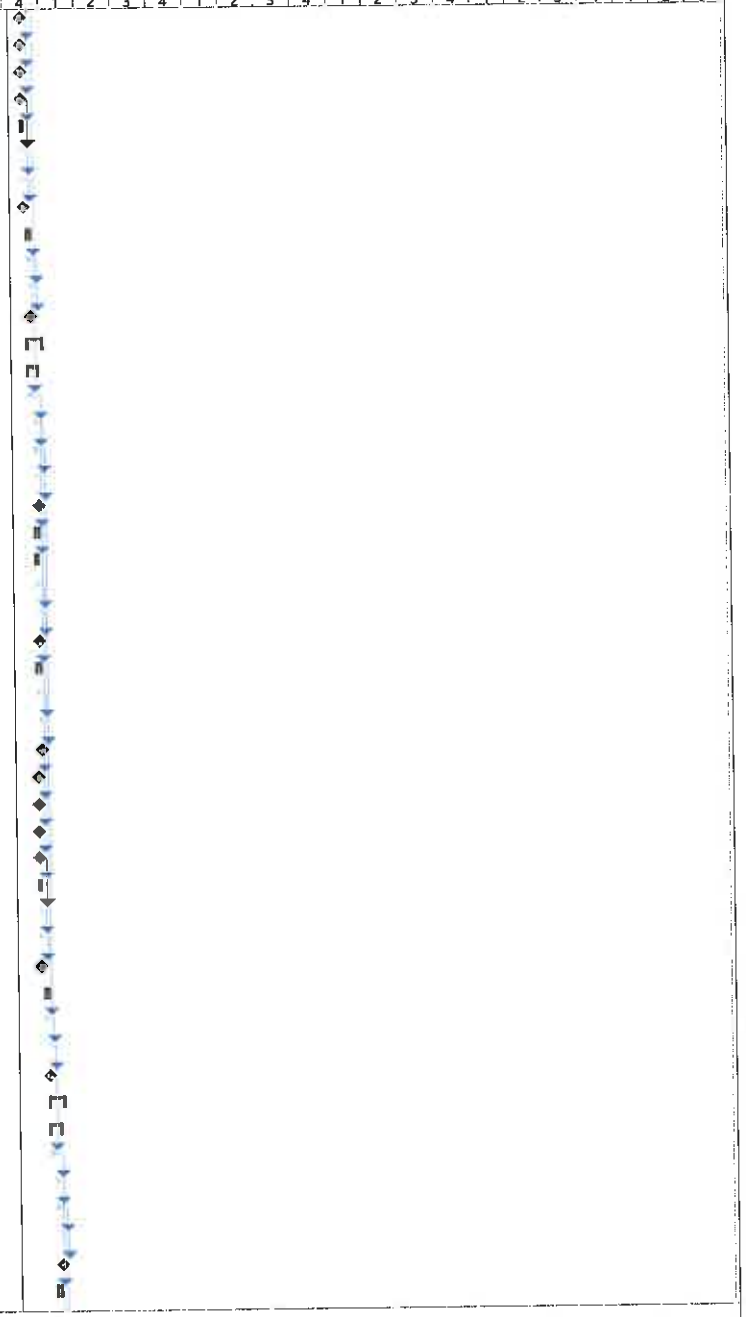
ID	WBS	Task Name	Duration	Start	Finish
2257	1.6.1.2.2.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2258	1.6.1.2.2.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2259	1.6.1.2.2.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2260	**1.6.1.2.3**	**Detailed System Design (DSD) Document**	**85 days**	**6/4/2018**	**9/28/2018**
2261	1.6.1.2.3.1	Develop Detailed System Design (DSD) Document	75 days	6/4/2018	9/14/2018
2262	1.6.1.2.3.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2263	1.6.1.2.3.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2264	1.6.1.2.3.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2265	**1.6.1.2.4**	**Data Dictionary**	**85 days**	**6/4/2018**	**9/28/2018**
2266	1.6.1.2.4.1	Develop Data Dictionary	75 days	6/4/2018	9/14/2018
2267	1.6.1.2.4.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2268	1.6.1.2.4.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2269	1.6.1.2.4.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2270	**1.6.1.2.5**	**Data Models**	**85 days**	**6/4/2018**	**9/28/2018**
2271	1.6.1.2.5.1	Develop Data Models	75 days	6/4/2018	9/14/2018
2272	1.6.1.2.5.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2273	1.6.1.2.5.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2274	1.6.1.2.5.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2275	**1.6.1.2.6**	**Reports Inventory**	**85 days**	**6/4/2018**	**9/28/2018**
2276	1.6.1.2.6.1	Develop Reports Inventory	75 days	6/4/2018	9/14/2018
2277	1.6.1.2.6.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2278	1.6.1.2.6.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2279	1.6.1.2.6.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2280	**1.6.1.2.7**	**Correspondence Inventory**	**85 days**	**6/4/2018**	**9/28/2018**
2281	1.6.1.2.7.1	Develop Correspondence Inventory	75 days	6/4/2018	9/14/2018
2282	1.6.1.2.7.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2283	1.6.1.2.7.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2284	1.6.1.2.7.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2285	**1.6.1.2.8**	**Forms Inventory**	**85 days**	**6/4/2018**	**9/28/2018**
2286	1.6.1.2.8.1	Develop Forms Inventory	75 days	6/4/2018	9/14/2018
2287	1.6.1.2.8.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2288	1.6.1.2.8.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2289	1.6.1.2.8.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2290	**1.6.1.2.9**	**Interface Inventory**	**85 days**	**6/4/2018**	**9/28/2018**
2291	1.6.1.2.9.1	Develop Interface Inventory	75 days	6/4/2018	9/14/2018
2292	1.6.1.2.9.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2293	1.6.1.2.9.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2294	1.6.1.2.9.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2295	**1.6.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**85 days**	**6/4/2018**	**9/28/2018**
2296	1.6.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	75 days	6/4/2018	9/14/2018
2297	1.6.1.2.10.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2298	1.6.1.2.10.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2299	1.6.1.2.10.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018
2300	**1.6.1.2.11**	**Data Cleansing and Conversion Specification Document**	**85 days**	**6/4/2018**	**9/28/2018**
2301	1.6.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	75 days	6/4/2018	9/14/2018
2302	1.6.1.2.11.2	Interim draft deliverable submission	0 days	8/27/2018	8/27/2018
2303	1.6.1.2.11.3	Submit deliverable for review	0 days	9/14/2018	9/14/2018
2304	1.6.1.2.11.4	Receive deliverable client approval	10 days	9/17/2018	9/28/2018



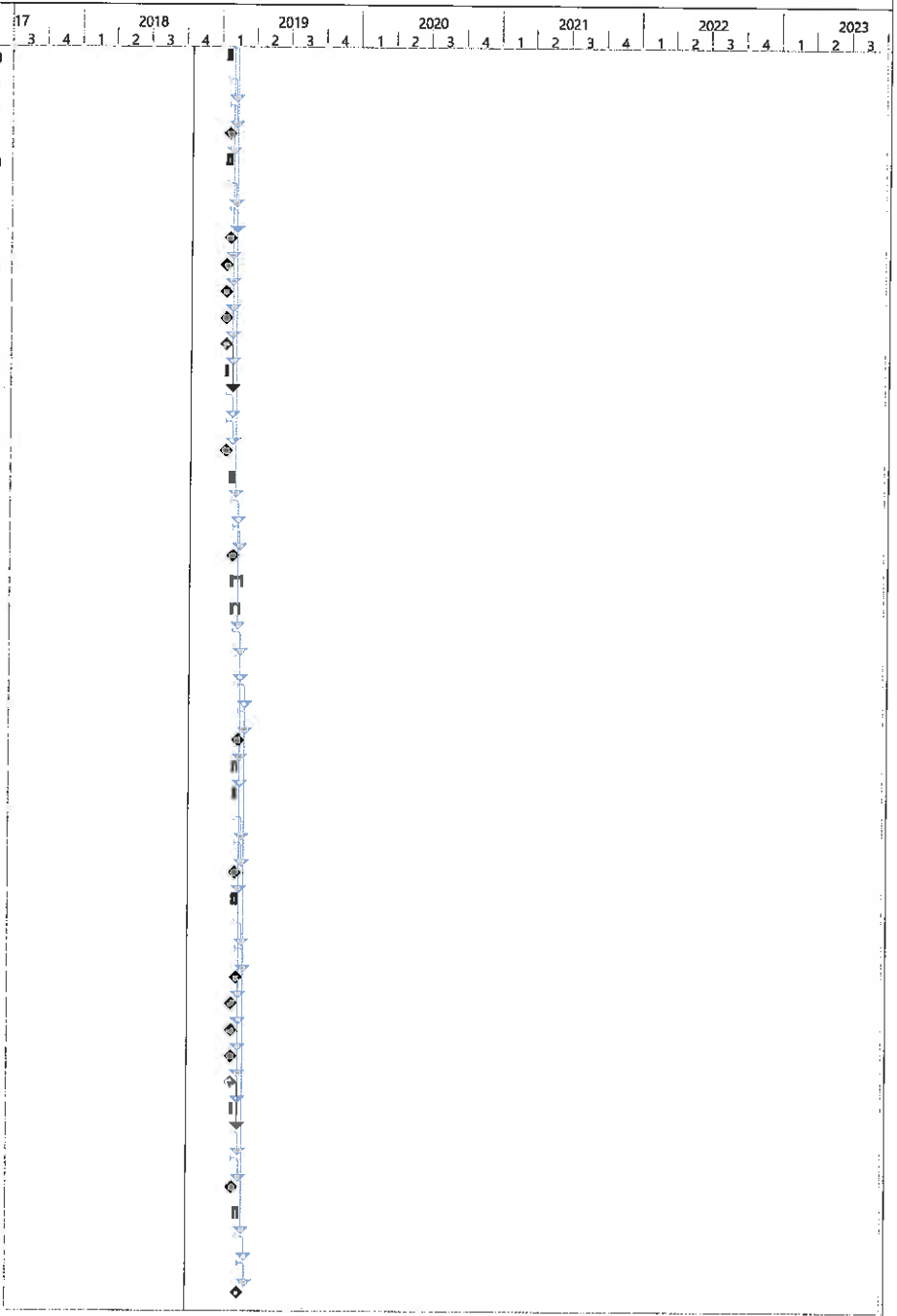
ID	WBS	Task Name	Duration	Start	Finish
2305	1.6.1.2.12	Overall completion of Data Conversion Design	0 days	9/28/2018	9/28/2018
2306	1.6.1.2.13	Overall completion of Design Phase	0 days	9/28/2018	9/28/2018
2307	**1.6.2**	**Development, Configuration and Testing**	**220 days**	**10/1/2018**	**8/2/2019**
2308	**1.6.2.1**	**Sprint Development**	**110 days**	**10/1/2018**	**3/1/2019**
2309	**1.6.2.1.1**	**Sprint 1**	**24 days**	**10/1/2018**	**11/1/2018**
2310	**1.6.2.1.1.1**	**Sprint Execution**	**18 days**	**10/1/2018**	**10/24/2018**
2311	1.6.2.1.1.1.1	Build	9 days	10/1/2018	10/11/2018
2312	1.6.2.1.1.1.2	Write UAT Tests	5 days	10/12/2018	10/18/2018
2313	1.6.2.1.1.1.3	System Testing& Defect Remediation	8 days	10/12/2018	10/23/2018
2314	1.6.2.1.1.1.4	Review	1 day	10/24/2018	10/24/2018
2315	1.6.2.1.1.1.5	Retrospective/Backlog Refinement	0 days	10/24/2018	10/24/2018
2316	**1.6.2.1.1.2**	**Sprint OWPs**	**8 days**	**10/11/2018**	**10/23/2018**
2317	**1.6.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**10/12/2018**	**10/18/2018**
2318	1.6.2.1.1.2.1	Submission	4 days	10/12/2018	10/17/2018
2319	1.6.2.1.1.2.1	DHHR Review	1 day	10/18/2018	10/18/2018
2320	1.6.2.1.1.2.1	DHHR Signoff	0 days	10/18/2018	10/18/2018
2321	**1.6.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**10/12/2018**	**10/23/2018**
2322	1.6.2.1.1.2.2	Submission	5 days	10/12/2018	10/18/2018
2323	1.6.2.1.1.2.2	DHHR Review	3 days	10/19/2018	10/23/2018
2324	1.6.2.1.1.2.2	DHHR Signoff	0 days	10/23/2018	10/23/2018
2325	**1.6.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**10/11/2018**	**10/11/2018**
2326	1.6.2.1.1.2.3	Unit Test Results	0 days	10/11/2018	10/11/2018
2327	1.6.2.1.1.2.3	String / System Test Results	0 days	10/11/2018	10/11/2018
2328	1.6.2.1.1.2.3	Integration and Regression Test Scripts	0 days	10/11/2018	10/11/2018
2329	**1.6.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**10/12/2018**	**10/15/2018**
2330	1.6.2.1.1.2.4	Developed Components	1 day	10/12/2018	10/12/2018
2331	1.6.2.1.1.2.4	Sprint Review	1 day	10/15/2018	10/15/2018
2332	1.6.2.1.1.2.4	Sprint Retrospective	0 days	10/15/2018	10/15/2018
2333	**1.6.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**10/24/2018**	**11/1/2018**
2334	1.6.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	10/24/2018	10/30/2018
2335	1.6.2.1.1.3.2	DHHR Code Review	2 days	10/31/2018	11/1/2018
2336	1.6.2.1.1.3.3	Sprint Acceptance	0 days	11/1/2018	11/1/2018
2337	**1.6.2.1.2**	**Sprint 2**	**25 days**	**11/2/2018**	**12/6/2018**
2338	**1.6.2.1.2.1**	**Sprint Execution**	**19 days**	**11/2/2018**	**11/28/2018**
2339	1.6.2.1.2.1.1	Build	10 days	11/2/2018	11/15/2018
2340	1.6.2.1.2.1.2	Write UAT Tests	5 days	11/16/2018	11/22/2018
2341	1.6.2.1.2.1.3	System Testing&Defect Remediation	8 days	11/16/2018	11/27/2018
2342	1.6.2.1.2.1.4	Review	1 day	11/28/2018	11/28/2018
2343	1.6.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	11/28/2018	11/28/2018
2344	**1.6.2.1.2.2**	**Sprint OWPs**	**8 days**	**11/15/2018**	**11/27/2018**
2345	**1.6.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**11/16/2018**	**11/22/2018**
2346	1.6.2.1.2.2.1	Submission	4 days	11/16/2018	11/21/2018
2347	1.6.2.1.2.2.1	DHHR Review	1 day	11/22/2018	11/22/2018
2348	1.6.2.1.2.2.1	DHHR Signoff	0 days	11/22/2018	11/22/2018
2349	**1.6.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**11/16/2018**	**11/27/2018**
2350	1.6.2.1.2.2.2	Submission	5 days	11/16/2018	11/22/2018
2351	1.6.2.1.2.2.2	DHHR Review	3 days	11/23/2018	11/27/2018
2352	1.6.2.1.2.2.2	DHHR Signoff	0 days	11/27/2018	11/27/2018



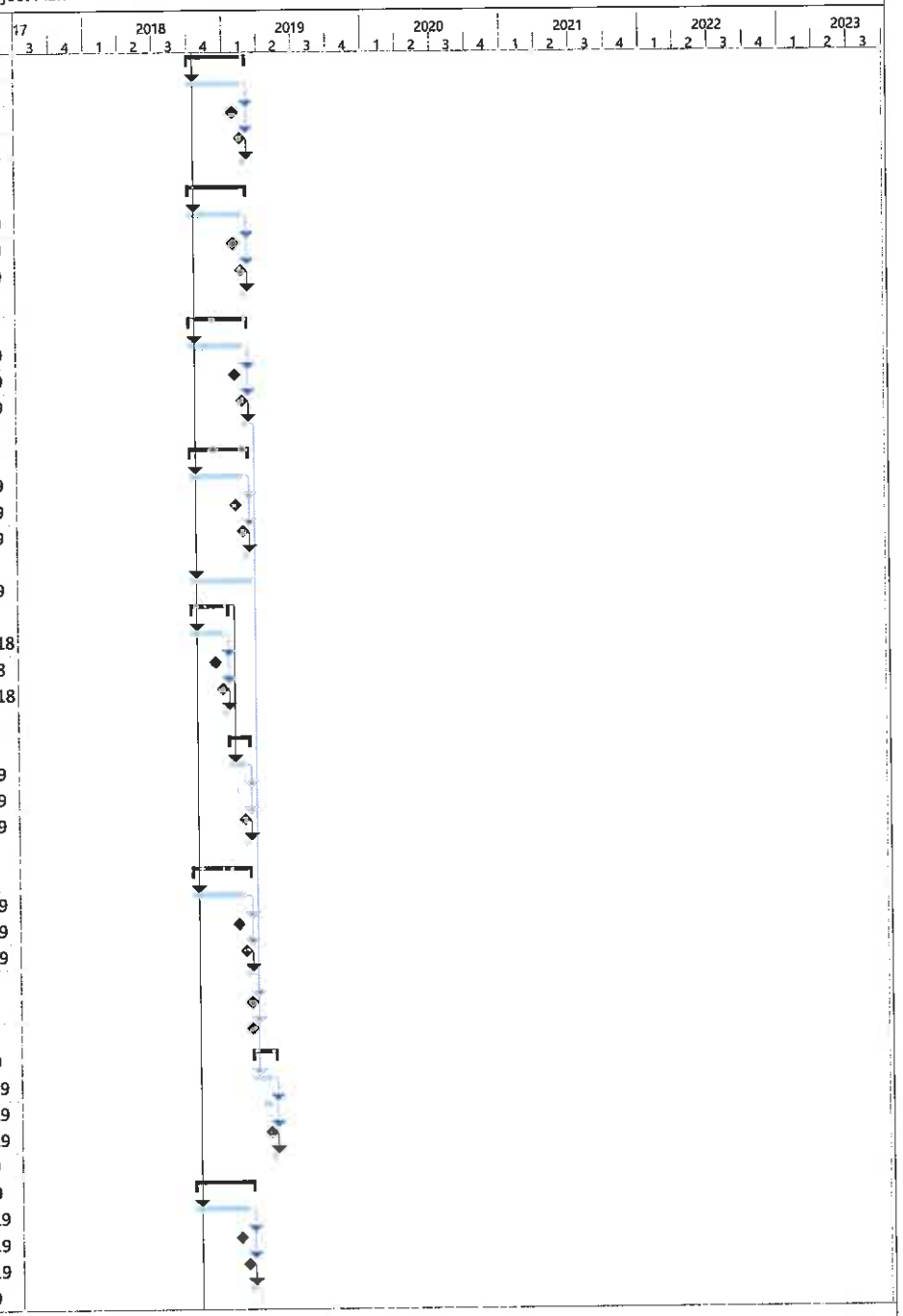
ID	WBS	Task Name	Duration	Start	Finish
2353	**1.6.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**11/15/2018**	**11/15/2018**
2354	1.6.2.1.2.2.3	Unit Test Results	0 days	11/15/2018	11/15/2018
2355	1.6.2.1.2.2.3	String / System Test Results	0 days	11/15/2018	11/15/2018
2356	1.6.2.1.2.2.3	Integration and Regression Test Scripts	0 days	11/15/2018	11/15/2018
2357	**1.6.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**11/16/2018**	**11/19/2018**
2358	1.6.2.1.2.2.4	Developed Components	1 day	11/16/2018	11/16/2018
2359	1.6.2.1.2.2.4	Sprint Review	1 day	11/19/2018	11/19/2018
2360	1.6.2.1.2.2.4	Sprint Retrospective	0 days	11/19/2018	11/19/2018
2361	**1.6.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**11/28/2018**	**12/6/2018**
2362	1.6.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	11/28/2018	12/4/2018
2363	1.6.2.1.2.3.2	DHHR Code Review	2 days	12/5/2018	12/6/2018
2364	1.6.2.1.2.3.3	Sprint Acceptance	0 days	12/6/2018	12/6/2018
2365	**1.6.2.1.3**	**Sprint 3**	**25 days**	**11/28/2018**	**1/1/2019**
2366	**1.6.2.1.3.1**	**Sprint Execution**	**18 days**	**11/28/2018**	**12/21/2018**
2367	1.6.2.1.3.1.1	Build	10 days	11/28/2018	12/11/2018
2368	1.6.2.1.3.1.2	Write UAT Tests	5 days	12/12/2018	12/18/2018
2369	1.6.2.1.3.1.3	System Testing&Defect Remediation	8 days	12/12/2018	12/21/2018
2370	1.6.2.1.3.1.4	Review	1 day	12/19/2018	12/19/2018
2371	1.6.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	12/21/2018	12/21/2018
2372	**1.6.2.1.3.2**	**Sprint OWPs**	**8 days**	**12/11/2018**	**12/21/2018**
2373	**1.6.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**12/12/2018**	**12/18/2018**
2374	1.6.2.1.3.2.1	Submission	4 days	12/12/2018	12/17/2018
2375	1.6.2.1.3.2.1	DHHR Review	1 day	12/18/2018	12/18/2018
2376	1.6.2.1.3.2.1	DHHR Signoff	0 days	12/18/2018	12/18/2018
2377	**1.6.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**12/12/2018**	**12/21/2018**
2378	1.6.2.1.3.2.2	Submission	5 days	12/12/2018	12/18/2018
2379	1.6.2.1.3.2.2	DHHR Review	3 days	12/19/2018	12/21/2018
2380	1.6.2.1.3.2.2	DHHR Signoff	0 days	12/21/2018	12/21/2018
2381	**1.6.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**12/11/2018**	**12/11/2018**
2382	1.6.2.1.3.2.3	Unit Test Results	0 days	12/11/2018	12/11/2018
2383	1.6.2.1.3.2.3	String / System Test Results	0 days	12/11/2018	12/11/2018
2384	1.6.2.1.3.2.3	Integration and Regression Test Scripts	0 days	12/11/2018	12/11/2018
2385	**1.6.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**12/12/2018**	**12/13/2018**
2386	1.6.2.1.3.2.4	Developed Components	1 day	12/12/2018	12/12/2018
2387	1.6.2.1.3.2.4	Sprint Review	1 day	12/13/2018	12/13/2018
2388	1.6.2.1.3.2.4	Sprint Retrospective	0 days	12/13/2018	12/13/2018
2389	**1.6.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**12/24/2018**	**1/1/2019**
2390	1.6.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	12/24/2018	12/28/2018
2391	1.6.2.1.3.3.2	DHHR Code Review	2 days	12/31/2018	1/1/2019
2392	1.6.2.1.3.3.3	Sprint Acceptance	0 days	1/1/2019	1/1/2019
2393	**1.6.2.1.4**	**Sprint 4**	**25 days**	**1/2/2019**	**2/5/2019**
2394	**1.6.2.1.4.1**	**Sprint Execution**	**19 days**	**1/2/2019**	**1/28/2019**
2395	1.6.2.1.4.1.1	Build	10 days	1/2/2019	1/15/2019
2396	1.6.2.1.4.1.2	Write UAT Tests	5 days	1/16/2019	1/22/2019
2397	1.6.2.1.4.1.3	System Testing&Defect Remediation	8 days	1/16/2019	1/25/2019
2398	1.6.2.1.4.1.4	Review	1 day	1/28/2019	1/28/2019
2399	1.6.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	1/28/2019	1/28/2019
2400	**1.6.2.1.4.2**	**Sprint OWPs**	**8 days**	**1/15/2019**	**1/25/2019**



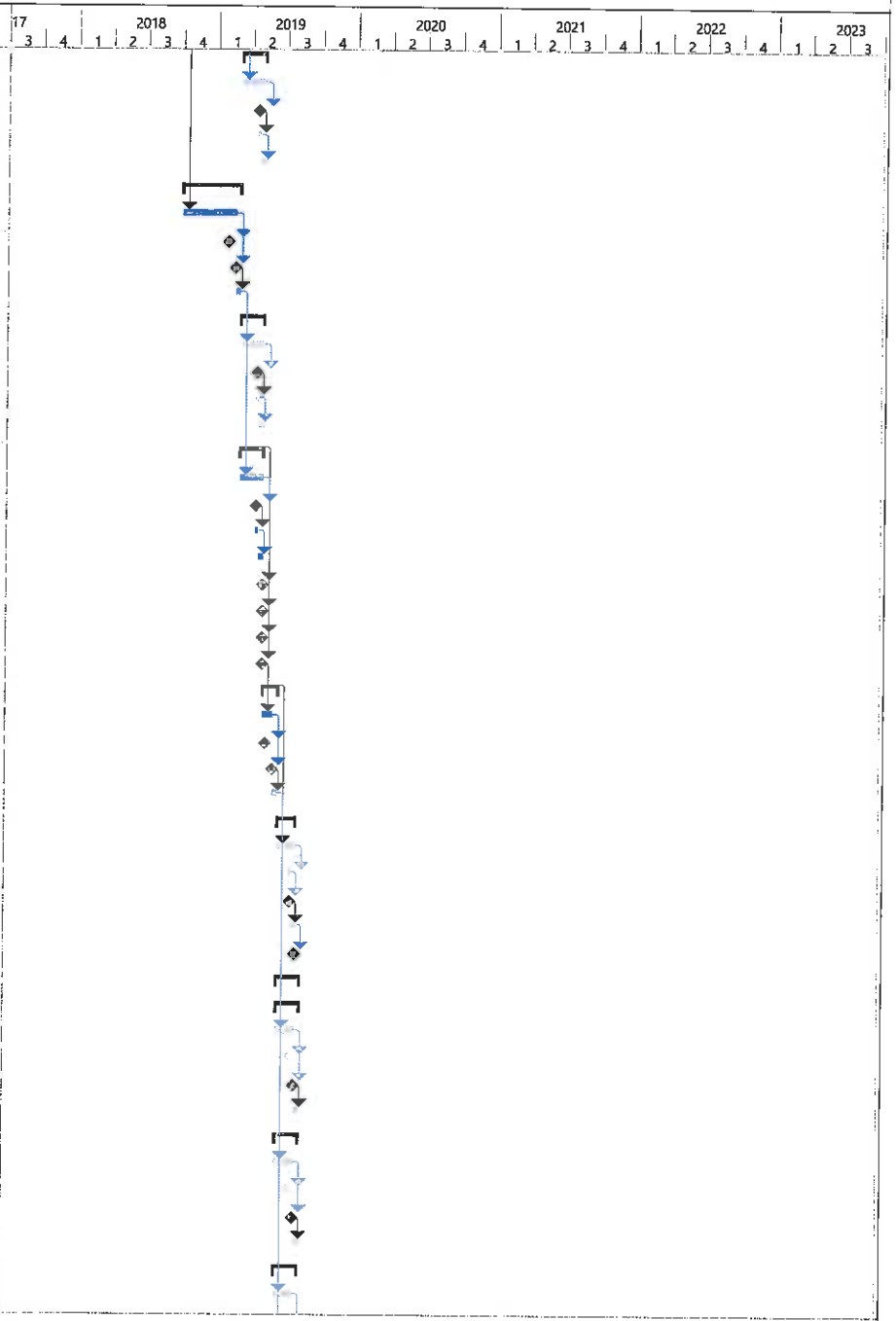
ID	WBS	Task Name	Duration	Start	Finish
2401	**1.6.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**1/16/2019**	**1/22/2019**
2402	1.6.2.1.4.2.1	Submission	4 days	1/16/2019	1/21/2019
2403	1.6.2.1.4.2.1	DHHR Review	1 day	1/22/2019	1/22/2019
2404	1.6.2.1.4.2.1	DHHR Signoff	0 days	1/22/2019	1/22/2019
2405	**1.6.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**1/16/2019**	**1/25/2019**
2406	1.6.2.1.4.2.2	Submission	5 days	1/16/2019	1/22/2019
2407	1.6.2.1.4.2.2	DHHR Review	3 days	1/23/2019	1/25/2019
2408	1.6.2.1.4.2.2	DHHR Signoff	0 days	1/25/2019	1/25/2019
2409	**1.6.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**1/15/2019**	**1/15/2019**
2410	1.6.2.1.4.2.3	Unit Test Results	0 days	1/15/2019	1/15/2019
2411	1.6.2.1.4.2.3	String / System Test Results	0 days	1/15/2019	1/15/2019
2412	1.6.2.1.4.2.3	Integration and Regression Test Scripts	0 days	1/15/2019	1/15/2019
2413	**1.6.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**1/16/2019**	**1/17/2019**
2414	1.6.2.1.4.2.4	Developed Components	1 day	1/16/2019	1/16/2019
2415	1.6.2.1.4.2.4	Sprint Review	1 day	1/17/2019	1/17/2019
2416	1.6.2.1.4.2.4	Sprint Retrospective	0 days	1/17/2019	1/17/2019
2417	**1.6.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**1/28/2019**	**2/5/2019**
2418	1.6.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	1/28/2019	2/1/2019
2419	1.6.2.1.4.3.2	DHHR Code Review	2 days	2/4/2019	2/5/2019
2420	1.6.2.1.4.3.3	Sprint Acceptance	0 days	2/5/2019	2/5/2019
2421	**1.6.2.1.5**	**Hardening Sprint**	**20 days**	**2/4/2019**	**3/1/2019**
2422	**1.6.2.1.5.1**	**Sprint Execution**	**14 days**	**2/4/2019**	**2/21/2019**
2423	1.6.2.1.5.1.1	Build	5 days	2/4/2019	2/8/2019
2424	1.6.2.1.5.1.2	Write UAT Tests	5 days	2/11/2019	2/15/2019
2425	1.6.2.1.5.1.3	System Testing&Defect Remediation	8 days	2/11/2019	2/20/2019
2426	1.6.2.1.5.1.4	Review	1 day	2/21/2019	2/21/2019
2427	1.6.2.1.5.1.5	Retrospective/Backlog Refinement	0 days	2/21/2019	2/21/2019
2428	**1.6.2.1.5.2**	**Sprint OWPs**	**8 days**	**2/8/2019**	**2/20/2019**
2429	**1.6.2.1.5.2.1**	**Create Sprint Backlog**	**5 days**	**2/11/2019**	**2/15/2019**
2430	1.6.2.1.5.2.1	Submission	4 days	2/11/2019	2/14/2019
2431	1.6.2.1.5.2.1	DHHR Review	1 day	2/15/2019	2/15/2019
2432	1.6.2.1.5.2.1	DHHR Signoff	0 days	2/15/2019	2/15/2019
2433	**1.6.2.1.5.2.2**	**Design Specification (Sprint Features)**	**8 days**	**2/11/2019**	**2/20/2019**
2434	1.6.2.1.5.2.2	Submission	5 days	2/11/2019	2/15/2019
2435	1.6.2.1.5.2.2	DHHR Review	3 days	2/18/2019	2/20/2019
2436	1.6.2.1.5.2.2	DHHR Signoff	0 days	2/20/2019	2/20/2019
2437	**1.6.2.1.5.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**2/8/2019**	**2/8/2019**
2438	1.6.2.1.5.2.3	Unit Test Results	0 days	2/8/2019	2/8/2019
2439	1.6.2.1.5.2.3	String / System Test Results	0 days	2/8/2019	2/8/2019
2440	1.6.2.1.5.2.3	Integration and Regression Test Scripts	0 days	2/8/2019	2/8/2019
2441	**1.6.2.1.5.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**2/11/2019**	**2/12/2019**
2442	1.6.2.1.5.2.4	Developed Components	1 day	2/11/2019	2/11/2019
2443	1.6.2.1.5.2.4	Sprint Review	1 day	2/12/2019	2/12/2019
2444	1.6.2.1.5.2.4	Sprint Retrospective	0 days	2/12/2019	2/12/2019
2445	**1.6.2.1.5.3**	**DHHR Sprint Acceptance**	**7 days**	**2/21/2019**	**3/1/2019**
2446	1.6.2.1.5.3.1	Perform DHHR Acceptance Tests	5 days	2/21/2019	2/27/2019
2447	1.6.2.1.5.3.2	DHHR Code Review	2 days	2/28/2019	3/1/2019
2448	1.6.2.1.5.3.3	Sprint Acceptance	0 days	3/1/2019	3/1/2019



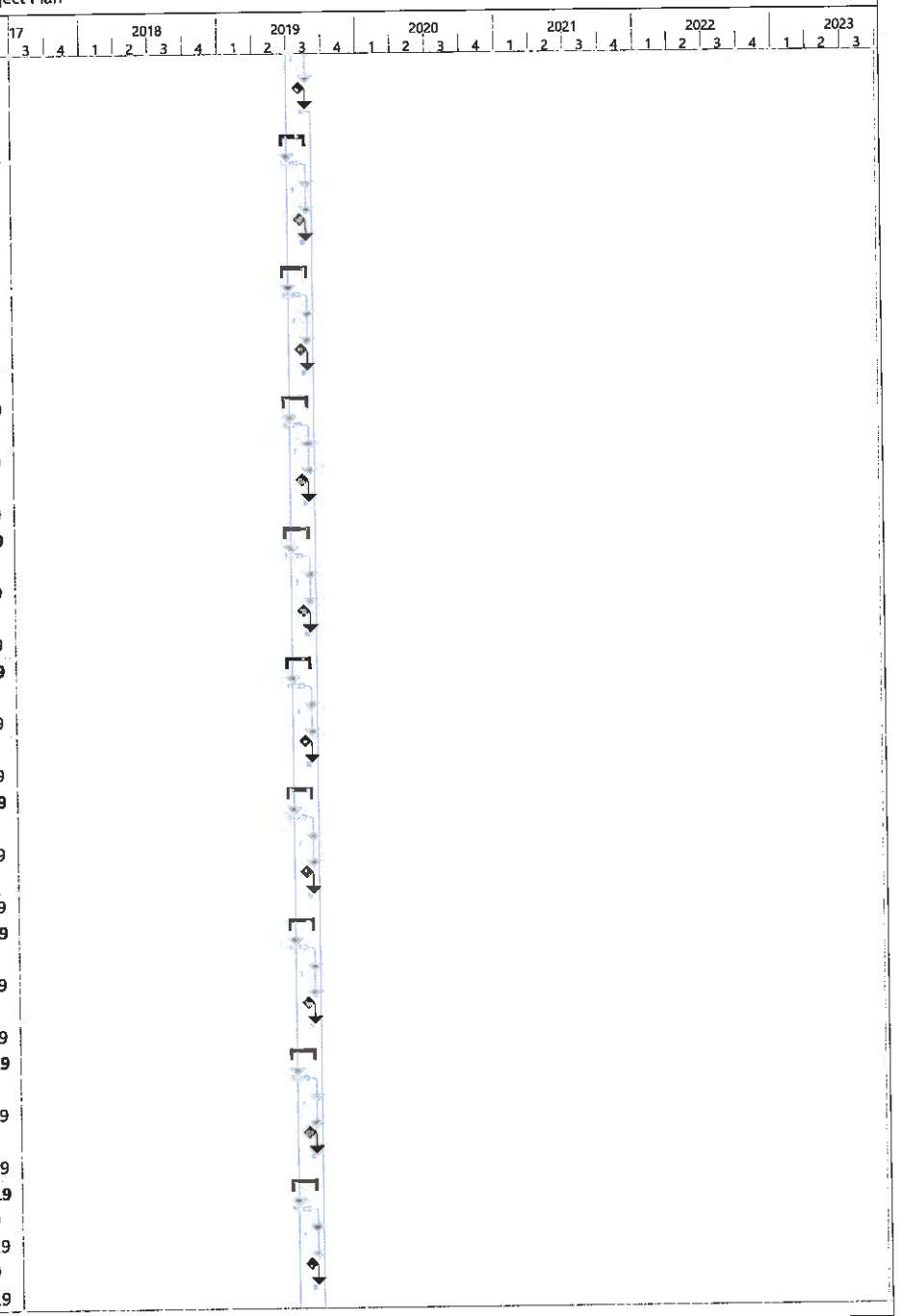
ID	WBS	Task Name	Duration	Start	Finish
2449	**1.6.2.2**	**System Documentation**	**110 days**	**10/1/2018**	**3/1/2019**
2450	1.6.2.2.1	Develop System Documentation	100 days	10/1/2018	2/15/2019
2451	1.6.2.2.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2452	1.6.2.2.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2453	1.6.2.2.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2454	**1.6.2.3**	**System Security Plan (SSP)**	**110 days**	**10/1/2018**	**3/1/2019**
2455	1.6.2.3.1	Develop System Security Plan (SSP)	100 days	10/1/2018	2/15/2019
2456	1.6.2.3.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2457	1.6.2.3.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2458	1.6.2.3.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2459	**1.6.2.4**	**Safeguard Procedures Report**	**110 days**	**10/1/2018**	**3/1/2019**
2460	1.6.2.4.1	Develop Safeguard Procedures Report	100 days	10/1/2018	2/15/2019
2461	1.6.2.4.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2462	1.6.2.4.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2463	1.6.2.4.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2464	**1.6.2.5**	**User Documentation**	**110 days**	**10/1/2018**	**3/1/2019**
2465	1.6.2.5.1	Develop User Documentation	100 days	10/1/2018	2/15/2019
2466	1.6.2.5.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2467	1.6.2.5.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2468	1.6.2.5.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2469	1.6.2.6	Execute Automated Data Migration process	120 days	10/1/2018	3/15/2019
2470	**1.6.2.7**	**Data Conversion System Integration Test Cases**	**70 days**	**10/1/2018**	**1/4/2019**
2471	1.6.2.7.1	Develop Data Conversion System Integration Test Cases	60 days	10/1/2018	12/21/2018
2472	1.6.2.7.2	Interim draft deliverable submission	0 days	12/3/2018	12/3/2018
2473	1.6.2.7.3	Submit deliverable for review	0 days	12/21/2018	12/21/2018
2474	1.6.2.7.4	Receive deliverable client approval	10 days	12/24/2018	1/4/2019
2475	**1.6.2.8**	**Data Conversion System Integration Test Results**	**40 days**	**1/7/2019**	**3/1/2019**
2476	1.6.2.8.1	Develop Data Conversion System Integration Test Results	30 days	1/7/2019	2/15/2019
2477	1.6.2.8.2	Interim draft deliverable submission	1 day	1/28/2019	1/28/2019
2478	1.6.2.8.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2479	1.6.2.8.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2480	**1.6.2.9**	**System Integration Test Cases**	**110 days**	**10/1/2018**	**3/1/2019**
2481	1.6.2.9.1	Develop System Integration Test Cases	100 days	10/1/2018	2/15/2019
2482	1.6.2.9.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2483	1.6.2.9.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2484	1.6.2.9.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2485	1.6.2.10	Completion of Data Conversion Trial Run in Test Environment	0 days	3/1/2019	3/1/2019
2486	1.6.2.11	Overall completion of Development and Configuration	0 days	3/1/2019	3/1/2019
2487	**1.6.2.12**	**System Integration Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2488	1.6.2.12.1	Develop System Integration Test Results	35 days	3/4/2019	4/19/2019
2489	1.6.2.12.2	Interim draft deliverable submission	15 days	4/1/2019	4/19/2019
2490	1.6.2.12.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2491	1.6.2.12.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2492	**1.6.2.13**	**Regression Test Cases**	**110 days**	**10/1/2018**	**3/1/2019**
2493	1.6.2.13.1	Develop Regression Test Cases	100 days	10/1/2018	2/15/2019
2494	1.6.2.13.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2495	1.6.2.13.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2496	1.6.2.13.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019



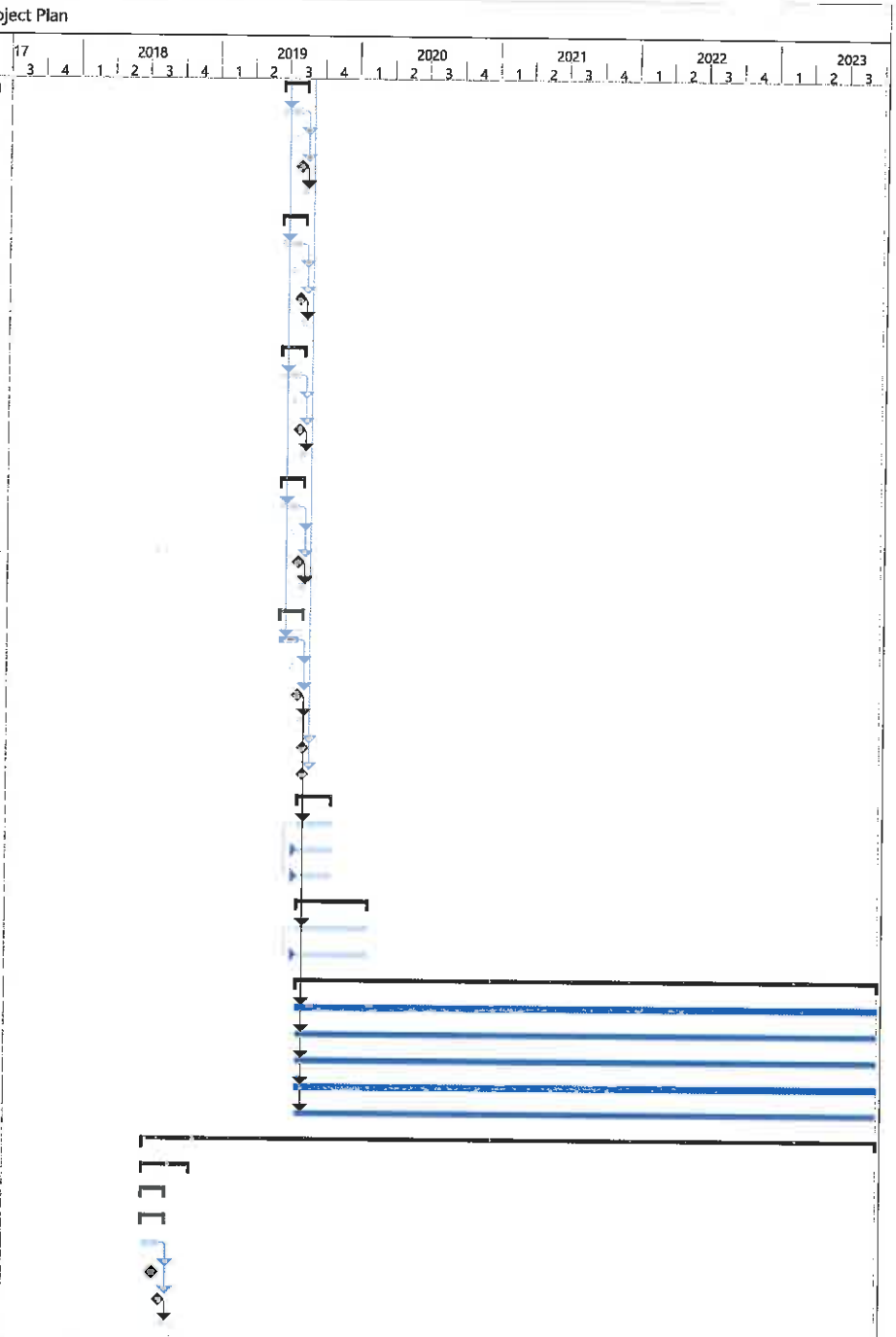
ID	WBS	Task Name	Duration	Start	Finish
2497	**1.6.2.14**	**Regression Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2498	1.6.2.14.1	Develop Regression Test Results	45 days	3/4/2019	5/3/2019
2499	1.6.2.14.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2500	1.6.2.14.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019
2501	1.6.2.14.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2502	**1.6.2.15**	**Load/Stress Test Cases**	**110 days**	**10/1/2018**	**3/1/2019**
2503	1.6.2.15.1	Develop Load/Stress Test Cases	100 days	10/1/2018	2/15/2019
2504	1.6.2.15.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2505	1.6.2.15.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2506	1.6.2.15.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2507	**1.6.2.16**	**Load/Stress Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2508	1.6.2.16.1	Develop Load/Stress Test Cases	45 days	3/4/2019	5/3/2019
2509	1.6.2.16.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2510	1.6.2.16.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019
2511	1.6.2.16.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2512	**1.6.2.17**	**Capacity Analysis Report**	**45 days**	**3/4/2019**	**5/3/2019**
2513	1.6.2.17.1	Develop Capacity Analysis Report	45 days	3/4/2019	5/3/2019
2514	1.6.2.17.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2515	1.6.2.17.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019
2516	1.6.2.17.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2517	1.6.2.18	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	5/3/2019	5/3/2019
2518	1.6.2.19	Update Business Continuity Plan	0 days	5/3/2019	5/3/2019
2519	1.6.2.20	Execute Disaster Recovery Test	0 days	5/3/2019	5/3/2019
2520	1.6.2.21	Overall completion of System Testing	0 days	5/3/2019	5/3/2019
2521	**1.6.2.22**	**User Acceptance Test Cases**	**30 days**	**5/6/2019**	**6/14/2019**
2522	1.6.2.22.1	Develop User Acceptance Test Cases	20 days	5/6/2019	5/31/2019
2523	1.6.2.22.2	Interim draft deliverable submission	0 days	5/13/2019	5/13/2019
2524	1.6.2.22.3	Submit deliverable for review	0 days	5/31/2019	5/31/2019
2525	1.6.2.22.4	Receive deliverable client approval	10 days	6/3/2019	6/14/2019
2526	**1.6.2.23**	**User Acceptance Test Results**	**35 days**	**6/17/2019**	**8/2/2019**
2527	1.6.2.23.1	Develop User Acceptance Test Results	35 days	6/17/2019	8/2/2019
2528	1.6.2.23.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2529	1.6.2.23.3	Submit deliverable for review	0 days	7/19/2019	7/19/2019
2530	1.6.2.23.4	Receive deliverable client approval	10 days	7/22/2019	8/2/2019
2531	1.6.2.24	Overall completion of Acceptance Testing	0 days	8/2/2019	8/2/2019
2532	**1.6.3**	**Implementation Readiness**	**45 days**	**6/17/2019**	**8/16/2019**
2533	**1.6.3.1**	**Operational Readiness Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2534	1.6.3.1.1	Develop Operational Readiness Plan	35 days	6/17/2019	8/2/2019
2535	1.6.3.1.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2536	1.6.3.1.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2537	1.6.3.1.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2538	**1.6.3.2**	**Operational Readiness Test Scripts**	**45 days**	**6/17/2019**	**8/16/2019**
2539	1.6.3.2.1	Develop Operational Readiness Test Scripts	35 days	6/17/2019	8/2/2019
2540	1.6.3.2.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2541	1.6.3.2.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2542	1.6.3.2.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2543	**1.6.3.3**	**Operational Readiness Test Results**	**45 days**	**6/17/2019**	**8/16/2019**
2544	1.6.3.3.1	Develop Operational Readiness Test Results	35 days	6/17/2019	8/2/2019



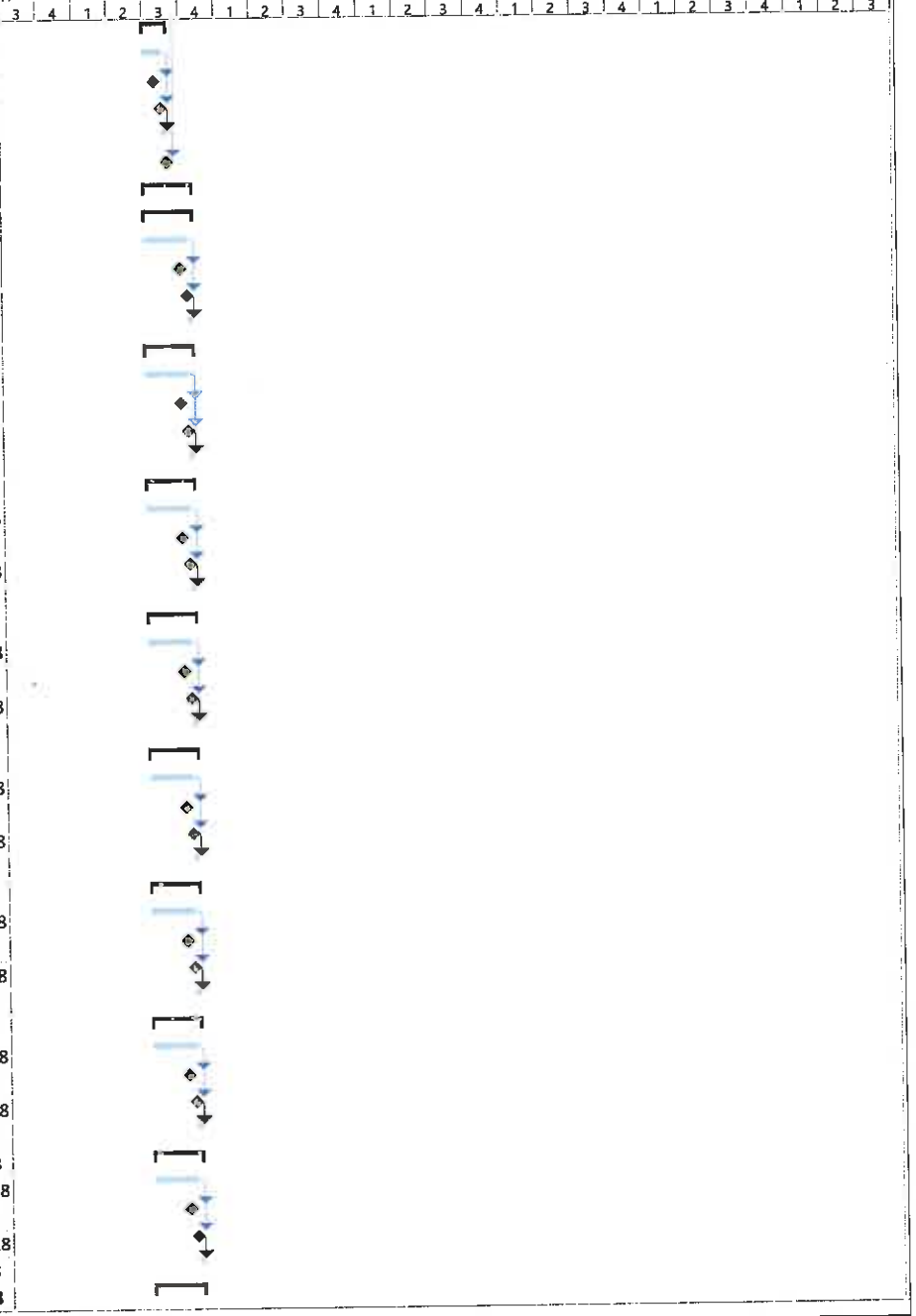
ID	WBS	Task Name	Duration	Start	Finish
2545	1.6.3.3.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2546	1.6.3.3.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2547	1.6.3.3.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2548	**1.6.3.4**	**Updated Training Management Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2549	1.6.3.4.1	Develop Updated Training Management Plan	35 days	6/17/2019	8/2/2019
2550	1.6.3.4.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2551	1.6.3.4.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2552	1.6.3.4.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2553	**1.6.3.5**	**Training Schedule**	**45 days**	**6/17/2019**	**8/16/2019**
2554	1.6.3.5.1	Develop Training Schedule	35 days	6/17/2019	8/2/2019
2555	1.6.3.5.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2556	1.6.3.5.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2557	1.6.3.5.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2558	**1.6.3.6**	**Training Materials**	**45 days**	**6/17/2019**	**8/16/2019**
2559	1.6.3.6.1	Develop Training Materials	35 days	6/17/2019	8/2/2019
2560	1.6.3.6.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2561	1.6.3.6.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2562	1.6.3.6.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2563	**1.6.3.7**	**Training Report**	**45 days**	**6/17/2019**	**8/16/2019**
2564	1.6.3.7.1	Develop Training Report	35 days	6/17/2019	8/2/2019
2565	1.6.3.7.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2566	1.6.3.7.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2567	1.6.3.7.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2568	**1.6.3.8**	**Implementation Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2569	1.6.3.8.1	Develop Implementation Plan	35 days	6/17/2019	8/2/2019
2570	1.6.3.8.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2571	1.6.3.8.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2572	1.6.3.8.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2573	**1.6.3.9**	**Cut-Over Play Book**	**45 days**	**6/17/2019**	**8/16/2019**
2574	1.6.3.9.1	Develop Cut-Over Play Book	35 days	6/17/2019	8/2/2019
2575	1.6.3.9.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2576	1.6.3.9.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2577	1.6.3.9.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2578	**1.6.3.10**	**Report Distribution Schedule**	**45 days**	**6/17/2019**	**8/16/2019**
2579	1.6.3.10.1	Develop Report Distribution Schedule	35 days	6/17/2019	8/2/2019
2580	1.6.3.10.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2581	1.6.3.10.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2582	1.6.3.10.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2583	**1.6.3.11**	**Operations Project Management Plans**	**45 days**	**6/17/2019**	**8/16/2019**
2584	1.6.3.11.1	Develop Operations Project Management Plans	35 days	6/17/2019	8/2/2019
2585	1.6.3.11.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2586	1.6.3.11.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2587	1.6.3.11.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2588	**1.6.3.12**	**Solution health Monitoring Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2589	1.6.3.12.1	Develop Solution health Monitoring Plan	35 days	6/17/2019	8/2/2019
2590	1.6.3.12.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2591	1.6.3.12.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2592	1.6.3.12.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019



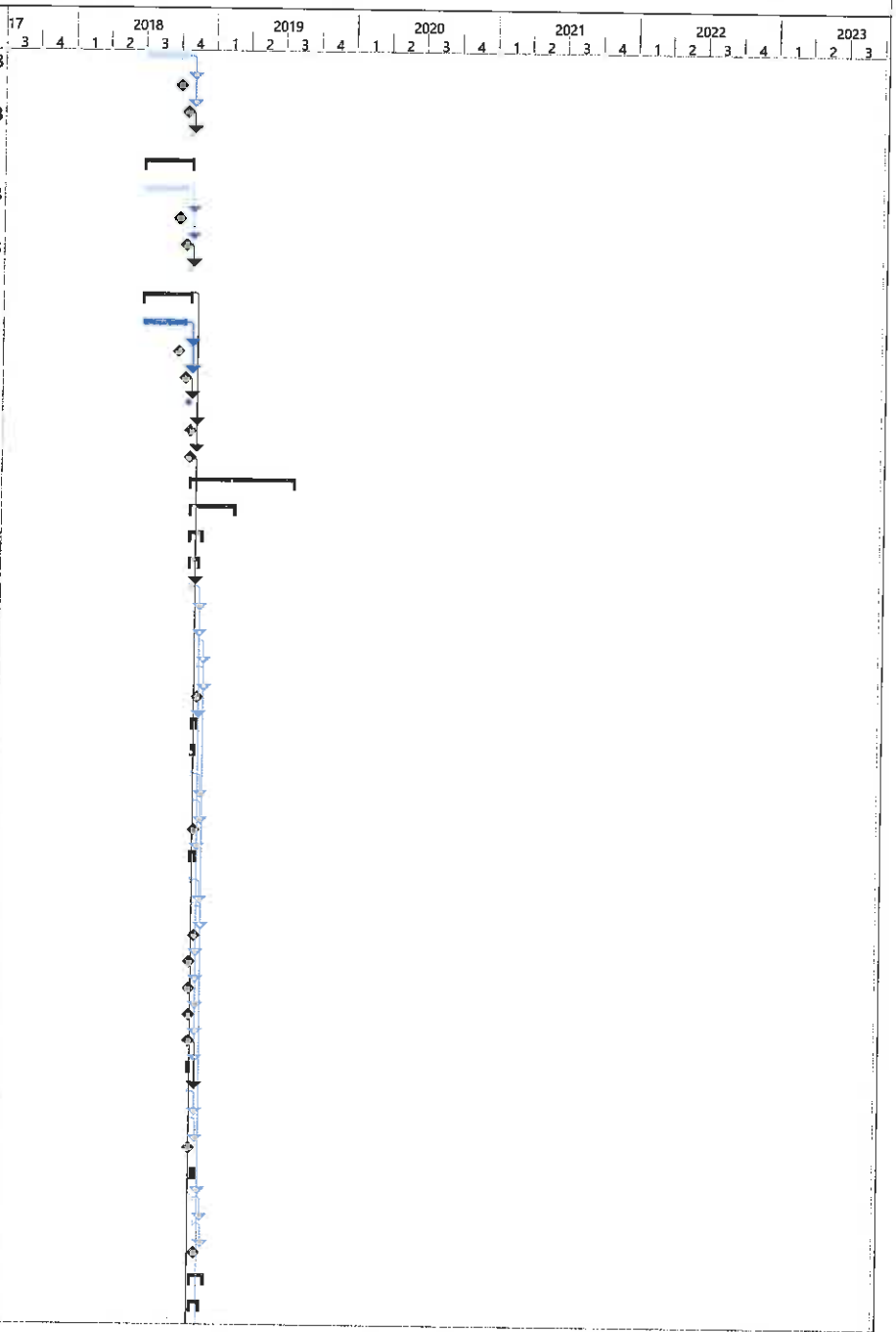
ID	WBS	Task Name	Duration	Start	Finish
2593	**1.6.3.13**	**Federal Certification and Review Management Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2594	1.6.3.13.1	Develop Federal Certification and Review Management Plan	35 days	6/17/2019	8/2/2019
2595	1.6.3.13.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2596	1.6.3.13.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2597	1.6.3.13.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2598	**1.6.3.14**	**ACF Certification Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2599	1.6.3.14.1	Obtain ACF Certification Documentation	35 days	6/17/2019	8/2/2019
2600	1.6.3.14.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2601	1.6.3.14.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2602	1.6.3.14.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2603	**1.6.3.15**	**Federal Review Supporting Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2604	1.6.3.15.1	Obtain Federal Review Supporting Documentation	35 days	6/17/2019	8/2/2019
2605	1.6.3.15.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2606	1.6.3.15.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2607	1.6.3.15.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2608	**1.6.3.16**	**Social Security Administration Certification Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2609	1.6.3.16.1	Obtain Social Security Administration Certification Document	35 days	6/17/2019	8/2/2019
2610	1.6.3.16.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2611	1.6.3.16.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2612	1.6.3.16.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2613	**1.6.3.17**	**Implementation Certification Letter**	**45 days**	**6/17/2019**	**8/16/2019**
2614	1.6.3.17.1	Obtain Implementation Certification Letter	35 days	6/17/2019	8/2/2019
2615	1.6.3.17.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2616	1.6.3.17.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2617	1.6.3.17.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2618	1.6.3.18	Overall completion of Implementation Readiness	0 days	8/16/2019	8/16/2019
2619	1.6.3.19	Overall completion of deployment to production	0 days	8/16/2019	8/16/2019
2620	**1.6.4**	**Pilot**	**65 days**	**8/5/2019**	**11/1/2019**
2621	1.6.4.1	Support Pilot rollout	65 days	8/5/2019	11/1/2019
2622	1.6.4.2	Develop Statewide rollout strategy	65 days	8/5/2019	11/1/2019
2623	1.6.4.3	Defect resolution support for Pilot county/counties	65 days	8/5/2019	11/1/2019
2624	**1.6.5**	**Warranty**	**135 days**	**8/5/2019**	**2/7/2020**
2625	1.6.5.1	Support Warranty activities	135 days	8/5/2019	2/7/2020
2626	1.6.5.2	Defect resolution support	135 days	8/5/2019	2/7/2020
2627	**1.6.6**	**Ongoing Maintenance and Operations**	**1085 days**	**8/5/2019**	**9/29/2023**
2628	1.6.6.1	Ongoing Maintenance and Operations	1085 days	8/5/2019	9/29/2023
2629	1.6.6.2	Defect resolution support	1085 days	8/5/2019	9/29/2023
2630	1.6.6.3	Quarterly Maintenance Software upgrades	1085 days	8/5/2019	9/29/2023
2631	1.6.6.4	Incident Management Support	1085 days	8/5/2019	9/29/2023
2632	1.6.6.5	Ongoing Operations Support	1085 days	8/5/2019	9/29/2023
2633	**1.7**	**FACTS Child Care - Technology Platform and Business Application M**	**1370 days**	**7/2/2018**	**9/29/2023**
2634	**1.7.1**	**Discovery**	**90 days**	**7/2/2018**	**11/2/2018**
2635	**1.7.1.1**	**Requirements Validations**	**45 days**	**7/2/2018**	**8/31/2018**
2636	**1.7.1.1.1**	**Requirements Traceability Matrix (RTM)**	**45 days**	**7/2/2018**	**8/31/2018**
2637	1.7.1.1.1.1	Develop Requirements Traceability Matrix (RTM)	35 days	7/2/2018	8/17/2018
2638	1.7.1.1.1.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
2639	1.7.1.1.1.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
2640	1.7.1.1.1.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018



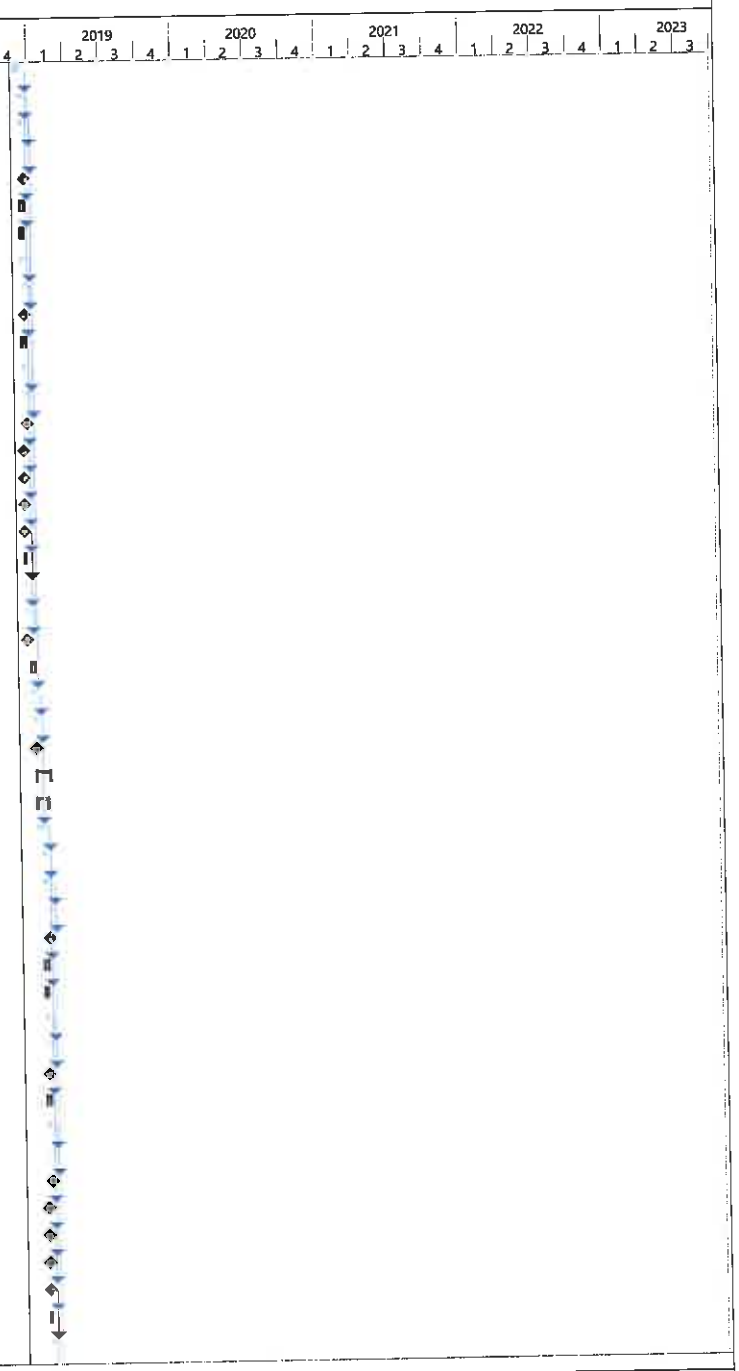
ID	WBS	Task Name	Duration	Start	Finish
2641	**1.7.1.1.2**	**Requirements Specification Document (RSD)**	**45 days**	**7/2/2018**	**8/31/2018**
2642	1.7.1.1.2.1	Develop Requirements Specification Document (RSD)	35 days	7/2/2018	8/17/2018
2643	1.7.1.1.2.2	Interim draft deliverable submission	0 days	7/30/2018	7/30/2018
2644	1.7.1.1.2.3	Submit deliverable for review	0 days	8/17/2018	8/17/2018
2645	1.7.1.1.2.4	Receive deliverable client approval	10 days	8/20/2018	8/31/2018
2646	1.7.1.1.3	Overall completion of Requirements Validation	0 days	8/31/2018	8/31/2018
2647	**1.7.1.2**	**Design**	**90 days**	**7/2/2018**	**11/2/2018**
2648	**1.7.1.2.1**	**Requirements Gap Analysis Document**	**90 days**	**7/2/2018**	**11/2/2018**
2649	1.7.1.2.1.1	Develop Requirements Gap Analysis Document	80 days	7/2/2018	10/19/2018
2650	1.7.1.2.1.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2651	1.7.1.2.1.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2652	1.7.1.2.1.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2653	**1.7.1.2.2**	**Business Process Models**	**90 days**	**7/2/2018**	**11/2/2018**
2654	1.7.1.2.2.1	Develop Business Process Models	80 days	7/2/2018	10/19/2018
2655	1.7.1.2.2.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2656	1.7.1.2.2.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2657	1.7.1.2.2.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2658	**1.7.1.2.3**	**Detailed System Design (DSD) Document**	**90 days**	**7/2/2018**	**11/2/2018**
2659	1.7.1.2.3.1	Develop Detailed System Design (DSD) Document	80 days	7/2/2018	10/19/2018
2660	1.7.1.2.3.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2661	1.7.1.2.3.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2662	1.7.1.2.3.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2663	**1.7.1.2.4**	**Data Dictionary**	**90 days**	**7/2/2018**	**11/2/2018**
2664	1.7.1.2.4.1	Develop Data Dictionary	80 days	7/2/2018	10/19/2018
2665	1.7.1.2.4.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2666	1.7.1.2.4.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2667	1.7.1.2.4.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2668	**1.7.1.2.5**	**Data Models**	**90 days**	**7/2/2018**	**11/2/2018**
2669	1.7.1.2.5.1	Develop Data Models	80 days	7/2/2018	10/19/2018
2670	1.7.1.2.5.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2671	1.7.1.2.5.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2672	1.7.1.2.5.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2673	**1.7.1.2.6**	**Reports Inventory**	**90 days**	**7/2/2018**	**11/2/2018**
2674	1.7.1.2.6.1	Develop Reports Inventory	80 days	7/2/2018	10/19/2018
2675	1.7.1.2.6.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2676	1.7.1.2.6.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2677	1.7.1.2.6.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2678	**1.7.1.2.7**	**Correspondence Inventory**	**90 days**	**7/2/2018**	**11/2/2018**
2679	1.7.1.2.7.1	Develop Correspondence Inventory	80 days	7/2/2018	10/19/2018
2680	1.7.1.2.7.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2681	1.7.1.2.7.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2682	1.7.1.2.7.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2683	**1.7.1.2.8**	**Forms Inventory**	**90 days**	**7/2/2018**	**11/2/2018**
2684	1.7.1.2.8.1	Develop Forms Inventory	80 days	7/2/2018	10/19/2018
2685	1.7.1.2.8.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2686	1.7.1.2.8.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2687	1.7.1.2.8.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2688	**1.7.1.2.9**	**Interface Inventory**	**90 days**	**7/2/2018**	**11/2/2018**



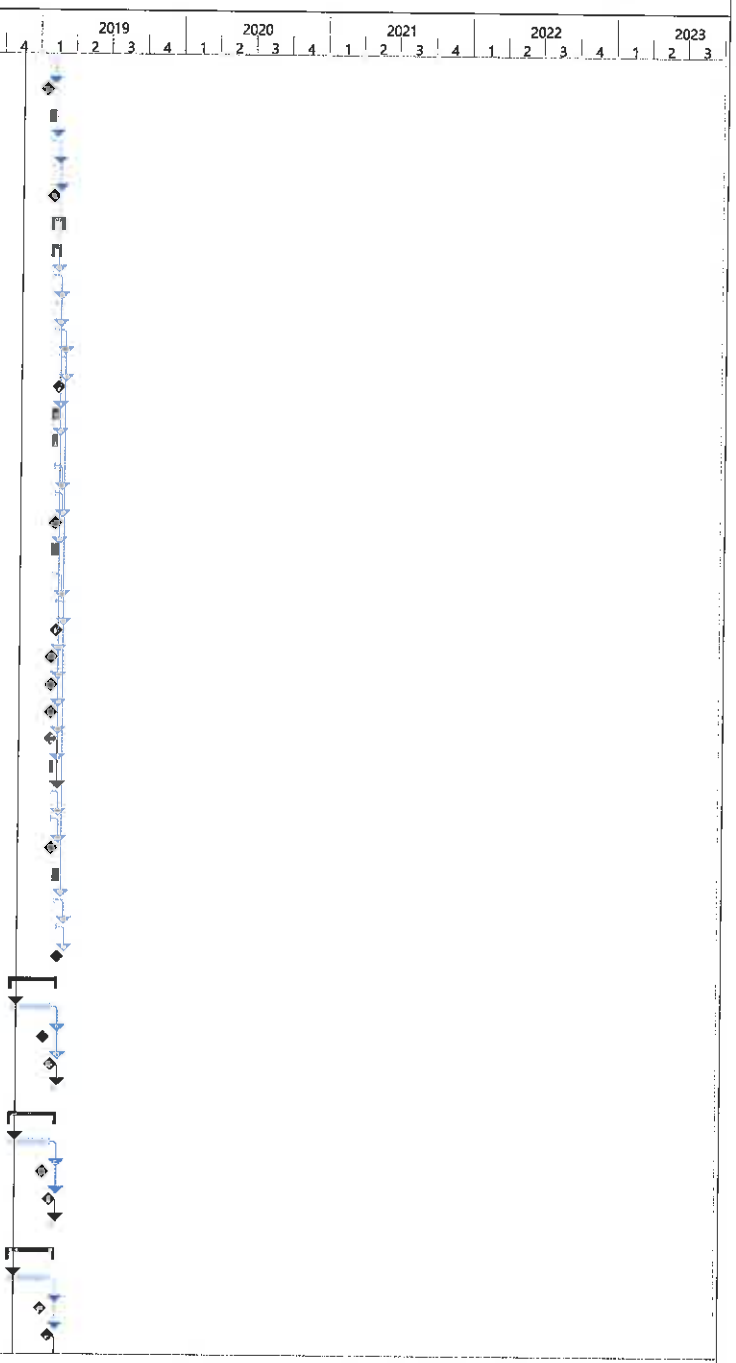
ID	WBS	Task Name	Duration	Start	Finish
2689	1.7.1.2.9.1	Develop Interface Inventory	80 days	7/2/2018	10/19/2018
2690	1.7.1.2.9.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2691	1.7.1.2.9.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2692	1.7.1.2.9.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2693	**1.7.1.2.10**	**Data Cleansing and Conversion Requirements Document**	**90 days**	**7/2/2018**	**11/2/2018**
2694	1.7.1.2.10.1	Develop Data Cleansing and Conversion Requirements Doc	80 days	7/2/2018	10/19/2018
2695	1.7.1.2.10.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2696	1.7.1.2.10.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2697	1.7.1.2.10.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2698	**1.7.1.2.11**	**Data Cleansing and Conversion Specification Document**	**90 days**	**7/2/2018**	**11/2/2018**
2699	1.7.1.2.11.1	Develop Data Cleansing and Conversion Specification Docu	80 days	7/2/2018	10/19/2018
2700	1.7.1.2.11.2	Interim draft deliverable submission	0 days	10/1/2018	10/1/2018
2701	1.7.1.2.11.3	Submit deliverable for review	0 days	10/19/2018	10/19/2018
2702	1.7.1.2.11.4	Receive deliverable client approval	10 days	10/22/2018	11/2/2018
2703	1.7.1.2.12	Overall completion of Data Conversion Design	0 days	11/2/2018	11/2/2018
2704	1.7.1.2.13	Overall completion of Design Phase	0 days	11/2/2018	11/2/2018
2705	**1.7.2**	**Development, Configuration and Testing**	**195 days**	**11/5/2018**	**8/2/2019**
2706	**1.7.2.1**	**Sprint Development**	**85 days**	**11/5/2018**	**3/1/2019**
2707	**1.7.2.1.1**	**Sprint 1**	**24 days**	**11/5/2018**	**12/6/2018**
2708	**1.7.2.1.1.1**	**Sprint Execution**	**18 days**	**11/5/2018**	**11/28/2018**
2709	1.7.2.1.1.1.1	Build	9 days	11/5/2018	11/15/2018
2710	1.7.2.1.1.1.2	Write UAT Tests	5 days	11/16/2018	11/22/2018
2711	1.7.2.1.1.1.3	System Testing&Defect Remediation	8 days	11/16/2018	11/27/2018
2712	1.7.2.1.1.1.4	Review	1 day	11/28/2018	11/28/2018
2713	1.7.2.1.1.1.5	Retrospective/Backlog Refinement	0 days	11/28/2018	11/28/2018
2714	**1.7.2.1.1.2**	**Sprint OWPs**	**8 days**	**11/15/2018**	**11/27/2018**
2715	**1.7.2.1.1.2.1**	**Create Sprint Backlog**	**5 days**	**11/16/2018**	**11/22/2018**
2716	1.7.2.1.1.2.1	Submission	4 days	11/16/2018	11/21/2018
2717	1.7.2.1.1.2.1	DHHR Review	1 day	11/22/2018	11/22/2018
2718	1.7.2.1.1.2.1	DHHR Signoff	0 days	11/22/2018	11/22/2018
2719	**1.7.2.1.1.2.2**	**Design Specification (Sprint Features)**	**8 days**	**11/16/2018**	**11/27/2018**
2720	1.7.2.1.1.2.2	Submission	5 days	11/16/2018	11/22/2018
2721	1.7.2.1.1.2.2	DHHR Review	3 days	11/23/2018	11/27/2018
2722	1.7.2.1.1.2.2	DHHR Signoff	0 days	11/27/2018	11/27/2018
2723	**1.7.2.1.1.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**11/15/2018**	**11/15/2018**
2724	1.7.2.1.1.2.3	Unit Test Results	0 days	11/15/2018	11/15/2018
2725	1.7.2.1.1.2.3	String / System Test Results	0 days	11/15/2018	11/15/2018
2726	1.7.2.1.1.2.3	Integration and Regression Test Scripts	0 days	11/15/2018	11/15/2018
2727	**1.7.2.1.1.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**11/16/2018**	**11/19/2018**
2728	1.7.2.1.1.2.4	Developed Components	1 day	11/16/2018	11/16/2018
2729	1.7.2.1.1.2.4	Sprint Review	1 day	11/19/2018	11/19/2018
2730	1.7.2.1.1.2.4	Sprint Retrospective	0 days	11/19/2018	11/19/2018
2731	**1.7.2.1.1.3**	**DHHR Sprint Acceptance**	**7 days**	**11/28/2018**	**12/6/2018**
2732	1.7.2.1.1.3.1	Perform DHHR Acceptance Tests	5 days	11/28/2018	12/4/2018
2733	1.7.2.1.1.3.2	DHHR Code Review	2 days	12/5/2018	12/6/2018
2734	1.7.2.1.1.3.3	Sprint Acceptance	0 days	12/6/2018	12/6/2018
2735	**1.7.2.1.2**	**Sprint 2**	**25 days**	**11/28/2018**	**1/1/2019**
2736	**1.7.2.1.2.1**	**Sprint Execution**	**18 days**	**11/28/2018**	**12/21/2018**



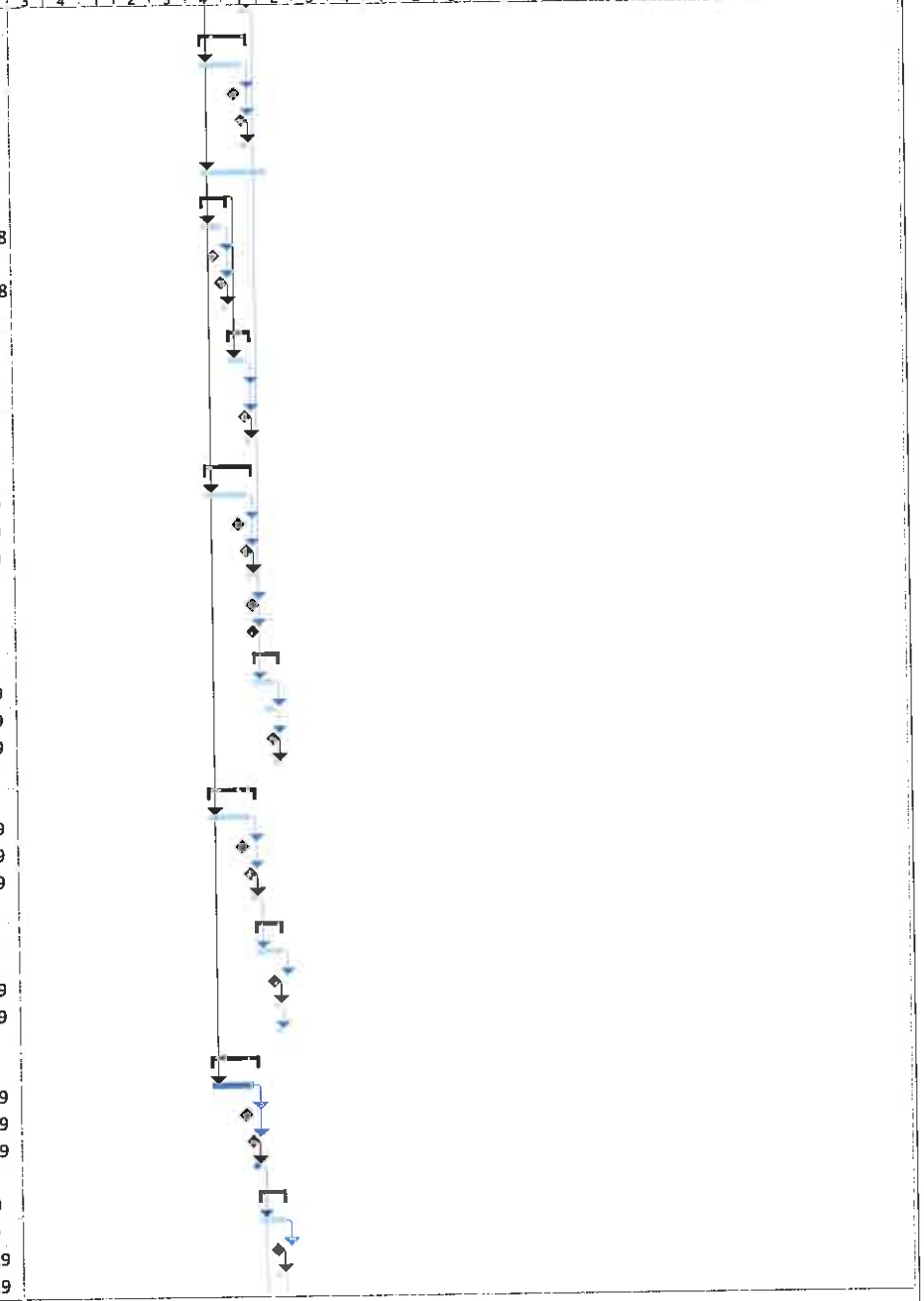
ID	WBS	Task Name	Duration	Start	Finish
2737	1.7.2.1.2.1.1	Build	10 days	11/28/2018	12/11/2018
2738	1.7.2.1.2.1.2	Write UAT Tests	5 days	12/12/2018	12/18/2018
2739	1.7.2.1.2.1.3	System Testing&Defect Remediation	8 days	12/12/2018	12/21/2018
2740	1.7.2.1.2.1.4	Review	1 day	12/19/2018	12/19/2018
2741	1.7.2.1.2.1.5	Retrospective/Backlog Refinement	0 days	12/21/2018	12/21/2018
2742	**1.7.2.1.2.2**	**Sprint OWPs**	**8 days**	**12/11/2018**	**12/21/2018**
2743	**1.7.2.1.2.2.1**	**Create Sprint Backlog**	**5 days**	**12/12/2018**	**12/18/2018**
2744	1.7.2.1.2.2.1	Submission	4 days	12/12/2018	12/17/2018
2745	1.7.2.1.2.2.1	DHHR Review	1 day	12/18/2018	12/18/2018
2746	1.7.2.1.2.2.1	DHHR Signoff	0 days	12/18/2018	12/18/2018
2747	**1.7.2.1.2.2.2**	**Design Specification (Sprint Features)**	**8 days**	**12/12/2018**	**12/21/2018**
2748	1.7.2.1.2.2.2	Submission	5 days	12/12/2018	12/18/2018
2749	1.7.2.1.2.2.2	DHHR Review	3 days	12/19/2018	12/21/2018
2750	1.7.2.1.2.2.2	DHHR Signoff	0 days	12/21/2018	12/21/2018
2751	**1.7.2.1.2.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**12/11/2018**	**12/11/2018**
2752	1.7.2.1.2.2.3	Unit Test Results	0 days	12/11/2018	12/11/2018
2753	1.7.2.1.2.2.3	String / System Test Results	0 days	12/11/2018	12/11/2018
2754	1.7.2.1.2.2.3	Integration and Regression Test Scripts	0 days	12/11/2018	12/11/2018
2755	**1.7.2.1.2.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**12/12/2018**	**12/13/2018**
2756	1.7.2.1.2.2.4	Developed Components	1 day	12/12/2018	12/12/2018
2757	1.7.2.1.2.2.4	Sprint Review	1 day	12/13/2018	12/13/2018
2758	1.7.2.1.2.2.4	Sprint Retrospective	0 days	12/13/2018	12/13/2018
2759	**1.7.2.1.2.3**	**DHHR Sprint Acceptance**	**7 days**	**12/24/2018**	**1/1/2019**
2760	1.7.2.1.2.3.1	Perform DHHR Acceptance Tests	5 days	12/24/2018	12/28/2018
2761	1.7.2.1.2.3.2	DHHR Code Review	2 days	12/31/2018	1/1/2019
2762	1.7.2.1.2.3.3	Sprint Acceptance	0 days	1/1/2019	1/1/2019
2763	**1.7.2.1.3**	**Sprint 3**	**25 days**	**1/2/2019**	**2/5/2019**
2764	**1.7.2.1.3.1**	**Sprint Execution**	**19 days**	**1/2/2019**	**1/28/2019**
2765	1.7.2.1.3.1.1	Build	10 days	1/2/2019	1/15/2019
2766	1.7.2.1.3.1.2	Write UAT Tests	5 days	1/16/2019	1/22/2019
2767	1.7.2.1.3.1.3	System Testing&Defect Remediation	8 days	1/16/2019	1/25/2019
2768	1.7.2.1.3.1.4	Review	1 day	1/28/2019	1/28/2019
2769	1.7.2.1.3.1.5	Retrospective/Backlog Refinement	0 days	1/28/2019	1/28/2019
2770	**1.7.2.1.3.2**	**Sprint OWPs**	**8 days**	**1/15/2019**	**1/25/2019**
2771	**1.7.2.1.3.2.1**	**Create Sprint Backlog**	**5 days**	**1/16/2019**	**1/22/2019**
2772	1.7.2.1.3.2.1	Submission	4 days	1/16/2019	1/21/2019
2773	1.7.2.1.3.2.1	DHHR Review	1 day	1/22/2019	1/22/2019
2774	1.7.2.1.3.2.1	DHHR Signoff	0 days	1/22/2019	1/22/2019
2775	**1.7.2.1.3.2.2**	**Design Specification (Sprint Features)**	**8 days**	**1/16/2019**	**1/25/2019**
2776	1.7.2.1.3.2.2	Submission	5 days	1/16/2019	1/22/2019
2777	1.7.2.1.3.2.2	DHHR Review	3 days	1/23/2019	1/25/2019
2778	1.7.2.1.3.2.2	DHHR Signoff	0 days	1/25/2019	1/25/2019
2779	**1.7.2.1.3.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**1/15/2019**	**1/15/2019**
2780	1.7.2.1.3.2.3	Unit Test Results	0 days	1/15/2019	1/15/2019
2781	1.7.2.1.3.2.3	String / System Test Results	0 days	1/15/2019	1/15/2019
2782	1.7.2.1.3.2.3	Integration and Regression Test Scripts	0 days	1/15/2019	1/15/2019
2783	**1.7.2.1.3.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**1/16/2019**	**1/17/2019**
2784	1.7.2.1.3.2.4	Developed Components	1 day	1/16/2019	1/16/2019



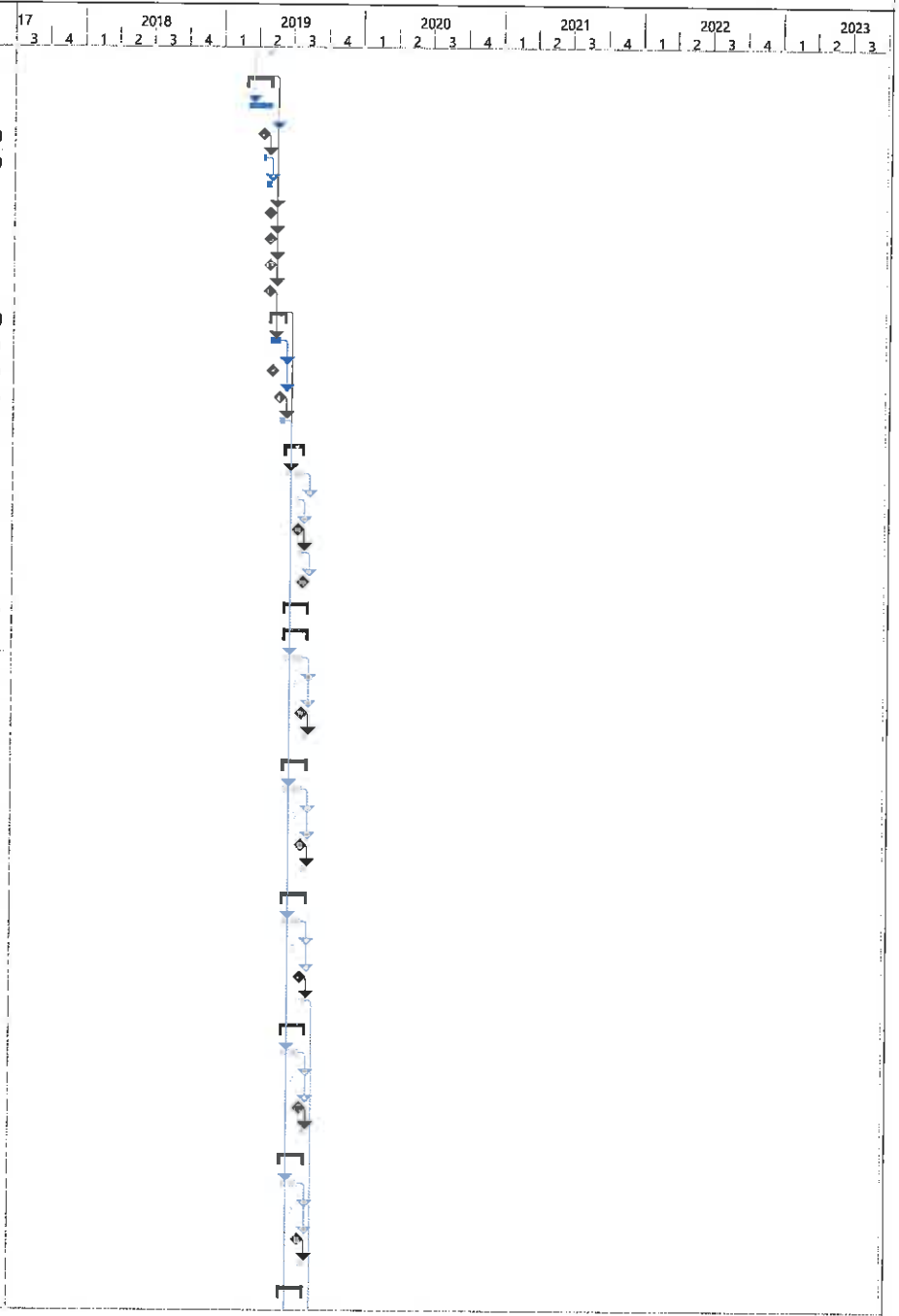
ID	WBS	Task Name	Duration	Start	Finish
2785	1.7.2.1.3.2.4	Sprint Review	1 day	1/17/2019	1/17/2019
2786	1.7.2.1.3.2.4	Sprint Retrospective	0 days	1/17/2019	1/17/2019
2787	**1.7.2.1.3.3**	**DHHR Sprint Acceptance**	**7 days**	**1/28/2019**	**2/5/2019**
2788	1.7.2.1.3.3.1	Perform DHHR Acceptance Tests	5 days	1/28/2019	2/1/2019
2789	1.7.2.1.3.3.2	DHHR Code Review	2 days	2/4/2019	2/5/2019
2790	1.7.2.1.3.3.3	Sprint Acceptance	0 days	2/5/2019	2/5/2019
2791	**1.7.2.1.4**	**Hardening Sprint**	**20 days**	**2/4/2019**	**3/1/2019**
2792	**1.7.2.1.4.1**	**Sprint Execution**	**14 days**	**2/4/2019**	**2/21/2019**
2793	1.7.2.1.4.1.1	Build	5 days	2/4/2019	2/8/2019
2794	1.7.2.1.4.1.2	Write UAT Tests	5 days	2/11/2019	2/15/2019
2795	1.7.2.1.4.1.3	System Testing&Defect Remediation	8 days	2/11/2019	2/20/2019
2796	1.7.2.1.4.1.4	Review	1 day	2/21/2019	2/21/2019
2797	1.7.2.1.4.1.5	Retrospective/Backlog Refinement	0 days	2/21/2019	2/21/2019
2798	**1.7.2.1.4.2**	**Sprint OWPs**	**8 days**	**2/8/2019**	**2/20/2019**
2799	**1.7.2.1.4.2.1**	**Create Sprint Backlog**	**5 days**	**2/11/2019**	**2/15/2019**
2800	1.7.2.1.4.2.1	Submission	4 days	2/11/2019	2/14/2019
2801	1.7.2.1.4.2.1	DHHR Review	1 day	2/15/2019	2/15/2019
2802	1.7.2.1.4.2.1	DHHR Signoff	0 days	2/15/2019	2/15/2019
2803	**1.7.2.1.4.2.2**	**Design Specification (Sprint Features)**	**8 days**	**2/11/2019**	**2/20/2019**
2804	1.7.2.1.4.2.2	Submission	5 days	2/11/2019	2/15/2019
2805	1.7.2.1.4.2.2	DHHR Review	3 days	2/18/2019	2/20/2019
2806	1.7.2.1.4.2.2	DHHR Signoff	0 days	2/20/2019	2/20/2019
2807	**1.7.2.1.4.2.3**	**Logical Data Model (Sprint Features)**	**0 days**	**2/8/2019**	**2/8/2019**
2808	1.7.2.1.4.2.3	Unit Test Results	0 days	2/8/2019	2/8/2019
2809	1.7.2.1.4.2.3	String / System Test Results	0 days	2/8/2019	2/8/2019
2810	1.7.2.1.4.2.3	Integration and Regression Test Scripts	0 days	2/8/2019	2/8/2019
2811	**1.7.2.1.4.2.4**	**Burndown Chart and Velocity Summary**	**2 days**	**2/11/2019**	**2/12/2019**
2812	1.7.2.1.4.2.4	Developed Components	1 day	2/11/2019	2/11/2019
2813	1.7.2.1.4.2.4	Sprint Review	1 day	2/12/2019	2/12/2019
2814	1.7.2.1.4.2.4	Sprint Retrospective	0 days	2/12/2019	2/12/2019
2815	**1.7.2.1.4.3**	**DHHR Sprint Acceptance**	**7 days**	**2/21/2019**	**3/1/2019**
2816	1.7.2.1.4.3.1	Perform DHHR Acceptance Tests	5 days	2/21/2019	2/27/2019
2817	1.7.2.1.4.3.2	DHHR Code Review	2 days	2/28/2019	3/1/2019
2818	1.7.2.1.4.3.3	Sprint Acceptance	0 days	3/1/2019	3/1/2019
2819	**1.7.2.2**	**System Documentation**	**85 days**	**11/5/2018**	**3/1/2019**
2820	1.7.2.2.1	Develop System Documentation	75 days	11/5/2018	2/15/2019
2821	1.7.2.2.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2822	1.7.2.2.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2823	1.7.2.2.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2824	**1.7.2.3**	**System Security Plan (SSP)**	**85 days**	**11/5/2018**	**3/1/2019**
2825	1.7.2.3.1	Develop System Security Plan (SSP)	75 days	11/5/2018	2/15/2019
2826	1.7.2.3.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2827	1.7.2.3.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2828	1.7.2.3.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2829	**1.7.2.4**	**Safeguard Procedures Report**	**85 days**	**11/5/2018**	**3/1/2019**
2830	1.7.2.4.1	Develop Safeguard Procedures Report	75 days	11/5/2018	2/15/2019
2831	1.7.2.4.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2832	1.7.2.4.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019



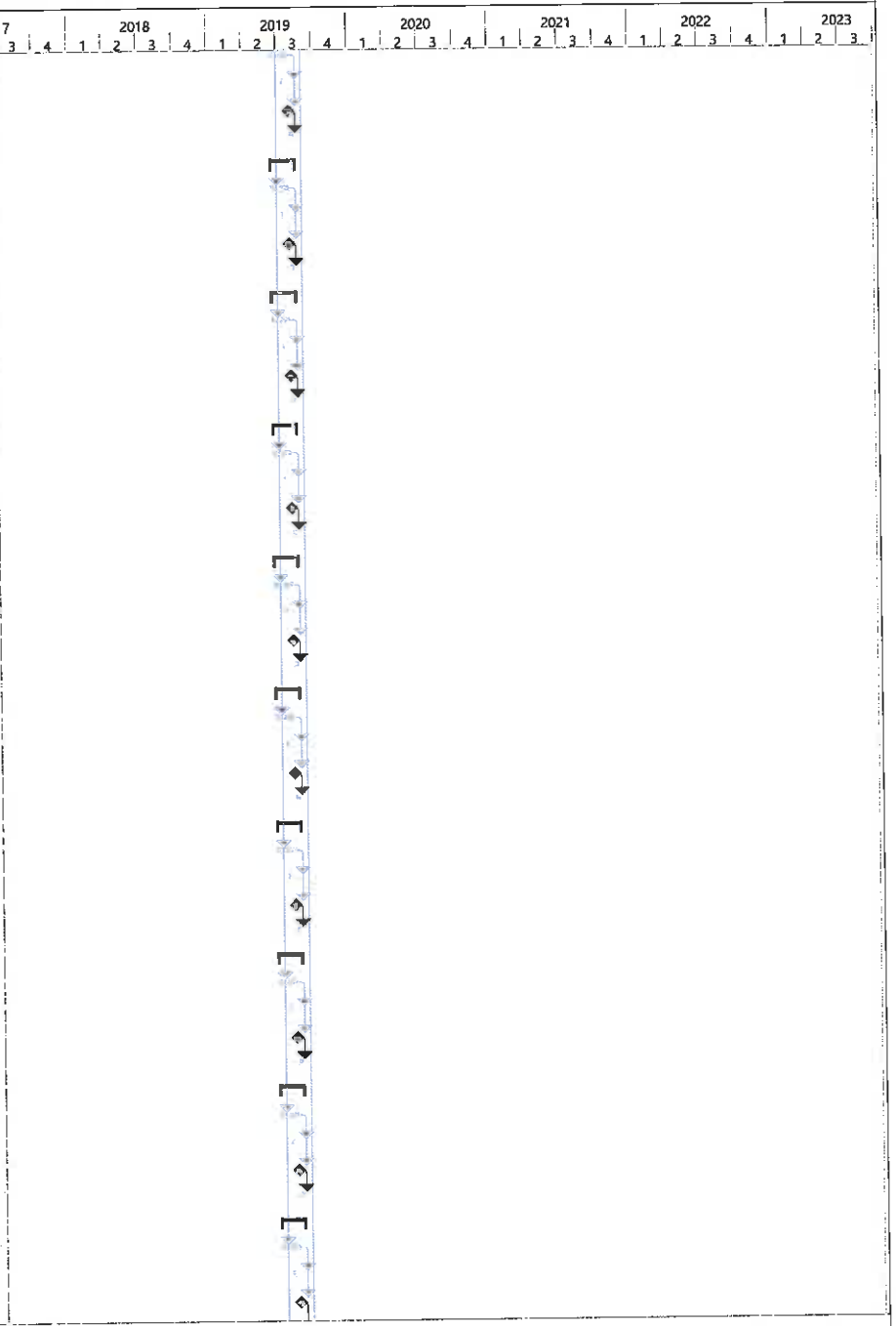
ID	WBS	Task Name	Duration	Start	Finish
2833	1.7.2.4.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2834	**1.7.2.5**	**User Documentation**	**85 days**	**11/5/2018**	**3/1/2019**
2835	1.7.2.5.1	Develop User Documentation	75 days	11/5/2018	2/15/2019
2836	1.7.2.5.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2837	1.7.2.5.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2838	1.7.2.5.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2839	1.7.2.6	Execute Automated Data Migration process	120 days	11/5/2018	4/19/2019
2840	**1.7.2.7**	**Data Conversion System Integration Test Cases**	**45 days**	**11/5/2018**	**1/4/2019**
2841	1.7.2.7.1	Develop Data Conversion System Integration Test Cases	35 days	11/5/2018	12/21/2018
2842	1.7.2.7.2	Interim draft deliverable submission	0 days	12/3/2018	12/3/2018
2843	1.7.2.7.3	Submit deliverable for review	0 days	12/21/2018	12/21/2018
2844	1.7.2.7.4	Receive deliverable client approval	10 days	12/24/2018	1/4/2019
2845	**1.7.2.8**	**Data Conversion System Integration Test Results**	**40 days**	**1/7/2019**	**3/1/2019**
2846	1.7.2.8.1	Develop Data Conversion System Integration Test Results	30 days	1/7/2019	2/15/2019
2847	1.7.2.8.2	Interim draft deliverable submission	1 day	1/28/2019	1/28/2019
2848	1.7.2.8.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2849	1.7.2.8.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2850	**1.7.2.9**	**System Integration Test Cases**	**85 days**	**11/5/2018**	**3/1/2019**
2851	1.7.2.9.1	Develop System Integration Test Cases	75 days	11/5/2018	2/15/2019
2852	1.7.2.9.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2853	1.7.2.9.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2854	1.7.2.9.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2855	1.7.2.10	Completion of Data Conversion Trial Run in Test Environment	0 days	3/1/2019	3/1/2019
2856	1.7.2.11	Overall completion of Development and Configuration	0 days	3/1/2019	3/1/2019
2857	**1.7.2.12**	**System Integration Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2858	1.7.2.12.1	Develop System Integration Test Results	35 days	3/4/2019	4/19/2019
2859	1.7.2.12.2	Interim draft deliverable submission	15 days	4/1/2019	4/19/2019
2860	1.7.2.12.3	Submit deliverable for review	0 days	4/19/2019	4/19/2019
2861	1.7.2.12.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2862	**1.7.2.13**	**Regression Test Cases**	**85 days**	**11/5/2018**	**3/1/2019**
2863	1.7.2.13.1	Develop Regression Test Cases	75 days	11/5/2018	2/15/2019
2864	1.7.2.13.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2865	1.7.2.13.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2866	1.7.2.13.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2867	**1.7.2.14**	**Regression Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2868	1.7.2.14.1	Develop Regression Test Results	45 days	3/4/2019	5/3/2019
2869	1.7.2.14.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2870	1.7.2.14.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019
2871	1.7.2.14.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2872	**1.7.2.15**	**Load/Stress Test Cases**	**85 days**	**11/5/2018**	**3/1/2019**
2873	1.7.2.15.1	Develop Load/Stress Test Cases	75 days	11/5/2018	2/15/2019
2874	1.7.2.15.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
2875	1.7.2.15.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
2876	1.7.2.15.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
2877	**1.7.2.16**	**Load/Stress Test Results**	**45 days**	**3/4/2019**	**5/3/2019**
2878	1.7.2.16.1	Develop Load/Stress Test Cases	45 days	3/4/2019	5/3/2019
2879	1.7.2.16.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2880	1.7.2.16.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019



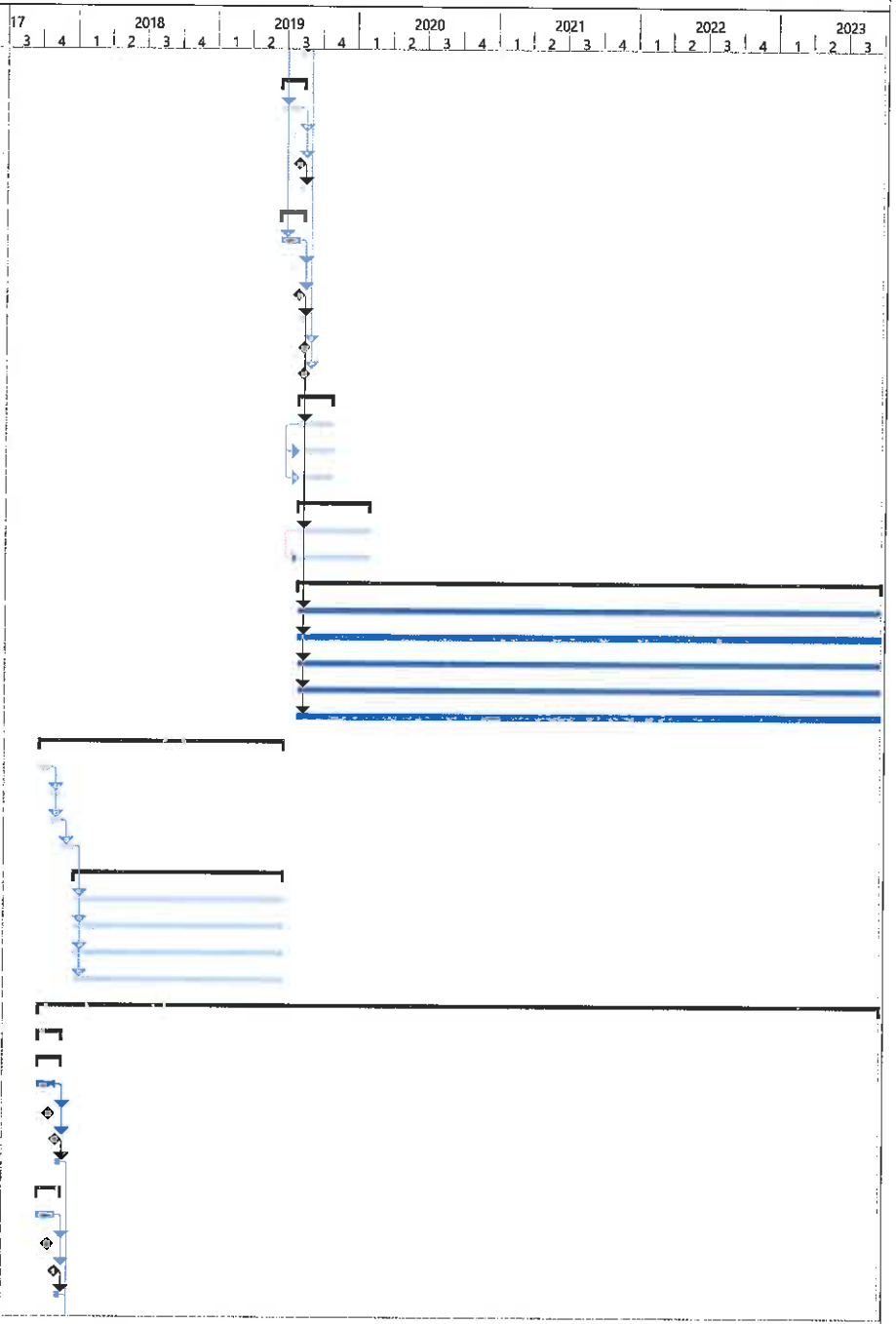
ID	WBS	Task Name	Duration	Start	Finish
2881	1.7.2.16.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2882	**1.7.2.17**	**Capacity Analysis Report**	**45 days**	**3/4/2019**	**5/3/2019**
2883	1.7.2.17.1	Develop Capacity Analysis Report	45 days	3/4/2019	5/3/2019
2884	1.7.2.17.2	Interim draft deliverable submission	0 days	4/15/2019	4/15/2019
2885	1.7.2.17.3	Submit deliverable for review	5 days	4/15/2019	4/19/2019
2886	1.7.2.17.4	Receive deliverable client approval	10 days	4/22/2019	5/3/2019
2887	1.7.2.18	Completion of Data Conversion Trial Run for User Acceptance Te	0 days	5/3/2019	5/3/2019
2888	1.7.2.19	Update Business Continuity Plan	0 days	5/3/2019	5/3/2019
2889	1.7.2.20	Execute Disaster Recovery Test	0 days	5/3/2019	5/3/2019
2890	1.7.2.21	Overall completion of System Testing	0 days	5/3/2019	5/3/2019
2891	**1.7.2.22**	**User Acceptance Test Cases**	**30 days**	**5/6/2019**	**6/14/2019**
2892	1.7.2.22.1	Develop User Acceptance Test Cases	20 days	5/6/2019	5/31/2019
2893	1.7.2.22.2	Interim draft deliverable submission	0 days	5/13/2019	5/13/2019
2894	1.7.2.22.3	Submit deliverable for review	0 days	5/31/2019	5/31/2019
2895	1.7.2.22.4	Receive deliverable client approval	10 days	6/3/2019	6/14/2019
2896	**1.7.2.23**	**User Acceptance Test Results**	**35 days**	**6/17/2019**	**8/2/2019**
2897	1.7.2.23.1	Develop User Acceptance Test Results	35 days	6/17/2019	8/2/2019
2898	1.7.2.23.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2899	1.7.2.23.3	Submit deliverable for review	0 days	7/19/2019	7/19/2019
2900	1.7.2.23.4	Receive deliverable client approval	10 days	7/22/2019	8/2/2019
2901	1.7.2.24	Overall completion of Acceptance Testing	0 days	8/2/2019	8/2/2019
2902	**1.7.3**	**Implementation Readiness**	**45 days**	**6/17/2019**	**8/16/2019**
2903	**1.7.3.1**	**Operational Readiness Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2904	1.7.3.1.1	Develop Operational Readiness Plan	35 days	6/17/2019	8/2/2019
2905	1.7.3.1.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2906	1.7.3.1.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2907	1.7.3.1.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2908	**1.7.3.2**	**Operational Readiness Test Scripts**	**45 days**	**6/17/2019**	**8/16/2019**
2909	1.7.3.2.1	Develop Operational Readiness Test Scripts	35 days	6/17/2019	8/2/2019
2910	1.7.3.2.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2911	1.7.3.2.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2912	1.7.3.2.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2913	**1.7.3.3**	**Operational Readiness Test Results**	**45 days**	**6/17/2019**	**8/16/2019**
2914	1.7.3.3.1	Develop Operational Readiness Test Results	35 days	6/17/2019	8/2/2019
2915	1.7.3.3.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2916	1.7.3.3.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2917	1.7.3.3.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2918	**1.7.3.4**	**Updated Training Management Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2919	1.7.3.4.1	Develop Updated Training Management Plan	35 days	6/17/2019	8/2/2019
2920	1.7.3.4.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2921	1.7.3.4.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2922	1.7.3.4.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2923	**1.7.3.5**	**Training Schedule**	**45 days**	**6/17/2019**	**8/16/2019**
2924	1.7.3.5.1	Develop Training Schedule	35 days	6/17/2019	8/2/2019
2925	1.7.3.5.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2926	1.7.3.5.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2927	1.7.3.5.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2928	**1.7.3.6**	**Training Materials**	**45 days**	**6/17/2019**	**8/16/2019**



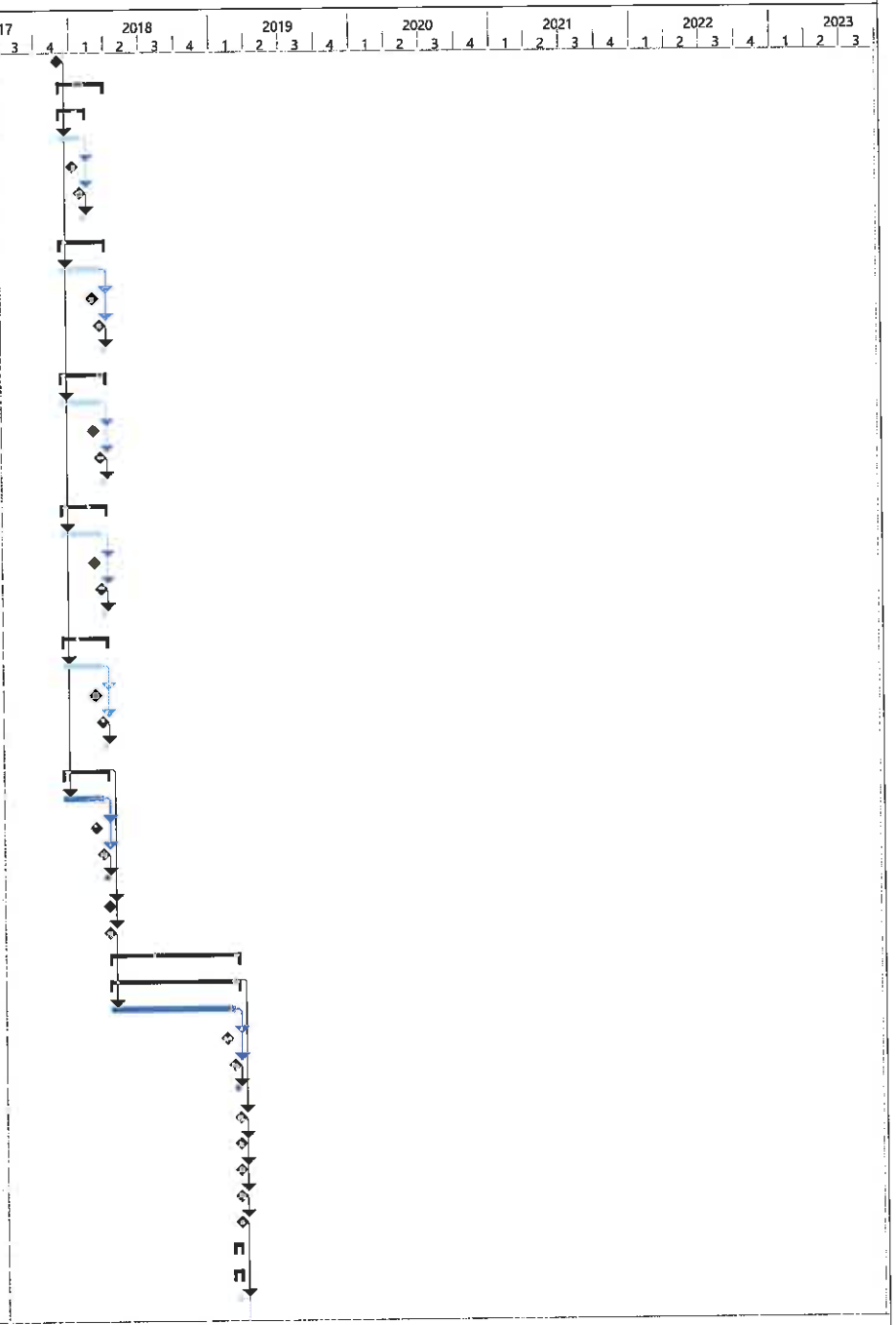
ID	WBS	Task Name	Duration	Start	Finish
2929	1.7.3.6.1	Develop Training Materials	35 days	6/17/2019	8/2/2019
2930	1.7.3.6.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2931	1.7.3.6.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2932	1.7.3.6.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2933	**1.7.3.7**	**Training Report**	**45 days**	**6/17/2019**	**8/16/2019**
2934	1.7.3.7.1	Develop Training Report	35 days	6/17/2019	8/2/2019
2935	1.7.3.7.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2936	1.7.3.7.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2937	1.7.3.7.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2938	**1.7.3.8**	**Implementation Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2939	1.7.3.8.1	Develop Implementation Plan	35 days	6/17/2019	8/2/2019
2940	1.7.3.8.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2941	1.7.3.8.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2942	1.7.3.8.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2943	**1.7.3.9**	**Cut-Over Play Book**	**45 days**	**6/17/2019**	**8/16/2019**
2944	1.7.3.9.1	Develop Cut-Over Play Book	35 days	6/17/2019	8/2/2019
2945	1.7.3.9.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2946	1.7.3.9.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2947	1.7.3.9.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2948	**1.7.3.10**	**Report Distribution Schedule**	**45 days**	**6/17/2019**	**8/16/2019**
2949	1.7.3.10.1	Develop Report Distribution Schedule	35 days	6/17/2019	8/2/2019
2950	1.7.3.10.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2951	1.7.3.10.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2952	1.7.3.10.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2953	**1.7.3.11**	**Operations Project Management Plans**	**45 days**	**6/17/2019**	**8/16/2019**
2954	1.7.3.11.1	Develop Operations Project Management Plans	35 days	6/17/2019	8/2/2019
2955	1.7.3.11.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2956	1.7.3.11.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2957	1.7.3.11.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2958	**1.7.3.12**	**Solution health Monitoring Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2959	1.7.3.12.1	Develop Solution health Monitoring Plan	35 days	6/17/2019	8/2/2019
2960	1.7.3.12.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2961	1.7.3.12.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2962	1.7.3.12.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2963	**1.7.3.13**	**Federal Certification and Review Management Plan**	**45 days**	**6/17/2019**	**8/16/2019**
2964	1.7.3.13.1	Develop Federal Certification and Review Management Plan	35 days	6/17/2019	8/2/2019
2965	1.7.3.13.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2966	1.7.3.13.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2967	1.7.3.13.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2968	**1.7.3.14**	**ACF Certification Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2969	1.7.3.14.1	Obtain ACF Certification Documentation	35 days	6/17/2019	8/2/2019
2970	1.7.3.14.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2971	1.7.3.14.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2972	1.7.3.14.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2973	**1.7.3.15**	**Federal Review Supporting Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2974	1.7.3.15.1	Obtain Federal Review Supporting Documentation	35 days	6/17/2019	8/2/2019
2975	1.7.3.15.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2976	1.7.3.15.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019



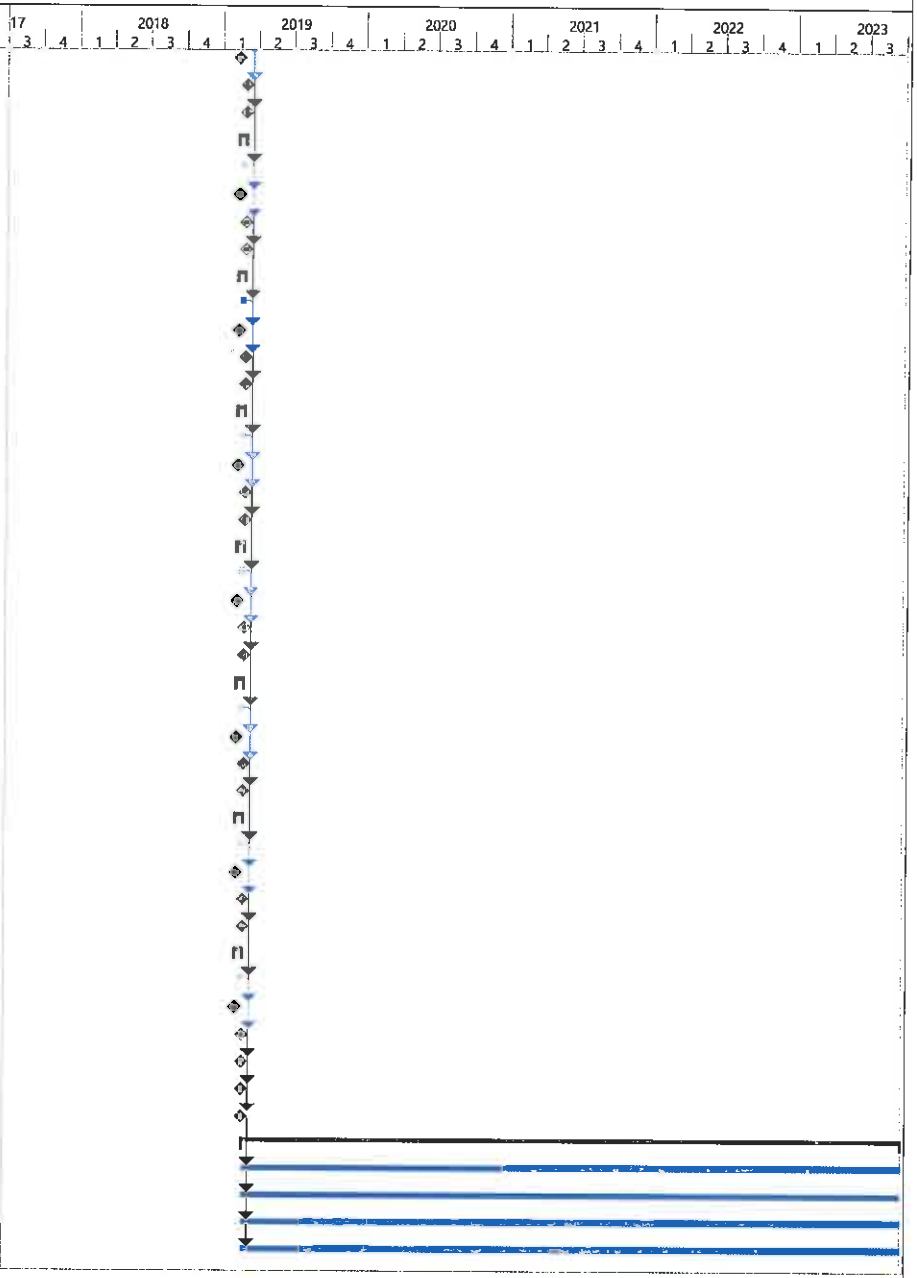
ID	WBS	Task Name	Duration	Start	Finish
2977	1.7.3.15.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2978	**1.7.3.16**	**Social Security Administration Certification Documentation**	**45 days**	**6/17/2019**	**8/16/2019**
2979	1.7.3.16.1	Obtain Social Security Administration Certification Document	35 days	6/17/2019	8/2/2019
2980	1.7.3.16.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2981	1.7.3.16.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2982	1.7.3.16.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2983	**1.7.3.17**	**Implementation Certification Letter**	**45 days**	**6/17/2019**	**8/16/2019**
2984	1.7.3.17.1	Obtain Implementation Certification Letter	35 days	6/17/2019	8/2/2019
2985	1.7.3.17.2	Interim draft deliverable submission	5 days	7/15/2019	7/19/2019
2986	1.7.3.17.3	Submit deliverable for review	0 days	8/2/2019	8/2/2019
2987	1.7.3.17.4	Receive deliverable client approval	10 days	8/5/2019	8/16/2019
2988	1.7.3.18	Overall completion of Implementation Readiness	0 days	8/16/2019	8/16/2019
2989	1.7.3.19	Overall completion of deployment to production	0 days	8/16/2019	8/16/2019
2990	**1.7.4**	**Pilot**	**65 days**	**8/5/2019**	**11/1/2019**
2991	1.7.4.1	Support Pilot rollout	65 days	8/5/2019	11/1/2019
2992	1.7.4.2	Develop Statewide rollout strategy	65 days	8/5/2019	11/1/2019
2993	1.7.4.3	Defect resolution support for Pilot county/counties	65 days	8/5/2019	11/1/2019
2994	**1.7.5**	**Warranty**	**135 days**	**8/5/2019**	**2/7/2020**
2995	1.7.5.1	Support Warranty activities	135 days	8/5/2019	2/7/2020
2996	1.7.5.2	Defect resolution support	135 days	8/5/2019	2/7/2020
2997	**1.7.6**	**Ongoing Maintenance and Operations**	**1085 days**	**8/5/2019**	**9/29/2023**
2998	1.7.6.1	Ongoing Maintenance and Operations	1085 days	8/5/2019	9/29/2023
2999	1.7.6.2	Defect resolution support	1085 days	8/5/2019	9/29/2023
3000	1.7.6.3	Quarterly Maintenance Software upgrades	1085 days	8/5/2019	9/29/2023
3001	1.7.6.4	Incident Management Support	1085 days	8/5/2019	9/29/2023
3002	1.7.6.5	Ongoing Operations Support	1085 days	8/5/2019	9/29/2023
3003	**1.8**	**RAPIDS Integrity Eligibility Maintenance and Support (Legacy)**	**456 days**	**10/2/2017**	**7/1/2019**
3004	1.8.1	RAPIDS Knowledge Transfer (Legacy)	20 days	10/2/2017	10/27/2017
3005	1.8.2	RAPIDS Operational Planning (Legacy)	20 days	10/30/2017	11/24/2017
3006	1.8.3	RAPIDS Transition Planning (Legacy)	20 days	10/30/2017	11/24/2017
3007	1.8.4	RAPIDS Transition (Legacy)	25 days	11/27/2017	12/29/2017
3008	**1.8.5**	**Ongoing RAPIDS Maintenance and Operations Support**	**391 days**	**1/1/2018**	**7/1/2019**
3009	1.8.5.1	Defect resolution support	391 days	1/1/2018	7/1/2019
3010	1.8.5.2	Quarterly Maintenance Software upgrades	391 days	1/1/2018	7/1/2019
3011	1.8.5.3	Incident Management Support	391 days	1/1/2018	7/1/2019
3012	1.8.5.4	Ongoing Operations Support	391 days	1/1/2018	7/1/2019
3013	**1.9**	**WV HSP Call Center**	**1565 days**	**10/2/2017**	**9/29/2023**
3014	**1.9.1**	**Requirements Validations**	**45 days**	**10/2/2017**	**12/1/2017**
3015	**1.9.1.1**	**Requirements Traceability Matrix (RTM)**	**45 days**	**10/2/2017**	**12/1/2017**
3016	1.9.1.1.1	Develop Requirements Traceability Matrix (RTM)	35 days	10/2/2017	11/17/2017
3017	1.9.1.1.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
3018	1.9.1.1.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017
3019	1.9.1.1.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017
3020	**1.9.1.2**	**Requirements Specification Document (RSD)**	**45 days**	**10/2/2017**	**12/1/2017**
3021	1.9.1.2.1	Develop Requirements Specification Document (RSD)	35 days	10/2/2017	11/17/2017
3022	1.9.1.2.2	Interim draft deliverable submission	0 days	10/30/2017	10/30/2017
3023	1.9.1.2.3	Submit deliverable for review	0 days	11/17/2017	11/17/2017
3024	1.9.1.2.4	Receive deliverable client approval	10 days	11/20/2017	12/1/2017



ID	WBS	Task Name	Duration	Start	Finish
3025	1.9.1.3	Overall completion of Requirements Validation	0 days	12/1/2017	12/1/2017
3026	**1.9.2**	**Design**	**85 days**	**12/4/2017**	**3/30/2018**
3027	**1.9.2.1**	**Requirements Gap Analysis Document**	**50 days**	**12/4/2017**	**2/9/2018**
3028	1.9.2.1.1	Develop Requirements Gap Analysis Document	40 days	12/4/2017	1/26/2018
3029	1.9.2.1.2	Interim draft deliverable submission	0 days	1/8/2018	1/8/2018
3030	1.9.2.1.3	Submit deliverable for review	0 days	1/26/2018	1/26/2018
3031	1.9.2.1.4	Receive deliverable client approval	10 days	1/29/2018	2/9/2018
3032	**1.9.2.2**	**Detailed System Design (DSD) Document**	**85 days**	**12/4/2017**	**3/30/2018**
3033	1.9.2.2.1	Develop Detailed System Design (DSD) Document	75 days	12/4/2017	3/16/2018
3034	1.9.2.2.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
3035	1.9.2.2.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
3036	1.9.2.2.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
3037	**1.9.2.3**	**Reports Inventory**	**85 days**	**12/4/2017**	**3/30/2018**
3038	1.9.2.3.1	Develop Reports Inventory	75 days	12/4/2017	3/16/2018
3039	1.9.2.3.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
3040	1.9.2.3.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
3041	1.9.2.3.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
3042	**1.9.2.4**	**Interface Inventory**	**85 days**	**12/4/2017**	**3/30/2018**
3043	1.9.2.4.1	Develop Interface Inventory	75 days	12/4/2017	3/16/2018
3044	1.9.2.4.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
3045	1.9.2.4.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
3046	1.9.2.4.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
3047	**1.9.2.5**	**Data Cleansing and Conversion Requirements Document**	**85 days**	**12/4/2017**	**3/30/2018**
3048	1.9.2.5.1	Develop Data Cleansing and Conversion Requirements Docum	75 days	12/4/2017	3/16/2018
3049	1.9.2.5.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
3050	1.9.2.5.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
3051	1.9.2.5.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
3052	**1.9.2.6**	**Data Cleansing and Conversion Specification Document**	**85 days**	**12/4/2017**	**3/30/2018**
3053	1.9.2.6.1	Develop Data Cleansing and Conversion Specification Docume	75 days	12/4/2017	3/16/2018
3054	1.9.2.6.2	Interim draft deliverable submission	0 days	2/26/2018	2/26/2018
3055	1.9.2.6.3	Submit deliverable for review	0 days	3/16/2018	3/16/2018
3056	1.9.2.6.4	Receive deliverable client approval	10 days	3/19/2018	3/30/2018
3057	1.9.2.7	Overall completion of Data Conversion Design	0 days	3/30/2018	3/30/2018
3058	1.9.2.8	Overall completion of Design Phase	0 days	3/30/2018	3/30/2018
3059	**1.9.3**	**Development, Configuration and Testing**	**240 days**	**4/2/2018**	**3/1/2019**
3060	**1.9.3.1**	**System Documentation**	**240 days**	**4/2/2018**	**3/1/2019**
3061	1.9.3.1.1	Develop System Documentation	230 days	4/2/2018	2/15/2019
3062	1.9.3.1.2	Interim draft deliverable submission	0 days	1/28/2019	1/28/2019
3063	1.9.3.1.3	Submit deliverable for review	0 days	2/15/2019	2/15/2019
3064	1.9.3.1.4	Receive deliverable client approval	10 days	2/18/2019	3/1/2019
3065	1.9.3.2	Overall completion of Development and Configuration	0 days	3/1/2019	3/1/2019
3066	1.9.3.3	Update Business Continuity Plan	0 days	3/1/2019	3/1/2019
3067	1.9.3.4	Execute Disaster Recovery Test	0 days	3/1/2019	3/1/2019
3068	1.9.3.5	Overall completion of System Testing	0 days	3/1/2019	3/1/2019
3069	1.9.3.6	Overall completion of Acceptance Testing	0 days	3/1/2019	3/1/2019
3070	**1.9.4**	**Implementation Readiness**	**15 days**	**2/11/2019**	**3/1/2019**
3071	**1.9.4.1**	**Operational Readiness Plan**	**15 days**	**2/11/2019**	**3/1/2019**
3072	1.9.4.1.1	Develop Operational Readiness Plan	10 days	2/18/2019	3/1/2019



ID	WBS	Task Name	Duration	Start	Finish
3073	1.9.4.1.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3074	1.9.4.1.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3075	1.9.4.1.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3076	**1.9.4.2**	**Operational Readiness Test Scripts**	**14 days**	**2/11/2019**	**3/1/2019**
3077	1.9.4.2.1	Develop Operational Readiness Test Scripts	10 days	2/18/2019	3/1/2019
3078	1.9.4.2.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3079	1.9.4.2.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3080	1.9.4.2.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3081	**1.9.4.3**	**Operational Readiness Test Results**	**14 days**	**2/11/2019**	**3/1/2019**
3082	1.9.4.3.1	Develop Operational Readiness Test Results	10 days	2/18/2019	3/1/2019
3083	1.9.4.3.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3084	1.9.4.3.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3085	1.9.4.3.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3086	**1.9.4.4**	**Implementation Plan**	**14 days**	**2/11/2019**	**3/1/2019**
3087	1.9.4.4.1	Develop Implementation Plan	10 days	2/18/2019	3/1/2019
3088	1.9.4.4.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3089	1.9.4.4.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3090	1.9.4.4.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3091	**1.9.4.5**	**Cut-Over Play Book**	**14 days**	**2/11/2019**	**3/1/2019**
3092	1.9.4.5.1	Develop Cut-Over Play Book	10 days	2/18/2019	3/1/2019
3093	1.9.4.5.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3094	1.9.4.5.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3095	1.9.4.5.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3096	**1.9.4.6**	**Report Distribution Schedule**	**14 days**	**2/11/2019**	**3/1/2019**
3097	1.9.4.6.1	Develop Report Distribution Schedule	10 days	2/18/2019	3/1/2019
3098	1.9.4.6.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3099	1.9.4.6.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3100	1.9.4.6.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3101	**1.9.4.7**	**Operations Project Management Plans**	**14 days**	**2/11/2019**	**3/1/2019**
3102	1.9.4.7.1	Develop Operations Project Management Plans	10 days	2/18/2019	3/1/2019
3103	1.9.4.7.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3104	1.9.4.7.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3105	1.9.4.7.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3106	**1.9.4.8**	**Solution health Monitoring Plan**	**14 days**	**2/11/2019**	**3/1/2019**
3107	1.9.4.8.1	Develop Solution health Monitoring Plan	10 days	2/18/2019	3/1/2019
3108	1.9.4.8.2	Interim draft deliverable submission	0 days	2/11/2019	2/11/2019
3109	1.9.4.8.3	Submit deliverable for review	0 days	3/1/2019	3/1/2019
3110	1.9.4.8.4	Receive deliverable client approval	0 days	3/1/2019	3/1/2019
3111	1.9.4.9	Overall completion of Implementation Readiness	0 days	3/1/2019	3/1/2019
3112	1.9.4.10	Overall completion of deployment to production	0 days	3/1/2019	3/1/2019
3113	**1.9.5**	**Call Center Operations Support**	**1195 days**	**3/4/2019**	**9/29/2023**
3114	1.9.5.1	Defect resolution support	1195 days	3/4/2019	9/29/2023
3115	1.9.5.2	Quarterly Maintenance Software upgrades	1195 days	3/4/2019	9/29/2023
3116	1.9.5.3	Incident Management Support	1195 days	3/4/2019	9/29/2023
3117	1.9.5.4	Ongoing Operations Support	1195 days	3/4/2019	9/29/2023



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WV IES

PROJECT MANAGEMENT PLAN

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

Attachment A Section, 4.3.1 Objective: Project Management

The vendor should include sample reports, forms, and deliverable formats in a separate section at the back of their proposal. Specific reports, forms, and deliverable samples should include a representation of the standard items associated with the Vendor's project management approach.

As requested within section 4.1.3 – Objective: Project Management of the RFP, we are pleased to present our comprehensive initial draft deliverable Project Management Plan which includes a set of sample reports, forms, and deliverable formats that are built in accelerators of our EVD for SI methodology. In addition, we provide our initial draft Project Schedule. The WV IES Project will benefit from these accelerators from project kickoff and throughout the lifecycle of the project. These elements come ready to use for the WV IES and will promote consistency and standard governance for DHHR.

Project Management Plan Contents

1. Project Schedule
2. Deliverables Dictionary
3. Stakeholder Management Plan
4. Staffing Management Plan
5. Facility Management Plan
6. Documentation Management Plan
7. Training Management Plan
8. Testing Management Plan
9.a. Scope Management Plan
9.b. Schedule Management Plan
9.c. Cost Management Plan
9.d. Quality Management Plan
9.e. Human Resources Management Plan
9.f. Communications Management Plan
9.g. Risk Management Plan
9.h. Issue Management Plan
9.i. Change Management Plan
9.j. Security, Privacy, and Confidentiality Management Plan
9.k. Configuration Management Plan
9.l. Data Conversion Management Plan
9.m Disaster Recovery and Business Continuity Plan
9.n. Integration Management Plan
9.o. Data Quality and Governance Plan
9.p. System Backup and Record Retention Plan
10. Turnover and Closeout Management Plan
11. Weekly Status Report Template
12. Monthly Status Report Template

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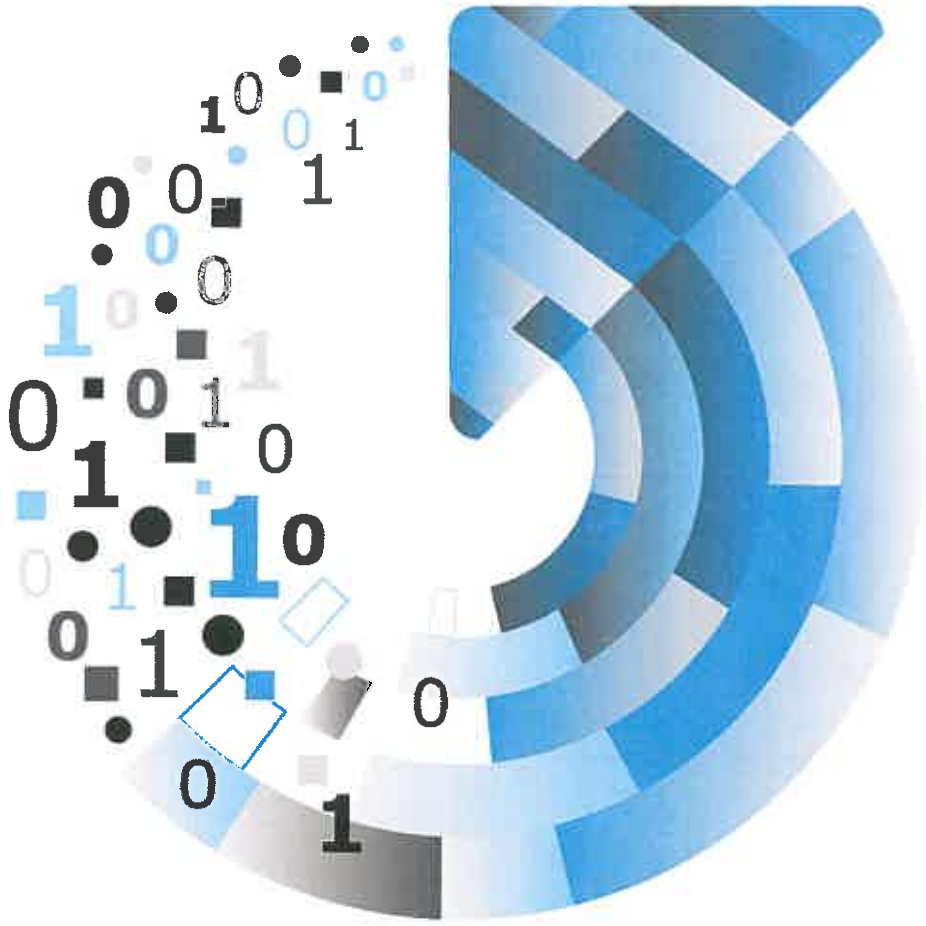

WV IES

1. Project Schedule

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

Document Name	Project Schedule
Project Name	WV IES
Client	WV Department of Health and Human Resources
Document Author	Deloitte
Document Version	.01
Document Status	Sample Template
Date Released	Dec 2016

Document Edit History

Version	Date	Additions/Modifications	Prepared/Revised by
V.01	Dec 16	Initial Draft	Deloitte

Document Review/Approval History

Date	Name	Organization/Title	Comments
<dd-mmm-yyyy>	<Name>	<Organization/Title>	<Comments>

Distribution of Final Document

The following people are designated recipients of the final version of this document:

Name	Organization/Title
TBD	TBD

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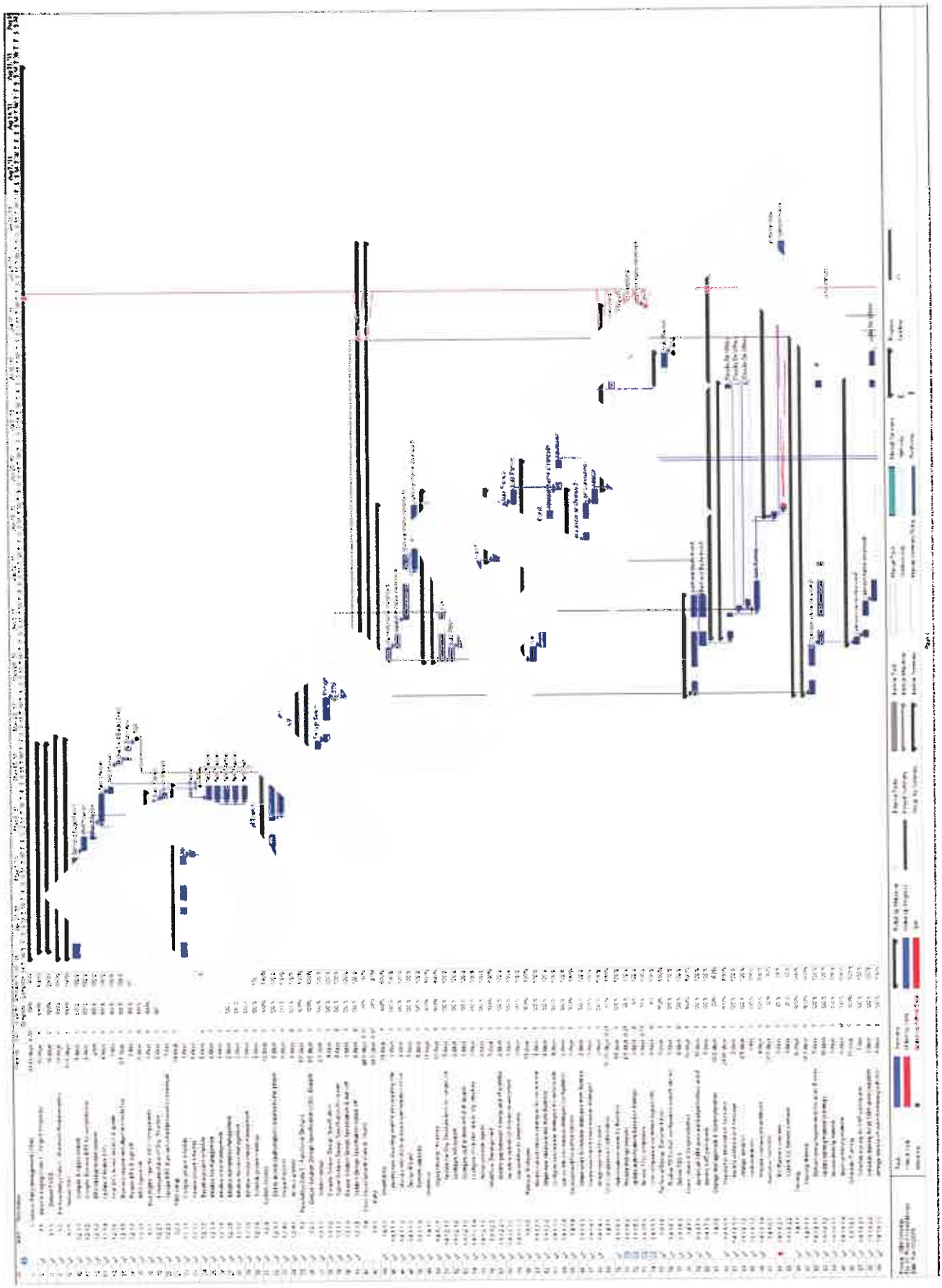
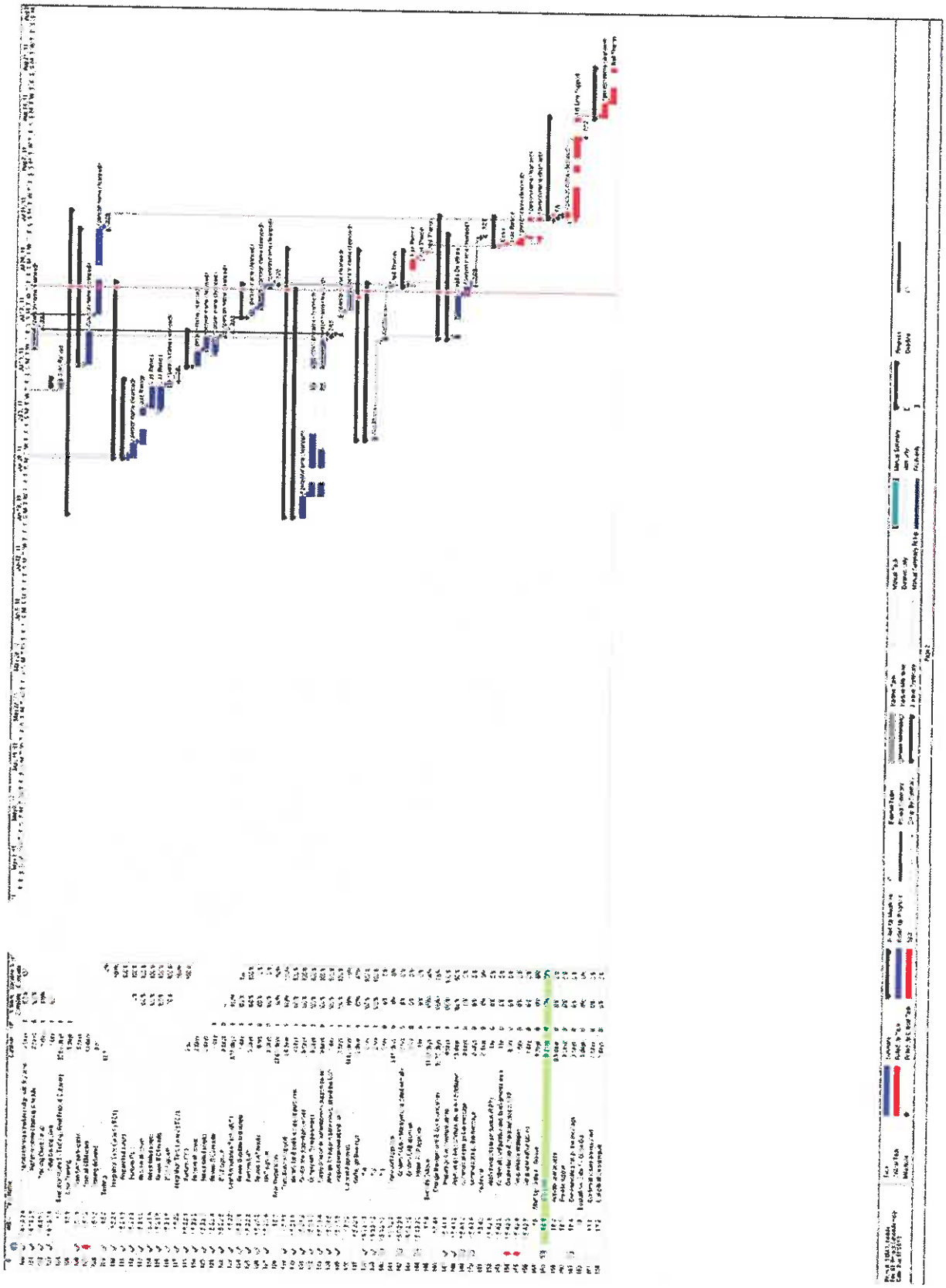
1. Project Schedule i

Project Schedule Introduction 1

Project Schedule Introduction

The Project Schedule provides both an overarching and detailed plan of activities to be completed throughout the duration of the WV IES Project. The schedule includes proposed start and end dates, durations, work estimates, and forecasted resourced needs. It also highlights specific tasks, deliverable and project milestones which are critical to the success of the project. The schedule provides a plan to which actual work progress can be tracked and analyzed and will allow both DHHR and Deloitte stakeholders to identify critical paths. The final schedule will be baselined to the needs of WV DHHR and can be adjusted as changes may arise throughout the project.





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WV IES

2. Deliverables Dictionary

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

Document Name	Deliverables Dictionary
Project Name	WV IES
Client	WV Department of Health and Human Resources
Document Author	Deloitte
Document Version	.01
Document Status	Sample Template
Date Released	Dec 2016

Document Edit History

Version	Date	Additions/Modifications	Prepared/Revised by
V.01	Dec 16	Initial Draft	Deloitte

Document Review/Approval History

Date	Name	Organization/Title	Comments
<dd-mmm-yyyy>	<Name>	<Organization/Title>	<Comments>

Distribution of Final Document

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Name	Organization/Title
TBD	TBD

Table of Contents

2. Deliverables Dictionary i

Deliverables Dictionary Introduction 1

Deliverable List 1

Deliverables Dictionary Introduction

The Deliverable Dictionary is a list of project deliverables and serves a sort of index. For each deliverable it covers a couple key fields. The Deliverable Number helps to identify the unique deliverable. The Deliverable Title is the corresponding name and the Description field highlights the purpose of the document. Other tracking fields are added to the Deliverable Dictionary for internal document management and WV DHHR approval include Work Product ID, Review Type, Review Participants, Sign-off Participants, and Deliverable Acceptance.

Deliverable List

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
1	Establishment of Facility	Complete when the State accepts the vendor facility.	D001	TBD	DHHR Leadership	DHHR Leadership	Yes
2	Project Kickoff Meeting within 10 Calendar Days of Contract Execution	The initial meeting to begin the project, conduct initial introductions, and signals the formal start of project work. The vendor and State should work together to identify the topics for discussion in this meeting. The Vendor should prepare the agenda for this meeting and should be responsible for the meeting notes.	D002	TBD	DHHR Leadership	DHHR Leadership	Yes
3	Project Charter	Should provide the business need, assumptions, constraints, understanding of the project, and the services that will be provided. It authorizes the project.	D003	TBD	DHHR Leadership	DHHR Leadership	Yes
4	Stakeholder Analysis	Should provide the stakeholder register, and background information on each stakeholder	D004	TBD	DHHR Leadership	DHHR Leadership	Yes
5	Stakeholder Management Plan	Should provide the approach that the vendor plans to use to manage stakeholder engagement during the project.	D005	TBD	DHHR Leadership	DHHR Leadership	Yes
6	Facility Management Plan	Should provide the approach that the vendor plans to use to identify, lease, establish, and maintain project facilities.	D006	TBD	DHHR Leadership	DHHR Leadership	Yes
7	Staffing Management Plan	Should provide the approach that the vendor plans to take to staff the project and maintain compliance with staffing requirements set forth in RFP Appendices VI, Table 26: Business and Technical Requirements and VII, Table 27: Operations Requirements of this RFP	D007	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
8	Document Management Plan	Should provide the approach that the vendor plans to use to manage project documentation, including, but not limited to: • Documentation types include deliverables, meeting materials, and artifacts • Use, access, and management of document repositories • Approach to version control on project documentation	D008	TBD	DHHR Leadership	DHHR Leadership	Yes
9	Training Management Plan	Should provide the approach the vendor plans to take to training system users to use the solution. The training plan should contain the vendor's approach to providing training, as described throughout RFP Section Four, Subsection 4.3.7of this RFP.	D009	TBD	DHHR Leadership	DHHR Leadership	Yes
10	Testing Management Plan	Should provide the vendor's approach to conducting and supporting each phase of testing as described throughout RFP Section Four, Subsection 4.3.5 of this RFP.	D010	TBD	DHHR Leadership	DHHR Leadership	Yes
11	Scope Management Plan	Should provide the approach the vendor plans to take to define, control, and verify scope during the project, and should include the following elements: • Approach for developing project scope statement • Approach to creating the WBS based on the scope Statement Approach to maintenance of the WBS - WBS that decomposes project tasks down to the work package level	D011	TBD	DHHR Leadership	DHHR Leadership	Yes
12	Deliverable Dictionary	Should provide a list of project deliverables and should include the following elements for each deliverable: • Deliverable Number • Deliverable Title • Purpose • Description Initial acceptance criteria based on requested content in RFP	D012	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
13	Schedule Management Plan	Should provide the approach the vendor plans to use to manage the Project Schedule and should include the following elements: • Scheduling Tool • Standing Schedule review meetings • Project schedule delivery interval • Assumptions used to develop draft project schedule • Constraints that impact draft Project Schedule • Project Schedule reporting • Approach to baselining schedule	D013	TBD	DHHR Leadership	DHHR Leadership	Yes
14	Project Schedule	Should provide a detailed task-by-task schedule of the activities to be completed during the DDI phase of the project, tying back to the WBS. The project schedule provides start and end dates, durations, work estimates, resources, and predecessors for each tasks, deliverables, and milestones. The Vendor should deliver the schedule in Microsoft Project format, and baseline the schedule upon initial approval by the State.	D014	TBD	DHHR Leadership	DHHR Leadership	Yes
15	Cost Management Plan	Should provide the approach the vendor will use manage the project budget to confirm the project stays within budget.	D015	TBD	DHHR Leadership	DHHR Leadership	Yes
16	Quality Management Plan	Should provide the approach the vendor plans to use to manage the quality of the work that is provided on the project. The Quality Management Plan should establish the deliverable review process and quality assurance approach for the project, as described throughout the project goals in RFP Section Four, Subsection 4.3.2 of this RFP.	D016	TBD	DHHR Leadership	DHHR Leadership	Yes
17	Human Resources Management Plan	Should provide the approach the vendor plans to use to manage the human resources that support the project.	D017	TBD	DHHR Leadership	DHHR Leadership	Yes
18	Communication Management Plan	Should provide the approach the vendor plans to use to manage communications during the project, and should include the following elements: • Audience • Tools	D018	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
		• Standing Project Meetings (purpose, audience, frequency) • Reporting • Maintenance of contact list • Time frame and frequency of communications • Required project communications					
19	Risk Management Plan	Should provide the approach the vendor plans to use to manage risk on the project, and should contain the following elements: • Risk management tools • Data sources that support risk management • Roles and responsibilities • Criticality and probability measures • Escalation measures • Mitigation techniques	D019	TBD	DHHR Leadership	DHHR Leadership	Yes
20	Issue Management Plan	Should provide the approach the vendor plans to use to manage project issues, and should contain the following elements: • Issue management tools • Data sources that support issue management • Roles and responsibilities • Criticality measures • Escalation measures • Corrective action plan methodology	D020	TBD	DHHR Leadership	DHHR Leadership	Yes
21	Change Management Plan	Should provide the approach the vendor plans to use to conduct change management on the project, and should include: • Change management tools • Establishment of a change control board • Regularly scheduled change control meetings • Process used to document change requests on the project Align with the change management requirements contained in the project goals in Section 4.3: Common Governance Structure, of this RFP	D021	TBD	DHHR Leadership	DHHR Leadership	Yes
22	Security, Privacy, and	Should provide the approach the vendor plans to use to manage security, privacy, and confidentiality during the project. This plan should establish the approach for complying with federal	D022	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
	Confidentiality Management Plan	and State security mandates. This plan should also include the following elements: • Vendor's approach to conducting penetration testing • Account management • Role-based security (including complete solution role matrix) • Audit controls and logging • Incident response plan • A description of how the vendor plans to use • IDS, IPS, Security Information Event • Management (SIEM), and malicious software detection. • Annual update process • Data breach reporting processes Align with the related procedures in State plans provided in Procurement Library - Approach to completing SSP, SPR, POA&M, and other artifacts tied to federal reviews					
23	Configuration Management Plan	Should provide the approach the vendor will take to managing solution configuration during the project	D023	TBD	DHHR Leadership	DHHR Leadership	Yes
24	Data Conversion Management Plan	• Should provide the approach the vendor plans to take to conducting the data conversion supporting the transition from the legacy solutions to the integrated solution. The plan should include the following elements: • Development and/or use of conversion programs, tools, or existing extract routines to extract data from the current system • Validation of the data conversion software, including description of a system test of conversion software to demonstrate its functionality and performance before conversion • Conducting parallel system and subcomponent runs to validate data conversion results • Data cleansing, including development of a Data Conversion Specifications Document containing the specific data cleansing and	D024	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
		conversion criteria for data elements - Development and use of data conversion test scripts • Support for UAT of converted data • Approach to data conversion reconciliation, including methodologies for: • Trial conversions • Results reporting and analysis, including reports to assure that there are adequate checks and balances in the data conversion process • Verification of pilot implementation data - Verification of system-wide implementation data • Strategy for any data that does not convert • Approach to development and use of Data • Conversion Test Scripts					
25	Disaster Recovery and Business Continuity Plan	Should provide the approach the vendor plans to use to restore operations following a disaster event. The plan should include the following elements: • Back-up and protection plans and procedures, to include files, software, hardware, and network connectivity • Description of any proposed alternate hot site(s), including proposed plans and procedures for failover testing • Description of off-site storage procedures, including a detailed schedule for back-up operations and any proposed clustering methodology for high availability • Proposed recovery time and recovery point objectives • Risk analysis and risk mitigation for each core business process • Processes and procedures for testing and reporting of the DR/Business Continuity Plan to include: – Failover/fallback functionality – Back-up/recovery functionality, including Recovery Point Objective and Recovery Time Objective.	D025	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
		– Business Continuity iv. Process for updating the plan (as necessary) through the life of the contract					
26	Integration Management Plan	Should provide the approach the vendor will use to manage the modules that make up the complete solution and how these modules support the Seven Conditions and Standards established by CMS	D026	TBD	DHHR Leadership	DHHR Leadership	Yes
27	Data Quality and Governance Plan	Should provide the approach the vendor plans to use to manage program data and records in the system. The plan should include: • Executive Summary • Functional and Organizational Infrastructure • Technical Infrastructure • Policies and Procedures • Data Quality Management	D027	TBD	DHHR Leadership	DHHR Leadership	Yes
28	System Back Up and Record Retention Plan	Should provide the approach the vendor will use to conduct system back-ups and confirm that records are retained on a schedule that aligns with State and federal regulations. The plan should include the following elements: • Detailed schedules, to confirm that data maintained on the WV HSP or in other system/manual files is properly and routinely purged, archived, and protected from loss, unauthorized access, or destruction, in accordance with relevant State policies and procedures • Retention methodology for data and records associated with each of the project phases described herein	D028	TBD	DHHR Leadership	DHHR Leadership	Yes
29	Turnover and Closeout Management Plan	Should provide the approach the vendor plans to use to transition the operations and maintenance of the system to the new vendor or State when the contract comes to a close. The plan should include the following elements: • Knowledge transfer to new vendor and/or • State staff • Delivery of project documentation • Job shadowing • Transfer of assets (software, hardware, furniture) - Escrow	D029	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
		• All data • Certificates of destruction • Project Closeout Report					
30	Weekly Project Status Report Template	Should establish the template for the weekly project status report described in the RFP narrative	D030	TBD	DHHR Leadership	DHHR Leadership	Yes
31	Monthly Project Status Report	Should establish the template for the monthly project status report described in the RFP narrative.	D031	TBD	DHHR Leadership	DHHR Leadership	Yes
32	Weekly Project Status Report	Each Weekly Status Report submitted by the vendor ties to this deliverable.	D032	TBD	DHHR Leadership	DHHR Leadership	Yes
33	Monthly Project Status Report	Each Monthly Status Report submitted by the vendor ties to this deliverable.	D033	TBD	DHHR Leadership	DHHR Leadership	Yes
34	Completion of Project Management Plan	Complete when component project management plan deliverables for the DDI phase of the project have been approved by the State.	D034	TBD	DHHR Leadership	DHHR Leadership	Yes
35	Requirements Traceability Matrix (RTM)	Should establish traceability for the solution requirements from the outset of the project. An initial version of the RTM will be approved following the completion of the Requirements Validation Sessions. The RTM continues to be updated and maintained over the course of the project.	D035	TBD	DHHR Leadership	DHHR Leadership	Yes
36	Requirements Specification Document (RSD)	The primary output of the Requirements Validation sessions. The RSD should establish vendor ownership of system requirements by documenting the shared understanding of the expectations for each requirement between the State and the Vendor.	D036	TBD	DHHR Leadership	DHHR Leadership	Yes
37	Overall Completion of Requirements Validation	Complete when the Vendor completes requirements validation sessions with the State and the State approves the Requirements Specification Document Deliverable. The 10% payment will be distributed evenly across the number of releases that the Vendor proposes.	D037	TBD	DHHR Leadership	DHHR Leadership	Yes
38	Requirements Gap Analysis Document	Should Identify and document the approach for resolving any gaps between system requirements and the capabilities of the Vendor's solution.	D038	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
39	Business Process Models	Should provide step-by-step workflow for each business process supported by the solution.	D039	TBD	DHHR Leadership	DHHR Leadership	Yes
40	Detailed System Design (DSD) Document	Should provide the solution design that the Vendor will use to satisfy the requirements of the contract. The DSD is the primary output of the Design Sessions.	D040	TBD	DHHR Leadership	DHHR Leadership	Yes
41	Data Dictionary	Should provide a complete inventory of data elements that exist in the solution, a definition, data type, and table location for each element.	D041	TBD	DHHR Leadership	DHHR Leadership	Yes
42	Data Models	Should provide the conceptual, logical, and physical data models that determine the structure of the data in the solution.	D042	TBD	DHHR Leadership	DHHR Leadership	Yes
43	Reports Inventory	Should provide a complete inventory of reports supported by the solution. The inventory should include a unique ID, title, description, frequency, retention, and audience for each report.	D043	TBD	DHHR Leadership	DHHR Leadership	Yes
44	Response Inventory	Should provide a complete inventory of correspondence generated by the solution. Correspondence includes both letters (informational) and notices (decisions and changes to client accounts). The inventory should include a unique ID, title, description, related program.	D044	TBD	DHHR Leadership	DHHR Leadership	Yes
45	Forms Inventory	Should provide a complete inventory of forms generated by the solution. The inventory should include a unique ID, title, description, related program.	D045	TBD	DHHR Leadership	DHHR Leadership	Yes
46	Interface Inventory	Should provide a complete inventory of external interfaces in the solution. The inventory should include a unique ID, title, description, source/destination, inbound/outbound, data classification, format, transmission method/medium, frequency, and format/standard.	D046	TBD	DHHR Leadership	DHHR Leadership	Yes
47	Data Cleansing and Conversion Requirements Document	Should provide the business rules that will be used to support the conversion of data from the legacy to the modern solution.	D047	TBD	DHHR Leadership	DHHR Leadership	Yes
48	Data Cleansing and Conversion	Should provide the mapping of fields and other information require to support the conversion from the legacy to the modern solution.	D048	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
	Specification Document						
49	Overall Completion of Design Phase	Complete when the vendor completes design sessions with the State and the State approves the Detailed System Design (DSD) deliverable. The 18% payment will be distributed evenly across the number of releases that the vendor proposes.	D049	TBD	DHHR Leadership	DHHR Leadership	Yes
50	System Documentation	Consists of artifacts that document the design and structure of the solution.	D050	TBD	DHHR Leadership	DHHR Leadership	Yes
51	System Security Plan (SSP)	The CMS-mandated mapping for how the vendor solution meets security controls that are applicable to the solution. Based on the template provided by CMS.	D051	TBD	DHHR Leadership	DHHR Leadership	Yes
52	Safeguard Procedures Report (SPR)	The IRS-mandated mapping for how the vendor meets IRS Publication 1075 Security Requirements that are applicable to the solution. Based on the template provided by the IRS.	D052	TBD	DHHR Leadership	DHHR Leadership	Yes
53	User Documentation	This consists of supporting documentation that the vendor makes available to system users to support specific business processes. This may include desk level procedures, user guides, and other job aides.	D053	TBD	DHHR Leadership	DHHR Leadership	Yes
54	Data Conversion System Integration Test Cases	The test cases that the vendor intends to use to verify that the data conversion was successful at the system-test level.	D054	TBD	DHHR Leadership	DHHR Leadership	Yes
55	Data Conversion System Integration Test Results	The test results verifying that the data conversion was successful at the system-test level.	D055	TBD	DHHR Leadership	DHHR Leadership	Yes
56	System Integration Test Cases	The test cases that the vendor intends to use to verify solution functionality at the system-test level.	D056	TBD	DHHR Leadership	DHHR Leadership	Yes
57	System Integration Test Results	The test results verifying solution functionality at the system-test level.	D057	TBD	DHHR Leadership	DHHR Leadership	Yes
58	Regression Test Cases	The cases that the vendor intends to use to verify solution functionality during regression testing.	D058	TBD	DHHR Leadership	DHHR Leadership	Yes
59	Regression Test Results	The results verifying solution functionality during regression testing.	D059	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
60	Load/Stress Test Cases	The test cases that the vendor intends to use to verify solution functionality during load/stress testing.	D060	TBD	DHHR Leadership	DHHR Leadership	Yes
61	Load/Stress Test Results	The test results verifying solution performance during load/stress testing.	D061	TBD	DHHR Leadership	DHHR Leadership	Yes
62	Capacity Analysis Report	This report analyzes the workload that the solution can handle in its designed configuration to allow the State to plan whether there may be a need to expand capacity in the future if new programs are rolled into the solution, or the client base expands significantly.	D062	TBD	DHHR Leadership	DHHR Leadership	Yes
63	Overall Completion of System Testing	Complete when the vendor completes system testing and the State approves the System Integration Test Cases and Results. The 10% payment will be distributed evenly across the number of releases that the vendor proposes.	D063	TBD	DHHR Leadership	DHHR Leadership	Yes
64	User Acceptance Test Cases	The test cases that the State intends to use to verify solution functionality during UAT.	D064	TBD	DHHR Leadership	DHHR Leadership	Yes
65	User Acceptance Test Results	The test results verifying solution functionality during UAT.	D065	TBD	DHHR Leadership	DHHR Leadership	Yes
66	Overall Completion of User Acceptance Testing	Complete when user acceptance test execution is complete for releases, the vendor delivers final UAT results, and the vendor has resolved defects identified by the State as impacting readiness for the final release. The 18% payment will be distributed evenly across the number of releases that the vendor proposes.	D066	TBD	DHHR Leadership	DHHR Leadership	Yes
67	Operational Readiness Plan	Should provide the approach that the vendor will use to confirm organization readiness to make the transition from the legacy systems to the new solution.	D067	TBD	DHHR Leadership	DHHR Leadership	Yes
68	Operational Readiness Test Scripts	The test scripts that the vendor intends to use to test readiness for solution transition during ORT.	D068	TBD	DHHR Leadership	DHHR Leadership	Yes
69	Operational Readiness Test Results	The results that verify operational readiness for the transition.	D069	TBD	DHHR Leadership	DHHR Leadership	Yes
70	Updated Training Management Plan	Should provide an update to the Training Management Plan prior to initiating training.	D070	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
71	Training Schedule	Should provide the schedule for training to be conducted during the training phase.	D071	TBD	DHHR Leadership	DHHR Leadership	Yes
72	Training Materials	Includes materials that the vendor will use to support training, including slide decks, lesson plans/curriculums, agendas, and any other materials that the vendor will present to trainees.	D072	TBD	DHHR Leadership	DHHR Leadership	Yes
73	Training Report	Should provide the outcomes of the training phase of the project.	D073	TBD	DHHR Leadership	DHHR Leadership	Yes
74	Implementation Plan	Should provide the approach the vendor will use to conduct the cut over from the legacy systems to the new solution at go-live.	D074	TBD	DHHR Leadership	DHHR Leadership	Yes
75	Cut Over Play Book	Should provide a detailed task by task schedule of the activities to be completed during the cut over from the legacy systems to the new solution at go-live.	D075	TBD	DHHR Leadership	DHHR Leadership	Yes
76	Report Distribution Schedule	Should provide the schedule for executing reports.	D076	TBD	DHHR Leadership	DHHR Leadership	Yes
77	Operations Project Management Plans	Should provide updated versions of management plans (inclusive of project management plans approved for the DDI phase of the project) that the vendor will use during the Operations phase of the project.	D077	TBD	DHHR Leadership	DHHR Leadership	Yes
78	Solution health Monitoring Plan	Describes the Vendor's approach to monitoring, maintaining, and enhancing the solution during the Operations phase of the project.	D078	TBD	DHHR Leadership	DHHR Leadership	Yes
79	Overall Completion of Implementation Readiness	Complete when the vendor completes ORT, training, and cut-over planning for releases. The specific deliverables tied to the completion of these tasks are: • Operational Readiness Plan • ORT Scenarios • ORT Results • Training Plan • Training Materials • Implementation Plan • Implementation Play Book The 10% payment will be distributed evenly across the number of releases that the vendor proposes,	D079	TBD	DHHR Leadership	DHHR Leadership	Yes

#	Deliverable Name	Description	Deliverable ID	Review Type	Review Participants	Sign-off Participants	Requires Deliverable Acceptance?
80	Federal Certification and Review Management Plan	Provides the approach that the vendor will use to support federal reviews required throughout the project.	D080	TBD	DHHR Leadership	DHHR Leadership	Yes
81	ACF Certification Documentation	All supporting documentation required to support the ACF Certification process.	D081	TBD	DHHR Leadership	DHHR Leadership	Yes
82	Federal Review Supporting Documentation	All supporting documentation required to support Federal Reviews of the systems.	D082	TBD	DHHR Leadership	DHHR Leadership	Yes
83	Social Security Administration Certification Documentation	All supporting documentation required to support the SSA Certification process.	D083	TBD	DHHR Leadership	DHHR Leadership	Yes
84	Implementation Certification Letter	Should provide attestation that solution functionality has been delivered and is ready for full solution acceptance.	D084	TBD	DHHR Leadership	DHHR Leadership	Yes
85	Overall Completion of Deployment to Production	Complete when the vendor successfully deploys functionality to the production environment and resolves defects that cross the acceptable impact threshold defined in the Implementation Plan deliverable. The State intends to distribute the first 10% of DDI cost allocated to this milestone to the vendor upon acceptance of the complete solution (all modules and supporting functionality). The State intends to also pay the remaining 10% upon acceptance of the complete solution (e.g., modules and system functionality), minus any reductions as defined in RFP Appendix VIII: Service Level Agreements, Tables: 28- 34.	D085	TBD	DHHR Leadership	DHHR Leadership	Yes
86	Turnover and Closeout	Complete when the vendor completes planning and execution of closeout activities when the contract comes to an end.	D086	TBD	DHHR Leadership	DHHR Leadership	Yes

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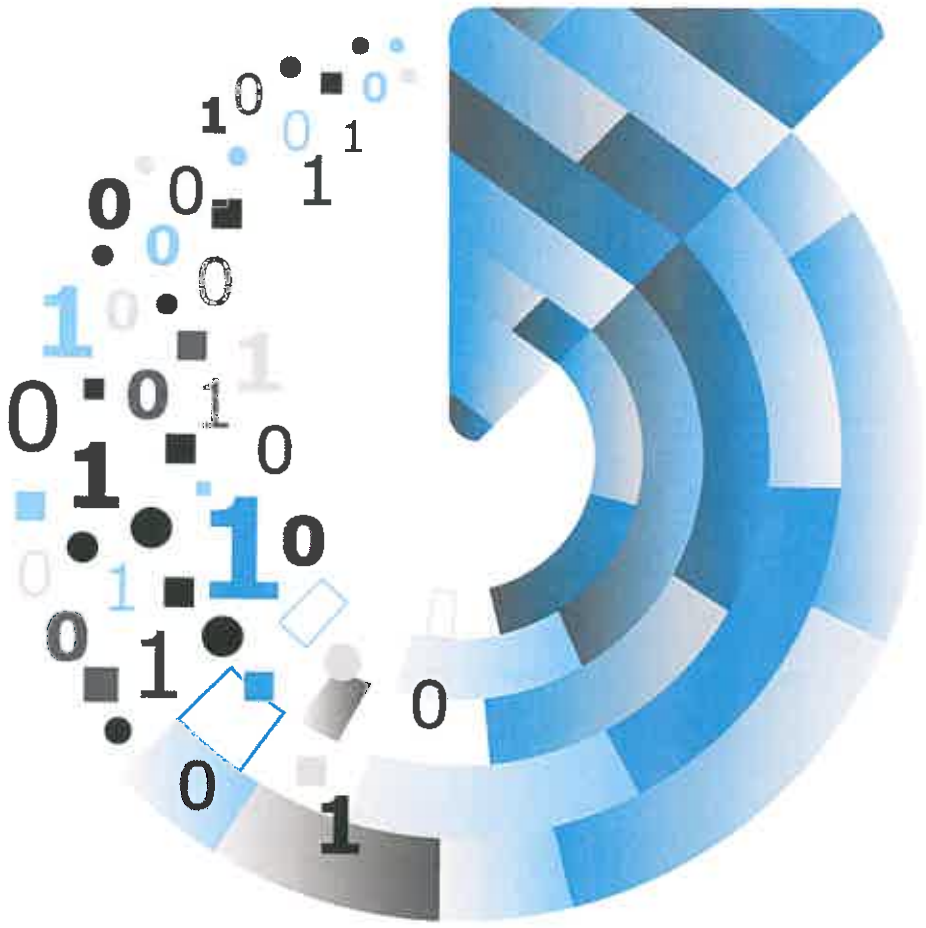

WV IES

3. Stakeholder Management Plan

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

Document Name	Stakeholder Management Plan
Project Name	WV IES
Client	WV Department of Health and Human Resources
Document Author	Deloitte
Document Version	.01
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V.01	Dec 16	Initial Draft	Deloitte

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TBD	TBD

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Stakeholder Management Plan Introduction

The purpose of the Stakeholder Management Plan is to offer a high-level strategy for how stakeholder groups will remain engaged across the various project phases. To confirm accuracy, the Stakeholder Management Plan will be updated at the beginning of each phase of the project. This Plan ultimately attempts to establish commitment and buy-in of key stakeholders through targeted communication and engagement efforts to confirm that each project member has the same end goals in mind. To accomplish this, the Plan also aims to present an overarching framework to assure effective ongoing stakeholder management that aligns with West Virginia's HHS objectives, timeframes, and benefits. Additionally, this Plan also seeks to drive consistency in the way we engage individuals and groups impacted by West Virginia HHS to ease the process of establishing said commitment amongst the DHHR, RAPIDS Vendor, Project Manager Vendor, and Deloitte.

Overview

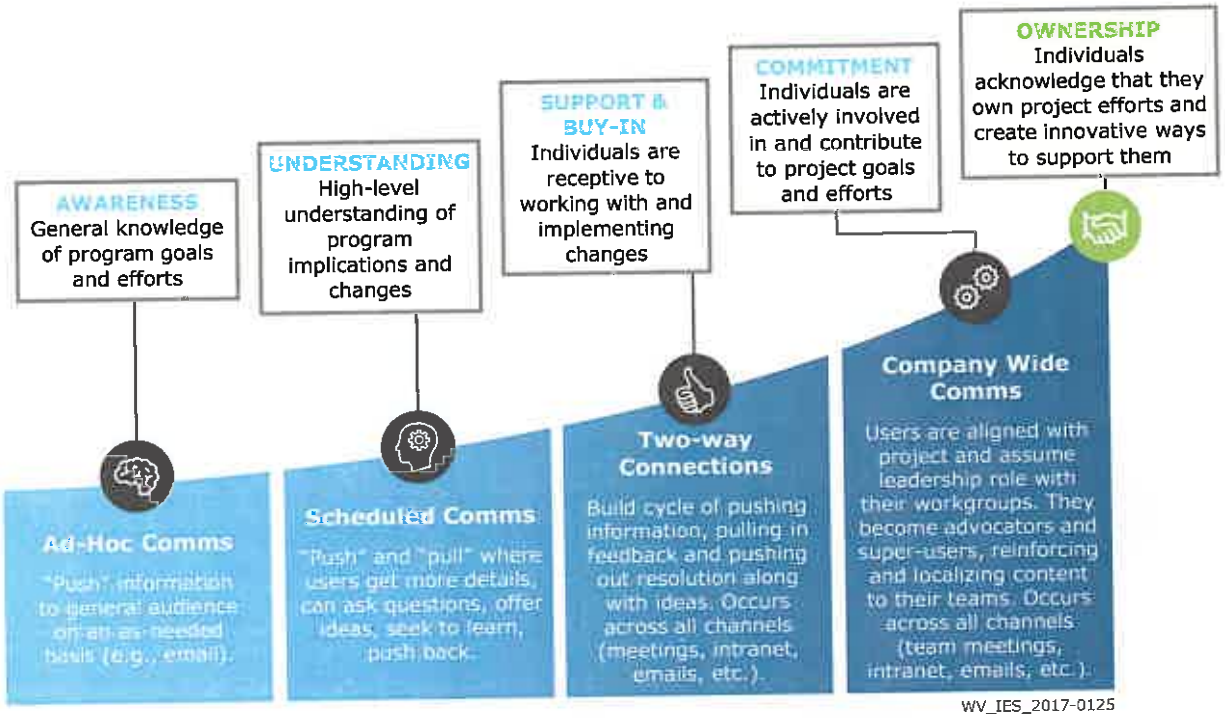
The Stakeholder Engagement Plan provides an overall roadmap for how stakeholder groups (those that will be impacted by the project and those supporting the project) will be engaged across project phases. The Stakeholder Engagement Plan will be revisited and updated at the beginning of each phase of the project.

Objectives

- Build commitment and buy-in of key stakeholders through targeted communication and engagement efforts
- Present a framework as a starting point for confirming effective ongoing stakeholder management that support the achievement of West Virginia HHS objectives, timeframes and benefits
- Drive consistency in the way we engage individuals and groups impacted by West Virginia HHS

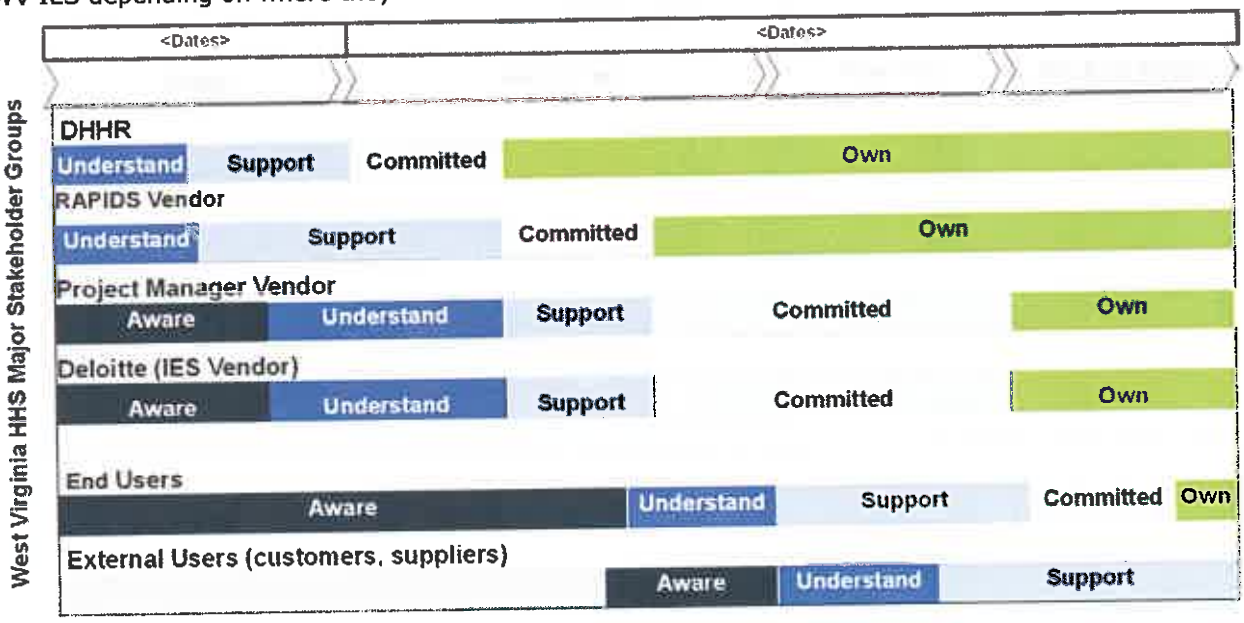
Goal of the Stakeholder Engagement Program

The goal of the stakeholder engagement program is to drive WV IES Stakeholder Groups from Awareness to Buy-In and Ownership of business transformation in preparation for Go-Live. Throughout program implementation, stakeholders fall within different stages of the commitment curve. Input from the Stakeholder Assessment Report is used to set a baseline commitment level and a goal for targeted commitment level.



Engaging the Different Stakeholder Groups

Each stakeholder group will require a different level of involvement and engagement throughout the WV IES depending on where they need to be on the Commitment Curve.



Engaging Stakeholder Groups Impacted by the Project

Key Stakeholders and Goals Overview

This is a list of key members of the stakeholder group, goals of the stakeholder engagement program, needs of the group and requests of the stakeholder group.

Topic	Overview
Key members	• WV DHHR • RAPIDS Vendor • Project Management Vendor • Deloitte IES Vendor • End Users and • External Users
Goals of the Stakeholder Engagement Program	• Understand the benefits of the new system and how to do their jobs with minimal disruptions. • Create comfort and familiarity with the system. • Communicate the value of the new IES program. • Keep all key stakeholders informed of key decisions. • Keep stakeholders informed of progress across threads of the engagement
Key Needs	• Clearly defined roles and expectations in each phase of the project. • Proper working space and applicable technology for stakeholders during meetings and sessions with the vendor. • Stakeholder buy-in to accept and provide feedback from all areas of the WV IES program.
Project Requests	• Provide an overview of the training and support resources available to them. Outlined knowledge transfer plan. • Full collaboration from stakeholder members during each phase of the project.

Engaging WV DHHR across Phases

During planning, Deloitte will work with DHHR to establish expectations across the duration of the engagement. For each phase of the project, this is the outline of the targeted commitment level (per the commitment curve) for WV DHHR.

Phase	Targeted Commitment Level	Recommended Engagement/ Information Topics
Design	Understand and Support	• Participate in design sessions with Deloitte • Collaborate in turning business requirements into a functioning system
Build	Committed	• Remain engaged and available for clarification during the development phase
Test	Ownership	• Assist in identifying relevant test scenarios • Participate in User Acceptance Testing
Final Prep	Ownership	• Review the system functionality and provide final approval • Confirm stakeholder readiness for the solution • Participate in end user training
Go-Live and Support	Ownership	• Validate functionality of the system • Collaborate with Deloitte on updates during the maintenance period • Provide post-implementation feedback and user satisfaction reports for improvement

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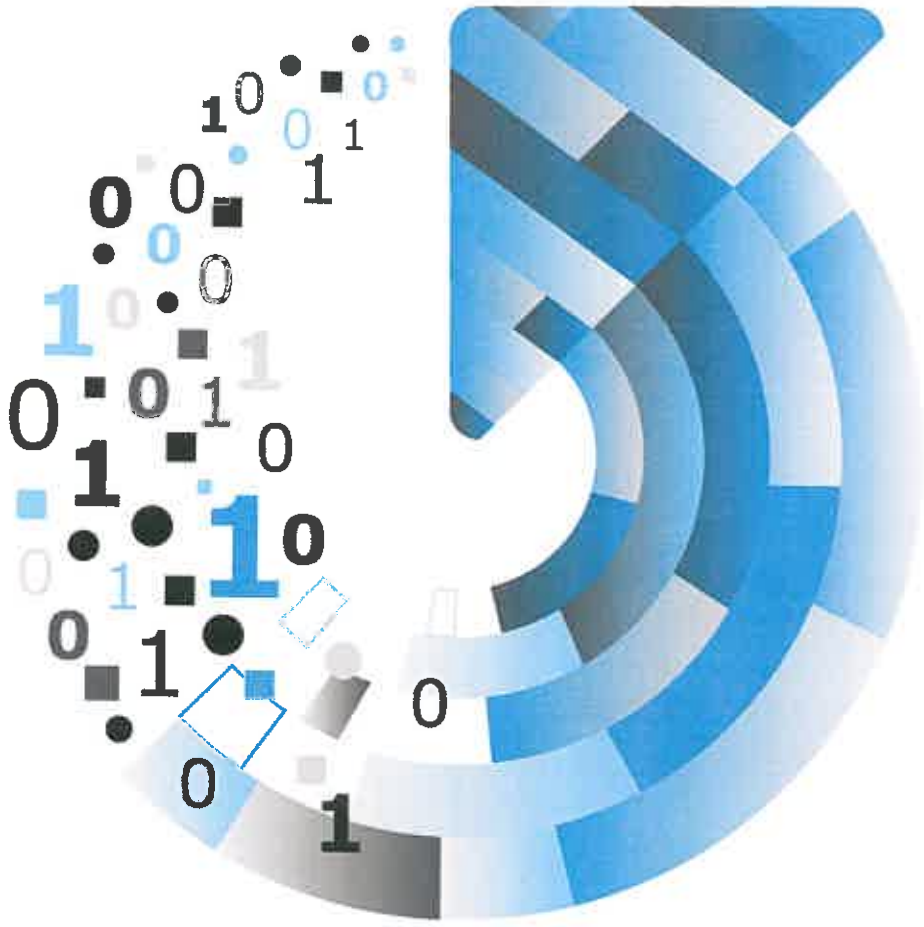

WV IES

4. Staffing Management Plan

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

Document Name	Staffing Management Plan
Project Name	WV IES
Client	WV Department of Health and Human Resources
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Staffing Management Plan Introduction

The purpose of the Staffing Management Plan is to provide stakeholders with an overview of how we propose to staff the project and maintain compliance with staffing requirements per the WV IES RFP. To confirm smooth execution of a project of this size, it is vital that the DHHR adopts a sound plan to manage staffing resources as efficiently as possible. Thus, the proposed Staffing Management Plan offers a detailed outline of how we propose to manage the aforementioned staffing resources for the WV HSP Solution. By thoroughly identifying each potential staffing resource and understanding where said resource belongs within the Staffing Management Plan, the WV IES Project will operate efficiently.

Steering Committee, Advisory Committee, Program Leadership

Role	Resource Name(s)	Primary Activities	Deliverables
Steering Committee Members	Client Person	• Provide guidance to the program to confirm alignment with business strategy and goals • Participate in Steering Committee meetings • Participate in discussions and decisions related to the project • Resolve critical issues with organization-wide impacts	• N/A
Advisory Committee Members	See org chart	• Provide guidance to the program to confirm alignment with business strategy and goals within each organizational unit • Provide function-specific input for project issues that require senior management attention • Manage resource allocation to the Program	• Evaluate and ratify project decisions • Issue and risk resolution • Resource allocations
Program Manager	Client Persons	• Responsible for overall delivery of the Project WV IES project, including Deloitte and DHHR work • Monitor project progress and provides oversight to facilitate adherence to project scope, timeline, and structure • Oversees issue resolution and escalation • Manage project risks and mitigation planning • Facilitate agenda for Advisory Committee meetings • Serve as liaison to WV IES leadership through WV IES Business and Technology and Committee forum • Drives organizational change and stakeholder	• Formalized project organization structure • Defined project roles and responsibilities • Project scope and charter • Resource plan • Project budget and financials • Program roadmap • Program status
Program Leadership	Client person(s)	• Advises program directors on key issues, risks, and status • Serves as central communication channel between project teams and Steering/Advisory Committees • Monitors project progress and provides oversight to facilitate adherence to project scope, timeline, and structure	• Advisory Committee Agenda and Materials • Consolidated issue, risk and action item log • Change control process

Role	Resource Name(s)	Primary Activities	Deliverables
		• Assist Directors with creating agenda and materials for Advisory Committee meetings Manage/Facilitate review of risks, issues and decisions across the project • Facilitates change control process • Drives organizational change and stakeholder alignment	

Workgroups and Projects

Product Benefits & Medical Policy, Case Migration & Customer Retention, Claims, Rx, Network/Provider, Service, Finance, Group & Membership, Dental, EDW/Reporting, EDI/834-Benefit Focus, Print/Mail, VRU, Macess

Role	Resource Name(s)	Primary Activities	Deliverables
Business Architect	Client Person(s)	• Understand the business strategy of the project and provide leadership to the functional workgroups • Work in concert with IT program leadership • Develop and coordinate business migration plan • Provide cohesion across functional workgroups • Understand and communicate the impact of decisions on the business • Manage significant issues and risks related to the cross functional areas of the project • Resolves and manages cross functional resource and priority perspective conflicts • Drives process design/redesign across functional business areas	• Overall migration plan • Overall executive status report
Functional Architect	Client Person(s)	• Provide leadership to the project team for designing and delivering the end-to-end business solution • Provide oversight over a portion of the functional workgroups • Drive consistency across functional workgroups • Represent status and escalate issues/risks to program leadership • Provide backup for workgroup coordinators, as needed	• N/A
Lead	Workgroups: Projects: Client Personnel names deleted	• Serve as the face to Project X driving Client X business needs of the Project X solution • Provide direction for tactical workgroup activities • Serves the single point of contact for the functional workgroup • Serve as central communication channel between workgroup team members and coordinators	• Input for workgroup meeting agendas, meeting materials • Escalation of issues for workgroup • Scope change requests for workgroup • Approach and strategy for completing the deliverables

Role	Resource Name(s)	Primary Activities	Deliverables
		• Facilitate Workgroup Team meetings and review/approval sessions • Track workgroup issues and escalates issues as necessary • Identify potential risks to scope and timeline and communicate to the workgroup coordinators	• Business requirements (in conjunction with BA) • User acceptance test cases/results
Coordinator	Workgroups: Projects: Client Personnel names deleted	• Guide the overall workgroup process • Develop high-level approach and strategy for developing and executing the business blue print for the workgroup (business requirements, processes, policies, etc.) • Provide industry perspective and best practices • Provide cross-functional integration perspective consistent with the overall strategic direction of the project • Share templates tools and methods • Challenge status quo • Review and approves project deliverables and facilitates adherence to project templates and best practices • Provide backup and advisory for workgroup leads, as needed • Perform QA review of workgroup deliverables	• Weekly workgroup status reports • Initial drafts of project tools, templates, and deliverables • Future state business processes and activity profiles
Project Manager	Workgroups: Projects: Client Personnel names deleted	• Manage overall work plan and day-to-day team activities • Perform QA review of workgroup deliverables • Manage workgroup issues/risks/action items • Support coordinators leads with status updates • Adhere to overall organizational methodology process (e.g. EPOC)	• Work plan • Workgroup meeting agendas, meeting materials • Consolidated issue log for workgroup • Issue/risk/action item log • Status updates
Business Analyst (BA)	Workgroups: Projects: Client Personnel names deleted	• Serve as the conduit between the customer community and the software development team through which requirements flow • Responsible for eliciting the business requirements from stakeholders • Preparation of detailed business requirements from which system requirements will be written • Manage the specified requirements and verify fulfillment of those requirements • Develop user acceptance testing (UAT) test cases	• Business Requirements • UAT Test Cases • Training materials
Business Technology Analyst (BTA)	Workgroups: Projects: Client Personnel names deleted	• Serve as the conduit between the customer community and the software development team through which requirements flow • Responsible for eliciting the technical requirements from stakeholders	• Technical requirements • Technical specifications • Build Prototype/Screen mockups • Report Layouts • Context Diagrams

Role	Resource Name(s)	Primary Activities	Deliverables
		• Preparation technical requirements and specifications from business requirements • Manage the specified requirements and verify fulfillment of those requirements	• Business Terms and Business Rules • Training materials

Cross Functional Support – PMO

Role	Resource Name(s)	Primary Activities	Deliverables
PMO Leadership	Client Personnel names deleted	• Provide oversight to the project managers across business, IT and organization and change • Facilitate weekly PMO meeting • Enforces governance process regarding program issues, risks, status reporting, work plan, scope control and escalation to senior leadership	• Weekly PMO meeting agenda and materials
PMO Support	Client personnel names deleted	• Maintain log of PTO & coverage plans for project members • Maintain consolidated issues log • Support coordination of overall project status report • Coordinate team logistics • Maintain the knowledge database for the overall team • Serve as the central hub of communication • Develop templates, procedures and standards to align teams within the program and manage adherence to best practices and standards • Help prepare for and facilitate status meetings	• Team member calendar • Status updates • Team-wide communications • Knowledge database • Document templates • Meeting materials, agendas, logistics

Cross Functional Support – Org & Change

Role	Resource Name(s)	Primary Activities	Deliverables
Overall Organization and Change Lead	Client Person	• Develops and coordinates organizational change management activities • Develops, manages, coordinates and executes a communication plan for the program, DHHR employees, and DHHR business partners (providers, trading partners, etc.)	• Leadership Alignment Strategy & Plan • Review of Communications and Change Management deliverables • Conducts bi-weekly O&C team meetings
Overall Organization and Change Coordinator	Client Person	• Develops and coordinates organizational change management activities • Advises and supports on execution of the communication plan for the program, DHHR employees, and DHHR business partners (providers, trading partners, etc.) • Develops and manages training plans, strategy, assessments, agreements and materials	• Organization & Change Work plan • Training Strategy • Change Agent Network Strategy & Plan • Review of Change Management, Training, and Organization and Talent Deliverables

Role	Resource Name(s)	Primary Activities	Deliverables
		• Oversees project team/end user training • Oversees and reviews Change Management activities and Deliverables • Advises on Organization & Talent activities	
Organization & Talent Lead	Client Persons	• Assess current roles and activities being performed • Understand the current organizational structure and identify which areas in the organization will be affected by the project • Determine what activities need to be performed in the key areas in the "To-Be" state and how this impacts the roles and positions in the organization; identify job impacts • Identify what positions will exist in "To-Be" version of the key areas and develop the job profiles for those positions • Develop strategy to transition workforce and develop necessary communications and training	• Workforce Transition Strategy • Key Job Profiles • Org. Design Review • Role Mapping Matrix • Workforce Transition Guides • Execute Workforce Transition Plans
Communications and Change Mgmt Lead	Client Person (Comm) Client Person (Comm & Chg Mgmt)	• Develop communication plan for Release 1 • Develop and deliver project communications, State X employee communications, external communications, and go-live communications • Assists with execution of Change Management activities	• Release 1 Communication Plan • Deliver Project Communications • Deliver Core Administration Communications • Deliver DHHR Communications • Deliver External Communications • Deliver Go-Live Communications
Training Lead	Client Persons	• Assess what employees need to be trained on • Assess training audiences • Define technical requirements for training • Develop training agreements with each key workgroup • Identify and onboard training developers • Develop course outlines and lead course development • Oversee training delivery • Conduct training evaluations	• Training Strategy • Training Agreements • Training Matrix • Training Schedule • Training Communications Plan
Change Management Lead & Coordinator	Client Person	• Plan the strategy and meeting curriculum for the Change Agent Network ("Bullpen") • Select Bullpen team members and kick off Bullpen	• Design/Build Phase Change Readiness Assessment • Change Agent Network Strategy & Plan

Role	Resource	Primary Activities	Deliverables
		• Maintain active Bullpen (collect feedback, manage meetings) • Identify change impacts with R1 (via process modeling sessions and meetings with workgroup leads) • Develop a change impact action plan and then deliver planned activities (example: management meetings, employee workshops, etc.) • Plan the strategy for the change readiness assessment • Conduct change readiness assessments (including interviews, focus groups, and an online survey) • Analyze change readiness assessment data and develop assessment report and recommendations	• Kick off Change Agent Network ("Bullpen") • Change Impact Spreadsheet • Test Phase Change Readiness Assessment • Change Impact Action Plan • Deliverables identified in Change Impact Action Plan

Cross Functional Support – Overall Cross Functional Support Team (CFT)

Role	Resource Name(s)	Primary Activities	Deliverables
Team Lead	Client Person(s)	• Facilitate cross-functional issue discussions • Coordinate logistics for cross-functional meetings • Communicate pertinent messages from Advisory Committee meetings that have cross-functional impacts • Provide direction to workgroups for	• Cross-functional issues log • Cross-functional meeting agendas
Team Coordinator	Client Person	• Manage process for resolution of cross-functional issues • Develop materials to supplement meeting topics • Conduct due diligence with the relevant workgroups	• CFT process documentation

Cross Functional Support – Business Process Engineering

Role	Resource Name(s)	Primary Activities	Deliverables
Team Lead	Client Person(s)	• Facilitates process modeling discussions with the workgroups • Owns overall business process model • Enters process flows into Sparx tool	• Process Flows in Sparx • Enterprise Business Process Model
Team Coordinator	Client Person	• Liaisons between business workgroups and BPE department	• Detailed design master calendar • Process Flow Inventory

Role	Resource Name(s)	Primary Activities	Deliverables
		• Manages repository of business requirements, process flows and activity profiles • Organizes logistics for process modeling activities	• Repository of detailed design deliverables

Cross Functional Support – Architecture

Role	Resource Name(s)	Primary Activities	Deliverables
Team Lead	Client Person(s)	• Oversee Architects to confirm an effective and efficient architecture is established to support business processes and technology requirements • Provide status updates and flag issues regarding cross-functional issues • Review and approve architecture deliverables	• Architecture Design • Status update • Cross-functional issues and proposed resolution
Architects (incl. Systems, Data, Infrastructure & Solutions)	Client Person(s)	• Preserve conceptual integrity across multiple systems through the delivery of enterprise goals, promotion of technology possibilities and identification of system limits • Confirm that we are leveraging our systems in a way that provides the most value to the company • Understand the interactions of systems and the impact of changes on those systems • Establish the business rules for managing data, data modeling conventions, data definition rules and data naming standards to communicate and oversee the enterprise data strategy • Develop the basic foundation required to perform business processes, manage information and run enterprise systems • Responsible for understanding the solution as a whole, taking into consideration data, business, systems and infrastructure • Confirm that we are taking an enterprise wide view of solutions developed	• Architecture Design • Status update • Cross-functional issues and proposed resolution

Cross Functional Support – Testing

Role	Resource Name(s)	Primary Activities	Deliverables
Team Lead	Client Person	• Develop testing strategy and timeline • Consolidate test scenarios from each team to develop an overall testing plan • Develop procedures to manage test results and issue resolution during testing process • Serve as the point of communication between the testing team and each workgroup/project team • Coordinate and facilitate testing team meetings • Create status report	• Testing strategy • Testing plan • Test results and issue resolution process • Status report

Cross Functional Support – Technology Governance and Alignment

Role	Resource Name(s)	Primary Activities	Deliverables
Technology Governance and Alignment	Client Person	• Drive clarity around the overall SDLC methodology and alignment with EPOC process • Alignment of DHHR and CL LOE delivery dates • Manage a disciplined approach for software release sizing and estimation for R1, R2 and beyond • Guide a consistent approach to requirements management and traceability • Assist teams in understanding the approach for functional and technical design across projects and workgroups • Lack of alignment between DHHR test and production environments and code promotion strategy • Drive business process view of test data needs, fulfillment , conditioning and refresh mechanisms • Centralized management of data migration and conversion • Lack of cross-functional implementation and go-live plan • Manage and communicate a unified view of the overall release landscape and alignment with WV IES releases • Assist in managing the governance around deliverable scope, structure, quality assurance and sign-off process	• Requirements traceability process • Program communication plan • Environmental strategy and process • Data migration and conversion plan

Projects – Application Interfaces and Data Extracts (Formerly "Integration")

Role	Resource Name(s)	Primary Activities	Deliverables
IT Integration Lead	Client Person	• Overall program management methodology definition, promotion, education and enforcement • Coordinate with business sponsorship and responsible for escalation of issues and risks to and within the stakeholders • Review project plans and manage integration points, dependencies and risks • Provide program status to the executive sponsorship team • Enforce standards, integrity and quality for projects	• Status Review • Issue Resolution • Risks Monitoring
Integration Support	Client Person	• Provide strategic leadership and operational support for the Integration Team (Application Interfaces and Data Extracts) • Continuously evaluate the Integration competency strengths	• Signed off Offshore Delivery Process

Role	Resource Name(s)	Primary Activities	Deliverables
		and improvement opportunities and recommend process enhancements • Serve as the point of contact for architectural and development decisions/needs for the Integration effort • Assign DHHR onsite Single Points of Contacts (SPOC) to the project • As the governing body for	
Offsite Coordinator/Project Manager	Client Person	• Prepare and manage the communication framework between onsite and offshore teams • Coordinate activities between the onsite and offshore development teams • Overall project management, develop detailed work plan, and responsible for managing the aspects of the work plan including resource scheduling and tracking progress • Provide weekly status update and escalate issues and risks to the IT Integration Lead and DHHR	• On-site/Off-site Communication Plan • Detail Project Pan • Project Status Report • Project Issues and Risks Log
Off-site Project Manager	Client Person	• Provide inputs to the overall project plan, offshore resource requirements, and ramp up plan • Responsible for offshore project delivery • Provide offshore weekly status to the Onsite/Offshore Coordinator • Escalation point for onsite/offshore issues and manage timeliness and quality delivery from offshore	• Off-site Project Pan • Off-site Status Report • Off-site Issues and Risks Log
Off-site Delivery/Quality Manager [Partial Allocation]	Client Person	• Evaluate if the quality processes are adhered to from an offshore delivery perspective • Participation in quality and risk review activities • Work with offshore project manager on mitigating project issues • Escalation contact for onshore leadership • Responsible for overall responsibility for delivery	• Quality Review • Risk Review
Off-site ETL SME [Partial Allocation]	Client Person	• Provide technical direction to the team from an ETL perspective in times of need • Provide guidelines on ETL best practices and development standards • Required on an "As needed" basis	• ETL Development Standards and Best Practices

Role	Resource Name(s)	Primary Activities	Deliverables
On-site Development Lead	Client Person	• Responsible for design knowledge transfer between onsite/offshore development teams • Identify and resolve/escalate development related project issues and risks • Enforce adherence to development standards • Conduct development code review • Monitor source control procedures at onsite	• Technical Issues/Resolution Log • Off-site Development Environment Maintenance • Query Log Maintenance/Resolution • Deliverable Review Report
Off -site ETL Lead/Develop er	Client Person	• Responsible for the extraction, transformation and load from DHHR IDS (New EDW) database to downstream feeds/applications • Develop technical program specifications for ETL programs • Develop and unit test ETL programs based on design specifications • Support onsite system/end-to-end testing and deployment activities	• Program Specifications • Unit Tested Code/ETL Programs
Off-site BI/Report Lead/Developer	Client Personnel names deleted	• Develop technical specifications for reports and reporting objects • Responsible for the development of reports and reporting objects • Administer report scheduling and related tasks • Provide ad hoc technical support to the user community	• Report Development Standards • Program Specifications • Unit Tested BI/Reporting Objects
Off-site ESB Lead/Develop er	Client Personnel names deleted	• Develop technical program specifications for ESB interfaces • Develop and unit test ESB interfaces based on design specifications • Support onsite system/end-to-end testing and deployment activities	• Program Specifications • Unit Tested Code/ESB Interfaces
WV DHHR SPOCs (Single Point of Contacts)	Client Personnel names deleted	• Coordinate setup of development environment for the off-site team • Provide operational support for development environment related issues the off-site team encounters during build and testing phases. • Coordinate code migration and change control documentation • Confirm off-site team's compliance with Client X's change control process and Release Mgmt process	• Development Environment for Off-site Team • Design and Build Deliverables Review/Design off

Projects – Cross Projects Support

Role	Resource Name(s)	Primary Activities	Deliverables
DHHR IS Roles: Svstem	Client Personnel names	• Analyze Business Requirements and business process models to define specific functional and non-functional requirements related to	• Functional Specifications (BTA/SA)
DHHR IS Roles: Data Analyst (DA) Data Modeler (DM) Database Administrator (DBA) Data Architect (DAr)	Client Personnel names deleted	• Data Analysts: • Analyze the data feeds coming in from Project X • Identify WV IES data elements that map to DHHR data elements • Develop the source to target mapping document • Data Modelers: • Develop data models for workgroups based on inputs provided by business users, BTAs and BIAs • DBA: • Implement/maintain physical data models in production • Data Architect: • Establish the business rules for managing data, data modeling conventions, data definition rules and data naming standards to communicate and oversee the enterprise data strategy • Work closely with business users to explain the EDW data mart	• Source to Target Mapping Document (DA) • Data Dictionary of the new EDW/IDS (DM)
DHHR IS Roles: Business Intelligence Analyst	Client Personnel names deleted	• Analyze existing reports, and identify data requirements • Prepare a master reporting requirements document based on the analysis • Work closely with business users to validate this data element list	• Reporting Requirements
DHHR IS Roles: Business Technical Analyst	Client Personnel names deleted	• Work closely with business users to identify reporting requirements • Identify list of ad hoc and canned reports • Update report book with a list of reports • Work closely with business users to validate the list of WV IES data elements that map back to Capsule/EDW data elements	• Functional Specifications (BTA/SA) • Workgroup Report Book

Quantitative

Staffing Requirements

The number of resources needed for each position will be determined during the planning phase.

Staff Reporting and Direction

Once the staffing plan has been finalized, reporting relationships will be established to confirm program direction is established for all staff members.

Staffing Adjustments

A specific plan around needed staffing adjustments will be addressed prior to the engagement, as well as any concerns around resource availability and resource pools.

Deloitte.

WV IES

5. Facility Management Plan

Draft Deliverables

August 8, 2017

Document Control Information

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Project Name	WV IES
Client	WV Department of Health and Human Resources
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Facility Management Plan Introduction

The purpose of the Facility Management Plan is to provide an overview of our proposed strategy to identify, lease, establish, and maintain project facilities. We fully recognize the importance of confirming a safe, secure facility that stimulates productivity. Thus, the Facility Management Plan outlines our recommended approach to achieve said safety, security, and productivity through concrete facility management. Our detailed Facility Management Plan, which highlights the associated facility management peripherals, will provide the DHHR the confidence to place their faith in our coordinated facility management efforts.

Overview

Deloitte has a strong, successful record of procuring, establishing, and managing facilities for numerous large, complex business and technology projects for state government and commercial clients. Deloitte, will consult with local vendors to secure a project location that will meet the requirements set forth by this proposal.

Facilities Management Approach

We will leverage the experience from Deloitte's professional Real Estate Services team, our national Information Technology Services (ITS) organization, and our Portland-based ITS organization. Our Real Estate Services team manages a portfolio of nearly 11.3 million square feet of leased and owned properties, which represents 160 Deloitte locations in the United States and India.

Our experience establishing and managing offices and client project sites, including associated technologies, allows Deloitte to:

- Apply lessons learned and leading practices to reduce costs, minimize challenges, and curtail risks
- Leverage years of experience negotiating complex lease agreements
- Leverage existing national agreements with real estate and associated facilities and maintenance services vendors
- Capitalize on a strong and successful record of establishing and managing large project sites
- Set up technology infrastructure in a cost-effective manner by taking advantage of our national procurement contracts, including for laptops, monitors, phone systems, and supporting technologies
- Establish the WV IES project infrastructure properly, including project management tools and connectivity between project facilities to minimize system disruptions
- Provide a high standard of office management support, including clerical activities and maintenance coordination

Our team looks forward to leading the responsibilities of leasing, establishing, and managing the facility for the WV HSP team that meets security, safety, and applicable state and federal regulations. Many considerations go into deciding the location of such an important facility. Not only must the location meet RFP requirements as defined by the state, but it must also be conducive to the project workflow and be equipped with the necessary technology.

Engaging the state early in the process will allow for a facility acceptable to parties. Deloitte plans to work closely with the Agency to identify the appropriate facility and confirm mutual approval for the facility prior to negotiating and executing a lease.

Our approach to facilities management in focused on three key components, from both a set up and ongoing maintenance perspective. Our Facility Management approach provides a comprehensive and structured approach to meeting the facility and working space needed for a productive WV IES team. The three pillars of our Facility Management approach: Facility, IT Infrastructure, and Administrative Support cover components and steps required to establish the project site.

Establishing and securing a fully functional project site is an important component of successful WV IES Project delivery and operations. Deloitte understands and agrees to perform the required responsibilities to be determined by WV DHHR, beginning with project initiation and ending in contract completion. Leveraging the Facility Management approach, Deloitte will meet responsibilities and requirements. Insurance

The establishment of the WV IES Project site will leverage Deloitte's ITS services, both from a national level as well as from nearby Portland. Our national ITS will provide oversight and direction regarding the implementation of the technology standards and compliance. Our national ITS services will provide the support to make sure that our facility, IT infrastructure, and administrative model aligns with project requirements and internal firm standards. Furthermore, our local ITS team will be leveraged for the physical implementation and ongoing maintenance and support. The local ITS team will support the projects in the implementation across the three pillars of our facility approach and methodology.

The project site will conform to the American with Disabilities Act (ADA), as well as applicable safety and health regulations and will be constructed in accordance with applicable State building codes. To safeguard both staff and information housed at the WV IES project site, we will provide multiple security features, such as secure processes for authorized systems and building access. These features include management reporting capabilities via our networked badge reader system; a centrally monitored alarm system, if required; an emergency evacuation plan; physically secured work and storage spaces; and badge access via Deloitte's national OneBadge.

Project Facility Acquisition and Build-Out

The Deloitte project team will engage our Real Estate Services team in the pre-selection of several sites appropriate for the WV IES Project facility. This team has acquired more than 160 project offices with in excess of 11.3 million square feet of leased office space. Upon contract award, the Real Estate Services team will begin work immediately on the acquisition of the project facility, as well as the build-out planning and implementation The Real Estate Services team has a wide network of local contractors and vendors that are fully capable and prepared to provide the services required to open the project facility in a timely manner. Additionally, the Project Facility and Equipment Plan will include the Project Facility Work Plan with specific timeframes and milestone dates.

Project Facility Location

Our team will identify several options that fall within the facility requirements. We will continue to monitor the market for additional sites and will conduct a full sourcing and establishment process upon award notification. Formal space planning, programming, test-fit, and review processes will be conducted at that time, with full progress and status reporting provided to the agency, as required. Additionally, Deloitte will work with WV DHHR leaders to finalize the site location.

Project Facility Parking

The final draft of the facility management plan, will outline specifics with regards to facility parking options, which will meet requirements set forth by DHHR.

ADA

The project site will conform to the American with Disabilities Act (ADA), as well as applicable safety and health regulations, and will be constructed in accordance with applicable State of West Virginia building codes.

Provide Liability Insurance

Deloitte maintains the insurances required by federal, state, or local statutes, including workers' compensation and employers' liability coverage. We also maintain commercial general liability and automobile liability in amounts sufficient to protect our U.S. organizations, as well as the interests of our clients, where appropriate. The attached sample certificate of insurance provides evidence of the minimum limits the U.S. organizations maintain for each of these policies.

Deloitte maintains professional liability coverage believed to be similar to the programs of other large professional services organizations in the United States. We believe our insurance coverage is adequate to sufficiently cover the services detailed in this request for proposal.

If Deloitte is awarded the work, the insurance requirements will be negotiated in good faith, as part of the overall contract negotiation process.

Leasing, Renting and Purchasing

Deloitte, will either lease or rent a project facility. Under the Project Facility and Equipment Plan, Deloitte will provide a leasing or rental agreement that will meet the specifications as defined by this proposal. In the event a facility cannot be found to meet of the specifications, Deloitte will work with WV IES Project leaders on a mitigation approach.

Deloitte will work with the agency to define the transfer of equipment upon the execution of the termination or expiration of contract according to defined rules set forth by Deloitte legal review and compliance with State of West Virginia procurement standards.

Rooms

Meeting spaces of various sizes and uses will be provided, to meet a variety of project needs. Specific agreements will be agreed upon, once contract negotiations take place.

Video Conference Capabilities

Deloitte ITS has built telepresence videoconferencing and standard video systems in offices in the United States and around the globe as video conferencing has become a standard business practice.

Deloitte will equip the dual-purpose meeting room and one of the 20-person capacity standard meeting rooms with an Internet-enabled video-conferencing system that will be able to accommodate a state-based video-conferencing capabilities. Once the facility planning is under way, Deloitte will work closely with the Agency to establish a detailed understanding of the agency needs.

Restrooms

Requirements related to restrooms will be agreed upon once contract negotiations are underway.

Provision for Large Meetings

If required, Deloitte will provide space for large meetings to accommodate a specified number of people.

Non-Manager Workspaces

Once contract negotiations take place, we will work with DHHR to identify specific needs around non-manager workspaces.

Manager Workspaces

Once contract negotiations take place, we will work with DHHR to identify specific needs around manager workspaces.

Project Facility and Local Area Network

Deloitte facilities team members will work with the state network team to enable access to these environments from the project facility for Deloitte and state staff who are working from the facility. We understand that there may be unique software circumstances that may require the state to provide VPN/specialized network access to enable the teams to fully interact in this environment.

Based on the connectivity established from the project facility for the state network by the state network team, Deloitte will enable access to the state WAN using agency-approved processes. This will allow Deloitte to follow state agency processes for application file access and connectivity from the project facility. Deloitte will follow state agency VPN guidelines for remote access.

Agency employees will retain the same e-mail and scheduling functionality in the project facility as they have in the agency facilities since they will be using agency-provided PCs with necessary software. The project will use state e-mail for communications, leaving Microsoft Exchange and Outlook functionality for agency staff unchanged.

Deloitte will use the Microsoft Exchange e-mail and Outlook scheduling functionality that the state utilizes. The project will use state e-mail for communications, leaving Microsoft Exchange and Outlook functionality for agency staff unchanged. Deloitte will use Deloitte-provided Microsoft office for the team's PCs with state exchange configured for Microsoft Outlook. If the state standards do not allow this functionality, for reasons such as domain-managed workstation inventory or other restrictions, we will use the state's Web Outlook functionality for Deloitte team members.
Deloitte team members will use laptops to help them work efficiently from remote locations. They will also use the state VPN to access state data center-hosted environments and resources required for performing project work. This includes the ability to remotely access the necessary state servers to do project work. If a Deloitte project laptop needs to be kept overnight in active run mode for a task or monitoring, a Deloitte facility team member will enable remote desktop capability on that specific laptop only.

Technical Support

Specific technical support needs will be determined throughout contract negotiations.

Specifications of Office Equipment

Our team will identify specific requirements for office equipment, once contract negotiations take place.

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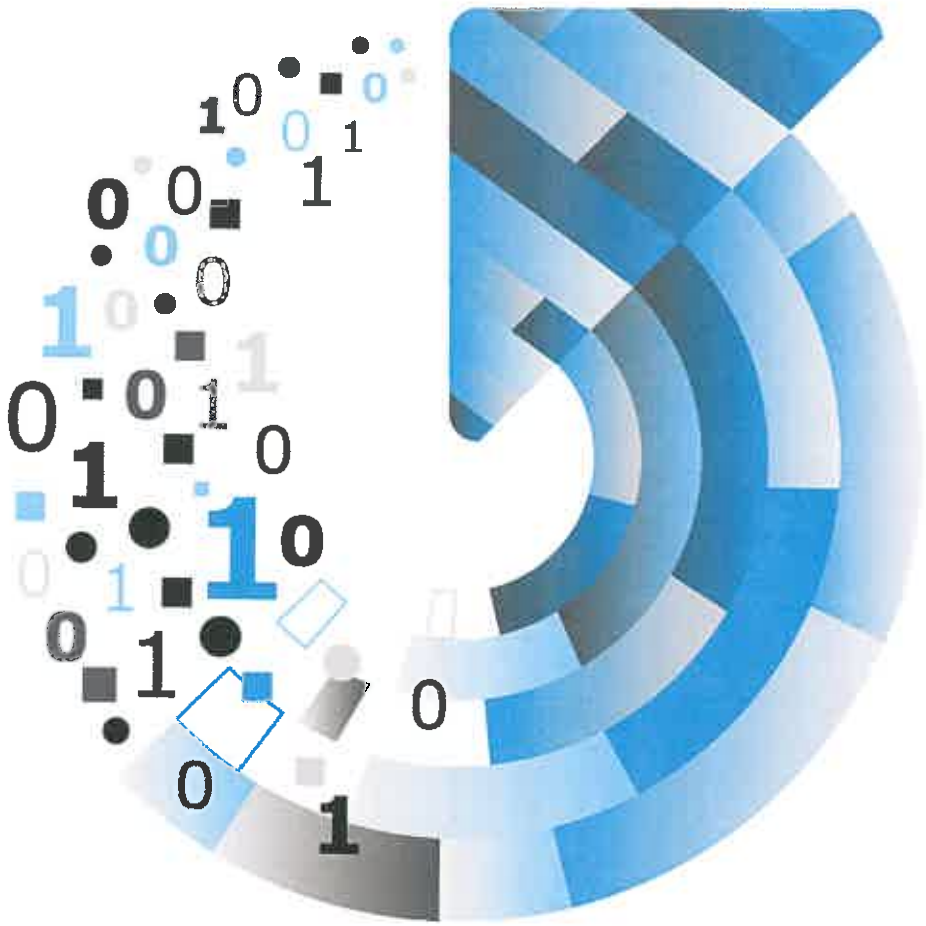

WV IES

6. Documentation Management Plan

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August 8, 2017

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Documentation Management Plan Introduction

The purpose of the Documentation Management Plan is to confirm the integrity of project documents. In order to successfully deliver a project solution, it is necessary that the integrity of project documents is maintained. To achieve said integrity, the Documentation Management Plan outlines of the protocols we recommend implementing to manage project documentation. Considering the large number of documents required for successful completion of this project, it is imperative that stakeholders have an understanding of the conventions (e.g. naming standards, version control, backup, and access control) that will be utilized to adequately manage project documentation. Thus, the Documentation Management Plan is ideal for stakeholders seeking greater clarification on how we propose to manage documents, and, in turn, project documentation integrity.

Project Document Management Guidelines

Purpose

The purpose of project document management is to confirm the integrity of project documents. Integrity refers to the degree of assurance that the information or content of the project documents is both accurate and reliable for its intended purpose.

Specifically, project document management involves identifying a project's managed and controlled documents, the selection and set-up of systems and repositories to maintain project documents, defining the processes that will be used to control changes to project documents, and assessing the effectiveness and consistency of the controls used to preserve the integrity of project documents throughout the life of the project. (For example, access rights, version control, naming standards, and so on.)

Document management is one aspect of control over a project's work products. Other categories of work products for systems development projects include code or software, and technical environments or infrastructure. This guidelines document focuses strictly on project document management and provides detailed information on how to implement effective project document management and change control.

Project Document Management

Successful delivery of a project requires that the integrity of project documents is maintained. Project documents must be appropriately managed and controlled, because in dynamic project environments, team members need to have their work based on accurate, reliable, and stable project documents.

Project document management enables control over the integrity of project documents. Different project documents require different levels of control, based on their purpose and criticality to the project. This section describes the common standards and controls needed for effective project document management, as well as the level of control applied based on project document type: (1) controlled project documents; and (2) managed project documents.

Document Standards and Controls

Standards and controls will be used to manage project documents for the WV IES project, including naming standards, version control, backup (also known as archiving), and access control. These components are described below.

- **Naming standards.** Naming standards provide a project with a systematic way of labelling project documents. Naming standards improve a project's ability to identify, sort, and retrieve project documents.
- **Version control.** Version control protects the integrity of project documents by creating a distinct version of a project document each time changes are made. Additionally, version notes allow a user to identify unique information about a set of project document versions, because version notes typically summarize changes from one version to another, and provide the author of the changes for each version.
- **Backup.** Backing up project documents, in combination with version control, provides projects with the ability to retrieve the most recent backed up version of a project document in case of a system failure, or to roll back to a previous version of a project document when necessary.
- **Access control** protects the integrity of project documents by limiting access and authority to make changes.

Controlled Project Documents

Controlled project documents are signed-off and put under change control. Controlled project documents must be specified as such in the Document Control Information and/or a documented naming standard, and have appropriate levels of version control, access control, as well as undergo regular backups.

- **Controlled Project Document Examples.** Controlled project documents should include a formal naming standard. The following is a suggested file-naming standard: <WV IES Project>_<Controlled Document Type/Document>_.document extension.

The following are expected controlled project documents for the WV IES Project:

- Proposal and Contractual Documents
- Management Plans
- Work Plans
- Approaches
- Use Cases
- Test Cases
- Requirements Specifications
- Code Specifications
- Data Models
- Templates

The following are guidelines for what specific elements of a controlled project document are subject to change control:

- **Documents, spreadsheets, and presentations.** Control should be applied to content.
- **Work Plans.** Control should be applied to the baseline Work Plans defined at the project phase level.

Managed Project Documents

Managed project documents require less control and are not governed by the project's change control process. However, some degree of control is still planned for managed project documents. When planning for managed project documents, a project should define appropriate file-naming standards, version control, access control, and backup procedures. Different managed project documents may require different levels of control. Examples of managed project documents, along with suggested control standards in parentheses, are list below:

- Schedules (file-naming standards, version control, access control, backup)
- Reports (file-naming standards, access control, backup)
- Meeting minutes (file-naming standards, access control, backup)
- Checklists (file-naming standards, access control, backup)
- Databases, logs, and registers (file-naming standards, access control, backup)

Project Document Type Identification

The Project Document Management Plan within the project's Quality Management Plan defines the project's controlled and managed project documents.

Project Document Management Status

Project document management status accounting summarizes the project's ability to manage the status (that is, current version information and whether or not it is checked in/ checked out, and by whom) of each of its project documents. Most document management systems allow for real-time project document management status reporting of managed and controlled project documents.

Document Management Systems

Document management systems are software applications used to manage and control project documents. There are many types of document management systems. An electronic repository is the foundation of any document management system that provides version control and an organized library of files. Any file placed in the repository is considered to be under project document management. The system should also allow varying access control capabilities to the file structure created to enable change control over the project documents loaded into the system.

Some tools, such as Microsoft SharePoint and DeloitteOnline, have additional features specially designed for advanced project document management capabilities. Refer to the Develop Tool Strategy task and template for further details on the selection process.

Selecting a Document Management System

Projects may select different management systems to manage different project work products. The selection of a software/code management tool should be guided either by the client or a formal decision process by the project.

Unless otherwise specified by the client, it is recommended that projects use Deloitte OnLine (also known as eRooms), Deloitte's standard, and free (to the project) document management system to manage their project documents.

Setting up a Document Management System

Document management systems must be capable of enforcing standards for version and access control. The systems should be set up to control project documents in a manner consistent with the guidelines presented in this document, and the project-specific document management plans defined in the Quality Management Plan. The specifications below describe the requirements for project documents the select document management system(s) must support:

- Access control is enabled: Appropriate access rights are assigned for controlled project documents.
- Version control is enabled: Changes to controlled project documents in the repository result in the creation of new versions.
- Version history is maintained: The repository stores version history information which, in addition to the version number, includes version notes, the author of the version, when the version was created and the current status of the project document (see next bullet).
- Check-in/ check-out features are enabled: To work on a controlled project document, users check out a version, perform work on it, and, at their discretion, check it back into the repository. This creates a new version of that controlled project document, and a version number is automatically associated with a new version. Versions are locked until they are checked in.

Project Document Management Assessments

Purpose of Performing Project Document Management Assessments

Project document management assessments are performed to confirm the integrity of the document baselines. They confirm that project documents in the baseline are consistent with, and conform to the project document management standards and requirements defined in the Quality Management Plan. This includes such items as file-naming standards, change history, access control, version control, and so on.

Project Document Management Assessment Types

Depending on client or project needs, there are different types of project document management assessments to consider. The remainder of this section describes three of the most common assessment types.

Functional Assessments

Functional assessments verify that functional objectives of the project documents in a baseline are achieved, and that the format of each project document meets requirements.

A functional assessment is conducted to compare that:

- The development of each project document has been completed satisfactorily.
- Each project document has achieved the functional objectives specified.

When performed, functional assessments are generally done only once per project document.

Physical Assessments

Physical Assessments are conducted to verify that the project documents conform to the templates and development process that was supposed to be used to create them. Physical assessments confirm that the right document versions are included in the baseline, and are ready to be delivered and archived.

Physical assessments are conducted to compare that each project document conforms to the template, standards, and guidelines that were to be followed in their development:

- All items comprising the baseline are included in the baseline.
- The correct version of each document is included in the baseline.

When performed, physical assessments are generally done only once per project document, and follow a functional assessment.

In-process Assessments

In-process assessments are performed to confirm that project documents and baselines conform to the defined document management standards and requirements for the project consistently. The longer document non-conformances are allowed to exist for a baseline, the greater the risk they could corrupt the project's baseline contents and adversely affect the final product or a project's ability to deliver a high-quality final product. Thus it is highly recommended that in-process assessments be performed on a regular basis (for example, monthly, bi-monthly, or quarterly), or as part of each baseline release.

Generally, there are two types of in-process assessments. The first, a comprehensive assessment, requires an assessment of each project document submitted to a baseline, at the time they are submitted. This approach is recommended when the project has a full-time project document manager, or the resources to conduct many assessments. Although it requires the most rigor and effort, it is the most effective approach for preventing incomplete or the incorrect versions of project documents into a baseline or as inputs into the next phase of work.

The second type of in-process assessment is based on sampling. This type of assessment confirms that document records and baselines are consistent and conform to the document management standards and requirements defined in the Quality Management Plan, based on a select sample. This assessment type is typically performed on a recurring schedule (for example, monthly, bi-monthly, quarterly, and so on), or at defined milestones throughout the project. Unlike the comprehensive assessment, this assessment is performed on a random subset of documents from the project. This assessment type is recommended when a project does not have a full-time project document manager, or when project resources are constrained.

Project Document Management Assessment Responsibility

Project document management assessments can be performed by any qualified member of the project team. Projects may find it more efficient to combine project document management assessments with quality assessments, particularly those projects that do not employ a full-time project document

manager. In these situations, it is perfectly acceptable for the quality assessment assessor to perform the project document management assessment.

Project Document Management Assessment Scheduling

Project document management assessments should be done at a frequency that is appropriate to effectively mitigate the risks of promoting inaccurate or incomplete baseline documents. Project document management assessments can be performed on a calendar schedule (for example, monthly, bi-monthly, quarterly, and so on), at project milestones, or whenever document baselines are established. The larger the project and size of the project document baselines, the more frequent project document management assessments should be planned for the project.

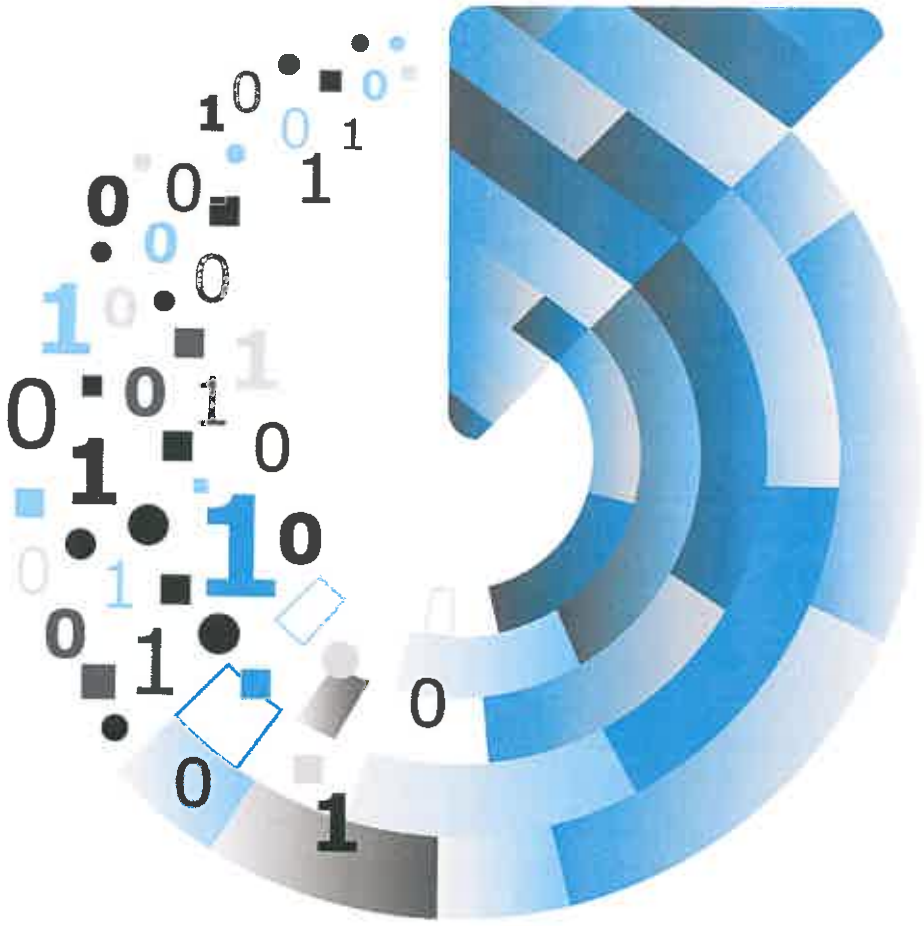
Project Document Management Assessment Plan

As part of project document management planning, projects need to define their project document management assessment plans. The Quality Management Plan provides a section for projects to identify their scope and plans for conducting project document management assessments. This includes identifying the type, scope, timing, and frequency of the project document management assessments. The following provides an overview of each component of the project document management assessment plan:

#	Component/Field	Description
1	**Project Document Management Assessment Type**	Enter the project document management assessment type to be used for the particular line item (see prior section of this document for a description of each): • Functional Assessment • Physical Assessment • In-process Assessments • Other
2	**Frequency/Cycle/Schedule**	Enter the frequency that each assessment will be performed. This may be on a calendar schedule (for example, monthly, bi-monthly, quarterly, and so on; or at project milestones, or when baselines are established, and so on.) **Note**: To minimize project risk, project document management assessments should be performed on a regular basis.
3	**Project Document Management Assessment Scope**	The purpose of this field is to indicate which project documents will be reviewed. That is, whether the assessment will be a review of baseline documents or a sampling.
4	**Project Document Management Assessment Review Criteria**	Enter the assessment criteria that will be used to review each in-scope project document. If the assessment criteria are pre-documented in a checklist, provide a link or pointer to that checklist.
5	**Responsibility**	List the individual or role responsible for conducting the project document management assessment. Typically, this will be either the project document manager or the quality manager for the project.

Project Document Management Assessment Plan

Deloitte.



WV IES

7. Training Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

Document Control Information

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Distribution of Final Document

The following people are designated recipients of the final version of this document:

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Training Management Plan Introduction

The Training Management plan outlines a training plan for end users targeted as a result of the implementation of WV HSP. The plan will provide a framework for designing, developing conducting and maintaining training content related to WV HSP. It will present the specific responsibilities of stakeholders impacted as part of testing activities. By reviewing this document, the reader should understand approaches, high level activities and estimated timeframes across and initiatives related to training for the WV HSP solution.

Executive Summary

Document Purpose

This document describes the End User Training Plan for WV HSP Implementation.

The purpose of this document is to:

- Outline a training plan for end users targeted for WV HSP roll-out;
- Outline a training plan for Train-the-Trainer;
- Confirm that WV DHHR Leaders understand and contribute to the successful implementation of the end user training program;
- Provide a framework for designing, developing, conducting and maintaining WV HSP-related training content;
- Describe the specific responsibilities of various parties involved in the process of transferring knowledge and skills;
- Describe the main conditions to implement the training program successfully; and
- This document covers the period of time as described in the High Level Timeline however consideration for additional training post go-live is in place and training evaluations will continue up until the time training has been completed. Detailed planning for additional training post go-live will be done over the next couple of months.

Document Summary

This document can be summarized with the following key statements:

- Training related to WV HSP implementation will be delivered to approximately 3,500 total users
- A Training Needs Assessment (TNA) was conducted; the outputs of these assessments were leveraged to shape the WV DHHR training approach and curriculum in addition to building out components within this Training Plan.
- The training approach is a blended approach that includes Web-based training, Instructor-Led Training, video-based training, train-the-trainer, online help, and a Practice Environment; this blended approach will provide a consistent training program to end users.

- A Training Environment will be made available. The Training Environment is planned to be refreshed nightly to confirm data and scenarios entered by staff are retained.

Document Overview

This document outlines the following WV HSP training

- Training Program development;
- Training delivery (delivery method, evaluation, coordination, logistics, reporting); and
- Training management (trainers, trainees, program management, materials).

Audience

The intended audience of this document is:

- WV HSP – Change and Training Team;
- WV HSP – Project Management Team (PMT);
- West Virginia DHHR Executives
- Deployment Site Leads; and
- WV HSP – Work Stream Leads

Key Terms

Presented below is a list of key terms from the WV HSP glossary that are particularly relevant to this deliverable.

#	Term	Description
1	Adobe Captivate	A tool used for developing Web-based training content.
2	Business Process	The agreed upon and documented work steps completed in carrying out particular tasks.
3	Docreg	Document register, a database used by the content manager to confirm the content creation project is on schedule. Docreg contains a list of required documents including; document owner, status, WV DHHR, content specialist, location, etc.
4	Facilitated Training	An "expert" facilitator will present the information via LiveMeeting.
5	Go-Live	To make the WV HSP system, which had been under development or operating in a limited test mode, fully active so that its intended users can access it.
6	Instructor-Led Training (ILT)	Instructor-Led Training is classroom training with an instructor.
7	Post Go-Live	Following the time where WV HSP production has been deployed and made available for end users.
8	Scenarios	Forms the basis for scripts which tell the story of work tasks.
9	Scripts	Forms the basis for the content of training recordings.
10	Self-Paced Learning	Training approach where users can access tools anytime, anywhere and are intended to be used without the assistance of an instructor (e.g. online help, web/computer based training, recorded training)
11	Training Pilot	Sessions conducted before the full training launch to test training materials and delivery approach.
12	Web-based Training (WBT)	Acronym for HSP Training Web-based Training. One of the modalities used for WV in Phase 1 consists of self-paced Web-based training.
13	WV HSP Training Team the Roles defined in section	The WV HSP training team is made up of core members with the following extended team members: Supervisors, Infrastructure, Regional Training Coordinators, Trainers and WV DHHR Program Subject Matter Experts.

Assumptions

The following assumptions have been made.

#	Description
1	WV DHHR will identify and support trainers who have the appropriate skill set, knowledge and are available full time to deliver quality training. The full time availability period for trainers needs to be from the beginning of April 2019 to the end of August 2020. Additional part-time involvement will be required to start in late September, early October to take part in a WV HSP roadshow and complete some preparation for the Train-the-Trainer course by reviewing project and training materials in advance.
2	WV DHHR will identify training administration resources with appropriate skills, knowledge and ability to support training enrolment, registration and tracking.
5	WV DHHR training material resources available to start developing training materials. The team may be reduced as required at that time depending upon requirements for updates to training materials based on changes arising out of user acceptance testing, as well as the requirement for resourcing the Training.
6	WV DHHR Training developers and trainers have access to computers to undertake their specific roles
7	WV DHHR provide the related resources to support the development and implementation of the end user training program (budget, equipment, resources).
8	WV DHHR secure the requisite number of Adobe Captivate licenses to support WV DHHR training material developers to develop training materials
9	WV DHHR users have completed their standard business process training prior to WV HSP training.
10	WV DHHR change management activates will lay the ground work prior to training implementation. Business Practice related questions will not be addressed in the system training but provisions will be made for these to be addressed by the appropriate WV DHHR resources.

Key Dependencies

The following key dependencies to other processes, activities, modules etc. are described in this section.

#	Description
1	Select training team members must have appropriate tool training (Adobe Captivate) prior to the commencement of training material development. Subject matter experts on the WV HSP training team will assist with an informal Adobe Captivate orientation.
2	System Build is completed on schedule. If the Build Code Drops are delayed, the establishment of the Training Environment will be delayed which in turn will delay the finalization of training materials.
3	System Integration Test (SIT) is completed on schedule. If SIT completion is delayed, the finalization of the Training Environment will be delayed which in turn will delay the finalization of training materials and the development of the Training Environment for training delivery.
4	Training Environment set up by Infrastructure team is completed on schedule. If the Training Environment set up is delayed, the development of training materials will be delayed.
6	Performance testing has been performed by the Infrastructure team to allow for acceptable performance in the Training and Practice environments.
7	We will be evaluating system defects identified in UAT for updates to the training material.
8	The Training plan is in sync with High-Level Deployment Strategy work product.
9	A sufficient # of training facilities and mobile laptop labs can be acquired and/or mobilized, by the province in coordination with the WV HSP Training Team, in time for setup and delivery of training; as per the current estimates in the budget for DHHR.

Risks

The following Risks to the training approach and implementation are described in this section.

#	Description
1	WV DHHR may not fund this training approach. If funding is constrained, a greater reliance on either Web-based training or employee self-directed learning will occur which may increase pressure on u sers, calls to the WV HSP Training, and the Help Desk as well as service delivery impacts.
2	WV DHHR may not be able to provide the requisite training development resources in a timely manner. If resources are constrained, delayed or less productive, the amount of training materials will be reduced which may increase pressure on users, calls to the WV HSP Training, and the Help Desk as well as service delivery impacts.
3	WV DHHR may not be able to provide the requisite training delivery resources in a timely manner. If resources are constrained, delayed or less productive, the number of Instructor-Led training days will be reduced which may increase pressure on users, calls to the WV HSP Training, and the Help Desk.
4	WV DHHR may not be able to provide the requisite training facilities (computer training labs) in a timely manner. If facilities are constrained or delayed, the number of Instructor-Led training days will be reduced which may increase pressure on users, calls to the WV HSP Training, and the Help Desk as well as service delivery impacts.
5	WV DHHR practice and business change training material development teams do not align timelines and curriculum in a timely manner. If WV DHHR training material development does not align or if WV DHHR business and Practice content is not provided in a timely manner, WV HSP Training will focus primarily on system steps which may not be perceived to be as relevant to the end user in their day-to-day work. This will increase pressure for re-fresher training after implementation.
6	WV DHHR do not set aside sufficient resources and personnel to continue delivering WV HSP Training after go-live. If resources and personnel are not available to deliver WV HSP training beyond go-live may increase pressure on users, calls to the WV HSP Training, and the Help Desk.
7	WV DHHR delivering a significant volume of instructional content in a short period of time. If the aggregate training content to be delivered is overwhelming for end users, users will not be able to successfully absorb and apply learning which may increase pressure on users, calls to the WV HSP Training, and the Help Desk.

Training Background

Training Objectives

WV HSP training has the following objectives:

- To support WV HSP technology adoption by enabling end user proficiency;
- To guide the end-user through the implementation of new business processes and changes as they relate to WV HSP;
- To minimize any decreases in user performance and adoption after the initial implementation; and
- To encourage consistent use and application of the WV HSP system.

In order to meet these training objectives, the training plan has taken into account some key considerations and principles including:

- Educating the end-users targeted for deployment in a timely and appropriate manner;
- Using a variety of training methods to maximize effectiveness and minimize cost, while adopting adult learning principles;
- Applying lessons learned from Pilot sessions and phased implementation within the WV DHHR as well as best practices from other implementations of software;
- Addressing a diverse group of learners by recognizing the differences and finding the commonalties between each WV DHHR and the individual job roles within that WV DHHR.

Scope

The areas that are within scope for WV HSP training are based on the completed design documents, visibility and privacy specifications and the project scope document, a summary of the items are included in the WV HSP Training Approach

The WV HSP training approach incorporates a blended learning approach, which combines various training delivery media and methods, to be utilized. This approach will allow learners to build on their existing knowledge and gain competency in performing new tasks, leveraging Instructor-Led trainings as well as self-paced learnings.

Blended Learning Approach

- The training approach gives rise to the following learning modes for end users:

Instructor-Led Training

Instructor-Led Training will be used to introduce WV HSP system functionality to support program, and process-specific details. The WV HSP Instructor-Led Training will be process-based, teaching complete processes where possible and practical. Training will be delivered by WV DHHR Trainers. This approach to training allows the trainer and end users to interact directly and also allows end users to share experiences with one another, facilitating the learning process while also building confidence. Practice exercises using end to end business scenarios designed by WV DHHR Training Developers will be Instructor-Led to facilitate richer learning.

The Instructor-Led Training method will be most effective to help deliver classroom training that is:

- Tailored to one functional area, or
- Tailored to only a few roles, or
- Applicable to users in a condensed geographic location.

Using the Instructor-Led Training delivery method, instructors will be in classrooms with their participants who each have a workstation to allow them to engage in both simulations and practice in a live Training Environment.

Training Environment

A Training Environment will be made available to end users for self-guided practice based on the training materials provided through self-paced learning or instructor lead training. The hands-on practice will help to facilitate end user adoption. It is planned that the Training Environment will not be refreshed on a scheduled basis. User support for the Training Environment will be further detailed as a part of the Training planning.

Video-based Trainings

Live, instructor-led trainings conducted over the Internet. They allow for interactions and can be delivered with fewer logistical constraints than live instructor-led classroom training to large groups of people (up to 200 simultaneously).

Web-based Trainings

The WV HSP Web-based trainings will be module-based, teaching how certain steps in the process are completed based on software function. End users will complete self-paced learning as a pre-requisite to attending Instructor-Led or Facilitated Training. To facilitate better use of the practice environment, practice scenarios will be developed to guide users through specific business process scenarios.

Online Help

Online help provides embedded context base help with the WV HSP system. Online help modules help the user through process tasks in a step by step fashion. Online help will also provide links to relevant screens, information and relevant fields within the online help screen.

Quick Reference Guides

Reference tools in the form of PDF documents and pre-recorded demonstrations will be made available on the WV HSP Web site to end users; these quick reference guides will provide specific, concrete information to end users to help them perform tasks accurately.

The quantity of Quick Reference Guides will be determined based on the extent of the course materials. Prioritization will be required to confirm appropriate scenarios are available to support end users.

WV HSP Training Curriculum

The WV HSP training curriculum is the roadmap for training material design and development; including development of detailed course outlines and courseware material development. The curriculum will serve as a tool to communicate early information about the training program to WV HSP end user training stakeholders. The curriculum presented in this document provides sufficient detail for planning purposes. The curriculum will be further refined and detailed prior to the start of training material development.

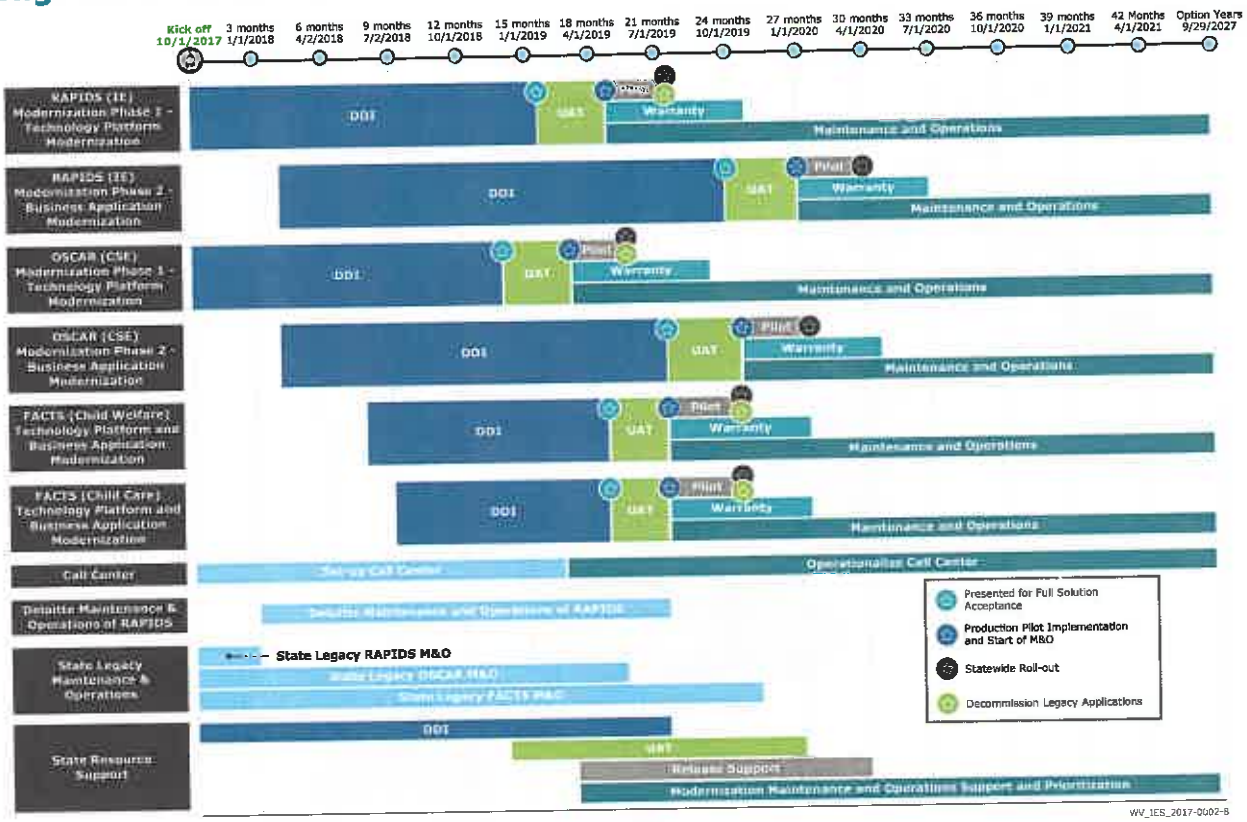
The WV HSP Training Curriculum was designed using the Enterprise Value Delivery for System Integration (EVD for SI) methodology, which was defined, developed, tested and refined though our technology adoption experience nationwide . It is unique in the sense that expert workers are used to determine curriculum, rather than having curriculum selected by a third party.

Role-based training refers to an approach for designing and delivering targeted, job-specific (role-based) training by teaching end users how to perform new WV HSP system tasks as aligned to business practices or new and ongoing practices within each WV DHHR, in the context of WV HSP functionality.

Steps taken to design the training curriculum include:

- Complete Training Needs Assessment and incorporate learning topics into curriculum design (conducted by the WV HSP Change Management Team as assisted by both Client X and Subsidiary A representatives)
- Complete User Roles to Category Mapping
- Develop role-based curriculum for each WV DHHR
- Determine training delivery methods, Instructor-Led, Video-based, or Web-based training for each module
- Complete workshop descriptions, objectives and participants are detailed in Appendix B, Detailed Curriculum of this document.
- The training curriculum is designed so learners attend role-based training courses that align with their primary job responsibilities. The training curriculum is developed in modular components, each containing elements of facilitated learning, hands-on experience and practice exercises using scenarios.
- The WV HSP training curriculum is divided into two sections; common training curriculum and WV DHHR specific training curriculum.

High Level Schedule with Milestones and Deliverables



High Level Schedule
There are detailed communication and training items not included on this timeline that can be found in the WV HSP Communication Plan

The dates showed in the following table lists milestones in the Training Plan.

Milestone	Date
WV DHHR Training Development Resources Identified	
Web-based training – Script Development Begins	
Instructor-Led Training Material Begins	
Trainers Identified for Instructor-Led Training	
Training Pilot Begins	
Trainer Orientation – specific date to be confirmed	
Web-based training – Courses are Available	
Train-the-trainer Begins	
Practice Environment is Available	
Video-based Training Begins	
Go-Live	

IE Training Approach

IE Training Audience

Each user will be assigned the appropriate curriculum based on their WV HSP training category. Each WV HSP training category is a collection of one or more WV HSP Responsibilities that are similar and so the users with those WV HSP Responsibilities will therefore be trained together.

User Role/Audience	Topics
Receptionists	New functionality
Call Center Workers	New functionality
Caseworkers	Interfaces and new functionality
ABD specialists	Interfaces and new functionality
LTC specialists	Interfaces and new functionality
Supervisors	Interfaces and new functionality

IE Specific Training Curriculum

The training curriculum has been designed using a blended approach including Web-based and video-based training. The IE specific training curriculum has been structured into WV HSP training categories, based on WV DHHR user groups. Each category is broken into modules that relate specifically to the respective program. End to end scenarios have been included in sections.

While IE users will complete WV DHHR specific training curriculum modules, they will need to first complete Common Training Learning Curriculum modules.

The support and back office category is not graphically represented in the IE specific curriculum, as they will need a blend of topics depending on where and what program they are aligned to with the WV DHHR.

A detailed spreadsheet outlining the training plan for each WV HSP category that identified the modules for each role and a detailed curriculum breakdown for each program can be found in Appendix B.

Child Care Training Approach

Child Care Training Audience

Each user will be assigned the appropriate curriculum based on their WV HSP training category. Each WV HSP training category is a collection of one or more WV HSP Responsibilities that are similar and so the users with those WV HSP Responsibilities will therefore be trained together. The following WV HSP training categories have been identified:

Audience	Topics
Caseworkers	Intake, Changes & Renewals; Authorizing Child Care Services
Supervisors	Reviewing casework; Reporting
Vendor and Financial Staff	Vendor enrollment and changes; Managing finances
Provider Management Staff	Service Delivery; Provider Licensing; Provider Contracts; Resource Directory
Providers	Provider portal functions

Child Care Specific Training Curriculum

The training curriculum has been designed using a blended approach including Web-based training, Instructor-Led Training, and Video-based Training. The Child Care specific training curriculum has been structured into WV HSP training categories, based on WV DHHR user groups. Each category is broken into modules that relate specifically to the respective program.

While Child Care users will complete WV DHHR specific training curriculum modules, they will need to first complete Common Training Learning Curriculum modules.

The diagram below represents Common Training Curriculum modules for "New WV HSP Users" that Child Care users will complete. The support and back office category is not graphically represented in the Child Care specific curriculum, as they will need a blend of topics depending on where and what program they are aligned to with the WV DHHR.

Child Support Training Approach

Child Support Training Audience

Each user will be assigned the appropriate curriculum based on their WV HSP training category. Each WV HSP training category is a collection of one or more WV HSP Responsibilities that are similar and so the users with those WV HSP Responsibilities will therefore be trained together.

User Role/Audience	Topics
Case Workers	Correspondence, Interfaces, and new functionality
Financial Specialists	Correspondence, Interfaces, and new functionality
Locate Specialist	Correspondence, Interfaces, and new functionality
Legal Specialists	Correspondence, Interfaces, and new functionality
Enforcement Specialists	Correspondence, Interfaces, and new functionality
Supervisors	Interfaces and new functionality
Data Analytics and Administrative Specialist	Interfaces and new functionality
Customer Service Specialist	Correspondence, Interfaces, and new functionality

Child Support Specific Training Curriculum

The training curriculum has been designed using a blended approach including Web-based training and Video-based Training. We have incorporated hands-on practice for each WV DHHR user group in the WV HSP practice system using end to end scenarios and have increased the amount of Instructor-Led modules and delivery time.

The Child Support specific training curriculum has been structured into WV HSP training categories, based on WV DHHR user groups. Each category is broken into modules that relate specifically to the respective program. End to end scenarios have been included in sections. WV HSP training categories include:

- While Child Support users will complete WV DHHR specific training curriculum modules, they will need to first complete Common Training Learning Curriculum modules.
- The support and back office category is not graphically represented in the Child Support specific curriculum, as they will need a blend of topics depending on where and what program they are aligned to with the WV DHHR.

Child Welfare Training Approach

Child Welfare Training Audience

Each user will be assigned the appropriate curriculum based on their WV HSP training category. Each WV HSP training category is a collection of one or more WV HSP Responsibilities that are similar and so the users with those WV HSP Responsibilities will therefore be trained together.

Audience	Topics
Community Partners	Using the portal
Providers	Using the portal
Supervisors	Staff Directory; Workload Management; Reporting
Caseworkers	Intake; Case Planning; Ongoing Services Management; Person Management; Common Functions; Eligibility
Hotline Staff	Hotline functions

Child Welfare Specific Training Curriculum

The training curriculum has been designed using a blended approach including Web-based training, Instructor–Led Training, and Facilitated Learning. We have incorporated hands-on practice for each WV DHHR user group in the WV HSP practice system using end to end scenarios and have increased the amount of Instructor-Led modules and delivery time.

The Child Welfare specific training curriculum has been structured into WV HSP training categories, based on WV DHHR user groups. Each category is broken into modules that relate specifically to the respective program. End to end scenarios have been included in sections. WV HSP training categories include:

While Child Welfare users will complete WV DHHR specific training curriculum modules, they will need to first complete Common Training Learning Curriculum modules.

The support and back office category is not graphically represented in the Child Welfare specific curriculum, as they will need a blend of topics depending on where and what program they are aligned to with the WV DHHR.

Training Facilities Requirements

Regional Deployment Strategy

This approach uses a WV DHHR boardrooms converted into computer labs, and government owned permanent computer labs. The majority of the training facilities will be converted boardrooms, since there are only a few government computer labs available. In order to convert the boardrooms into computer labs, the Project Team needs to purchase equipment (i.e. – laptops, network switches, shipping cases, etc.), ship the labs and set them up in the various locations throughout the province. The facility requirements described in this section consider the training facilities needed for WV DHHR end users.

The following table shows the breakdown for the users per region. This is based on the assumption that the classrooms would be running at an average 85% attendance rate. With 86 total sessions needed for training, the maximum number of concurrent training sessions required each day for each training is 12.

Classrooms will require advance booking to confirm availability for the training period; additional non-training days will require the same rooms be available for classroom setup and post go-live for any catch up training required.

Training Pilot Plan

The WV HSP Team will host Pilot Training Sessions to help test training materials and gather feedback from trainers about the training materials and training process. The Pilot will allow the Training Team to evaluate the effectiveness of the mix of Web-based training and Instructor-Led Training.

The separate Pilot Training Sessions are seen as an opportunity to improve the process and quality. These sessions offer another opportunity to review and pilot the completed Instructor-Led materials prior to full deployment to users; feedback from the trainers would be considered as part of the material update process.

Format and Content

The WV HSP Pilot Training Sessions may include a combination of delivery methods and will address a variety of topics.

Content will be specific to the WV HSP workers in attendance and the details defined jointly by the WV HSP training team and the business representatives. Only a sub-set of the training materials will be piloted. The outcomes and findings of the Pilot sessions will inform the Train-the-Trainer program and provide a source of quality review for the piloted material.

Training Evaluation

Student satisfaction of the quality of the training and the effectiveness of the delivery will be determined by training evaluations. The Training Team will work with the WV DHHR to issue an electronic course evaluation to end user WV DHHR workers after they have received training. This may be done as part of the course agenda or as a take away for participants. This evaluation may be extended to the end user where a combination of facilitated workshops and surveys may be put in place. Details will be determined when the detail evaluation are produced.

Distinct training evaluations will be delivered following each of the following training delivery methods. It is anticipated that similar end of course evaluations as used in Phase 1 will be used to evaluate training.

This will allow the WV DHHR to gauge to what extent staff are using the new tool and, if required based on the feedback, to provide clarification materials as needed. The process for updating and maintaining training materials on an ongoing basis post go-live is still to be determined with each WV DHHR. Consideration will be given to minimizing the number of changes in the training materials in order to maintain consistency of training delivery.

Evaluation Tools

The training evaluations will be delivered electronically using the WV DHHR' survey tool. Using an electronic survey tool is necessary due to the scope and size of training. This will be done by the WV DHHR. Each WV DHHR created a survey for their Train-the-Trainer evaluation and their Instructor-Led Training, which contained questions for the Web-based training as well, and will be used as a base for each WV DHHR's training evaluations.

Results Collection

The survey will either be completed at the end of the course (i.e., the end user is directed to the link that would bring them to the online evaluation form); or, the user will receive an email with a link to the evaluation form inviting them to complete the evaluation. The details of the evaluation process will be addressed in further planning by the Training Team. The results provided from the surveys will be analyzed and reviewed at specific points.

The results collected will serve several purposes and will feed into the Training Evaluation Deliverable. If required, these results will allow any necessary changes to be made to the Training Material to improve user learning. The primary focus of the feedback gathered through this evaluation will be to feed into Lessons Learned. We anticipate the evaluation period to continue for a few weeks after training ends.

Training Program Development and Approach

Training Material Development Process

Our process follows a methodical approach for training material development:

1. Determine Curriculum

This phase involves designing the overall curriculum based on the Training Needs Assessment and audience analysis. The content is analyzed to arrive at the number of courses, course objectives, course duration, delivery mode, pre-requisites and the roles/target audience for the courses.

2. Create Course Outlines

This phase involves creating outlines for each course identified in the curriculum. These outlines define the lessons and topics to be covered in each course with objectives and key teaching points.

3. Develop Course Materials

This phase involves developing training materials – Web-based training or Classroom Training. Based on the course outlines, content is created to help end users understand the content in a logical manner. The content is created based on the objectives defined in the course outlines. The end users are also tested on the concepts taught in the course. Assessments at the end of each course assess the end user's understanding of the content.

4. Quality Review and Approval

Built-in quality gates after each phase provide an integrated approach for consistently delivering high quality results by providing a comprehensive tool set for Quality Management, Risk Management and Project Management. Those involved in this QA process (i.e. JAD SMEs, Learning Services) will be

called upon for periodic material reviews once the Training Team has undertaken multiple rounds of quality checks. These reviews and subsequent approval processes will be staggered so as to allow for reviewers and approvers (i.e. PMT) to review and sign-off on training material as and when they are completed. A review schedule will be produced as part of the material development schedule.

5. Loading Exercise Data

This phase involves loading exercise data into the Training Production Environment to enable the learner run through the exercises successfully. Required data is identified as part of the Create/Edit Scripts and Scenarios. Multiple sets of training exercises are created as concurrent classes are being delivered.

Training Material Updates

Requests to update training materials will be documented and tracked on a template.

Training material update inputs include:

- Changes to Training Materials pre and post Pilot Training: Acceptable training material updates include those requested by Trainers after completion of the Pilot Training and Train-the-Trainer sessions.
- Changes to Training Materials Prior to Go-Live Training: Acceptable training material update requests include changes requested by UAT and SIT, triggered by either system changes (i.e., bug fixes), or as a result of UAT, SIT, or Train-the-Trainer feedback.

The processes that the WV HSP Training Team will use to receive requests to update training materials which have been formally approved include:

- Documentation of training material update requests: Training material update requests will be formally submitted to the WV HSP Training Lead for approval
- Review and update training material: The WV HSP Training Lead will be responsible for reviewing and approving training material update requests received from WV DHHR stakeholders. The WV HSP Training Lead will also be responsible for submitting the training material update to the appropriate party (i.e., PMT) depending on the circumstances and timing of the update request.
- Training material changes may result in changes to courseware or through information sharing via bulletins or other communication vehicles.
- Once training delivery has started, changes to the training materials (Web-based training and then Instructor-Led training) will be managed in Releases. This release schedule will be included as part of the Training Program deliverable.

Training Environment

Training Development Environment

For training material development, offshore and onshore resources will use a dedicated Training Development Environment ('TRN-Dev'). TRN-Dev will be based on the System Integration Test (SIT) environment and will be updated with a one week lag following any updates to the SIT environment. A training development environment has the following benefits:

- Developers can work on training materials without interruption of data refresh in the Training production environment.
- Sample data for screen shots, scenario based examples, and exercises can be kept separate from training production exercise data.

The Training Development Environment will be used for development of training material and Web-

based training course development to capture screenshots and to develop exercises. The environment will be used by offshore and onshore development resources. Prior to the start of the training period, the Developers will work in the Development Environment.

Training Tools

Tools Available

- Tools available in are limited to existing WV HSP tools, either through license agreements procured for the WV HSP project specifically or through existing license agreements procured by the WV DHHR impacted by the WV HSP implementation. Depending on the type of material being presented a combination of the following tools will be used.
- The tools available are: Adobe Captivate. Online help is available to enhance content but not used as the basis for content development.

Adobe Captivate

Adobe Captivate is a tool for providing Web-based training solutions. It enables you to create high quality Web-based training products quickly and easily. Adobe Captivate software also has the ability to handle questions with a range of built in question handling options with various question types. It has the ability to publish SCORM and AICC compliant courses and the ability to incorporate graphics and media.

Roles and Responsibilities

The below table details the Roles & Responsibilities of those who will contribute towards the WV HSP Training Program Development. It is expected that everyone identified in this table will work collaboratively to deliver on and achieve as a team the training plan. Due to the increased scope and number of trainees in the Team Members assigned to each role has been increased accordingly.

Role	Responsibilities	Team Member
Deloitte Team Lead	• Manage the stream against scope, timelines and budget • Manage risks and resolve issues, escalate to WV DHHR Training Executives and to PMT if needed • Provide direction to the Training Team • Status reporting	Name
WV DHHR Training Executive	• Facilitate the provision of WV DHHR Resources to the Training Team • Provide input to and review of Training Team work products • Confirm integration between Training Team and Organizational Change Team activities • Provide a link to Executive committees and Program Area Leadership to update them on the progress of the Training Plan • Provide regular updates to PMT • Provide support with issue resolution for the Training Team • Confirm that the WV DHHR' respective Learning Services Groups are included in the planning and development of the training program	Name

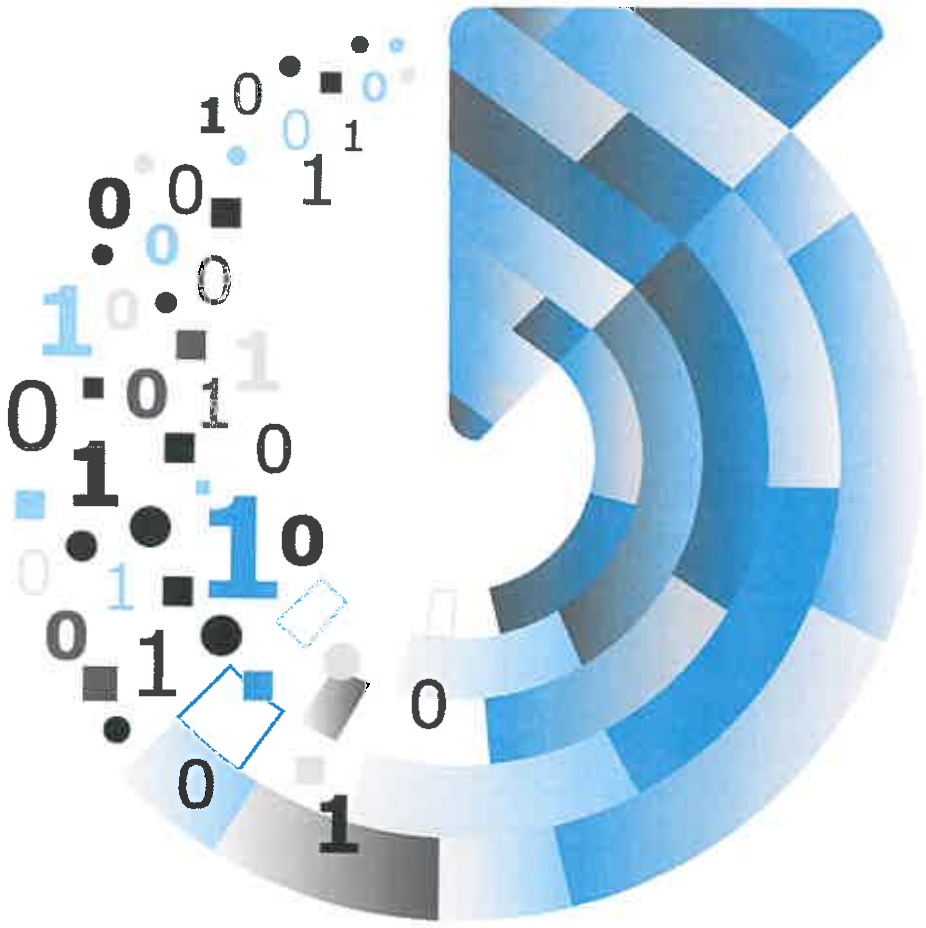
Role	Responsibilities	Team Member
WV DHHR Learning and Training Advisors	• Review Training Team Work Products and provide feedback • Provide input and advice to the Training Team on training team work products (curriculum, plan, etc.) • Ongoing maintenance, support and deployment of the Training Program for post delivery • Work with the Training Team to develop the Training Program for Phase 2 • Provide strategic advice to the WV HSP Training Team as required throughout the development, design and delivery of the WV HSP Training Program.	Name
Deloitte Training Manager	• Coordinate training activities and resolves issues • Develop training plan • Oversee the design and development of the training program • Support coordination of roll-out of training with sites • Monitor training work plan, deliverables, and resources • Implement the training plan • Supervise training developers • Manage the Train-the-Trainer program	Name
Deloitte Training Team	• Develop training plan • Facilitate the design, development and deployment of high quality and accurate end user training materials • Design the training curriculum • Develop training prototypes • Develop documentation standards • Conduct peer reviews of training materials • Facilitate design and delivery of the Train-the-Trainer program • Coordinate Training Development and Practice Environments and data build	Name

Role	Responsibilities	Team Member
WV DHHR Program Training Material Subject Matter Experts	• Review content related to respective WV DHHR programs • Review and provide feedback relating to training materials • Provide the training developers with feedback relating to business scenarios that represent day-to-day operations in order to build engaging exercises and interactivity • Will be used as required – a detailed schedule will be developed	Name
Trainers	• Deliver end-user learning program components • Attend a Train-the-Trainer course • Review course materials and provide feedback for assigned courses • Help end-users use the new system and processes • Learn aspects of their functional area's training • Secure the room at the end of each day • Attend support calls as required to provide feedback on training experience/issues etc.	Name
Supervisors	• Complete Training Schedule tracking sheet • Provide input into overall training schedule and confirm training dates with staff to confirm operational coverage • Facilitate opportunity for staff to complete the Web-based Training modules before their Instructor-Led training session • Provide recognition when staff have completed their Web-based Training modules • Inform the Regional Training Coordinators about any issues or concerns related to training delivery for their staff	Name

Training Lessons Learned

Lessons Learned have been reviewed and taken into consideration into the development of the Training Plan. The Training Plan is a starting point, and will be re-visited periodically to confirm ongoing alignment and to reflect the realities, including successes and lessons learned, as training rolls out across the organization.

Deloitte.



WV IES

8. Testing Management Plan

Draft Deliverables

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The following people are designated recipients of the final version of this document:

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Testing Management Plan Introduction

The Testing Management Plan outlines the overall scope of the testing effort, planned test types to be exercised, the test team organization, and the roles and responsibilities of the teams involved in the WV IES Project. The Plan provides Deloitte's high level testing policies and processes which will be used to support DHHR. This document describes the testing portion of the software development cycle and has been created to provide DHHR managers, testers, and developers' knowledge about the key details of the testing process. It outlines the testing objective, methods of testing new functions, policies and processes for conducting various testing activities.

Purpose

The purpose of the Testing Management Plan is to describe the testing portion of the software development cycle. It is created to inform DHHR and the WV IES Project managers, testers, and developers about the key details of the testing process. This includes the testing objective, methods of testing new functions, policies and processes for conducting various testing activities.

The Testing Management Plan outlines the scope of the overall testing effort, the types of testing required for DHHR projects, the test team organization, and the roles/responsibilities of the teams involved.

Scope

The Testing Management Plan covers testing policies and processes to support the various test types and cycles for WV HSP.

References

Document Title	Document ID	Date	Publishing Organization	Version
TBD	TBD	TBD	TBD	TBD

References

Testing Policies

Testing Mission Statement

Provide flexible, consistent delivery of "best in class" testing services that drive improved quality, lower cost and increase speed of delivery across the WV IES Project. This mission is accomplished by deploying:

- Deloitte's EVD for SI standardized methodology, processes and deliverables
- Disciplined, metrics-based management of testing services
- Flexible resource model with the right skills, training and experience
- Consistent test automation approaches
- Integrated testing tools
- Alignment with and support of the overall DHHR-IT Quality organization

Testing Principles

The guiding principles that drive the test effort include:

- Plan testing early: Up-front planning facilitates starting to test on time and staying on schedule.
- Test early: It is less costly to fix errors early on in the systems development life cycle rather than later.
- Clearly define and measure testing entry and exit criteria: Minimize the gaps and overlaps in testing by clearly defining the objectives of each test type/cycle and measure against entry and exit criteria to validate that those objectives are met.
- Define test cases during design activities: Create test cases while executing design activities in order to validate direct correlation between business requirements and test cases.
- Prioritize what is tested and in what order: Validate the most critical, significant, or riskiest requirements are addressed as early as possible to provide the time needed to resolve possible issues.
- Develop strong test standards: Develop well-documented, repeatable test standards to facilitate analysis and regression testing of identified defects in the current and future test types.
- Test with appropriate DHHR involvement: DHHR users not only have ownership of the system but also have the business expertise and are in the best position to determine and validate the application conforms to the business requirements.
- Automate testing where possible: Use automated testing tools to increase testing execution speed and accuracy within the testing types.
- Establish entry and exit criteria: Clearly define and communicate entry and exit criteria for each environment handshake as well as thresholds for testing and defect resolution.
- Exercise end-to-end business process lifecycles early and often: Structure testing to support end to end business processes testing and execute early and often to increase test exposure across the system.

Test Planning & Approach Principles

Test management plan validates that:

- Requirements are documented, approved and defined to a level of detail that is testable
- Test plans evaluate applicability of testing automation
- Each production change is planned for pre-production testing
- Testing is conducted in a non-production environment, with the exception of testing the production deployment

Test Case Development Principles

Test Case Development validates that:

- Standardized formats are used for test cases and scenarios within and across test types. Standard templates are leveraged and imported into appropriate test tool, where applicable
- Appropriate level of detail is used when defining test cases and scenarios so that they are usable by any individual on the project test team, including novices (both technical and functional)
- Test cases and scenarios are scheduled to be prepared based on risked based testing principles and/or operational profile concepts
- Reusable test cases and scenarios are identified and utilized where appropriate

Test Execution Principles

Test Execution validates that:

- Entry/exit criteria for each test type and cycle are satisfied before progressing to the next test type in order to validate that required activities have been completed or addressed
- The defined defect management process is followed across test types
- Test Metrics are generated, tracked and reported during each type of testing to identify continuous improvement actions

Approach for Completion of Testing Phase Deliverables

Deloitte uses the following approach for the completion of testing phase deliverables:

Title	Approach to Completion
Identify and plan for testing Deliverables	Deloitte uses robust planning processes early in the project life cycle for deliverables preparation and completion. Our planning approach includes the following steps: • Include the list of testing deliverables in project estimation • Incorporate testing deliverables and associated activities in the project work plan, along with the resources involved in their creation • Configure testing tools with the correct template to produce testing deliverables • Coordinate testing deliverable milestones with the PMO team for their creation and review cycle • Include test data preparation and test coverage steps during test design to provide traceability

Title	Approach to Completion
Create testing deliverables	The testing deliverables are created based on scripts executed in JAMA and defects logged in JIRA. Therefore, during testing deliverable creation, our approach includes the following steps: • JAMA/JIRA are kept up to date with test progress and defect details. • Daily defect triage meetings are held to discuss if defect details, priorities and severities are correctly set and are clearly communicated to the stakeholders. • Test execution activities are prioritized so that the test cases with higher business impact are executed earlier in the test cycle. In addition, key metrics such as environment availability, defect resolution timeline and tester execution rates are monitored to allow process improvements.
Review testing deliverables	Test execution results are extracted from JAMA and defect logs are extracted from JIRA. They are reviewed by the Deloitte team for accuracy and completeness
Update deliverables	Deloitte recognizes the significance of updating deliverables throughout the lifecycle of the project and has well-defined processes to update deliverables and system documentation when a change is identified during the project lifecycle. Testing deliverables are modified if a new requirement is identified or an existing requirement is modified requiring changes to the testing procedures.

Figure x.x-xx. Approach Followed for Completion of Test Phase Deliverables.

Approach for Obtaining Agency Approval for Testing Milestones

Deloitte uses a structured approach for submitting testing deliverables, taking them through the formal review process and obtaining agency approval. The following table outlines our approach for obtaining DHHR approval for testing milestones:

Activities	Description
Planning	• Establish timeline for each of the testing deliverables • Review timeline with DHHR • Update plan if there are changes to timelines based on DHHR input
Establish Acceptance Criteria	• Establish approval criteria for each testing deliverable and milestone • Acceptance criteria for completion status of test case execution • Acceptance criteria for defect closure by severity • Entry and Exit criteria for each testing phase
Prepare Deliverables	• Prepare deliverables for each of the testing phases • Conduct Internal review of testing deliverables
Conduct Review	• Submit deliverables using specified formats • Review with DHHR using the agency defined timelines for review and feedback cycle
Track Approval	• Work with DHHR for incorporating feedback in deliverables and tracking for approval

Figure x.x-xx. Approach for Milestone Completion and Obtaining Agency Approval.

Approach for Working with the IES Team during Testing Phases

Deloitte collaborates with DHHR towards achieving success in each phase of the Software Testing Life cycle. For each of these key testing focused activities, we work with DHHR by scheduling planning discussions and reviewing deliverable templates and actual deliverables to get informal as well as formal feedback. Additional focus is applied during UAT test execution phase in which we work with DHHR for UAT kick off, help them in driving test execution as well as assist in reviewing defects for their validations and re-execution. Deloitte follows communication strategy that includes identifying key points of contacts, scheduling touch-point meetings, delivering frequent status updates, and communicating risks, issues and mitigation plan throughout the testing phase.

Approach for Developing Test Cases

We use our existing 2500+ test cases from our various IE, Child Care, Child Support and Child Welfare implementations and any existing DHHR system test cases in order to jump start test case planning and designing activities. Using successfully executed test cases gives us a strong baseline and confidence on their accuracy and reduces risk. We use these baseline test cases and then expand for WV HSP specific features based on our requirements, design, screen mockups and discussions with the development team. Test cases are created in JAMA based on the approved format. These test cases serve as a repository for future use during later phases of the software test life cycle. Modification and updates to test cases are performed directly within the tool.

Our approach includes contingency plans to address risks that may be encountered during IES testing.

Approach for Documenting Each Test Type

Test cases and test execution results are tracked in the JAMA test management tool. Requested deliverables are produced from a report from JAMA and provided to DHHR. Defect information is tracked in JIRA and similar documentation reporting is done directly from the tool.

Types of Testing

For the WV IES Project, based on our hybrid agile methodology, following types of testing are considered key components of testing:

- Unit Testing
- System Testing
- Integration Testing
- Regression Testing
- Performance/Stress Testing
- Parallel Testing
- User Acceptance Testing
- Implementation/Operational Readiness Testing
- Interface Testing
- Security Testing
- Pilot Testing
- Data Conversion Testing
- Accessibility Testing
- Disaster Recovery Testing

The following sections describe in detail approach of each of these testing types, responsibility as well as their associated entry & exit criteria.

Unit Testing

Objective

Unit testing is used to help verify that the basic building blocks of the system have been built per specifications and that defects have been removed prior to integration testing. Unit testing also encompasses formal code peer and solution architect reviews of the application software, unit test scenarios and execution results.

Accordingly, the key objectives associated with unit testing are:

- Unit testing is conducted to test an individual unit of program code in an isolated environment. A "unit" may represent a screen (for example) and its related logic, objects, procedure calls, etc. Unit testing is predominantly a technical test to verify the functionality of a unit of work according to its detail design prior to its incorporation with other tested units.
- Unit testing is done to verify that the software components of the system meet the functional requirements defined in the design specifications.
- Unit testing includes testing individual services and procedures to identify logic processing and testing single points of failure.

Unit testing is often also referred to as "White-Box Testing" and the essential scope of unit testing includes:

- Testing each code unit based on DHHR development guidelines
- 80% coverage measured via automated unit testing
- 100% of the code has been validated by static code QA to meet DHHR coding standards

Audience

The development team is responsible for the planning, execution, and reporting of unit testing.

Test Readiness Criteria

- The detailed system design is complete, signed off by the application team, the solution architect and the QA team
- The development has been completed and reviewed as part of peer review and by the solution architect

Test Exit Criteria

- Automated code coverage reports show unit testing coverage of at least 80%
- 100% of the code has been successfully unit tested
- Static code analyzer reports generated show no compliance issues in the created/modified code
- Automated unit tests have been created for new/modified application code.
- Code reviews have been completed and have been verified by the solution architect

- The Consolidated Unit Test Checklist has been completed and reviewed by the reviewer, track lead, and application manager

System Testing

Objective

System Testing is testing the system as a whole to validate compliance with the requirements specifications. This includes verifying that the inputs into the system produce the desired response and outputs, continual retesting (regression testing) to validate changes to any one component do not adversely affect the functionality of the system and that expected results continue to be met. System testing, regression testing and accessibility testing must be performed for each functional release and for bug fix maintenance. System testing is a formalized process whereby the subject matter experts perform testing on each system process. The essential objectives for system testing are:

- Confirm that components and modules of a system included in a particular release are tested before entering user acceptance testing
- Validate that the system testing environment is functioning based on approved and in-scope functional requirements

Audience

The testing team is responsible for the planning, execution, and reporting of the system acceptance test.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in system test environment
- System Test environment is configured and delivered to the testing team
- Test execution reporting processes are reviewed by the testing team
- Test execution communication meetings are scheduled by the testing team (status meeting, defect meeting, etc.)
- System Test case walkthrough complete with relevant teams
- System Test data requirements defined and verified by testing team
- Exit criteria for the INT test phase has been met
- Shakeout of test environment completed and is fully operational with no major issues including the verification of the following:
  - Application functionality,
  - Test data, and
  - User logins

Test Exit Criteria

- 100% of the system testing scenarios are completed successfully, validated and test results are documented by the testing team
- System test results have been approved and reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review

- INT (if any) as well as system test defects across fatal and major severity levels have been fixed and successfully tested
- Remaining open defects (if any) are documented in the Test Defect Tracking System

Integration Testing

Objective

Integration testing looks at how the transactions and business processes work together. This type of testing also validates that data exchanges and inter-process synchronization work properly. Integration testing verifies exception-processing logic is complete and correct. Integration testing is intended to validate that the current functional release works properly after it is connected with the existing system and previous functional releases. To that end, the key objectives of integration testing include:

- Validate that the application(s) and technical architecture support the end-to-end business processes and functioning based on approved and in-scope functional as well as non-functional requirements
- Execute tests in a fully integrated environment with respect to application and interfaces (functionally identical, but not necessarily to scale)
- Validate code against specifications and business requirements
- Pass real data between applications, then validate that data in downstream applications as available
- Integration testing should include exception/negative test

Audience

The testing team is responsible for the planning, execution, and reporting of the integration test activities.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in Integration Test Environment
- Integration Test Environment has been configured and delivered to the testing team
- Test execution communication meetings are scheduled by the testing team (status meeting, defect meeting, etc.)
- Scope introduction and training imparted to testing team members
- Integration Test case walkthrough complete with relevant teams
- Integration Test data requirements defined and verified by testing team
- Exit criteria for the unit test phase has been met for the code that is been promoted
- Installation instructions or Build Guides are completed by application team and environment readiness walk-through is completed
- Shakeout of integration test environment completed and is fully operational with no major issues including the verification of –
  - Basic application functionality,
  - Test Data,
  - User logins

Test Exit Criteria

- 100% of the Integration Test Scenarios have been tested, validated and the test results are documented by the testing team
- Integration Test results has been reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review
- 100% of the critical and high severity defects have been fixed and approved
- Remaining open defects (if any) are documented in the Test Defect Tracking System

Accessibility Testing

Objective

Accessibility testing validates that persons with disabilities can access, navigate, and obtain information provided through web applications. The PowerMapper tool is used for this purpose, and automatically displays a list of non-compliant pages and recommended actions for each. This test is executed in the integration testing (INT) environment.

The key objectives of the accessibility test are to:

- Be compliant with DHHR Accessibility Policy
- Help validate that elements on a web page are compliant and accessible to those who use alternate means to view and access the Web site. Besides the design of a page, this includes non-text elements such as audio clips or other programmatic objects and features that require a text equivalent so that their purpose and meaning can be conveyed to the user who is otherwise unable to access these non-text elements.

Audience

The testing team is responsible for the planning, executing, and reporting of accessibility test cases.

Test Readiness Criteria

- Since accessibility testing is done in integration test environment along with integration testing, the integration test readiness criteria is applicable.

Test Exit Criteria

- Since accessibility testing is done in integration environment along with integration testing, the integration test exit criteria is applicable.

Performance & Stress Testing

Objective

Performance or load and stress testing includes conducting tests on the system by identifying peak usage within units of work and system components to peak capacity. The process also includes strategies for monitoring and resolving performance issues. It is the process of understanding how the application and its operating environment behave at various user and job loads. In general, it entails simulating application load, using virtual users and batch jobs to measure response time, latency, throughput, and resource utilization of the application.

Some of the key objectives of performance testing are to help tune and maintain a system with low latency, high throughput, and low resource utilization. The Performance test is only executed when required and dependent upon application scope of changes. Major enhancements or large modifications to the application require performance testing.

The key objectives that are accomplished through performance and stress test include:

- Understanding overall application performance objectives and service level standards
- Testing and validating performance effectiveness of application
- Providing an effectively configured and sized technical infrastructure
- Adequately testing the application's online performance under expected business volumes
- Performing stress tests under extreme load conditions to identify system breaking points and thresholds
- Adequately testing the batch components under expected business volumes (as needed)
- Enabling a feedback process to the development team to revise application components that do not meet performance objectives

Audience

The testing team is responsible for the planning, executing, and reporting of performance and stress test cases with support from the development team.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in Load Test environment
- Load test environment is configured and delivered to the testing team
- Test execution reporting processes are reviewed by the testing team
- Test execution communication meetings are scheduled by the testing team (status meeting, defect meeting, etc.)
- Performance test scenarios and metrics reviewed by the teams with appropriate stakeholders
- Performance test data requirements defined and verified by the teams
- Shakeout of test environment completed and is fully operational with no major issues including the verification of the following:
  - Application functionality,

- Test data, and
- User logins

Test Exit Criteria

- Load testing scenarios are completed successfully, validated and load test results are documented
- Load test results have been approved and reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review
- Load defects across fatal and major severity levels have been fixed and successfully tested (as agreed upon in the system test plan)
- Remaining open defects (if any) are documented in the Test Defect Tracking System

Parallel Testing

Objective

Parallel testing is defined as execution of test cases to test multiple system components on one application concurrently or to test components of the legacy system in the new system to validate that similar results are achieved. For WV IES, the process will involve verifying compatibility of the modernized system with the legacy system.

The key objectives that are accomplished through parallel testing include:

- Test components of the legacy system in the modernized system
- Confirm data is converted and corrected
- Confirm that configuration of new system produces the same results as the process in the legacy system
- Identify test results that do not match the results produced by the legacy system
- Reconcile the result variances after the test process

Audience

The development team is responsible for the planning, executing, and reporting of parallel test cases during unit testing while the testing team will be responsible for parallel testing during integration and system testing with support from the development team.

Designated DHHR representatives with assistance from Deloitte are responsible for the planning, execution, and reporting of parallel testing during UAT.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in the test environments
- Test environments are configured and delivered to the testing team by the application team and the solution architect
- Test execution reporting processes are reviewed by the testing team
- Test execution communication meetings associated with parallel, if any, are scheduled (status meeting, defect meeting, etc.)
- Parallel test scenarios reviewed with appropriate stakeholders
- Parallel test data requirements defined and verified by the testing team

Test Exit Criteria

- Parallel test scenarios are completed successfully, validated and parallel test results are documented by the testing team
- Parallel test results have been approved and reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review
- Defects across fatal and major severity levels have been fixed & successfully validated
- Gaps in functionality between legacy and modernized system, if any, are documented

Regression Testing

Objective

Regression testing is defined as re-execution of test cases to validate that previously working functionality is not negatively impacted by newer code or configuration changs. During the WV HSP project software development life cycle, Regression can take on the following two forms.

Regression-Upgrade: This type of regression testing occurs when introducing new code into a currently working environment. The functionality previously supported by the original code is tested to validate that it continues to work with the updated code base.

Regression-Post Exit Criteria: During the project life cycle, if a defect is identified in a testing phase, the resolution code base is migrated through the previous phases to reach the tester who identified the issue. By passing of the exit criteria for these phases, it validates that issues with the fix are resolved prior to impacting any previously passed working functionality in the current phase.

From a timing perspective, regression testing is often conducted at the end of functional testing prior to user acceptance and is a mix of automated as well as manual testing of entire application's end-to-end functionality.

Audience

The testing team is responsible for the planning, executing, and reporting of regression test cases.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in system test environment
- System test environment is configured and delivered to the testing team by the application team and the solution architect
- Test execution reporting processes are reviewed by the testing team
- Test execution communication meetings associated with regression testing, if any, are scheduled (status meeting, defect meeting, etc.)
- Regression test scenarios reviewed with appropriate stakeholders
- Regression test data requirements defined and verified by the testing team

- Exit criteria for system acceptance test phase has been met

Test Exit Criteria

- Regression test scenarios are completed successfully, validated and regression test results are documented by the testing team
- Regression test results have been approved and reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review
- Regression defects across fatal and major severity levels have been fixed & successfully validated
- Remaining open defects (if any) are documented in the Test Defect Tracking System

User Acceptance Testing

Objective

User acceptance testing takes place after the unit, integration & system tests are run to validate that the current functional release is performing well against its design specifications. User acceptance testing validates that the current functional release is meeting end user requirements and expectations. User Acceptance testing is a formalized process whereby DHHR representatives perform testing on each system process.

The focus of UAT testing includes:

- Allow the user community to accept the software as supporting their business need, and mark the completion of the SDLC
- Allow the user community to validate that the manual/desktop procedures have been documented to support the software release

Audience

Designated DHHR representatives with assistance from Deloitte are responsible for the planning, execution, and reporting of the user acceptance test.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use in Acceptance Test
- Acceptance Test environment is configured and delivered to DHHR users
- Test execution reporting processes are reviewed within the testing team, development team & leadership
- Test execution communication meetings are scheduled by the testing team (status meeting, defect meeting, etc.)
- DHHR representatives have:
  - Created the acceptance test plan, scenarios & reviewed with the appropriate stakeholders,
  - Determined the acceptance test leads and finalized the testing participants,

- Confirmed the acceptance testing venue and calendar of who is testing, when is the testing being done and what is being tested,
- Defined the test data needed for successful execution of the acceptance testing
- Performed shakeout of test environment and confirmed that it is fully operational with no issues including the verification of the following:
  - Application functionality,
  - Test data, and
  - User logins

Test Exit Criteria

- User Acceptance Test results are documented by DHHR testers
- Summary of modified and/or additional tests are available for review from DHHR testers
- Defects with fatal and major severity have been fixed as agreed upon collectively by Deloitte and DHHR representative which would prevent or reduce the significance of future testing
- Remaining open defects, if any, are documented in the Test Defect Tracking System
- User community accepts the system
- 'Go' decision is received from the DHHR representatives to proceed with the Operational Readiness (ORT) & production deployment

Operational Readiness Testing (ORT)

Objective

Operational Readiness Testing (ORT) validation is defined as re-execution of critical test cases, prior to the Production deployment. It provides the team a testing opportunity to step through the deployment activities and raise questions or concerns prior to the production migration date.

Audience

The application team, testing team as well as DHHR is responsible for the planning, executing, and reporting of ORT test cases.

Test Readiness Criteria

- Appropriate hardware is allocated and ready for use for ORT testing
- Exit criteria for UAT as well as regression test phases have been met
- User community accepts the system
- 'Go' decision is received from DHHR at the end of UAT phase to proceed with the ORT & production deployment

Test Exit Criteria

- ORT scenarios are completed successfully, validated and ORT validation results are documented by the testing team

- ORT validation results have been approved and reviewed with the relevant project team and project leadership
- Summary of modified and/or additional tests are available for review
- ORT defects across fatal and major severity levels have been fixed & successfully validated unless agreed upon collectively by development manager, test manager & project leadership, which would prevent or reduce the significance of go-live

Security Testing

Objective

Application Security Testing provides application security testing for all Internet facing applications, custom applications, third-party-hosted applications, packaged applications.

Services include both automated and manual security testing against web sites and applications to obtain a level of security assurance. Formal security testing validates that secure coding techniques and appropriate web server configurations are properly implemented, both of which help to prevent unauthorized data disclosure and to preserve data integrity and availability. Analysis of scan results help in security flaws validation based on which a mitigation process is identified. Deloitte will assist with prioritization of remediation.

The application security testing service will be provided by Deloitte's team of knowledgeable professionals to provide scalable, cost effective and timely application security testing services to member firms—with scalable infrastructure to support all security testing services.

Deloitte will establish the approach and define the scenarios for security vulnerability testing. The approach should target all aspects of testing the software's ability to provide protection from accidental or malicious access, use, modification, destruction, or data disclosure, and ensure system compliance with the security specifications. We work to define the Security Vulnerability Test Cases and test steps for each in-scope test scenario identified in the Security Vulnerability Test Approach. Once we have defined test cases, we identify the relevant Security Vulnerability Test Data is to identify the test data that is required to conduct security vulnerability testing. Before executing our security vulnerability testing, we develop a Security Vulnerability Test Plan. The Security Vulnerability Test Plan allows us to plan for the validation of all the security mechanisms built into the system and to document all security testing activities. The plan should cover all aspects of testing the software's ability to provide protection from accidental or malicious access, use, modification, destruction, or data disclosure, and ensure system compliance with the security specifications.

We complete the above activities and are prepared to execute Security Vulnerability Testing. This allows Deloitte to test the solution's ability to perform secure authentication, authorization, and other identity and access management functions. This activity validates that the solution adheres to security standards, such as information categorization and providing appropriate levels of information security according to a range of risk levels. The Security Vulnerability Test environment is prepared and populated, and then testing is conducted. Test cases are executed and the results for all security vulnerability test cases are captured as per the Security Vulnerability Test to validate all the security scenarios built into the system. This includes testing the software's abilities to provide protection from accidental or malicious access, use, modification, destruction, or data disclosure, and verify system compliance with the security specifications.

Audience

The application team and testing team are responsible for the planning, executing, and reporting of security test cases.

Test Readiness Criteria

- Coordinate the testing activity with stakeholders like IT infrastructure and application and data center service providers.
- Review the vulnerability reports and own limited "as needed" distribution of the reports. The sensitive nature of information contained in the reports requires a key stakeholder being responsible for managing the communication aspects.
- Identify mission-critical systems, business partners or affiliates, and third parties as applicable.
- Identify the time period for communication to the appropriate stakeholders for high-severity security vulnerabilities identified in the production environment.
- Coordinate and authorize Deloitte's access to the client information technology components that have been identified by the trusted agent for vulnerability testing.
- Identify expert-level security vulnerability testers to create and review test cases executed during the test phase. Document in the Security Vulnerability Test Plan.
- Approach security vulnerability testing from both functional and technical aspects of the system.

Test Exit Criteria

- Security Vulnerability Testing scenarios are completed successfully, validated and Security Vulnerability Testing validation results are documented by the testing team.

Disaster Recover Testing

Objective

Disaster Recovery Testing helps in verification of the disaster recovery plan and to validate that the business continuity can be guaranteed upon recovery from a disaster. It includes testing related to different facets of the project including the System, different applications, data for those applications and any relevant communication failovers. Conducting a Disaster Recovery Test is effective when the human and technology elements are combined into one test and by simulating what will really happen if a disaster were to occur. A successful Disaster Recovery testing effort helps verify if the Disaster Recovery environment is operational and the failover can be relied upon to normalize the business after a catastrophic event.

Audience

The application team, testing team as well as DHHR is responsible for the planning, executing, and reporting of Disaster Recovery test cases.

Test Readiness Criteria

- A thorough Disaster Recovery Plan has been approved by the DHHR individuals responsible for approving the test plan
- Appropriate hardware, software, logistical support etc. has been allocated and ready for use for DR testing
- Disaster Recovery Exercises have been planned to address the different facets of the business as described in the Disaster Recovery Plan
- DR Test participants including business, management, technology, business continuity team, disaster recovery team and any affected business partners have been coached on the details of the DR Test Plan

Test Exit Criteria

- Infrastructure Verification signoff has been provided by the Infrastructure Engineers who have deployed the DR hardware
- Technical testing has been performed in the DR Test Environment for the applications which are part of the DR Testing Plan
- End user testing has been performed in the DR Test Environment for the applications which are part of the DR Testing Plan
- Site failover testing has been performed
- Implementation Certification Letter will be provided to the client once the system is ready for operation.

Interface Testing

Objective

The objective of Interface Testing is to validate that interfaces are developed and integrated with the broader WV HSP system, and are transferring information with the Interface partners according to the requirements. This type of testing confirms communication between the adjoining software components are correctly integrated with the WV HSP solution. Interfaces should confirm all data is consistently and accurately transferred in the correct format, to and from all entities communicating with WV HSP.

Audience

The application team, testing team as well as DHHR is responsible for the planning, executing, and reporting of Interface test cases.

Test Readiness Criteria

- Identify interfaces with State and Federal agencies
- Establish interface connectivity timeline
- Setup test environment to complete interface testing
- Configure to point to interface partner's test environment
- Create test scenarios and test data

Test Exit Criteria

- Data is successfully transferred to and from identified interface entities.
- All defects have been documented in detail.
- All defects have been fixed and retested to all interfaces without issue.
- Compile all test results and report to DHHR.

Pilot Testing

Objective

Pilot testing is performed on a specific population of individuals or a segmented module of the tested system. The objective of pilot testing is to verify a system can operate under specific operational conditions, prior to pushing the full implementation of the solution to the entire population of end users. This type of testing validates the functionality of the system before going into production.

Audience

The application team, testing team as well as DHHR is responsible for the planning, executing, and reporting of Pilot test cases.

Test Readiness Criteria

- Identify system components that affect external system users, such as web portals, web-based software, and data entry by other vendors,
- Identify test cases and user base for pilot testing
- Execute test cases to validate pilot functionality
- Set up test harness to validate interfaces with external partners

Test Exit Criteria

- All defects have been documented in detail for piloted segment population/module.
- All defects have been fixed and retested without issue.
- Compile all test results and report to DHHR.

Conversion Testing

Objective

Data conversion testing is performed using automated tools to Extract, Transform, Load (ETL) data to the conversion environment with the DHHR approved tolerance level. Test results of data conversion are sent for DHHR approval prior to beginning the conversion of production data

Audience

The testing team is responsible for the planning, executing, and reporting of conversion test cases.

Test Readiness Criteria

- Identify system components that affect external system users, such as web portals, web-based software, and data entry by other vendors,
- Identify test cases for conversion testing
- Execute test cases to validate conversion scripts
- Evaluate data conversion outcomes in the conversion environment

Test Exit Criteria

- All defects have been documented in detail.
- All defects have been fixed and retested without issue.
- Compile all test results and report to DHHR

Test Environments

WV HSP Test Environments

This section identifies the overall set of environments supporting the testing team for WV HSP. Refer to the environment architecture diagram for more information of each environment that is established.

The table summarizes the purpose of each environment. The order of environments does not imply the order in which they are used from a SDLC perspective, nor is each environment used as part of an SDLC phase.

Test Environment	Intended Use and Description
Unit Testing	This form of testing is performed in the development environments that provide necessary core features needed for coding and unit testing efforts
System Integration Testing	System integration testing, along with interface testing, is performed in the system integration testing (SIT) environment. This environment is also used to perform our security testing of the end-to-end application
Performance Testing	This type of testing uses the Performance testing environment dedicated solely to this testing effort. This is a large environment with a representative database to simulate production environments as required for load and stress testing
Conversion Testing	This testing occurs in an isolated conversion environment for data control purposes. Once conversion is verified, "scrutinized" data is then brought over to the System Integration Testing environment so the application can also be tested against conversion volume and data variations
User Acceptance Testing	User acceptance testing is performed in the User Acceptance Test environment with. This environment closely simulates the production environment
ORT	This testing is performed in order to ensure the quality of the System and applications before production
Training	This testing is performed in order to train the end users on the new System and coach them on any new or updated business process.
Disaster Recovery	This type of testing is performed in order to ensure that the System and applications are resilient and the failover is going to help normalize the business as usual in case of a disaster or catastrophe.

Test Environments

Testing Methodology

Test Planning & Approach

Test planning outlines the high level objectives and approach to testing based on a review of the enterprise test standards and associated project deliverables, such as the requirements documentation and design documentation. This section also provides the guidance necessary to accomplish test case development and execution activities.

Test Planning & Approach Activities

Test Planning/Approach includes the following activities:

- Confirm requirements in scope and out of scope
- Determine affected applications and interfaces
- Related test plans scheduled for execution to verify the application.
- Determine schedules for each test cycle
- Determine key milestones for the testing effort
- Identify test team and cross-functional team roles
- Confirm resources assumptions for the testing effort
- Determine estimated test resources required to execute testing

Establishing Test Types

The various test types applicable to our EVD for SI methodology are described in the section above.

Mandatory Test Types

The testing types used on DHHR projects include:

- Unit Test
- Integration Test
- Accessibility Test
- System Test
- Load/Stress Test
- Regression Test
- User Acceptance Test

- ORT Validation
- Disaster Recovery Testing

Optional Test Types

Testing types to be assessed and reviewed for use based on specific initiatives include:

- Security Vulnerability Test
- Data Conversion Test

The following table shows each of these test types, their mapping to appropriate SDLC phases, and associated testing tools:

Type of Testing	DHHR Definition	Environment for Testing
Unit Testing	Testing of groups of code or modules during development	DEV
Integration Testing	Testing of components or modules into the overall system codebase to validate that existing components are not broken by the new module	DEV
Iterative Functional Testing	Each logical iteration meets functional and technical requirements	DEV
System Testing	Validation of new functionality and interoperability of the system and other subsystems, and their integration with infrastructure into an overall integrated system	SIT
Interface Testing	Completeness of Interface development and readiness for integration in the wider system	SIT, UAT
Regression Testing	Set of agency approved scenarios that should be used for regression after integration of each component into the wider system, as well as after migration of new build versions	SIT, UAT
End-To-End Testing	Testing of a Business using real-world scenarios at the component, application, and system level	SIT, UAT
Security Testing	Testing of functional, technical and infrastructural components to validate that the system meets security requirements	SIT, UAT
Performance Testing	System should meet performance service levels required by DHHR for query and page response times under simulated load for number of users for multiple concurrent functions	Performance
Usability/Accessibility Testing	Testing of User Interface for internal and external users, power users, users with limited computer skills, or the users with disability	SIT
Browser Testing	System should operate in the supported browser versions and operating system configurations approved by DHHR	SIT
UAT	System meets expectations of DHHR and the system users	UAT
Data Conversion Testing	Data migrated from current systems is brought to new systems in a usable, complete, correct and expected state	SIT/UAT

Testing types for WV HSP

Proposed Tools	Purpose	Rationale for Tool Selection
JAMA	Test Scenario Creation and managing relationship between requirements and test cases (i.e. Requirements Traceability Matrix)	Industry standard test management tool that supports requirement traceability and an environment for end-to-end test management
JIRA	Defect creation and management	Industry recommended tool frequently used in conjunction with JAMA for defect management
TermX	Record and replay tool in Mainframe and refactored system during Unit test phase	Best in class tool to effectively test legacy functionality functions as-is
JMeter	Load and Performance Testing	Industry recommended tool to test load and performance of Java based applications
HP Load Runner	Performance Testing	Industry standard and the best known tool for its robustness to execute and report results of the Load Testing
CA Test Data Management	Test data management	Provides reduced time-to-market and a complete end-to-end test data management solution
Junit	Unit testing framework	Industry recommended tool for writing and running unit test cases in Java
Maxenso Suite	Enterprise Solution for modernization	Strong suite of products which supports modernization of development environments as well as the entire enterprise application
Jenkins	Automation Server	The leading open source automation server that supports building, deploying and automating Java based software
PowerMapper/JAWS	Accessibility Testing	Best in class accessibility testing tool that supports comprehensive accessibility testing for ADA compliance
HP Fortify Security Center, Nessus Vulnerability Scanner, and AppDetective Pro	Security and vulnerability testing	Helps in identifying vulnerabilities in Web applications, databases and servers to mitigate associated security risks using dynamic and interactive analysis techniques for thorough coverage and accuracy
Unified Functional Tester/Selenium	Automated Testing	Provides an environment for automated test script creation and execution.

Testing tools proposed for the WV HSP solution

Test Case Development

The purpose of Test Case Development is to detail test scenarios, develop step by step test cases, prepare the finalized deliverables for submission and signoff, and identify needed data to support test execution.

Test Case Development Activities

The test case development is done in each of the test types.

Test Case Development Deliverable

Each test case development as well as its execution has an output associated with it. Some of these outputs are deliverables from the specific testing type.

Title	Deliverable Description
Data Conversion System Integration Test Cases	Details of authored test cases.
System Integration Test Cases	Details of authored test cases.
Regression Test Cases	Details of authored test cases.
Load/Stress Test Cases	Details of authored test cases.
User Acceptance Test Cases	Details of authored test cases.
Operational Readiness Plan	Detailed documented plan
Operational Readiness Test Scripts	Details of authored test cases.

Test case development deliverables

Test Execution

Test execution involves running test cases and verifying the results. For each Test Cycle, the testers execute test cases, uncover as many defects as possible, document the defects, and work with the development team to understand and resolve defects, and capture metrics. Code quality is measured following each Test Cycle by comparing metrics against exit criteria. Each Test Cycle is carefully coordinated with the Development Teams, Release Management and Configuration Management.

Test Execution Activities

Unit Testing

Unit tests verify that individual system components support the related functional, non-functional (technical), and interface requirements as represented in the system specifications as well as the Unit Test Checklist.

Unit testing is performed by developers in a local development environment. To successfully test units of functionality, basic simulation tools need to be developed by developers to completely exercise technical logic.

The scope of Unit Testing is planned and executed by application leads where effort and allocation of adequate time in the schedule is made to make sure that it is performed thoroughly.

Integration Testing

Integration Test is the process of testing documented business and functional components of the application in a fully integrated testing environment that mimics the real world use, including the interaction with external systems.

Integration Testing is performed by the testing team, with planning activities performed early in the SDLC to make sure that resources, timelines, test data and the necessary stakeholder coordination are covered and documented.

Integration test cases are developed prior to INT testing and are reviewed by peer testers as well as application teams for thoroughness and accuracy. JAMA is used to capture Test Cases and defects, and provides reporting metrics to monitor progress.

Regular status meetings are held to make sure that the testing and development team are coordinated to report and resolve defects, as well as escalate and react to risks that may arise during test execution.

System Testing

System testing validates that components and modules of a system included in a particular release are tested in system test environment before entering user acceptance testing.

System testing is done by the SMEs on the testing team and includes execution of end-to-end Test Cases focusing on business requirements. System testing also includes additional ad hoc and break testing to make sure that the code is configured and is UAT ready.

Defects found during System testing are managed in JIRA in a similar fashion to Integration test defects. The testing team is responsible for sending testing execution progress to stakeholder groups.

Regular status meetings are held to make sure that the testing and development team are coordinated to report and resolve defects, as well as escalate and react to risks that may arise during test execution.

Load Testing

Load Test is the process of testing to verify performance of the system's underlying technical architecture by simulating application load using virtual users and batch jobs and measuring the system's response time, latency, throughput, and resource utilization. It also includes testing the application under higher than usual load volumes to the point of system failure to identify system breaking points and thresholds.

Load Testing is performed using HP Performance Center by the Testing team. Testing team is also responsible for planning, scheduling and execution of load tests. After analyzing load testing results, testing team coordinates with application team for any necessary code changes and re-tests that performance issues are addressed.

Load testing performance defects found during Load Testing are entered and tracked in JIRA. Testing team is responsible for sending load testing progress updates to stakeholders, as well as tracking completion and progress of load testing.

Regression Testing

Regression Test is the process of selective retesting of systems and system components to verify that modifications have not caused unintended effects and that the system or component still complies with its specified requirements. It is performed by a dedicated testing team either manually or with the use of automated functional testing tools (e.g. HP UFT).

Test Cases executed for this test are planned ahead of time and documented in JAMA, but additional test cases may be re-executed depending on testing performance during the earlier phases. Regression test suites are assessed after each release to make sure that they stay up to date with ongoing changes made on the system.

JAMA is used for Test Cases preparation and execution where JIRA is used for defect management. Regular status meetings are held to make sure that the testing and development team are coordinated to report and resolve defects, as well as escalate and react to risks that may arise during test execution.

User Acceptance Testing

User Acceptance Test is the process of completing the final validation of required business functions and flow of the system by representatives of end users based on documented business requirements.

User Acceptance Testing is done by representatives designated by DHHR, which may be DHHR staff, end users, or both. UAT planning, coordination and execution is facilitated by Deloitte.

JAMA is used to capture Test Cases and JIRA for defects, and provides reporting facilities to monitor progress. User Acceptance Test Cases are created by DHHR in a plan which is separate from the Integration plan in JAMA. DHHR and Deloitte test managers are responsible for reporting testing progress, as well as scheduling regular status meetings with DHHR and the Deloitte application & testing teams.

ORT Validation

ORT validation provides the migration team a testing opportunity to step through the deployment activities and do a shakedown test prior to the production migration date. ORT validation is the process of selective retesting of systems and system components to verify that the deployment process has not caused unintended effects and that the system or component still complies with its specified requirements. It is performed by a dedicated testing team either manually or with the use of automated functional testing tools (e.g. HP UFT). Pilot testing of system components that affect external system users, such as Web Portals, Web-Based software, and data entry by other vendors is also conducted.

The ORT phase also includes disaster recovery testing which involves testing technical components, environment and data to ensure failover protocols are followed and the application is functioning as expected in the event of a disaster.

Test Cases executed for this test are planned ahead of time. JAMA is used for Test Cases preparation, execution and JIRA for defect management.
Regular status meetings are held to make sure that the testing and development team are coordinated to report and resolve defects, if any, as well as escalate and react to risks that may arise during test execution.

Test Execution Deliverables

The test case execution is done for each of the test types. Execution of test cases in each test type results in a deliverable. The following table outlines typical deliverables associated with each of the test types.

Title	Deliverable Description
Data Conversion System Integration Test Results	Execution report of the Data Conversion System Integration Test Results.
System Integration Test Results	Execution report of the System Integration Test Results.
Regression Test Results	Execution report of the Regression Test Results.
Load/Stress Test Results	Execution report of the Load Test Results
User Acceptance Test Results	Execution report of the User Acceptance Test Results
Operational Readiness Test Results	Execution report of the Operational Readiness Test Results
Test execution deliverables	

Deloitte's structured Testing methodology is strictly based around the rigid testing processes listed below:

Test Process	Approach
a. Management of Testing Processes	• Use guidelines and practices provided by our EVD for SI methodology to cover aspects of testing.
b. Requirements Traceability	• Use of Requirements Traceability Matrix and Detailed System Design to validate linkage from testing to requirements • JAMA used as a comprehensive test management tool, mapping requirements to test cases creating bi-directional traceability. • Design documents and requirements are located in the tool and linked to corresponding test

Test Process	Approach
	cases.
c. Automation of Functional Testing	• Automation test scenarios are selected based on key user functions and are automated for execution during subsequent phases of testing • Automation scenarios are identified by reviewing high volume transactions and/or business critical scenarios. • Use risk based testing approach to identify scenarios which are most important • We also review highly utilized screens for testing the application • Create automation scripts for bulk test data creation.
d. Test data development through sample preliminary converted files	• Data is loaded based on size and intended use of the testing environment. If existing data from production environment (i.e. converted data) is to be used, Personally Identifiable Information (PII) is removed. • Converted data goes through additional validation to check data integrity and completeness. • Test data is loaded into the testing environments prior to the start of the initial test phase. Automated test scripts are also used to create new and bulk data.
e. COTS Product Testing	• Our COTS products includes the Salesforce client functionality shown in our product view. • Validated using scenarios that test their configuration switches and enable/ disable features. • Defect Identification, Defect Logging, Defect Triaging, Defect Resolution, Defect FIX and Deploy, Defect Retest are done within the COTS product testing.
f. Defect and issue identification, tracking and resolution	• Detailed defect and issue management processes are defined for each testing phase including – Defect Definition – Defect categorization, prioritization, impact assessment and defect reproduction and documentation – Defect resolution and – Defect Monitoring • All defects are maintained and tracked using JIRA • Continuous monitoring and reporting of defects and resolution progress
g. Documentation Updates	• Manage documentation updates based on whether they are Controlled Items or Managed Items. • Controlled items are DHHR deliverables that need version control as well as DHHR approval once a baseline is created. • These documents need update, they go through a change control process for creation and approval. • Managed items are working documents that do not require a strict approval process, but are version controlled.
h. Problem Handling	• Use weekly status reporting to notify DHHR for the progress made, key accomplishments, milestones reached and highlight issues, risks noted. • Critical issues which are identified as showstoppers during test phases, are discussed with DHHR on day to day basis with its root cause and a resolution plan.
i. Test Results Reporting	• Follow our EVD approach for preparing and delivering test results based on the deliverables milestones. • Status reports are shared highlighting progress of test execution, and issues encountered. • Testing progress metrics are generated for each test phase including SIT and UAT and is shared with DHHR.

Test Team

Organization Chart

The organization chart shown below identifies Deloitte test team members. As needed, the Org Chart may have multiple images representing the Deloitte Team, the DHHR Team, and also an Integrated Project Org Chart.

{Placeholder to update the chart upon project start up}

Organization Chart for Deloitte Team

Roles and Responsibilities

This section outlines key Testing Team Roles and specific functions that each Team Member performs within the testing phases as well as non-testing phases.

SDM Phase	Key Activities for testing	Test Lead	Testing SME	Application Tester	Automation Tester
Estimation	Understand background, Vision	C	C		
	Estimation for testing	R	C		
	Staff planning	R	C		
	Review estimates (Submission owned by app team)	C	C		
	Participate in kick off & wrap up sessions	C	C		
System Requirements	Review System Requirements Deliverable document (Owned by app team)	C	R		
General System Design	Participate in kick off & wrap up sessions	C	C		
	Review use cases & requirements traceability matrix for purpose of	A	R		
	Review General System Design (GSD) Deliverable document (Owned by app team)	C	C		
Detailed System Design	Participate in kick off & wrap up sessions	C	C		
	Review key considerations & screenshots for purpose of Test Scenario Creation	A	R		
	Review Detailed System Design Deliverable Document (Owned by app team)	C	C		
Development	System Test Plan Creation	R	C		
	Integration Test Scenario Creation	A	R	R	
	System Test Scenario Creation	A	R		
	Train Functional Testers	A	R	R	
	Review and validate completeness and accuracy of INT, SAT and REG scenarios	A	R	R	
	Participate in Exit Criteria evaluation for Development/ Unit Testing	C	C		
Integration Testing	Validate Entry Criteria for INT Testing	R	C		
	Regression (manual) Test Scenario Creation	A	R	R	
	INT Test Scenario Execution	A	R	R	
	Defect Management	A	R	R	
	Smoke & regression (automated) Test Scenario Creation	A	C	C	R
	Conduct ADA compliance Testing	A	I		R
	Facilitate Security Vulnerability Testing (owned by ITSS security team)	C			
	Validate Exit Criteria for INT Testing	R	C	C	
	INT Test Results Deliverable Document	R	R	R	
System Testing	Validate Entry Criteria for SAT Testing	R	R	C	
	SAT Test Scenario Execution	A	R	R	
	Execute UAT Test Scenarios	A	R		

SDM Phase	Key Activities for testing	Test Lead	Testing SME	Application Tester	Automation Tester
	Defect Management	A	R	R	
	Validate Exit Criteria for SAT Testing	R	R	C	
	SAT Test Results Deliverable Document	R	R	C	
Load Testing	Load Test Scenario Planning	R	C	C	
	Load Test Scenario Script Creation	C	C		
	Load Test Scenario Script Execution	C	C		
UAT Testing	Validate Entry Criteria for UAT Testing	C	C		
	UAT Test Plan Creation Support	C	C		
	UAT Test Case Creation Support	C	C		
	UAT Test Case Execution Support	C	C	C	C
	UAT Test Data Management to support Test Cases	C	C	C	
	Defect Management	A	R	R	
	Regression (manual) Test Scenario Execution	A	R	R	
	Regression (automated) Test Scenario Execution	A	I	I	R
	UAT Test Results Deliverable Document	C	C		
	Validate Exit Criteria for UAT Testing	C	C	C	
Regression Testing	Validate Entry Criteria for Regression Testing	R	C	C	
	Regression (manual) Test Scenario Execution	A	R	R	
	Regression (automated) Test Scenario Execution	A	C	C	R
	Defect Management	A	R	R	
	Validate Exit Criteria for Regression Testing	R	C	C	R
	Validate Entry Criteria for Disaster Recovery Testing	A	R	I	
	Plan Disaster Recovery Exercises	A	C	R	
	Train the DR Test participants	A	R	C	I
	Perform the actual Disaster Recovery Exercises	A	I	R	R
	Validate Exit Criteria for Disaster Recovery Testing	A	R	C	C
ORT Validation	Validate Entry Criteria for ORT Validation	R	C	C	
	Regression (manual) Test Scenario Execution	A	R	R	
	Regression (automated) Test Scenario Execution	A	C	I	R
	Defect Management	A	R	R	
	Validate Exit Criteria for ORT Validation	R	C	C	
Production	Production Logistics Coordination Support	C	C	C	

The DHHR projects use JAMA/JIRA to assist with the system testing and defect management processes. JAMA serves as both a documentation and tracking tool for the Department and is used to report the progress and status of application activities. Individuals get trained on using JAMA as part of the on-boarding experience.

UAT Support Approach

User Acceptance Testing is a crucial part of the development and delivery of this system. Key elements of successful testing are planning, preparation and execution. The test planning process involves establishing concise entrance/exit criteria, accurately defining test objectives, tests, and test data and laying the foundation for how UAT is organized. The key deliverables out of this process are formal test plans, tests, test data requirements, and status reports against plans.

UAT Plan Development

Deloitte will work with DHHR to outline the timelines related to the UAT testing. Deloitte will summarize the overall understanding of UAT scope and share expectations from each team that contribute to UAT testing. Deloitte will share UAT processes including defect management, test case execution that impact testing. UAT execution assignments and daily execution schedule will be shared with DHHR as well.

Test Data Management Approach

Test Data Management involves the identification, acquisition, replication and staging of test data to testers to support executing test scenarios in the various environments for both system data and input data. DHHR application testing requires reliable, realistic test data before launching new or enhanced initiatives into production. Using Production converted data is ideal but needs strict data privacy regulations to protect personally identifiable information. Therefore, the testing team not only has to validate accuracy of test data but also needs to validate tests correctly reflect production situations, both functionally and technically.

Test Data Management includes the following considerations:

Test Data Creation

Implementation of new business and system requirements usually requires creation of new test data to simulate expected application behavior.

This is accomplished using JAMA and requires that testing conditions are met as part of the test type entry criteria.

Use of Production Data

When existing business and/ or system requirements are modified, their troubleshooting and testing could be accomplished by use of existing Production data. This helps recreate defects into lower environment for better and faster troubleshooting as well as testing of modified requirements.

This is accomplished by making a selective or bulk copy of Production data into lower test environments (or using converted data) including Integration test, System Test, User Acceptance Test and Training. This aspect requires protecting sensitive data by masking, translating, analyzing and validating data copied over from Production environment.

Specific test data management considerations, timelines and cross-team coordination needs should be discussed as part of individual initiative planning exercise and covered as part of that initiative's system test plan.

Defect Severity

The following table indicates the defect severity guidelines used by DHHR during the SAT and UAT test phases. Defects or error conditions are assigned severity levels, defined by the defect management process.

Severity	Definition
1. Fatal	Very severe • Entire application, component, or function not working • Client, system or environment is unavailable. No work-around available • Severe data loss or corruption • Data integrity issue related to security, confidentiality, legal, or regulatory non-compliance • "Blocking defect" Intermittent defects that result in any of the above are also classified as Critical.
2. Major	Significant • Entire application, component or function not working. A work-around is available • Corruption of a critical component • Loss of a non-critical component Intermittent defects that result in any of the above are also classified as High.
3. Minor	Result is not as expected • Corruption of a non-critical component. A work-around is available • Low impact to the end user or application Intermittent defects that result in any of the above are also classified as Medium.
4. Cosmetic	Minor defect • Some of the application operations are unexpected Intermittent defects with low impact to the business operations or end users.

Defect Priority

Priority	Definition
1. Critical	The software does not operate as specified and/or as designed with one or more of the following effects: • A "show stopper" that prevents users from doing their work • No work around exists Data has been corrupted and some type of recovery is needed before returning the system to operation
2. High	A major function or feature has been disabled or is incorrect causing a severe degradation in service. A work around is possible, but additional problems/ failures could result in critical failure
3. Medium	Minor function(s) are disabled or incorrect; some inconvenience for users. However, the defect has a workaround solution that is easily identifiable
4. Low	Superficial error; aesthetic; no effect on operations

Defect Priority Guidelines

Defect Escalation

The following table defines the testing escalation windows for any defects not addressed within specified time frame based on the defect priority or severity.

Test Defect Priority	Test Defect Severity	Escalation Time Frame	Responsible for Escalation	Escalated To
1. Immediate	1. Fatal	24 hours	Testing Lead	Project PM, Application Manager, Initiative Lead
2. High	2. Major	24 hours	Testing Lead	Project PM, Application Manager, Initiative Lead
3. Medium	3. Minor	48 hours	Testing Lead	Application Mods Manager, Initiative Lead
4. Low	4. Cosmetic	3-5 days	Testing Lead	Application Mods Manager, Initiative Lead

Defect Escalation Time frame

Defect Process

During the project testing phases, defects are created for true defects and/or changes requested by testers. An assigned team member is responsible for reviewing these defects on a regular basis with the team to determine which defects need to be fixed for the release. The assignee is identified prior to the start of testing phase. The defect review discussions require input from testing, application, and user teams.

<Placeholder to add JAMA based defect management process>

Defect Management Process in Team Foundation Server (TFS)

<Placeholder to add defect life cycle view>

Life cycle of a Defect in Team Foundation Server (TFS)

Defects identified during testing phases which are not resolved as part of the current release are maintained within JIRA for future work inclusion. These defects go through the change control process defined in detail within the project management plan. Future application maintenance releases or enhancement work orders may arise from this list.

The state flow diagrams shown above represent the Defect Management Process with respect to the JIRA tool used to manage defects.

Test Tools

The purpose of using testing tools is to organize and accelerate the Test Process. This section identifies the testing tools used by DHHR and how the test team utilizes them. The table summarizes the name of the tool and its purpose for the testing team.

Proposed Tools	Purpose	Rationale for Tool
JAMA	Test Scenario Creation	Best industry standard test management tool that supports requirement traceability and an environment for end-to-end test management
JIRA	Development and Defect Tracking	Industry recommended tool frequently used in conjunction with JAMA for defect management
HP Load Runner	Performance Testing	Industry-standard, and the best known tool for its robustness to execute and report Load Testing
CA Test Data Management	Test data management	Provides reduced time-to-market and a complete end-to-end test data management solution
PowerMapper	Accessibility Testing	Best in class accessibility testing tool supporting comprehensive accessibility testing for ADA compliance
IBM Rational AppScan	Security and vulnerability testing	Helps in identifying vulnerabilities in Web applications to mitigate associated security risk using dynamic and interactive analysis techniques for thorough coverage and accuracy
HP Unified Functional Testing	Automated Testing	Provides an environment for automated test script creation, and execution.

Testing tools proposed for the WV HSP solution

ORT Reporting

Our approach to Operational Readiness Tracking (ORT) enhances the chances of project success by managing the end-user environment throughout the project life cycle and a focused effort toward the final testing cycle where the end-product is ready for production implementation. ORT provides the certification that the WV HSP, its sub systems, functions, processes, operational procedures, staffing, telecommunications and all other associated support is in place and ready for operation. In the post-implementation phase, the operational checklist is revisited to validate changes are complete and whether they met expectation. The following table outlines Deloitte's approach for Operational Readiness tracking:

Operational Readiness Tracking	Key activities and Benefits to DHHR
Baseline Assessment	• Baseline assessment of Operational processes, structure, and environment is conducted and areas of gap are identified. Next steps and schedules with respective owners are developed and are closely tracked till the production go-live.
Set-up and Readiness Tools	• Pre-assessment success factors help define and track roles and responsibilities, end state, feedback from stakeholder • Implementation checklist defines steps to successfully implement end state • Risk Assessment and Escalation Process mitigates risks and identifies potential impact
Implementation Plan Template	• Comprehensive implementation plan provides tactical descriptions for implementation and change management, risk escalation process, and an operational checklist

Figure 4.3-1. Operational readiness tracking.

The Operational readiness report is shared with DHHR prior to the release going into production, and includes the following:

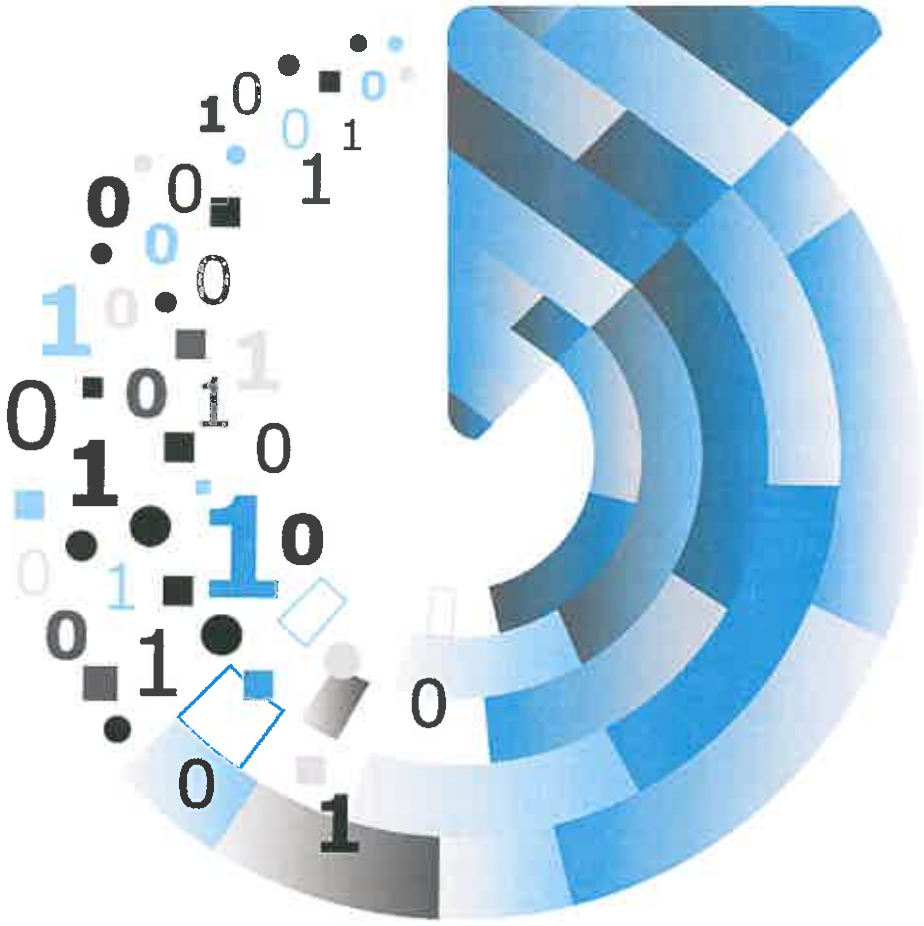
- Deployment status for application and database
- Status for performing deployment activities
- Status of smoke test and server restarts
- Post-production set of activities and their associated owners

In addition to the WV HSP solution readiness, ORT also includes discussion with DHHR stakeholders to assess readiness of DHHR staff to support the roll-out as well as the ability to support the volume and load expected after the roll-out.

Traceability throughout Testing

Deloitte uses JAMA as our Requirements Traceability Matrix (RTM) tool and links requirements to the test cases throughout the testing process. Requirements Traceability Matrix mapping confirms that the requirements defined for a system are tested in the testing phase. This allows us perform a comprehensive set of test activities within a single tool including requirements mapping, test scripting and test execution.

Deloitte.



WV IES

9.a. Scope Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

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Scope Management Plan Introduction

The purpose of the Scope Management Plan is to provide a high-level perspective of our proposed strategy to document the processes, templates, and associated tools that the WV IES Project will use to identify, evaluate, and respond to scope changes throughout the project's duration. To methodically assess and review each encountered change throughout the project's duration, stakeholders can refer to this Plan to gain greater clarity on how each change will impact the overall project. To prevent any potential scope creep, it is important that stakeholders continually refer to this Plan to prohibit any changes that could detrimentally impact the overall progress of the project. The Scope Management Plan aims to assist stakeholders with defining, controlling, and verifying the project's scope, which in turn results in compliance to project deadlines.

Overview

The Scope Management Plan documents the process, templates, and tools that the project will use to identify, evaluate, and respond to scope changes throughout the life of the project.

A change is defined as a request to alter the project's scope, which could impact cost, budget, schedule, and quality.

The project will use this plan to review the changes in a formal approval process and determine whether the changes should be implemented. Team leads are responsible for identifying, analyzing, and requesting changes. The project manager is responsible for validating and communicating change requests to the project sponsor. The project sponsor will decide whether to approve or to escalate the change requests to the operating/steering committee.

Approach to Developing the Project Scope Statement

Defining the scope of WV IES project is a key component to project success. By clearly and concisely identifying the scope of the project, DHHR and Deloitte can help ensure alignment on key deliverables. Additionally, the inclusion of a defined process flow for scope changes will help DHHR and Deloitte work together to manage scope changes and their impacts.

- The objectives of the Scope Management Plan are to:
- Develop change standards, policies, and procedures
- Effectively manage and coordinate all changes to the project
- Monitor the impacts on the project's delivery date
- Coordinate all of the work activities associated with a change request
- Manage the approved baseline and deliverables
- Eliminate or reduce "scope creep"

Scope management controls any additions, deletions, or modifications to the scope and the project plan. The type of change to the project affects the scope documents. The investigation of a proposed change evaluates its effect on budget dollars, schedule, and resources. Not all aspects of a project can be determined in advance. Change from internal or external sources to the scope and project plan need to be accommodated through the life of the project. All requests for changes must be evaluated and

approved, deferred or rejected in order to recognize and control scope creep.

Process Summary

Scope Management Framework

Task	Objectives
Plan Change Control	• Define the project's approach to identify, analyze, respond to, and report on scope changes • Assign roles and responsibilities to support the project's scope management process • Define the tools or templates needed to support the project's scope management process • Define project's scope change reporting requirements
Manage Change Control	• Identify and document change requests against project deliverables or content that has been signed off and placed under change control • Analyze, review, and approve valid change requests • Implement approved change requests and make adjustments for their impacts to the project's scope, cost, schedule, and quality • Monitor and report the status of project change requests

Change Control Management Task Objectives.

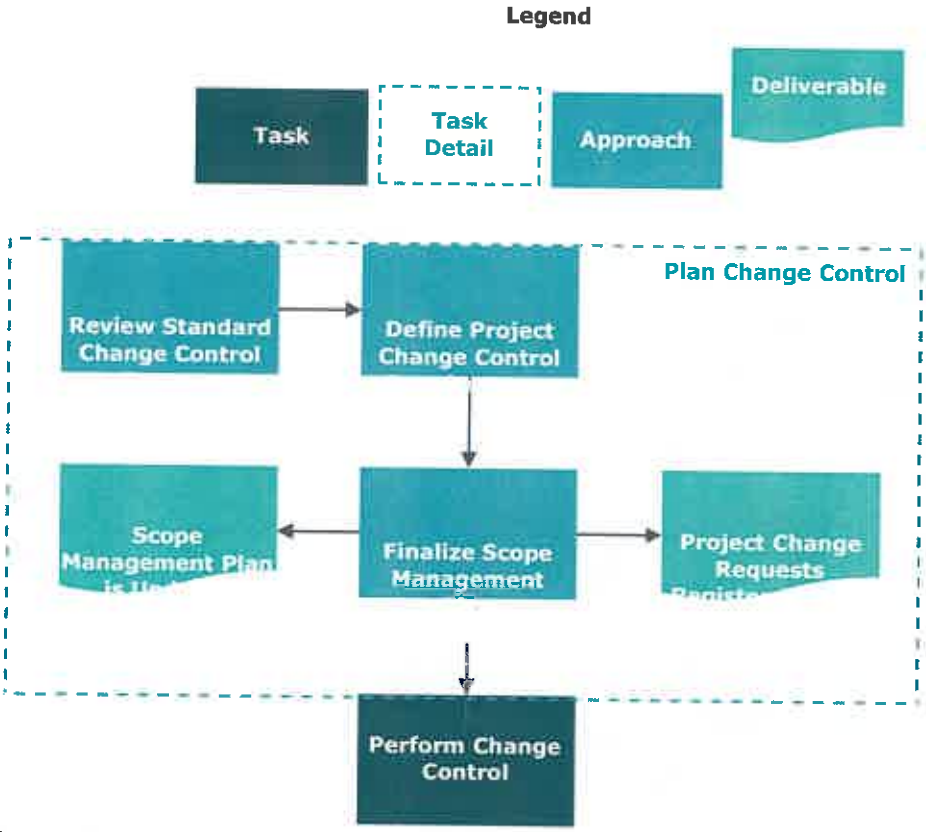
Key Roles and Responsibilities

Task	Role	Responsibilities
Plan Change Control	Project Manager	• Define and document the project's scope management process • Configure the project's scope change request tools
	CLIENT X Internal Audit	• Review the Scope Management Plan • Review the tools established to support the project's scope management process
	Project Sponsor	• Review and approve the Scope Management Plan • Review and approve the tools established to support the project's scope management process
Manage Change Control	Team Leads	• Identify and log project change requests • Determine impacts of valid change requests • Identify risks and related issues for valid change requests • Prioritize change requests • Create change orders when requests are approved
	Project Manager	• Validate change requests • Maintain project change request status records • Communicate change requests to the project sponsor • Communicate change request approvals to the project team • Add approved changes to the project plan
	Project Sponsor	• Approve or reject change requests • Escalate change requests, as necessary • Sign change orders
	Operating/Steering Committee	• Review , approve, or reject escalated change requests

Change Control Management Key Roles and Responsibilities.

Plan Change Control

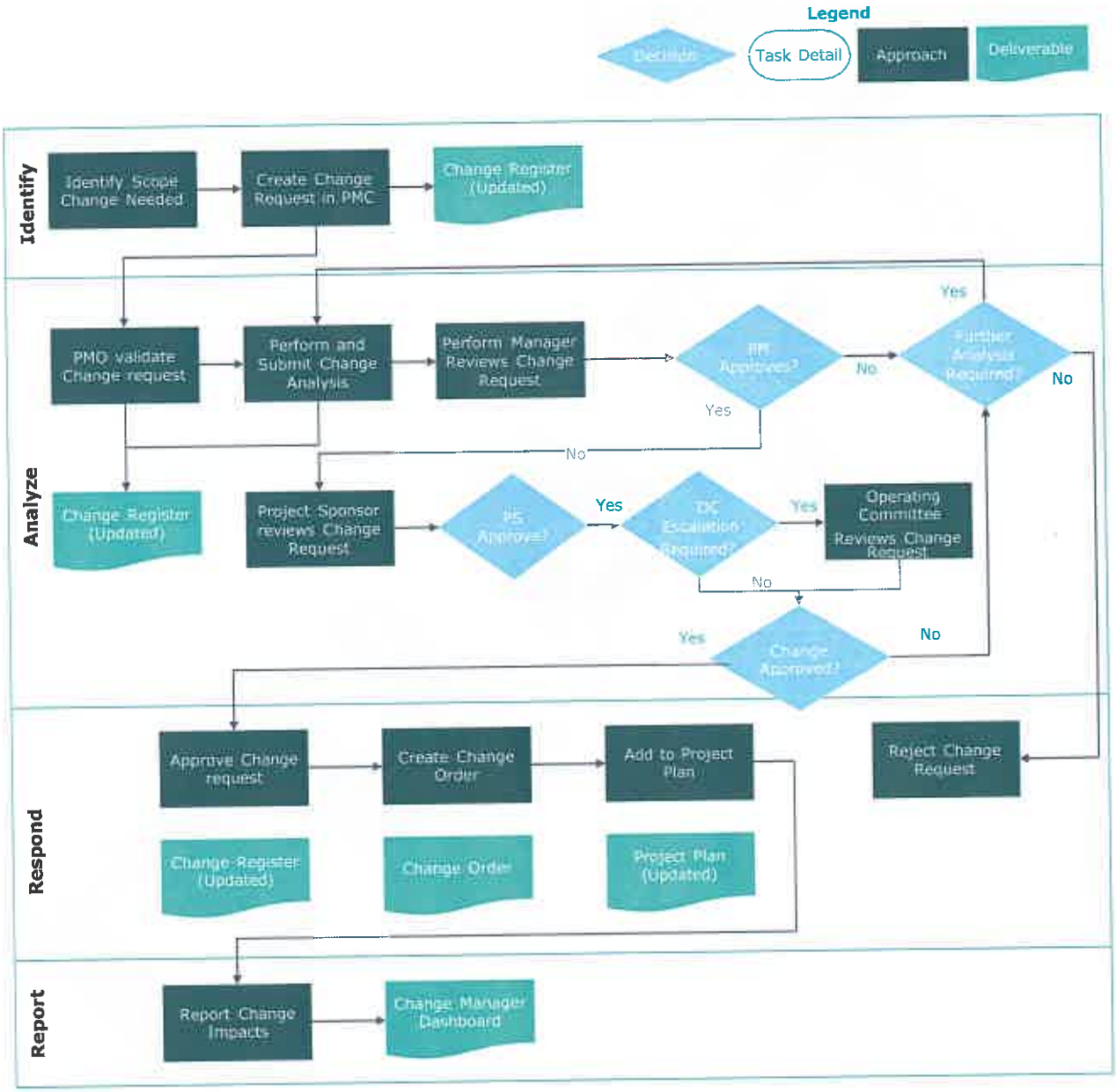
Planning scope management includes identifying the requirements of the project and developing an approach and documentation standard to meet identified requirements. This responsibility falls onto the project manager who will define the project's scope management process. The project sponsor will review and approve the Scope Management Plan. The process is illustrated in the diagram below.



Plan Change Control Process.

Manage Change Control

The Project Management Center (PMC) will be used to manage change requests on the project. The PMC will be the sole tool to document, analyze, resolve, and approve change requests. The process flow below illustrates the process the project will use to manage change requests using the PMC.



Manage Change Control Process.

Identify

Change identification is an ongoing, iterative process throughout the project. Changes that affect the scope or signed-off requirements of the project must be formally documented, analyzed, reviewed, and approved.

When a change is required, the appropriate team lead creates a change request in the change register. Once the change request is entered, the person that the change request is assigned to and the project manager receive a notification. The assigned person is notified that a change is created and that he is the assignee while the project manager receives an email with an awaiting action message. At this stage the change has the status 'New'. To create a change request, follow the steps below:

1. Navigate to the Project Change Request Register
2. In the left pane, navigate to Project Management -> Project Controls -> Create a Change
3. Fill in the fields as indicated
4. Click "Submit"

Field	Data
Project	Choose the project name
Created By	Pre-populated by the project management center
Priority	Choose the priority of the change request (Medium, Low, High or Critical). Prioritize change requests by the time frame in which they must be resolved. • **Medium** - Change must be resolved in the following weeks • **Low** – Change must be resolved at some point in the future' • **High** - Change must be resolved quickly for the project to move forward • **Critical** – Resolving Change is critical for the project
Type	Choose the type of the change
Description	This field serves as the title of the change
Business Impact Severity	Choose the severity of the change request (Medium, Low, High or Critical). Prioritize change request by the impact on the business they will have. • **Medium** – Change will have a medium impact • **Low** – Change will have a low impact • **High** – Change will have a high impact • **Critical** – Change will have a critical impact
Identified On	Project Management Center's default is "today's date" this can be changed to reflect the date of actual occurrence
Detailed Description	Enter detailed description of the change request
Justification	Enter detailed description why the change request is justified
Team (optional)	Choose the team that identified the change
Notes (optional)	Add comments
References (optional)	This feature allows a person to add any supporting file(s) necessary or helpful to support the change request.

Change Request Register Required Fields.

Analyze

All change requests need to be validated for clarity, accuracy, and relevance. Impacts of the change request must be documented in the project change request register.

The priority level assigned to the change request should reflect the criticality and urgency of the CR. The CR information in the change request record must be complete, and as accurate as possible in order to provide the information needed to determine the best course of action for the change request.

Validate Change Request for Accuracy

The project manager will validate change requests by starting the change analysis. As soon as the project manager starts the analysis, the status of the change becomes 'In Analysis' and the assignee is responsible for providing the project manager with the necessary information. However, during this stage no notification is send to the assignee to provide change analysis. To initiate this phase, the following fields in the PMC have to be completed:

Field	Data
Assigned To	Enter the person that is responsible to solve the problem.
Due Date	Date the change is due

Change Request Register Required Fields.

Perform and Submit Change Analysis

The team lead will perform the change analysis and complete the fields as described below. After the change analysis is completed, he or she must hit the 'Complete Analysis" button, which will submit the analysis to the project manager. The status of the change changes to 'Pending Approval' and a notification email is send to the project manager. To submit the change analysis, follow the steps below:

1. Navigate to the Project Change Request Register
2. Go to portlet 'Requests Assigned to Me'
3. Click on the change's number
4. Go to the 'Analysis and Impact' section of the change
5. Complete the fields below:

Field	Data
Dependencies	Use this field to document any dependencies of the change request
Financial Impact (mandatory by PMO)	Enter the estimated financial impact of the change
Schedule Impact (in days) (mandatory by PMO)	Enter schedule impact in days
Effort Impact (in hours) (mandatory by PMO)	Enter effort impact in days
Impact Summary	Use this field to address the impact to the overall project
Notes (optional)	Use this field to add any related comments and document discussion points on the change
References (optional)	This feature allows a person to add any supporting file(s) necessary or helpful to support the change request.

Change Request Register Required Fields.

Review Change Request

The project manager will review the change analysis submitted by the team lead. The project manager will decide to approve, reject, or request more analysis. If the project manager approves the change request, he will not hit the approve button in the PMC, but communicate the change request to the project sponsors for approval.

If the project sponsor rejects the change request, he will be responsible for rejecting the change request within the PMC. The project sponsor will open the change request and click the "Reject and Close Change" button at the top of the screen. After a change is rejected in the system, the project manager is required to complete the "Notes for Action: Reject and Close Request" field and communicate the rejection reason to the team lead/assignee. The status of the change request will change to "Rejected" and will be recorded in the change request register. The change assignee will be notified automatically by email that the request has been rejected.

If the project sponsor requires more analysis, he will open the change request and click the "Request More Analysis" button at the top of the screen. The status of the change request will change to "In Analysis" and will be recorded in the change request register.

If the project manager approves the change request but it exceeds the financial impact authorized to the project sponsor for approval, it will be escalated to the operating/steering committee. The project will use the thresholds defined in CLIENT X Policy P-GL-CLIENT X-AF-0001. To escalate, the project sponsor will click the "Request CCB Approval" button. The project sponsor will then fill out the following fields:

Field	Data
Control Board Level (Project):	Chose "Operating/Steering Committee"
Notes for Action: Request CCB Approval	Enter a description why the change request was escalated to the Operating/Steering Committee. For example, the estimated financial impact of the change requires O/S committee's approval.

Change Request Register Required Fields.

Respond

If the change request is approved, the project sponsor will open the change request and click the "Approve Change" button at the top of the screen. The status of the change request will change to "Pending Implementation," which means that the change request is approved but is pending a signed Change Order. A formal Change Order will be executed by Company and Consultant, in accordance with the Agreement. The change order will need to be signed by the project sponsor in order for the change to be initiated.

Once the change order has been signed, the project manager will hit the "Close Change" button in the PMC. At this point the Change Request status changes to "closed" and the change assignee will be notified automatically by email that the request has been approved.

Once closed, the change will be closed in the PMC, become a part of the project plan, and will be managed as such. To close a change, follow the steps below:

1. Navigate to the Project Change Request Register
2. Go to portlet 'Requests Assigned to Me'
3. Click on the change's number
4. Go to the 'Implementation' section of the change

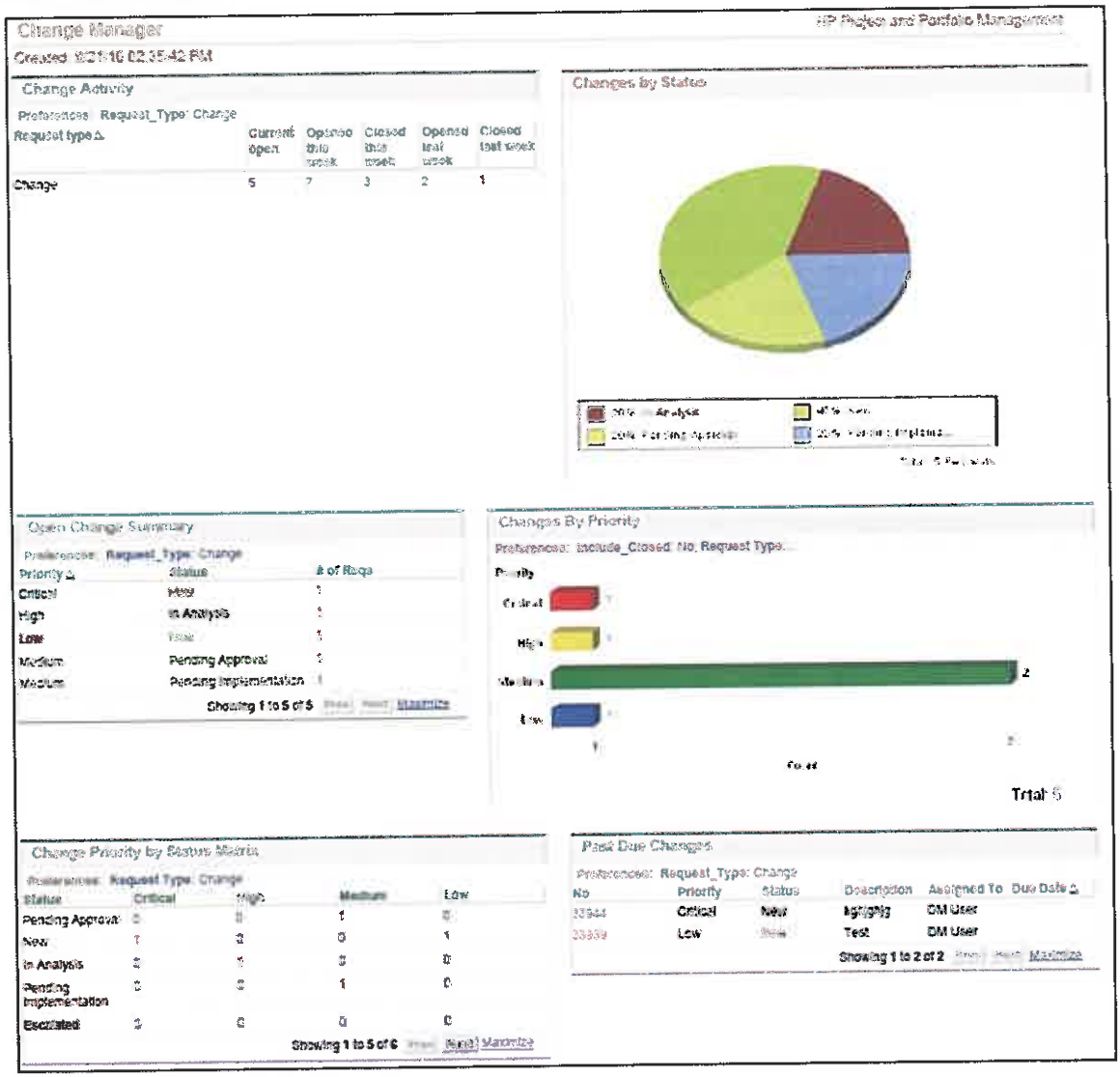
Field	Data
Implemented On	Enter the date the change is implemented
Implementation Details	Enter the implementation details
Notes (optional)	Add comments

Field	Data
URL	Enter a URL to the signed change order in the eRoom, use "Signed Change Order" as the description.

Change Request Register Required Fields.

Report

The project management center has extended reporting capabilities through its dashboard. The PMO can use preconfigured pages or choose to build customized ones. Dashboards templates can be exported to PDF format for easy distribution or consultation. These reports will be used during the weekly project status meeting and the periodic operating/steering meeting. The illustration below shows an example.



PMO Issues Register's Dashboard.

The standard Scope Dashboard will include the following reports.

Report	Style	Description
Change Activity	Table	Displays a matrix of recent change activity by status and age
Open Change Summary	Table	Provides an overview of the open changes identified and documented in the PMC
Change Priority by Status	Table	Displays a matrix and count of changes by status and priority
Past Due Changes	Table	Displays a list of changes that are open past the due date assigned
Change By Status	Pie Chart	Displays an illustration of change by percentage of total issues and status
Change by Priority	Bar Chart	Displays an illustrated count of changes by priority

Reporting Metrics.

It will be decided by project leadership what configuration and reporting capabilities are required. These capabilities will be used in status meeting updates and operating/steering committee updates.

Approach to creating the WBS based on the scope statement

Deloitte's EVD for SI provides a detailed Work Breakdown Structure (WBS) based on the scope of project.

Approach to create and maintain WBS Structure

Deloitte will work with DHHR to develop the WBS structure for the WV IES Project. Deloitte will use EVD for SI methodology to translate the State's RFP requirements into a detailed work breakdown structure (WBS). We use the WBS to develop the staff load and effort estimates that ultimately serve as the foundation for the detailed project plan, staffing and resource allocation plan to successfully implement the WV HSP.

Deloitte will work collaboratively with the State and the IES Project Team to create consistent direction for how, when, and why the project plan should be updated. Deloitte will also update the project plan based on progress and provide relevant metrics to project leadership. The project plan will be maintained in a repository where it is easily accessible to key State staff and also available upon request.

WBS Decomposition

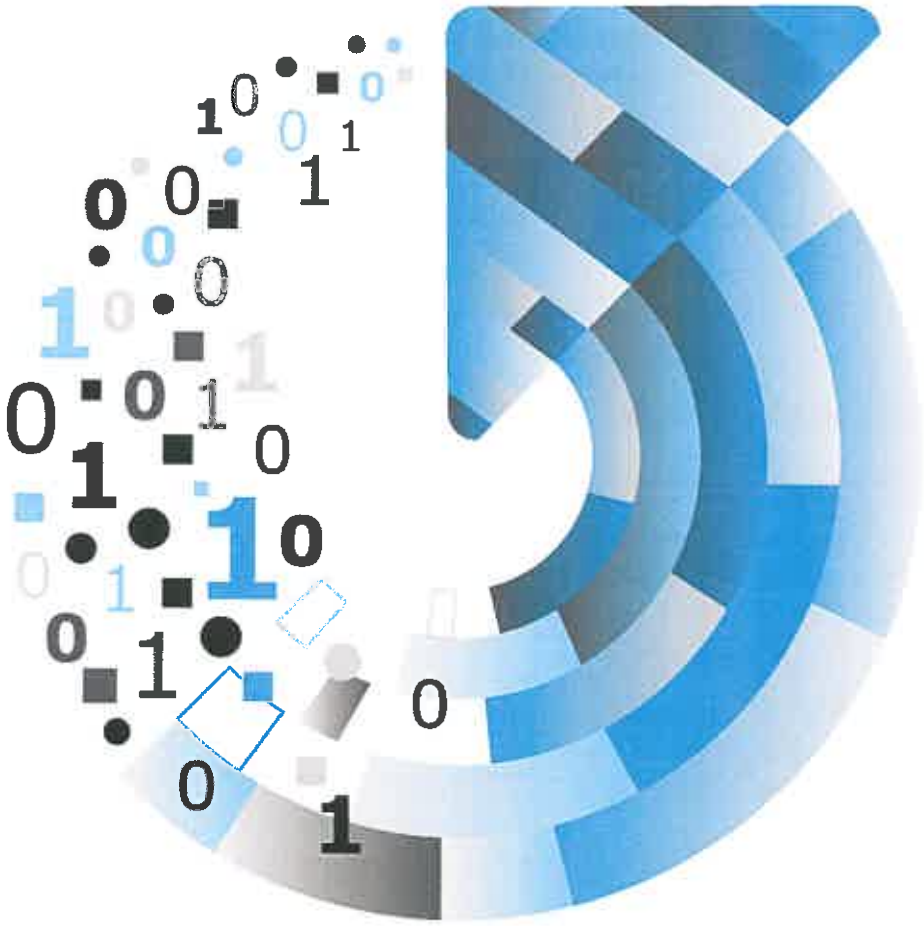
A detailed WBS for the WV IES project has been provided as an appendix artifact (Appendix C – Draft Project Schedule) along with this RFP response. The WBS identifies all project tasks and deliverables along with their tentative completion timelines

Once a project plan is created, it will be reviewed with the State and baselined once approved. The plan will be used to track and manage tasks, deliverables, milestones, dependencies, and resources of the project to help with appropriate tracking and status reporting.

1	1	**West Virginia Human Services Platform (WV HSP) Enablement**	**1565 days**	**Mon 10/2/17**
2	1.1	**Project Start Up and Project Planning**	**1565 days**	**Mon 10/2/17**
3	1.1.1	Establish Facility	5 days	Mon 10/2/17
4	1.1.2	Project kick-off	0 days	Fri 10/13/17
5	1.1.3	**Develop Project Charter**	**48 days**	**Mon 10/2/17**
6	1.1.3.1	Develop Project Charter	38 days	Mon 10/2/17
7	1.1.3.2	Interim draft deliverable submission	0 days	Thu 11/2/17
8	1.1.3.3	Submit deliverable for review	0 days	Wed 11/22/17
9	1.1.3.4	Receive deliverable client approval	10 days	Thu 11/23/17
10	1.1.4	**Stakeholder Analysis**	**48 days**	**Mon 10/2/17**
11	1.1.4.1	Develop Stakeholder Analysis	38 days	Mon 10/2/17
12	1.1.4.2	Interim draft deliverable submission	0 days	Thu 11/2/17
13	1.1.4.3	Submit deliverable for review	0 days	Wed 11/22/17
14	1.1.4.4	Receive deliverable client approval	10 days	Thu 11/23/17
15	1.1.5	**Stakeholder Management Plan**	**38 days**	**Mon 10/2/17**
16	1.1.5.1	Develop Stakeholder Management Plan	38 days	Mon 10/2/17
17	1.1.5.2	Interim draft deliverable submission	0 days	Thu 11/2/17
18	1.1.5.3	Submit deliverable for review	0 days	Mon 10/2/17
19	1.1.5.4	Receive deliverable client approval	10 days	Mon 10/2/17
20	1.1.6	**Facility Management Plan**	**48 days**	**Mon 10/2/17**
21	1.1.6.1	Develop Facility Management Plan	38 days	Mon 10/2/17
22	1.1.6.2	Interim draft deliverable submission	0 days	Thu 11/2/17
23	1.1.6.3	Submit deliverable for review	0 days	Wed 11/22/17
24	1.1.6.4	Receive deliverable client approval	10 days	Thu 11/23/17
25	1.1.7	**Staffing Management Plan**	**48 days**	**Mon 10/2/17**

WV HSP Work Breakdown Structure

Deloitte.



WV IES

9.b. Schedule Management Plan

Draft Deliverables
August 8, 2017

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Schedule Management Plan Introduction

The Schedule Management Plan is a key management tool outlining Deloitte's approach to support project planning and control. The magnitude of the WV DHHR projects, the coordination efforts, and the vast responsibilities require a structured management process to confirm schedules are defined, developed, analyzed, reported, and maintained. Consistent schedule management processes also confirm management can integrate the various levels of schedules and the necessary information derived to support the planning and control needs of project personnel. On a more detailed level the Schedule Management Plan also outlines protocol for standing meetings and reporting the Project Schedule. The plan also delineates the constraints and assumptions used to develop the timeline.

Overview

The Schedule Management Plan is a key management tool to support project planning and control. The magnitude of the WV DHHR projects, the coordination efforts, and the vast responsibilities require a structured management process to confirm schedules are defined, developed, baselined, analyzed, reported, and maintained. Consistent schedule management processes also confirm management can integrate the various levels of schedules and the necessary information derived to support the planning and control needs of project personnel.

Plan Objectives/Purpose

The objective of the WV IES Schedule Management Plan is to establish the policies and guidelines for defining, developing, baselining, analyzing, reporting, and maintaining schedules. This plan identifies roles and responsibilities for each level of the project team, as well as standard processes and techniques. This plan will serve as the basis for developing and managing schedules for the WV DHHR Program Management Office.

The WV IES Schedule Management Plan follows the principles of effective schedule development and control defined by the Project Management Body of Knowledge (PMBOK). This section details the policies for managing activities and resources loaded into the Project Schedule. By following these principles, the WV DHHR will have:

- Coordinated and consistent schedule management across projects.
- Consistent methods for establishing schedule baselines and incorporating changes.
- Effective communication vehicles for confirming wide dissemination of activity status, progress, and other schedule information.

Schedule Management Life cycle

To confirm consistency across projects, this plan has outlined a specific process that project groups and teams shall follow, unless specifically stated otherwise in a contract. This is done to achieve a high level of consistency in schedule management processes and procedures to confirm product consistency, permit deployment integration, promote data quality, provide efficient communications, enhance schedule review, support status reporting, and confirm schedule control.

Schedule Management Life cycle.

Schedule Management Life cycle Activities

- Activity Development
  - Estimate Activity Durations/Work Effort
  - Identify Resources
  - Develop the Activity List
  - Develop the Milestone List
- Schedule Development
  - Create Project Schedule
  - Create Dependencies
  - Assign Resources and Work Effort
  - Identify Critical Path
- Schedule Baselining
  - Identify Mandatory Milestones
  - Develop Project Schedule Change Control Process
  - Baseline the Schedule
- Schedule Execution and Control
  - Update Task Status
  - Incorporate Change Requests
  - Generate and Distribute Reports
  - Analyze Project Schedule and Report Information
  - Identify Corrective Action to Realign Project Schedule to Baseline
- Schedule Reporting
  - Identify Reporting Standards
  - Determine Report Content
  - Generate and Distribute Reports

Success Criteria

The list below defines the success criteria to performing schedule management for the WV IES project. These criteria indicate that the schedule management process was followed during the planning, execution, and control phases. Additionally, these criteria permit the Project Lead to conduct a gap analysis to determine what may be needed to move from the "As-Is" state to the desired state.

- All project schedules will maintain the WBS structure down to at least Level 3 (e.g., 2.1.2). On larger or complex projects, the WBS structure should be maintained down to Level 5.
- Formal discussions occur when re-baselining project schedules in accordance with governing policies of the WV IES Project Change Management Plan.
- Common project mandatory milestones and discretionary milestones are identified and agreed-upon by the project team.
- All SDLC project schedules will follow the same SDLC WBS template and controlling processes to confirm consistency in reporting data. Non-SDLC projects will develop and use a deliverable based WBS.
- All mandatory milestones are entered into the project schedule and verified against the Project Charter by the Project Lead.
- Work effort and resources are identified for each activity, and then assigned to each activity (not to the summary activities, upper WBS levels, or to milestones).
- Predecessor and successor dependencies are set on detail tasks (not to the WBS), resulting in only two open ends (the project start milestone and the project finish milestone).
- A critical path is derived based on the set dependencies.
- The project schedule's finish date is calculated from the project start date and dependencies and matches the dates provided in the Project Charter. If the calculated project finish date cannot match the date in the Project Charter, then the Project Charter may require revising.
- The Program Manager and/or the Project Sponsor reviews the project schedule prior to work starting to verify accuracy and gives written approval to baseline the project schedule.
- The Schedule Lead captures an initial schedule baseline prior to work starting or entering status updates.
- Unless contractually stated otherwise, Project Leads must submit status updates in the form of actual start date, actual hours worked (to date), remaining hours left on task and actual finish date (if applicable) for each detail task to the Schedule Lead no later than COB on Tuesday for work completed by the previous Friday. The PMO should identify when (date and time) status is due and the work period. Once received, the Schedule Lead will input the information resulting in an up-to-date project schedule.
- The Schedule Lead generates standard status and performance reports as required for meetings and project status reviews.
- Changes to the project schedule, including capturing new baselines, follows the process defined in this WV IES Schedule Management Plan and the WV IES Project Change Management Plan.

Assumptions to Schedule Management

The WV DHHR accepts the following assumptions as true without guarantee or demonstration:

- Microsoft Project will be the preferred scheduling and planning tool for projects.
- The WV DHHR will develop the project schedule standards, report content, change control procedures, and to provide accurate and timely project schedule updates.
- WV DHHR will train their staff on the project's processes and project management software tools.

- All WV IES project members will adhere to the processes put in place to manage the project effectively and to control scope, schedule and costs within the parameters of the project.

Constraints to Schedule Management

The WV DHHR states the following assumptions:

- The project will operate without collaborative scheduling tools in place.
- Contracts exist which are not under the authority of WV DHHR to enforce the policies of this Schedule Management Plan.
- Some projects may be under a FFP contract or have pre-negotiated status update schedules in place.

Risks to Schedule Management

Risks to schedule management will be managed according to the risk management process to be defined in the WV IES Risk Management Guide. Typical risks regarding schedule management include:

- If a schedule is not loaded with work effort estimates and assigned resources, then it is not likely that an accurate critical path can be determined, nor a valid estimate to complete (ETC), resulting in schedule or cost overruns, or both.
- If task dependencies are determined by resource availability, then it is likely that a most probable critical path will not be calculated.
- If resources are not identified for each task in the schedule, then it is difficult for the Project Lead to control the schedule, to ascertain who is responsible for performing the work, or causing a delay to the schedule.
- If status updates are late, then the quality of project schedule data will be reduced resulting in inferior EVM and project performance reports.
- If schedule management and change control processes are not followed, then the schedule will likely show a deviation from the baseline.
- If project resources are not trained on the proper use of the scheduling software tools, then it is likely that the quality and accuracy of schedule data will diminish.
- If senior management does not actively participate in maintaining an accurate project schedule, then it is likely that the other project members will not involve themselves in maintaining an accurate project schedule.

Document Control

As a living document, the WV IES Project Schedule Management Plan must be updated as new project-related events and issues present themselves. While other sections will describe the process for approving the document, this section describes the process for updating the document on a regular basis.

Resource Requirements

The following Project Team Members and Stakeholders shall participate in the plan practices:

Roles and Responsibilities

This section is to confirm that there are people available, accountable, and possess the necessary skills and expertise to perform the processes required by this project.

The following table summarizes the typical role types and corresponding responsibilities pertaining to the WV IES Schedule Management Plan.

Role	Description of Role/Responsibilities
PMO	• Maintains the WV IES Schedule Management Plan. • Provides advisory services in the development and maintenance of project schedules • Incorporates Project Management activities within the performance measurement baseline schedule to manage and control PM tasks. • Receives and reviews workaround strategies for missed milestones. • Receives and reviews status and performance reports on the project schedule from the Project Lead or Schedule Lead. • Advises Project Lead on re-baselining activities for the performance measurement baseline. • Assists Project Lead and Program Manager as necessary with critical path analysis.
Project Sponsor	• Validates activity status reporting is agreed to by WV DHHR and overall project status reporting is accurate and timely. • Authorizes the establishment of project execution baselines. • Establishes and approves changes to deployment dates, end of phase dates and OMB Milestone dates.
Program Manager	• Authorizes the establishment of incremental baselines when mandatory milestones are not affected. • Reviews PCRs that impact scope, cost or schedule. • Meets weekly or on an event-driven basis with the Project Lead. • Handles second level escalations in regards to project schedule management. • Responsible for acquiring project resources.
Project Lead	• Develops the supporting WBS required to effectively plan and control project work. • Develops project schedule with input from Project Team and SMEs. • Requests and assigns project resources. • Coordinates with Project Team to identify the milestones and tasks and their corresponding work effort associated with delivering the project, and other task dates not under the authority of the WV IES Program Manager. • Coordinates with Team Leads and project team in the establishment and baseline of mandatory milestones, as defined in this plan, to be used by the project in analyzing project schedules. • Validates with Team Leads in the establishment and baseline of mandatory milestones for the project. • Provides timely information to support continuous schedule analysis and reporting in conformance with project policy on activity status reporting. • Validates activity status reporting is agreed to by project participants, and overall project status reporting is accurate and timely. • Receives, reviews, and assesses status reports on the project schedule. • Develops workaround strategies for missed mandatory milestones. • Performs necessary re-baselining activities, upon receipt of an approved PCR to address major deviations from the project schedule. • Confirms dissemination of the schedule reports to WV IES Team/Functional Leads. • Responsible for determining internal and external costs associated with PCRs.
Team Lead/Cost Account Manager (CAM)	• Works closely with the Project Lead in developing the supporting WBS required to effectively plan and control project work. • Coordinates with Project Lead to identify the milestones and tasks and their corresponding work effort associated with delivering the project, and other task dates not under the authority of the WV IES Program Manager.

Role	Description of Role/Responsibilities
	• Coordinates with Project Lead and Project Team in the establishment and baseline of mandatory milestones, as defined in this plan, to be used by the project in analyzing project schedules. • Validates with the Project Lead in the establishment and baseline of mandatory milestones for the project. • Provides timely information to support activity status reporting, specifically by confirming activity status reports for their respective Project Lead before submission of those reports. • Assists in the identification of mandatory milestones. • Reviews schedule updates and supports the identification of schedule risks and issues to the Project Lead. • Works with the management staff to identify mitigation approaches to reduce schedule and cost impacts. • Responsible for executing and reporting status on project work.
Team Members	• Support their appropriate organization (Functional, Technical and Configuration Management) in developing required schedule elements by identifying activities, duration, resources, and interdependencies. • Provide timely information to support continuous schedule analysis and reporting in conformance with project policy on activity status reporting. • Review schedule updates and support the identification of schedule risks and issues to the Project Lead and the appropriate Team Lead. • Work with management staff to identify mitigation approaches to reduce schedule and cost impacts.
Schedule Lead	• Supports the WV DHHR organization in the entire schedule management process. • Works closely with the Project Leads, maintains the schedule in Microsoft Project, and facilitates the updating, reporting, and dissemination of the schedule. • Maintains a performance measurement baseline of the project schedule for activities supported by the project's Final Scope of Work. • Coordinates with the Project Lead and the Project Team in the establishment of mandatory milestones for the project. Inputs and verifies that mandatory milestones have been incorporated into the project schedule. • Receives, reviews, and assesses activity status input and reports on the status of activities completed by WV IES project members. • Updates the project schedule based on the workaround strategies defined by the Project Lead for missed mandatory milestones. • Performs necessary re-baselining activities on the project schedule as approved by the Project Sponsor according to the processes set forth in this plan and the WV IES Project Change Management Plan. • Confirms accuracy of the project data and applicable schedule reports. • As required, performs earned value analysis to determine project performance against the baseline plan. • As required, defines and reports EVM status.
External Stakeholders	• May provide an opinion on the project schedule and related status reports.
Budget Staff	• Reviews contractor project status reports. • Reviews contractor initiated schedule-related PCRs. Recommend appropriate action to the WV DHHR PMO as the situation requires and as mandated by the Project Change Management Plan.
Contracting Officer	• Authorizes schedule-driven Scope Change Requests approved by WV DHHR Directors as required by the contract and FAR elements regarding changes for any contracts.

Training Requirements

Team performance is enhanced by a common understanding of the project management approach. This section of the plan should include a training plan for each member of the project team that includes the contents of this plan.

The training will confirm the team fully understands project management terminology, processes, and the project management software tool used by the project. The following table identifies the skills required by role and corresponding training.

Role	Required Skills	Required Training
PMO	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process. • Uses Microsoft Project to review and analyze project schedule data. • Understands project status process. • Uses SharePoint to review and analyze project schedule data. • Experienced in Earned Value Management principles. • Understands criteria for managing and reporting on projects. • Able to derive Earned Value information from project schedule information.	• Project Management Fundamentals Training (if necessary) • Microsoft Project and SharePoint training. • Earned Value Management Training • Project Status Update Process • Change Control Process
Project Sponsor	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process. • Uses Microsoft Project to review and analyze project schedule data. • Understands project status process.	• Project Management Fundamentals Training (if necessary) • Microsoft Project • Project Status Update Process • Change Control Process
Program Manager	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process. • Uses Microsoft Project to review and analyze project schedule data. • Understands project status process.	• Project Management Fundamentals Training (if necessary) • Microsoft Project • Project Status Update Process • Change Control Process
Project Lead	• Understands project management concepts and terminology. • Experience in project schedule development. • Understands the change control process. • Manages changes to the project schedule.	• Project Management Fundamentals Training (if necessary) • Microsoft Project training • Project Status Update Process • Change Control Process • Earned Value Training (if applicable)

Role	Required Skills	Required Training
	• Understands the project status process. • Understands project status information in reports. • As required, understands Earned Value Management principles. • Understands criteria for managing and reporting on projects. • Able to report time worked on activities via a Microsoft Excel spreadsheet. • Microsoft Project to review and analyze project schedule data.	
Team Leads/Cost Control Mangers (CAMs)	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process. • Able to report time worked on activities via a Microsoft Excel spreadsheet.	• Project Management Fundamentals Training (if necessary) • Project Status Update Process • Change Control Process • Earned Value Training (if applicable)
Team Members	• Understands project management concepts and terminology. • Understands project status information in reports. • Able to report time worked/status updates on activities via email. • Uses reports generated from Microsoft Project to review and analyze project schedule data.	• Project Management Fundamentals Training (if necessary) • Project Status Update Process • Change Control Process
Schedule Lead	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process. • Ability to develop the project schedule. • Ability to update the project with status updates and approved changes. • Ability to customize and build reports. • Ability to generate reports. • Able to report time worked on activities via Microsoft Project. • Uses Microsoft Project to review and analyze project schedule data.	• Project Management Fundamentals Training (if necessary) • Microsoft Project training • Earned Value Management Training (if necessary) • Microsoft Project Orange Belt or higher certification. • Project Status Update Process • Change Control Process
External Stakeholders	• Understand project management concepts and terminology. • Understand project status information in reports. • Understand the change control process. • Understand project status process.	• Project Management Fundamentals Training (if necessary) • Microsoft Project training (if necessary). • Project Status Update Process • Change Control Process
Budget Staff	• Understands project management concepts and terminology.	• Project Management Fundamentals Training (if necessary)

Role	Required Skills	Required Training
	• Understands project status information in reports. • Understands the change control process.	• Project Status Update Process • Change Control Process
Contracting Officer	• Understands project management concepts and terminology. • Understands project status information in reports. • Understands the change control process.	• Project Management Fundamentals Training (if necessary) • Project Status Update Process • Change Control Process

Schedule Management Approach

This plan outlines the specific schedule management process project groups and teams will follow to confirm uniformity across projects. Consistency in schedule management process performance confirms the project standards are followed, permits deployment integration, promotes better data quality, provides efficient communications, enhances schedule reviews and status reporting, and improves overall schedule control.

The schedule management process includes the following elements:

- Activity Development
- Schedule Development
- Schedule Baselining
- Schedule Execution and Control
- Schedule Reporting

The following processes reflect the WV IES Project's standards for developing and maintaining an integrated schedule. Participants in the process shall include select members of the WV IES project teams, and other project stakeholders affected by schedule development or configuration control procedures.

Activity development including assumptions and constraints for project schedule development

Activity development involves identifying and documenting the activities that must be performed to produce deliverables, meet milestones, and deliver the final product. This effort is performed to provide management and project resources with insight on the activities required for timely completion of the project.

Inputs

Inputs to the Schedule Management Plan process shall include:

- Project Charter
- WBS
- SDLC (for software development projects only)
- Historical information

- Project Issues and Risk data
- The experiences of the Project Team

Step 1 – Activity Definition

The Project Lead, Team Leads, project members, and WV HSP Technical Subject Matter Experts (SMEs) identify the specific activities and milestones required to produce the project deliverables. Once the WBS has been decomposed to the level necessary to deliver the end-product and support effective status reporting, the Project Lead and Team Leads shall define the activities necessary to complete each lowest level WBS element.

- As a rule of thumb, a task's duration should not be greater than 2 times (2x) the length of its supporting reporting period or a maximum of 60 hours in duration. For example, tasks listed in weekly reports should be decomposed until it is broken into sub-tasks no greater than ten business days in length. A task should be no less than a half day in duration (3 work hours). For planning purposes, allocate six hours per business day for performing project work. The remaining two hours will be allocated for performing overhead tasks.
- The rolling wave approach to project planning shall be used in the development of the schedule. The rolling wave requires the identification of each specific task required during the first phase of the project (normally, this is the first 3 to 6 months of the project). The following phases of the project should be defined using high level tasks and include any mandatory milestone or delivery dates. At least four weeks prior to the start of each subsequent phase, the Project Lead and the project team shall have completed the identification of the specific activities and milestones required to produce the deliverable for this phase of the project. Once the activities and milestones have been defined and approved by the Program Manager, the Schedule Lead will capture an incremental baseline of the newly defined phase.

Task Categories and Naming Conventions

There are various types of tasks, each with their own function within the project schedule. These tasks include summary tasks, detail tasks, recurring tasks, and milestones. The following provides a brief definition of each activity as well as how the activity is phrased.

- **Summary Task.** A summary task represents a deliverable within the project. A summary task will be worded using a noun, such as Requirements. Adjectives may help define the measurability of the deliverable (e.g., "Final Requirements"). Activity names must be unique.
- **Detail Task.** A detail task does not have any activities indented beneath it and represents the work effort assigned to a resource(s). Detail tasks are activities that will be worded using verbs, such as "*Conduct* land survey."
- **Recurring Task.** A recurring task is a task that is repeated throughout the course of project, such as meetings. Recurring tasks will be worded using plural nouns, such as Meetings with IT Development Team.
- **Milestones.** A milestone is a zero (0) duration task that marks a significant accomplishment in the project. Milestones will be worded using a noun followed by a perfect tense verb, such as "Schedule Management Plan Completed."

These rules are to be applied consistently to confirm clarity to the project members and Stakeholders. The clearer a project schedule's activity descriptions, the easier it is for everyone to understand it and manage scope.

Activity Definition Outputs

- **Activity List.** The Project Lead develops an Activity List that contains the activities to be conducted on the project, organized by the agreed-upon WV IES WBS. Supporting detail for each activity is documented to identify any constraints, assumptions, and activity dependencies that must be considered during the Activity Definition step.
- **Milestone List.** The Project Lead develops a Milestone List identifying the project's milestones and whether that milestone is required by the contract (mandatory milestone) or needed based on other project requirements or historical information (discretionary milestone).
- **Project Change Requests.** The Project Lead submits an email with supporting documentation detailing desired changes to the Program Manager and Project Sponsor for review and approval if changes or additions to the Project Charter or WBS are discovered during the Activity Definition step.
- **Updates to the WBS.** Upon notification from the Project Lead, the Schedule Lead updates the WBS if project members have identified missing deliverables or other elements necessary to complete the project. An email with supporting documentation detailing desired changes must be submitted to the Project Lead for review and Program Manager Approval to update the existing WBS.

Step 2 – Activity Sequencing and project schedule delivery interval

Upon successful completion of Activity Definition, the Project Lead, with input from project team members arrange the tasks into a logical sequence, with required dependencies (predecessors and successors) between tasks, for effective execution. The process involves reviewing the Project Charter, Activity List, Milestone List, resource availability, and any updates/change requests to the WBS.

The project schedule will use the Precedence Diagramming Method (PDM) to define the sequence for performing project work. The drivers (the required inputs) of an activity should determine that activity's predecessor(s). The predecessor-successor relationship between two or more tasks may use one or more of the following relationships, listed in order from most likely used, to least likely used.

- **Finish to Start.** Sequential, Task (B) cannot start until task (A) finishes.
- **Start to Start.** Parallel, Task (B) cannot start until task (A) starts. Start B after A starts. Either can finish first
- **Finish to Finish.** Parallel, Task (B) cannot finish until task (A) finishes. Either can start first. Finish A first, and then B can finish, but not before.
- **Start to Finish.** Sequential, Task (A) cannot finish until task (B) starts. Task A must continue until B is ready to start.

Important: Dependencies should only be created on detail tasks. Do not create dependencies on summary tasks. Doing so will make it difficult to gather earned value information, can mislead the critical path, and miscalculate a task's and overall project's slack.

Activity Work Effort Estimating

- **Analogous Estimating/Historical Information.** Data from other similar projects can be used as a basis for estimating the effort required to complete an activity.

- **Expert Judgment.** When historical information is not available, expertise may be provided by any group or individual with specialized knowledge or training relevant to the task.
- **Critical Path Analysis.** An important tool for schedule analysis is the Critical Path Method (CPM) technique. The Project Lead will perform scheduled critical path analysis to confirm effective task execution and communication of schedule risk.

The Project Lead, in conjunction with the project team, shall define task record configuration elements at the lowest level of the schedule to generate effective Critical Path Analysis reports for analyzing the sequencing, slack, activity durations, resource requirements and conflicts within the schedule. Results of this technique provide management with detailed information to monitor the impact any task may create that can negatively influence timely completion of deliverables and milestones.

Activity Sequencing Outputs

- **Project Network Diagram (PDM).** The Schedule Lead documents the PDM developed by the Project Lead and the project team members. The PDM will display the project's activities (tasks), their respective dependencies, and their sequence. The Project Lead will develop a summary of the process that describes the sequencing approach used, and will document any unusual sequences, such as illogical dependencies, with detail.
- **Project Change Requests.** The Project Lead will submit via email the desired changes and the supporting documentation for technical/budgetary review to the Program Manager and if required, Project Sponsor for approval if changes or additions to the Project Charter or WBS are discovered during the Activity Sequencing step.
- **Activity List Updates.** Upon notification by the Project Lead, the Schedule Lead updates the Activity List if any WBS changes or additions have been identified and approved by the Program Manager and/or Project Sponsor during the sequencing process.

Step 3 – Activity Duration Estimation

The Activity Duration Estimating process takes information from the project scope and resources to define the total estimated work effort for each activity in the schedule. The Project Team reviews the activity list and takes into consideration the information provided in the Project Charter, constraints; assumptions; resource requirements, skill level, and availability; historical information; and any identified risks.

Past projects of a similar nature and experienced resources, where applicable, will be consulted to understand the total work effort (resource work hours) required to complete an activity. If there is uncertainty estimating the total work effort, the Project Lead will use three-point estimates (optimistic, pessimistic, and most-likely) to determine a more accurate estimate. The total work effort (in hours) provided will be assigned to an activity in addition to any constraints identified during the activity sequencing process. The use of constraints should be minimized in order to keep the plan as dynamic as possible. Specifically, avoid *hard* constraints altogether and restrict soft constraints to Start-No-Earlier-Than (SNET).

The default task "type" for tasks entered into the project schedule is "Fixed Work", which defines the number of resource hours required to complete a task. The exception to this shall be limited to milestones, training and meetings, which shall be Fixed Duration.

Activity Resource Estimating

The Project Lead and project team members will identify the needed resources and assign the resources to the activities they will be responsible for completing.

Activity Duration Estimation Outputs

- **Activity Duration Estimates.** The Project Team determines the duration estimate for each task, based on total work effort required by one resource. The Project Lead documents assumptions made into the WBS dictionary when developing the estimates.
- **Organizational Breakdown Structure (OBS).** An OBS is required on projects to facilitate the assignment of responsibility, accountability and authority for summary line items in the Work Breakdown Structure. The OBS should reflect the Title, Name, Agency and responsible summary WBS element(s) for each lead member of the project team. The project roles and team members are identified in the Project Charter. The Project Lead develops the OBS using Microsoft PowerPoint software and the PMO provided OBS template
- **Activity Resource Requirements.** The Project Lead documents the assumptions made when determining both labor and non-labor resource requirements and assigning resources to tasks. The Project Lead develops a Responsibility Assignment Matrix (RAM) to show responsibility for tasks. On SDLC projects, the RAM is used to determine the appropriate control accounts. To confirm management control, each control account is assigned to a Control Account Manager (CAM). The CAMs are responsible for executing the work associated with their assigned Control Account(s). The RAM documents the responsibilities of the CAM (refer to the Earned Value Management System Documentation and Procedures Guide).
- **Project Change Requests.** The Project Lead submits an email outlining the proposed changes and the supporting documentation to the Program Manager for review and approval if the Project Charter or WBS changes or additions are discovered during the Activity Duration Estimation step.
- **Activity List Updates.** Upon written notification from the Project Lead, the Schedule Lead updates the Activity List if any changes or additions occur during the estimating process and are approved by the Program Manager and/or Project Sponsor.

Schedule Development

Once the tasks have been defined and dependencies and duration estimates have been identified, they will be entered into Microsoft Project by the Schedule Lead. The project will then be scheduled to determine start and finish dates. If the project start and finish dates do not meet expectations, the Project Team will review the PDM and activities, and where necessary, revise through the use of schedule compression, what-if analysis, and resource leveling. The Project Lead and the project team will review the Project Charter, PDM, activity work effort estimates, resource requirements, constraints, assumptions, and any identified risks. Additionally, non-work days will be entered in the Microsoft Project calendar to confirm the tool does not count them as working days. The critical path is determined once the project schedule is in alignment with the Project Charter.

Schedule Development Tools

The project management software tool used to generate the project schedule is Microsoft Project.

Schedule Development Outputs

- **Project Schedule.** The Schedule Lead inputs activity information and generates an integrated schedule in Gantt Chart format. The WBS contains major program-level deliverables and the mandatory milestones for the project. The project schedule provides insight into concurrency, precedence, and progress of major activities. The Schedule Lead updates the schedule in preparation for the Quad Status Report.
- **Resource Leveling Updates.** The Project Lead notifies the Schedule Lead of any updates and/or changes to resource requirements. If the resources needed exceed the project's scope, an email outlining the changes and the supporting documentation will be submitted to the Program Manager for review and approval prior to any additional resource being assigned.
- **Project Change Requests.** The Project Team submits an email outlining the proposed changes and the supporting documentation will be sent to the Project Lead for review and approval if changes or additions discovered during the Activity Sequencing step.
- **Schedule Management Plan Updates.** The Project Lead updates the Integrated Project Management Plan (IPMP) to reflect how approved changes in the project schedule will be managed.
- **Activity List Updates** – Upon written notification from the Project Lead, the Schedule Lead updates to the Activity List if any WBS changes or additions have been identified and approved by the Program Manager and/or Project Sponsor.
- **Resource Assignments.** On projects, the Project Lead and Team Lead(s) will assign resources to detail tasks and will be responsible for managing expectations in regards to completing the assigned work, reporting status on work performed to the Project Lead. Team Leads are responsible for reporting, to the Project Lead, on the effective progress and completion of tasks assigned to resources under their management.
- **Project Schedule Report Standards.** The reports defined for the project will show status and progress of Unstarted Tasks, Tasks Starting Soon, Tasks in Progress, Should Have Started Tasks, and Slipping Tasks (tasks that should have started or finished as of the project status date). Reports should be viewed by the Project Lead, Program Manager and the PMO.
- **Project Calendar.** The project calendar is a separately maintained and managed listing of meetings conducted by any member of the WV IES project team. The calendar includes information defining the date, time, location and attendance of project calendar events. The Schedule Lead maintains the calendar updates it as events become defined. After each update, the Schedule Lead distributes the calendar weekly via email. The Project Calendar also includes holidays and non-working days recognized by and the contractor, if applicable. Non-working days are entered into the Microsoft Project schedule by the Schedule Lead. For WV DHHR, the appropriate calendar will be determined by contract/project type. For government only projects, the Federal Government holiday calendar should be followed. For vendor contracts, the contactor holiday calendar should be followed. If a project has a combination of vendors and government personnel, two calendars should be employed and set for each resource to determine availability and create a realistic and dynamic project plan.

Approach to Baselining Schedule

The Project Lead and Project Sponsor will set milestones on the critical path for baseline control. After the schedule has been created and before any work begins, the Project Sponsor will review and approve the project schedule. Upon approval, the Schedule Lead saves the project's first performance

measurement baseline. Actual project data is measured, compared, and reported against the schedule performance measurement baseline to measure project performance.

There shall be one (1) active "Approved Performance Measurement Baseline" of the schedule to support WV DHHR projects. However, additional baselines (up to 10) may be created and used for schedule analysis. Taking a new baseline of the project schedule (re-baselining) must be supported by a PCR and must be approved by the Project Sponsor. Once the performance measurement baseline is updated, it will represent the current project schedule and will override previous schedule versions representing the project's progress. Prior project schedule files will be archived and no longer represent the project schedule status. However, the files can be used for schedule analysis.

Baseline Inputs

Baseline Milestones

The Project Lead establishes milestone events in the Project Schedule at any time, as required for visibility and reporting needs dictated during the project. These milestone events represent the completion of scheduled activities that have bearing on project completion success. These baseline milestones are managed through the Program Manager, their status is reported by the Schedule Lead, and they are analyzed by the project team members. Project milestones shall consist of the following:

- **Mandatory Milestones.** Represent deliverables, per the Project Charter, necessary for completing or producing the project's defined objectives. The mandatory milestones for WV IES SDLC projects are outlined in the SDLC. For other projects the mandatory milestones are:
  - Deliverable Due Dates
  - Milestones Placed on the Critical Path
  - Contractual Incentives and
  - Contractual Disincentives

All mandatory milestones will be designated in the Project Schedule.

- **Discretionary Milestones.** Represent interim milestones not contractually required, but necessary to build and manage a dynamic schedule.

Baseline Controlling Process

Indicating and Reporting Mandatory Milestones

Each milestone task record in the project schedule shall have both the Baseline Finish date and the planned Finish date defined. The Schedule Lead will distribute a Milestone Report that tracks whether milestones have been completed on schedule, are scheduled to start as planned, and/or have been delayed.

Making Changes to the Baseline

The planned start or finish dates for mandatory milestones define the baseline for the project schedule. A change to the baseline start or finish date of a mandatory milestone is considered an out of scope change to the schedule baseline and requires the submission of a PCR to the Project Lead for approval by the WV DHHR. The following will serve as the operational policy for managing changes to the project schedule baseline.

Changing Task Dates (non-milestone activities)

The Project Lead reserves the right to move, add, or change activities in the project schedule to best serve the project when the schedule change does not alter the dates of mandatory milestones. These "In-Scope" schedule changes could change WV DHHR resource requirements, but cannot change total project cost, WV DHHR contractor reimbursable cost, or create an unplanned (less than two weeks' notice) demand on WV DHHR resources.

Project Team members may submit a schedule-related (non-scope) email to the Project Lead. The Project Lead reviews the requested change. Upon determination that the change does not move the dates of mandatory milestones nor impacts costs, the Project Lead approves or denies the email. The Project Lead shall document this in the email and notify the Schedule Lead and the Program Manager of the change. This does not require taking a new baseline. The Project Lead shall store a copy of emails with final disposition and supporting documentation. A PCR and Project Sponsor approval is required if the change does move the dates of mandatory milestones or increases project costs.

Any change to activity schedule dates that causes a change in the dates of mandatory milestones shall be approved in accordance to the policy governing the affected milestone or the request may be denied.

Deleting WBS Elements, Tasks, or Milestones

WBS elements, baselined work effort, and baselined milestones will not be deleted from the project schedule without a Project Sponsor approved PCR, as it removes the baseline information from the schedule and affects historical information and earned value calculations. Activities or milestones no longer needed in the schedule will have the following verbiage inserted before the WBS/activity/milestone name, *"No Longer Applicable –* " or *"Work Discontinued –*". Additionally, the Schedule Lead will remove any dependencies associated with the task/milestone and re-establish those links where appropriate. In-progress activities should have the "Work" changed to reflect the "Actual Work" performed. Unstarted tasks should have the planned work changed to zero (0). Activities with Actual Work reported shall never be deleted from the schedule.

Changing Mandatory Milestone Dates

All schedule changes to mandatory milestones require a Project Sponsor approved PCR.

If the project team requires a change to a mandatory milestone date, they will submit a PCR and supporting documentation detailing desired changes to the Project Lead's e-mailbox. The Project Lead will forward the PCR to the Project Team for a technical review of the requested change. The Project Team will perform an analysis to define effects to the schedule and will determine any changes on cost to deliver the project, quality impacts, and scope variances. If the requested change does not affect any mandatory milestones, then the Project Lead may approve the PCR and return it to the Schedule Lead for implementation. The Project Sponsor will not consider this a change to the schedule baseline.

If the requested schedule change does move any mandatory milestones, Project Team findings will be forwarded to the Project Sponsor for their review, adding any additional documentation, such as a Scope and Schedule Impact Assessment. The Project Sponsor may recommend the PCR for approval, reject the PCR or forward the PCR to the WV DHHR for final disposition. Impacts to cost or scope shall require additional information defining the change to project scope and must be submitted to the Project Sponsor for review. At the discretion of the Project Sponsor, unless mandated in the project charter, the PCR may be approved or forwarded to the WV DHHR for final disposition. Once approved by the Project Sponsor and the Contract Officer (if applicable) and after a contract modification and

funding has been received, the Schedule Lead will institute the changes into the schedule and save a new performance measurement baseline. The Schedule Lead shall save a copy of the project file, and archive a copy of the file. A new critical path will be calculated once the changes have been input into the project schedule.

Schedule Baselining Outputs

The output of the project schedule baselining process is a schedule that has the dates from the planned start and finish fields for affected activities defined in the baseline start and baseline finish fields. This baseline shall serve as the reference (comparison) point for schedule related status reporting.

Schedule Execution and Control

Project management requires execution of a structured process to confirm the timely completion of schedule analysis and identification of risks and issues. An effective schedule analysis is comprised of three major activities; collecting status data, updating the schedule, and analyzing for needed corrections to the open plan.

The first activity is a structured procedure to obtain the necessary inputs to determine the status of the project schedule. This is detailed below.

The next activity focuses on updating the status of each Activity; inserting the actual work and remaining work values into the baseline schedule, performing a detailed analysis, and generating the updated analysis results to see how the project schedule has changed. The Schedule Lead will provide current schedule activity data to the Project Leads, Team Leads, Program Manager and PMO for analysis. The project team will work closely to assess negative schedule effects created by any work overruns or delays. After the initial assessment is complete, a status report will be generated.

The third activity is to review the results with the manager of the WBS element (e.g., Project Lead, Functional or Technical Lead, or Departmental Lead) and determine where, when and how corrective action, if required, should occur. Additional work necessary to perform corrective actions should be recorded in the schedule.

Collecting Status Data

For projects, the following collecting status data procedure will be followed.

The Project Lead will create a spreadsheet to capture actuals. The Project Lead will distribute the spreadsheet to the Team Leads. Each Team Lead will determine how to gather information from team members. The Team Lead will provide the Project Lead with an updated spreadsheet by COB on the following Wednesday. The Project Lead will forward the updates to the Schedule Lead. The Schedule Lead will update the Client Schedule. Once updated, the Schedule Lead will distribute a new project schedule to the Project Lead.

The Team Lead will use the Project Change Management process for changes to dates/resources.

Projects Reporting Earned Value

In addition to the above process, earned value management (EVM) contracts will require the collection of EVM status data. The following process must be followed monthly.

The Project Lead will create a Microsoft Excel spreadsheet to capture actuals. The Project Lead will distribute the spreadsheet to the Control Account Managers (CAMs). Each Control Account Manager

will determine how to gather information from team members. The CAM will provide the Project Lead with an updated spreadsheet following the pay period. The Project Lead will forward the updates to the Schedule Lead. The Schedule Lead will update the Client Schedule. Once updated, the Schedule Lead will distribute a new project schedule to the Project Lead. In addition, the WV DHHR PMO will conduct a preliminary mid-month review the EVM calculations using Microsoft Project to proactively determine if any corrective action needs to be taken.

At the beginning of the second pay period of the month, the Project Lead will send out a Microsoft Excel spreadsheet to the Control Account Managers (CAM). Each Control Account Manager will determine how to gather information from team members. The CAM will provide the Project Lead with an updated spreadsheet. The Project Lead will forward the updates to the Schedule Lead. The Schedule Lead will update the Client Schedule. Once updated, the Schedule Lead will distribute a new project schedule to the Project Lead and the EVM Manager. The EVM Manager will update SharePoint with the updated project information.

The CAM will use the Project Change Management process for changes to dates/resources.

Updating the Schedule

The PMO and the Schedule Lead will review the Project Lead, Project Sponsor approved updates from resources and report errors or omissions to the appropriate Project Lead. The Schedule Lead will accept the Project Lead, Project Sponsor approved changes to the schedule.

Schedule Analysis

Effective project management requires execution of a structured analysis process to confirm the timely completion of schedule analysis and identification of risks and issues. An effective schedule analysis is typically comprised of three major activities. The first activity is a structured procedure to obtain the necessary inputs. Typically, this activity occurs weekly. The next activity focuses on inputting the data into the baseline schedule, performing a detailed analysis and generating the final analysis results. The Schedule Lead provides current schedule task data to the Project Lead for analysis. The project team will work closely with the Project Lead to assess schedule impacts created by any work overruns or delays. An initial assessment is completed and status report generated. The third activity is for the Project Lead to review the results with the Project Team, Program Manager and the PMO.

The Schedule Lead will generate reports for the PMO, Program Manager, Project Leads, and team members to review. The goal of the schedule analysis process is to gain an understanding of the project's status as of the last reporting date, identify areas of concern, develop mitigation strategies, and implement the mitigation strategies or corrective action to prevent further schedule delays and/or to bring the project schedule back to its planned course. Any changes that will affect mandatory milestones or deliverable dates must be documented in a PCR and be submitted to the Project Sponsor for review and approval prior to implementing.

Reports will be generated to assist in the analysis of the project schedule. These standard reports will include:

- Unstarted Tasks
- Tasks Starting Soon
- Tasks In Progress
- Slipping Tasks

- Schedule Performance Index (SPI)
- Cost Performance Index (CPI)

Schedule Execution and Control Outputs

- **Performance Reports.** The Schedule Lead distributes reports to the PMO, Program Manager, Project Lead and Team Leads for review and analysis.
- **Recommended Corrective Action(s).** The Project Lead, Team Leads, and Stakeholders may recommend corrective action after reviewing the schedule and analyzing reports and trends to realign future schedule work with the baseline.
- **Project Change Requests.** The Project Lead and/or Team Leads submit a PCR to the Program Manager and Project Sponsor for review if the schedule will cause a mandatory milestone's date to shift. If Project Sponsor approved (and funded), the Schedule Lead will change the schedule and then archive the PCR with final disposition and supporting documentation.
- **Activity List Updates.** The Schedule Lead updates the Activity List if any changes or additions have been identified during the execution and control process and approved by the WV DHHR.
- **Revised Schedule Baseline.** If a PCR recommending corrective action is authorized and the scope of the project changes, the Schedule Lead updates and then re-baselines the project schedule once the appropriate approval has been received. On government only projects, the schedule is rebaselined upon Project Sponsor approval to reflect the change in scope or change in dates for mandatory milestones. On vendor contracts, the schedule is rebaselined upon Project Sponsor approval and the approval of the Contract Officer to reflect the change in scope or change for contractual milestones including due dates for contractual deliverables.
- **Updated Project Schedule.** The Schedule Lead updates the schedule to reflect any status updates, PCRs, and/or re-baselining that occur during the execution and control process.

Saving and Storing Schedule Baseline Files

Each time the Schedule Lead saves a new baseline of the schedule; the Schedule Lead shall rename and save a new version of the Microsoft Project file, incrementing the version number by +1. A partial baselining of the file, which affects some, but not tasks, shall change the version number by +0.1.

Schedule Reporting

The Schedule Lead will generate status reports to the Program Manager, Project Lead, Team Leads and the PMO. Reports defined for the project will show status and progress of the project schedule.

Schedule Configuration

Contents and Naming Convention

The Client Schedule is a detail-level summary of the on-going projects within the WV DHHR organization. The goal of the Client Schedule is to display when projects begin, finish, and is validated as well as identify any interdependencies between project plans. Effectively tracking this data, and continually analyzing for outside influences, is the crux to confirming continuity of operational requirements for the WV DHHR.

Structure

The Client Schedule is structured primarily based on project, the major functional area being migrated, and the functional milestones comprising the individual workloads within the functional area.

1. Project

1.1 Major Activity

1.1.1 Milestone composition

Naming Convention

The naming convention will be defined by WV DHHR.

Milestone Naming Convention

The milestones that have been agreed upon to represent a significant accomplishment in the schedule. The following naming convention should be applied to the milestones in the schedule:

"Workload name" New Work Cut-over Date

"Workload name" Workload Transition Completed

"Workload name" Workload Transition Validated

Milestone Coding

The mandatory milestones created in the Client Schedule should be designated in the Project Schedule. This supports the reporting requirements for the Client Schedule.

EVM Coding

For EVM projects only, the following EVM fields should be designated in the Project Schedule. These fields are already designated within the WV DHHR Project Template. These fields support the reporting requirements for EVM.

- Cost Account
- Control Account
- Cost Code
- Work Package/Plan Package ID

Setting Baseline Dates

The Client Schedule will be the primary check and balance for adherence to the WV IES Master Schedule and the WV IES Project Change Management process. The baseline (BLO) utilized by the Client Schedule will reflect the planning migration dates per the latest version of each WV DHHR project schedule. This baseline will ONLY be adjusted after a Project Change Request has been approved.

Client Schedule Maintenance

Reviewing and Updating Milestones

Responsibility for maintaining the update status of the Client Schedule will fall on the Schedule Lead; however, the Project Leads are required to notify the Schedule Lead of task and milestone updates, ESPECIALLY if they occur immediately prior to the status reports.

Updating Client Schedule Content

Client Schedule content (excluding start and finish dates) will need to be updated on (what should be) rare occasions. These should be specifically tied to changes resulting from Project Change Requests. The Schedule Lead will conduct the Client Schedule content updates upon notification from the Project Lead.

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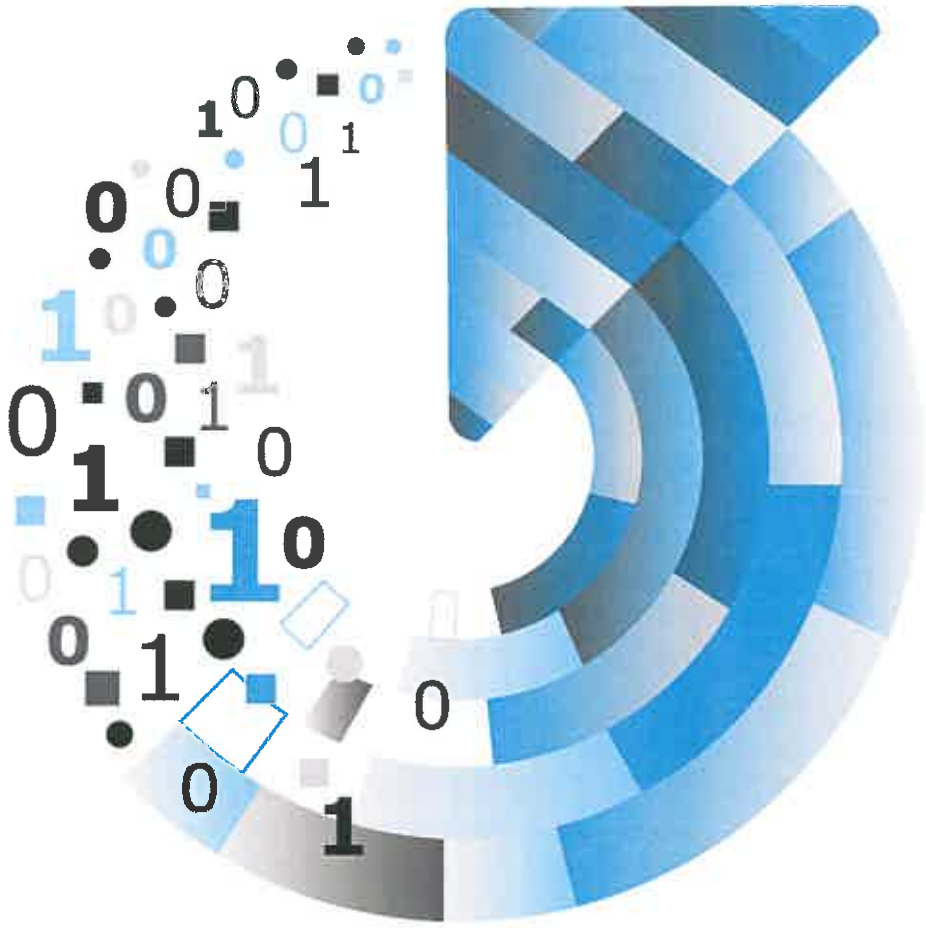

WV IES

9.c. Cost Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

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Cost Management Plan Introduction

The Cost Management Plan defines the methodology by which costs associated with WV IES will be managed throughout the project life cycle. To confirm the successful completion of the project within the allotted budget, this plan sets the format and standards by which the project costs are measured, reported and controlled. This Cost Management Plan outlines the overall project cost management approach. It also breaks down how the project cost, budget and source of funding will be determined. The plan also identifies who is responsible for managing costs, the methods to be used for quantitatively measuring and reporting on cost performance, and the reporting formats used. To complete this project successfully, key project members and stakeholders must adhere to and work within this Cost Management Plan and the overall project plan it supports.

Project Cost Management Approach

The Cost Management Plan approach for WV IES requires that the project resources assist in establishing and managing the total cost of ownership of the project. This includes establishing the estimated budget and measuring actual spending against the planned budget for the following items:

- Agency project team staff and their associated costs
- Other external resources/contractors
- Infrastructure costs
- Software and hardware
- Vendor contracts

The Cost Management Plan establishes the activities and criteria for planning, structuring, and controlling project costs. Cost estimating and cost controls are the most important evaluation and control items for State projects. Actual costs and cost variances must be reported regularly to oversight committees and project sponsors. Any cost change over five percent requires project steering committee approval.

The Project Manager and the Project Sponsors for WV IES will jointly create the cost baseline and the Cost Management Plan. Beginning with the preliminary cost estimates identified in the Initiation phase, the Project Manager will develop updated cost estimates to perform the work included in the revised schedule.

Cost Estimation

The Cost Management Plan for WV IES documents the methods to be used to manage and control the many internal and external cost components. Metrics and variance analysis must be applied to these cost components throughout the project life cycle for tracking, re-estimating and adjusting the project budget if needed. These cost components include:

- Project management/project team resources
- Hardware and other equipment

- Software and licensing
- Vendor contract costs

Costs estimates will be prepared using the best information available at the time of estimation. The basis for the estimate must be fully documented so that if better information becomes available at a later time in the project, the cost estimate can be adjusted.

Budget Determination

Once the needs of the WV IES have been determined, the project team will finalize the resource and staffing requirements necessary for the successful completion of the project. The Project Manager will complete the internal and external Work Breakdown Structure (WBS) respectively. Based on the labor costs and planned duration of each WBS element, an estimate will be determined. WBS element costs will then be totaled and verified against the allotted project budget. Once the project budget is approved, the Project Manager will compare the allocation for each WBS element against the overall budget and adjust allocations as necessary to comply with the project budget. Once allocations have been reviewed and approved by the Project Manager, the project budget will be baselined. The project budget baseline may only be changed with authorization by the Project Sponsor.

Cost Management Roles & Responsibilities

The Project Manager will work with the Project Sponsor to define various roles and expectations for resources involved in managing the overall project cost. These role definitions should define ownership for review and approval of project expenses, project cost establishment, review of budget tracking system details, and day-to-day cost detail management. In most cases, the Project Manager will be intimately involved in managing these details. Using a disciplined project management approach to manage project costs will help confirm that the project is delivered on time and within budget.

The Project Manager will be responsible for managing and reporting on the project costs throughout the duration of the project. During the project status meeting, the

Project Manager will present and review the project's cost performance for the preceding month. Performance will be measured using earned value, as defined below. The Project Manager is responsible for accounting for cost deviations and presenting the Project Sponsor, Project Steering Committee and Change Control Board with options for resolving project budget shortages or overages. The Project Sponsor has the authority to make changes to the project to bring it back within budget.

Cost Performance Measurement

The Project Manager will build a total cost of ownership model for WV IES. This model will capture vendor software and implementation costs, plus internal costs for staffing and related administrative and overhead costs, infrastructure, resources and other hardware needs. It will establish the total project baseline budget and a time-phased baseline budget by month and fiscal year for the development and implementation phases. Inputs are contract deliverable payments, project team staffing costs, budgeted amounts for infrastructure costs, and other anticipated costs to the project.

Cost Variance Response Process

Cost management measures will be reported in the periodic WV IES Status Report. Cost variances outside of the thresholds identified in this Cost Management Plan will be identified, along with any

planned corrective actions. Change requests triggered by project cost overruns will be identified and tracked in the status report.

Cost Variance Corrective Action Plan:

The Project Manager will present the Project Sponsor with options for corrective actions within five business days from when the cost variance is first reported. Within three business days from when the Project Sponsor selects a corrective action option, the Project Manager will present the Project Sponsor with a formal Cost Variance Corrective Action Plan. The Cost Variance Corrective Action Plan will detail the actions necessary to bring the project back within budget and the means by which the effectiveness of the actions in the plan will be measured. If the corrective actions to be taken result in a change, the project's overall Change Control Process must be followed as well. Upon acceptance, the Cost Variance Corrective Action Plan will become a part of the Project Schedule and the project will be updated to reflect the corrective actions.

Cost Change Control Process

The cost change control process will generally follow the established project change request process. Approvals for project budget/cost changes must be approved by the Project Sponsor. A summarization of the change control process is as follows:

- Identify and assess the change (typically generated from a cost variance analysis or corrective action report).
- Complete a Change Request Form and submit the form, along with required supporting documentation, to the Project Manager.
- The Project Manager will review the change request and may request additional documentation prior to review with the Project Manager.
- Using the Change Request Form, the Project Manager will mark the change as:
  - Approved, in which case the Project Manager will sign off on the change request and adjust other project planning factors as necessary.
  - Approved, pending additional supporting documentation, in which case the Project Manager will mark the change as approved/pending in the change control system, and sign off on the change request. The Project Manager will specify and coordinate gathering of the required documentation, incorporate the change and adjust other project planning factors as necessary.
  - Denied, in which case the Project Manager will mark the change as denied in the change control, and sign off on the change request. The Project Manager will notify the requestor of the status and reason for denial.
- The project manager will document the change request outcome as necessary (update WBS, schedule and budget documentation if impacted). If there is a change in the total cost of ownership or in how the estimated costs will be incurred over the remaining life of the project, a new project budget baseline, and time-phased budget baseline should be set (i.e., these are "re-baselined").

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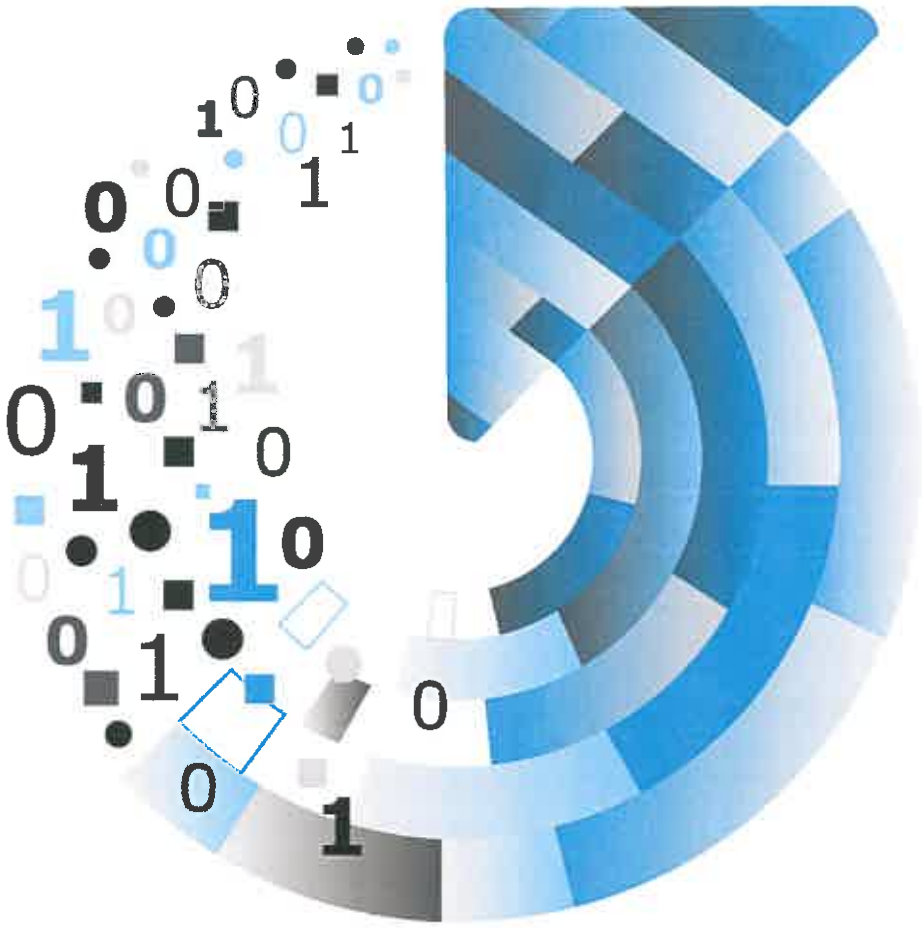

WV IES

9.d. Quality Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

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Quality Management Plan Introduction

The following Quality Management Plan defines necessary components required to implement an effective quality management program for the WV IES Project. The Quality Management Plan should define the WV IES Project goals and provide an overall framework for our approach to quality management. Through following this framework, our team will define an approach to verify that deliverables are meeting project standards and quality expectations, and verify that deliverables receive the proper Deloitte and DHHR sign-off. After agreement on this approach has been reached, we will work with DHHR to define metrics which will be used to monitor and control project performance, processes, and quality.

Overview

Purpose

The purpose of the Quality Management Plan is to define the objectives, processes, tools, metrics, and roles and responsibilities required to implement an effective quality management program for the WV IES Project.

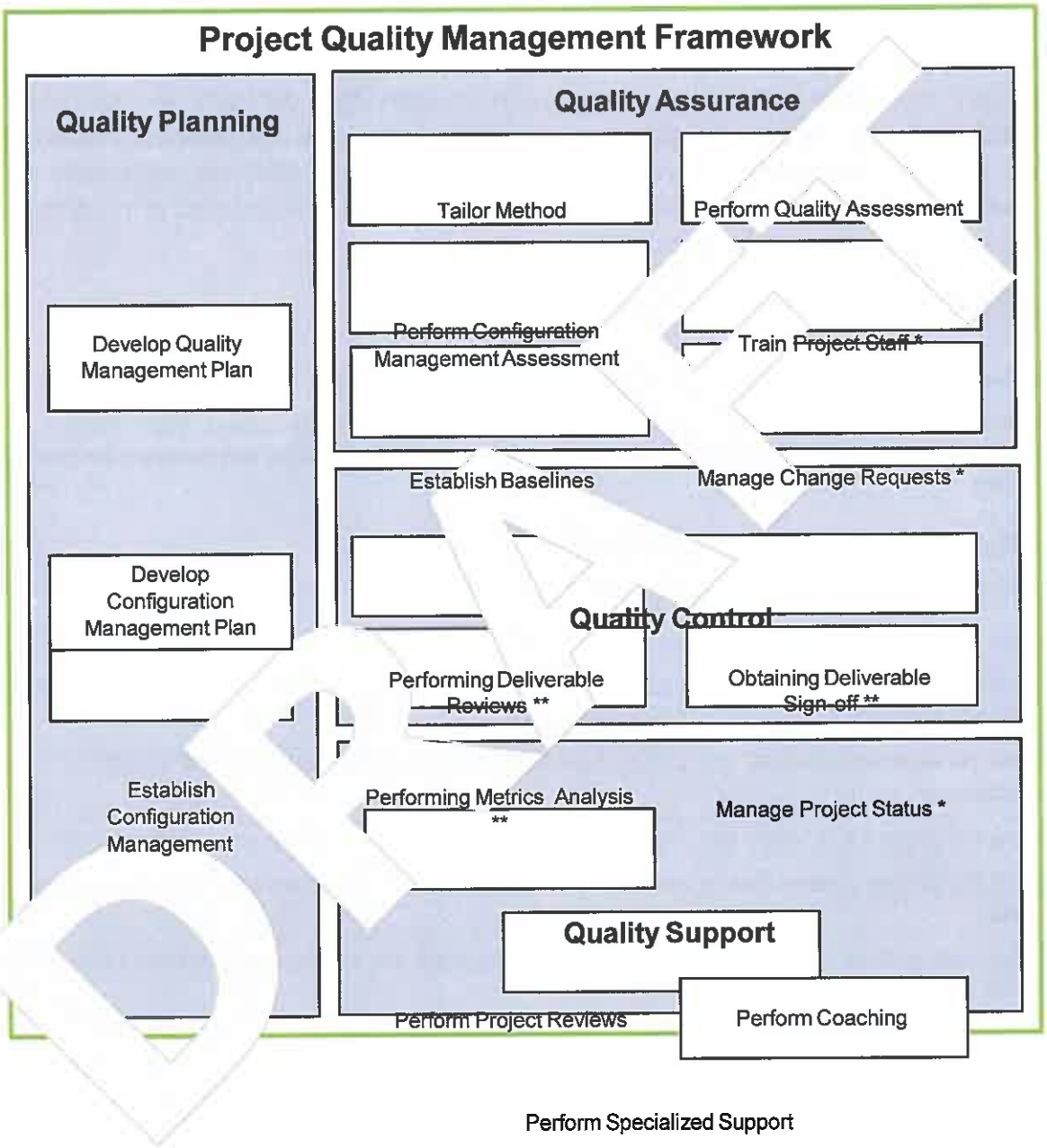
Quality Management Plan Objectives

The objectives of this Quality Management Plan are to:

- Define the project's quality goals and overall framework
- Define the approach to verify that project methods, processes, templates and tools are being used by the project team properly and they are effective
- Define the approach to verify that deliverables are meeting project standards and quality expectations
- Define the approach to verify that deliverables receive the proper Deloitte and DHHR sign-off
- Define the project metrics that is used to monitor and control project performance, processes, and quality
- Define what additional groups outside the core project team are visiting and supporting the project to help achieve these quality objectives

Project Quality Management Framework

The Project Quality Management Framework defines the tasks and procedures the project performs to effectively plan, execute, and monitor and control project quality. Short descriptions of the quality management processes follow.



Project Quality Management Framework

* The Train Project Staff, Manage Change Requests and Manage Project Status tasks are Project Management tasks that also play a role in Quality Management.

** Performing Deliverable Reviews, Obtaining Deliverable Sign-off, and Performing Metrics Analysis are procedures that help define the project's standard quality control activities.

Quality Planning:

Define the overall quality approach for the WV IES Project and how it is implemented through three quality activities: 1) Quality Assurance; 2) Quality Control; and 3) Quality Support.

Quality Planning also includes developing WV IES Project's Configuration Management Plan and establishing the tools/systems to properly store, manage, and back-up project deliverables.

Quality Assurance:

Perform activities to verify that the WV IES Project is using the proper methods, templates, standards, and guidelines, as well as practicing the right processes to produce high-quality deliverables that satisfy project requirements.

These activities can include tailoring the project method to meet project-specific needs, and training the project team on proper usage of the project's methods, tools, templates and processes.

Quality Assurance also relates to confirming that the project is effectively managing its deliverables by performing baselines at appropriate times, conducting configuration management assessments to verify the physical and functional integrity of project deliverables, and managing effective change control over deliverables that have been signed off.

As noted in the figure above, * The Train Project Staff, Manage Change Requests and Manage Project Status tasks are Project Management tasks that also play a role in Quality Management.

Quality Control:

Review specific WV IES Project results to determine whether they meet expected standards and requirements, and implement corrective actions or improvements when they do not.

Produce the WV IES Project metrics used to monitor and control the project in the project status report, and have project management address delinquencies and negative trends.

As noted in the figure above, **Performing Deliverable Reviews, Obtaining Deliverable Sign-off, and Performing Metrics Analysis are procedures that help define the project's standard quality control activities.

Quality Support:

Reviews and/or support from groups outside the core project team to further assist and confirm that the WV IES Project delivers a high-quality solution.

Roles and Responsibilities

The following table describes the roles and responsibilities involved in implementing the WV IES Project's quality management plan:

Role	Responsibility
Project Manager	• Review and approve the Quality Management Plan • Review assessment and project review findings • Assign project team members to appropriate action items resulting from assessments, project reviews, specialist support visits (where applicable); monitor and manage those action items to closure • Track project review and specialist review findings to closure
Quality Manager	• Develop and maintain the Quality Management Plan • Develop and maintain a quality assessment schedule in the Quality Assessment Plan

Role	Responsibility
	• Develop and maintain the Quality Support Schedule • Track non-compliances identified in the quality assessment to closure
Team Members	• Prepare for and participate in quality assessments, project reviews, and specialist support visits (where applicable) • Implement action items resulting from quality assessment results, project reviews, method coach and specialist support visits • Where applicable, attend method coaching events (for example, project process or tool meetings, training sessions, and so on)
Assessor	• Develops and tailors Quality Assessment Checklist in preparation for quality assessments • Coordinates quality assessment activities with the project participants • Performs process and work product assessment reviews • Identifies non-compliance issues and reports results • Follows up on non-compliance issues for resolution and escalates when necessary
Project Reviewer (external to project team)	• Performs project reviews • Completes Project Review Form and Quality Review Client Memo (as applicable) • Reviews the project review findings with project leadership • Follows up on action items from previous visits
Specialist Support (external to project team)	• Provide coaching and support to the quality manager to develop the Quality Management Plan, Quality Assessment Plan, and Quality Support Schedule • Promote the full capabilities of Deloitte methods and tools with project team • Identify quality assessment reviewers for the project • Provide deliverable samples from similar projects (when required) • Perform method coaching as defined in Perform Method Coaching task • Review and support the project's Tailoring Log • Plan, prepare, and perform project team visits to meet method coach objectives defined in the Quality Management Plan • Identify method, quality, and process improvement recommendations during each visit, and assign action items to the project team accordingly • Follow up on open quality-related action items

Implementing the Quality Management Plan

For a large project like WV IES with many deliverables and project quality activities, a project team member is assigned to a quality manager role to help plan, coordinate, and manage the quality program schedules, activities, and follow-up required.

Successful implementation of the Quality Management Plan is the shared responsibility of the entire WV IES Project team. The project team is responsible for implementing the quality standards, processes, and requirements identified in this Quality Management Plan.

Maintaining the Quality Management Plan

Project management plans and related procedures specific to the project must be maintained and kept up-to-date. It is the responsibility of the quality manager to identify and implement required revisions to the project's Quality Management Plan in order to keep it current and relevant.

Quality Assurance Plan

The WV IES Project's assigned specialist support plays a significant role in helping plan, prepare, and implement the project's quality assurance plan.

Quality Assurance Overview

Quality assurance is the application of planned, structured activities to help verify that the WV IES Project employs processes needed to create high-quality deliverables that meet requirements. This section of the Quality Management Plan describes the tasks related to quality assurance in the Project Quality Management Framework, and defines the assessment review plans for the project.

Quality Assurance Activities

Project Method Tailoring and Methods Training

Each project is unique and may have tasks, templates, tools, or procedures that need to be tailored to meet project-specific requirements. Project tailoring for processes and assets is documented and maintained in the project's Tailoring Log.

In order to adopt the project's methods, procedures, templates, and tools and use them effectively, project team members should receive direction from project management and onboarding materials regarding the expectations for consistent usage of the project's standards and procedures, and may receive training on them as part of the Train Project Staff task.

Project Baselines and Change Control

Establishing baseline records of project deliverables at key events (deliverable sign-off or acceptance) and verifying their accuracy and completeness are critical activities for promoting the right solution components. Once a deliverable becomes part of a baseline or is put under change control, an approved change request is required before any additional changes to the deliverable can be made.

Project Process Improvement Change Requests

Lessons learned and process improvement suggestions are identified and documented at the end of each project life cycle phase. The process improvement suggestions identified for the project method, standards, and/or procedures to be considered for implementation are vetted through the project lead, then to the management team for cross team input/recommendations, and recommendations escalated to the PM team for approval.

Quality Assessments

Quality assessments are performed to confirm that the defined processes and standards for producing high quality deliverables are followed by the WV IES Project team. Quality assessments are focused on addressing three questions:

- Are the documented processes being followed?
- Are the documented processes working?
- Are the documented processes efficient?

As quality assessments are performed, it is up to WV IES Project leadership to evaluate the results and determine what, if any, corrective actions should be taken. Corrective actions might include (a) additional training, (b) process enforcement, or (c) process refinements. It is important to weigh the cost of process changes against their expected benefits before making refinements.

The purpose of this section is to define the project's plans for: performing assessments; identifying, tracking, and resolving non-compliances found during the assessments; and communicating findings and status to project leadership.

Quality Assessment Approach

The following table describes the types of quality assessments that is performed on the project:

#	Quality Assessment Type	Description
1	Deliverable Based	Quality assessments are performed upon completion of major deliverables or work products. These assessments focus on WV IES Project deliverables and the activities performed to create them.
2	Scheduled	Quality assessments are based on a schedule and focus on assessing processes and work products over time.

Quality Assessment Plan

Quality assessments are performed to verify that the WV IES Project team is using the methods, processes, templates, and standards defined for the project properly, and that they are effective. The process for performing assessments is covered in the Perform Quality Assessment task.

The following table specifies what quality assessments are planned for the WV IES Project.

Quality Assessment Plan			
Processes/Tasks to be assessed	Work Products and Tools to be assessed	Frequency of Quality Assessment	Type of Quality Assessment
Application Architecture & Design Change Control Coding & Unit Testing Configuration Management Data Modelling Decision Analysis & Resolution Defect Management Deliverable Review Estimation Go Live Metrics Collection & Reporting Project Closure Project Initiation Project Monitoring & Control Project Planning Quality Assurance Risk & Issues Register Requirements Engineering Test Definition Test Execution	Templates & documents associated with applicable life cycle phase; supporting project management plans.	Planned quarterly.	Deliverables based & scheduled

Non-compliance and Escalation

This section describes how non-compliances identified during a quality assessment are documented and managed, and the escalation procedures to follow if the project team disagrees with any non-compliance items or fails to resolve non-compliance issues in an appropriate amount of time.

Non-compliances identified during an assessment represent risk to the project and therefore need to be documented, prioritized, addressed, and tracked to closure. The Quality Assessment Checklist is used by the assessor to review the project's processes and work products and any identified non-compliances are transferred to a Process Compliance Tracker.

The assessor may refer to previously completed quality assessments to refer to non-compliances that are still open and/or identify trends where non-compliances are recurring that may impact prioritization or escalation of new non-compliances.

It is the responsibility of the project team to address the identified non-compliances, and it is the quality manager's responsibility to monitor the Process Compliance Tracker, verify the closure of remediation actions, and escalate risks when necessary.

As quality assessments are performed, it is up to project leadership to evaluate the results and determine what, if any, corrective actions should be taken. Corrective actions might include (a) additional training, (b) process enforcement, or (c) process refinements. It is important to weigh the cost of process changes against their expected benefits before making refinements.

The following table outlines the escalation criteria and procedures the project follows if critical non-compliances are not accepted by the project or resolved in an appropriate amount of time.

#	Escalation Path/Level If not accepted or not resolved w/i the non-compliance number of days shown	Escalation Criteria Level of Risk	 Age of Non-Compliance
1.	Log as a risk to the project (Project Manager should be informed immediately of high-risk non-compliances & action plans to accept, mitigate, or resolve.)	TBD	TBD
2.	Escalate to Project Manager Project Sponsor should be informed of high-risk non-compliances & action plans to accept, mitigate, or resolve.	TBD	TBD
3.	Escalate to Project Leadership	TBD	TBD
4.	Escalate to the Project Sponsor	TBD	TBD

*Non-compliances should be accepted, mitigated, or resolved within 30-days.

Quality Assessment Reporting

Quality assessment results and status are reported and maintained in the project's Process Compliance Tracker.

Quality Assessment Closure

When non-compliances have been addressed and closed, and the status for each has been appropriately updated in the Process Compliance Tracker, the quality assessment can be considered closed. The assessor reports the status of the quality assessment as closed, and then archive the findings. For future quality assessments, access to the results of previous quality assessments is important to identify any non-compliance trends.

Quality Control Plan

Quality Control Overview

Quality control involves monitoring project-specific results for quality, and identifying corrective, preventive, or improvement actions when results are unsatisfactory.

Deliverable Management

Deliverable management is the set of activities the WV IES Project uses to draft, review and obtain appropriate levels of client approval for project deliverables.

The WVS IES project utilizes the deliverable management process to track deliverables and review types to be performed during the project life cycle.

The project leverages a deliverable feedback form to perform reviews by team members and the PMO submissions review as the two quality procedures prior to a formal deliverable submission to the client.

The acceptance tasks to review, approve, and obtain DHHR sign-off and acceptance of deliverables is defined by the project contract.

- **Performing Deliverable Reviews:** Deliverable reviews are inspections of deliverables from project "peers" or team members aimed at phase-containing errors and reducing project rework.
- **Obtaining Deliverable Sign-off:** Deliverable sign-off represents the review and approval process by DHHR. DHHR reviews a WV IES Project deliverable and either signs-off that it satisfies requirements and its business objectives, or provide feedback on why it does not. Obtaining DHHR deliverable sign-off is the trigger to put a project deliverable under change control.

Deliverable Reviews

Deliverable reviews aim to detect defects, errors, and risks. Before a deliverable goes through the deliverable sign-off, deliverable reviews are performed by the project team to:

- Verify the completeness of a deliverable
- Verify the accuracy of a deliverable
- Verify that a deliverable meets project standards (for example, using the right template), as well as any deliverable-specific or custom requirements
- Verify that the content of a deliverable meets its objectives and is consistent with prior approved deliverables

Each deliverable review cycle follows one of the following approaches:

Formal Review: Formal reviews represent the most structured review type and are used as development step for critical designs or deliverables with cross-team impact. They often follow a walkthrough or offline review for the same deliverable.

- The formal review takes place as a scheduled, facilitated meeting between two or more reviewers, after previously providing the deliverable and review criteria in advance of the meeting to review participants.
- Formal reviews are not meant to be conducted as walkthroughs. Reviewers must come prepared to share their findings from their individual preparation review with the other reviewers.

- There may even be a kickoff or preparation meeting with the reviewers before the formal review session.
- The consensus review defects are documented in one Deliverable Feedback Form, and agreed-upon changes must be implemented and verified before the formal review is considered complete.

Walkthrough Review: Walkthrough reviews are an effective deliverable review type for medium-risk deliverables or deliverables that are hard to understand (for example, complex business process flow documentation).

- The format of this walkthrough review is a face-to-face meeting where the authors of the deliverable walk a reviewer group through the deliverable.
- The reviewer group should include at least two individuals, with at least one subject matter expert.
- The review defects are documented in one Deliverable Feedback Form, and agreed-upon changes are resolved and verified in the deliverable before the walkthrough is considered complete.

Offline Review: Offline reviews are performed by someone other than the deliverable author in a distributed or asynchronous manner (that is, not a face-to-face meeting or live teleconference).

- Each offline reviewer uses the Deliverable Feedback Form and deliverable review criteria to evaluate the deliverable, identify defects, and document feedback.
- The Deliverable Feedback Form is provided to the deliverable author for resolution.
- The owner of the deliverable review assignment verifies that defects are resolved before the deliverable review can be considered complete.

Deliverable Review Defect Classifications

The defects identified in the deliverable review are classified by the following severity levels; these classifications are also referenced in the deliverable feedback form.

- **Critical**: Defect that could result in a defective finished product.
  - No known work around currently identified to address defect.
  - Defect that would result in a failure of the software product or an observable departure from specification (or any other input document). These defects may cause the system to hang, crash, produce incorrect/ unexpected results or behavior or corrupt user data.
- **Major**: Defect that could result in a defective finished product.
  - Work around identified, but requires significant additional effort to implement.
  - Defect that would result in a failure of the software product or an observable departure from specification (or any other input document). These defects may cause the system to hang, crash, produce incorrect/ unexpected results or behavior or corrupt user data.
- **Minor**: Defect that could alter finished product slightly, but it still meets business requirements and objectives.
  - For example, aesthetic changes or a slightly altered process.
  - Defects that deviate from specifications but do not cause the failure of the software product or an observable departure in performance.
  - Minor defects could have a cosmetic impact in terms of navigation or usability.

- **Suggestion**: Defect with minimal or no impact to the finished product.
  - For example a minor formatting defect with the document.
  - No impact on existing, defined functionality of software product. Request for additional feature or enhancement of existing specification.

Deliverable Feedback Form

The Deliverable Feedback Form represents Deloitte's standard approach for facilitating and documenting deliverable reviews. One feedback form should be created for each WV IES Project deliverable undergoing deliverable review(s).

Custom review criteria for any deliverable should be defined upfront as part of the defining deliverable expectations step of the standard deliverable management process. The Deliverable Feedback Form provides general review criteria, as well as a standard feedback form for deliverable review facilitation.

- Use this template to plan and facilitate deliverable reviews and PM sign-off.
- The feedback form is not included with the DHHR submission. The WV IES Project should retain a copy of the form for review purposes.

Deliverable Sign-off

Deliverable sign-off represents review from the appropriate DHHR personnel to confirm that a deliverable is complete, accurate, and meets its business objectives or intentions. A completed deliverable sign-off is the trigger to put a project deliverable under change control.

Signed off deliverables need to be placed in the appropriate, controlled project repository (e.g. WV SharePoint site), and documented evidence of DHHR deliverable sign-off also needs to be archived in the project's document repository. The Deloitte PMO manages the project document repository for archival of the signed off deliverables and documented evidence of DHHR deliverable sign-off. Any additional changes to a deliverable after it has been signed off needs to be approved as a change request.

Project Metrics

WV IES Project metrics are used by project management to obtain objective status and make informed decisions while directing and managing project delivery. Metrics represent a critical facet of project and quality management.

Defining and maintaining the project metrics that is used by the project is addressed by quality management. Collecting raw project measurement data, generating the metrics defined in the project's Metrics Plan, then analyzing and reporting on them is performed by the project manager and team leads in the Manage Project Status task.

Metrics Plan

The Metrics Plan defines the metrics that is collected, analyzed, and reported on the project at a detailed level. The Metrics Plan is maintained throughout the life of the project and supports and enables project performance monitoring and controlling activities.

The Plan defines what metrics is collected, analyzed, and reported. The plan includes a separate worksheet depicting the reporting procedure, owner, timeline, & data source.

Quality Support Plan

This section defines the reviews performed by Deloitte resources external to the core project team. Some reviews may be mandatory (for example, Deloitte project reviews); others may involve providing additional guidance or support to the project.

WV IES Project Review Program

WV IES Project reviews are formal, objective, onsite reviews conducted by a seasoned Deloitte principal or director who evaluates the status of the project in six categories:

- Project leadership
- Solution and deliverables
- Estimation, planning, and timeline
- Project staffing
- Monitor and control
- Approach

Project reviewers follow a defined process and toolset to document and report their findings back to the project team, which can include DHHR project leadership.

Project Review Plan & Schedule

The high-level project review plan is defined using the following table:

Project Review Plan

#	Type of Project Review	Reviewers	Frequency	Objectives

Method Coach Program

Method coaches represent experienced Deloitte delivery managers well-versed in the service line work and Deloitte methods they support. Method coaches are assigned to support projects throughout the entire project life cycle, including the pursuit phase. Their top priority is to coach and guide projects to adopt and use the full suite of Deloitte methods and tools, properly and effectively.

Method Coach Plan

The high-level method coach program is defined using the following table:

Method Coach Plan

Type of Method Coach Visit	Method Coach	Frequency & Duration	Objectives
Method coach	TBD	On-going	• Support Deloitte project leadership during the development of the Work Plan and key management plans • Identify Deloitte project team training needs • Coordinate and deliver Deloitte project team training, as appropriate • Support Deloitte project leadership with timely resolution of open project review action items • Collect actuals versus estimates from Deloitte project leadership to support historical data gathering • Collect leading practice deliverable samples from Deloitte project team • Capture lessons learned and feedback for method coach program

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WV IES

9.e. Human Resources Management Plan

Draft Deliverables

August 8, 2017

Document Control Information

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Distribution of Final Document

The following people are designated recipients of the final version of this document:

Name	Organization/Title
TBD	TBD

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Human Resources Management Plan Introduction

The Human Resources Management Plan strives to provide the WV IES Design team members the knowledge, skills and abilities they need to perform relevant activities and handle issues according to project milestones and goals. To fulfill this objective the project team will be on-boarded, trained, evaluated, retained and then transitioned off of the project. The plan will address key aspects of engaging project team members to confirm the success of the project and to support the transition from the project-environment to a production environment. The goal of the trainings is to be relevant, efficient and results oriented for involved.

Purpose of the Human Resources Management Plan

The overall objective of a Human Resources Management Plan is to confirm that the West Virginia HSP Design team members have the knowledge, skills and abilities they need to perform relevant activities and handle issues according to project milestones and goals.

To fulfill this objective the project team will be on boarded, trained, evaluated, retained and then transitioned off of the project. The plan will address key aspects of engaging project team members to confirm the success of the project and to support the transition from the project-environment to a production environment.

The following guiding principles underpin the approach to human resources for West Virginia HSP:

- *Results Oriented* – participants will have the necessary skill level to perform their project responsibilities appropriately and achieve results.
- *Relevant* – onboarding and training is relevant to the individual's work and personal development. The nature of the project is relevant to the project team member's expertise.
- *Efficient* – relevant onboarding and training is delivered at the right time and by an effective and cost-beneficial means. The team is designed and works in an efficient manner.
- *Responsible* – project team members approach work with a sense of responsibility, compliance and confidentiality.

Human Resources Management Approach

The purpose of human resources management approach is to address planning needs as well as resources and costs associated with the project teams. There are seven basic steps to the Human Resources Management Plan:

- *Step 1: Needs assessment*: identify focus areas and project team members to be engaged.
- *Step 2: Preparation*: identification of training locations, date/time, cost, and managing enrollment and tracking.
- *Step 3: Onboarding*: project team members are on boarded.
- *Step 4: Project-Specific Training*: project team members may attend training to learn about project specifics.

- *Step 5: Evaluation*: project team members are evaluated periodically following Deloitte's proven evaluation practices.
- *Step 6: Retention:* project team members are engaged and challenged in order to increase retention on the project.
- *Step 7: Transition:* project team members are transitioned off of the project confirming that their responsibilities and knowledge are transitioned appropriately.

Step 1: Needs Assessment

The objective of needs assessment is to identify the individuals to be on boarded and trained, by 'role' on the team, and specific skill requirements. This assessment will provide the basis for curriculum development and onboarding documents. It will also define roles and responsibilities. Team leads identify the roles within the team, the resources assigned to those roles, and assess the training needs of the individual or role.

Human Resources Management "Audience"

West Virginia IES Team Members consist of project team members from various business units/segments and locations. Team members come to the team with varying knowledge and expectations for the project.

The following audiences have been identified as a part of the West Virginia IES Team:

- Enterprise Platform Team Members
- Legacy Datamart Migration Team Members
- Asset Verification System Team Members
- Integrated Eligibility (RAPIDS) Team Members
- Child Care (FACTS) Team Members
- Child Support (OSCAR) Team Members
- Child Welfare (FACTS)
- WV Human Services Platform Team

Team members may require training on any new system or interface, client structure and client processes. In addition, additional training needs may be defined as the technology platform for the project is selected. Soft-skills training needs were not identified at this time.

Human Resources Management Approach Assumptions:

- No functional HR, Benefits or Payroll business process training is covered under this plan or required for the project.
- Not project members will attend or any courses, however, each team member should attend the courses required to fulfill his or her role.
- Great effort will be made to arrange courses as close to the team member's location as possible or via a remote teaching method, however, it is recognized that not courses will be available in the required time frame in their location so some travel may be required.

- As the project progresses additional training needs may be identified and additional education opportunities will be organized as required.

Step 2: Preparation

During the preparation phase, the timing, location (great effort will be made to train staff at or near their geographic location or via remote learning with a focus on cost containment), and exact classes required will be organized and scheduled for the project team. Also preparation is made regarding equipment, security access, and other daily work logistics or needs.

In scheduling training, dependencies between classes will need to be considered in conjunction with the timing by which the training is required for job performance (certain workshops are pre-requisites for others and these have been scheduled first). In addition, the availability of the training team members as participants must be considered to avoid interfering with Design or Configuration related activities.

This schedule will be reviewed with both the Project Management and Team Leads. Changes will be accommodated only when extenuating circumstances occur. Each participant will receive a memo outlining their session schedule.

Step 3: Onboarding

Project team members follow proven Deloitte processes for onboarding. This includes an understanding of industry, client, project and role. This allows team members to enter the project with a functional working knowledge and quickly make an impact. Client websites, snapshots and other materials are reviewed in order to bring team members up to speed quickly. Project-specific resources are reviewed with project leads. This can include project plans, project documents, statements of work and any other current client deliverables. Project team members further define their roles and responsibilities with project leads. This includes setting goals, fine tuning project roles and responsibilities and developing project organizational charts.

Step 4: Project-Specific Training

The specific approach to be used will be based on the subject and type of training to be delivered, i.e. instructor-led training, pre-recorded or live web cast, online self-study, etc.)

Training could include prior training materials developed for the West Virginia Integrated Eligibility Solution team or similar projects.

If project-specific training is required, this will be delivered in a timely manner with cost containment.

Step 5: Evaluation

Team members complete bi-weekly check-ins with their team leads. This allows the project team member and team lead to discuss progress towards goals, further outline growth opportunities and discuss any potential concerns. Quarterly written evaluations are completed by project leads in order to provide detailed feedback to team members.

Step 6: Retention

Onboarding and training can often be time consuming, so keeping team members on the project can be vital to success. Team members are engaged by providing opportunities for stretch roles or

leadership when possible. Recognition is provided on a regular basis for those team members who perform above the standard on the project or who excel at their goals.

Step 7: Transition

A transition plan will be put in place in order to confirm a smooth hand-off of responsibilities. Team leads will work with team members to develop transition plans when needed.

Next Steps

- Conduct needs assessment by audience in order to determine roles/responsibilities based off of project team
- Gather/prepare onboarding materials
- Develop any project-specific training materials

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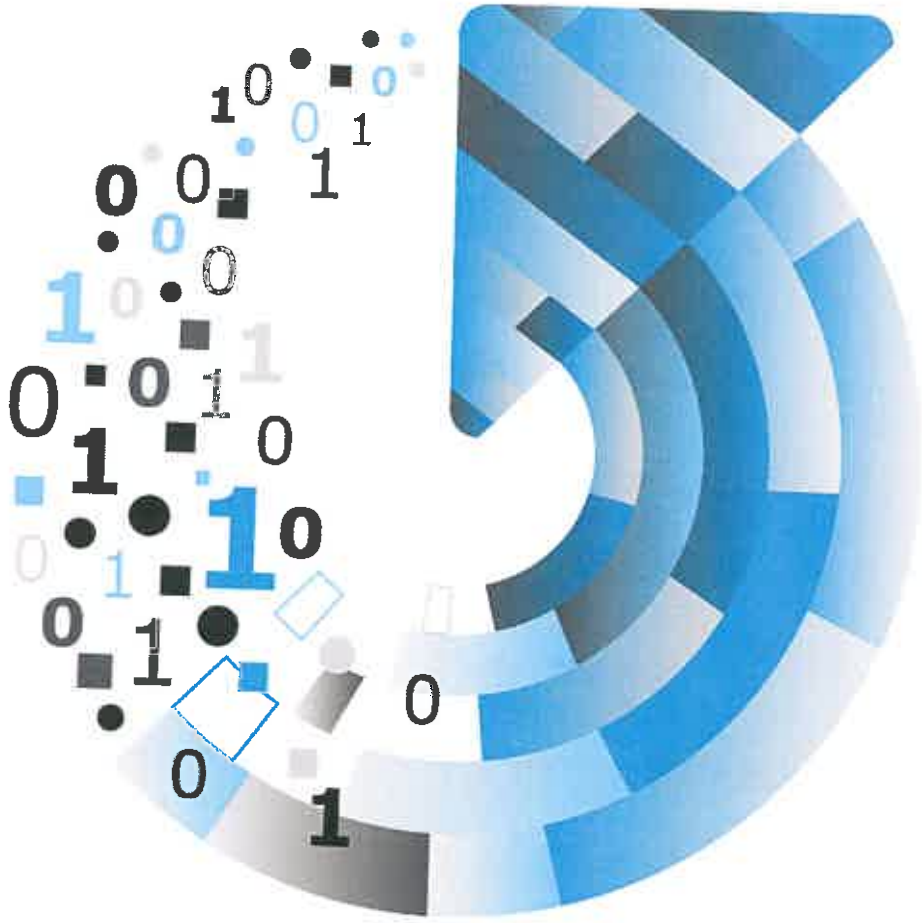

WV IES

9.f. Communications Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

Document Control Information

Document Information

Document Name	Communication Management Plan
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TBD	TBD

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9.f. Communications Management Plan i

Communications Management Plan Introduction 1

WEST VIRGINIA IES PROJECT

Communications Management Plan Introduction

The Communication Management Plan will assist the WV DHHR Program Management Office to manage communication with the given stakeholders for the entire duration of the project. The Communication Management Plan will confirm successful completion of the project by meeting the information needs of the multiple WV DHHR stakeholders. The Communication Management Plan highlights the communication strategy, the mode and timing of communication, and the nature of the communication to the targeted audience. Having a communication plan in place will help the WV DHHR Program Management Office to keep the stakeholders and the project teams engaged on the various project milestones and confirm that the stakeholders are equally informed regarding progress of the project.

Stakeholder Communication and Audience

Communication between West Virginia DHHR, IES PM Team, the current eligibility and enrollment vendor and Deloitte is key to the success of the WV IES project. Deloitte will conduct an audience analysis at the beginning of the WV IES project .The audience analysis focuses on identifying the groups of individuals (i.e., stakeholders) who will be directly or indirectly impacted in some way by the WV IES.

The audience analysis allows for a better understanding of who the stakeholders are and how to communicate most effectively with them. Conducting an audience analysis will help create targeted messages to each group and facilitates more efficient and effective communications by accommodating the respective needs of different groups within the organization.

The Project Communications Plan Matrix lists each stakeholder group, the type of communication necessary for that group, the reason for the communication, when the communication occurs, the media, and the person responsible for the communication.

Stakeholder Category	Information Needs	Purpose	Timing/Trigger	Media	Responsible Person or Role
Organization; Executives	Ad hoc reports will be provided as needed or requested by the organization or Deloitte Engagement Partner.	Performance Reporting	As required	E-mail, or website	Project Manager
Project Managers	All team leads will communicate to the project manager when their work module is completed.	Communicate schedule status	As required	E-mail; telephone;	Team Leads
Project Team	Meetings will be held with Deloitte Consulting and organization project managers, and other technical advisors as required, to review project progress, the project plan, issues, risks, and future requirements.	Communicate status and issues	Weekly	Meeting	Project Manager
Project Team	Signed acceptance documents will be collected and stored.	Administrative closure	As required	Acceptance documents stored in hard copy in	Project Manager oversees acceptance

				commercial operations; communications to team members by e-mail.	documents and notifies team members
Project Team	Any changes to scope, price, schedule, or terms and conditions will be initiated by using the Change Request Process.	Communicate and approve changes	As required	Hardcopy written document,	Partners; key organization personnel
Project Team	Reports: The project schedule will be updated and distributed.	Performance Reporting	Weekly	email	Project Manager
Steering Committee members (Partners, key organization personnel)	Steering Committee project reviews will be held the organization to review project progress, the project plan, issues, risks, and future requirements. The DHHR Project Manager will produce meeting minutes within two working days. Any changes to scope, price, schedule, or terms and conditions will be initiated by using the Change Request Process.	Communicate status and issues; Performance reporting	Monthly	Meeting	Senior Management

Communication Tools

There are multiple tools that can be utilized in the execution of the Communication Strategy. Many of these tools can be repurposed and customized for different audience groups. Below are some of the recommended tools.

Communication Plan

The Communication Plan is an integrated schedule that identifies key message content, media, target audience, and timing. It is the primary tool for the management and tracking of communication information. The Communication Plan is designed to map out the target audience groups in an effort to provide accurate, consistent, and timely information to each group offering the right information at the right time.

The Communication Plan lays the foundation for communication during each phase of the Program X and considers where each audience group is relative to the Commitment Curve. The Communication Plan is typically developed in the Planning Phase in preparation for Program Kick-off. The plan is a living document that is constantly updated with new information and new communication needs. It requires a single owner to manage and update accordingly.

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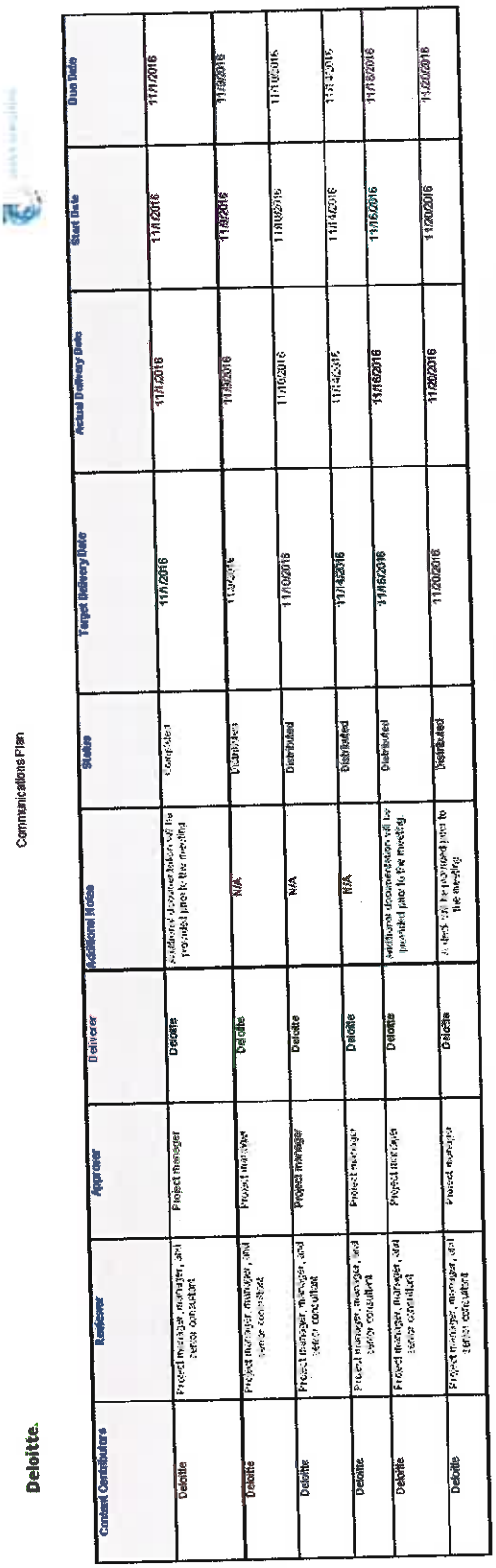
Communications Plan

ID	Project	Project Phase	Group	Target Audience	Communication / Event Name	Purpose of Communication	Key Messages	Dependency	Vehicle	Timing/ Frequency	Author
1	WVIES	Plan	This session will involve key project stakeholders to discuss project planning details.	Project team	Project Planning Session Kick Off	Internal announcement to project stakeholders to inform the organization about the decision to move forward with the Project implementation - the Project/Delta solution.	Definition of Project Project timeline	N/A	Conference Call and Webinar	One time	Deloitte
2	WVIES	Ongoing	This session will provide a weekly status update to key project stakeholders.	Project stakeholders	Weekly Update	An update on the current status of the project will be provided including information on tasks completed, ongoing and planned.	Status of the Project Ongoing, Completed, and Planned Tasks	N/A	Email	Weekly	Deloitte
3	WVIES	Ongoing	This session will provide a monthly status update to keep project stakeholders	Project stakeholders	Monthly Update	An update on the current status of the project will be provided including information on tasks completed, ongoing and planned.	Status of the Project Ongoing, Completed, and Planned Tasks	N/A	Email	Monthly	Deloitte
4	WVIES	Execution/ Maintenance	This session will provide system advisory information for relevant staff.	Relevant staff	System Advisory	An update on the current system outages will be provided to the team.	System outage update	N/A	Email	One time	Deloitte
5	WVIES	Ongoing	This session will include information on current issues and provide statuses on each of the issues identified.	Project stakeholders	Issue Status Report	An update on the current identified issues will be presented in this communication.	Status of any issues	N/A	Email	One time	Deloitte
6	WVIES	Ongoing	This session will involve key project stakeholders to discuss business priorities.	Project stakeholders	Steering Committee Meeting	Prioritization of organizational initiatives	Steering communication	A steering deck will be distributed prior to the meeting.	Conference Call and Webinar	Weekly	Deloitte



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Communications Plan

Content Contributors	Reviewer	Approver	Deliverer	Additional Notes	Status	Target Delivery Date	Actual Delivery Date	Start Date	Due Date
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	Additional documentation will be provided prior to the meeting	Completed	11/7/2016	11/7/2016	11/7/2016	11/7/2016
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	N/A	Distributed	11/9/2016	11/9/2016	11/9/2016	11/9/2016
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	N/A	Distributed	11/10/2016	11/10/2016	11/10/2016	11/10/2016
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	N/A	Distributed	11/14/2016	11/14/2016	11/14/2016	11/14/2016
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	Additional documentation will be provided prior to the meeting	Distributed	11/16/2016	11/16/2016	11/16/2016	11/16/2016
Deloitte	Project manager, manager, and senior consultant	Project manager	Deloitte	Additional documentation will be provided prior to the meeting	Distributed	11/20/2016	11/20/2016	11/20/2016	11/20/2016

Standing Project Meetings

Deloitte will facilitate a variety of project meetings to facilitate communication between project team and WV DHHR. These events include:

Weekly Status Meetings (WSR) – The weekly status meeting will be conducted with the Program Officer and other program representatives. The purpose of the WSR will be to review Deloitte's activities from the last week, present decisions for the consideration of the Project Officer, update the program on activities for the upcoming week. These meetings may be conducted telephonically or in person.

Executive Review Meeting – This meetings will be conducted in person with the WV DHHR leadership Project Officer and the Deloitte project team once a month. During this meeting, the Monthly Status Report (MSR) will be reviewed in detail

Architecture Review Board (ARB) meetings and Data Model Reviews – Deloitte will schedule and facilitate these meetings with DHHR to discuss architecture and design of the proposed solution at the end of design phase.

Change Control Board Meeting – Deloitte will schedule and facilitate change control board meeting to review change requests and estimation to help WV DHHR approve or decline change requests submitted during project execution.

Project Reporting

Deloitte will submit weekly/monthly status report to DHHR. The objective of these reports are to generate the project metrics as defined in the project in the Metrics Plan; and deliver project status information and guidance to the project team.

Project status reports are used to provide insight to the health of a project. The <CLIENT NAME> Program Manager is responsible for sending a status report to the project sponsor and the stakeholders. Below are some simple guidelines that each Project Manager will follow when reporting project. Measuring project health is a critical process throughout the life cycle of the WV IES project. To be able to define project health consistently and allow for reliable decision making, key project health metrics are required to be defined, tracked and reported. Through a joint effort with the State, using predefined red, yellow and green metric definitions, the EVD for SI methodology provides the framework for tracking project health through project closeout. The graphic below is an example Project Health Report for WV IES.

WV IES Project Health Criteria

Key Milestone/ Deliverable	Status	Red or Yellow Project Information	
		Reason for Red / Yellow Status	Path to Green
Financial Management	Y	Scheduling difficulties preventing Requirements sessions from occurring in a timely manner	Adjust schedule and requirements content focusing on high value key requirements
Training Management	Y	Training environment configuration behind schedule	Assign additional resources to expedite environment configuration
Services Management	G		
Client Management	G		

G *On Track* Y *Within Tolerances, But Issues Identified* R *Issues Sufficient to Impact Critical Path Milestones* B *Complete*

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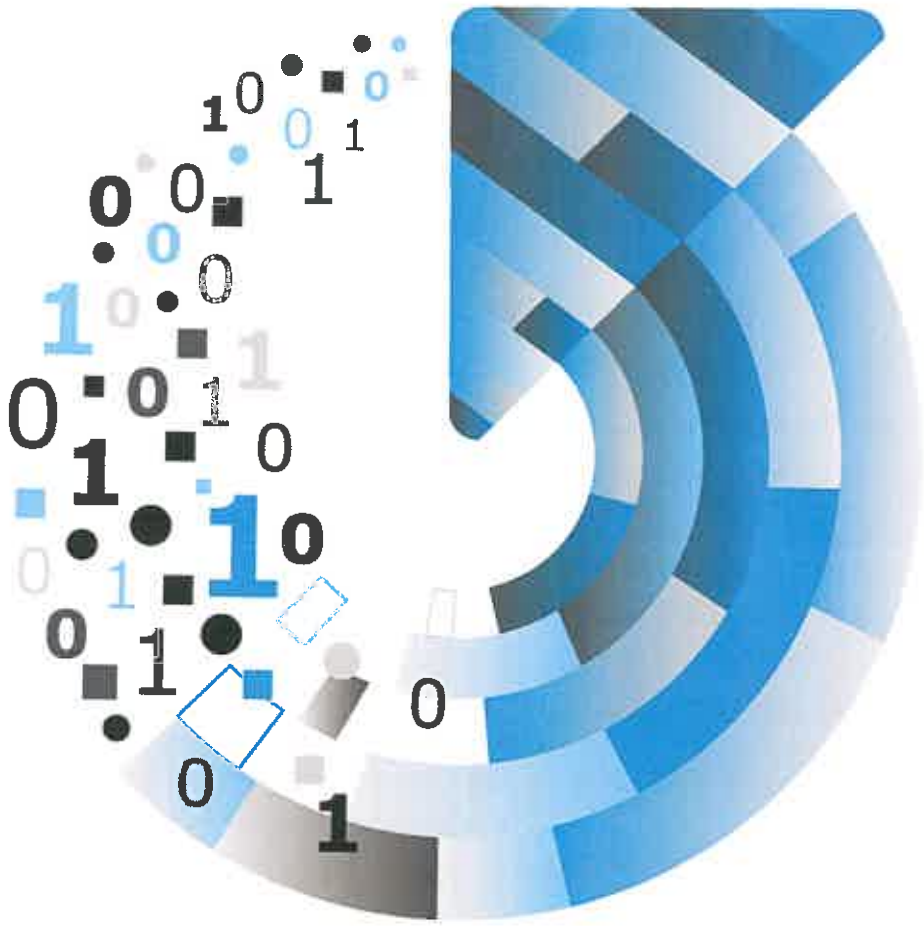

WV IES

9.g. Risk Management Plan

Draft Deliverables

August 8, 2017

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Risk Management Plan Introduction

Risk Management Plan is a key documentation to assist the WV DHHR Program Management Office to identify, minimize or eliminate the impact of risks and uncertain events on the project. Proper risk management will reduce not only the likelihood of an event occurring, but also the magnitude of its impact. The objective of the Risk Management Plan is to foresee risks, estimate impacts, and define responses to issues. Risk Management Plan will help the WV IES project teams to identify risks early on in the process, prioritize risks in the manner in which they should be addressed, establish processes to escalate the risk, identify key individuals and teams who will be responsible for performing risk management activities, and maintain a log for tracking risks. Having a Risk Management Plan will help the WV IES Project have a strong grasp on future events and will help the project be more proactive rather than reactive to risky situations.

Purpose and Scope

The purpose of this Risk Plan document is to specify the processes used to identify and manage risk. The Risk Plan addresses both internal and external risks on WV IES. Both the Risk Plan and the Risk Log should be reviewed regularly throughout the project to monitor existing risks and to identify new ones. The Risk Plan will be reviewed and approved by both WV DHHR and Deloitte Leadership. The DHHR must also communicate their support of this risk plan, as they have stressed the crucial importance of finishing this project prior to their fiscal year end reporting.

Risk Management Process

The process for managing risk on this project will include the following elements:

Risk Management Tools

JIRA will be used to create, maintain and monitor WV IES project risks.

Risk Identification

Project risks can be identified by using one or more of the following techniques:

Technique	Description
Interviews	Interview relevant project stakeholders to identify their concerns, which may provide insight into real project risks.
Risk Brainstorming Workshops	Conduct risk brainstorming workshops with relevant project stakeholders to identify risks, including key risk influencers, risk levels, and possible impacts. Use the risk type questions available in the Risk Management Guidelines tool as a starting point for brainstorming activities.

SWOT Analysis	Conduct a strengths, weaknesses, opportunities, and threats (SWOT) analysis to gain a holistic view of the project with respect to risk. • Threats are project risks • Opportunities represent lost potential benefits if not pursued • Weaknesses, if not properly mitigated, can negatively impact a project • Strengths should be leveraged to help the project mitigate the identified project threats
Process Reviews	Identify process-related risks by reviewing the various project management processes, tools, and techniques described in the Cost Management Plan and the Quality Management Plan.
Client and Deloitte Knowledge Assets	Identify risks from previous projects of similar size and complexity, using available project data and lessons learned.

Risk Assessment

- Identify current and potential risks. Understand the difference between causes and effects of risks and actual risks. Use techniques such as team brainstorming and examination of the lowest level of the work breakdown structure to identify risks. Also establish the triggers for each risk, such as those situations or events that cause the risk to occur.
- Categorize, qualify or quantify, and prioritize risks.
  - Determine categories to be used (for example, business imperative, project structure and approach, technology, people)
  - Determine severity or impact of each risk (for example, high, medium, low), or assign a monetary value to each risk.
  - Determine probability or likelihood that each risk will occur.
  - In some instances it may be possible to quantify the risks as opposed to qualifying them.
  - Prioritize the risks by ranking them based on consequence.
- Determine a strategy for each risk and develop risk response plans.

- Determine which risks require a response.
- Understand the trigger for each risk
- Assign team resources to own each risk.
- Risk owners will follow the Risk Plan, create a risk response plan with associated budget and schedule, and develop any metrics needed to measure the progress of each implemented risk response plan.
- Take whatever advance actions are possible to reduce the effect of a significant risk.
- Establish a schedule for subsequent risk assessments.

Risk Assessment Value

Deloitte has developed a variety of metrics to measure risk across our projects including priority, impact and escalation values.

Our team has established Risk Priority Ratings which are used to classify risks into the order in which they should be addressed. The Risk Priority Ratings can be seen in the following table:

Priority Value	Description
Critical	The risk will negatively impact overall project outcomes or objectives if realized and must be addressed immediately.
High	The risk will negatively impact the project significantly if realized (for example, cost overruns or milestone delays) and must be addressed as soon as possible.
Medium	The risk will negatively impact the project or parts of the project if realized; the risk should be addressed, monitored and controlled using regular project risk management processes.
Low	The risk will have minimal negative impact if realized; the appropriate risk response strategy depends upon risk severity score analysis.

The following table represents risk impact values used to categorize likely impacts of risks across the WV IES Project. The risks are described according to the effect the risk will bring the project.

Impact Value	Description
1-Low	Insignificant changes to time-scale and cost, re-planning necessary
2-Low/Medium	Small delays or cost increase
3-Medium	Medium: Delay increases cost in excess of tolerance
4-Medium/High	Substantial delay or cost; key deliverables not met
5-High	Inability to deliver; objectives cannot be achieved

The following table represents Deloitte's standard risk escalation levels as defined in the Project Management Plan. These levels can be tailored to meet specific DHHR needs and lay out levels to determine the proper stakeholders to notify, dependent upon the individual risk.

Escalation Level	Level Description
Level 1	Cross-team working committees
Level 2	Project manager and Project Management Office (PMO)

Escalation Level	Level Description
Level 3	Project sponsor and/or Steering Committee

The following table represents the standard risk impact/probability matrix. The resulting product from multiplying risk probability and impact determines the severity rating of the risk. The higher the risk rating, the more important it is to manage the risk.

Impact	Probability				
	1-Low	2-Low/Medium	3-Medium	4-Medium/High	5-High
5-High	Low (5)	Medium (10)	High (15)	High (20)	High (25)
4-Medium/High	Low (4)	Medium (8)	Medium (12)	High (16)	High (20)
3-Medium	Low (3)	Medium (6)	Medium (9)	Medium (12)	High (15)
2-Low/Medium	Low (2)	Low (4)	Medium (6)	Medium (8)	Medium (10)
1-Low	Low (1)	Low (2)	Low (3)	Low (4)	Low (5)

Risk Management Roles and Responsibilities

Individuals and teams will be identified and assigned to Perform, Approve, Review, or Support the risk management activities based on the abbreviated sample matrix shown below. Stakeholders identified as part of the WV IES Project are Project Manager, Track Leads.

	Prepare Risk Plan	Identify & Categorize Risks	Qualify & Prioritize Risks	Assign Risk Owners	Prepare Strategies	Prepare Risk Response Plans	Review Risk Response Plans
PM	X	X	X	X	X		X
Track Leads	X	X	X				X
Project Leadership					X		
Project Team		X					
DHHR Leadership							X

Logging and Tracking Risks

Logging and tracking of risks will be performed and will include keeping a Risk Log. The Risk Log will list elements that provide a comprehensive view and status update of each risk. This will include the following information regarding the risk:

- Description
- Category
- Impact, likelihood, and consequence

- Priority
- Strategy
- Risk response plan
- Risk trigger definition
- Budget or estimate of cost and resources needed to implement Risk Response
- Owner
- Status, including dates of last review and last update
- Dates of risk response plan implementation and closure
- Date of last Risk Report

Risk Mitigation and Response Strategies

The table below describes the risk response strategies that are available to guide the definition of risk response plans in the Risks Log.

Strategy	Description
Avoid	Eliminate a specific threat or risk by avoiding it altogether. Indemnify the project's objectives from the risk's potential impact. Examples include extending the schedule, changing the strategy, or altering the project scope.
Mitigate	Reduce the probability and impact by reacting early to the risk. Sample mitigation actions that can reduce risk probability and impact include designing less complex processes, creating a prototype or proof-of-concept, or using proven technologies when designing a software solution.
Accept	Accept a risk and its resulting consequences if realized. The acceptance strategy should still include some proactive measures. For example, developing a contingency plan to address the consequences of a realized risk.
Transfer	Shift the risk to a third party who will be accountable for the risk response and any consequences if it is realized. This is a common strategy for financial risks. Sample transfer strategies include using insurance, warranties, fixed-price contracts, and so on. If this strategy is accepted and deployed, make sure all project contracts have been amended accordingly.

Risk Plan Review and Approval

The Risk Plan will be distributed to DHHR for review and comment. Updates from the review cycle will be incorporated and submitted for approval.

A review of the Risk Log will be incorporated into each team meeting, and updated if needed.

Risk Reports will be created after each review of the Risk Log and will include the status of any implemented risk response plans.

The Risk Plan may also be reviewed and updated as a result of these team meetings, especially when transitioning between phases of the project.

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WV IES

9.h. Issue Management Plan

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WEST VIRGINIA IES PROJECT

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WEST VIRGINIA IES PROJECT

Issue Management Plan Introduction

Issue Management Plan is a key document to help the WV DHHR Program Management Office to deal with an unexpected issue, if and when one arises. An Issue Management Plan is imperative to minimize the effect of an issue on the outcome of the project. The plan establishes processes to log issues, identify key personnel and stakeholders responsible for managing the issue, and highlights the strategies to escalate and expedite issue resolution. An Issue Management Plan will help WV DHHR to resolve problems quickly and move on, with minimum to no impacts to the project Overview

The intent of this document is to clearly outline the Project Issue Management process, to provide the reader with a clear understanding of this process and how to apply it to their project or situation. The Issue Management process is part of the overall Project Management process, and has been broken out separately for clarification purposes. The main application of this process is on enterprise transformation and enterprise applications projects; however it can be applied to other projects as well. It is based on the PMI institute's PMBOK and on Deloitte experience and expertise with issue management on projects.

Objective

The objective of this document is to provide the reader with a clear understanding of the Issue Management process. It is also intended to provide the reader with a starting point for establishing and managing an Issue Management Process on an Enterprise Transformation or Enterprise Applications project.

Scope

The scope of this document includes:

- Issue definition
- Issue Management process description and process flow
- Roles and responsibilities
- Tools and techniques used
- Sample issue register
- Issue Escalation
- Issue communication
- Closing issues

Other items such as automatic workflow or detailed and advanced steps of the process are not outlined in this document and are **not** in scope for this document.

Approach

The process approach taken in this document clearly defines roles and responsibilities and the process steps included in the process. This process is used on many Deloitte projects and it has been enhanced to reflect new tools and applications that may be used to make this process more efficient for involved.

Assumptions

It is assumed that users involved with the Issue Management process have a clear understanding of what constitutes issues on their projects, and that they have access to the appropriate tools and applications used, and also possess the knowledge to use the tools.

Issue Definition

An issue is the existence of a condition, which if not addressed, significantly impacts the WV IES timeline, scope, and/or budget. The issue resolution procedure is used to address these issues, to communicate these problems and to create a viable resolution so the project may continue.

Project Teams often run into problems identifying, what is a Risk, Issue or Action. The following provides an explanation of the different types:

- **Risk.** A risk is a potential condition or circumstance that could negatively impact the project's activities, resources, budget and contract, if not successfully mitigated. The impact and probability of a risk occurring will vary, and their status and priority can change throughout the project life cycle. The management team must continuously monitor the status of risks in order to prevent them from occurring or reduce their impact should they be realized.
- **Issue.** An issue is a risk that has been realized. Issues require immediate resolution and if left unresolved, will negatively impact the project. An issue may also emerge that was unforeseen and unrecognized as a risk, which must be addressed. These issues should be considered the exception and not the norm once the risk process is fully implemented. In addition to project issues, the project team will be logging design issues in the eRoom that must be addressed.
- **Action Item.** An activity that has a finite resolution and time frame for completion and can be performed within the current scope of the project (i.e., the activity can be performed within the existing schedule and budget, with existing resources). An action item can also be thought of as an activity that needs to be performed in support of the project or tasks in the work plan. Typically, an action item can be resolved rather quickly, however, if left unresolved the action item could become a potential risk or issue.

An issue differs from:

- A "to-do" list item in that "to-do's" do not require resolution approval from the next level of authority or will be resolved as part of general project work
- Action items in that action items are typically units of work assigned to a resource as the result of a meeting and are continuously reviewed at subsequent meetings until closure results

The Project Manager will define at what level issues will be tracked. Each project team member and stakeholder will need to understand the definition of an issue, what constitutes an issue for the project, and will therefore need to understand and follow the process outlined in this document.

Therefore the Issue Management process will need to be clearly communicated to the project team and other key stakeholders.

Issue Logging

JIRA will produce an Issue Log which is designed to assist the project team in coordinating information between the team members, with the goal of identifying issues, recommendations, actions, and final resolutions. JIRA provides the project team with a central location to track this information, and enables standardization, risk management, and quality assurance.

Members of the project team will use JIRA to identify, manage, and resolve project-related issues. Using JIRA will enable the project team members to maintain a concise record of how issues have been approached and resolved.

The following fields are typical, and additional fields can be added as necessary for project specific needs.

Field Name	Definition/Options
Issue #	Unique identifier (or reference number) assigned to each issue as it is entered into JIRA. This number is automatically generated by JIRA.
Status	A status for the issue: New, Open and Closed, Deferred. Issues will be defaulted to New. Once the issue has been discussed it will change to open and will be subsequently worked by the person assigned the issue.
Issue Title	A name for the issue. This must clearly state the issue. For example: Unable to identify stakeholders for the Financial Design Workshop.
Priority Level	The priority indicating how quickly the issue will be addressed and resolved: • **High**—Issue affects project scope, cost, schedule (for example, jeopardizes a milestone), or performance or the issue affects multiple subproject or process teams • **Medium**—Issue affects deliverables with no effect on schedule or the issue affects a single subproject or process team • **Low**—Issue affects a deliverable instance only
Issue Description	Detailed explanation of the Issue. Attachments may be includes as well as supporting information (they will be displayed in Attachment Section)
Date Submitted	MM/DD/YY—Date issue submitted by the project team
Due Date	MM/DD/YY—Date issue resolution is due
Date Closed	MM/DD/YY—Date issue is closed
Submitted By	The individual who presented or submitted the issue to the project team
Assigned to	The individual who has been assigned the issue for resolution
Issue Description	Detailed explanation of the Issue. Attachments may be includes as well as supporting information (they will be displayed in Attachment Section)
Recommended Resolution	Explanation of proposed issue resolution. Include complexity or work effort, actions, and time frame required. Upon completion of work, include any other applicable information concerning the resolution process.

Roles and Responsibilities

An issue can be identified by any of the project participants or other stakeholders, and it is important that the roles and responsibilities around managing these issues are clear.

Issue Management has some distinct roles that project team members or other stakeholders play. These roles may be assigned differently by projects, but a typical project situation is described below:

Role	Description and Examples
Issue originator/ Submitted by individual	The individual who recognizes the issue and enters in JIRA. It is possible that one individual discovers the issue and communicates it to the individual who records the issue in JIRA. The person recording the issue is considered the issue originator. Issue originators/Submitted By Individuals is typically the project team members or the team leads, which are responsible for capturing issues in their respective areas.
Issue owner	The issue owner is responsible for addressing a particular issue assigned to them. An issue owner is assigned at time of issue entry, and this individual will be responsible for addressing the issue, and for working with the issue originator, the PMO team and anybody else in the process of addressing the issue. Addressing the issue may mean analyzing and working to resolving the issue. Addressing the issue may also involve escalating the issue (typically to a project sponsor, upper management or other key stakeholders outside the project), re-assigning the issue to more appropriate owner, deferring the issue, or making a risk assessment where the issue is accepted without resolution.
Project Manager	The project manager is responsible for the entire issue management process The Project Manager is typically a member of the PMO (Project Management Office) team and is assigned to review, screen, categorize, monitor and manage issues in JIRA. This may be the project manager on smaller and midsized projects or another member of the PMO team on large projects. This issue manager is responsible for making sure that issues are correctly entered and managed and facilitates the resolution process such that issues can be resolved as efficiently and effectively as possible. On a regular basis, the project management team review the issue log, and follow-up on issues with the originator, the owner or anybody else involve with managing the issue. This may take place in regular meetings or as needed, and becomes more and more critical the closer to project completion the project is.
Other Stakeholders	Individuals that may not be directly involved with the project or have formal project roles as part of the issue management process may also be involved in the process. They may be team members, client management, Deloitte management, partners and others. They may be involved in the issue management process at various stages and at various degrees.

Issue Management Process

The Issue Management process steps are described and depicted below, and is based on the recommended approach for issue management

Steps (1) Identify Issue and (2) enter it into JIRA

As the issue is identified, the issue originator enters issue in JIRA including required information. Information entered must be clear and easy for project manager and issue owner to interpret in order for appropriate action to be taken.

Step (3) Screen Issues

The project manager reviews and screens issues and follows up with issue originator if necessary. The project manager may reject or defer issues. In both cases, the issue originator is notified, and may need to save the issue for later (deferred) or address some other way.

Issues that are accepted are assigned to the issue owner. This may have been the assignment made initially by the issue originator, or this may have been updated by the project manager.

Step (4) Investigate Issue

The issue owner is responsible for addressing the issue, and will make an assessment as to what needs to be done with the issue. It may be deferred, escalated, expedited or may resolution may result in a scope change. If a scope change is involved, the Scope Control Process must be followed.

For issue expedition, if an issue is not resolved by the proposed resolution date, and the lack of resolution affects other project activities, then the issue must be expedited. The project manager should evaluate the reason that the issue was not resolved and should define the activities for resolving the issue. The project manager may attempt to assign additional team members to assist in the issue resolution (if necessary). If required, the project manager may increase the priority of the issue and rearrange the project schedule to accommodate the issue's resolution.

Steps (5) Determine Issue Resolution and (6) Implement Issue Resolution

As a result of the investigation and analysis of the issue, a resolution may be determines, approved (if necessary) and implemented. JIRA is updated with the resolution information, and the status is changed to "resolved".

Step (7) Closing the issue

To close an issue, the project manager is responsible for:

- Reviewing the Issues in JIRA and issue status
- Reviewing the status of open issues and if the issue resolution is in jeopardy of missing its due date, the project manager should consider expediting the issue.

Until an issue's status is changed to "Issue Resolved" in the Issues Log, the issue's resolution requirements and activities are not considered complete

Issue Expedition and Escalation Management

Expediting an Issue

If an issue is not resolved by the proposed resolution date, and the lack of resolution affects other project activities, then the issue must be expedited. The project manager should evaluate the reason that the issue was not resolved and should define the activities for resolving the issue. The project manager may attempt to assign additional team members to assist in the issue resolution (if necessary). If required, the project manager may increase the priority of the issue and rearrange the project schedule to accommodate the issue's resolution.

Escalating an Issue

If the no resolution is found, and issue is not deferred, it may be escalated to be addressed by individual other than the issue owner. If the issue is not resolved according to the plan and the lack of resolution significantly affects the project time line, the project manager may escalate the issue to the next level of authority for resolution. The levels of authority recognized for this project include:

- Team lead
- Project manager
- Project director

- Project Sponsor
- Steering Committee

The following items are examples of escalating issues to each level of authority:

Issue Type	Escalation - Level of Authority Progression
Issue affecting a single subproject team	1. Issue owner 2. Team lead
Issues affecting multiple subproject teams	1. Issue owner 2. Team lead 3. Project manager 4. Program Manager
Issues (affecting a number of organizational stakeholders) that have not been resolved by the proposed resolution dates and whose priorities are ranked as High	1. Issue owner 2. Project manager 3. Program manager 4. Project director 5. Project Sponsor 6. Steering Committee

Issue Communications

The Deloitte Consulting and client project managers are responsible for adequately communicating the status of issues to applicable stakeholders. Weekly Issues Status Reports should be provided to applicable stakeholders. Issues with an issue resolved status on previous reports should not be documented on subsequent reports.

Project team members should meet weekly to discuss the status of open issues, including any obstacles in the resolution process, change requirements for the current work plan, and any new issues recently submitted. The results of these meetings should be captured in the in the Resolution field. Updates to the Issue list should be completed accordingly.

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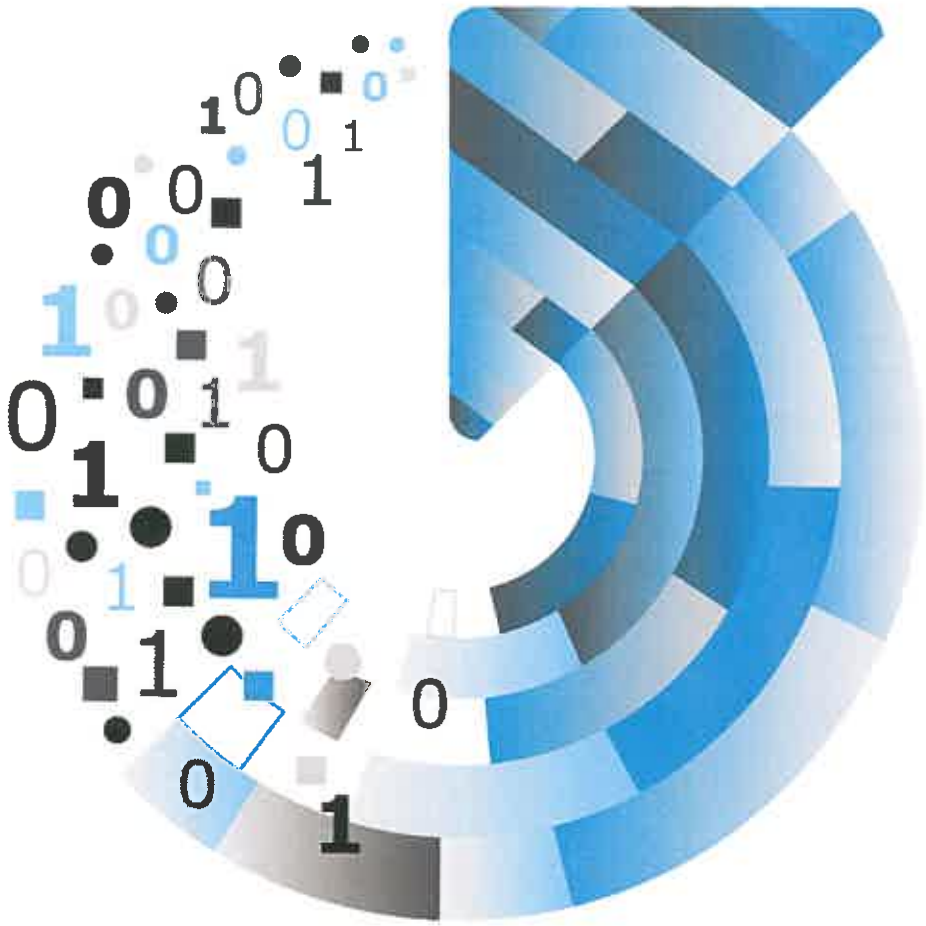

WV IES

9.i. Change Management Plan

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Change Management Plan Introduction

The Change Management Plan provides the framework and approach used by our team to effectively manage project change through project phases. It defines the objectives, processes, tools, and roles and responsibilities required to implement an effective Change management program for the WV IES project. The plan outlines the change verification process, project metrics and change management communication methods frequently used by our teams. Through executing the plan outlined in the following pages, Deloitte will be able to successfully implement the required changes as they surface throughout the WV IES engagement.

Overview

Purpose

The purpose of the Change Management Plan is to documents and tacks the necessary information required to effectively manage project change from project inception to delivery. It define the objectives, processes, tools, metrics, and roles and responsibilities required to implement an effective Change management program for the WV IES project.

Change Management Plan Objectives

The objectives of this Change Management Plan are to:

- Define the project's Change goals and overall framework
- Define the approach to incorporate changes with by the project team
- Define the approach to verify that necessary changes have been carried out, and proper communication to DHHR and Deloitte is made
- Define the project metrics that is used to monitor and control the changes made in the project

Change Management Principles

Below is the list of Change Management Principles –

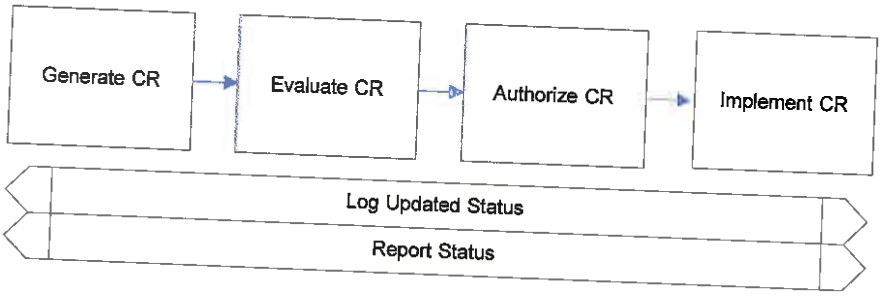
- Why we want to change
  - Establish direction
  - Put clear targets and measures of success in place
  - Look for ways to make WV DHHR experience better
  - Look for opportunities to create business value
- Managing change as a core capability
  - Managing change well is key to our success
  - The passion for change has to come from our executives – who champion it and are strong, visible role models

  - And everyone needs to know what they can do to support change
  - Change does not stop – it is a process, not a project
- Involve people in the changes that will affect them
  - At each level, people are involved, supported – and feel they have a role to play
  - In fact, the process is often more important than the solution
  - Identify and involve our stakeholders as early in the process as reasonably possible
  - Make sure everyone understands what is in it for them
- Talk to our people about change
  - Clear, open, honest communication is vital during change
  - Make sure it comes from right person
  - Explain what our challenges are
  - Look at change from the point of view of everyone involved
- Learn from change
  - Find out what we have learnt from change is essential for our success
  - Look at both the process and the content
  - Bold and open about our successes and failures
  - Share what we have learned across WV DHHR

Change Request Process Flow Requirements

[Outline the project team's agreed upon change request (CR) process flow. The following outlines a generic change request process flow.]

Step	Description
Generate CR	• A submitter completes a CR Form and sends the completed form to the Change Manager
Log CR Status	• The Change Manager enters the CR into the CR Log. The CR's status is updated throughout the CR process as needed.
Evaluate CR	• Project personnel review the CR and provide an estimated level of effort to process, and develop a proposed solution for the suggested change
Authorize	• Approval to move forward with incorporating the suggested change into the project/product



Change Management Form and Change Management Log

[List and define the data elements the project team needs to include on the Change Request Form and in the Change Management Log. At a minimum, the following data should be included on the project's Change Request Form and Change Management Log.]

Step	Description
Date	The date the CR was created
CR#	Assigned by the Change Manager
Title	A brief description of the change request
Description	Description of the desired change, the impact, or benefits of a change should also be described
Submitter	Name of the person completing the CR Form and who can answer questions regarding the suggested change
Phone	Phone number of the submitter
E-Mail	Email of the submitter
Component	The component that the suggested change is for
Version	The product version that the suggested change is for
Priority	A code that provides a recommended categorization of the urgency of the requested change (High, Medium, Low)

Evaluate and Authorize Change Request

[In order to evaluate and prioritize a change request, the "priority" and "type" of the change are taken into consideration. Use the first and second tables below to list and define the "priority" and "type" data elements that are applicable for the project. The third table provides examples of commonly used project status types. The list of elements is at the discretion of the project manager.]

Change requests are evaluated using the following priority criteria:

Priority	Description
High	<Insert the definition the project assigns to a high priority CR>
Medium	<Insert the definition the project assigns to a medium priority CR>
Low	<Insert the definition the project assigns to a low priority CR>

Change requests are evaluated and assigned one or more of the following change types:

Type	Description
Scope	• Change affecting scope
Time	• Change affecting time
Duration	• Change affecting duration
Cost	• Change affecting cost
Resources	• Change affecting resources
Deliverables	• Change affecting deliverables
Product	• Change affecting product
Processes	• Change affecting process
Quality	• Change affecting quality

Change requests are evaluated and assigned one of the following status types:

Status	Description
Open	• Entered/Open but not yet approved or assigned
Work in Progress	• CR approved, assigned, and work is progressing
In Review	• CR work is completed and in final review prior to testing
Testing	• CR work has been reviewed and is being tested
Closed	• CR work is complete, has passed tests, and updates have been released.

Change Control Board

[A Change Control Board (CCB) is a formally constituted group of stakeholders responsible for approving or rejecting changes to the project baselines. This group may meet on a predefined schedule or on an as needed basis. The following table provides a brief description of personnel acting as the Change Control Board (CCB) and their role/level of authority within that group.]

Role	Name	Contact	Description
[Insert Role]	[Insert Name]	[Insert Contact #]	[Insert Role Description]

Responsibilities

[Provide a brief description of persons responsible for each step of the change management process for the project.]

Role	Name	Contact	Description
Project Manager			
Change Manager			
[Insert Role]	[Insert Name]	[Insert Contact #]	[Insert Role Description]

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WV IES

9.j. Security, Privacy, and Confidentiality Management Plan

Draft Deliverables

August 8, 2017

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TBD	TBD

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WEST VIRGINIA IES PROJECT

Security, Privacy, and Confidentiality Management Plan Introduction

The Security, Privacy and Confidentiality Management Plan outlines our method for managing security privacy and confidentiality throughout the WV IES Project. The approved, finalized plan should act as a reference point throughout the project when considering a variety of areas. It should address our approach to account management, role-based access, data breach processes, confidentiality management, malicious software detection, data privacy, penetration testing and incident response. Security. The final, approved approach will be compliant with DHHR requirements as well as both federal and State security mandates.

Purpose

The objective of this document is to provide an overview of Deloitte's Security, Privacy and Confidentiality Management processes. It is created to inform DHHR and the WV IES Project team with the key details of the Security, Privacy and Confidentiality management processes.

Scope

The Security, Privacy and Confidentiality Management Plan covers the various areas of security, privacy and confidentiality management processes which Deloitte will follow in order to protect the data confidentiality, integrity and availability.

The scope of this document includes:

- Federal and State Regulatory Compliance Process
- Vulnerability and Penetration Testing Process
- Incident Response and Breach Management Process
- IDS, IPS, SIEM (Continuous Monitoring) and Malicious Software Detection Process
- Confidentiality Management Process
- Business and IT Continuity Management Process
- Data Privacy

Federal and State Compliance

Approach to Completing artifacts such as SSP, SSR, POA&M and Annual Update Process

Deloitte's approach to addressing federal security requirements regulations involved in the processing of Patient Protection and Affordable Care Act (PPACA) and Health Insurance Portability and Accountability Act (HIPAA) related information includes management, operational, and technical controls from our Security & Privacy Risk Framework (Risk Framework). Our Risk Framework is extensible and incorporates requirements from additional industry, regulatory, and state-based data sources, providing a broad and demonstrated framework. Deloitte will incorporate the applicable State

of WV security and privacy standards and policies to our Risk Framework to address the States specific security and privacy requirements.

Compliance Requirements	Deloitte Approach to support compliance with State and Federal compliance requirements
CMS MARS-E Ongoing Compliance	• Create and maintain a **System Security Plan (SSP)** with participation from appropriate DHHR stakeholders on an annual basis and whenever major changes are implemented to WV HSP Solution. • Create and update **Plan of Action & Milestone (POA&M)** on a quarterly basis and perform submission to CMS on an annual basis. Deloitte team facilitates information gathering with OIT and program areas for ongoing maintenance of POA&M artifact. • Conduct **Privacy Impact Assessment (PIA)** on an ongoing basis when there is major change to the WV HSP Solution and maintain the artifacts and Personally Identifiable Information (PII) flows within application and supporting systems accordingly. • Perform annual **Information System Risk Assessment (ISRA)** self-assessment based on various security and privacy controls requirements of MARS-E 2.0. • Perform Security Impact Analysis to assist the state in meeting **Change reporting (Official Notification)** requirement. • Assist the state in completing the Interconnection Security Agreement (ISA), Computer Matching Agreement (CMA) and Information Exchange Agreement (IEA), as required. • Create a Business Continuity/Disaster Recovery Plan and perform annual updates. • Perform monthly **vulnerability scans** as required by CMS MARS-E 2.0 requirements.
Social Security Administration	• Create the **Security Design Plan** required by SSA and perform updates when there are major changes made to the system or on an annual basis. • Develop the **compliance review questionnaire (CRQ)** for the periodic review scheduled by SSA.
Internal Revenue Service (IRS) publication 1075	• Create the **Corrective Action Plan (CAP)** document and update it on a semi-annual basis. • Develop the **Security Safeguard Report (SSR)** and update it on an annual basis and whenever major changes are implemented to WV HSP Solution.
HIPAA and Other requirements	• Facilitate Regulatory audits related to HIPAA, HITECH, etc. and ongoing maintenance of regulatory support documents. • Perform periodic review of NIST 800-53 and HIPAA Security Rule controls for revisions and monitor adherence. • Periodically monitor laws and regulations that could affect the security controls and classification requirements of the WV HSP Solution.

For any future changes in the regulations, we will monitor, assess any changes and work with the state to prioritize and implement the changes according to the change management plan. Any financial impacts will be addressed using the process defined in the Change Management Plan.

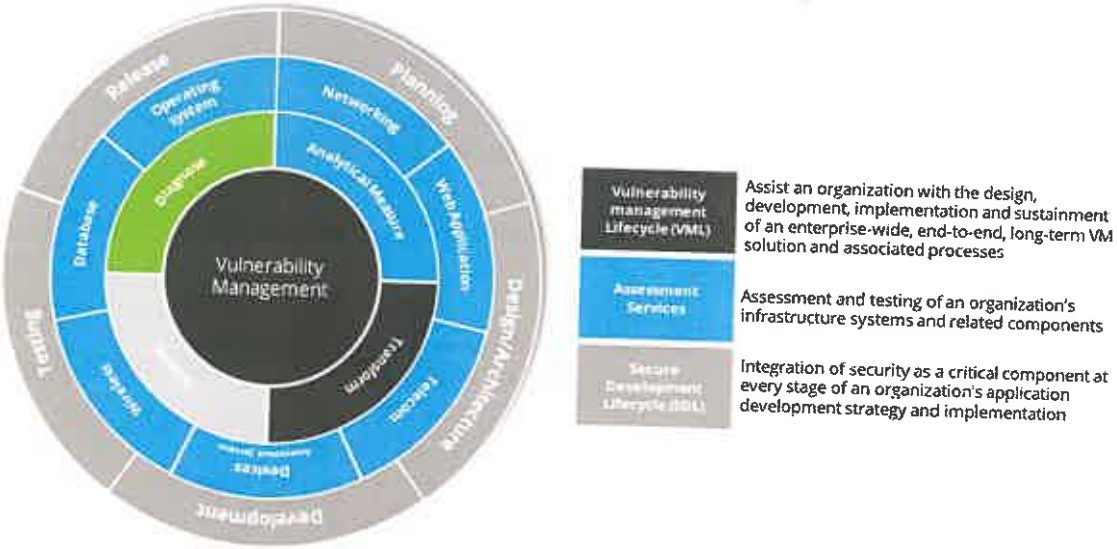
Approach to Vulnerability and Penetration Testing

We have the depth and breadth of security experience that is imperative to a successful vulnerability management program. The approach we outline below will highlight our vulnerability management methodology with a focus on these specific requirements.

Our technical approach is based on our security design and implementation experience and has been honed over the past several years supporting large state-based technology transformation projects such as the recent health exchange and integrated eligibility systems we have delivered across

multiple states. We take pride in providing implementable advice that comes from years of hands-on experience of supporting security programs such as yours which not only includes remediating vulnerabilities, but also addressing the people, process, and technology aspects.

We will use our demonstrated vulnerability management life cycle (VML) methodology to establish a program that will assist you with identifying, classifying, tracking and reporting security vulnerabilities in your IT environment. Our methodology provides you with recommendations for technical improvements that can be implemented to decrease exposure to an attack in addition to suggesting potential process improvements. Our framework is flexible and provides us with a structured, repeatable process to assess your IT infrastructure to identify potential vulnerabilities within your network and endpoint solutions. Our methodology covers the breadth of the IT infrastructure in three (3) specific service areas as illustrated below:

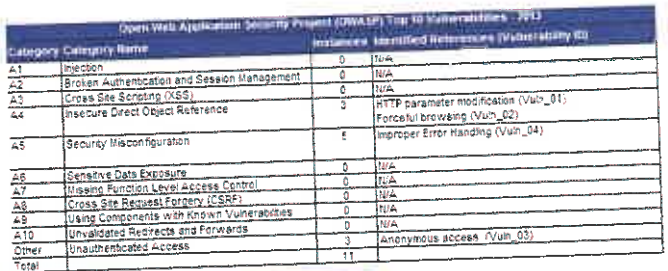


Vulnerability management methodology

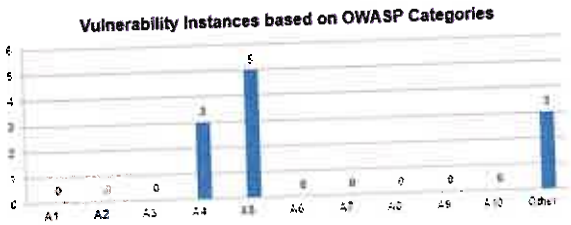
If you eventually require assistance with vulnerability exploitation, our team is capable of executing technical security attacks and penetration testing using commercial and proprietary tools that align with our methodology under the watchful eye of your trusted agent.

During attack and penetration testing activities, we will assist you in identifying the security weaknesses associated with the assets, applications, and processes under review, and attempt to identify exploits that are associated with these weaknesses. Our controlled approach is based on the concept that an attempt to compromise systems for further interrogation and data gathering is performed in coordination with your trusted agent to better mitigate risk or potential impact to production systems. We would welcome the opportunity to further discuss this service if the need arises.

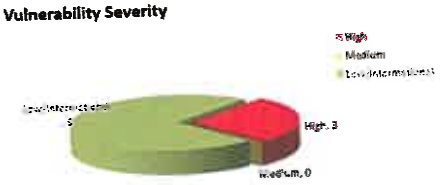
The following image shows an example of the vulnerability assessment report.



Open Web Application Security Project (OWASP) Top 10 Vulnerabilities - 2013			
Category	Category Name	Instances	Identified References (Vulnerability ID)
A1	Injection	0	N/A
A2	Broken Authentication and Session Management	0	N/A
A3	Cross Site Scripting (XSS)	0	N/A
A4	Insecure Direct Object Reference	3	HTTP parameter modification (Vuln_01) Forceful browsing (Vuln_02)
A5	Security Misconfiguration	5	Improper Error Handling (Vuln_04)
A6	Sensitive Data Exposure	0	N/A
A7	Missing Function Level Access Control	0	N/A
A8	Cross Site Request Forgery (CSRF)	0	N/A
A9	Using Components with Known Vulnerabilities	0	N/A
A10	Unvalidated Redirects and Forwards	0	N/A
Other	Unauthenticated Access	3	Anonymous access (Vuln_03)
Total		11	



Severity	Severity Description	Instances
High	Exploitation of the vulnerability may result in [illegible] Successful exploitation of this vulnerability may also result in unauthorized access to privileged information.	3
Medium	Exploitation of the vulnerability may lead to access of sensitive information on the host or unauthorized access to non-sensitive data and may result in training further attacks on the application.	0
Low (Informational)	Exploitation of the vulnerability could result in unauthorized access to informational data only.	0
Total		11



Sample Vulnerability Assessment Report

Account Management and Role Based Security

IAM Function	IAM Technology	How Technology Meets WV HHR Requirements
Identity Management	IBM Security Identity Manager (ISIM)	ISIM solution implements provisioning and administration solution that automates the process of adding, updating, and deleting user accounts from applications and directories. • Automated user provisioning and de-provisioning to target systems. • Self-service capability e.g., self-registration, access request, password management. • Delegated administration and approval process.
Access Management	IBM Security Access Manager (ISAM)	ISAM delivers critical functionality for role based access control, single sign-on, centralized policy management and session management. • Provides Enterprise single sign for WV HSP solution utilized by WV Staff and contractors. • Implements role-based access by enabling coarse-grained authorization capabilities to restrict access to users based on the business function. • Helps promote compliance by enforcing consistent, streamlines business rules and practices. • Audit and Logging capabilities to monitor user transactions
User Access Recertification	IBM Identity Governance & Intelligence (IGI)	IBM Security Identity Governance & Intelligence (IGI) helps implement need-based access and periodic review and removal of unneeded access. • Enables principle of least privilege required to perform job duties • Periodic Access review enabling removal of unneeded access
Multi-factor Authentication	IBM Security Access Manager (ISAM)	IBM Security Access Manager (ISAM) provides secure and tailored yet easy-to-integrate multifactor authentication. • Multi-factor authentication to WV HSP and Client Salesforce solution. • Real-time and context aware risk assessment and risk profiling.
Web-services Security	IBM DataPower Gateway	IBM DataPower's web-services security helps provide a consistent and streamlined approach to message layer (web service)

IAM Function	IAM Technology	How Technology Meets WV HHR Requirements
		interactions and secures SOA solutions and secures, accelerates and integrates system to system communication within WV HSP solution. • Provides authentication, authorization, message security and integrity in the WV HSP environment. • Provides audit logging of message events
Privileged User Management	IBM Security Privileged Identity Management (ISPIM)	ISPIM integrates with WV most critical systems including production servers and databases to monitor privilege sessions. • Manages privilege accounts credentials used between systems to systems. • Privileged Session Monitoring

Incident Response and Data Breach Management

Deloitte has built an integrated incident response team that brings together the appropriate subject matter experts from various cross-functional disciplines to address each specific incident. The Security Incident Response Procedures ("Procedures") describe how various types of incidents are handled. The Procedures identify key resources and communications that will take place based on various incident types. The Procedures identify to whom suspected incidents should be reported and describe the escalation path from the entry point in the process through fruition. Security awareness training is in place to educate Deloitte personnel of their responsibilities concerning security incidents. Each incident is logged and the relevant facts are captured for analysis and reporting. When necessary, data related to the incident is maintained in a forensically sound manner and appropriate chain-of-custody is documented.

The incident response team has a variety of tools available to assist them in the analysis of incidents. These include standard security tools from software and hardware providers as well as commercial forensic tools specifically targeted for such matters.

Information security incident procedures are executed periodically so the teams remain prepared for response should the need arise. At the completion of each significant incident, a post-incident review is conducted to identify any areas for improvement as well as lessons learned. These findings are used to adjust, enhance or improve the procedures.

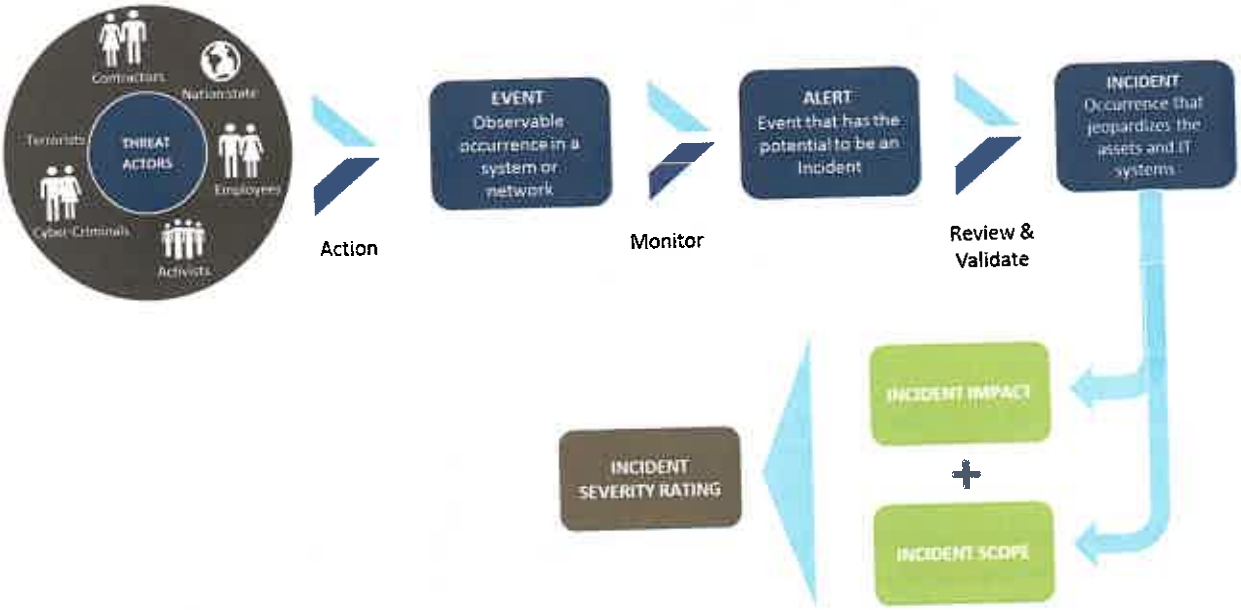
Deloitte has instituted an integrated incident response process designed to facilitate prompt reporting and resolution of incidents. Our confidentiality and privacy incident response process is characterized by the following:

- Centralized reporting of actual or suspected incidents to a Help Desk, which is available 24/7 with access via a toll-free number;
- Training and awareness programs focused on helping personnel understand immediate steps to be taken in case of actual or suspected incidents;
- Established roles and responsibilities for incident management and response including involving the appropriate consultation resources across the Deloitte organization, as applicable to the specific matter;

- Documented processes to help gather incident facts, initiate response activities, engage incident response teams, escalate incidents and alert appropriate leaders, based on the nature of the specific incident;
- Consultation among the relevant parties regarding the need for a corrective action plan;
- Development, as appropriate, of action plans for mitigating the risk of a future recurrence; and
- Post-incident follow-up process to analyze root causes and integrate lessons learned.

Incident Response Framework

Incident severity levels are used to classify incidents based upon a number of factors (impact, threat type, incident type, and scope). The incident severity level determines the magnitude of the response effort required by the appropriate teams. Response efforts are based on potential impacts and may change throughout the course of the investigation.



Incident Impact Classification

Incidents are prioritized based on a series of factors, rather than a first-come, first-serve basis. The categories of impact are based on the following criteria:

Incident scope is a variable that impacts incident severity, but may not be tied together in some cases. It is a combination of the number of assets, users, and records affected.

Rating	Description
1 (LARGE)	Impacts enterprise/regional/program office wide or impacting citizen users or causes public disclosure of data.
2 (MEDIUM)	Causes slowness to operations or impacts business partner users or causes business partner level/inter-agency disclosure of data.
3 (SMALL)	Causes intra agency disclosure of data

Rating	Asset	Recoverability	Information Accessed/Disclosed	Brand/Reputation
1 (MAJOR)	Organization can no longer provide critical services to any (or a significant portion of) users.	Recovery from incident is impossible, unpredictable, and/or will require extreme measures.	• Special Handling PII • Protected Health Information (PHI), • Regulated data: FTI, CMS, SSA, PCI & CJI • Sensitive PII • Biometric Information	Confirmed or high possibility reputational impact or disclosure.
2 (SIGNIFICANT)	Minimal effect; the organization can still provide critical services to all users but has lost efficiency.	Recovery from incident may require effort and resources beyond normal operations.	• Generally Identifiable Information • Internal operational information	Minimal possibility of reputational impact or disclosure.
3 (MINOR)	No effect to the organization's ability to provide all services to all users.	Recovery from incident requires effort, but within normal operations.	Information was not accessed or disclosed.	No reputational impact or disclosure.

Incident Severity

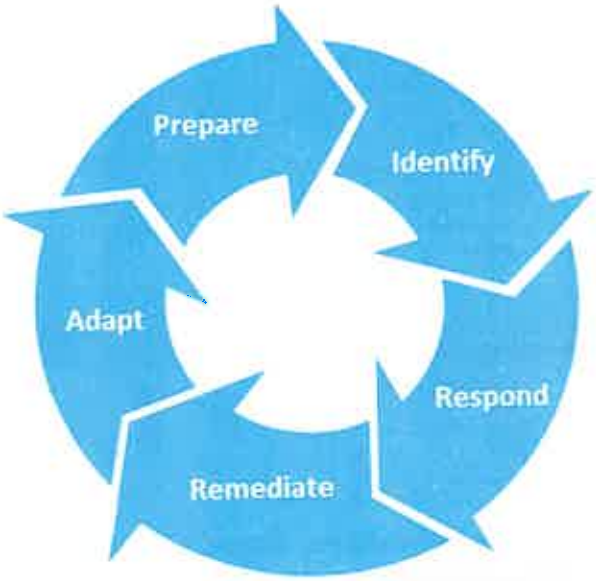
To determine the overall severity of an incident, **scope** and **weighted criteria ratings** are combined and a suggested **severity rating** is calculated using the matrix which has been developed to assist in assigning both a severity rating as well as possible courses of action

SEVERITY RATING MATRIX		SCOPE		
		1 (Large)	2 (Medium)	3 (Small)
IMPACT CRITERIA	1 (MAJOR)	L1	L1	L2
	2 (SIGNIFICANT)	L1	L2	L3
	3 (MINOR)	L2	L3	L3

Major Incident -L1	An incident impacting or having a **high likelihood of impacting a significant volume** of sensitive information (e.g. PII, PHI, and PCI), users, critical assets, and/or electronic services. It has the potential to disrupt critical services across the enterprise. Recovery might be **impossible** and requires coordinated response from a number of various functional teams across the enterprise.
Significant Incident- L2	An incident impacting or having the potential of **impacting sensitive information** (e.g. PII, PHI, and PCI), users, assets, and/or electronic services. It has the potential to disrupt services across departments or business units within the enterprise. Recovery time is **moderately unpredictable** and requires coordinated response from various functional teams across the enterprise.
Minor Incident- L3	An incident having **minimal or no impact** to sensitive information (e.g. PII, PHI, and PCI), users, assets, and/or electronic services. It has the potential to cause a loss in efficiency and/or worsen over time. Recovery time is **predictable** and requires response efforts from the incident response team along with relevant subject matter experts.

The Incident Response Process

The IR Plan is comprised of a series of steps that are collectively known as the Incident Response process. This process provides a standardized and organized approach for handling escalated security related incidents. If a potential Incident is reported, incident responders should follow the Incident Response Plan to take appropriate action. The IR Plan consists of five phases described below.



Identify: Monitor a variety of sources, both internal and external, for adverse or malicious activity. Investigate anomalous or suspicious activity to confirm incidents and engage appropriate response procedures.

Respond: Engage appropriate resources to investigate and determine scope, root cause, and extent of damages. Continually reassess severity of the incident and enact proper escalation/de-escalation protocol, assemble IR Team and subject matter expert resources as required. Notify executive leadership, corporate communications, law enforcement, and other internal and external groups.

Remediate: With full understanding of the incident scope, identify and execute containment, eradication, and recovery plans. Limit the spread of the threat (Containment); Remove artifacts of threat activity and prevent future compromise (Eradicate); Return assets to operational-ready state (Recover).

Adapt: Develop incident report, documenting lessons learned for future state improvements; Mitigate system deficiencies and identify and remediate IR process issues (Close).

IDS, IPS, SIEM and Malicious Software Detection

Deloitte will leverage Splunk Enterprise Security (ES) Security Incident and Event Management (SIEM) tool for audit log monitoring, correlation and reporting. Splunk Enterprise Security (ES) provides monitoring for server, application, network, and Web sites as well as customizable reporting and audit log correlation capabilities. Splunk ES logs, tracks, and reports on actions performed on the system by users including application login (success/failures), add, edit, and delete to data records and inquiries on application data.

Deloitte's proposed WV HSP solution implements Splunk Enterprise as a Security Incident Event Monitoring (SIEM) component to provide enhanced Cyber security monitoring, audit logging, reporting and log correlation. Our proposed SIEM component consolidates data from multiple audit sources and performs advanced security analytics on the collected data to alert the business user and security administrator for events such as security exceptions, incidents and regulatory compliance violations. It also provides periodic and ad hoc reports to monitor security and application Key Performance

Indicators (KPIs), forensics, real-time monitoring and reporting of security incidents. The below figure describes the features and capabilities of our SIEM solution:

SIEM System and Continuous Monitoring Function	Technology	Deloitte brings SIEM System and Continuous Monitoring Benefits
Single point of audit trail collection	Splunk	Splunk SIEM solution provides a seamless integration with WV HSP systems to capture and provide a centralized view of audit logs • Provides single point of view to display audits logs captured from different WV HSP applications, systems, databases and servers. • Integrates with different data sources including IIS logs,
Real-time event correlation and advanced analytics	Splunk	Splunk SIEM solution provides customized dashboards for advanced analytics • Provides customized dashboards containing log correlations from different WV HSP systems • Provides multiple filter criteria including real-time, last 24 hours or date and time frames
Continuous monitoring	Splunk	Splunk SIEM solution provides continuous monitoring and email notification alert when previously identified thresholds are surpassed • Generates alerts for attempts to access unauthorized WV HSP databases and systems from internal and external resources • Provides continuous monitoring to prevent and detect intrusion to WV HSP systems • Generates frequents reports based on previously identified criteria
Digital chain of custody	Splunk	Splunk SIEM solution maintains a digital chain of custody with unaltered audit trails for data retention and forensic requirements. • Audit trail encryption and secure transfer are used for audit trail protection during transfer and storage
Intrusion Detection System/ Intrusion Prevention System	TBD	AlienVault Unified Security Management and Alert Logic solutions provides a robust Intrusion Detection and Prevention systems enhancing security of WV IE • Continuous monitoring to detect and prevent intrusion of WV HSP systems • Provides IDS reports at intervals determined by West Virginia State • Integrates with Splunk for data analytics and log correlation

Confidentiality Management

Management and Protection of Confidential Information ("CI")

Deloitte is committed to protecting the CI of our clients, our organization and the third parties with which we work. To support this commitment, Deloitte has established the Office of Confidentiality and Privacy ("OCP") and developed a CI program for proactive management and protection of CI (the "CI Program"). The OCP is responsible for setting guidelines, developing procedures, and providing consultation and training on the management of CI. The OCP is also responsible for implementing the CI Program across Deloitte.

The CI Program consists of processes, technology controls, training, and communications that help our professionals to improve their awareness of CI risks and their ability to properly manage and safeguard CI.

CI Program

The CI Program consists of processes and activities that are performed by account and engagement teams throughout the engagement life cycle to manage and protect CI.

Account and engagement teams in the CI Program generally do the following:

- Appoint a Data Manager responsible for overseeing the CI Program activities;
- Develop and maintain a Confidential Information Management Plan ("CIMP") to document the CI management strategy and safeguards employed;
- Develop and deliver CI onboarding training that outlines the protocols that team members must follow when accessing, storing, using, transferring, and disposing of CI;
- Implement physical, administrative, and technical safeguards identified in the CIMP to proactively manage CI risk; and
- Complete other required confidentiality training as applicable.

Business and IT Continuity Management

Deloitte takes disaster and contingency planning very seriously, including planning for events that impact its people and/or its facilities. Deloitte's business continuity planning addresses issues such as, communications, travel, resource allocation, technology needs, and alternate work sites. Response procedures assess the well-being of personnel, provide for the continuity of essential business functions, and use recovery procedures for the restoration of critical business processes.

Cross-functional teams are identified to manage potential disruptive events, emergency situations or disasters. Each Deloitte office has a local crisis management team to handle smaller, localized events impacting a single location. For larger events or those that are not specific to a single location or geography, an experienced national incident support team is assigned ("National Incident Support Team"). A national crisis council handles incidents that rise to the level of a true crisis requiring strategic involvement and decision-making.

Cross-functional teams are identified and documented in the plans to include representation of key stakeholders from the following areas:

- • Client Services
- • Office Services/Operations/Facilities
- • Office of Security
- • Human Resources and Benefits
- • Information Technology Services
- • Procurement and travel
- • Communications
- • Risk Management

Deloitte has designed an impact-driven approach, which focuses on the impacts of an event, emergency, or crisis, rather than specific scenarios. Each type of situation could have an impact on our people, our facilities, our technology, or our clients. Each type of situation could require communications, whether internal or external. The team-based, impact-driven approach utilized by Deloitte provides the best resources to assess and address the impacts of an event.

Deloitte has developed a specific plan to address the impacts and continuity of operations in light of a pandemic ("Pandemic Plan"). The Pandemic Plan and related governance model is aligned with the crisis management and business continuity processes, including the use of the National Incident Support Team, but is supplemented by additional members of a Pandemic Response Committee. The Pandemic Response Committee monitors potential pandemic developments, and would oversee implementation of specific pandemic action steps based on the severity of the pandemic, including targeted communications that would be issued internally and externally, and identification of critical people and resources.

Deloitte maintains an active disaster recovery and business continuity program which help us to continue delivering information-technology-related services should a disruption occur. Deloitte's program includes the following basic activities:

- Business continuity planning for IT infrastructure support staff;
- Disaster recovery planning of our technology through multiple failover capabilities;
- Implementation of resilient architectures where technology allows;
- Risk assessments as part of continual service improvement, with countermeasures identified and implemented for the newest scenarios; and
- Internal review process for maintaining the quality of plans and services
- Business continuity plans ("BCP") include emergency-response business procedures, which go into effect following the occurrence of a disaster or other unplanned interruption.
- Disaster recovery ("DR") plans include technical and business contact call lists, as well as notification and escalation information and architecture diagrams. Where pertinent, third-party information is also included. Recovery time objectives and recovery point objectives are documented and tested for each plan.
- BCP/DR plans are subject to review and testing every 12 months with industry standard testing methods.
- Risk assessment test scenarios vary based on business sensing and technology security. Test results are reviewed and recorded.

In summary, Deloitte has a comprehensive disaster recovery and business continuity program that is designed to provide for the continuity of essential IT business functions and critical business processes following the occurrence of a disaster or other unplanned interruption impacting Deloitte's IT infrastructure.

Data Privacy

Deloitte has a data privacy policy, applicable procedures, and personnel dedicated to making sure we are in compliance with applicable data privacy laws and regulations.

Deloitte has policies and procedures that protect personally identifiable information ("PII") and support compliance with US and the European Union (EU) legal requirements relating to the transfer and

processing of PII. Deloitte is Safe Harbor certified and adheres to the Safe Harbor Privacy Principles of notice, choice, onward transfer, security, data integrity, access and enforcement with respect to such PII. When requested and necessary to meet legal requirements, Deloitte will enter into "Standard Contractual Clauses" to legitimize the transfer of personal data from the EU to the US.

Deloitte is not a "Covered Entity" as defined under the Health Insurance Portability and Accountability Act, as amended ("HIPAA"). Therefore, Deloitte is generally not required to, and does not, comply with the obligations of a Covered Entity. However, when Deloitte acts in the capacity of a "Business Associate" to our clients, as such role is defined under HIPAA, Deloitte is required to comply with the obligations of a Business Associate under HIPAA. Deloitte has implemented policies, procedures, and controls that facilitate compliance with those obligations.

Deloitte.

WV IES

9.k. Configuration Management Plan

Draft Deliverables

August 8, 2017

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Configuration Management Plan Introduction

The purpose of the Configuration Management Plan is to define the project's control environments and mechanisms for configurable items, and to maintain the integrity of the project's work products by identifying and implementing documentation and software management systems. The Configuration Management Plan outlines the overall strategy to setup and maintain the project's environments, including documentation and software repositories, development tools and supporting software products. The plan provides an overview of the configuration management systems, processes, roles and responsibilities, templates, and tools that will be used to effectively manage the project's deliverable documents, and code.

Overview

Purpose

The purpose of the Configuration Management Plan is to define the project's control environments and mechanisms for configurable items, and to maintain the integrity of the project's work products by identifying and implementing documentation and software management systems.

The Configuration Management Plan also defines the overall strategy to setup and maintain the project's environments, including but not limited to the following:

- Documentation repositories
- Software repositories
- Development and testing environments
- Developer tools
- Supporting software products

Lastly, the Project Data Privacy Plan is defined at the end of the Configuration Management Plan, identifying the project data items that will need special access and security control and describing how those requirements will be achieved throughout the life of the project, including how sensitive data items will be properly disposed of at project close. Special handling and control is required when working with client confidential or personally identifiable information (PII).

Configuration Management Plan Objectives

The objectives of this Configuration Management Plan are to:

- Define the configuration management systems, processes, roles and responsibilities, templates, and tools that will be used to effectively manage the project's deliverable documents, code, and technical environments.
- Define the project's data management approach, including the tools and procedures that will be used to manage it. The approach will cover access rights, archiving, backup, and disposition of project data for each class of configurable item.

- Define the client PII and/or other client confidential data items the project will access or create, as well as how that sensitive data will be properly managed throughout the life of the project to meet client security and privacy compliance requirements.

Roles and Responsibilities

The following table describes the roles and responsibilities involved in implementing the project's Configuration Management Plan:

Role	Responsibility
Project Manager	• Review and approve the Configuration Management Plan • Review CM assessment findings • Assign project team members to appropriate action items resulting from CM assessments and baseline activities; monitor and manage those action items to closure
Configuration Manager	• Establishes and maintains the Configuration Management Plan • Establishes and manages the project's configuration management systems • Coordinates configuration management activities for the project • Manages, maintains, and controls configuration items according to the Configuration Management Plan • Schedules and conducts configuration assessments
Project Data Privacy Manager	• Establish and maintain the Project Data Privacy Plan. • Work with the project's configuration manager to establish and maintain restricted access folders for sensitive data items, as well as access and handling protocols for project team members. • Provide project team with training and/or guidance on data security access and handling requirements. • Review data security infrastructure and procedures to confirm their integrity, usage, and effectiveness. • Help define, implement, and maintain the project data privacy back-up and archive plans. • Confirm proper handing and/or destruction of client PII that is no longer used or needed by the project and project team members.
Change Control Board (CCB)	• Review, approve, and prioritize change requests to controlled items.

Implementing the Configuration Management Plan

Successful implementation of the Configuration Management Plan is the shared responsibility of the entire project team. The project team is responsible for understanding and consistently following configuration management protocols and procedures as defined in the project's Configuration Management Plan.

The project's change control board (CCB) is tasked with reviewing and approving changes to the project's configuration items. The CCB for the project is defined in the project organization section of the Project Management Plan.

Configuration Management Strategy

Configuration Management Strategy Overview

The Configuration Management Strategy describes the planned activities to accomplish the setup and management of project environments related to the WV DHRR IES. Furthermore, the Configuration

Management Strategy governs how the project team utilizes these environments as it designs, develops, tests, and deploys the WV HSP solution. The strategy outlines the technical approach, methodologies, and practices for completing project activities in the areas of technical environment management, configuration management, and infrastructure management and production support environments.

Technical Environments

The WV HSP technical environments are designed to accommodate multiple versions of the WV HSP application so the activities of development, testing, training, pre-production and production can occur concurrently. The logical and physical views of the WV HSP environments are depicted below in the Physical and Logical Environments table.

Development	Testing	Training	Pre-production	Production
• Unit/smoke testing • Data conversion	• Smoke/Integration/ String/Functional/ Regression/ Validation • Data conversion	• Knowledge transfer • Training	• System/Validation/ UAT • Performance/stress/ security testing	• Production maintenance

Physical and Logical Environments

Unit/Smoke Testing Logical Environment

Unit/smoke testing environment is used to develop and unit/smoke test the WV HSP application. In addition, the development environment hosts the project and application development infrastructure, including configuration and version management tools. It also acts as a repository for the project deliverables. The development environment allows collaboration of development that actually takes place on developer workstations equipped with tools such as Visual Studio.NET, MSDN Library, and SQL Server client.

Data Conversion Logical Environment

The data conversion environment is the primary environment in which the development and the initial unit testing of the WV HSP data conversion processes occur. The data conversion team also utilizes this environment to carry out data analysis, as well as the identification of data mapping between the legacy data source and the destination WV HSP database. As a development environment, the setup of the data conversion environment will be the same to allow the development team access to the same set of development/analytical tools that are accessible for the development team in the logical development environment.

Test Environment

The test environment provides an area to validate the components and verify functional accuracy and completeness of the WV HSP application prior to the user acceptance test phase. The project team designed the test environment to replicate the structure of the production environment, but not its capacity. The comprehensive test environment supports different phases of testing, including smoke, integration, string, functional, and regression. This environment supports not only the end-user functionality, but also the back-end functions such as batch processing, interfaces, and information delivery. This provides an integrated test environment for the validation for system components working together prior to the initiation of user acceptance test in the pre-production environment.

Smoke/Integration/String/Function/Regression/Validation Logical Environment

The smoke/integration/string/functional/regression/validation test environment is the user-functionality testing environment. This dedicated environment enables testers to confirm the application meets business functional requirements. Depending on the specific test activity taking place, this environment is setup for the test team to verify and validate the functionality of the application.

Data Conversion Logical Environment

The logical environment for data conversion in the physical test environment is setup to provide a location in which data conversion programs are executed by the project data conversion team to support the various testing activities where converted legacy data is required. This environment also provides a separate location in which data conversion executions can occur outside of development for the purpose of process performance and data cleansing evaluation through mock runs.

Training Environment

Knowledge transfer and training: The knowledge transfer and training environment is a dedicated environment that allows participants to perform hands-on exercises during training delivery. The data in the environment is setup based on converted legacy data so provide a realistic representation of the actual application environment for the trainees to experience.

Pre-Production Environment

The architecture of the pre-production environment mirrors the setup of the production environment with less capacity in regard to server count and storage capacity. As a best practice for configuration management, only after a change has been verified in the pre-production environment is it migrated to the live production environment.

Pre-production is also used as an alternate test environment for the testing of specific functions that may benefit from being verified in a production-like environment.

System/Validation/UAT

Set up in the pre-production environment, the system test environment provides an environment to carry out testing/validation activities independent from the testing efforts of the testing team as a part of the build validation for each quality Build. As an environment designed to support validation and other project-owned testing activities, the project team plans to support and assist in the overall process in the preparation and configuration of the environment prior to the start of the testing activity. The environment is prepared in accordance to the requirements and the needs of the particular testing activity taking place.

Performance/Stress/Security

Similar to the environment described in the physical test environment, this logical environment provides an alternate ground for the testing team to perform the required testing activities in a production-like environment. In addition, the variation of the hosting approach for the physical environment, upon which this environment is based, allows a closer estimation of application's performance/stress metrics in the production environment.

Production

The production environment serves as the live environment of the WV HSP application and is hosted in the in a location specified by WV DHHR.

Environment Management

This section details the approach for managing the WV HSP environments, including maintenance, access, and tools used.

Environment Maintenance

All environments specified as part of the requirements will be maintained by the Deloitte team throughout the engagement.

Environment Access

The configuration manager works with the project team to identify the level of access for each environment. For the purpose of this document, the accesses below refer to one of the following:

- System Administration Access – Access to maintain and operate the given environment
- Application Configuration Access – Access to add/modify/delete application configuration items
- Application Data Access – Access to view/add/modify/delete application data stored in a database

The following table lists the high-level access control mechanisms for the various project environments:

Environment	System Administration Access	Application Configuration Access	Application Data Access
Development	• Full access to Dev Team	• Full access to the Deloitte project team • Read only access to the admin team	• Full access to the Deloitte project team • Read only access to the admin team
Testing	• Full access to the testing Team	• Full access to the Deloitte project team • Read only access to the admin team	• Full access to the Deloitte project team • Read only access to the admin team
Training (Knowledge Transfer and Training)	• Full access to the designated turnover staff	• Full access to the Deloitte project team • Read only access to the admin team	• Full access to the Deloitte project team • Read only access to the admin team
Pre-Production	• Full access to the deployment Team	• Full access to the deployment team	• Full access to the admin team
Production	• Full access to the deployment Team	• Full access to the deployment team	• Full access to the deployment team

High Level Access Control Mechanism for the Physical Environments

Tools Used for Environment Management

Tools to be used to support the configuration management activities will be determined. Examples of our typical tools can be seen below.

Tool used to manage technical environments	Tool Description and Functions
Jenkins	Build – Automates software build process
JAMA	Version control – Controls access to source code, build and configuration files, and tracks changes made to the environment
Microsoft SharePoint	Asset Management - maintains lease, licensing, and maintenance agreements for application components within an environment

Configurable Items

Configurable Item Identification and Management

The term configuration item refers to the fundamental unit of a configuration management system. Examples of configuration items include requirements documents, source code, and data models. Configuration management systems allow version and access control of the configuration items through a combination of process and tools.

Configuration items are organized into classes and types. The three configuration item classes are:

- Documentation
- Software/Code
- Infrastructure

The configuration item types are:

- Controlled
- Managed

Controlled items require a greater degree of rigor than managed items, and are subject to the project's change control process. Managed items require a lesser degree of control, and are not subject to the change control process. The specific controls for each class and type of configuration item are described below.

Managed Items

Managed items do not need to be signed off and put under change control. However, they still need version control and team access, and may be stored in the same configuration management system as the controlled items.

The following work products (or work product classes) are managed configuration items for this project:

#	Work Product (Or Class Of Work Product)
1	Meeting Minutes
2	Status Reports
3	Checklists

Controlled Items

Controlled items need to be signed off and subsequently managed through the change control process. After sign-off, changes to the item must be reviewed and approved through the change control board first.

Configuration Item Class: Documentation

The project can also reference the Deliverables Log for a complete listing of controlled document configuration items: that is, document deliverables that will be signed off by and delivered to the client. Usage of this log can reduce informational redundancies.

Configuration Management Baselines and Assessments

Configuration Management baselines archive a set of signed-off deliverables. Baselines can occur anytime, but it is recommended that baselines are performed at key project milestones, like the end of the planning or requirements project life cycle phase. For example, at the end of requirements, signed off requirements documents should be baselined prior to beginning the design phase.

Configuration Management Assessments are performed to validate the versioning and integrity of the work products in a baseline, confirming that they are complete, accurate, and conform to project standards. This includes verifying items such as naming conventions, version history, and so on.

The purpose of this section is to define the project's plans for performing configuration management baselines and assessments.

Configuration Management Baseline and Assessment Plan

The following table provides the project's plans for establishing configuration management (CM) baselines and performing CM assessments. A CM assessment will be performed against a baseline to confirm and validate the integrity, completeness, and correctness of the project work products that make up the baseline.

#	Configuration Management Assessment Type	Frequency/Cycle/Schedule	Assessment Scope	Assessment Criteria	Responsibility
ex	Functional Configuration Management Assessment	TBD	Release 1 requirements	TBD	Project Manager

Configuration Management Baseline and Assessment Deliverables

Non-compliance issues identified during the CM Assessment must be documented in the tracked through closure. A completed baseline must be accompanied by a successful and completed CM assessment.

Non-Compliance and Escalation

Non-compliances identified during a configuration management assessment represent risk to the project and therefore need to be documented, prioritized, addressed, and tracked to closure. The CM Assessment Checklist is the statement of record for a CM assessment. It is the responsibility of the project team to address the identified non-compliances, and the configuration manager's responsibility

to monitor the CM Assessment Checklist to verify closure of relevant "NC Status" (Non-compliance Status) items, and/or escalate open items when necessary.

The following table outlines the escalation criteria and procedures the project will follow if CM non-compliances are not accepted by the project or resolved in an appropriate amount of time.

	Escalation Criteria		
#	Escalation Path/Level	Level of Risk	Age of Non-Compliance
1 (Ex)	Log as a risk to the project	Low, Medium	= > 10 days
2 (Ex)	Escalate to Deloitte project leadership (e.g., Deloitte principal or director)	Medium, High	= > 10 days
3 (Ex)	Escalate to the project steering committee and/or project sponsor	High	= > 20 days

Configuration Management Baseline and Assessment Reporting

The project will use the results of the configuration management assessment documented in the completed Configuration Management Assessment Checklist and the completed Baseline Form to communicate the results of CM assessments and the establishment of baselines.

CM baseline and assessment communications are defined in the Project Status and Stakeholder Communications Plan section of the Project Management Plan.

Deloitte.

WV IES

9.I. Data Conversion Management Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

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The following people are designated recipients of the final version of this document:

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WEST VIRGINIA IES PROJECT

Data Conversion Management Plan Introduction

The Data Conversion plan should provide specifics around data conversion processes including conversion, cleansing and data validation across the WV IES Project. This plan should provide insight into a variety of objectives across data conversion. Through reading this document, you should be able to understanding which data objects will be in scope, understand the detailed data cleansing process and understand processes around data governance. The finalized plan will also provide detail around providing corrective actions to any issues across data conversion and also timelines around the data conversion process.

a) Overview

The Data Conversion Management Plan deliverable defines the approach and processes Deloitte will use to convert data from the source systems to the WV HSP system. The Data Conversion Strategy includes the activities required to plan, design, develop, test, validate, and implement data conversion activities. The Migration Strategy covers a phased conversion approach to support the implementation rollout approach consisting of a pilot followed statewide implementation. The overall strategy also includes an approach to data cleanup in order to assist DHHR agencies as part of the data conversion from the source to target system.

b) Purpose

The purpose of the Data Conversion Management Plan is to document the approach and provide the general planning for the data conversion for WV IES. This deliverable acts as a guide for conversion and highlights the roles and responsibilities of the parties involved including the executive stakeholders, State business and IT, legacy business and IT, field workers, the PMO and Deloitte.

The purpose of this document is to:

- Describe the System Development Life Cycle (SDLC) methodology used for data conversion activities. This methodology aligns with the overall project SDLC methodology and timelines.
- Establish a roadmap and a set of guidelines to follow when extracting data from the source system, during data cleanup activities, and when converting data to WV HSP system.
- Define the roles and responsibilities of Deloitte, DHHR and other parties involved in the conversion effort.
- Identify and describe data conversion design, development and testing tools
- Define approach for verification of conversion software and testing
- Define approach for verification of converted data for Pilot and Statewide implementations
- Define conversion approach to support parallel system operations
- Provide strategy for any data that does not convert
- Contingency planning for conversion risk identification and mitigation
- Define approach to support UAT

c) Scope

This Conversion Plan focuses on the policies, procedures, and activities required to complete conversion for WV HSP pilot and statewide rollout, including identification of software and procedures that result from simultaneous operation of WV HSP, RAPIDS, OSCAR and FACTS systems.

The Data Conversion Management Plan will be updated at the end of each project cycle phase as appropriate to accommodate changes in the current business and technical environments. Also, this document will be supplemented with more detailed requirements as documented in the project's requirements deliverable and with the design artifacts in the Data Conversion Specification deliverable.

d) Common Terms and Definitions

The common terms and their definitions as used in this document are listed below.

Term	Definition
Conversion Go-Live Date	The date when a case is converted from RAPIDS into the WV HSP system
Conversion Month	The month of the Conversion go-live date for a case
Pre-Conversion Period	The period prior to the Conversion month for a case
Conversion Effective Month	The month immediately following the conversion month for a case. WV HSP issues ongoing benefits from the Conversion Effective Month.
Conversion Future-Future Month	The month immediately following the conversion effective month
Master Client Index	Central repository that contains individual specific information of clients known to WV HSP and legacy systems.
Flagging Files	Files generated after each statewide or interim conversion run that will consist of cases and clients successfully converted into WV HSP.
Day zero interface files	Files exchanged with interface partners one time immediately after conversion.
Pilot conversion	Conversion of cases into WV HSP where a group of counties go live
Statewide implementation	Conversion of data into WV HSP where the remaining counties go live
Interim Conversion	Process to convert data on a more frequent basis in between Pilot and statewide implementations.
Staging	Storing the extracted data in database before performing validation and transformation.
Trial Runs (Mock go-live)	Trial runs are conversion mock runs performed prior to the production pilot or statewide implementation to validate the results of the conversion software and processes that are used in the live data conversion run.
Data mapping	Defining transformation rules to move data elements from the source systems to WV HSP.

e) Roles and Responsibilities

Data conversion is critical to the success of the project and involves timely input and informed decision making from DHHR stakeholders during the conversion phase.

Deloitte's Conversion Team Lead manages the overall data conversion effort. The Deloitte's conversion team is comprised of the following roles:

- Conversion Lead

- Data Analyst
- Extraction Transformation and Load (ETL) Specialists/Developers
- Database Administrator (DBA)
- System Administrator
- Testers

Resources are on-boarded to the conversion team during the appropriate phases of conversion.

Table 1 below describes the roles and responsibilities of Deloitte and Agency for source data cleanup. This table also includes the roles and responsibilities of Deloitte and Agency involved in the development, review and approval of this deliverable.

Role	Name(s)	Responsibilities	Organization
Conversion Lead	TBD	Overall responsibility for the data conversion effort including day-to-day management of conversion activities and resources Responsible for conversion deliverables and work products Track progress and update status to Project Management Identify risks and develop mitigation strategies Lead Conversion Design sessions	Deloitte
Conversion Developer	TBD	Participate in Conversion Design sessions and provide input to Conversion Design deliverables Develop, unit test, and execute custom programs to convert data from the conversion staging area to the target data model Correct defects in the custom programs identified during conversion testing Assist testers with researching issues identified during conversion testing	Deloitte
ETL Specialist	TBD	Participate in Conversion Design sessions and provide input to Conversion Design deliverables Develop, unit test, and execute ETL routines to convert data from the conversion staging area to the target data model Correct defects in the ETL routines identified during conversion testing Assist testers with researching issues identified during conversion testing	Deloitte
Database Administrator (DBA)	TBD	Participate in Conversion Design sessions and provide input to Conversion Design deliverables Configure the Conversion Database and staging areas Load the data extracts and purge unused data Assist testers with researching issues identified during conversion testing	Deloitte
System Administrator	TBD	Prepare conversion environment for development and testing purposes Prepare Mock and Production environment	Deloitte
Data Analyst	TBD	Map source to target data elements Participate in Conversion Design sessions	Deloitte

Role	Name(s)	Responsibilities	Organization
		Generate data cleanup reports identifying missing data, duplicate data, and inconsistent data Verify the activities of Agency's data cleanup team to verify duplicate data and inconsistent data is removed and missing data is provided Assist Agency Data Conversion Coordinator with researching issues identified during data cleanup	
Testers	TBD	Test converted data in the conversion environment Identify defects	Deloitte
Conversion Lead	TBD	Manage Agency resources and conversion activities such as source extract development, participation in data mapping, and Conversion Design sessions Provide input and guidance for conversion deliverables	DHHR
Subject Matter Expert (SME)	TBD	Participate in conversion planning sessions and provide input to Conversion Plan deliverables Work jointly with other Agency resources to conduct a data quality assessment of the source data Participate in Conversion Design sessions and provide input to Conversion Design deliverables Review and validate conversion test results and provide business subject matter expertise	DHHR
Legacy Database Administrator (DBA)	TBD	Produce source logical and physical data models, and assist other Agency resources with source data quality analysis Participate in Conversion Design sessions and provide input to Conversion Design deliverables	Agency
Data Conversion Coordinator	TBD	Manage and coordinate data cleanup activities Act as the primary liaison between the user and the Project team Monitor progress against goals for data cleanup activities and provide status updates to Project Management Work closely with the Conversion Team related to cleanup activities	DHHR
Data Cleanup Team	TBD	Responsible for performing cleanup activities in the source system	DHHR
UAT Testers	TBD	Test converted data in UAT environment Identify defects	DHHR
Project Management Office (PMO)	TBD	Track deliverable progress Publish deliverable to Central Project Repository Submit deliverable with cover letter, DED and any associated documentation	Deloitte
Deliverable Approver	TBD	Validate the completion of the final deliverable Submit a written deliverable acceptance or rejection notification to Deloitte team with an approved deliverable as accepted for payment or a rejected deliverable with a statement of actions to be taken	DHHR

f) Assumptions and Constraints

i) Constraints

- The Data Conversion and Migration Strategy is dependent upon the Implementation Plan. Changes to the current implementation plan consisting of a pilot followed the Statewide rollouts, will alter the conversion cutover activities.
- Completing Conversion Design, develop, test, validate, and implement data conversion activities are contingent upon timely access to source data.

ii) Assumptions

This section lists the assumptions which must be met for a successful data conversion. These assumptions include but are not limited to the following:

- Knowledgeable legacy staff will be available as needed to assist in the conversion process throughout the project phases including planning, requirements analysis and system design, development, testing, data cleansing, mock go-lives, go-lives, implementation readiness and post go-live support.
- Decisions on conversion issues will be made in conformance to the project schedule and not result in delays to the schedule.
- Implementation planning will be completed in a timely manner allowing the conversion schedule to be constructed.
- Significant modifications to the legacy systems and interface systems for purposes other than the transition to WV HSP will not be made during the requirements analysis and system design, development, testing or implementation of the WV HSP conversion. If there are any critical modifications that must be made, it must be approved by the change control board.
- The legacy staff will support the legacy data cleansing activities in a timely manner.
- The maintenance team for legacy systems is responsible for modifications to the legacy systems and interfaces systems as needed in order to support the conversion to WV HSP. These will be identified, designed, developed and tested in alignment with the WV HSP application development timeline. Deloitte Consulting will facilitate, guide and provide feedback.
- Manual data entry by the workers after conversion will be minimized by approved data mappings which default and derive values not available in legacy systems. Additionally, the conversion dry runs will communicate tasks that workers can do to increase the success of conversion and/or benefit matching.
- It is required to have some downtime on both WV HSP and the legacy production systems to conduct production data conversions. These windows will be planned in advance of roll-outs.
- Legacy data extracts will be provided as quickly as possible in the legacy batch schedule during the conversion weekend.
- Legacy and WV HSP batch schedules will be limited to only the required processes during the conversion weekends/windows. Only those jobs that are required to support conversion or to deliver services to clients will be executed.

- Data extraction from the legacy systems for data conversion including case and client selection criteria, Spider Web, formatting into flat files and delivering the files for conversion, is the responsibility of the Source System staff. Deloitte will facilitate, guide and provide feedback.
- A WV HSP trained worker will be available for each office statewide in advance of Pilot. It is possible that there will be converted clients in unexpected places of the state based on the Spider Web.
- All processing will be completed in the legacy systems before the cutover for Conversion. Examples of these processes include – interfaces, payments etc. Any exceptions to this will be reported and discussed by the legacy staff during development, testing and implementation in order to take necessary actions.
- "Once in WV HSP, always in WV HSP. And in WV HSP." This means that the data for the related cases and clients is converted to WV HSP and from that point, WV HSP remains the system of record for that data.
- Deloitte will facilitate the entire WV HSP conversion process. This facilitation will include the oversight and guidance of State conversion processes.
- Any issues that cannot be readily resolved related to these primary assumptions will be escalated to the Project Management Office (PMO) immediately.

2. Source Systems for Conversion

The data conversion process involves converting data from multiple legacy sources into WV HSP. This section identifies and briefly describes the legacy source systems for conversion.

The following are brief descriptions of these source systems:

a) RAPIDS

RAPIDS is West Virginia's integrated automated benefit eligibility system for administering federal public assistance programs at the state level. RAPIDS currently supports the following State and federal programs administered by the DHHR

- Medicaid
- Work Programs
- Emergency Assistance
- Refugee Assistance
- SNAP
- Disaster Supplemental Nutrition Assistance Program (D-SNAP)
- SNAP Employment and Training Program
- TANF/West Virginia WORKS
- Children's Health Insurance Program (CHIP)
- Low-Income Energy Assistance Program (LIEAP)
- Non-Emergency Medical Transportation
- WV School Clothing Allowance

RAPIDS resides on an IBM BC (business class) z12 model 2828-502 Enterprise Server Mainframe and uses DB2 as the database with COBOL OS/390 and VM source programs, with data stored and accessed on more than 460 database tables. RAPIDS also has over 27 interfaces and data exchanges with various federal and State agencies.

b) OSCAR

OSCAR is the mainframe computer system that enables the West Virginia Bureau for Child Support Enforcement (BCSE) to fulfil its mission of establishing, modifying, collecting, and disbursing child, medical, and spousal support.

The main functions of OSCAR under Title IV-D includes:

Locate parents

Establish paternity and child support

Modify and/or enforce court-issued support orders

Collect and distribute support payments

OSCAR resides on an IBM Enterprise Server Mainframe with operating system zJOS Version 2 Release 1. The OSCAR Database is DB2 Version 10 and the Programming Language is Software AG's Natural Version 4.2.5.

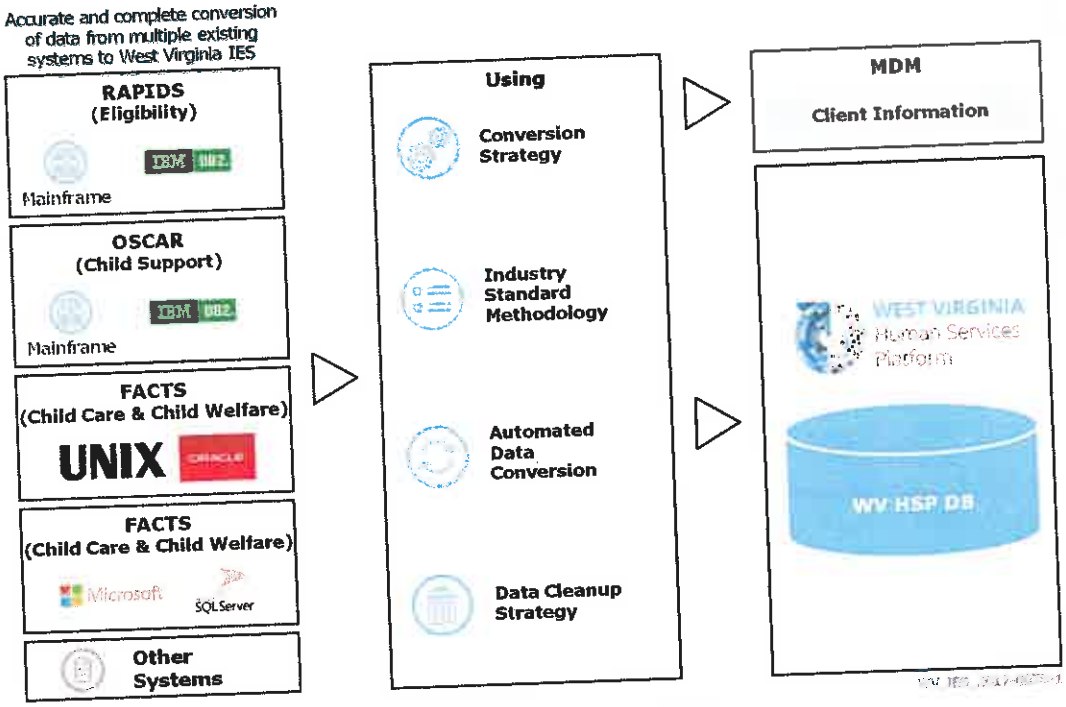
c) FACTS

FACTS, a federally funded Statewide Automated Child Welfare Information System (SACWIS), supports the following State and federal programs administered by the DHHR:

- Adoption
- Child Protective Services
- Adult Protective Services
- Adult Residential Services
- Legal Guardianship
- Foster Care
- Youth Services
- Independent Living
- Family Preservation
- WV School Clothing Allowance
- Interstate Compact for Placement of Children (ICPC)

The core FACTS application software is currently in a Client Server PC environment, with integrated Web-based components. The development and production servers are HP platinum servers, using the HP-UX v3 (11.31) operating system. It uses Oracle and SQL server as underlying databases. UNIX Crontab is utilized for server scheduling of jobs and Oracle Jobs is used for database scheduling of tasks.

FACTS uses the mainframe only as a transient for data communications with RAPIDS, West Virginia Auditor's Office, MMIS, and the OSCAR system.



Source Systems for Conversion.

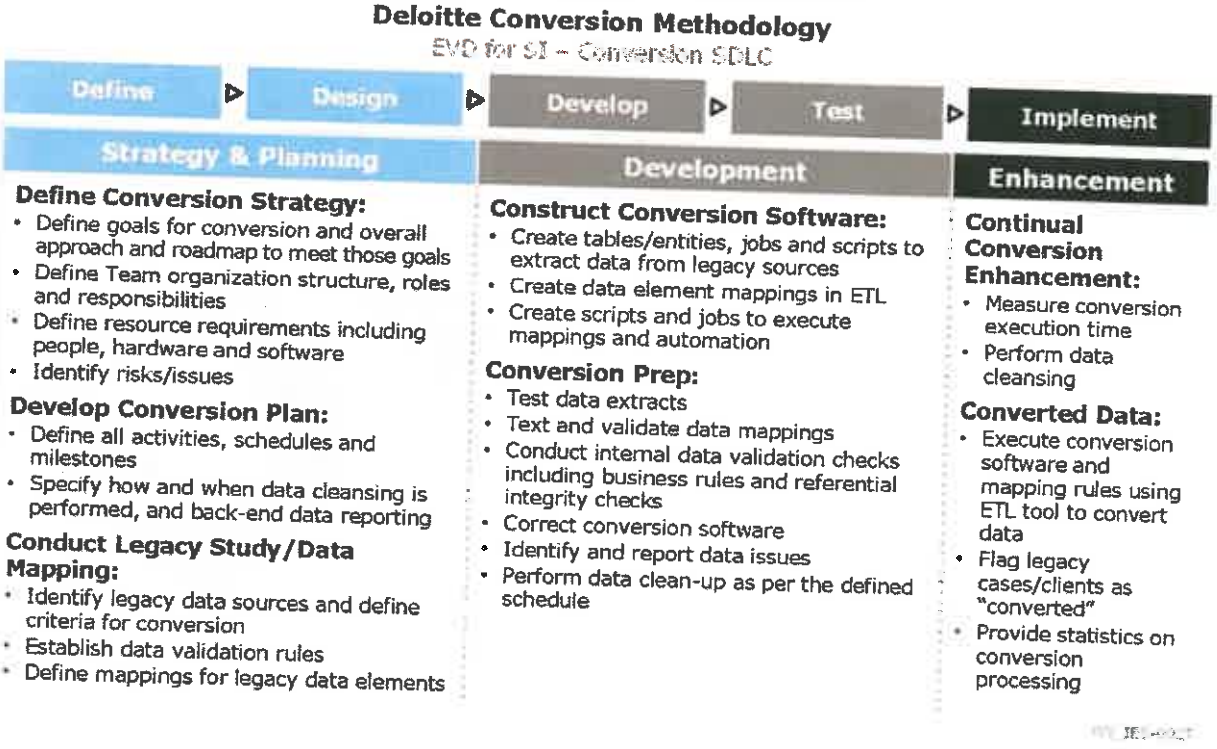
3. Data Conversion Methodology

This section provides a description of the Data Conversion and Migration Methodology including project timeline, activities, and milestones that occur in each conversion phase to convert data from the source system to the target system.

- Conversion Strategy and Planning – This phase begins with a thorough understanding of the source data. Identifying the data elements from the source system for migration to the target system is the next step in this phase. The Data Conversion and Migration Strategy is developed to support a data conversion approach and support the Implementation Plan. Deloitte documents the conversion requirements in the Deliverable D047 - Data Cleansing and Conversion Requirements Document. Additional details describing this phase are included in Section 3.1 of this document.
- Conversion Design – This phase includes data mapping of the source data elements to the target data model with the necessary transformation logic needed to support loading data to the target system. Deloitte revises the data mapping based on data model changes identified during the functional JAD sessions. Deloitte documents the Conversion Design in deliverable D048 - Data Cleansing and Conversion Specification Document. Additional details describing this phase are included in Section 3.2 of this document.
- Conversion Development – This phase includes setup of the conversion environment and the staging area to temporarily hold the extracted data. Deloitte installs and configures the ETL tool needed to extract, transform and load data from the source system to the target system. Deloitte develops the conversion scripts for the ETL tool and develops custom programs using Java as needed during this phase. Based on the knowledge of the conversion scripts, data formats, and

custom programs and their dependencies, conversion test scenarios are created. Additional details describing this phase are included in Section 4.3 of this document.

- Conversion Test – Deloitte verifies the converted data for data integrity, accuracy, and completeness during this phase. Deloitte verifies data quality by executing validation scripts, querying, and reporting on the converted data. Identify and address ETL issues and source data issues. The performance of the conversion programs is tested and improved as needed as part of the cutover plan. Deliverable D055 - Data Conversion System Integration Test Results documents the test results from the Conversion Test phase. Additional details describing this phase are included in Section 4.4 of this document.
- Mock Conversion Execution – This phase includes mock conversion executions with full volume production data to review and validate the conversion process, data quality, and the effectiveness of the data cleanup efforts initiated by the Agency during this phase. Additional details describing this phase are included in Section 3.5 of this document.
- Production Conversion Execution – The final phase is the Production Conversion Execution phase. Deloitte works with Agency to execute the conversion scripts in the production environment. At the completion of this phase, the converted data is available for end users to conduct casework in the production environment. Additional details describing this phase are included in Section 3.6 of this document.
- Legacy Data Cleanup – This is an ongoing phase which will begin the early project life cycle and continue until statewide implementation of functionality. Additional details describing this phase are included in Section 3.7 of this document.



a) Conversion Strategy and Planning

This section includes a timeline for each task and identifies associated dependencies. It describes the roles and responsibilities of the individuals and teams involved with the strategy and planning tasks. The activities are:

- Understand the source data.
- Identify source data entities and elements that need to be converted.
- Finalize the Migration Strategy and Go-Live approach.
- Refine the conversion requirements.

i. Understand Source Data

The first step in this phase is to understand source data elements, associated entities, relationships between entities, dependencies, and attributes of source data elements. In order to study source data structures, a series of source data sessions are held as identified in the work plan to gain an understanding of source data including its current usage, policy, and administrative guidelines. Deloitte Conversion Team Lead works with Agency SMEs to conduct these sessions.

Deloitte groups topics by each source system's business entities. For example, OSCAR business entities will be grouped as case, participants, and financials etc. Data entities and attributes associated with each of these subtopics are discussed during these sessions. Agency SMEs use the source system's data model, data dictionary, and supporting documentation as tools during the source data sessions to provide an understanding about the source data elements.

Table 3 provides an example schedule of the source data sessions with topics and subtopics to be discussed during each session. Similar schedule will also be created for RAPIDS, FACTS and other identified systems for conversion.

Session Number	Session Topic	Sub Topics	Hybrid Agile Sprint /Session Date
1	Data Sources	Data Sources	TBD
	Case Entities - I	Case Construct	
		Case Types, Status	
		Interstate/Intercounty Cases	
		Case/Worker/County/Office Relationship	
2	Case Entities - II	Case Ownership, Assignments	TBD
		Case Security Indicators	
		Case Additional Attributes	
		Case Participant Relationship	
3	Participant Entities	Participant Demographics	TBD
		Participant Address	
		Participant Employment	
		Participant Licenses, Assets, Insurance	
		Participant Security Indicators	
4	Establishment, Financials - I	Legal Actions	TBD
		Support Order	

Session Number	Session Topic	Sub Topics	Hybrid Agile Sprint /Session Date
		Obligations, Debt Types, Monthly Support Order	
		Case Balances (Current Support, Arrears)	
5	Financials - II	Collections, Held Payments	TBD
		Distribution/Disbursement Hold Instructions	
		Disbursements, Outstanding, Voids	
		Payee EFT/Debit Card Instructions	
6	IV-A/IV-E Referrals	IV-A10 Case Number, Status, Aid Codes	TBD
		IV-E Case Number, Status, Aid Codes	
		Title XIX Case Number, Status	
		IV-A Grant, Unreimbursed Grant Balances	
		IV-E Grant, Unreimbursed Grant Balances	
7	Enforcement	Enforcement Overview Attributes	TBD
		Current Status of Enforcement activities	
		In-Flight - Pending Activities & associated attributes	
		In-Progress Activities	
		Enforcement Related Attributes	
8	Supporting Data Entities - Part I	Employer Data	TBD
		Third Party Data	
		Organization Data	
9	Supporting Data Entities - Part 2	System Parameters	TBD
		Codes, Sub Codes	
		Case Action Logs	
		History Data	

Example Source Data Sessions Schedule for OSCAR

ii. Identify Data Entities and Elements

Deloitte uses the source system's data dictionary, information on data elements provided during the Source Data sessions, and additional input from Agency Business Analysts (BAs) and SMEs to identify source data entities and key attributes required to convert from the source system to the target system. The attributes of the source data elements used for Conversion Design in section 3.2 include:

- Data type
- Enumeration of the code type values
- Optional and not null attributes
- Key business rule(s)

The source data is primarily stored in a DB2 database residing in the mainframe for RAPIDS and OSCAR and in Oracle DB for FACTS. The conversion team analyzes additional data sources including Agency ad hoc data stores. Deloitte works with Agency SMEs to gain a better understanding of the ad hoc data stores and finalizes the list of data sources during this phase.

iii. Finalize Migration Strategy

The current implementation approach is to implement Origin using a pilot rollout followed by three regional rollouts. The migration strategy to convert data to support the implementation rollout approach is discussed during the Strategy and Planning phase. This includes the criteria for selecting the cases pertaining to each rollout and the approach to synchronize data between the source system and target system until statewide rollout is complete.

iv. Refine Conversion Requirements

This section describes how conversion requirements are refined and updated in the Data Conversion Requirements Document and IES Requirements Specification Document (RSD).

With the source data elements identified, the next step is the identification of the target system data entities to be converted using the target data model. Deloitte and Agency discuss and finalize the data that need to be converted as well as the data that needs to be excluded from conversion during the Strategy and Planning phase. Data that is obsolete and not required for functioning of the target system, redundant data that is normalized in the target data model, and data that must be archived for reference purposes are examples of criteria that will result in data that is excluded from conversion to the target system. The data not converted but required for future reference is stored in a separate area in the target system in a read only format and available for retrieval using querying tools.

Deloitte provides the conversion requirements in the form of data entities that are identified for conversion along with a data entity level mapping that identifies the source data to target data in Deliverable Data Conversion Requirements Document with the following details:

- Source entity (table)
- Source Key attributes (columns)
- Target entity (target table)
- Target Key attributes

The changes to conversion requirements may also have impact on IES requirements for other functions. This impact is identified, communicated and updated in the IES Requirements Specification Document (RSD). After Deliverable for Requirements is approved, Deloitte updates the conversion requirements section to include any changes identified in the source data sessions.

v. Responsibilities

The following table lists the tasks and activities associated with the Conversion Planning and Strategy phase and identifies the responsible parties within Deloitte and Agency organizations against identified tasks.

Tasks	Activities	Primary Responsibility	Secondary Responsibility
Study Source Data	Study and understand the source data, data structure (Entities, relationships, dependencies, etc.)	Deloitte: Conversion Lead, DBA, Data Analyst	
	Provide subject matter knowledge	Agency: Conversion Lead, DBA,	

Tasks	Activities	Primary Responsibility	Secondary Responsibility
		SME	
Identify Data Elements	Identify and maintain a list of entities, data elements used in source system	Agency: DBA	Deloitte: DBA, Data Analyst
	Identify characteristic of each data elements (i.e. data type, mandatory/optional, list of code values, business rules etc.)	Deloitte: Conversion Lead, Data Analyst	Agency: Conversion Lead, DBA, SME
	Categorize the data elements into conceptual business entities	Deloitte: Conversion Lead, Data Analyst	Agency: DBA SME
	Provide Data Dictionary, CSEAS system information, codes, combination of codes, history of changes	Agency: Conversion Lead, DBA, SME	Deloitte: Conversion Lead
Finalize migration Strategy	Finalize Migration Go-Live approach	Deloitte: Conversion Lead	Agency: Conversion Lead
	Integrate Data Conversion process with Migration Go-Live strategy.	Deloitte: Conversion Lead, DBA, Data Analyst	Agency: Conversion Lead, DBA, SME
	Create and submit Deliverable 6.1 Data Conversion & Migration Strategy	Deloitte: Conversion Lead	Deloitte: Data Analyst
	Provide inputs to approach	Agency: Conversion Lead, DBA, SME	Deloitte: Conversion Lead, DBA, Data Analyst
	Approve Go-Live approach	Agency: Leadership, Conversion Lead	Agency: SME
	Review and approve Deliverable	Agency: PMO, Conversion Lea	
Refine Requirements	Determine the data elements, records sets that needs to be converted	Deloitte: Conversion Lead, Data Analyst	Agency: DBA, SME
	Refine conversion requirements	Deloitte: Conversion Lead, DBA, Data Analyst	Agency DBA, SME
	Provide inputs to requirements	Agency: DBA, SME	

Roles and Responsibilities for Conversion Strategy and Planning Phase

b) Conversion Design

This section describes activities occurring in the Conversion Design phase. Tasks within the phase, timeline for each task, and associated dependencies are included. The section also includes a list of roles and responsibilities for the Deloitte and Agency staff.

The Conversion Design phase activities are:

- Conduct Conversion Design sessions.
- Define data mapping specifications.
- Define data extract specifications.
- Complete Data Conversion Design.

The outcome of the above activities is the completed Data Conversion Design.

i. Conduct Conversion Design Sessions

Scheduling and conducting design sessions for converting data is the first activity in the design phase. The Deloitte Conversion Team's objective for this activity is to meet with Agency SMEs and DBAs to finalize source to target mapping for each identified data element. Deloitte uses the high-level entity mapping as a starting point to initiate the design sessions.

The Conversion Design session schedule included here identifies data entities covered in each session along with dates. The Conversion Design sessions follow the corresponding functional JAD and JTD sessions. This allows for identifying changes to the data model to support the functional and technical design of the target system. An additional set of five sessions is required to discuss the approach for processing each interface file to be used during the implementation rollover period to process interfaces in the old and Origin. Additional details describing this approach are included in Section 4.7.6 of this document. The following table shows the example schedule for the sessions.

Session Number	Session Topic	Meeting Date
1	Source Data Extract Strategy	TBD
2	Participant Demographics	TBD
3	Participant Address, Licenses	TBD
4	Participant Employment, Assets, Medical	TBD
5	Employer Data	TBD
6	Third Party, Organizations data	TBD
7	IV-A Referral	TBD
8	IV-E Referral, Title XIX Referral	TBD
9	Case, Case type & Status	TBD
15	Establishment - Scheduling, Legal Action	TBD
16	Establishment - Support Order	TBD
18	Financials - Case Accounts	TBD
19	Financials - Case Account Balances	TBD
20	Financials - Hold Instructions	TBD
21	Financials – Collections	TBD
22	Financials – Disbursements	TBD
23	Financials - Obligee Disbursement Instructions	TBD

Session Number	Session Topic	Meeting Date
25	Enforcement Overview Attributes	TBD
26	Enforcement Activities Attributes	TBD
28	Historical Data, Case Logs	TBD
29	Closed Cases	TBD
30	Reference Tables	TBD
31	Interface data session 1	TBD

Example Data Conversion Design Sessions Schedule for OSCAR

ii. Define Data Mapping Specifications

Data mapping involves identifying specific source data elements to be migrated, mapping them to a corresponding target system data element, and transforming the data to the target data model.

The data mapping specifications provide instructions for how data will be extracted from the source, transformed where necessary, and loaded in the target system. The data mapping rules form the basis to develop the Extract-Transform-Load (ETL) routines and custom conversion programs. Deloitte uses the inputs below for detailed data mapping rules:

- Refined requirements documented within the Requirements Traceability Matrix.
- Modifications identified in the JAD sessions affecting the base data model.
- Source system data dictionary.
- Target system data dictionary.

iii. Define Data Extract Specifications

As part of this activity, Deloitte IES team will work with DHHR and maintenance and operation team members of RAPIDS, FACTS and OSCAR systems to define the data extract specification for conversion. These specification will include the case/client selection criteria, table/record level extract rules, layouts and format of the extract files to be produced.

DHHR and Deloitte will define the selection criteria for data to be included in the extract files. These criteria depends on the roll out strategy. For example, the pilot conversion extract files will only include data associated with the selected pilot county.

iv. Complete Conversion Design

In this activity, Deloitte will define the other components of conversion design taking into consideration reports needed for business use, parallel systems operations, impact to trading partners/third party systems, handling of data conversion exceptions.

Deloitte finalizes the Conversion Design within Deliverable Detail System Design (DSD). The Conversion Design includes the data mapping used to develop and test the ETL scripts and custom conversion programs. The plan details data cleanup related tasks and timelines. The source data extraction schedule and frequency as agreed between Deloitte and Agency is included in the conversion plan.

v. Responsibilities

Table 6 below summarizes the activities and the responsibilities of Deloitte and Agency during the Conversion Design phase.

Tasks	Activities	Primary Responsibility	Secondary Responsibility
Conduct Conversion Design	Attend functional JAD sessions to understand the new child support system project	Deloitte: Conversion Lead, Data Analyst	
	Conduct Conversion Design sessions for each data entity	Deloitte: Conversion Lead, DBA, Data Analyst	Agency: Conversion Lead, SME, DBA
	Create and submit data mapping rules	Deloitte: Conversion Lead, DBA, Data Analyst	
	Participate and provide inputs to data mapping	Agency: Conversion Lead, DBA, SME	Deloitte: Conversion Lead, DBA, Data Analyst
Data Extract Specification	Extract key source data, send to Deloitte for understanding the system and analysis	Agency: DBA, Developers	Deloitte
Data Mapping Specification	Perform mapping logic from source to target as applicable	Deloitte: Conversion Lead, DBA, Data Analyst	Agency: Conversion Lead, DBA, SME
	Review and approve Data Mapping Rules – appendix to Deliverable 6.2 Data Conversion & Migration Management Plan	Agency: Conversion Lead, DBA, SME	
Complete Conversion Design sessions	Provide inputs to data mapping	Agency: DBA, SME, Developer	Deloitte: Conversion Lead, DBA, Data Analyst ETL Specialist
	Provide business rules or conditions that affect data conversion or migration	Deloitte: Conversion Lead, DBA, Data Analyst	Agency: Conversion Lead, DBA, SME
	Complete Conversion Design	Deloitte: Conversion Lead, DBA, Data Analyst, ETL Specialist	Agency: Conversion Lead, DBA, SME
	Create and submit Design Deliverable	Deloitte: Conversion Lead, ETL Specialist	
	Review and approve Design Deliverable	Agency	

Roles and Responsibilities for Conversion Design Phase

c) Conversion Development

This section describes the Conversion Development phase tasks, timelines, and associated dependencies. It identifies roles and responsibilities of individuals and teams associated with development tasks.

Activities involved in conversion development are:

- Setup ETL software. This includes installation and configuration activities.
- Develop data transformation and loading scripts using the ETL software.
- Develop data transformation and loading scripts using custom developed scripts as needed.
- Identify data elements that require manual conversion.
- Develop data quality analysis reports and queries to identify data conversion anomalies and issues.
- Develop data conversion report and queries that confirm the successful loading of source data.
- Unit Test ETL and custom built conversion scripts.

i. Setup ETL Software

The Informatica PowerCentre ETL tool will be primarily used to develop the conversion scripts to extract, transform and load source data to the target system.

Deloitte installs and configures the ETL tool in the conversion environment including the client component installed on the developer workstations, required to design and develop conversion scripts.

Deloitte validates the installation and configuration of the ETL tool by executing data transformation and load scripts using mock extract files.

Hierarchy of conversion methods - The method used within the data conversion process follows the below hierarchy. Deloitte works with Agency to minimize the need for manual conversion by:

- Using the ETL tool – Informatica PowerCentre to perform a majority of the data entities to be converted.
- Using conversion programs – When transformation rules and mapping require special handling, custom coding is selected.

ii. Extract Source Data

Data extraction routines for sources systems will be developed by the teams responsible for maintaining the corresponding source systems. Native language and tools available in the source systems will be used to extract the data out of source databases. For example, COBOL and DB2 SQL queries will be used to extract the data out of RAPIDS DB2 database. Data is extracted from the source system on a periodic basis using the agreed upon format to perform the conversion development activities. Source systems team verify the extracted data before transferring to the staging area. Deloitte uses data quality analysis reports and queries to verify the data extract received from Agency to confirm the format and content of source data.

Deloitte provides feedback to the source system teams based on the analysis on the source data extract and these teams will modify the extraction routines as needed. The data extracts are a critical step within the conversion process and used iteratively within the Data Cleanup phase. Details of the source data cleanup is documented in section 3.14.

iii. Develop Data Conversion Software

The conversion software is constructed based on the defined design and utilizes the combination of Informatica ETL tool and custom Java programs. Deloitte constructs the transform and load scripts based on the mapping specification documents. Collectively, these routines are responsible for extracting, transforming, and loading the necessary source data into the target system.

Type of transformation	Software Approach
Basic, static mappings	Informatica (COTS Extraction, Transform and Load tool)
More complex, dynamic rules that are subject to change during dry runs and testing (example: Case merge rules)	Decision Tables to be executed in the WV HSP rules engine
Transformations that are available with WV HSP existing business objects and functionality (example: Income budgeting)	Custom developed Java code to drive, monitor, and interact with the existing WV HSP application code

This activity includes unit testing of conversion software. The Deloitte ETL Specialist or developer along with the data analyst verifies the conversion logic by executing the software and analyzing the results.

Deloitte documents test details including the data load hierarchy and the test approach in the XXX Test Plan document. The test plan includes the approach to verify source data extraction, detailed test scenarios to test aggregate level details across data entities, and granular case level detail verified through the application.

iv. Responsibilities

The following table summarizes the activities and responsibilities of Deloitte and Agency during Data Conversion Development phase.

Tasks	Activities	Primary Responsibility	Secondary Responsibility
Setup ETL software	Install ETL software – Informatica PowerCentre	Deloitte: ETL Specialist, DBA	Agency: DBA, Developer
	Configure ETL software	Deloitte: ETL Specialist, DBA	Agency: DBA
	Involve Agency Developers (shadow process)	Deloitte: Conversion Lead, ETL Specialist, DBA, Developer	Agency: Conversion Lead, DBA, Developer
Identify Methods	Identify data that requires manual conversion efforts.	Deloitte: Conversion Lead, ETL Specialist, DBA Data Analyst	Agency: Conversion Lead, DBA, SME

Tasks	Activities	Primary Responsibility	Secondary Responsibility
	Identify data elements that would require a customized programming instead of using ETL software	Deloitte: Conversion Lead, ETL Specialist, DBA, Data Analyst	Agency: Conversion Lead, DBA, Developer
Extract Source Data	Define Extract Specification	Deloitte: Conversion Lead, ETL Specialist, DBA	Agency: Conversion Lead, DBA
	Extract data from source system and ancillary systems in an agreed upon format on a periodical basis to support development and testing efforts	Source System Team – RAPIDS, OSCAR, FACTS	Deloitte: Conversion Lead, DBA
	Verify and validate extract before sending to Deloitte	Agency: Conversion Lead, DBA, Developer, Tester	Deloitte: Conversion Lead, ETL Specialist, DBA, Data Analyst
	Verify and validate data extracts received from Agency	Deloitte: Conversion Lead, ETL Specialist, DBA, Tester	Agency: Conversion Lead, DBA
Develop Conversion Software	Develop Conversion software using ETL tool	Deloitte: Conversion Lead, ETL Specialist, DBA, Developer, Data Analyst	Agency: Conversion Lead, DBA, Developer
	Develop custom program	Deloitte: Conversion Lead, ETL Specialist, DBA, Developer, Data Analyst	Agency: Conversion Lead, DBA, Developer
	Complete development & unit testing	Deloitte: Conversion Lead, ETL Specialist, DBA, Developer, Data Analyst	Agency: Conversion Lead, DBA, Developer
	Create and submit Deliverable 6.3 Data Conversion and Migration Test Plan	Deloitte: Conversion Lead, Data Analyst, ETL Specialist	
	Review and approve Deliverable 6.3 Data Conversion and Migration Test Plan	Agency: Conversion Lead, SME, DBA	

Roles and Responsibilities for Conversion Development Phase

d) Conversion Test

This section includes the tasks, timelines, and associated dependencies in the Conversion Test phase. The goal of conversion testing is to confirm the completeness, accuracy, and usability of the data once migrated to Origin. The roles and responsibilities of the individuals and teams associated with conversion testing tasks are included.

The Conversion Test phase activities are:

- Prepare an environment for testing conversion routines.
- Prepare test scripts.
- Execute conversion ETL jobs and custom programs.
- Load converted data in the test environment to support system test activities.
- Review and validate the results.

Conversion testing is an integral part of the overall application testing and data from the source system used in test scenarios within the target system for verifying conformance and compatibility. The preparation timelines for conversion test scripts aligns with system test preparation to facilitate communication and coordination between test teams for comprehensive testing. The Conversion Test phase facilitates end-to-end testing using converted data to mimic business scenarios and verify source data ease of usage in the target system. Deliverable D055 - Data Conversion System Integration Test Results Test Results is produced at the end of this phase.

i. Prepare Testing Environment

The first step in the Conversion Test phase is to prepare the environment required to perform testing activities. A separate conversion environment stages the extracted data first then the Deloitte loads the converted data in the target system. Conversion testing verifies and validates the conversion test results using conversion validation scripts.

ii. Prepare Test Scripts

Deloitte develops the conversion test scripts based on the data mapping specification. The test scripts are developed with the following objectives:

- Completeness – a measure of how much of the source data was migrated
- Accuracy – a measure of the degree to which the converted data was appropriately mapped and stored
- Functionality – the ability to transact in the application on data that was converted
- Performance – the ability to convert the required data in the defined time frame

Test scripts include verifying case level details including person, demographics, relationships, address, support order, enforcement and financial details through the target system. Test scripts also include aggregate level testing of conversion data including case counts at worker, supervisor, unit, and office level. Negative test scenarios verify the exclusion of closed cases that were not included in the source conversion logic.

Data Conversion System Integration Test Cases deliverable includes detailed guidelines for preparing test scripts.

iii. Execute Conversion Routines

Deloitte executes multiple test cycles to confirm the accuracy and precision of conversion scripts by verifying the mapping, refining the dependencies, and streamlining the sequence of jobs. A conversion test cycle consists of the following steps:

- Extract source data from source system and send data
- Load data in staging area
- Execute the conversion jobs
- Load data in the target environment

Deloitte works with Agency to plan for the execution of the conversion routines as they depend on the extraction of source data. The Data Conversion Coordinator works with Deloitte to prioritize the data cleanup based on the data quality analysis reports and the type of data errors and the remediation approach.

iv. Load Converted Data to Test Environment

A primary objective of application system testing is to use the converted data for system test activities. Converted data is loaded and made available in the appropriate test environments to support testing. Deloitte collaborates with Agency to coordinate the frequency of the data load and the refresh of the converted databased on identified defects.

v. Review and Validate Results

Converted data is reviewed and validated through following activities:

- Technical Validation,
- Front-end Field Validation
- Front-end Transactional Validation
- Operation of parallel systems (as defined in the section 3.9)

The conversion testers review the test results by executing SQL statements to validate the correctness of data. The outcome of the review validation activity identifies conversion errors that require fixes. The source of the error is analyzed to determine if the issue is due to a problem with source data or an issue with conversion routine. If the error is determined as a conversion issue, the conversion team fixes the conversion routine. If the issue is identified as a problem with source data, then it is sent to the Data Conversion Coordinator for fixing the source data.

The results are also reviewed online in the target system. End users are involved in the review and validation process by comparing the case data in the source system with the target system. Critical processes such as eligibility determination, case changes, renewals and interfaces with critical trading partners will be tested against converted data.

In addition, the validation will also involve execution of subcomponents such as Interface split and merge jobs, flagging of case and clients in source systems, update of conversion status in MCI to test the parallel systems operation as defined in the section 3.9.

vi. Responsibilities

Table 8 below summarizes the activities and the responsibility of Deloitte and Agency for each activity during the Conversion Test phase.

Tasks	Activities	Primary Responsibility	Secondary Responsibility
Execute conversion testing	Prepare environment to test conversion routines	Deloitte: DBA, Developer	Agency: DBA
	Prepare test scripts	Deloitte: Tester, Data Analyst	Agency: Tester
	Test Conversion software in test environment	Deloitte: Tester, Data Analyst	Agency: Tester, Data Analyst
	Create and submit Deliverable 6.4 Data Conversion and Migration Test Results Report	Deloitte: Conversion Lead, Tester, Data Analyst	
	Review Converted data	Deloitte: Conversion Lead, Tester, Data Analyst, DBA	Agency: SME, Tester, Data Analyst, DBA
	Review and approve Deliverable 6.4 Data Conversion and Migration Test Results Report	Agency: Conversion Lead, SME	
Load converted data in system test	Load converted data in system test environment(s) to support system testing activities of target child support system	Deloitte: DBA, ETL Specialist	Agency: DBA
Identify & fix conversion errors	Identify, track and fix conversion software based on test results	Deloitte: Conversion Lead, DBA, Developer, ETL Specialist	Agency: Conversion Lead, DBA, Developer
	Produce data cleanup reports based on issues identified in source data	Deloitte: Conversion Lead, DBA, Developer, Data Analyst	Agency: Conversion Lead, Data Conversion Coordinator

Roles and Responsibilities for Conversion Testing Phase

e) Support for UAT

After the conversion process has been sufficiently tested through the System testing phase, the converted data will be shared with the State who will perform their own set of test scenarios. Oftentimes, the Conversion UAT test scenarios are more functional in nature and focus on performing typical scenarios that would be done after the go-live. Deloitte will provide a jointly agreed amount of converted data to the user acceptance test region where State testers will validate correctness and completeness of converted data. As issues are identified and conversion rules are updated, Deloitte will reload the converted data and the State will be able to validate the fix has resolved the issue.

Ultimately, the UAT testing will conclude when the converted data is agreed to be at a sufficient level of success.

f) Trial Conversion Runs

Conversion trial runs are performed prior to the production pilot or statewide implementation to validate the conversion software and processes that are used in the live data conversion run. In preparation for each of the rollouts, a minimum of three conversion trial runs (fewer if satisfactory results are produced) are executed before the corresponding production Conversion run. Trial runs are an essential part of the conversion testing process as these allow the conversion team to simulate what occurs during a live production conversion run. In doing this, conversion team is able to foresee and correct issues in the conversion process before serious implications occur. These runs are also essential to benchmark the performance of the conversion software and tune the performance if necessary. This is also a way to prepare the state staff who are involved with the production data conversion so that the various activities of the conversion process are familiar to parties involved.

The activities associated in the Trial Conversion Execution phase are:

- Prepare the mock conversion environment for pilot and region rollouts.
- Verify access and readiness of the Trial conversion environment.
- Execute the trial conversion run
- Review and validate the results.

i. Prepare Trial Conversion Environment

The first step in the process of proceeding with mock conversion is to setup the mock environment that reflects a production like environment setup. The mock conversion environment is setup in the production region for pilot conversion rollout. For regional and statewide rollouts, the environment is created in a non-production region. Trial Conversion environments are also created in each source systems to support this conversion activity. An online application instance is also required for data review and validation purposes. The conversion team works with the technical infrastructure team on sizing configurations to setup the environment.

ii. Verify Access for Readiness

Deloitte verifies access to the conversion environment after the setup is complete to confirm that appropriate access to system, application, and file system is available to carry out the conversion execution process.

iii. Execute Trial Conversion

Deloitte conducts three mock executions before the pilot rollout and one mock execution before each regional rollout. The goal of the first mock executions is to mimic the sequence of executions carried out during the production execution and identify errors related to data and environment. After the identified issues are fixed, the second mock execution focuses on performance of the overall conversion execution processes. The next set of three mock conversions are executed before each consecutive regional rollout. These mock conversions are focused on identifying data errors related to each regional rollout and assist with fine-tuning the performance of the conversion programs.

iv. Review and Validate Results

Once the execution is complete, both Deloitte and Agency review the results. The results are reviewed online in the target system. End users are involved in the review and validation process by comparing the case data in the source system with the target system. Agency SMEs assist the end users in the review process. Deloitte also validates the results using online application and data quality reports.

v. Responsibilities

The following table summarizes the activities and the responsibility of Deloitte and Agency for each activity during the Mock Conversion Execution phase.

Tasks	Activities	Primary Responsibility	Secondary Responsibility
Setup Mock environment	Setup software access to execute mock executions	Deloitte: Conversion Lead, DBA, System Administrator	Agency: Conversion Lead, DBA
	Provide details on setting up mock environment	Deloitte: Conversion Lead, DBA, ETL Specialist	Agency: Conversion Lead, DBA
	Prepare mock environment	Deloitte: Conversion Lead, DBA, System Administrator	Agency: Conversion Lead, DBA
Execute Mock Conversion	Execute multiple iterations (5 executions) of mock conversion executions	Deloitte: Conversion Lead, DBA, Developer, ETL Specialist	Agency: Conversion Lead, DBA
	Execute two mock executions before pilot conversion	Deloitte: Conversion Lead, DBA, Developer, ETL Specialist	Agency: Conversion Lead, DBA
	Execute one mock execution before each phased roll-out	Deloitte: Conversion Lead, DBA, Developer, ETL Specialist	Agency: Conversion Lead, DBA

Tasks	Activities	Primary Responsibility	Secondary Responsibility
	Prepare conversion verification results	Deloitte: Conversion Lead, Data Analyst, Tester	Agency: Conversion Lead, SME, Tester
	Extract production data from source system	Agency: Conversion Lead, DBA	Deloitte: Conversion Lead, DBA
	Execute region roll-out in multiple phases	Deloitte: Conversion Lead, DBA, ETL Specialist	Agency: Conversion Lead, DBA, Developer, SME
	Validate conversion results	Deloitte: Conversion Lead, DBA, ETL Specialist, Data Analyst, Tester	Agency: Conversion Lead, DBA, Developer, SME, Tester
	Review conversion results	Agency: Conversion Lead, DBA, Developer, SME, Tester	Deloitte: Conversion Lead, DBA, ETL Specialist, Data Analyst, Tester

Roles and Responsibilities for Mock Conversion Execution Phase

9) Production Conversion Execution

This section describes the activities and tasks during the Production Conversion Execution phase. It includes the timeline for each task, and any associated dependencies. It also describes the roles and responsibilities of the individuals and teams who work the conversion tasks during this phase.

The schedule for implementation of WV HSP will include one pilot and one statewide implementation. The pilot implementation with be done using a set of counties that will be identified during the requirement analysis phase. Additionally, there will be a statewide implementation when the data that have not been converted as part of the pilot implementation will be converted. The Implementation Plan document will identify the counties that will be part of each rollout.

The activities associated in Production Conversion Execution phase are:

- Prepare the pilot production environment
- Verify access to the environment (environment readiness)
- Prepare a Conversion Readiness checklist
- Conduct a Go or No-Go decision meeting
- Extract, transform, and load converted data into the production environment
- Review and validate the results of the conversion execution

The Conversion Execution phase is the final phase within data conversion. In this phase, conversion routines are executed in the production environment, data is migrated to the target system and final conversion verification is performed.

i. Prepare Production Environment

The production database environment is setup by Deloitte along with Agency Technical team as outlined in the Configuration Management Plan. The production environment includes a staging area for the temporary storage of the data extracts. Once the source data format and content are confirmed, the data is transformed and loaded to the target system.

ii. Verify Access to the Environment

This step occurs after the production environment setup is complete. Deloitte verifies that Agency and Deloitte conversion team members are able to access the conversion environment and perform conversion activities.

iii. Prepare Conversion Readiness Checklist

The objective of this activity is to prepare a detailed checklist to confirm aspects are in place before proceeding with conversion execution. The checklist includes criteria to verify production environment readiness and verifies if data cleanup is complete. The checklist verifies if the Day Zero Data is loaded and cases that converted to the target system are flagged within the source system. Deloitte also includes plans for manual conversion (if any) in the checklist.

iv. Conduct Go or No-Go Decision

Based on the mock conversion results, environment readiness, and Conversion Readiness Checklist, Deloitte conducts a Go or No-Go decision meeting with the project stakeholders, and Agency approves the decision. The decision depends upon the exit criteria set for the mock conversion and UAT activities.

v. Execute Conversion in Production Environment

After successful completion of the previous activities and obtaining Agency approval, the conversion scripts are executed in the production environment. Extracted data from the source system is provided to the conversion team to execute the conversion jobs in production environment. Executing conversion jobs takes time to complete, and the completion time is measured during the test and mock conversion phases. Based on the time taken, the unavailability of the source system is estimated and access is limited during conversion execution for rollouts. The source system availability must be limited to confirm data is preserved during the execution. The system can resume access only after the successful completion of conversion jobs and completed verifications.

vi. Verification of implementation data

After the conversion execution is completed for Pilot and Statewide implementation, the converted data will need to be verified through the WV HSP application to confirm that critical business function work as desired.
The cut-over implementation plan will include a time frame for this verification activity. Deloitte will work with DHHR to define the set of verification checks. These checks will include the most common business functionality such as view case and participant data through online screens in read only mode, perform case changes and renewals etc. DHHR will identify a team of business users such as field workers, clerks and supervisors to perform this verification. These team members will identify case list for such verification in advance. As part of the validation that will occur after Pilot implementation, the team would consist of people from converted offices and select cases for case changes and renewals based on the pending work on their desk.

If any data conversion issues are found then a data fix is applied to correct the data and this fix is then verified. If data fix cannot be applied immediately then a workaround procedure for the issues

will be identified and communicated to the business users.

The system is released to the field workers and offices only after this validation is successfully completed or workarounds have been identified and approved by the state business owners if any issues are identified.

vii. Responsibilities

The following table summarizes the roles and responsibilities of Deloitte and Agency for each activity during the Production Conversion Execution phase.

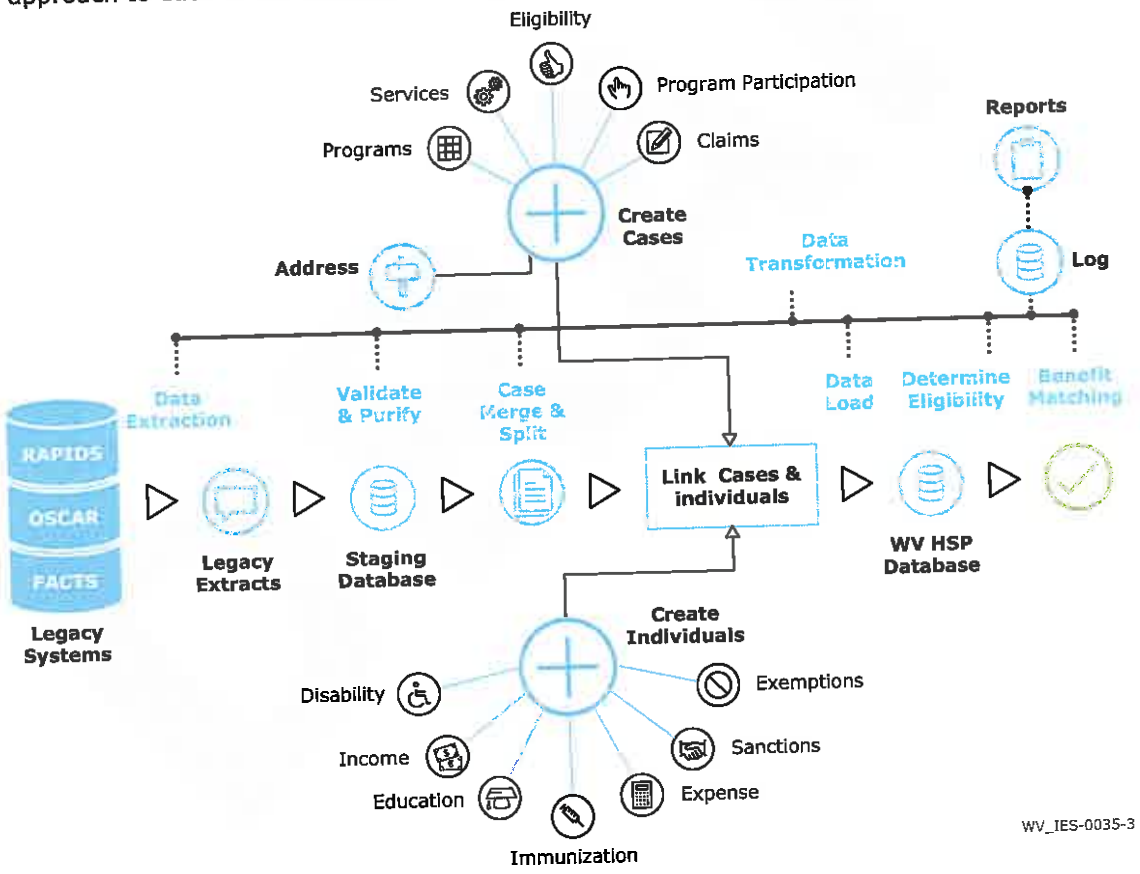
Tasks	Activities	Primary Responsibility	Secondary Responsibility
Prepare Conversion Readiness checklist	Prepare Conversion Readiness Checklist	Deloitte: Conversion Lead, Data Analyst	Agency: Conversion Lead, SME
	Create and submit Deliverable 12.1 – Readiness Assessment	Deloitte: Conversion Lead, Data Analyst	Agency: Conversion Lead, SME
	Review and approve Deliverable 12.1 – Readiness Assessment	Agency: Conversion Lead, SME, DBA	Deloitte: Conversion Lead, Data Analyst
Conduct Go or No-Go Decision	Conduct Go or No-Go meeting for pilot implementation Provide inputs to decision making	Deloitte Conversion Lead	Agency: Conversion Lead
	Provide inputs to decision making	Deloitte: Conversion Lead, ETL Specialist	Agency: Conversion Lead, SME, DBA
	Review and approve decision	Agency: Conversion Lead	
Execute Conversion in Production Environment	Execute pilot conversion	Deloitte: DBA, ETL Specialist	Agency: DBA
	Execute region roll-out in multiple phases	Deloitte: DBA, ETL Specialist	Agency: DBA
	Validate conversion results	Deloitte: Conversion Lead, ETL Specialist, DBA, Data Analyst, Developer	Agency: Conversion Lead, SME, DBA, UAT Tester
	Review conversion results	Agency: Conversion Lead, SME, DBA, UAT Tester	Deloitte: Conversion Lead, ETL Specialist, DBA, Data Analyst, Developer

Roles and Responsibilities for Production Conversion Execution

h) Technical Approach

This section describes the technical processes that are designed and built into automated conversion software. The legacy data flows from one conversion process to another and reaches to the target WV HSP database.

The goal of Data conversion is to seamlessly transfer data into the new WV HSP system in a manner transparent to end users. Conversion of data accurately from source to target system is extremely important to successful rollout of the new solution within the state. Deloitte brings our data conversion experience from 25 states to define a conversion process that meets the needs of the state. The corresponding sections below provide an overview of the data conversion tasks along with our approach to each of the activities involved in the process.



i. Data Extraction Process

Data extraction is the process of pulling data from the legacy systems based on predetermined selection criteria. The data extraction rules are defined based upon the information gathered and analyzed during the legacy study performed in the Define and Design phases. For the first phase of WV HSP solution, the data extraction criteria may be defined to extract open cases and closed cases within X months from RAPIDS system.

The data extraction processes will be developed using the native programming language of the corresponding legacy platform.

In addition to the extracting data from legacy sources, this process also marks or flags the extracted clients (recipients) and associated cases in the legacy databases, so that these clients/cases are not updated in source systems during conversion.

Upon execution of this process, extract files are created that contain the data to be converted for specific counties/offices. These data files are then migrated via FTP from the legacy systems to IES server for subsequent processing. As part of the extraction process, control reports that provide statistics on extracted data are also created and sent to IES. Upon receipt of the extracts on the IES side, sanity checks are performed and control totals are matched to identify issues in the extract files.

ii. Staging Database Load Process

This process loads the data received in the extract files from the source systems into the Staging database, which is a relational database. The staging database design mimics the extract file layouts and is built within the solution to accept the extracted data from the source systems so as to help validate the integrity of the information received. Each source system may have its own table structure within the staging database. This provides the conversion team a single source from which to continue with the remaining phases of the conversion flow.

iii. Data Validation Process

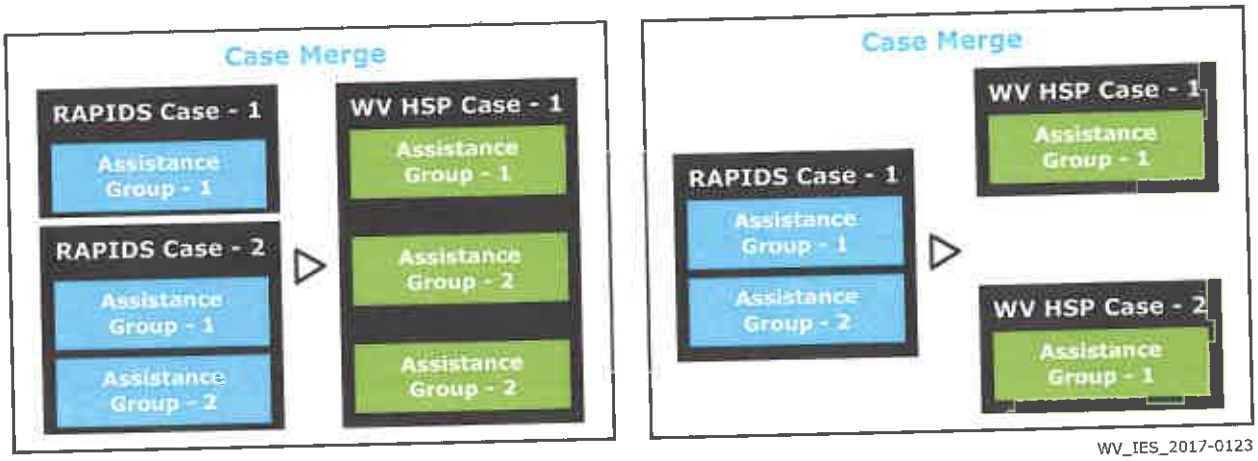
Data validation is the process of identifying and reporting the data anomalies in the data extracts received from the legacy systems. The source system data loaded in the staging database is validated to make sure that it meets the IES data integrity and constraint rules. The data is verified for assumptions in format and relationships so the conversion rules can be executed. Sample data verifications include: validation of numeric values, verification of list of values, and validating that individuals exist within the case. If the extracted data does not meet the basic quality requirements, the data will not be able to be converted since conversion rules are based upon the data assumptions. Cases or clients that fail validation are identified as a conversion failure and are reactivated in the legacy system.

As part of the validation process, control and error reports are created. These reports are reviewed and validated to identify areas for data purification. In the purification process, errors from the validation process are corrected in the legacy system. These errors may be corrected through manual, automated, or a combination of automated/manual updates based upon the type of data. The types of data purification include standardization of data format, entering valid data values, and correcting incorrect data values.

Once the data is corrected through manual or automated processes, it is likely that this data will be validated in subsequent runs.

iv. Case Merge/Split Process

We understand that in RAPIDS system, multiple assistance groups are combined under one case. However, the case structure in WV HSP could vary from the current groupings as DHHR may adopt new business processes and case management approach with the implementation of the new HSP system.
Therefore, when program data is converted from RAPIDS and other systems to WV HSP, these programs are consolidated for a single household in a single case. Individuals who are part of that household and are associated to each of these programs in legacy are also converted and associated to this single case along with their associated individual data such as income, assets, disability, education etc.



Case Merge/Split Approach.

The merge process allows conversion to achieve the concept of a single case for a single household. Our conversion solution contains case merge functionality that we were able to successfully implement during previous conversion efforts which allows for various program and individual specific information to be automatically merged onto one case in WV HSP solution on specifically defined conversion logic. For example, if a household is receiving multiple Medicaid program/services, Medicaid Works or Medicare Savings Program in RAPIDS system, the different cases maintained for each of those assistance programs are merged onto a single case with different assistance groups. These rules can be further extended for converting SNAP and TANF cases into WV HSP solution.

Coupled with the concept of case merge is the need for a case split process. There may be instances where although most programs and information for a household are captured on a single case, depending on policy and/or business related circumstances it may be necessary to be housed in a different case.

Deloitte conversion team will work with the DHHR staff to determine the business and conversion rules that are associated with this functionality during Joint Application Design sessions.

v. Data Transformation Process

During this process, the conversion rules that were established during JAD sessions are executed against the data. The common data definition rules are applied to each data element, which confirms that the data eventually loaded into the solution, conforms to the prescribed data model.

The data not available in the source system but required in the solution is defaulted to defined values to confirm that there is a smooth transformation process. Conflicting data elements or entities are then identified and the appropriate information is eliminated from the available data set to fulfill the data precedence goals. Finally, the transformation mapping process determines which data element from the source systems' table maps to in the integrated table set of the solution. This data set is then used as the source for the load process from the staging tables into the actual application tables.

vi. Data Load Process

During this Conversion step, the merged and translated data is loaded into the WV HSP solution database. The data is loaded into the appropriate IES tables that are used by functional areas such as eligibility, child support, and child welfare applications. This data load process equates to the Data Collection process except data will be loaded without user input in the online screens. The data is loaded to

preserve referential integrity within WV HSP database, and in many situations, values are created to link appropriate tables. Through this conversion process, summary and exception reports are generated. These reports as well as subset of converted cases/clients are reviewed to make sure that the rules have been correctly applied.

The data load process provides flexibility and recoverability mechanism using the following strategy:

- Define logical units of work and rollback points. The data load process is structured and divided into multiple sub-processes in such a way that the referential integrity of converted data is preserved. Typically, the load process confirms that a logical unit of work is completed before committing the data in the database. For example, the load process commits the data for a case only when the core data for a case is successfully loaded into the database. If a piece of data is failed to load, the load process rollbacks the entire logical unit (e.g. case) of the data. Other logical units of the data, for which there are no errors, can still be loaded into the database. The failed data can be analyzed later and fixed to reload into the database. This allows for the load process to selectively cancel or reload the data into WV HSP database.
- Use database recovery mechanism. Database backups or checkpoints are taken before the data load process is started. Therefore, if a decision is made to cancel or reset the entire load processes, these backups or checkpoints can be used to restore the database back to the pre-load status.
- Prohibit or minimize updates during conversion. Only the data load process updates or inserts the data into the database tables for the WV HSP solution. Other conversion processes like data validation, merge and transformation process or update the data in temporary staging tables. This approach allows easier recovery option if the conversion is cancelled before the load process begins.

During conversion execution, no users and batch processes are allowed to update any data in the target WV HSP solution. During this period, legacy systems also prevent users and processes to update the data associated with cases/clients extracted for conversion. This confirms that if the database is restored during conversion, no other data updates are lost.

vii. Determine Eligibility and benefit matching

This process provide a mechanism for conversion team to measure the accuracy of converted data. Once data is converted to WV HSP, the Eligibility Determination process is run against the Food Stamp, TANF, Medicaid, CHIP, and Child Care case data to determine what benefits the client should receive in the new WV HSP system. The result of this process is then compared to the benefits that were issued from the legacy system through the Benefit Match process. If the benefits are different between legacy and IES, the case is marked as a "benefit mismatch" and remains in conversion mode.

For Medicaid cases, this process confirms that the clients are grouped into the right category of assistance with right level of services. This confirms that the converted data is complete and accurate enough to run eligibility calculate benefit according to policy rules. The benefit matching will be done as part of each trial run. We will work with the DHHR to review the benefit matching results, identify patterns and implement resolutions.

The cases where benefits do not match, needs manual review. Until that happens legacy benefits will continue to go out of The WV HSP system. So clients' benefits are not impacted. Our continuous improvement approach confirms that the volume of such cases is very low. Multiple cycles of this process should be carried out to achieve the desired accuracy level.

i) Approach to parallel system operations

The WV HSP system will be implemented using a phased approach i.e. Pilot followed by the statewide implementation. The data from sources systems such as RAPIDS, FACTS and OSCAR will also be converted in a phased manner. This requires operating the existing systems and new WV HSP systems in parallel while maintain cases and serving clients within their respective domains. The parallel system operations must prevent inappropriate and/or duplicate eligibility to clients and also confirm that Interface processes with other state and federal systems work appropriately with no loss of data.

Deloitte strategy for parallel system operation involves the following functionality:

- Use of Master Data Management solution containing Master Client Index to track conversion status of clients
- Use of MCI for Interface processing
- Case/client section for conversion using spider web logic
- Flagging cases and clients in Source systems
- Interim Conversion
- Third Party Data Synchronization
- The following subsections describe these functions briefly.

i. Use of Master Client Index

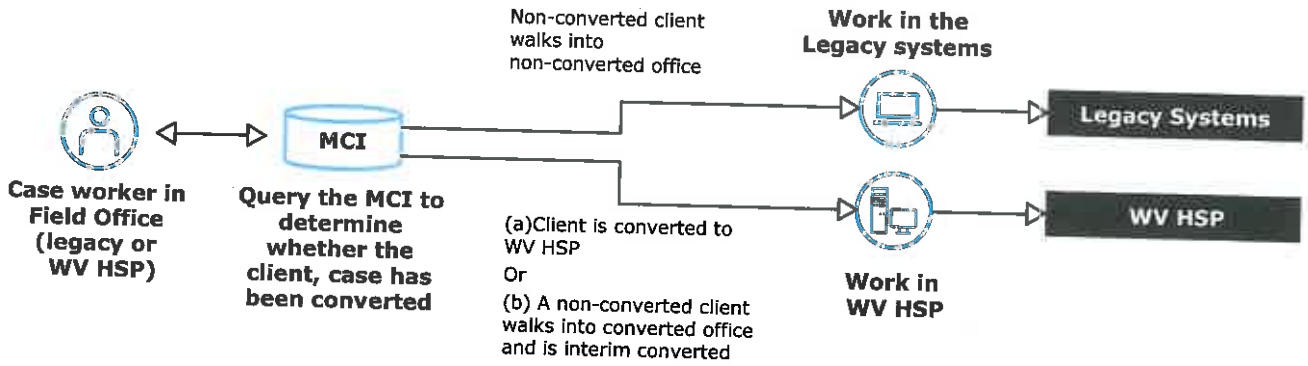
To navigate the period of time when WV HSP is operating in parallel with the legacy systems, the approach is to develop and use a common factor between the legacy systems and the new solution. That shared piece is the Master Client Index (MCI), a central repository that contains individual specific information of clients known to DHHR. The existing Master Data Management Solution contacting MCI will be used for this purpose. The MCI data model will be enhanced to add attributes to track the Conversion status for clients and their system participation. Since the existing MOM solution for MCI already contains clients from RAPIDS and FACTS systems. The MCI will also be loaded with the clients present in the OSCAR prior to Pilot conversion of OSCAR.

Client Clearance

During Pilot and Statewide implementation of WV HSP, in order to maintain continuity and data accuracy, it is essential that both the legacy systems and WV HSP communicate with the MCI at the time of file clearance to determine whether a client is known to DHHR or not. If the client is not present in the MCI, a new client record will be inserted in the MCI either by legacy systems or WV HSP depending on which system is servicing the client.

Supporting Transition

As part of the conversion solution, when a client is converted into WV HSP, that information is recorded in the MCI and accessible for subsequent processes that are dependent on knowing where the most current individual data resides. For example, at the time of servicing a new client, a caseworker can inquire whether the client is known to DHHR and, if so, whether they have been converted or not.
Understanding whether a client is converted or not helps a caseworker to identify which system he or she would have to work in to service that particular client.



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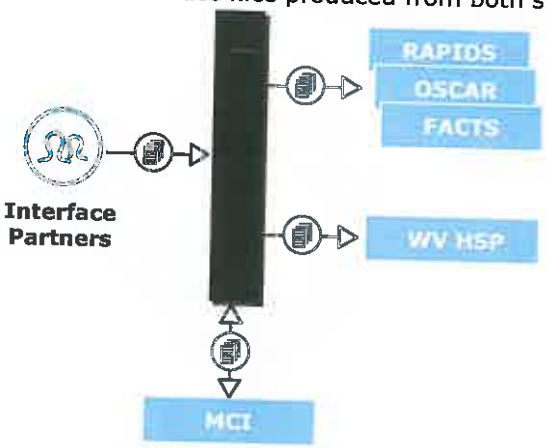
Approach to Parallel System Operations.
MCI helps navigate the period of time when WV HSP and legacy systems are operating in parallel

ii. Interface Split/Merge

During Pilot and Statewide implementation, both legacy systems and WV HSP will receive files from and send files to external trading partners.

Data received from external partner agencies may go through layout changes based on the requirements for Origin. During pilot cutover and statewide rollout, the interface files will have to be processed in the source system and Origin. During the Conversion Design phase, Deloitte conducts focused sessions to discuss the strategy to process interfaces in the old and Origin. During these sessions, the approach and options to process the data in two systems are discussed. The various tasks involved in handling the interfaces as well as the roles and responsibilities involved in processing the interface data in both systems is identified. This approach includes the need to split incoming interface data files based on converted data that exists in Origin and unconverted data that exists in the source system so that information can be applied to the appropriate system of record. Similarly, the approach for merging outbound interface files produced from both systems is discussed during these sessions.



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MCI will be leveraged to split files received from interface partners, and route them to either legacy systems or WV HSP based on the system of origin of each client on the file.

MCI helps Split Interface Files.
The MCI is leveraged to function as an indicator that directs interface files received from external interface partners to the correct system of record.

iii. Case/Client Selection criteria with Spider web Logic

To address the challenge of parallel operations, only one system should be the system of record for any given client i.e. either GA IES or old systems should handle eligibility/benefits of programs for a client. This means when a client is converted over to GA IES, the cases associated with that client should also be converted. On the other hand, if a client is not getting converted then associated cases should remain in the legacy systems.

The approach to select cases for pilot rollout is by identifying the cases and associated participants (Obligor, Obligee, and Dependents) that belong to the counties, which are part of the pilot region. The cases managed by offices within the pilot region are eligible for pilot conversion.

The Spider Web logic refers to the conversion data extraction process to include the cases/clients from other counties that are related to the cases/clients for the counties being converted for Pilot

During each phase, legacy data is pulled for the cases and clients that belong to the counties part of that implementation. In addition, if any of the clients have cases in other counties that are not being converted, such associated cases and clients are also extracted for conversion. This cycle continues until case linkages are identified for associated clients.

iv. Flagging of cases and clients

Cases that have been converted to WV HSP will have to be have a closed/converted indicator on the respective source systems so that the source system software programs must identify and treat (or ignore) the cases appropriately. The flagging of data in the source system allows for ease of identification and prevents workers from updating the flagged cases in the source system. The converted cases marked as read only are preserved in their original state in the source system for data conversion related verification and reference purposes.

Case workers will not be able to update case data for cases that have been converted to WV HSP.

Data Conversion Load process will create flagging file containing the list of successfully converted cases and clients. These flagging files will be sent to respective Source systems for processing and flagging cases and clients.

v. Interim Conversion

Between Pilot and Statewide implementation, certain citizens might relocate from non-Pilot or non-live counties/offices to locations that are live with the WV HSP solution. To support this population of citizens and allow for uninterrupted services to these clients without requiring caseworkers to use both systems during the transitional period, the ability to conduct interim conversions is provided. Other reasons for conducting interim conversion are:

- A closed case that is not converted, but the client on the case walks into a converted county
- Cases/clients dropped in the pilot conversion due to data validation
- Central office request
- Interim conversion helps enhance business continuity during the rollout period.

vi. Third Party Data Synchronization

The case selection approach detailed in the above sections for pilot substantially reduces the need to have data synchronization between the source and target systems, since business entities such as

case management data, establishment data, enforcement data and financial data are tied to either a case or a participant. Data structures tied to a case or participant are converted and that data results in being mutually exclusive between the two systems.

However, third party data such as Providers, Employers, Insurance, Attorney, and Organization data exist in old systems and requires maintenance to remain in sync. DHHR staff who maintain cases in the converted pilot region need to add and or update third party data in both systems to maintain the integrity of the System. The approach to synchronize data between the two systems for the third party data is discussed in detail during the strategy planning sessions by identifying the data entities and elements that need to be synchronized and a solution is finalized during the Conversion Design phase. The decision to manually update or have a file-based daily interface between the source and target system is based on the number of data elements, associated volume, frequency of updates, and level of effort to implement.

j) Conversion Data Quality

The most important aspect of data quality in data conversion is confirming completeness with accurate data converted from source system to the target system. This section defines an approach on how to plan, design, and implement data quality checks and reconciliations before and after data conversion for each rollout.

There are two aspects to validating the correctness of converted data. They are:

- Validate whether data extracted is converted in its entirety and is accounted for
- Validate the correctness of data to confirm business integrity

The data quality approach starts during the Strategy and Planning phase and is finalized during subsequent phases.

Case, Participant, and other key business data-entity elements are identified during the Strategy and Planning phase for use as validation criteria. An initial validation occurs using the data criterion to confirm record sets extracted from the source system and received in the staging area are accurate. A second level of validation takes place to get record counts and business entity counts in the target system after conversion and reconcile with the count of records extracted from the source system. For example, the case counts from the extract region, the staging region, and final target region should be equal. Deloitte analyzes why a case or a particular data set did not convert and corrects the error condition.

The validation criteria is further vetted through the design phase and appropriate scripts are developed during the development phase. Both Deloitte and DHHR in the respective regions develop the validation scripts. These scripts are used in the development phase to validate the data extracted, transformed and loaded in target development region. The results of the validation scripts are used to identify issues and fix them in the development and test phases. The validation results also allow for the continuous refinement of the validation scripts.

The validation scripts are used in conversion testing, mock, and production execution phases.

k) Conversion Reports

The following reports are recommended for the IES conversion and additional reports may be provided based on discussion with the state's conversion team.

- **Extract Control Reports:** As part of the extraction process, control reports that provide statistics on extracted data are also created and sent to IES. Upon receipt of the extracts on the IES side, sanity checks are performed and control totals are matched to identify issues in the extract files.
- **Validation Failures:** Validation failures result from discrepant or errant data that causes potential issues once converted into IES. Due to the criticality of the downstream implications posed by these validation failures, these records and any associated data is not converted into IES until they have been cleaned up either systematically or manually. Validation reports will be provided to list the conversion errors and the error rate.
- **Conversion Results:** Conversion Load Reports are generated before and after ever conversion run. Provides summary metrics on percentage of data records migrated successfully, records that failed migration and the reason for the failures Includes detailed data record migration results – both prior to and after the conversion module has run. Results are sortable and searchable so that any number of statistics can be derived
- **Benefit Match Reports:** After legacy data gets converted into the WV HSP system. WV HSP systems will need to run Eligibility on converted data to determine if they are calculating same benefits as that of RAPIDS and FACTS. Benefit Match reports capture such discrepancies of benefit calculation between legacy and WV HSP system.

I) Data Cleansing

Source System's data quality is one of the crucial factors for high rate of data conversion. Invalid or missing key legacy data will result in conversion to fail the impacted cases and clients. Poor data quality can also impact eligibility results, benefit match and external interfaces. Conducting data validation early on in the process allows the conversion team to identify and eliminate potential data issues that may result in benefit mismatches.

i. Data Validation Approach

The verification of the accuracy and quality of the data post-extraction from the legacy systems needs to be performed to confirm that it is ready for conversion into WV HSP.

The data validation process starts right after the data extracts are provided for conversion. Deloitte will guide and work with the State and the PMO to define a process to validate the extracted data. Deloitte conversion team will work with the State and the PMO to define a process to validate the extracted data. This includes an analysis of the extract files to confirm that the data conforms to the output specifications agreed to during the requirements phase as well as verification to confirm that the data needed has been appropriately extracted (i.e. file formats, matching record counts, matching totals, etc.).

The next step is to load the data collected from the legacy systems into staging area that contains tables that mimic the structure of the extract files created from the source system. Validation rules are defined during the design sessions for each legacy data field being converted and refined during the testing cycles. Each rule is categorized as either fatal or warning depending upon the criticality of the data field. The validation rules are executed against the staged data, and validation reports with the discrepancies are produced. The next section describes how this invalid data is handled.

ii. Data Cleansing Approach

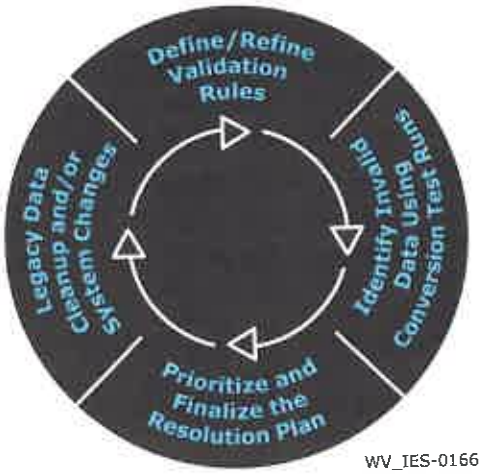
The data cleansing approach follows an iterative process that includes the following steps:

- **Identify data validation rules:** The data validation rules are defined to measure metrics on data quality, including whether the data conforms to particular standards or patterns. These metrics include:
  - **Completeness** - Understand volumes and usage of data in the legacy systems.
  - **Uniqueness** – Identify if duplicate records exist within a table or database
  - **Accuracy** - Identify whether data accurately describes the actual values in the source
  - **Consistency** – Identify whether data is consistent across different sources
  - **Integrity** – Identify whether data is consistent between parent and child tables

These rules will be defined in the Data Conversion Specification document.

- **Identify Invalid Data:** Conversion validation run is executed on the staging tables to identify invalid data. Data validation summary and detail reports are generated.
- **Prioritize and Finalize the Resolution Plan:** The State business team determines the priority and the most appropriate resolution for each type of data issue. Priority will be based on the impacts of the issue, the number of invalid records and onetime versus repeated clean-up required. Resolution will involve legacy data clean up and/or system changes (legacy system change, legacy data extraction software change, conversion data mapping or validation rule change). Responsible parties will include the State, Deloitte, legacy system owners, and interface agencies.
- **Legacy Data Clean-up:** Based on the resolution plan, data clean-up will be done centrally by state staff and/or locally by the field workers. Also, the data clean-up can be done through an automated process or done manually:
- **Automated Legacy Data Cleanup:** In certain scenarios, it is more efficient to execute automated programs or data update scripts on the legacy systems to correct the data issues. A most common example of this scenario is a data issue that impacts a large number of records and it is feasible to program the logic to correct the data.
- **Manual Legacy Data Cleanup:** For certain types of data issues, manual data cleanup is required to be performed by expert workers using the application screens. The resolution can require a series of manual steps to be taken by the workers and can also involve researching the information about the case/client. The State will distribute the data validation reports as appropriate along with detailed instructions and timelines.
- **System Changes:** System changes are prioritized, tested and implemented as appropriate. Some examples are – to define new conversion mapping rules to set default values for missing fields or blank values, or to fix defects in the extraction or conversion software.
- **Monitor Progress and Repeat:** The resolution is monitored and the cycle of steps is repeated minimum of three times for each statewide of conversion (fewer if satisfactory results are produced). The actual dates of these data purification runs will be published in a separate calendar.

This iterative process of validation and clean-up is summarized in the following diagram.



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Legacy Data Validation and Cleanup
The data validation and cleanup for legacy data will be an iterative process

iii. Known Legacy Data Quality Issues – Approach to Mitigate

The iterative data cleansing cycle described in the previous section will use the Conversion software once it has been developed and tested. In order to use the time period before this cycle can begin, it is highly recommended that known legacy data quality issues identified and fixed in advance during the design or development. This section will list the known legacy systems quality issues and an approach to mitigate them.

iv. Data Clean-up Schedule

A detailed schedule will be produced to plan, monitor and manage the data clean-up activities for the WV IES project.

4. Strategy for Data that do not convert

This section details business processes to handle cases with exceptions during the conversion run. Most common causes of discrepant conversion are - data validation failures or benefit mismatch.

a) Data Validation Failure

Most data validation failures will be identified and fixed during conversion testing or dry runs. However, if cases fail validation during implementation, following is the business process to handle these cases:

- Cases with data validation failures will exception out of the conversion process, and they will not be loaded into WV HSP (nor will any associated cases based on spider web rules).
- These will not be flagged in the legacy systems.
- The conversion process will generate a validation report, which will be used by the state to perform legacy data clean-up.
- Once data cleansing in done in legacy for these cases, they can either be
- Interim converted or
- Converted during the statewide.
- Manual Conversion for Known data scenarios

The manual approach is avoided where possible due to the excessive amount of effort required to load the data, and the increased possibility of human error. Manual conversion will be performed for only case or clients that have data scenarios that cannot be handled through conversion. Conversion team will identify these scenarios during data profiling, design and testing of converted data. These scenarios will be discussed with the DHHR to gain approval for manual conversion and identify work procedures to enter cases or clients in IES or perform manual correct post-conversion.

5. Source System Changes/Expectations

This section describes the changes and expectations for the legacy systems that are required in order to support the data conversion and transition to WV HSP. More details will be furnished during development and testing. The State and legacy staff are responsible for implementing these changes based on a schedule that is aligned with the WV HSP conversion schedule. These legacy changes shall be developed, tested and stabilized before the QAT phase. Deloitte will facilitate, guide and provide feedback escalating issues that may impact schedule to the PMO.

In addition, as noted under the assumptions subsection, any significant modifications to the legacy systems and interface systems for purposes other than the transition to WV HSP shall be minimized or eliminated (based on direction of Executive Sponsors) during the design, development, testing or implementation of the WV HSP conversion. These changes shall be mutually agreed upon between State and Deloitte.

a) MCI

As described previously, the Master Client Index (MCI) for OSCAR will go live in WV HSP approximately one month before the OSCAR Pilot go-live. Basic demographics data for the clients belonging to the counties will be loaded into the MCI database stored in WV HSP. Clients from OSCAR will be used to populate the MCI. The WV HSP system will host the web services for accessing the MCI. From this point

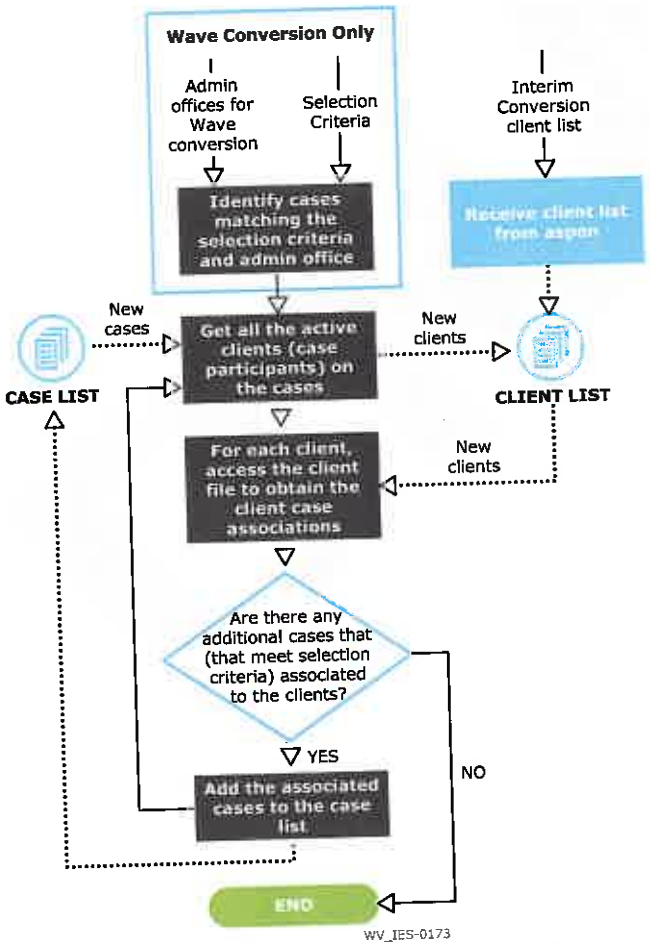
forward, OSCAR shall start using the MCI web services for any client clearance and creation processes instead of using their existing mechanism. Also, the OSCAR shall change their process to use the MCI web services provided by WV HSP for updating existing client demographic data. It is recommended that these legacy changes are implemented in a manner that is consistent with their existing business process and is transparent to the end user. During the rollout process, pseudo SSNs will be generated for new clients (by WV HSP) without an SSN, and this number will be stored in the MCI.

b) Spider Web logic

The Spider Web logic refers to a requirement for legacy data extraction process to include the cases/clients from other counties that are related to the cases/clients for the counties being converted. The legacy systems shall use the final client list created by this process to perform the legacy data extraction from their respective systems.

A pilot and statewide implementation approach to conversion is recommended over a "big bang" statewide implementation. During each rollout, legacy data is extracted for the cases and clients that belong to the counties part of that rollout. In addition, if any of the clients have cases in other counties that are not being converted, such associated cases and clients are also extracted for conversion.

The following flowchart shows the steps that are involved in the Spider Web logic.



Spider Web Logic Steps for Legacy Data Extraction
ISD2 will perform the spider web logic, and send the final client list to systems for data extraction.

As shown in the flowchart above, legacy data extraction for conversion begins with a list of counties and for interim conversion, it starts with a list of clients. Legacy systems recursively performs the spider web logic. This final client list is then sent to the legacy systems to provide the data extracts for conversion.

c) Data to Extract by Legacy System

The legacy systems shall extract and provide the data for Conversion as defined in the legacy conversion requirements. The following table summarizes the data that will be converted from each system, and also when the data extracts need to be provided for conversion.

More details on the actual data elements that need to be extracted will be included in the requirements and design documents.

Legacy System	High Level Data to be Converted	When to Extract?
OSCAR	Demographics information for clients statewide, including Name, SSN, DOB, Gender etc.	One time for MCI load, approximately one month before OSCAR Pilot
RAPIDS	Most current snapshot of pre-EDBC data (demographics, income, expenses, assets etc.) All history of post-EDBC data (benefit issuances, sanctions, IPVs, clocks, and work activities)	Extract the following during pilot and statewide implementation: Active cases Cases closed within a certain duration (Closed case duration - will be decided during the requirement analysis) of conversion effective month Extract during statewide implementation: Active cases Cases closed within closed case duration of conversion effective month Extract during interim conversion: All cases (irrespective of status) depending on the client list For cases closed before closed case duration, extract only client level information
OSCAR	Most current snapshot of pre-EDBC data (demographics, income, expenses, assets etc.) All history of post-EDBC data (benefit issuances, sanctions, IPVs, clocks, and work activities)	Extract the following during pilot and statewide implementation: Active cases Cases closed within a certain duration (Closed case duration - will be decided during the requirement analysis) of conversion effective month Extract during statewide implementation: Active cases Cases closed within closed case duration of conversion effective month Extract during interim conversion: All cases (irrespective of status) depending on the client list For cases closed before closed case duration, extract only client level information
FACTS	Most current snapshot of pre-EDBC data (demographics, income, expenses, assets etc.)	Extract the following during pilot and statewide implementation: Active cases

Legacy System	High Level Data to be Converted	When to Extract?
	All history of post-EDBC data (benefit issuances, sanctions, IPVs, clocks, and work activities)	Cases closed within a certain duration (Closed case duration - will be decided during the requirement analysis) of conversion effective month Extract during statewide implementation: Active cases Cases closed within closed case duration of conversion effective month Extract during interim conversion: All cases (irrespective of status) depending on the client list For cases closed before closed case duration, extract only client level information

d) Implementation

The legacy systems shall support the data conversion processes during implementation (production) of WV HSP. Deloitte will facilitate, guide and provide feedback. The following subsections describe the support that will be provided by the legacy system owners.

MCI Implementation

- Provide list of individuals known to legacy and the demographics data in an agreed upon format (OSCAR)
- After successful conversion of MCI, change the OSCAR software to use MCI web services

No new individual can now be directly added to legacy without going through MCI

Pilot Conversion

- Complete batch cycle for that day in legacy
- Run spider web to identify individuals/cases
- Run extract process
- Fix extract process (if applicable - unknown at this time)
- Fix validation errors (if applicable)
- Provide updated extracts (if applicable)
- After successful conversion, receive flagging file
- Process flagging file to mark the individuals/cases as converted to WV HSP and prevent benefit issuance for that individual/case from legacy
- Receive Day Zero file (if applicable)
- Process Day Zero file (if applicable)
- Use split/merge process for batch files as appropriate

Statewide Implementation

- Complete batch cycle for that day in legacy
- Run spider web to identify individuals/cases
- Run extract process
- Fix extract process (if applicable - unknown at this time)
- Fix validation errors (if applicable)
- Provide updated extracts (if applicable)
- After successful conversion, receive flagging file
- Process flagging file to mark the individuals/cases as converted to WV HSP and prevent benefit issuance for that individual/case from legacy
- Receive Day Zero file (if applicable)
- Process Day Zero file (if applicable)
- Use split/merge process for batch files as appropriate

Interim Conversion

- Complete batch cycle for that day in legacy
- Receive list of individuals identified for interim conversion
- Run spider web to identify individuals/cases
- Run extract process
- Fix extract process (if applicable - unknown at this time)
- Fix validation errors (if applicable)
- Provide updated extracts (if applicable)
- After successful conversion, receive flagging file
- Process flagging file to mark the individuals/cases as converted to WV HSP and prevent benefit issuance for that individual/case from legacy
- Receive Day Zero file (if applicable)
- Process Day Zero file (if applicable)
- Use split/merge process for batch files as appropriate

Dry runs

- Create test environment for dry runs
- Run spider web to identify individuals/cases
- Run extract process
- Fix extract process
- Fix validation errors

- Provide updated extracts
- After successful conversion, receive flagging file
- Process flagging file to mark the individuals/cases as converted to WV HSP and prevent benefit issuance for that individual/case from legacy
- Receive Day Zero file (if applicable)
- Process Day Zero file (if applicable)

This will be an iterative process as a whole or in steps depending on the success factor

e) Flagging process

In order to prevent cases from being handled in both legacy and WV HSP during the phased rollout, it is important that the legacy systems have a mechanism of being able to distinguish converted cases and clients from unconverted cases and clients. This distinction is achieved by marking or "flagging" cases and clients converted to the new system so they can be easily identified and prevented from any additional changes in legacy. This preventative action requires some modification to the legacy system.

The data conversion process will generate "flagging files" after each statewide or interim conversion that will consist of cases and client successfully converted into WV HSP. The legacy flagging process will use these files to flag the cases and clients in their systems. Once the cases and clients are flagged, they would subsequently be available only in "read-only" mode to caseworkers who continue to access the legacy system during the transitional phase.

f) Identify systems that potentially require a change

Following table summarizes the legacy systems and the changes required to support the conversion to WV HSP. Further details will be added during development, testing and implementation phases.

Legacy System	Changes required to support conversion to WV HSP
OSCAR	Interfacing with MCI (For Client Creation, Clearance and Updates), Flagging
RAPIDS	Flagging
OSCAR	Flagging
FACTS	Flagging

6. Contingency Planning

The Conversion Contingency approach will be developed to address the possibility that the conversion process will not successfully complete within an acceptable time frame and other risks that may be faced as during data conversion efforts. The approach for handling conversion related contingencies is described below:

Risk Category	Description	Mitigation
Legacy Data quality	Poor quality of existing data in legacy systems is a huge pitfall	Pro-active and iterative assessment of legacy data quality

Risk Category	Description	Mitigation
		Use automated tools for data profiling Establish special teams for data cleanup Monitor and measure progress throughout the life cycle
Understanding legacy data	Understanding the structure, significance of legacy data from business perspective	Deploy a team of analysts who understands West Virginia's HHS programs Conduct JAD session sessions to study legacy data- how it is created, modified and used by business users and processes Use proven tools and techniques to analyze legacy data
Infrastructure Installation	Conversion development and test environments both on IES and legacy systems are not available in a timely manner	Plan for conversion environment setup early in the project life cycle Begin development in temporary legacy environment and transition to larger environment when it is available. Coordinate use of existing test environment for extract and update testing Begin development of programs on pc without environment.
Results Validation during Development and Test	Mechanisms needed to validate accuracy of results of each step in the conversion process	Identify cases and relevant data to test results upon completion of each conversion program Implement checks and balances at each step Review error reports at completion of each step Compare to extracts and verify with data using legacy application and other means such as query languages.
Systems Performance – Legacy extracts and Conversion solution	Conversion Runs must be completed in appropriate time restrictions	Develop conversion software using proven ETL design patterns and tools Use of database tools to fine tune SQL queries Identify memory and CPU requirements for conversion execution and acquire these resources in a timely manner Track performance of the multiple trial runs.

7. Key Decisions/Interdependencies

This section will maintain the list of key decision made with regards to Data conversion and any interdependencies between different systems and/or functional areas. This will include but not limited to issues like population of Verification sources, SSN validation approach, reporting during rollout, batch schedule during cut-off. Deloitte will work with DHHR agencies to identify these issues and define resolution.

8. Data Conversion Communications Plan

Accurate and timely communication among involved parties is critical throughout the conversion process, especially when coordinating schedules, identifying and resolving issues and reporting conversion status. The following table identifies the project-wide communications required for data conversion, along with a brief description of each communication, and the strategy to share these with the various stakeholders. Wherever the strategy has not yet been finalized, it is marked as "To be determined" and will be updated later.

Communication	Description	Strategy for Communication with Stakeholders
Implementation Scheduling	Conversion schedule and status reporting throughout the process.	To be determined in the Statewide Implementation Plan
Dry Run Scheduling	Conversion dry run schedule and results.	To be determined in the Statewide Implementation Plan
Data Purification/Cleansing	Communicating newly identified data quality issues.	To be determined during Conversion Development
Production Conversion Failures/Error	Production failures and errors as well as production conversion results.	To be determined in the Statewide Implementation Plan
Implementation Conversion Playbook	Hour by hour plan on how actual conversion will be conducted.	To be determined during Conversion Development
Status Reporting and Communication with Project Management	Conversion status updates.	Status updates from the conversion team will be part of the WV IES weekly and monthly status reports.

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WEST VIRGINIA IES PROJECT

WV IES

9.m Disaster Recovery and Business Continuity Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

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Disaster Recovery and Business Continuity Plan Introduction

System Backup and Record Retention Plan is a key document for the WV IES project to confirm that they can respond to a disaster or any other emergency that affects information systems and minimize the effect on the operation of the business. The System Backup and Record Retention Plan will assist the WV Program Management Office to minimize interruptions to normal operations, limit the extent of disruption and damage to the project, establish alternative means of operation in advance, train the necessary resources to be prepared in case of an emergency, and provide smooth and rapid restoration of services. The System Backup plan provides procedures for information services backup and the necessary steps to follow in order to retrieve the system in case of system failure.

Overview

Purpose

The purpose of the Disaster Recovery and Business Continuity Plan is to document and track the necessary information required to effectively identify the current state of Disaster Recovery and business continuity i.e. continuity of operations covering critical aspects of People, Process, and Technology for the WV IES project and define the objectives, processes, tools, metrics, and roles and responsibilities required to implement an effective Disaster Recovery program and Business Continuity Plan for the WV IES project.

Disaster Recovery and Business Continuity Plan Objectives

The objectives of this Disaster Recovery and Business Continuity Plan are to:

- Meet the HIPAA Remediation roadmap.
- Provide DHHR necessary compliance status with applicable industry standards and HIPAA regulations
- Define the project's DR and BCP goals and overall framework
- Define the approach to incorporate changes with the project team
- Define the approach to verify that necessary changes have been carried out, and proper communication to DHHR and Deloitte is made
- Define the project infrastructure metrics and application configuration that is used to monitor and control the risk impact, business impact and the business continuity/DR plan

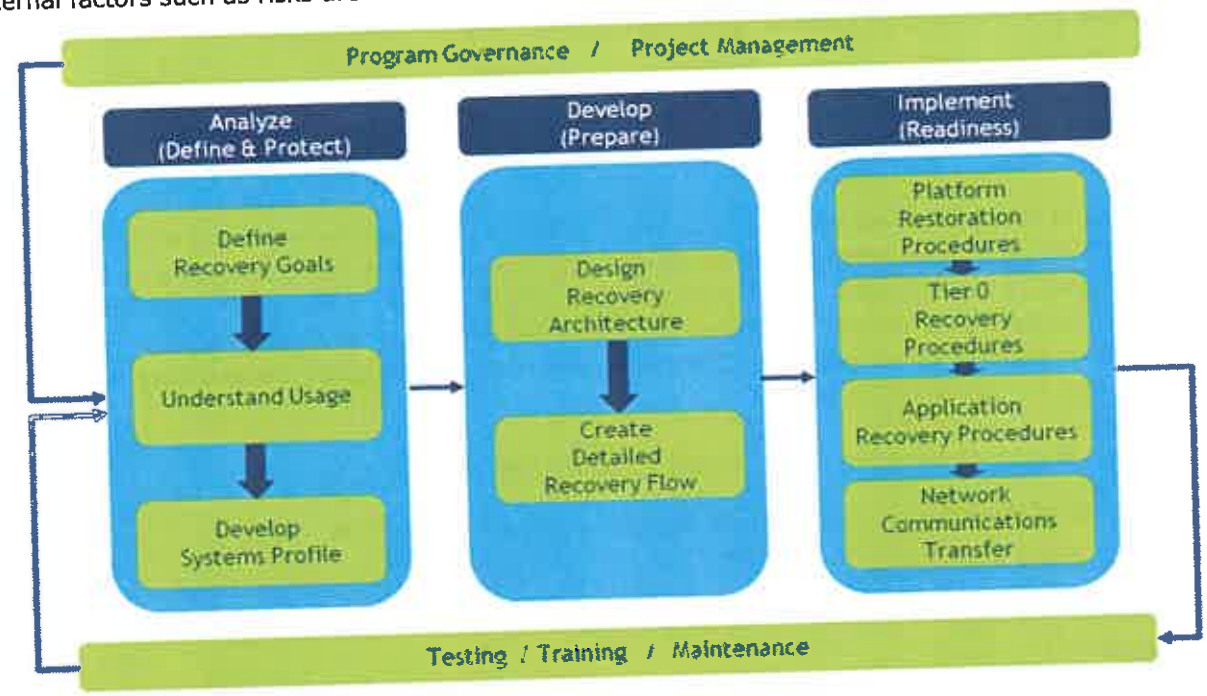
Disaster Recovery and Business Continuity Framework

The basis for the Disaster Recovery and Business Continuity plan for WV HSP is the Disaster Recovery and Business Continuity **Framework**, which defines the overall approach to analyzing, developing, and implementing an enterprise-wide disaster recovery plan. The framework is built on best practices from across industries that can be applied to a large integrated solution such as WV HSP.

The framework includes:

- **Recovery goals** set by IT and business leaders to set realistic expectations for recovery in the event of a disaster, and to define the key technologies that will be leveraged to meet those targets
- **Recovery architecture** designed to support the IT systems an alternate location, considering cost and maintenance requirements
- **Detailed Recovery procedures** across systems that define the steps and responsibilities to bring up the IT systems in the event of a disaster, including failback procedures
- **Training considerations** for technical and business staff to keep them up to date on the latest business continuity technologies and WV HSP disaster recovery procedures

The below graphic depicts the ongoing processes and dependencies for defining and refining a Disaster Recovery Plan for WV HSP – the framework is updated as technology, business requirements, and external factors such as risks are identified.



The sections in this document address the detailed steps that are taken in the event an incident is identified and a disaster is declared, which are based off of the framework and ongoing evaluation of operational needs for the WV HSP primary IT systems.

Additionally, the following are the required inputs to the final Disaster Recovery and Business Continuity Plan – these variables must be defined in conjunction with DHHR representatives in order to complete a disaster-ready plan for the West Virginia Human Services Platform (WV HSP) system. They include specific targets and metrics for recovery, DR architecture and supporting business system dependencies, and specific DR roles and responsibilities to carry out the DR plan.

Disaster Recovery Service Tier Model	Catalog of recovery service levels, including: • Recovery Time Objectives (RTO) • Recovery Point Objectives (RPO) • Minimal Operating Level (MOL)

	• Alignment of applications to each service tier
Conceptual DR Architecture	High level architecture model of the proposed DR technical solution, including: • DR Data Center Hosting Solution • High Level Telecommunications Topology • High Level Storage and Replication Architecture • High Level Computing and Database Architecture
DR Service and Organizational Model	Recommended organizational model and service standards for DR, including: • DR Roles and Responsibilities • Recommended Service Level Agreements (SLA) for DR • Recommended Key Performance (KPI) and Key Risk Indicators (KRI) • Skill and Resourcing Gap Analysis of the Service Availability Organization

Emergency Response and Disaster Declaration

This section outlines the procedures for assessing and declaring a disaster for the primary West Virginia IES datacenter. In case of an incident, an Incident Response team will be formed to quickly assess the incident, damage to the datacenter, and inform leadership of the nature of the incident so that a decision can be made whether Disaster Recovery procedures need to be enacted.

Damage Assessment Procedures

Timely damage assessment is vital to both initiating the recovery activities, and also preventing the unwarranted, expensive activation of those activities. Accurate, reliable information must be collected for use by decision-makers in determining whether or not to initiate recovery activities. The status of resources will be recorded in the Preliminary Damage Report as the means of documenting the initial damage assessment. The following actions will be taken in order to initiate and complete damage assessment activities immediately after gaining access to the building:

1. Equipment – Determine the status of equipment, the ability to support continued operations. Also determine the level of support that could be provided by the available equipment. Interface with the IT Technical Services teams.

2. Communications – Determine the status of supporting communication facilities and circuits. Determine the ability of these communications to continue to support normal operations or estimate the degree of degradation present at the point of failure.

3. Facilities and Utilities – Assess the impact on normal operations due to the damage of the physical and support utilities. Estimate the duration for which the facility will not be accessible/available.

4. Transportation – Assess damage to transportation due to the disaster and its impact on normal operations. If in-house vehicles are needed for support of contingency operations, determine if the emergency situation has affected the availability of those vehicles.

Disaster Declaration Decision

The Disaster Recovery team should evaluate answers to the following questions and according to the event specific answers, decide to declare a disaster for WV HSP.

- What is the nature of the event (in reaction to or in anticipation of)?
- What is the potential impact to the data center equipment?
  - High – entire datacenter
  - Med – half datacenter
  - Low – one section of the datacenter
- What is the potential impact to IT service capability and/or the data center equipment?
- Can the situation be resolved in <5 days?
- What is the confidence level that the situation can be resolved in <5days?

Disaster Decision Matrix

The Disaster Recovery team can use the Disaster Decision matrix to inform a decision on which Disaster Recovery procedures to enact. The Decision matrix includes the following variables: Damage, Time to Recover, and Confidence to Recover. The combination of these variables defines a disaster recovery scenario (A, B, C, Normal), each which has specific considerations as outlined in section 3.6 below.

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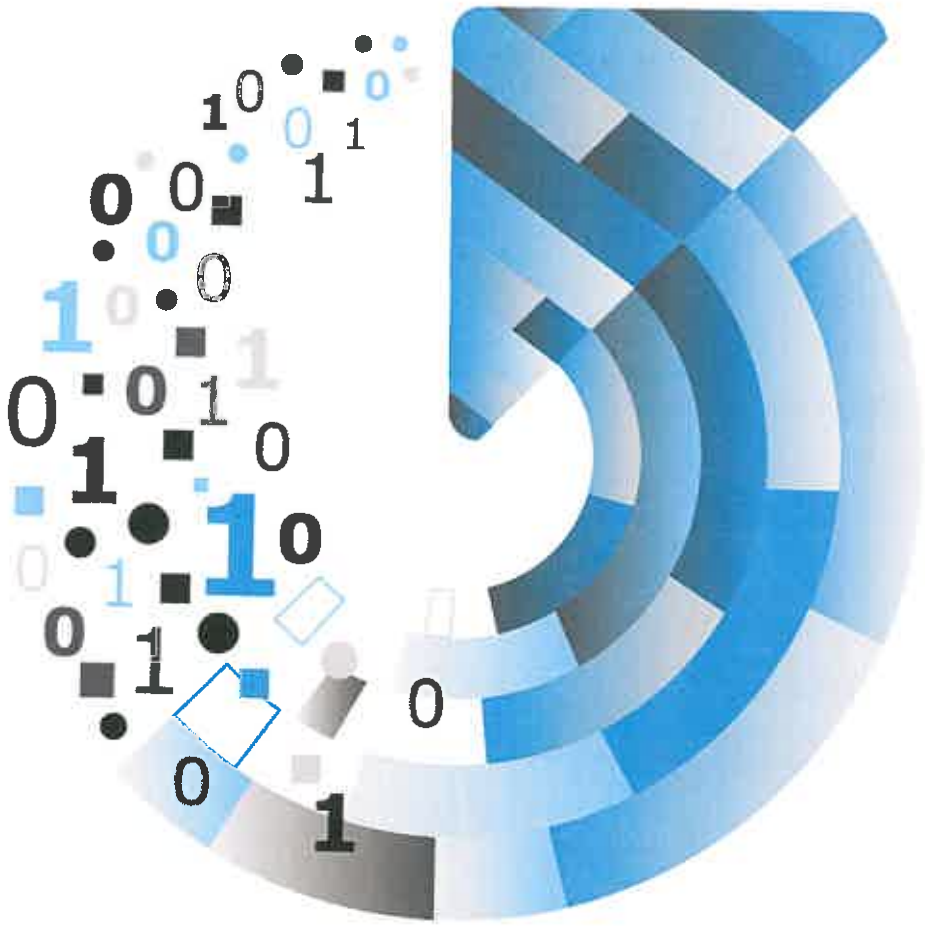

WV IES

9.n. Integration Management Plan

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Integration Management Plan Introduction

The Integration Management Plan should provide a framework for the management of integration activities throughout the WV IES Project. This plan articulates the approach to integration management throughout phases of the SDLC, including key tasks and deliverables developed as a result of each phase. The finalized plan will call out each impacted interface and will outline the target integration architecture and roadmap for the durations of the WV IES engagement. Once final negotiations take place, our team will include the specific interface release plan for impacted interfaces across the project.

Overview

Purpose

The purpose of this plan is to define a framework for the Integration Life Cycle that will support the formation of an Integration Management Plan for the WV IES Project.

This document contains specifications for a project to perform a business impact analysis and to design and manage a release of an interface throughout the Interface Life Cycle.

The guidance in this document will include methodologies that confirm our integration approach represents industry leading practices, is appropriate for the WV IES Project, and aligns to existing standards and applicable requirements.

Related Documentation

Impact Assessment

Our team will design integrations based on requirements provided by DHHR, for the WV IES engagement. Based on these requirements, we will provide an Impact Analysis to confirm that the integration design achieves the following goals:

- Meets integration project requirements including data, privacy and security requirements.
- Adheres to the internal and external integration and relevant data, security, privacy, legal and regulatory principles and standards.
- Utilizes an integration approach, suitable for WV DHHR
- Aligns to the Integration conceptual target architecture

Data Conversion Plan

A data Conversion Plan has been completed and belongs to a separate part of the Project Management Plan. The Data Conversion Management Plan deliverable defines the approach and processes Deloitte will use to convert data from the source systems to WV HSP system. The Data Conversion Strategy includes the activities required to plan, design, develop, test, validate, and implement data conversion activities.

Integration Approach

Identify Interfaces

At the onset of the Interface Release Life Cycle, project planning related to integration takes place in which the program roadmap, priorities, interface needs and gaps are identified. Based on the output of this planning, DHHR, along with Deloitte, will identify high level project specific interface requirements.

In this phase, the current inventory of interfaces will be identified to:

- Identify a need for an interface.
- Determine if any existing interfaces can be reused.
- Determine if any existing interfaces can be decommissioned.

As part of the planning phase, Deloitte will develop a high level roadmap to forecast changes to the WV HSP system landscape and interfaces. This documentation will provide a conceptual view of integration needs and gaps to be addressed by the WV HSP solution.

Define Interfaces

During the Define Phase, Deloitte will address underlying gaps and further detail out integration requirements through the iterative development of conceptual integration architecture and data flow diagrams specific to the project. As a result of this interfaces definition, several key outputs may be produced:

- Test Management Plan
- Conceptual Integration Architecture
- Requirements Traceability Matrix
- Requirements Specification Documentation
- Release Plans

Design Interfaces

Throughout design, our team must create an interface based on interface requirements for the project. Additionally, an Impact Analysis is conducted by Deloitte to confirm that the integration design achieves the following:

- Meets integration project requirements including data, privacy and security requirements.
- Adheres to the internal and external integration and relevant data, security, privacy, legal and regulatory principles and standards.
- Aligns to the Integration conceptual target architecture

There are several critical outputs of the Design Phase which need to be completed and agreed upon by stakeholders prior to moving on to the Implementation Phase. These include the following:

- Impact Analysis
- Interface Control Document
- Definition of Acceptance Criteria

- Integration design components required in the Functional/Technical Design of the Solution
- Integration Test Management Plan and associated testing artifacts
- Integration design components

Implement Interfaces

Once the design, build, and testing has been successfully completed and accepted by DHHR, interfaces are to be deployed by Deloitte to the production environment closely adhering to the overarching change, configuration, deployment, and risk mitigation plans. As part of the implementation of the interfaces, multiple outputs will be drafted:

- Plan for mitigating integration related risk.
- Integration components of system support documents.

Maintain Interfaces

Interfaces are operational once successfully implemented. Deloitte will operate and maintain the WV HSP interfaces, managing possible defects through the duration of the contract. At the completion of the contract, Deloitte will transition interface operations and maintenance to DHHR.

Decommissioning Interfaces

An interface may be decommissioned with DHHR approval as a result of end of life and/or as a result of taking a different approach. A decommissioning plan is to be developed to identify the approach on how the interface will be decommissioned, who will be involved, and identify the data that is to be converted over to a new interface and/or archived.

Managing Changes

A change management process must be in place to manage changes to the interfaces while in production and non-production environments. Deloitte's change management process is outlined in a separate section of the Project Management Plan. This plan also applies to any changes in interfaces to the WV HSP solution. Key roles will be involved in the review and approval of the integration changes depending on impact of the required change. For integration this should include relevant track leads, application managers, DHHR leadership, Deloitte Project Manager and any system users impacted by the interface change.

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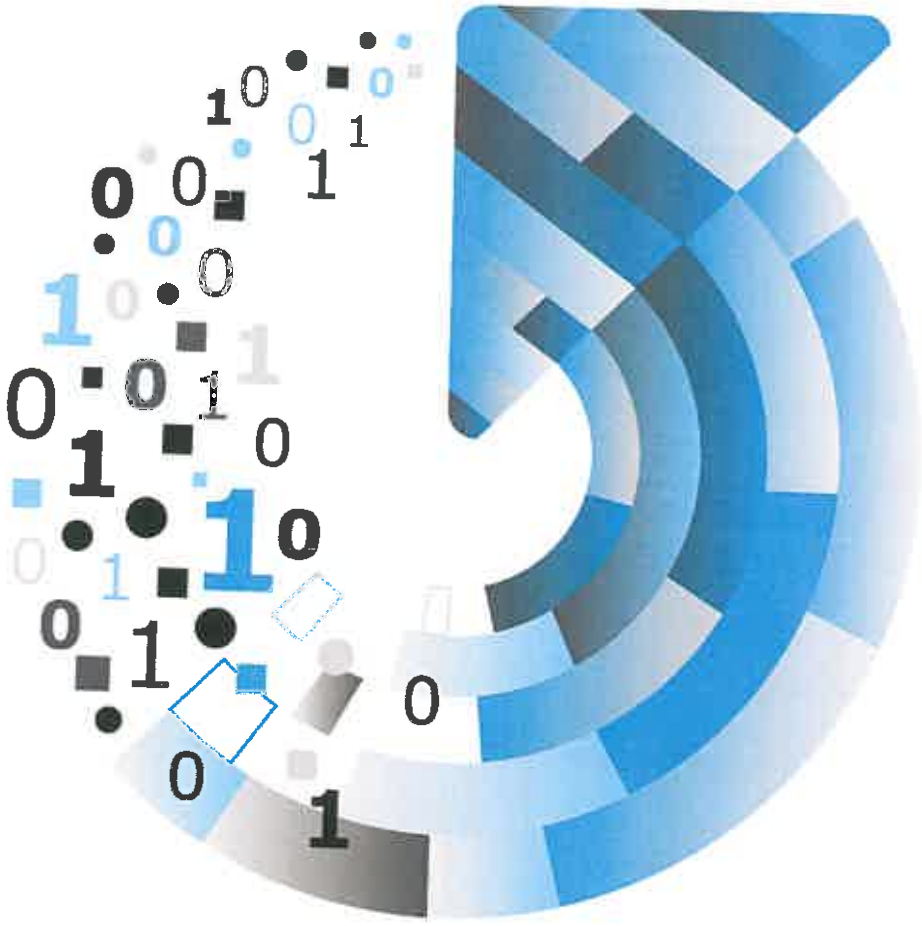

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9.0. Data Quality and Governance Plan

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Data Quality and Governance Plan Introduction

The Data Quality and Governance Plan describes our approach to implementing Data Quality and Governance and serve as a reference for implementation on the WV IES Project. Content throughout the document considers current leading practices in Enterprise Information Management. And provides guidance for building a cohesive strategy and approach supporting waves of the project. It spans the people, processes, policies, and technology components involved in governing data within the WV IES Project. Data Quality and Governance defines the formalized policies and procedures that the organization must follow to confirm ongoing data integrity, as well as the technologies required to manage, maintain, and leverage information as a resource. It also encompasses managing the day-to-day operations of the business.

Objective

The purpose of this document is to serve as a reference for implementing Data Quality and Governance on the WV IES Project while considering current leading practices in Enterprise Information Management (EIM). This document will provide guidance for building a cohesive strategy and approach supporting waves of the project. It spans the people, processes, policies, and technology components involved in governing data.

Executive Summary

Data Quality and Governance defines the formalized policies and procedures that the organization must follow to confirm ongoing data integrity, as well as the technologies required to manage, maintain, and leverage information as a resource. It also encompasses managing the day-to-day operations of the business.

Examples of Data Governance activities include owning metadata repositories, data profiling, determining data access roles and privileges, and providing enterprise data input to projects. Data Governance is important because it gives an organization the ability to make better informed decisions and confirms consistency across the enterprise. This is accomplished by leveraging the strategic process of managing the quality, consistency, usability, security, and availability of critical business data.

What is Data Quality and Governance?

Data Quality and Governance consists of the business framework surrounding the data, the formalized policies and procedures that DHHR needs to follow, and the day to day management of the data.

Data Quality and Governance also includes a collection of decision rights, processes, standards, policies and technologies required to manage, maintain and leverage information as an enterprise resource. An effective Data Governance program includes processes to manage the quality, consistency, usability, security and availability of the organization's data.

Why is Data Governance needed?

Historically at DHHR, data has been collected and managed by individual departments for their own needs. Each division has developed procedures, data formats, and terminology that fit their unique situations and preferences. As long as there was no need to integrate or exchange the data, these practices were acceptable.

WV IES and the integration of multiple previously separate divisions has changed this paradigm.

From a Data Governance perspective, DHHR's challenges are:

- Data quality - DHHR has traditionally maintained good data quality but this comes with a cost, supported by many manual processes that require significant time and resources. Our focus is to confirm that the data is cleansed and accurate, that it is recorded consistently, and that it is error-free. Interfaces will have automatic reconciliations and mechanisms to identify data quality errors. This challenge is complicated in many situations by the fact that the original source of critical data may be a third party, operating under a completely different set of data quality criteria. When problems are identified, it is not always clear who is responsible for correcting the issue.
- Data silos and multiple sources of data - One of the most common data-related challenges DHHR faces is a lack of integration among our many systems and subsystems. The information that is compiled for regulatory and compliance purposes can often be valuable for marketing and strategic planning if it were accessible by all. The data is stored in disconnected systems and departments with common interests often duplicate efforts while producing information that is not consistent in quality or format.
- A large number of stakeholders, with ambiguous data-related roles and responsibilities. Those with an interest in DHHR's Data Governance structure include not only the IT department but also the various lines of business, many of which may have conflicting priorities. There is often a lack of clarity about the differing responsibilities of the data owners (the business or IT personnel who are responsible for entering and maintaining certain data) and the data stewards (who are responsible for the movement, management, and standardization of the data).
- Lack of trust and confidence on the part of data users. One direct result of data quality problems is a lack of confidence in the accuracy and availability of data on the part of the business users who need information to perform their duties. This matters because individuals will develop their own "mini-systems" to give them access to information when they need it. This practice can create problems because information may be maintained without regard to Data Governance rules.
- System integration challenges. Introducing new data management capabilities into existing systems often poses system integration challenges. These challenges become increasingly difficult to address as legacy systems age and new systems grow more complex. This issue is often made worse by domestic and foreign M&A activities, which introduce even more diversity and challenges into the organization's IT enterprise architecture.

Data Quality and Governance Framework

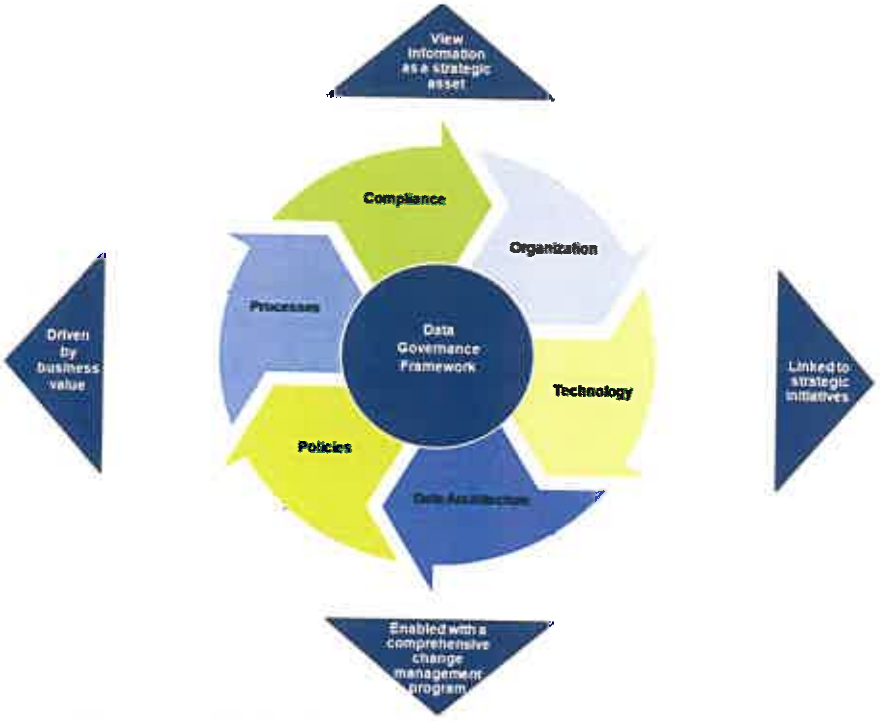
Our overall approach to Data Quality and Governance supports the alignment of DHHR's information demands with value delivery across the enterprise.

Deloitte's approach to implementing Data Quality and Governance and enabling its widespread adoption in business will focus on the following areas that are aligned to business priorities, in order to deliver sustained quality of data.

Data Governance Components

Data Governance is the process of managing quality, consistency, usability, security, and availability of information.

The goal is to align DHHR's business information assets with its business strategy. This includes organization, technology, data architecture, policies, processes, and compliance required to maintain the standardized definition of a data element.



Data Governance Component	Definition
Organization	Organizations chartered with administering data management activities provide a responsible network of resources to deliver quality master data
Technology	Technology supporting common information exchange solutions, workflow and business rules functionality, and user presentation
Data Architecture	Data Architecture includes the use of enterprise data standards, business information model, metadata dictionary, and security & privacy
Policies	Policy refers to master data management guidelines and principles for enforcing data standards, processes, and policies within a change management framework
Processes	Process establishes structures defining how Data Governance policies, processes, standards, and master data are created and modified, supporting business efficiency and effectiveness.
Compliance	Compliance establishes measures for monitoring data management performance and actions to continuously improve data

Data Quality and Governance within the Organization

The organization strategy focuses on the People component of Data Quality and Governance. It defines the roles and responsibilities for parties involved in providing information governance and stewardship. Additionally, the team will socialize the Data Quality Governance initiative to gain buy-in and execution from stakeholders.

Key Actions Taken

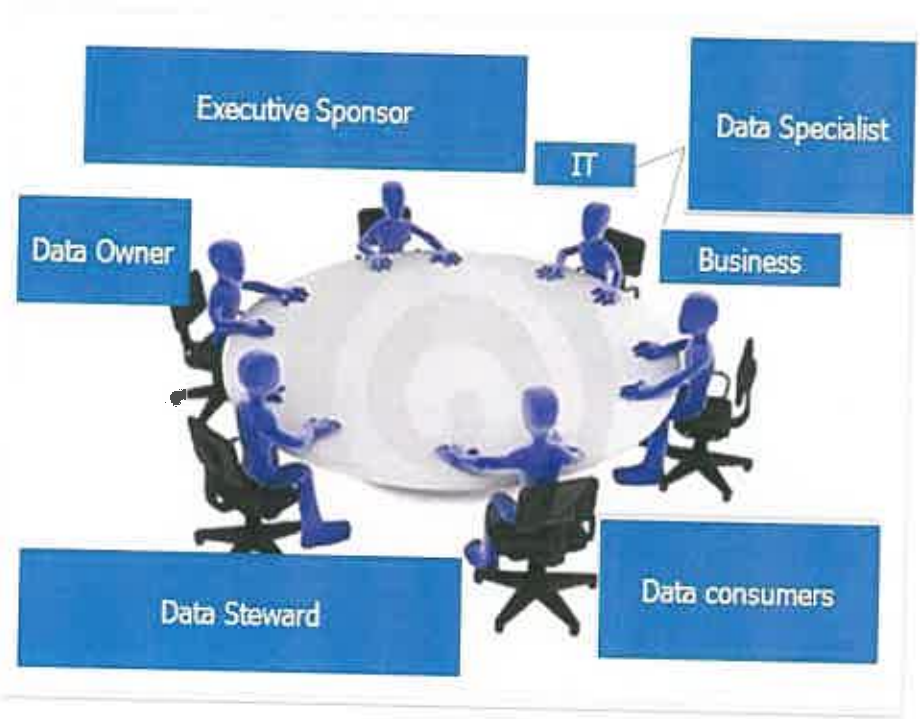
- Define an organization structure that contains and assures compliance with data rules and procedures, guidelines and conventions.
- Define the roles, responsibilities, sample deliverables and time commitment to be carried out within or on behalf of the organization by defining rules of operation.
- Establish a Data Governance council comprised of IT and business stakeholders that governs decisions for new data, such as new subject areas, new data sources, and new business initiatives and problems to be solved using governed data.
- Enable the organization to use a consistent approach to enterprise data structures, moving beyond project-by-project approaches.
- Define the master data domains and the associated stewards to help confirm accuracy, consistency, and reliability of rules.

Data Quality and Governance Roles

To implement a successful Data Quality and Governance initiative, DHHR will establish a governance body and commit to expanding data management expertise within the organization. This expertise is not limited to IT personnel and includes staff within the business community, as well as executive commitment.

In order to meet this objective, we will define several roles and subsequently define how they interrelate. These roles include Executive Sponsor, Data Owner, Data Steward, and both IT and Business Data Specialists. They are designed to empower the individuals assigned to the roles to build our Data Governance framework, and define and implement our Data Governance policies. The primary goal of this council is to help the data consumer select the correct information source to meet their need, understand the information assessed, and comply with the policies that the organization establishes.

Below is a representation of the various roles along with a description of each:



Executive Sponsor: Defines and leads the scope of governed data, the data initiatives, and investments. Tracks the effectiveness of governance by scorecard and defines the management of data maturity.

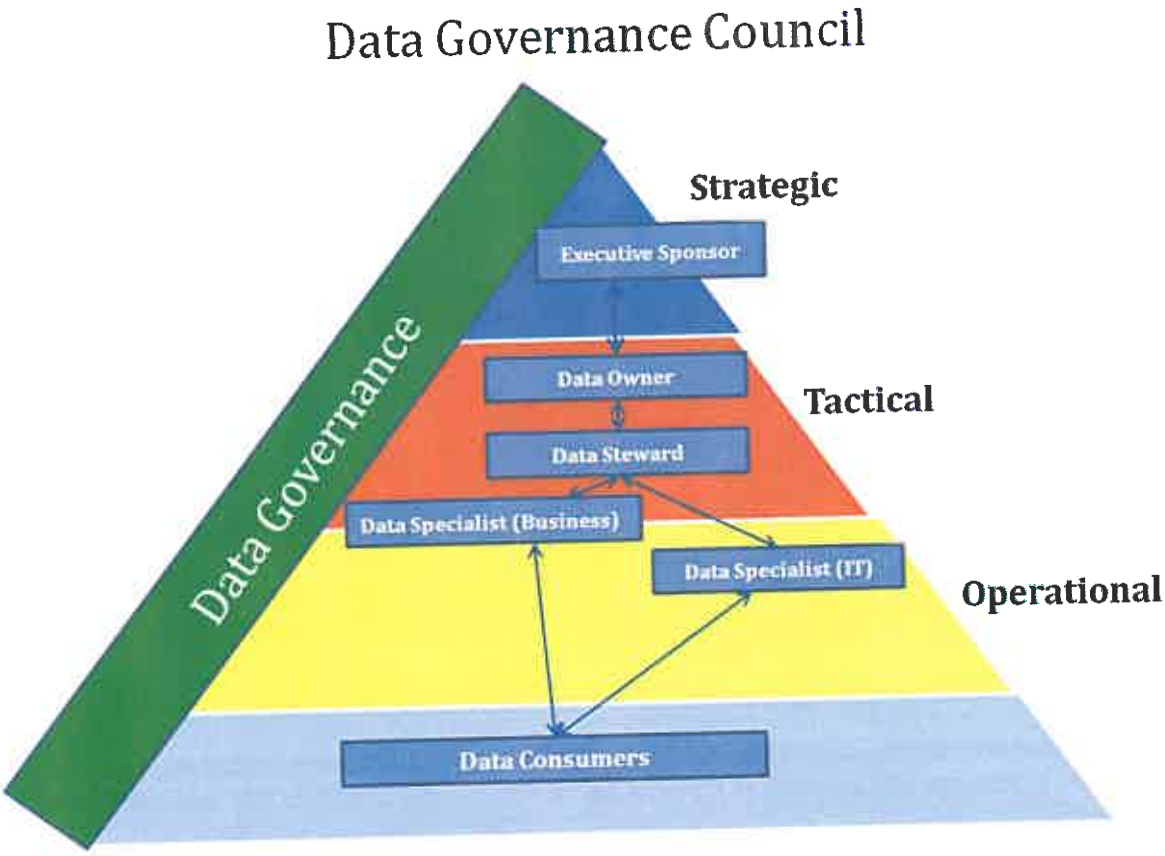
Data Owner: High level individual who provides tactical direction and policy. The Data Owner defines Data Governance priorities.

Data Stewards: Defines data policies and standards for confirming appropriate data entry, usage and transformation. The individual in this role plans information requirements, and coordinates delivery efforts. The role also focuses on managing data content and the business logic behind data transformations. Stewardship occurs at the point of entry within the source application, at the point of transformation, and at the point of consumption. Data Stewards define data issues, remediate conflicts, and provide linkage among owners of different but related data subjects.

Data Specialists (Business): Supports data initiatives, policies and standards for each major class of data and business function. Individuals in this role help to confirm data standards and processes across each domain align with the Data Governance framework of the organization.

Data Specialists (IT): Captures stores and retains data, designs technical infrastructure for each major class of data and business function. Data Specialists facilitate the use of data throughout the enterprise.

The Data Governance Council with the corresponding relationships among the various roles is depicted below:



Federated Governance Organization

When considering how to define our Data Governance model, three choices were considered; Decentralized, Federated and Centralized. Our current Data Governance practices at DHHR align with a Decentralized Model, enabling each area to define their own governance rules. On the opposite end of the spectrum, a Centralized Model provides extensive control over the data.

Deloitte recommends a Federated Model, whereby Data Governance is managed by centralized council and integrated working groups across each domain. This will confirm that the business users are in charge of their data and will help to communicate any new policies or processes within their business area.

Within the Federated Model, we will have clear roles for individuals that will be defining and implementing Data Governance policies across each domain. These roles will initially require some commitment of time to define the process, but eventually will evolve to be a small component of each individual's job.

Following is a chart describing each of the models in detail and providing benefits and challenges of each model.

	Decentralized Model	Federated Model	Centralized Model
Description	• Continue to manage information in the current environment • Business units work independently to develop their data definitions and data models	• A data governance group (but not separate organization) with members **representing the central IT function and each of the main business groups in a "federation"** model to create, promote and enforce policies and standards	• A centralized, standardized, and controlled data management function to create, promote and enforce data mgt policies and standards • Requires the data management group to have authority to implement policies
Benefits	• Data issues can be resolved on an application by application basis • These initiatives would be incorporated in the enhancement of current applications or in the development of new applications	• Same advantages as Centralized Model except it places the **business users in charge of their data**, keeping control as close to the source as possible • **Provides business units with a voice** and a policy-communication channel to the development teams in a business unit	• Provides cross-functional and cross-application view of information • Creates a central point of definition and issue resolution • Reduces data redundancy • More effective management of information
Challenges	• Promotes inconsistent definition of data • Will not reduce data redundancy or provide consistency needed to support data warehouse • Will not increase data availability across the organization	• Complexity of coordination as **input and support is required from each business area** • Potential high cost of operation and staffing as **data governance** will be supported **at multiple levels within the organization**	• Difficult to implement successfully in a highly decentralized organization • The central information management function may not fully understand the business needs

The key design principles of a Federated Data Governance model are outlined as follows:

Sponsorship	An Executive Steering Committee that provides overall guidance and sponsorship to Data Governance efforts. The business and IT Sponsors need to be specifically recognized – they must support the initiative and are often responsible for the accuracy of the data.
Leadership	A Data Steward provides leadership and is responsible for driving effective use of data across the domain.
Cross-Functional	The Committee Model specifically recognizes the importance of working cross-functionally to deliver and manage Data Governance effectively. A cross-section of business and IT are represented.
Distinct Roles	The Executive Sponsors, Data Owners, Data Stewards, Business and IT Data Specialists are distinct roles with differing responsibilities, mission, and reporting structure.
Natural Alignment	An integrated model is required for the Data Owners and Data Stewards because they need to work collaboratively to support the specific business-functions. The primary concern for the Data Owner and the Data Steward is within the data domain. The Business Data Specialists will facilitate the use of the data across domains. Using inputs from the Data Owners and Data Stewards, the Data Governance Council can weigh the needs of the domain versus the needs of other domains.
Classification of Data	There are Data Owners and Data Stewards for each major class of data and business function.
IT Involvement	IT is essential to the success of any Data Governance initiative – IT Leadership, DBAs, Data Architects, etc. must accept and support the operational aspects of the program.
Organizational Support	There are many important supporting groups including training, H/R, etc. which assist a Data Governance Council.

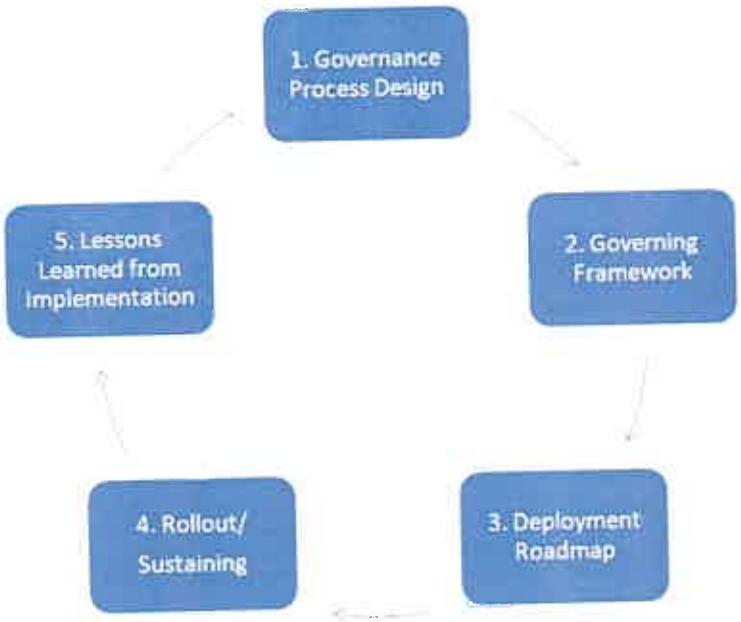
Sponsorship	An Executive Steering Committee that provides overall guidance and sponsorship to Data Governance efforts. The business and IT Sponsors need to be specifically recognized – they must support the initiative and are often responsible for the accuracy of the data.
Program Specific Roles	The Data Governance Council is specific to the Data Governance program and is a separate organization from the existing hierarchies, roles, and titles within the organization.

Data Quality and Governance Processes

Functional processes need to be defined to create an effective Data Quality and Governance operational working model. Successful Data Quality and Governance processes support multiple functions of a Data Quality and Governance program, including data maintenance, change control, data quality analysis and issue management/resolution.

Design, Deploy and Sustain an Effective Data Governance Program

A successful Data Governance program must define these five key Data Governance processes. These processes will be performed for each of the domains that are included within the Data Governance framework.



Quality and Governance Process Design:

- Identify the functions and processes the program supports, including data maintenance, change control, data quality analysis and issue management resolution.
- Governance processes define the way the Governance Organization and its associated members will operate in managing and governing business critical information needs.
- Define baseline Data Quality and Governance policies and processes.

- Each process around defining and managing data elements shall be assigned to a data owner who is responsible for defining the standard for the data.
- Each business area and Data Governance Council shall follow the defined Data Governance process. Employees under each business area shall be made aware of the governance processes and the associated policies' purpose, scope, requirements, and responsibilities.
- Gain buy-in from stakeholders who will confirm adherence to these processes.
- Defined governance processes will be published for employees to easily review and reference.

Governing Framework:

- Define the way the Data Governance Council and its associated members will operate in managing and governing business critical data.
- Complete roles and responsibility identification.
- Review and obtain approval from managers for the Data Governance design.
- Socialize Data Governance and the supporting framework.

Deployment Roadmap:

- Integrate Data Quality and Governance processes to support business strategies.
- Develop a control process for filtering and evaluating submitted change requests. Require executive summary of issues requiring resolution, impact and involvement of stakeholders affected, alternative solutions and recommendations.
- Develop a decision making process which defines the mechanism for calling a meeting to resolve an issue or request and focuses on a decision being made to take corrective action/suggested next steps.

Rollout/Sustaining of program:

- Data Governance roll-out.
- Provide training of Data Governance principles, roles, and responsibilities.
- Execute a Data Governance project management plan.
- Execute a Data Governance change plan.
- Confirm operations and effectiveness of Data Governance through a scorecard metrics.

Lessons learned:

- Refine Data Governance framework, roles and responsibilities based on the initial implementation
- Incorporate lessons learned from development of the Data Governance Council established for initial implementation to modify or adjust roles, responsibilities and processes into the governance design for next phases.

Data Quality and Governance in the Project Life cycle

Data Quality and Governance will engage in projects in proportion to the significance the data or data management processes have to the organization, its partners or regulatory authorities.

Throughout the course of any project, the Project Data Stewards will consult with other Data Stewards as necessary. The Project Data Stewards will consult with the Data Owner on enterprise wide use of data as specific to a domain. The Project Data Stewards will consult with the Business Data Stewards for questions regarding a specific business function.

Data Profiling

Data Quality and Governance will perform routine data profiling, to assess the organization's data. The Data Specialists will profile data with the assistance of Project Data Stewards, as availability allows. The data profiling effort will follow the Data Governance process for profiling data.

The results of the profiling will be presented on the resulting profiling report scorecard. The Stewards will identify issues from this information and escalate key findings and issues to the Data Owner and Executive Sponsor in accordance with Data Governance administrative procedures. The involved parties will then evaluate the cause of the issues and assess the impact and cost-benefit of fixing the problem. The remediation of the issue will then be determined.

Data Review

Data Governance will perform routine data reviews, including data auditing and matching, to assess and reconcile any modifications to data in the source systems.

The IT Data Specialist will be charged with the day-to-day management of the domain data as well as reviewing the Issue Reports. The Data Domain Stewards escalate key findings and issues to the Data Owner and Executive Sponsor in accordance with Data Governance administrative procedures. After identifying issues, the involved parties will evaluate the issue to determine root cause, impact and cost-benefit analysis. The remediation of the issue will then be determined.

Reports

The Data Stewards and the business and IT Data Specialist will regularly monitor the Data Governance reports in order to make sure that data quality is meeting Data Governance standards and escalate data quality issues to the appropriate Data Owner.

These reports are established to monitor the health of the data to confirm that it does not negatively deviate from the established data quality thresholds, and that it continues to meet Data Governance standards.

Data Definitions

Data Governance will make the meaning of data and business rules applied to enterprise data accessible to data producers and consumers. Data definitions and derivations should be unique and stored in a common metadata repository, either physically or logically. The same data fact within the same business context, regardless of the data store, shall have the same definition and set of logical values to maintain consistency across databases. Enterprise data producers and consumers must adhere to the data definitions as established by Data Governance.

Compliance with Industry Models and Standards

The members of the Data Governance Council will conduct periodic data quality reviews to verify that data is in accordance with meaningful data standards as defined by Data Governance that create and facilitate common understanding, communication, and productivity of enterprise data.

Data Quality and Governance Policies & Procedures

An effective Data Quality and Governance policy defines what data and regulations are required to provide guidance for effective program administration.

The policies are owned and enforced by the Data Governance organization to confirm continued data quality and consistency through the domains.

These policies will address the following:

- Each of the domains being addressed shall have defined standards.
- Defined data standards will be published for employees to easily review and reference. Employees shall be made aware of policies governing information standards. These published standards will include the policy's purpose, scope, requirements, and responsibilities.
- Each data standard shall be unique in the way it is defined and consistently applied across the domains. The type of data requiring defined standards shall be: master data, transactional data, analytical data, and web content.
- Each data field requiring a standard will be assigned to a Data Steward who will be responsible for defining the standard for each domain.
- Information shall comply with regulatory requirements.
- Industry information standards shall be reviewed and assessed for adoption by the domains.
- Any projects, reports, and forms shall use approved documented information standards when creating or modifying the definition of data fields and classifications, systems of record, or requirements for unstructured data.
- For each element, the single primary reference for the definition of each standard shall be the data design document for that object.
- All stakeholders shall confirm adherence to these standards.

Purpose

The purpose of the Information Governance Policies is to:

- Establish a management policy for confirming data standards
- Establish guidelines for data standards, governance and management
- Confirm the adherence to applicable Data Governance procedures
- Confirm business critical information has been standardized, documented, and consistently defined and applied throughout the enterprise
- Establish a single source of truth for financial data
- Enable robust information management
- Standardize processes, data structures, and technologies while preserving market-specific competitive differentiators
- Enhance data visibility and transparency across the appropriate organization level

Policies

The Data Governance program will be executed in order to consistently manage data as a company asset. The determination of whether or not Data Governance involvement is required will be made by Data Stewards with escalation going to the Data Governance Steering Committees when required.

Data Governance Project Management

Data Governance Project Management defines the required touch points between projects and the Data Governance Council in order to maintain control and consistency of data elements, definitions, and data quality across projects.

Projects and programs that use enterprise data must engage with Data Governance. Data Governance resources will determine their required level of involvement and confirm that the project planning includes Data Governance support as appropriate.

Data Monitoring and Controls

The prime function of Data Quality and Governance is to improve and maintain the quality of the data; thus, to be successful at governance, quality must be continuously measured and the results continuously fed back into the governance process.

- Data Governance will establish standards for routine data profiling of operational systems data and will manage the execution of the data profiling projects.
- Data Governance will establish, monitor, and maintain a queue to address data matches and conflicts.
- Data Governance will establish data control checkpoints and parameters.
- Leadership within the Data Governance Council must engage with Data Governance whenever data or the meaning of data is utilized, created, or updated in a presentation, access, or physical storage layer.
- Data Governance will establish standards for collection and documentation of business names, definitions, derivations, key performance indicators, and data quality rules.

Data Governance Administration and Oversight

A Data Governance Steering Committee will be established to act as the oversight and vetting body for new and revised Data Governance standards and policies. During the initial stages of Data Governance Council, the policies/processes will be created and adopted by the individual functional areas. Data stewards will be responsible for communicating the policies and processes to the Steering Committee. As the Data Governance Council matures these policies/processes would be more top-down driven with the organization goal to adopt the defined standards.

- Data Governance will create, maintain, and perform policies, procedures and processes as they pertain to the management and enablement of the Data Governance program.
- Data Governance will establish performance objectives for members of the Data Governance Council.

Data Governance Policies, Standards, Documents

The Organization – Roles – Responsibilities document will maintain the organization structure and operational model for Data Governance (see section 8 for example).

The Data Governance RACI document outlines the responsible, accountable, consulted, and informed parties for each of the Data Governance related tasks (see section 10.1 for example).

The IT Data Stewardship Policy outlines the data ownership, data classification, and data retention principles from an IT standpoint, to assist with integrity and quality of data.

Data Governance Technology

Each organization has different processes and business requirements, legacy systems, and Data Governance strategies that will aid in determining the most appropriate data architecture style DHHR will adhere to.

Technology Strategy

As foundational components, Data Governance enabling technologies should include functionality for managing:

- Data Quality and Master Data Management: Enabling technologies should include functionality for managing master data across applications, data quality auditing, capturing and reporting on data quality metrics, data profiling capabilities to assess data quality, and capabilities that enable data cleansing when errors are encountered.
- Data Privacy Security and Compliance: Enabling technologies should include functionality for supporting application-level security, data authentication, access provisioning, and encryption. These technologies should have capabilities to limit and restrict access to data only to individuals who require access based on their roles and responsibilities.
- Data Life cycle: Enabling technologies should support the management of the creation, configuration, deployment life-cycle, and usage monitoring of data assets
- Data Lineage: Enabling technologies should give the ability to track data sources
- Reference Data Management: Enabling technologies should support the storage of data definitions, derivations, valid values, business rules, and usage in a common metadata repository which is maintained by the organization

Data Governance enabling technologies will be selected to fulfill the organization's data governance objectives. These Data Governance enabling tools facilitate data cleansing, automation of data creation and replication, and control capabilities to simplify and automate data maintenance and the governance process.

The Role of Technology in Data Governance

Data profiling, data quality, and business glossary software support business and IT stewards in the following areas:

- Profiling and analyzing source data
- Defining and capturing standard definitions for data to be shared across the enterprise
- Standardizing lists of values to be used for consistent data capture

- Defining and implementing cleansing, standardization, validation, enrichment, matching, and merging business rules for automatic data quality validation and remediation
- Defining and implementing exception rules where manual intervention is required to mitigate data quality issues

Data Quality and Governance Organizational Role Definition, Responsibilities, Sample Deliverables & Time Commitment

In an effort to socialize our Data Quality and Governance Plan, we are looking to validate with the work stream leaders and mangers of different domains, the roles we are proposing and the names we are recommending.

Executive Sponsor

Role Definition - Senior Executive that provides both strategic and tactical support to confirm successful implementation of the Data Governance program across DHHR. The individual lays the foundation for the Data Governance program, defines and leads the scope of governed data, the data initiatives and investments.

Executive Sponsor	Responsibilities
Strategy and Planning	Promote the Data Governance mission for DHHR making sure that everyone understands the benefits of a standardized federated Data Governance model. The Sponsor has to communicate, influence and engage areas throughout the organization.
Qualitative drivers	Provide policy and direction. The Executive Sponsor will review and approve data policy, and recommend it for approval.
Quantitative drivers	Determine indications of progress. The Executive Sponsor will establish appropriate business drivers, and determine how to measure effectiveness against them.
People and Process	Establish the groups that will meet. He will assign individuals to these roles, defines the purpose and function of Data Governance teams, and confirms that training, informative documentation, and necessary tools are provided to them.

Data Owner

Role Definition - Data Owner is typically an executive with full accountability for one or more types of data. He determines the appropriate solution to data quality issues based upon recommendations from their supporting Data Stewards and Data Specialists. He can authorize or deny access to certain data, and is responsible for its accuracy, integrity, and timeliness.

Data Owner	Responsibilities
Data Governance Compliance	Confirm compliance with DHHR Data Governance polices and regulatory requirements for his area of responsibility.
Data Management and Integrity	Specify appropriate controls, based on data classification, to protect the information resources from unauthorized modification, deletion, or disclosure. Convey those requirements to data stewards for implementation and educate users.

Data Owner	Responsibilities
Data Security	Confirm that applicable controls are in place to confirm appropriate level of confidentiality, integrity and availability. Confirm compliance with applicable controls. Assign custody of information resource assets and provide appropriate authority to implement security controls and procedures.
People and Process	Confirm access rights are re-certified on a regular basis and adjusted when a user's access requirements to the data change (e.g., job assignment change).

Data Steward

Role Definition - A subject matter expert (SME) in a specific domain and is the single most important role responsible for determining optimal solutions to data quality issues. He is responsible for preparing data definitions and business rules for data quality, transformation, and aggregation.

A Steward plays a pivotal role in a successful Data Governance program by providing linkage among owners of different but related data subjects. He connects business rules and requirements with data models, database design with information systems implementation. He plays the lead role and determines the frequency of meetings, tracks the effectiveness of governance, and defines the management of data maturity.

Data Steward	Responsibilities
Strategy and Planning	Identifies business requirements for data and information, helps to set priorities, and maintains a roadmap of activities to meet requirements with continuous alignment of data with business needs.
Definition and Classification	Addresses the many metadata topics, data definitions, data naming, consistent use of data, data lineage and traceability of data.
Quality and Security Management	The Data Steward is the direct connection to the goals of - and motivations for - governance. Areas of responsibility include policies, regulations, goals, measures, monitoring, communication, education, and root cause analysis.
People and Process	Through teamwork, facilitation, and consensus building, the Data Steward forms the core of a governance organization.

Data Specialist (Business)

Role Definition - Conducts studies, and gathers and analyzes data from various databases and sources. He develops reports, summaries, recommendations, and visual representations. He maintains databases and provides consultation and assistance to a wide variety of clients.

He advises and assists clients in determining the appropriate analytical methodology to meet their needs and objectives. He uses various statistical packages, summarizes and interprets statistical results, and designs and implements process improvements.

Data Specialist (Business)	Responsibilities
Data Forecasts & Performance	Manage the design, collection, retrieval and analysis of critical forecasting and performance data.
Data Analytics	Act as internal consultant to business units to provide assistance regarding the development of analytical models and unit-based decision support systems (e.g. workload, projection vs. goal, etc.).

Data Specialist (Business)	Responsibilities
Data Liaison	May offer advice and counsel clients in determining the appropriate analytical methodology to meet their needs and achieve their objectives.
Data Improvement	Manage process improvement initiatives related to data collection, analysis or presentation. Supervise, train and direct the work of lower-level staff.

Data Specialist (IT)

Role Definition - The Data Specialist plays a critical role in protecting DHHR information systems and data. The Data Specialist has administrative and/or operational responsibility over information assets and must follow appropriate and related security guidelines to confirm the protection of sensitive data and intellectual property residing on systems for which they have accountability.

The Data Specialist has to proactively identify data quality issues using data profiling tools and to implement program code fixes that have been approved by the Data Owner.

Data Specialist (IT)	Responsibilities
Data Flow	Responsible for the safe custody, transport, storage of the data and implementation of business rules. He is responsible for the technical environment and database structure.
Data Fixing	Conduct data validation and reconciliation processes following completion of data movement as specified by the Data Stewards (e.g. validating and reconciling data movements into the GL).
Data Quality & Security Management	Review access and transaction groups confirming the access and groups are appropriate and valid.
Data Integrity, Security & Privacy	Monitor the data to confirm current data processing procedures are effective and timely.

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9.p. System Backup and Record Retention Plan

Draft Deliverables

August 8, 2017

WEST VIRGINIA IES PROJECT

Document Control Information

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System Backup and Record Retention Plan Introduction

The System Backup and Record Retention Plan provides an approach to keep WV DHHR's records are protected and adequately maintained throughout the duration of the WV IES Project. The plan should provide an outlined explanation of the records retention policy and retention schedules applicable to both structured and unstructured electronic records. Through reading this plan, DHHR should understand the obligations of al project team members with regards to supporting records preservation to sufficiently support the WV HSP solution. This plan should improve the confidence level regarding the completeness and accuracy of data and also provide the basis for establishing an effective mechanism around the processes and technology needed to gather enterprise data.

Record Management Guidelines

Approach

The high level approach for the Record Management plan for the WV HSP system includes:

- Develop a Records Management plan to establish a more rigorous and robust Records Management regiment
- Define a records retention policy and retention schedules applicable to both structured and unstructured electronic records
- Establish a faster and more effective mechanism (process and technology) to gather data
- Improve the confidence level regarding the completeness and accuracy of data
- Determine how to implement records retention and records management business rules within the proposed WV HSP technical environment

An effective Records Management solution for WV DHHR will also take into account these primary factors:

- Risk Mitigation
- Search and Retrieval
- Quality
- Security Control
- Storage and Architecture
- Performance

Three Phases of Approach

A three phase approach is recommended to develop a Records Management Plan.

Assess

- Assess existing policy, documentation types, retention standards, processes and security

- Assess existing Records Information Management (RIM) practices and staffing
- Assess IT infrastructure and software; inventory IT data/records repositories
- Identify key audience and messages; assess existing communications and training plans

Outcome

- A gap analysis and risk assessment from leading practices helps to develop a strategy to implement a comprehensive solution.

Develop

- Develop global information retention, security, destruction and hold policies
- Define, document and gain approval for recommended records governance structure and leading practices
- Identify IT procedures for adherence to RIM policies
- Create a communication plan, job aids and training resources

Outcome

- Retention policies and procedures relevant to WV IES are solidified.

Implement

- Apply policies and practices
- Implement plan and assign plan responsibilities and roles
- Roll-out IT plan on electronic records
- Begin plan outreach and training activities; audit and monitor plan compliance

Outcome

A sustainable, compliant and trustworthy solution is in place. Also, there is communication and education in regards to any changes.

Project Record Management Framework

Establishing a records management plan for WV IES begins with developing a framework for the most important components of records management. These include.

- State Records Policy - Contains the authorization, development, and approval process for the plan, as well as its staff and management structure.
- Records Retention Schedule - Provides a classification for record categories and corresponding retention periods, as well as who controls the destruction of records and other information.
- Data Hold Policy - Details processes and systems to help assure that required records and data are identified and safeguarded from alteration or destruction when they are relevant to existing or reasonably anticipated inspection, investigation or litigation.
- Records Management Manual - Combines relevant policies and procedures into a one-stop resource to instruct staff on accomplishing activities that support the plan throughout the organization.

On-Going Maintenance

On-going administration of the Records Management plan will involve a set of controls and processes to be followed when modifications need to be made to the Enterprise Taxonomy, Records Classification Schema or Records Retention Schedule. This occurs primarily in these two scenarios:

System Implementation

- Performed in preparation of an enterprise content management system implementation for specific business areas
- Done proactively to address changes to business, functional, or technical requirements made since completion of the framework
- Requires additional review with business users

Maintenance

- Performed after implementation of an enterprise content management system
- Done on an as needed basis through a formal change request process
- The framework was developed using a function-based approach and should not change often, however, significant business events may trigger a modification to the framework

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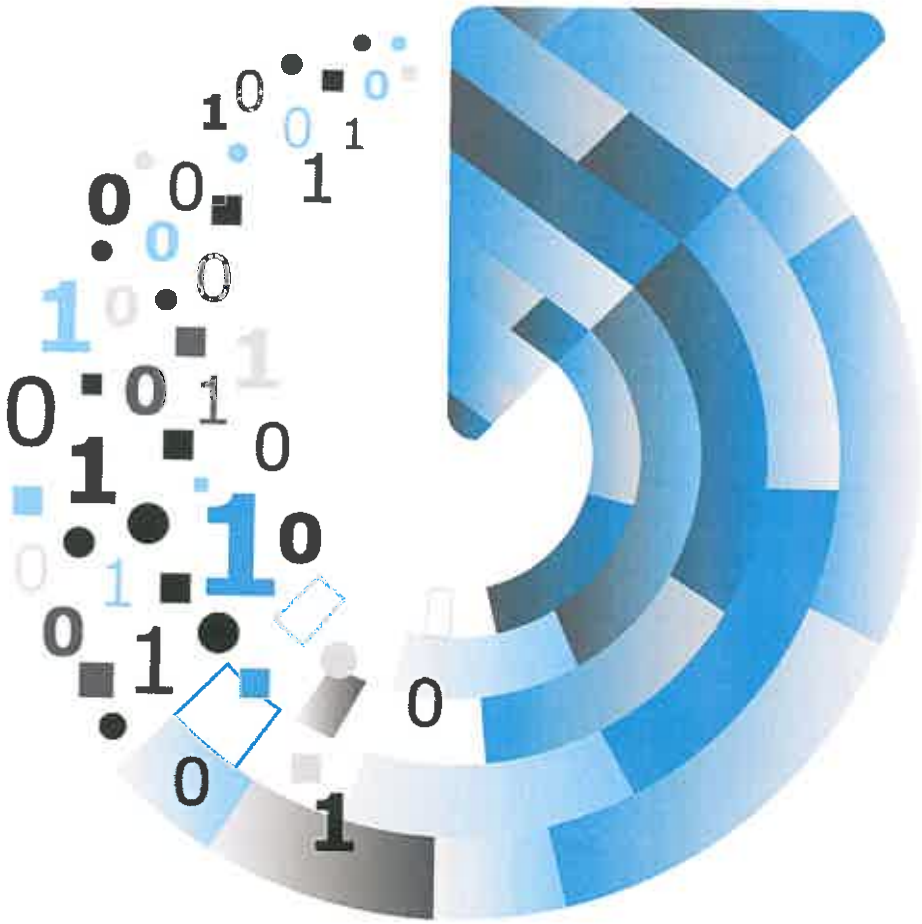

WV IES

10. Turnover and Closeout Management Plan

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Turnover and Closeout Management Plan Introduction

The Turnover Plan provides the high level details around the steps our team intends take in order to transition aspects of the WV HSP solution. Our team has put consideration around capabilities supporting this application including staffing, software, standards, governance, and tools. This plan captures the processes, deliverables and documentation used to operate and maintain the WV HSP solution. The turnover plan should educate WV DHHR staff with necessary information to understand the activities the activities necessary to complete the transition of the WV HSP application before the project team is dissolved. The Turnover Plan defines the content of capability transfer, process transition, a strategy for delivery, metrics for accomplishment and a schedule.

Purpose of the Turnover Plan

The Turnover Plan elaborates how Deloitte Consulting plans to the transition of the WV HSP solution and capabilities supporting this application including: team staffing, software framework, patterns, standards, conventions, and tools. The Turnover Plan captures the processes and artifacts used to operate and maintain the WV HSP solution. The objective of turnover is to provide WV DHHR staff with necessary information to understand the design, implementation, configuration and monitoring capability of the WV HSP application before the project team is dissolved.

Standards and Methodology Followed

The Turnover Plan is based on Deloitte Consulting's Enterprise Value Delivery for System Integration Methodology, and on past experience with projects of similar scope, technology and size. This deliverable serves as an outline for aspects of transition, but also details the transfer processes.

Goals of the Turnover Plan

The Turnover Plan defines the content of capability transfer, process transition, a strategy for delivery, metrics for accomplishment and a schedule.

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Schedule

Below is an outline of a potential schedule to be followed throughout the turnover phase. A majority of the effort involved with be comprised primarily of knowledge transfer and transition of responsibilities.

Months Prior to Turnover	Description	Responsible	Participants	Timing
15 Months	Finalize Turnover Plan	Project Manager	DHHR Leadership	Plan
14 Months	Receive final approvals from DHHR – Make Modifications if necessary	PM, PM Support Team	DHHR Leadership	Plan
12 Months	Turnover Notice Received from OMIS	Project Manager	DHHR Leadership	Plan
12 Months	Begin Executing Turnover Plan	Project Team, Track Leads	DHHR System Users, System Support	Execute
12 Months	Review Roles and Responsibilities with DHHR	Project Team, Track Leads	DHHR System Users, System Support	Execute
12 Thru 1	Kickoff Knowledge Transfer Sessions	Stream Leads, WV DHHR Project Leaders	Functional Team Members	Execute
12 Thru 1	Transition System Responsibilities	Project Team, Track Leads	DHHR System Users, System Support	Execute
1 Month	Assessment of Turnover Activities	PM, PM Support Team	DHHR Leadership	Closeout
1 Month	Submit Turnover Results Reports	Stream Leads and Team Members	DHHR Leadership	Closeout
0 Months	Final responsibilities transitioned. DHHR Users provide 100% system maintenance and operations	PM, PM Support Team, Track Leads	DHHR Leadership DHHR System Users, System Support	Closeout
0 Months	Modify access rights and security levels for system users.	Security Specialists	DHHR System Users	Closeout

Knowledge Transfer

The Knowledge Transfer Strategy described here establishes knowledge transfer agreements between consultant and client pairings, creating a culture of learning and knowledge sharing within the project teams.

The Knowledge Transfer Strategy and its execution will:

- Define the key knowledge transfer elements for each individual WV DHHR team member (based on his/her specific roles and responsibilities).
- Identify target performance based on individual roles and responsibilities.
- Provide a basis for measuring individual progress toward knowledge transfer.

The entire process is executed through knowledge agreements that document the above points. These agreements are developed through conversations between the Consultant and WV DHHR team members and under the direction of the Stream Leads. The intent is to only have one knowledge transfer agreement per consultant and WV DHHR pairing. If there is a transition or change of any individual, then a new agreement will be developed.

Knowledge Transfer Methods

Transferring knowledge from the Consultants to WV DHHR team members will be through daily interaction while working on work products and other deliverables. When gaps are identified through knowledge transfer assessments, Consultants will take into account the elements that require attention and increase coaching in that area as they work with their WV DHHR counterpart.

Our typical approaches to knowledge transfer includes:

- Job shadowing
- Documentation Review
- Code Review
- System Walkthroughs
- Functional Design Review

Roles and Responsibilities

The success of the knowledge transfer program will require the commitment and support of Deloitte and WV DHHR project team members. As indicated below, the role of Deloitte is to provide the knowledge transfer approach and structure. Monitoring of the assessments is completed by the Project Management Office (PMO), Deloitte and WV DHHR Leadership.

Stream Leads (WV DHHR)

- Identify appropriate knowledge transfer pairings
- Facilitate development of knowledge transfer agreements by their team.

Review knowledge transfer agreements for their team members.

Consulting Team Members

- Develop a knowledge transfer agreement with their counterpart.

- Identify capabilities to be transferred in conjunction with their WV DHHR counterpart.
- Create learning opportunities for his/her counterpart as per agreement.
- Use day-to-day work as an opportunity to transfer knowledge and skills.
- Provide feedback, advice and evaluations as required.
- Complete the knowledge transfer assessment reviews as per the prescribed dates.
- Work with counterpart to create opportunities for learning and knowledge development.
- Use day-to-day work as an opportunity to transfer knowledge and skills.

Complete the knowledge transfer assessment reviews as per the prescribed dates.

Project Manager

- Set clear expectations for team members regarding the knowledge transfer objectives.
- Monitor the execution of knowledge transfer assessments.

Staff Transition

Deloitte's resource allocation strategies are based upon our experience and what we believe can be achieved for turnover activities. We have transitioned many systems to our clients and the resource allocation strategy is dependent upon the ability of DHHR to understand and gain a level of proficiency in the application support operations for the systems. Deloitte has assumed a full staffing compliment to support turnover activities that include a ramp up of turnover percentages and a ramp down of system support services as the end of turnover approaches. The following table outlines the percentage of staff dedicated for turnover and system support services over the twelve month turnover period.

Time Period	Turnover Percentage	Deloitte Support Percentage
Month 2	10%	90%
Month 4	30%	70%
Month 6	40%	60%
Month 8	60%	40%
Month 10	80%	80%
Month 12	90%	10%

Transfer Responsibilities

The Deloitte team will work with DHHR to transition services conducted in support of WV HSP. After initial knowledge transfer sessions, DHHR will begin to perform these services under the monitoring of Deloitte and slowly begin to perform a greater percentage of responsibility as the turnover phase progresses. There are specific tasks outlined in the following table, which apply to the different services provided:

Responsibility	Description of Transition Tasks
Transition Project Management Responsibilities	Review the project management and PMO responsibilities with DHHR. Provide an overview of the governance structure and typical engagement points for DHHR project managers as well as typical project control procedures. Provide an overview and demos of the current management tools used to carry out the project management tasks.
Transition Platform and Configuration Management	Conduct technical infrastructure, and configurations walkthroughs to review key infrastructure components of WV HSP. Outline the processes that must be followed for migrating software throughout the server environments. Demonstrate the migration activities and answer questions as part of this review.
Transition Release Management	Provide an overview of system documentation and conduct sessions to review the release management and deployment planning deliverables and procedures. Review the schedule of current application activities to help DHHR understand the process utilized to perform maintenance and enhancement releases of WV HSP.
Transition Enterprise Application Architecture	Conduct detailed walkthroughs of the technical activities, infrastructure, and configuration supported by application architecture roles. Conduct an architectural standards review to enable DHHR to understand the existing DHHR technology standards, developer practices and governance practices.
Transition Batch Operations	Review the batch operations and provide a detailed overview of the existing batch application architecture and standard designs used to support DHHR batch processing. Provide a review of the current batch schedules for each of the DHHR applications. Review the batch scheduling and batch maintenance processes and review load testing processes.
Transition Database Management	Conduct database architecture and maintenance procedure walkthroughs to provide DHHR the necessary knowledge needed to effectively support database activities for WV HSP. Conduct data model and data dictionary walkthroughs in conjunction with the DHHR data management team to provide a detailed explanation of the WV HSP physical data model.
Business Process Support	Review business processes which will support WV HSP and the inputs/outputs of the system. Conduct system demonstrations and walkthroughs, to provide context to the business and functional roles within WV HSP. Provide and review WV HSP activity diagrams, to provide context around the different processes within the WV HSP modules.

Resource Skill Set and Experience Required

The following table defines the specific resource requirements for turnover, representing the different positions and skillsets for which the incoming support team will need to have to support the WV HSP Solution. Deloitte will work with DHHR to use the below table as a starting point and we will work to identify changes required to support that technology turnover. The following table illustrates our typical resource requirements for the roles needed as part of the WV IES engagement; these resource requirements may evolve:

Position	Resource Responsibilities	Required Skill Set and Experience
Project Manager	• Provide overall system Quality Assurance and alignment with established standards and policies • Manage contract compliance and timely completion of deliverables, work products and operational work products • Manage and use resources for overall project delivery • Facilitate project stakeholder communications • Manage project issues/risk and escalate to address to senior management • Manage timely completion of timesheets and overall project invoicing • Manage project schedule and timely completion of established tasks • Manage compliance with business requirements • Perform Change Control Management • Integrate individual aspects of system maintenance and project coordination	• 5-7 years in active management of software development methodology in a large-scale IT systems integration project. Experience with DHHR SDM or a similar waterfall or Unified Process based methodology • 5-7 years of project management experience of a Web-based system handling HHS programs and proven experience of project management concepts and tools • 5-7 years of experience in the understanding of end user, and operational delivery of HHS services • 5-7 years of hands on experience and knowledge of integrated front end capabilities and functional requirements as well as future goals or in a similar state HHS environment
Application Manager (s)	• Leverage and bring application development leading practices from similar HHS systems and processes • Participate and/ or lead requirements sessions with program office • Manage compliance with project schedules • Provide technical support and guidance to the application team • Provide accurate level of effort and resource estimates • Manage application change control and execute established change priorities • Manage quality assurance of application initiatives – including architecture, design and components	• 5-7 years of hands on experience and knowledge in the application management and implementation of HHS programs in the state environment • 5-7 years of experience in the understanding of end user, and operational delivery of services in a similar HHS environment • 5-7 years of experience in the understanding of program experience in a HHS environment • 5-7 years of experience in managing mission critical enterprise application of similar size and complexity •
Track Lead (s)	• Leverage and bring application development leading practices from similar HHS systems and processes • Participate and/or lead requirements sessions with program office • Manage and supervise a functional team to deliver services • Facilitate design sessions with program office • Coordinate the activities of the team to deliver enhancements • Manage compliance with project schedules • Provide technical support and guidance to the project schedule. • Provide accurate level of effort and resource estimates • Manage application change control and execute established change priorities • Manage quality assurance of application initiatives – including architecture, design and components	• Hands on experience and knowledge in application management and implementation • Experience with software development methodology • Hands on management of functional areas • Experience with industry standard tools • Experience in managing work plans, workload, and prioritization of activities • 5-7 years of experience with Microsoft application design architectures; hands on experience with object- and service-oriented architecture • 2-4 years of hands on management experience in the application architecture, data architecture, integration broker, security and component based architectures and

Position	Resource Responsibilities	Required Skill Set and Experience
	• Provide functional insights during design and development • Manage and escalate risks and issues • Assist, mentor, develop, and guide team members in resolving problems and completing work assignments • Oversee coordination and completion of application design, development and maintenance activities within a functional track or for an application release	implementation of HHS programs in the state environment • 5-7 years of experience in the understanding of end user issues and operational delivery of services in a similar state environment
Maintenance Manager	• Oversee coordination and completion of application design, development and maintenance activities across functional tracks for an application release • Manage quality assurance of initiatives and work products for a release • Manage technical/application development issue resolution and risk management • Provide functional experience in the completion of application initiatives • Manage compliance with business requirements by leading requirement/design session • Manage completion of application initiatives within project schedule • Support creation of application level of effort and resource estimates	• Hands on experience in performing impact assessments on software processes and estimation techniques a similar integrated eligibility system • 3-5 years of hands on management experience in the application architecture, data architecture, integration broker, security and component based architecture • 3-5 years of experience in the understanding of end user, and operational delivery of welfare services • 3-5 years of hands on experience with industry standard tools as identified in the DHHR standards and guidelines document
Subsystem Lead (s)	• Primary interface between the development staff and program area staff to manage, develop and test the technology developed to satisfy business functional requirements • Participate in the creation of detailed technical requirements documents and review them with developers during the construction phase • Develop and test technology to confirm business requirements are properly translated into system functionality • Support system testing and conduct end-user training when necessary	• Experience in design, coding, testing, and deployment developing functional and technical components of modules • 2-3 years of experience and knowledge of business requirements, system functionality, and relevant application design, development, testing and deployment tools • 2 -3 years of experience and knowledge in application management and implementation of programs in a similar environment using a relational database architecture
Data Warehouse Developers	• Analyze, design, and code component and assembly testing of the data warehouse code • Maintenance (including production support), enhancement and development work	• Knowledge of DHHR data warehouse technologies • Hands on data warehouse programming and unit testing experience • Experience with data warehousing technologies, standards, guidelines and procedures
Business Analysts	• Primary interface between the development staff and program area staff to manage, develop and test the technology developed to satisfy business functional requirements	• Day to day management of relevant functional modules • Understand user interface and system design to support troubleshooting, problem research

Position	Resource Responsibilities	Required Skill Set and Experience
	• Participate in the creation of requirements documents and review them with developers during the construction phase • Support system testing and conduct end-user training when necessary • Provide program and functional insights for the specific functional area during design and development • Coordinate with other project teams for assessing cross subsystem impact, issue identification and resolution • Support developers in compliance with design specifications	and impacts, and modification designs • Experience managing subsystem workload, prioritization of defects, maintenance requests, bundling of software components, and releases to production • Experience design, coding, testing, and deployment experience in developing functional and technical components of modules
Application Architects	• Provide specialized knowledge of DHHR application architecture, technical environment and development tools • Support optimal system performance in system design • Support design and development in accordance with DHHR application development standards	• At least 10 years of specialist level experience with application architectures, technical environment and system capabilities • At least 5 years in managing software development methodology in a large-scale IT systems implementation project. • At least 5 years of experience in system design and performance optimization techniques • 3 years as architecture lead on a transactional processing application of similar size and scope to the DHHR systems
Programmers	• Develop system components according to established design specifications • Develop code • Follow defined DHHR programming standards • Unit testing during development to validate components • Testing of assigned application code • Document components to facilitate ongoing maintenance • Enhancement of systems and new development activities • Work with technical team on an as needed basis to confirm that design and code meet performance requirements specified by DHHR	• Hands on programming and unit testing experience • Experience with applicable technologies to perform the functions of a programmer • Experience with development standards, guidelines, and processes • 2 to 3 years in software development methodology in a large-scale IT systems integration projects. Experience with waterfall or Unified Process based methodology
Test Lead	• Plan, construct, and/or execute test plans for system integration and acceptance test teams • Verify that tests are executed appropriately in the development and release cycle • Identify defects found in the testing process. • Retest code as necessary to resolve defects • Manage application testing initiatives – unit testing coordination, integration testing, accessibility testing, user acceptance testing and test for production • Oversee scenario creation in compliance with business requirements • Manage issue identification and escalation • Coordinate with the application team for issue resolution	• 1-3 years of testing experience using a proven application testing methodology such as waterfall or unified process • Experience in testing or using web or mainframe transactional systems • 1-3 years of experience in managing a team of testers, organizing scenarios, providing guidance, managing test work plans, scheduling testing, tracking test scenarios and results • Understanding Service Integration (Workers, Providers, Community Partners, Citizens) business

Position	Resource Responsibilities	Required Skill Set and Experience
	• Manage compliance with project schedules • Manage testing quality assurance	requirements, its impacts and cross system considerations • 1-2 years of experience testing
Testers	• Develop test scenarios based on design specifications and overall business requirements • Develop regression test scenarios to cover core system functionality • Execute testing activities and track progression and results • Compile testing results • Analyze results for compliance with requirements and specifications	• 1-3 years of experience in test practices and conducting testing • 1-3 years of experience in HHS programs or similar processes; experience testing applications in a HHS environment
Configuration Manager	• Perform capacity planning, coordinating efforts with Technical Architects and Technology Support Manager as well as the application teams • Create, maintain and submit the capacity plan, coordinating across application teams • Schedule, facilitate and coordinate implementation meetings including Playbook creation and communication – e.g., review playbook and provide feedback, define on-site/on-call contacts, provide on-site production deployment support • Identify performance tuning opportunities through proactive review of applications and monitoring of production, SAT and Integration environments • Participate in design sessions as requested by the application team; provide recommendations based on enterprise standards and leading practices • Define, coordinate and implement appropriate source code management approaches	• 2-3 years of experience in overall configuration management and deployment of software components and business application modules • 2-3 years of experience in configuration management planning, scheduling, coordinating application testing and monitoring overall configuration changes • 2-3 years of experience of experience in managing load testing, capacity planning in a multi-platform such as mainframe and web environments
Security Architect	• Define, troubleshoot, prototype and communicate application security architectural solutions with the application teams • Define application specific roles; consolidate, reuse and reconcile role information to reduce the proliferation of application roles • Provide process, architecture and implementation guidance for Secure SOA solutions • Perform risk classification of transactions based on PII data elements collected and processed by applications. • Identify data privacy risks that may impact the applications, the application teams and DHHR. • Guide application teams in areas of privacy and data leakage protection • Identify PII elements and create an inventory of PII elements based on sensitivity level • Integrate data privacy and data protection principles during application development throughout SDLC • Rationalize security requirements and develop secure designs; monitor that security	• 7-8 years of experience in designing application security architecture • Well versed in application and enterprise Role Based Access Control (RBAC) concepts and standards • Vast knowledge of Security and privacy regulations such as HIPAA, IRS audit requirements and standard security process and procedures • Must possess ISC2 -Certified Information System Security Professional (CISSP) certification, Certified Information Privacy Professional (CIPP), or equivalent

Position	Resource Responsibilities	Required Skill Set and Experience
	architecture elements are integrated in the design • Monitor implementation of security controls during SDLC phases	
Senior Security and Privacy Specialist	• Provide advisory level support for enterprise level security and privacy programs • Facilitate periodic steering team meetings with the DHHR security and privacy officers • Assist in establishing standards and policies and audit compliance	• 8-10 years of security and privacy experience • Vast public sector information security experience to bring industry leading practices to DHHR • Affiliations with state government sector security and privacy forums such as the NASCIO committees • Relevant Industry certifications such as the CISSP and Certified Information Security Manager (CISM)
DBAs	• Coordinate the collection, reporting and publishing of database related capacity planning information. • Provide support for scheduling, facilitating and coordinating implementation logistics meetings including Playbook creation and communication • Monitor INT and Production environments for poorly performing queries/processes; troubleshoot opportunities for performance improvement and communicate solutions to application teams	• 2-3 years experience with Oracle • 2-3 years experience data modeling and database operational leading practices for large-scale HHS systems • 1-2 years of experience with industry leading practices with regard to database architectures and features • For data warehouse related work, 2-3 years of experience in data warehousing
Data Architects	• Data modeling for OLTP and Data Warehouse solutions • Define, prototype and communicate application architectural solutions with the application teams • Participate in design sessions and review GSD/DSD documentation, including data models and database technical architecture • Provide recommendations based on enterprise standards and leading practices	• 3-5 years of vast experience in working with a HHS based information data model • 2-3 years of experience in providing data modeling and architecture support • Specialist level database design skills, understanding of Oracle log or above features and industry design leading practices • 2-3 years of experience in data modeling, data dictionary and related techniques in a relational environment

Transfer of Assets

The following table outlines key assets to be transferred at the conclusion of the turnover and closeout phase:

Asset	Description
Hardware	All hardware existing at the selected hosting location will be transferred to WV DHHR , or the successor organization, at the conclusion of the engagement.
Software	Deloitte will transfer all software, code and licenses to the State once the WV HSP system has been fully transitioned to the WV HDR team.
Data	Upon closeout, we will provide LDMs and PDMs outlining the data structure within IES, as well as any other documentation to support knowledge around the data domain. Additionally, Deloitte will transfer all State data to a secure location to be determined by the State.
Furniture	Our team will transition and return all furniture, including office equipment, used as part of this engagement.

Escrow

Deloitte understands that all items developed and managed as part of the WV IES engagement will remain property of the State. These items include but are not limited to: software, software licensing, hardware, data, code and furniture.

Closeout Tasks

In closeout, out team will finalize turnover tasks and to provide DHHR an understanding of the final outcomes across the turnover effort and provide: a detailed description of how each of the objectives stated in the Turnover Plan have been achieved, documentation of the resolution of issues identified and prioritized during the turnover process and a final report of items identified through the risk identification, assessment, and mitigation component of the Turnover plan. The steps taken to close out the turnover phase and transition the WV HSP solution to DHHR, are listed below:

Task	Description
Assessment of Activities	The Deloitte team will conduct an assessment of the activities completed throughout the Turnover phase. This will be completed to determine whether the turnover process met/exceeded the defined criteria outlined. This assessment of turnover activities will also help provide DHHR or the successor team with a pulse
Checklist Completed	Our team will review the Turnover Plan, and verify agreed upon tasks have been completed to their entirety. For any activities where progress still needs to be made, Deloitte will thoroughly indicate the purpose and next steps for these items.
Deliverables Completed and Documented	At this time, deliverables should be completed and documented, to the satisfaction of DHHR. West Virginia should have deliverables in their possession, as well as documentation to support these deliverables.
Security Privileges Updated	As DHHR will already be performing tasks related to support WV HSP, final security privileges will be updated. We will verify DHHR stakeholders have necessary permissions and Deloitte practitioner privileges will also be removed at this time.
Provide Project Closeout Report	To summarize the turnover results, Deloitte will deliver the Turnover Results report. The report provides completion status of each high level task and activity that took place during the turnover period. We will demonstrate that work items have met the success criteria defined throughout Turnover Planning. Our team will provide a detailed description of how tasks throughout the Turnover Plan have been achieved and documentation of the resolution of issues identified and prioritized during the turnover process.
Final Closeout Meeting	After Turnover Closeout activities have concluded, Deloitte will conduct a meeting, in collaboration with DHHR, to review the Turnover Results Report. In this meeting DHHR will verify the closeout is complete and have the opportunity to raise any final questions. At the conclusion of the meeting DHHR will drive the maintenance and operations of WV HSP. At this stage, the Turnover and Closeout phase has reached completion.
Provide Certificate of Destruction	Following the turnover and closeout phase, our team will confirm all DHHR sensitive data has been transferred to the state or has been securely disposed of. Following these activities, Deloitte will provide a Certificate of Destruction to WV DHHR to demonstrate we have demonstrated compliance with this requirement.

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11. Weekly Status Report Template

Draft Deliverables

August 8, 2017

Weekly Status Report Template Introduction

The Weekly Project Status Reporting Template will be used throughout the duration of the WV IES Project. This template will provide frequent updates throughout the project to the immediate project team as well as project leadership. The project management team will identify risks, issues, upcoming milestones and project status on a weekly basis. This template will also call out items needing attention from Deloitte and DHHR leadership to provide timely resolution to any items needing escalation. This is an important artifact for the WV IES Project as it provides a snapshot of the current health of the project.

Project Status Executive Summary<dd-mmm-yyyy – dd-mmm-yyyy>

Project Status Summary

Overall Project Status	R
	-

Scope	Resources	Schedule	Quality
Y	R	G	Y
=	=	+	-

Project Trends Key

+ Trending Up (Improving)	= Flat Trend (Steady)	- Trending Down (Declining)

Project Status Summary	• Describe project progress against critical path. • Explain changes in project ratings or trends above. • Summarize key highlights for the reporting period. • Etc...

Items Needing Leadership Attention

Request ID	Description	Priority/ Severity	Target Resolution Date
Risk XX	Risk description...	Critical	17-May-2013
Issue XX	Issue description...	Critical	01-Jun-2013
Decision XX	Decision description...	High	17-Jun-2013

Upcoming Deliverable and Key Milestone Status

Deliverable / Milestone Name	Progress	Baseline Finish Date	Planned/Actual Finish Date	Status	Comments
Deliverable 1				C	
Deliverable 2				G	
Deliverable 3				Y	
Milestone 1				R	
Deliverable 4				NS	
Etc...					

Deliverable Status and Milestone Summary Legend	NS	Not started	C	Completed	G	On track	Y	<1 week behind schedule	R	>1 week behind schedule

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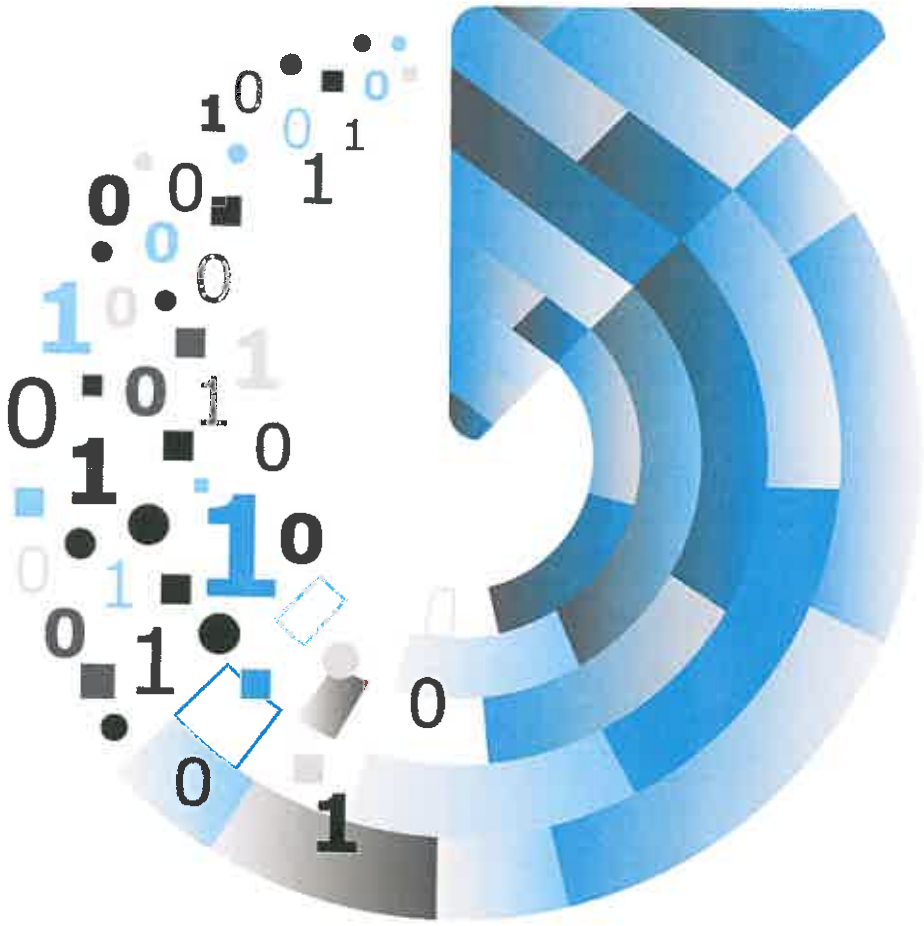


WV IES

12. Monthly Status Report Template

Draft Deliverables

August 8, 2017

Monthly Status Report Template Introduction

Similar to the Weekly Project Status Report, the Monthly Project Status Reporting Template will be used throughout the duration of the WV IES Project. This template will report project updates to the immediate project team as well as project leadership. The project management team will identify risks, issues, upcoming milestones and project status on a monthly basis. Items needing attention will be identified and flagged to Deloitte and DHHR leadership to provide timely resolution to any items needing escalation. This artifact will provide a snapshot of project highlights across each month of the engagement.

Project Status Executive Summary<dd-mmm-yyyy – dd-mmm-yyyy>

Project Status Summary

Overall Project Status	Scope	Resources	Schedule	Quality
R	Y	R	G	Y
-	=	=	+	-

Project Trends Key

+ Trending Up (Improving)	= Flat Trend (Steady)	- Trending Down (Declining)

Project Status Summary	
	• Describe project progress against critical path. • Explain changes in project ratings or trends above. • Summarize key highlights for the reporting period. • Etc...

Items Needing Leadership Attention

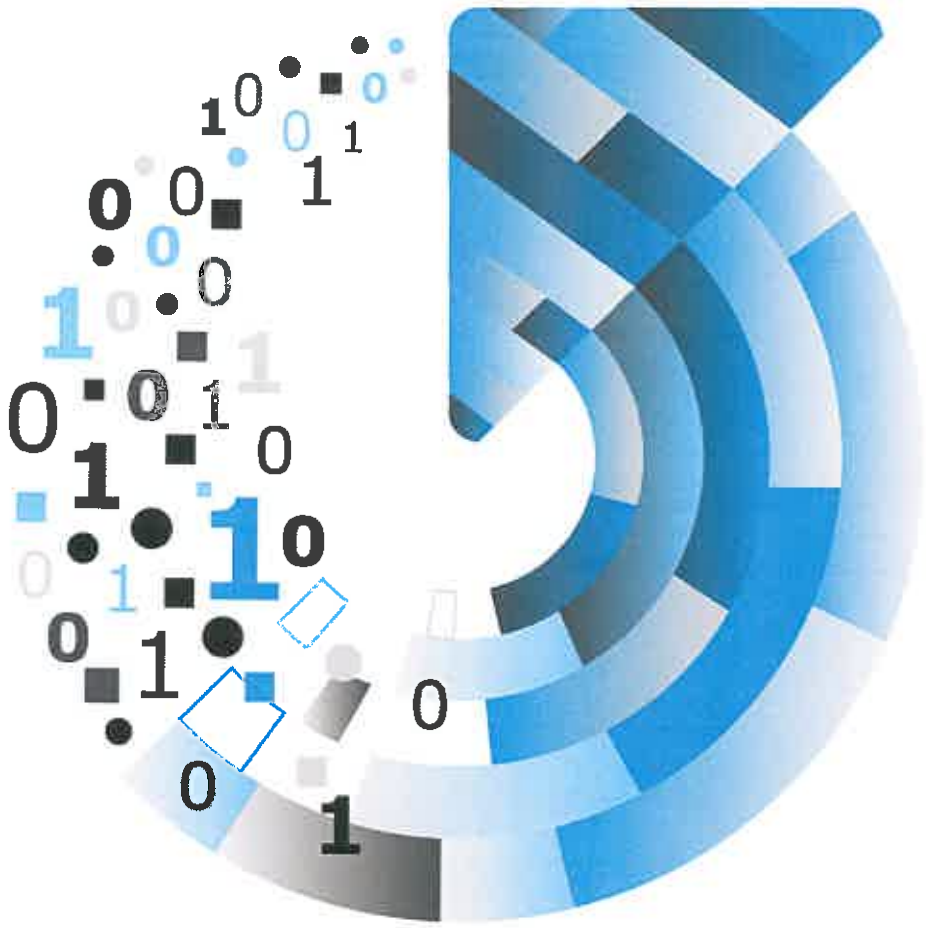
Request ID	Description	Priority/ Severity	Target Resolution Date
Risk XX	Risk description...	Critical	17-May-2013
Issue XX	Issue description...	Critical	01-Jun-2013
Decision XX	Decision description...	High	17-Jun-2013

Upcoming Deliverable and Key Milestone Status

Deliverable / Milestone Name	Progress	Baseline Finish Date	Planned/Actual Finish Date	Status	Comments
Deliverable 1				C	
Deliverable 2				G	
Deliverable 3				Y	
Milestone 1				R	
Deliverable 4				NS	
Etc...					

Deliverable Status and Milestone Summary Legend	NS	Not started	C	Completed	G	On track	Y	<1 week behind schedule	R	>1 week behind schedule

Deloitte.



WV IES

DRAFT DELIVERABLE FORMAT

Draft Deliverables

August 8, 2017

Attachment A Section, 4.3.1 Objective: Project Management

The vendor should include sample reports, forms, and deliverable formats in a separate section at the back of their proposal. Specific reports, forms, and deliverable samples should include a representation of the standard items associated with the Vendor's project management approach.

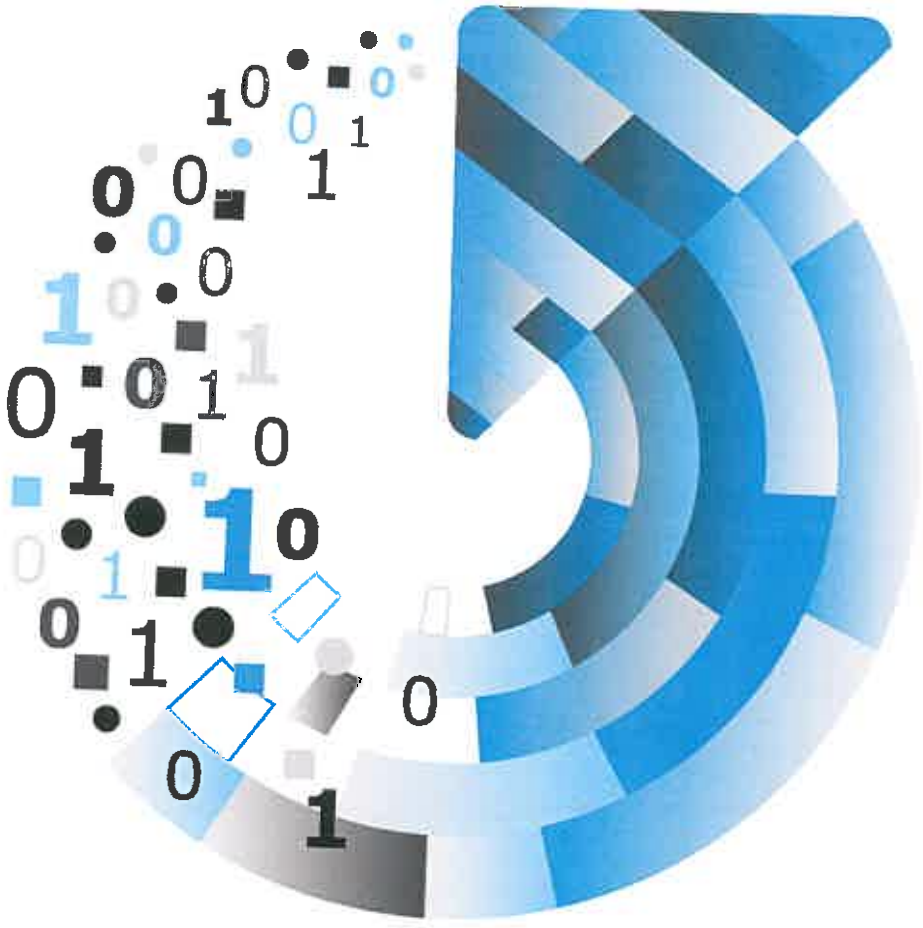
As requested within section 4.1.3 – Objective: Project Management of the RFP, we are pleased to present a sampling of our initial draft deliverable templates which includes a set of sample reports, forms, and deliverable formats that are built in accelerators of our EVD for SI methodology. The WV IES project will benefit from these accelerators from project kickoff and throughout the lifecycle of the project. These elements come ready to use for the WV IES project and will promote consistency and standard governance for DHHR.

WEST VIRGINIA
IES PROJECT

Draft Deliverable Format Contents

1. Functional Specification
2. Requirements Specification Document
3. Technical Architecture Specification
4. Business Process Models
5. Sample Reports

Deloitte.



WV IES

FUNCTIONAL SPECIFICATION

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

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Project Name	WV IES
Client	WV Department of Health and Human Resources
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The following people are designated recipients of the final version of this document:

Name	Organization/Title
TBD	TBD

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Purpose 1
Scope 1
Functional Overview 1
High-level Functional Specification 3
Detailed Functional Specification 3

WEST VIRGINIA IES PROJECT

Introduction

Purpose

The purpose of the Functional Specification for the WV IES Project is to document the functional design for the WV HSP Solution and provide a high-level description of its constituent components, describe the role of components as relevant to justify the object's main functionality, and other related information that will enable the project team to design the corresponding technical architecture.

Scope

This document is created from a functional (user) viewpoint rather than a technical (developer) viewpoint. It describes the object functionality in the context of the business requirements and the system features that address those business needs. At a high level, it talks about functional interactions between system modules and object components as relevant to the functionality under focus, process flow diagrams, etc.

This document does not contain any detail about the technical implementation of the object, coding logic, or data element descriptions. It also does not talk about functional details of other objects in the system. Where necessary, the corresponding functional specification documents are referred.

References

The following subsection provides a complete list of all documents referenced elsewhere in this file. Identify each reference document by title, document ID (if applicable), date, and publishing organization. Sources will be specified from which the references can be obtained. This information may be provided by reference to an appendix or to another document. List documents that can be considered as inputs for creation of this document, as dependent on the information captured in this document, and those that are just used as references (e.g., Business Rule Design Guideline). If no references exist, delete this section.

The documents referred in this document are listed in the below:

Document Title	Document ID	Date	Publishing Organization	Version

Table 1: Title.

Assumptions

The following section lists all assumptions made by the project team during the creation of this document.

Functional Overview

This section provides a functional overview of the object(s) with respect to its features, its relationships and interactions with other systems and modules, and its dependencies (if any) on other system functions.

Business Needs

This section lists the business needs of the project that are met in part or full by the functionality of the object.

Major Features

This section lists key features about objects that address multiple system requirements. The table below will list key system features that are supported by this object's functionality.

S. No.	Feature Name	Description

Table 2: List of Major Features

Systems Involved

The systems involved section lists the systems impact by the WV IES project by each specific object's functionality. The table below will list the systems involved in or impacted by this object's functionality.

S. No.	System Nam e	Description

Table 3: List of Systems Involved

Modules Involved

The table below includes the modules involved in or impacted by this object's functionality.

S. No.	Module Name	Description

Table 4: List of Modules Involved

Prerequisites and Dependencies

The table below includes the prerequisites for this object to perform its function.

S. No.	Prerequisite Name	Description

Table 5: List of Prerequisites

The table below includes dependencies that other systems, modules, and objects in the project have on this object's functionality.

S. No.	Dependency Name	Description

Table 6: List of Dependencies

Reference to Requirements

This section refers to all project requirements that are met by this object's functionality, including Requirement IDs, descriptions and links to work products in the project repository. Further details on the requirements are listed in the table below.

S. No.	Req. ID	Req. Name	Description

Table 7: List of Requirements

High-level Functional Specification

This section describes the high-level functional specification for the object in terms of the approach that resulted in the object's functional design, the components that constitute the object, the component relationships, process flows, and sequential steps that are part of the object's functionality.

Object Functionality

This section provides details on the core functionality of each object and the role within the overall system design. Primary function and a brief description of the overall functionality and the role of the object are described here.

Functional Approach

The Functional Approach sections include high-level design considerations, and methodologies relevant to justify the approach taken by the project team in each object's functional design.

Object Design

This section describes the functional design of the object in focus. Object components, roles, and functions will be described in this section.

Component Relationship Diagram

The component relationship diagram will show the overall functionality of the object and will display how the different components of the object are connected to each other, their relationships, and interactions.

Process Flow Diagram

The Process Flow Diagram shown below describes the essential process steps in the object's functionality. It illustrates how the components mentioned in the previous section interact across the process steps and provides an overview of the stepwise execution of the object's functionality.

Process Steps Description

Each step of the process flow described in the previous section is individually explained here.

Step No.	Step Name	Description

Table 8: List of Process Steps

Sequence Diagram

The Sequence Diagram below describes the orderly sequence in which the process steps described in the previous section are designed to execute. It also shows the components responsible for performing the steps.

Detailed Functional Specification

This section describes the detailed functional design for the object by covering three categories of information – design of the object interface that is presented to the user, design of the business intelligence running behind the scenes guiding the object's functionality, and a macro view of the database connections made by this object to retrieve and store necessary information.

Detailed Functional Description

The functional design of the object is described here in detail.

Presentation Layer

This section presents the functional design of the object features that are visible to the user, including objects that have a GUI component. The object interfaces for both user viewing and interaction is described here in detail.

Screen View

The screen presented to the user by this object will be shown below as well as specific requirements related to the object screen design.

Screen Fields

All the fields in the screen shown in the previous section will be described in the table below, as well as their functionality.

S. No.	Field Name	Description

Table 9: List of Screen Fields

Screen Actions

The table below describe all possible actions for this screen, screen components along with relevant details.

S. No.	Action Name	Description	Screen Component

Table 10: List of Screen Actions

Form Layout

The form presented to the user by this object, form layout, grid designs, exit options and key button functions will be shown below.

Table Layout

The table layout and actual table values are shown below.

Position	Field	Description	Type	Length	Decim al	Data Item

Table 11: Table Layout

Workflows

Depending on the actions taken by the user on the screens and tables described in the previous sections, one or more workflows may be executed for this object. A list of all relevant workflows is in the table below along with descriptions.

S. No.	Workflow Nam e	Description

Table 12: List of Workflow s

Inputs

All inputs to the mentioned object ar described here in detail.

All inputs to this object necessary for its functionality are listed below with descriptions.

S. No.	Input Nam e	Description

Table 13: List of Inputs

Outputs

All possible outputs from this object's execution as well as conditions for each output are listed below with descriptions.

S. No.	Output Name	Description

Table 14: List of Outputs

Messages

All possible messages that may be encountered by the user while interacting with this object's functionality are listed in the table below with relevant details.

S. No.	Message ID	Message Name	Description

Table 15: List of Messages

Help and Information Text

The table below lists all Help and Information Text that will guide the user to interact effectively with this object.

S. No.	Text Title	Description	Associated Screen Field

Table 16: List of Help and Information Text

Business Layer

The business and validation logic incorporated in the objects design for this object are described here in detail.

Business Rules

The table below lists and describes all business rules, transformation rules, defaulting rules, derivation rules and calculations that guide the functionality of this object.

S. No.	Rule Id	Description

Table 17: List of Business Rules

Validation Rules

The table below lists and describes all validation rules, inputs and outputs that ensure that the object processes correct data.

S. No.	Rule Id	Description

Table 18: List of Validation Rules

Field-level Security

Some screen fields may contain information critical to the overall system functionality and can only be edited by specific project team member roles. Listed below are the fields that have restricted access along with a description of the restriction and the member roles who can edit those fields.

Field Name	Restriction	Editable By

Table 19: List of Field-level Securities

Database Layer

The database components that this object interacts with, and high level database relationships, for its functionality are described here.

Database Connections

The table below lists details of the database tables that this object interacts with along with brief descriptions of any specifics of those database connections and the nature of the data transacted.

S. No.	Database	Table	Data Type	Connection Details

Table 20: List of Database Connections

Operational Design Considerations

This section describes essential design considerations that should be kept in mind to ensure smooth operation of the object's functionality.

Performance Considerations

Listed below are details about the performance that can be expected from this object's functionality and the conditions that will enable the desired performance:

- <Bullet 1>
- <Bullet 2>

Initiation, Frequency, and Scheduling Design

The conditions and method for invocation of this object's functionality, its expected frequency of operation in the system, and recommendations for appropriate scheduling (if any) of its operation are listed below:

- <Bullet 1>
- <Bullet 2>

Security and Controls Design

The following section describes security and control-related aspects of the functional design for the object.

The object design includes the following security and controls measures to ensure error-free operation:

- <Bullet 1>
- <Bullet 2>

Exception and Error Handling

This section describes the object's behavior when it encounters exception conditions or error scenarios.

Exceptions and Errors Handled

The table below lists all expected exception and error scenarios that this object is designed to handle along with brief descriptions of the handling process.

S. No.	Exception/Error	Description	Handling Process

Table 21: List of Exceptions and Errors handled

Log Output

The following section should contain a description around the format and details of the output log created when an object encounters exception or error scenarios.

In the event of an exception or error, the object kicks off the corresponding handling process as described in the previous section. At the same time, it generates a log for future reference and audit purposes. The layout of the log is as shown in the table below.

S. No.	Timestamp	Object Name	Brief Error Description

Table 22: Form at of Log Output

Restart Procedures

A restart procedure kicks in after the object has handled an exception or error scenario and is ready to start normal function. Listed below are all the restart procedures for this object.

S. No.	Procedure Nam e	Description

Table 23: List of Restart Procedures

Appendix

This section contains any additional information relevant to understanding and further exploring the content in the sections above.

Supporting Attachments

This section should include any documentation that is relevant to the functional design of the mentioned objects.

The table below lists all supporting attachments for the effective use of this document.

S. No.	Attachment	Attachment Nam e	Description
	<Embed attachment here>		

Table 24: List of Supporting Attachment

Deloitte.

WV IES

REQUIREMENTS SPECIFICATION DOCUMENT

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

Document Name	Requirements Specification Document
Project Name	WV IES
Client	WV Department of Health and Human Resources
Document Author	Deloitte
Document Version	.01
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Date Released	Dec 2016

Document Edit History

Version	Date	Additions/Modifications	Prepared/Revised by
V.01	Dec 16	Initial Draft	Deloitte

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Name	Organization/Title
TBD	TBD

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Overall Description 2
Requirements Specifications 3

Introduction

Purpose

The Requirements Specification Document (RSD), often referred to as the product specification, requirements document or the system specification, precisely states the functions and capabilities that the System must provide and the constraints that it must adhere to. The RSD is the basis for all subsequent project planning, design, and coding as well as the foundation for all system testing and user documentation. It should describe as completely as necessarily the system's behaviors under various conditions. The RSD does not contain design information or anything related to how the system will be built.

The Requirements Specification Document is mainly used by the following people:

- Designers use the RSD as a basis to develop the system design and establish traceability between the requirements and the design components.
- Developers use the RSD to conduct consistency checks between the design document, the requirements specification, and the implementation model. Developers also use the RSD to establish traceability between the requirements and the implementation model.
- The Project Manager refers to the RSD for input to control and monitor the project progress and scope.
- Testers use the RSD to develop the test cases and establish traceability between the requirements and the test cases/scripts.

Scope

This section provides the short description of the System being specified and its purpose. It relates the System to user or corporate goals and to business objectives and strategies.

Assumptions

This subsection provides a complete list of any assumption made by the project team while creating the document in bullet format. If no assumptions exist, include a sentence stating that fact.

Overall Description

This section of the RSD describes the general factors that affect the product and its requirements. This section does not state specific requirements, but instead provides a background for those requirements defined in Section 3 and makes them easier to understand.

Business Cases

This sub-section lists out the key business case highlights for the project.

The following are the business case highlights required to understand the project:

- <Highlight>
- <Highlight>
- <Highlight>

Overall Product Functions

This sub-section lists the major features the product contains or the significant functions that it performs. Details will be provided in section 3 of the SRS, so here only a high level summary will be mentioned. A picture of the major groups of requirements and how they are related, such as top level data flow diagram, a use case diagram, or a class diagram may also be added to this section.

The following are the major features to be provided by the product or the significant functions that it must perform:

- <Feature>
- <Feature>
- <Feature>

Key Dependencies

This sub-section lists any dependencies which are external or not in the control of the Project Manager which should be referenced.

The following are the external dependencies required in order for the project to be successful:

- <Dependency>
- <Dependency>
- <Dependency>

Out-of-Scope

This sub-section lists any items which are deemed out-of-scope for the solution which need clarification.

The following items are out-of-scope for this project:

- <Item>
- <Item>

Requirements Specifications

The four aspects of the Requirements Specification Document (RSD) are the requirements (functional and non-functional), use cases, business rules, and supporting specifications. Together they provide the overall picture for the project's requirements and will be used to begin design activities.

Requirements (Functional and Non-Functional)

This sub-section will include a reference to the versioned content in Git and JIRA where the requirements are available or will include a copy of the point in time content for review as part of the final client validation process.

Use Cases

This sub-section is optional for those projects where the client needs to approve use cases as part of their specifications and will include a reference to where the versioned use case models are available for review as part of the final client validation process.

Business Rules

This sub-section will include a reference to the versioned content in Git and JIRA where the business rules are available or will include a copy of the point in time content for review as part of the final client validation process.

Supporting Specifications

This sub-section will include a reference(s) to the versioned content in Git and JIRA where the business rules are available or will include a copy of the point in time content for review as part of the final client validation process.

Deloitte.

WV IES

TECHNICAL ARCHITECTURE SPECIFICATIONS

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

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Client	WV Department of Health and Human Resources
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TBD	TBD

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Introduction 1
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Application Architecture 3
Data Architecture 5
Integration Architecture 7
Infrastructure Architecture 10
Security Architecture 11

Introduction

Purpose

The purpose of this document is to document the high-level technical architecture for the solution and then refine and elaborate the architecture as the product scope changes throughout the sprints. A comprehensive architecture does not need to be initially defined. The technical architecture needs to provide a high level approach addressing key considerations with enough information for the team and other stakeholders to move forward knowing that the further detail will come later.

Architecture design artifacts such as business process models, entity diagrams, sequence diagrams, visual mock-ups, etc. serve as guideposts during implementation by establishing guidelines for performance criteria, design patterns, security considerations, service architecture, integration and other key considerations for detailed design required during Sprint development. As part of the artifacts, new or impacted domain models and system design changes are outlined.

Scope

This section provides a description of the functionality referred to in the document, detailing the architecture type and functionality details.

Assumptions

This section outlines the assumptions made by the project team, generally made in order to limit scope in some way.

Architectural Principles, Frameworks, Requirements, and Constraints

Architecture Principles, Frameworks, Requirements and Constraints details architectural principles and frameworks that govern the design and evolution of the solution and constraints that may arise from competing architecture requirements or existing architectures are detailed in this section.

Architecture principles

This section the architecture needs and ability to deliver per the project requirements.

Architecture frameworks

This section highlights the architecture frameworks that are leveraged to develop a broad range of different architectures, (application, data, infrastructure, security, etc.).

Architectural Requirements and Constraints

This section details the architectural requirements and constraints that may arise from competing architecture requirements or existing architectures.

Application Architecture

Overall Application Structure and Layering

Overall Application Structure and Layering details the overall application structure and layering provides an overview of the application layering scheme and the interaction between them. A visual diagram is included to illustrate the different layers in the application and their relation, depicting the communication medium by which the different application layers interact.

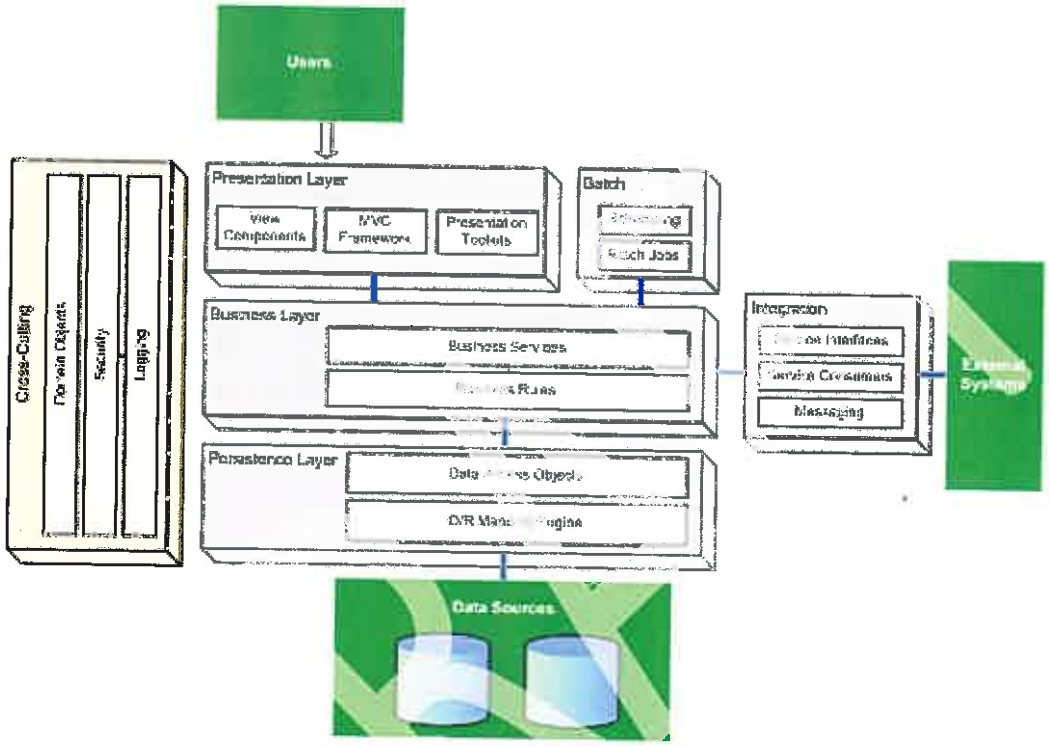

Figure 1: Application Structure Example

1.1.1 Presentation Layer

This section contains any other additional aspects of the design in the application architecture which are unique to this application layer.

1.1.2 Business Layer

This section contains any other additional aspects of the design in the application architecture which are unique to this application layer.

1.1.3 Persistence Layer

This section contains any other additional aspects of the design in the application architecture which are unique to this application layer, as well as any caching approaches that will be used at the persistence layer.

Cross-Layer Concerns

This section identifies the specific application architecture components that will be used to design and build the application that are not specific to any one of the application's layers. As each application architecture component is discussed, this section describes the tools used, the usage approach, and sample code artifacts for implementation.

1.1.4 Security

This section defines the approaches used to secure the application. Tools and frameworks used to secure the application, as well as the design approach employed will be defined. The following aspects are considered:

- Method for authentication
- Authorization, including the need for role-based access to resources and the method by which this will be achieved
- HTTPS and other transport security for secure information
- Prevention of common types of security attacks such as script and SQL injection, XSS attacks

1.1.5 Logging

This section provides details regarding the needed infrastructure for the application to handle anticipated and unanticipated events, including operating system exceptions and specific application errors. Diagnostic information may include the amount of time needed to execute a critical method, the number of transactions committed per second, or the number of users currently with active sessions.

1.1.6 Exception Handling

This section defines the approach to application exception handling. This subsection documents how exceptions be handled and logged and how they will be presented to the user.

1.1.7 Reference Table

This section clarifies the approach to manage static look-up table/reference table information. Example of reference tables are: County list, Application status, User friendly Error messages.

Deployment

This section includes any details about the deployment of the application. Examples of information that can be included are:

- How the application is packaged into binaries
- The different server environments the application is deployed to

Data Architecture

Solution Overview

The Solution Overview diagram shows the high level end-to-end solution design for the new Database architecture. It shows the flow of data from external parties into the existing systems and how this flow will be duplicated and directed into the new systems environment.

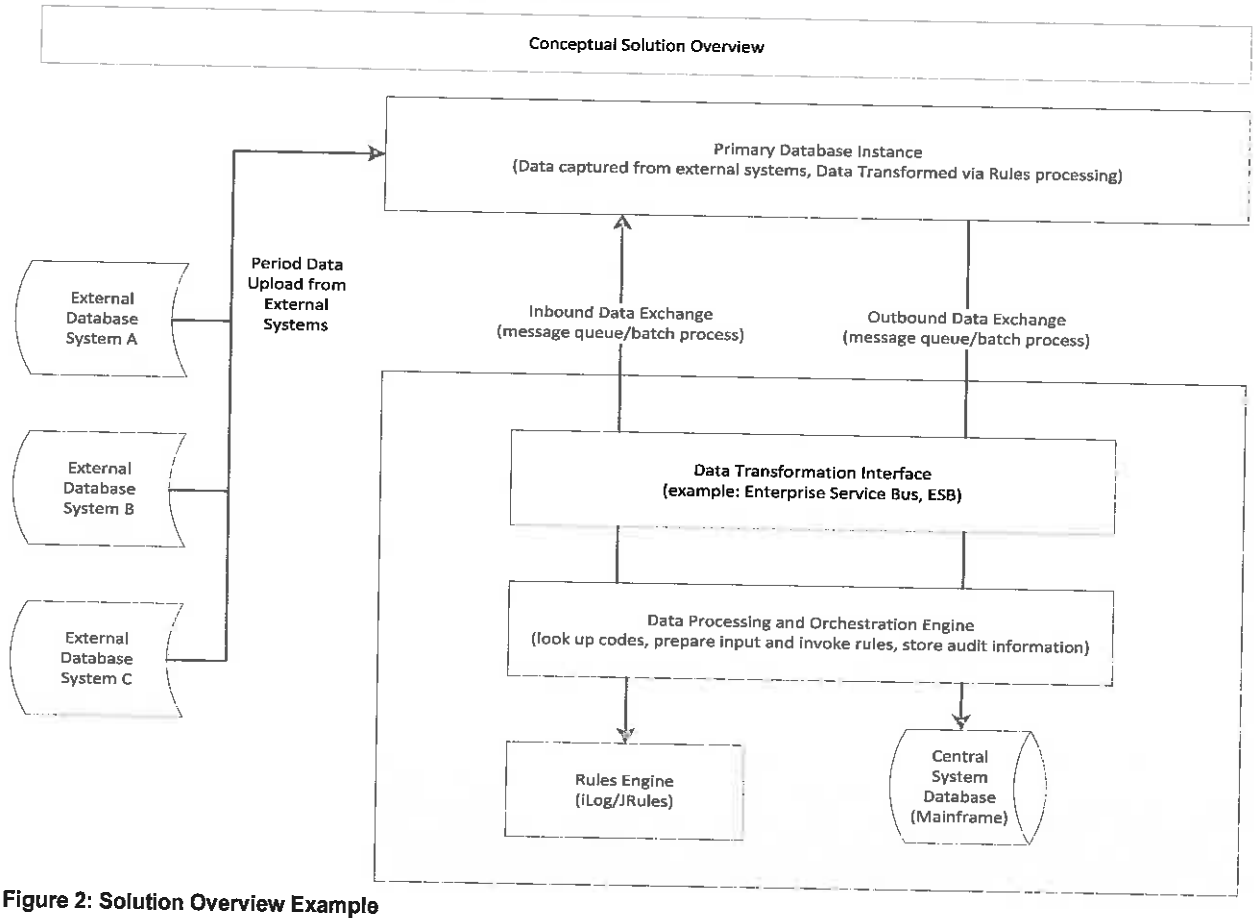

Figure 2: Solution Overview Example

Data Stores and Data Flow Design

This section describes the different data stores and the flow of data within these data stores.

1.1.8 Data Source

This section provides a list of data sources to be considered for the data architecture design, as well as the type of data in these data sources and data access frequency.

For Example:

- Data from legacy system
- Data will need to be accessed from legacy system on every search query run by the end user
- Data will need to be migrated from the legacy system to the new system via nightly batch run

1.1.9 Data Store Architecture

This section describes the different data stores and the type/quality data residing in these stores.

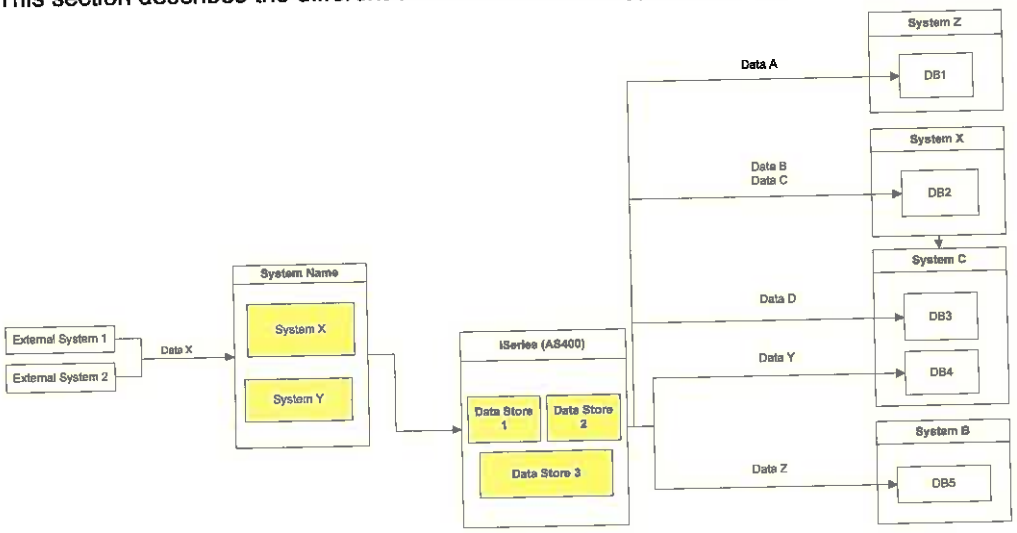

Figure 3: Title

1.1.10 End to End Data Flow Design

The End to End Data Flow design diagram illustrates the flow of data across different data stores that will be built to enable the processing and viewing of data.

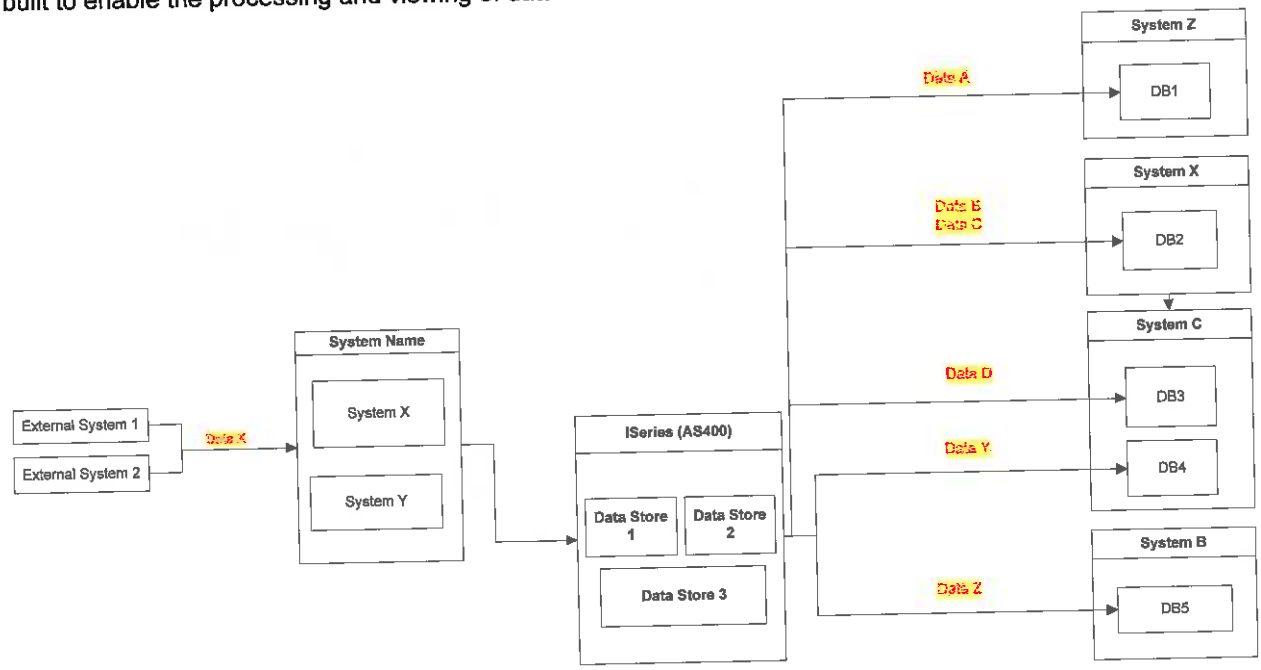

Figure 4: Title

Integration Architecture

Integration Architecture provides the detailed design for all the interfaces required implement the business functionality provided by the overall application. The section provides the implementation details for the interfaces to its end systems, data mappings between interfaces and its end systems and implementation of the business rules, validation rules, and transformation rules.

Business Rules

This section describes the business events and rules that trigger the integration sub-system to perform an action. The interfaces exposed by the integration sub-system to implement the business flow are defined. The message elements critical to implement the business functionality and the business logic implemented by the interface to implement the business rule is documented. The business rules are mapped to the requirements defined in the Software Requirements Specifications (SRS) document.

Requirement #	Business Rule	Rule Description	Interface Name	Message name	Business Logic Description

Table 1: Business rules

Interface Description

This section details the interfaces exposed by the integration sub-system to all the end systems in order to implement the required business functionality. The business functionality performed on the interface invocation including any post and pre conditions that should be met when the interface is invoked are documented.

Interface Name	Actors Involved	Context goal	Preconditions	Post conditions

Table 2: Interface details

Interface Frequency and Schedule (Optional)

This section describes the frequency and schedule for the invocation of the interface for the integration sub-system.

☐ Immediate (real-time)

☐ On demand

☐ Hourly Day: _____ Time: _____

☐ Daily Day: _____ Time: _____

☐ Weekly Day: _____ Time: _____

☐ Monthly Day: _____ Time: _____

☐ Quarterly Day: _____ Time: _____

☐ Annually Day: _____ Time: _____

☐ Other Day: _____ Time: _____

Message details (Optional)

This section documents details of the message exchanged between the integration sub-system interfaces and the end system. The messages may contain business objects and/or data elements used by the interface to implement the business functionality for the integration sub-system. Operations performed on the message elements and any validation rules performed on the messages when they are received by the interface of the integration sub-system are described. The XML schema files (xsd) used to define the message structure for XML based messages document are documented.

Interface Name	Message Name	Message element	Request/Response	Operation performed (select/insert/delete/update)	Validation Rule

Table 3: Message details

Data Mapping and Transformation Rules

This section describes the integration sub-system (source) and end system (target) messages such as the message element names, data type, date length and a description about the business purpose of the message element within the sub-system. Further the source and target sub-system message elements are mapped to each other and appropriate transformation rules are applied to clearly ensure that the message elements retain the business definitions as defined within the respective systems. The source and target messages are also mapped to the canonical model (if one exists) and appropriate transformation rules are applied to ensure that the business definitions of the messages are retained.

The table below lists the message elements for the integration sub-system (source) and documents the message element name, description of its purpose within the sub-system, the data type and length.

Field Name	Description	Type	Length (if applicable)

Table 4: Source Message

The table below lists the message elements for the end system (target) and documents the message element name, description of its purpose within the sub-system, the data type and length.

Field Name	Description	Type	Length (if applicable)

Table 5: Target Message

The table below lists the Source message to Target message mapping details including any transformation logic that has to be applied during the message exchange.

<Source System> Data Element	Required (Y/N)	<Target System> Data Element	Required (Y/N)	Mapping Logic

Table 6: Source to Target Message mapping

Infrastructure Architecture

Infrastructure Architecture provides details regarding the infrastructure architecture of the solution.

Operational Environments

This section documents the different environments the application is deployed in, including production, development, testing, training, and staging environments. This includes all hardware and software used in each environment.

Physical Environments

This section outlines the environments relevant to the As-Is architecture, including the supporting detail of the machines in the environment. An example of the environment detail is included below.

Machine	Hardware	Description	Software	Qty
Webserver	IBM xSeries 366 8863E7U Form factor Processor Memory Cache Local storage Controller/Storage adapter Optical Drive PCI/PCI-X Slots NIC Power supply Accessories	Dual power supply, Quad processor, 8 GB RAM, 1 @ 73 GB, HD at 10K RPM with hot-swap 3U, x366 Cabinet (Standard) 4 Intel Xeon Processors @ 3.66 GHz/667 MHz with Intel EM64T 2 4GB (2x2GB Kit) PC2-3200 Single Rank CL3 ECC DDR2 SDRAM RDIMM L1 data 16K, L1 instruction 12K, L2 cache 1MB Array1 - 1 @ 73GB 10K RPM HDD ServeRAID 8i SAS Controller IBM 8X Max DVD-ROM Ultrabay Enhanced drive Total 6 PCI/PCI-X adapter slots Dual integrated 10/100/1000 Mbps Ethernet Dual, Intel Pro 1000 Dual Port Dual 1300W Power Supply Specify cable management arm	Apache HTTP Server 2.3	2
App Server	...	...		2
DB Server	...	...		1

Table 7: Sample Physical Environments

Network (Optional)

This section documents salient aspects of the application network. This should include details of the different devices used, firewalls in place, and other network devices used.

Security Architecture

This section documents details regarding the solution security architecture.

Identity and Access Management (IAM)

This section documents identity and access management functions, such as user management, access management and provisioning.

Audit Logging

This section documents audit trail and correlation to detect and monitor user access (read/write/update) to data.

Database and Media Security

This section documents database and media security functions, such as user activity monitoring and data encryption.

Network Security

This section documents network security functions, such as encryption of data in transit, firewalls, an intrusion prevention system, and trust zone architecture.

Business Continuity

This section documents business continuity and disaster recovery functions, such as high availability, resilient and failover architecture, load balancing, system backup/recovery, and offsite storage.

Data Privacy

This section details document privacy functions, such as data-handling controls and data leakage prevention solutions to protect PII.

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WV IES

BUSINESS PROCESS MODELS

Draft Deliverables

August 8, 2017

Document Control Information

Document Information

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Client	WV Department of Health and Human Resources
Document Author	Deloitte
Document Version	.01
Document Status	Sample Template
Date Released	Dec 2016

Document Edit History

Version	Date	Additions/Modifications	Prepared/Revised by
V.01	Dec 16	Initial Draft	Deloitte

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Distribution of Final Document

The following people are designated recipients of the final version of this document:

Name	Organization/Title
TBD	TBD

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To-Be Business Process Model ID: Title Contributors 13

2. Introduction

2.1 Purpose

The purpose of this document is to capture the Business Process Models, and corresponding narratives and information that will be leveraged to elicit Functional and Non-Functional Requirements, and support WV DHHR IES with standardized, accurate, and updated Business Process Model documentation.

The To-Be Business Process Models enable the following:

- Provide insight into the organization's future state processes, including:
  - People: future roles and responsibilities by process task actor(s)
  - Processes: future pre-conditions and input data, triggers, post-conditions and output data, and business rules
  - Technology: future systems, interactions (interfaces), interface payload details, process performance targets, and security and controls

Serve as the communication and documentation tool to facilitate a common understanding of To-Be Business Process Models across the organization.

- Support the incorporation of business requirements through the re-design of As-Is Business Process Models (for example, resolution of current state pain points and choke points/constraints) and implementation of net new To-Be Business Process Models resulting from implementation of new technologies/systems and inherent capabilities.
- Enable effective elicitation and definition of Functional and Non-Functional requirements downstream, as well as use cases and storyboards.

This document will be used by:

- Application teams: to provide input to the definition, design, development, and testing of new and modified application functionality.
- Business process owners, client subject matter experts, and key stakeholders: to provide input to the development of detailed processes, procedures, and policies for business function areas.
- Integration teams: to identify and provide input to the definition, design, development, and testing of system-to-system interfaces.
- Organizational Change Management teams: to better understand the impacts to <Project Name> business function areas and operations, and to help prepare training materials.
- Test teams: to design test cases that verifies the system functionality, interfaces, and end-to-end business transactions.

2.2 Scope

This document covers the following To-Be Business Process Models, which are formally listed and tracked in the Business Process Model Inventory (a supplementary document):

Release	Category	Business Function Area ID	Business Function Area Title	To-Be Business Process Model ID	To-Be Business Process Model Title
R1	Customer Operations	BI	Billing	FS-BI-030	FS: Calculate Billing Determinants

2.3 References

The following is a complete list of all documents referenced elsewhere in this document.

Document Title	Document ID	Date	Publishing Organization	Version
FS-BI-030_Calculate Billing Determinants BPM_vFinal_20130315.vsd	Doc01234	15-MAR-2013	Deloitte	Final

Table 1: Title

2.4 Assumptions

The following is a complete list of assumptions for the Business Process Modeling work effort. Specific To-Be Business Process Model assumptions are located in a different section of this document.

- Business Process Modeling Scope
  - Redesign of As-Is Business Process Models, Design of net new To-Be Business Process Models, and the retirement of As-Is Business Process Models (as appropriate) are in scope.
- Business Process Model Tool
  - The BPM Tool utilized is the Software AG® ARIS® Platform, which is being used for all To-Be Business Process Modeling efforts on the project.
- Gap Analysis
  - A complete list of the business requirements, as well as any formal documentation on the business vision are located in the Project Charter for this engagement.
- Business Process Model Design Approach
  - Business Process Modeling Notation BPMN is the guiding standard for all redesign and design efforts; however, not all standards were followed exactly due to a superseding agreement between Deloitte and the client on object standards for the project.
- To-Be Business Process Model participants (for example, stakeholders)
  - The To-Be Business Process Model contributors list in this document is not the formal list for reviewers and approvers.

3 To-Be Business Process Model ID: Title

This is where the Business Process Model will be described and depicted. The ID and title of the Business Process Model should match the ID and title in the BPM Tool and associated work products including the BPM Inventory. Additional Business Process Models may be included as necessary.

3.1 To-Be Business Process Model ID: Title Description

In this section, a text description of the To-Be Business Process Model that includes a summary and business objectives will be added.

WEST VIRGINIA IES PROJECT

3.2 To-Be Business Process Model ID: Title

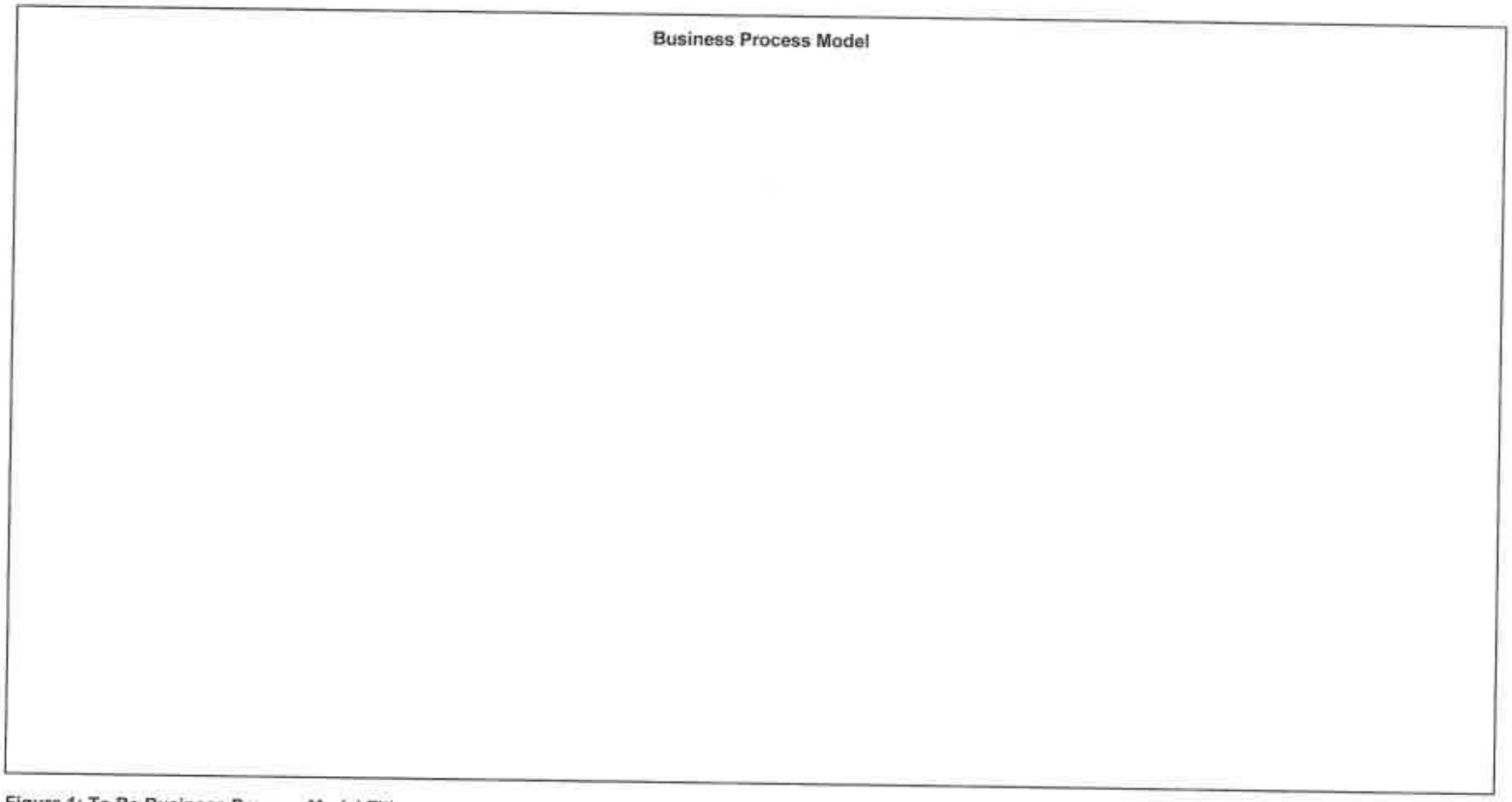

Figure 1: To Be Business Process Model Title

3.3 To-Be Business Process Model ID: Title

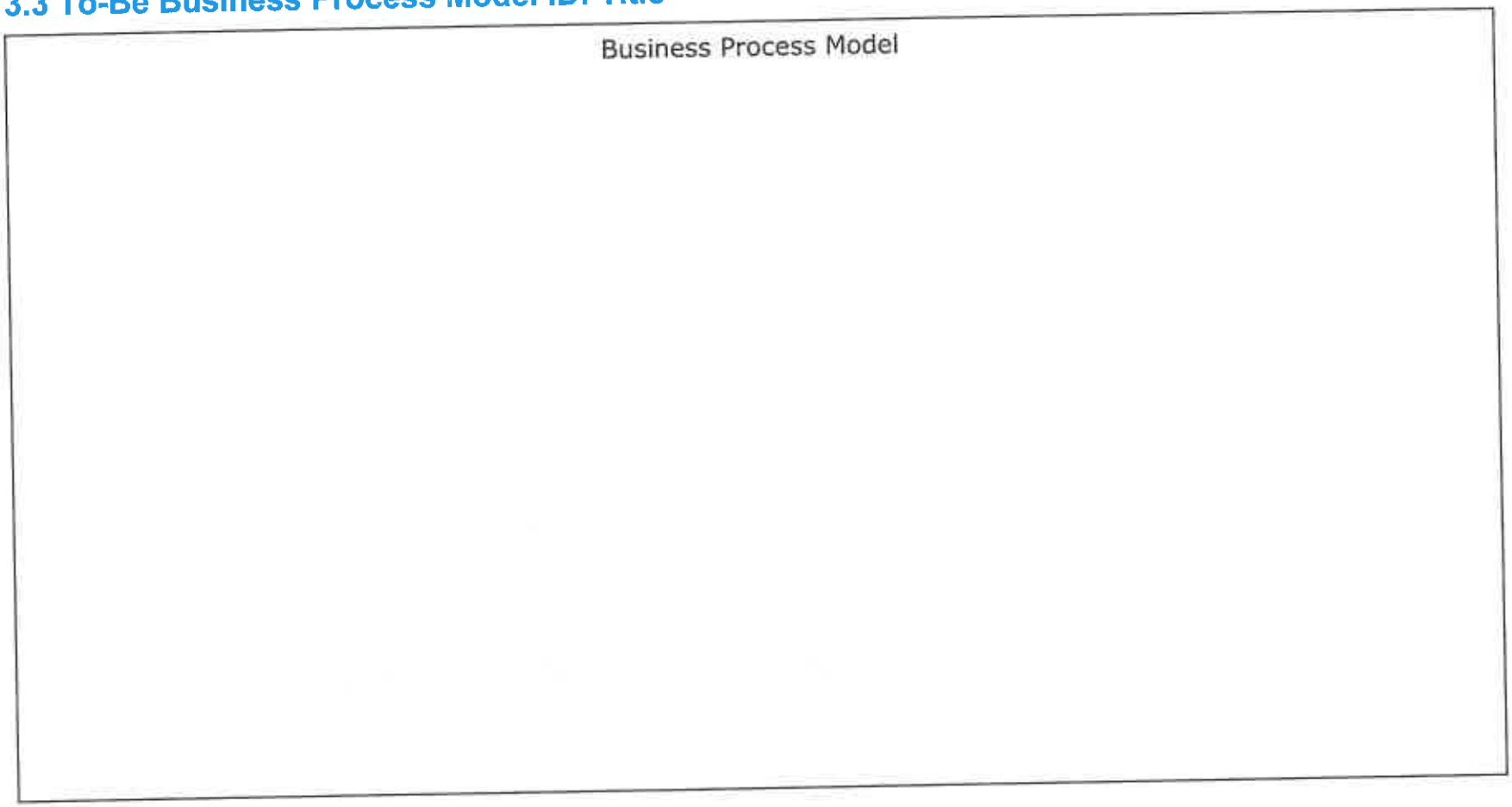

Figure 1: Figure 2: To Be Business Process Model Title

3.4 To-Be Business Process Model ID: Title Narrative

The following To-Be Business Process Model narrative includes detailed information about each task.

Task #	Task Name	Task Description	Task Input	Task Output

Table 2: Title

3.5 To-Be Business Process Model ID: Title Information

3.5.1 As-Is Business Process Model References

The following is a list of As-Is Business Process Model references used to design the To-Be Business Process Model depicted in this document.

Release	Category	Business Function Area ID/Title	As-Is Business Process Model ID: Title	To-Be Business Process Model ID: Title

Table 3: Title

3.5.2 Non-System Actor Inventory

The following is a list of the non-system actors in the To-Be Business Process Model depicted in this document.

Actor Role	Actor Description

Table 4: Title

3.5.3 System Actor Inventory

The following is a list of the system actors in the To-Be Business Process Model depicted in this document.

Actor Role	Actor Description

Table 5: Title

3.5.4 Pre-Conditions and Input Data

The following is a list of the pre-conditions and input data for the To-Be Business Process Model depicted in this document.

Pre-Condition(s)/Input Data #	Pre-Condition(s)/Input Data Description

Table 6: Title

3.5.5 Triggers

The following is a list of triggers in the To-Be Business Process Model depicted in this document.

Trigger #	Trigger Description

Table 7: Title

3.5.6 Post-Conditions and Output Data

The following is a list of the post-conditions and output data for the To-Be Business Process Model depicted in this document.

Post-Condition(s)/Output Data #	Post-Condition(s)/Output Data Description

Table 8: Title

3.5.7 Business Rules

The following is a list of the billing rules in the To-Be Business Process Model depicted in this document.

Process Step	Business Rule and Additional Process Rule Description

Table 9: Title

3.5.8 Interactions

The following is a list of the interactions in the To-Be Business Process Model depicted in this document.

Interface ID	Reference	Source	Target	Data Description	Frequency	Volume

Table 10: Title

3.5.9 Metric Estimates

The following is a list of the metric estimates for the To-Be Business Process Model depicted in this document.

Metric #	Metric Estimate

Table 11: Title

3.5.10 Security & Controls

The following is a list of security & controls concerning the To-Be Business Process Model depicted in this document.

Security/Control(s)	Security/Controls Description

Table 12: Title

3.5.11 Organizational Change Management

The following are organizational change areas to take into consideration with the implementation of the To-Be Business Process Model depicted in this document.

Org Change Area	Organizational Change Description
Process Change Implications	
Organizational Change Implications	
Technology Change Implications	
Cultural Change Implications	
Impacted Business Function Areas	
Impacted Roles	
Reference to Policy & Procedure Manuals	
Office Forms	
Legal/Regulatory	

Table 13: Title

3.5.12 Assumptions and Constraints

The following is a list of the assumptions and constraints concerning the To-Be Business Process Model depicted in this document.

Assumption/Constraint #	Assumptions/Constraints

Table 14: Title

3.5.13 Open Items

The following is a list of open items concerning the To-Be Business Process Model depicted in this document.

Open Item #	Open Item Description	Status	Date Opened	Due Date

Table 15: Title

3.5.14 Additional Notes

The following are additional notes concerning the To-Be Business Process Model depicted in this document.

Additional Note #	Additional Notes

Table 16: Title

3.5.15 Glossary

The following is a glossary of terms and definitions for the To-Be Business Process Model depicted in this document.

Term	Definition

Table 17: Title

4. To-Be Business Process Model ID: Title Contributors

The following client subject matter experts, business process owners, and key stakeholders have been identified and confirmed to have a stake in the design/redesign and validation of the To-Be Business Process Models depicted in this document.

Name	Organization/Title

Table 18: Title

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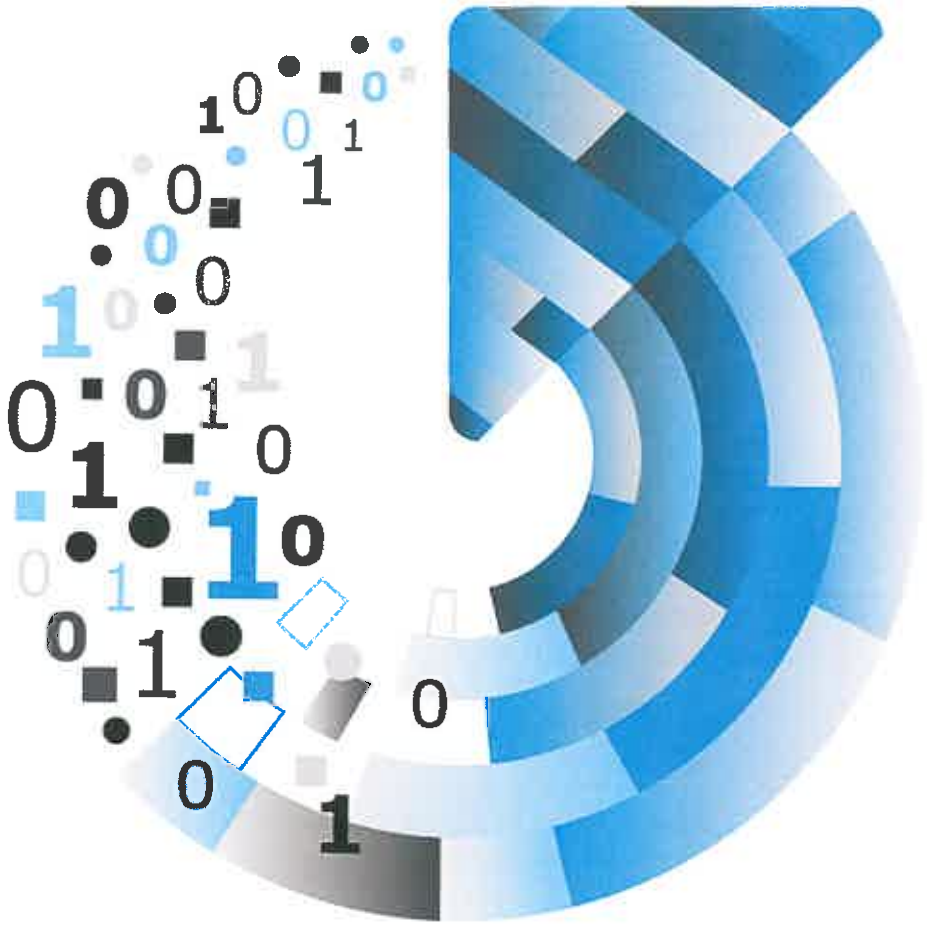

WV IES

SAMPLE REPORTS

Draft Deliverables

August 8, 2017

WEST VIRGINIA
IES PROJECT

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WEST VIRGINIA IES PROJECT

1. Sample Report: Cases and People Eligible to Receive Assistance

DEPARTMENT OF HUMAN SERVICES
CASES AND PERSONS ELIGIBLE TO RECEIVE ASSISTANCE

REPORT ID: [redacted]
REPORT PERIOD: 02/2017

RUN DATE: 03/07/2017
RUN TIME: 19:26:39

OFFICE OF SERVICE

	MEDICAL TOTALS		AGED		BLIND		DISABLED		TANF		AGED		BLIND		DISABLED		FHP *		ACA*		EXTENSIONS*	
	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON	CASES	PERSON
OFFICE 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OFFICE 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OFFICE 3	12	22	0	0	0	0	0	0	1	1	1	1	0	0	1	1	9	19	2	3	3	6
OFFICE 4	33	70	1	1	0	0	1	1	6	13	2	2	0	0	3	3	18	50	2	3	5	15
OFFICE 5	33	80	1	1	1	1	1	1	7	19	2	2	1	1	2	2	18	53	2	3	4	10
OFFICE 6	36	93	1	1	0	0	1	1	8	24	3	3	1	1	2	2	20	61	2	3	5	15
OFFICE 7	28	73	0	0	0	0	1	1	8	24	2	2	0	0	1	1	16	45	2	3	3	6
OFFICE 8	38	132	1	1	0	0	1	1	9	35	2	2	0	0	2	2	23	91	2	3	4	10
OFFICE 9	32	85	0	0	0	0	1	1	8	24	2	2	0	0	2	2	19	56	2	3	4	10
OFFICE 10	29	93	0	0	0	0	1	1	8	26	1	1	0	0	1	1	18	64	2	3	4	15
OFFICE 11	37	112	1	1	0	0	1	1	9	31	2	2	1	1	2	2	21	74	2	3	5	15
OFFICE 12	24	53	1	1	0	0	1	1	5	11	1	1	0	0	1	1	15	38	2	3	4	10
OFFICE 13	26	66	0	0	0	0	1	1	7	18	1	1	0	0	1	1	16	45	2	3	3	6
OFFICE 14	16	30	1	1	0	0	1	1	2	3	1	1	0	0	1	1	10	23	2	3	2	3

*ACA is subset of FHP
*Extensions is a subset of FHP

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IES Report

WV_IES_2017-5014(F)

WEST VIRGINIA IES PROJECT

2. Sample Report: Redetermination Snapshot by Office

DEPARTMENT OF HUMAN SERVICES
REDE SNAPSHOT BY OFFICE

REPORT ID: [redacted]
REPORT PERIOD: 08/2016

RUN DATE: 09/04/2016
RUN TIME: 0:32:49
Office: [redacted]

TYPE OF ASSISTANCE	DUE THIS MONTH	DUE IN 2 MONTH	DUE IN 3 MONTH	OVERDUE REDE (MEDICAL AND CASH) 0-15 DAYS	16- 30 DAYS	31-60 DAYS	61+ DAYS	CLOSED SNAP REDEs	REDE IN PROGRESS
AABD CASH	2	0	2					0	0
TANF	2	0	2					0	2
1619	0	0	0					0	0
AABD MED	2	0	2					0	2
AABD SPD	2	0	2					0	2
ACA ADULT	6	0	6					0	6
AK ASSIST	32	0	44					0	22
AK PREM 1	20	0	20					0	2
AK PREM 2	12	0	6					0	0
AK SHARE	12	0	12					0	2
DAC	2	0	2					0	0
DOA	2	0	4					0	4
DOA SPD	2	0	2					0	2
FAMILYCARE	6	0	6					0	6
HBWD	0	0	0					0	0
LTC NH	0	0	0					0	0
LTC SLF	0	0	0					0	0
MB NEWBORN	2	0	2					0	0

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IES Report

WV_IES_2017-5016(F)

WEST VIRGINIA IES PROJECT

3. Sample Report: Intake Activity by Office

Department of Human Services
Department of Healthcare and Family Services
Intake Activity by Office

Report ID : [redacted]
Report Period: 07/02/2017 - 07/08/2017
County : [redacted] Office: [redacted]

Run Date: 07/10/2017
Run Time: 11:03:32 pm

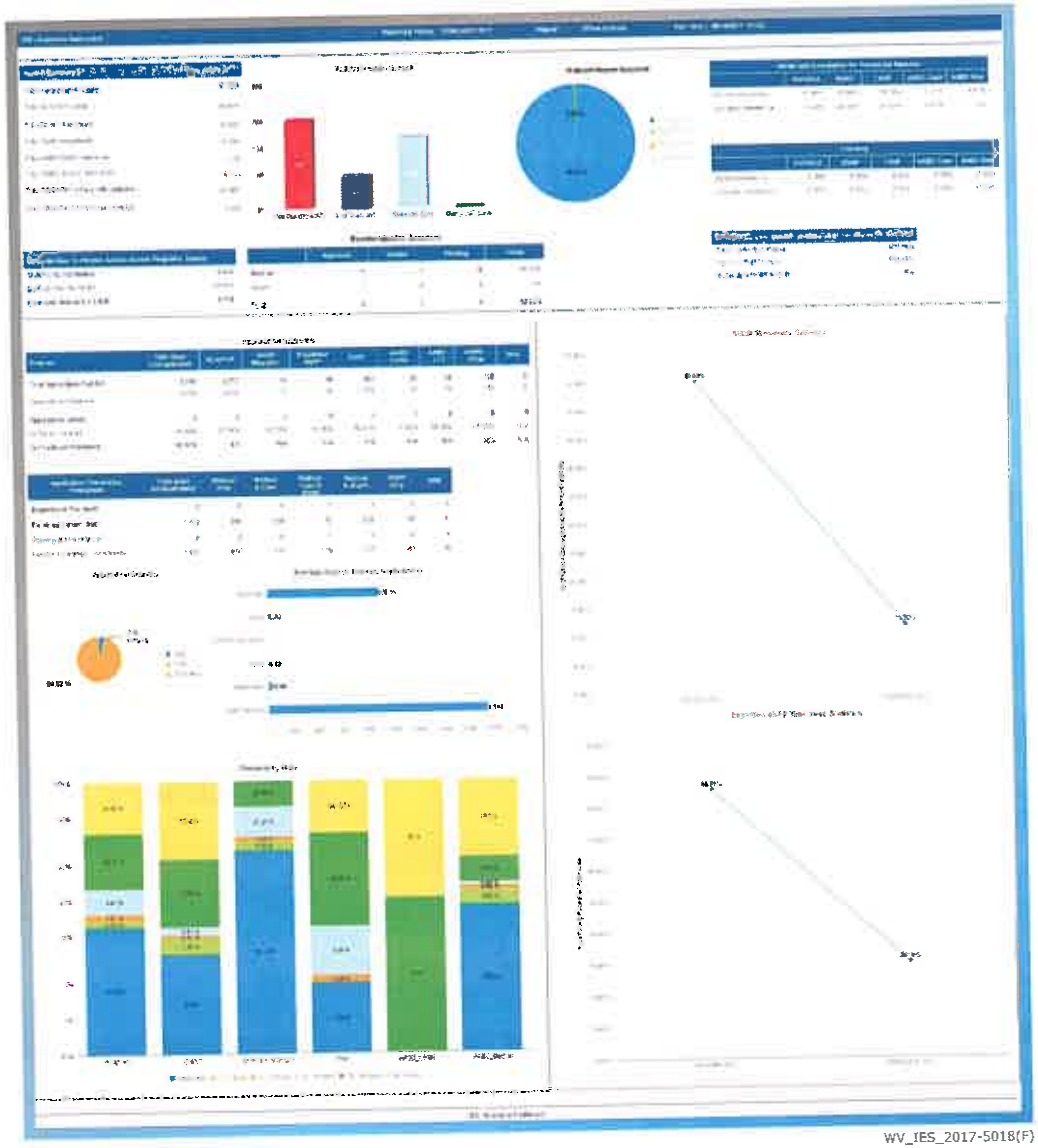
Pending Registration Activity Type of Assistance	Pend End Total	Number of Days Pending [0-5]	[6-10]	[11-14]	[15-30]	[31-45]	[46-60]	[>60]
Cash Total	26	6	1	4	14	1	0	0
TANF	22	4	1	4	12	1	0	0
AABD Cash	4	2	0	0	2	0	0	0
RRP Cash	0	0	0	0	0	0	0	0
MA Total	130	42	17	7	49	4	0	1
MAGI - Family Care	24	7	2	3	10	2	0	0
MAGI - AK Assist	39	14	5	4	15	1	0	0
MAGI - Pregnant	8	4	0	0	4	0	0	0
MAGI - ACA Adult	55	17	10	0	16	1	0	1
MAGI - M&B Newborn	0	0	0	0	0	0	0	0
MAGI - Med Ext	0	0	0	0	0	0	0	0
MAGI - AK Share	0	0	0	0	0	0	0	0
MAGI - AK Prem 1	1	0	0	0	1	0	0	0
MAGI - AK Prem 2	0	0	0	0	0	0	0	0
MAGI - FHS Pregnant	0	0	0	0	0	0	0	0
MAGI - FHS Child	3	0	0	0	3	0	0	0
MC Total(Medical Savings)	23	8	0	3	11	1	0	0
MSP - (QMB)	2	1	0	1	0	0	0	0
MSP - (SLIB)	4	1	0	0	3	0	0	0
MSP - (QI - 1)	17	6	0	2	8	1	0	0

* Cash and MA(Pre EDBC) have a 45 day SOP. Counts are at the program level
** SER Counts are by Service Request

WV_IES_2017-5017(F)

WEST VIRGINIA
IES PROJECT

4. Sample Report: Executive Dashboard of Programs and Application Statistics



WV_IES_2017-5018(F)

5. Sample Report: Child Support Enforcement Annual Data

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Administration for Children and Families
Office of Child Support Enforcement

Form Approved
OMB No. 0970-0177
Expires: 09/30/2017

CHILD SUPPORT ENFORCEMENT ANNUAL DATA REPORT

(This report consists of three pages. Do not report in shaded areas.)

STATE: SUBMISSION: ☐ NEW ☐ REVISED FISCAL YEAR

ITEMS	(a) TOTAL	(b) CURRENT ASSISTANCE	(c) FORMER ASSISTANCE	(d) NEVER ASSISTANCE
SECTION A: CASE INVENTORY				
1. Cases Open at the End of the Fiscal Year				
a. Interstate Cases Initiated in This State Open at the End of the Fiscal Year				
b. Interstate Cases Received From Another State Open at the End of the Fiscal Year				
c. Medicaid-Only IV-D Cases Open at the End of the Fiscal Year				
d. State-Tribal IV-D Cases Initiated in This State Open at the End of the Fiscal Year				
e. State-Tribal IV-D Cases Received From a Tribal IV-D Program Open at the End of the Fiscal Year				
f. International IV-D Cases Initiated in This State Open at the End of the Fiscal Year				
g. International IV-D Cases Received from Another Country Open at the End of the Fiscal Year				
2. Cases Open at the End of the Fiscal Year With Support Orders Established				
a. Interstate Cases Initiated in This State With Support Orders Established Open at the End of the Fiscal Year				
b. Interstate Cases Received From Another State With Support Orders Established Open at the End of the Fiscal Year				
c. Cases With Orders Established for Cash Support Open at the End of the Fiscal Year				
d. Medicaid Only IV-D Cases With Orders Established Open at the End of the Fiscal Year				
e. Arrears-Only IV-D Cases With Orders Established Open at the End of the Fiscal Year				
f. State-Tribal IV-D Cases Initiated in This State With Support Orders Established Open at the End of the Fiscal Year				
g. State-Tribal IV-D Cases With Support Orders Established Received From a Tribe Open at the End of the Fiscal Year				
h. International IV-D Cases With Support Orders Established Initiated in This State Open at the End of the Fiscal Year				
i. International IV-D Cases With Support Order Established Received From Another Country Open at the End of the Fiscal Year				
3. Cases Open at the End of the Fiscal Year for Which the State Has No Jurisdiction				

FORM OCSE-157 (2014)

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WV IES
Requirements Traceability Matrix

Version: 03

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Document Control Information

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Client	West Virginia DHHR
Document Author	<Insert author name >
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1 Overview
2 Deliverables
3 Key Notes
4 Instructions for the Template
5 Key Definitions
6 Printing Instructions

Requirements facilitate the effort required to design, build, test, and implement business processes. Requirements for each process and the supporting business rules or assumptions are defined.

Business requirements are high-level statements that document the solution for a project including the documentation of client needs and expectations. The most common objectives of business requirements are:
- To gain agreement with stakeholders
- To provide a foundation to communicate to a technology service provider what the solution needs to do to satisfy the client's business needs
- To provide input into the next phase for the project
- To describe what, not how the client's business needs will be met by the solution

Detailed requirements are singular documented capabilities that a particular product or solution should be able to perform or support. They are statements that identify a necessary attribute, capability, characteristic, or quality of a system in order for it to have value and utility to a user. Detailed requirements should support the various dimensions of scope, i.e. process, package functional, geographic, organizational, technical infrastructure and data. Detailed requirements must be documented, actionable, measurable, testable, traceable, related to identified business requirements (if documented), and defined to a level of detail sufficient for system design, build and test

The deliverable for the task listed below can be generated using this work book:
- **01199 - Document Business Requirements**: The objective of this task is to document the high-level business requirements.
- **03280 - Document Detailed Requirements**: The objective of this task is to document the detailed functional and non-functional requirements.
- **01238 - Conduct Fit Gap Analysis:** The objective of this task is to identify the requirements that are not supported by software functionality, provides and analysis of any gaps in the software, and documents potential gap resolutions.
- **03257 - Conduct Discovery Sessions (Workday)**: The objective of this task is to document the requirements created from discovery sessions.

- Use this spreadsheet to capture requirements.
- If a requirements management tool is not used on the project, this spreadsheet may be used for managing the project's requirements and traceability.
- Each row in the template should refer to only one specific requirement. Multiple requirements should not be combined into one row.
- At the end of each associated phase, a final version of the overall deliverable should be saved, so there is a static copy to reference throughout the project.

Back to Contents

1. The "Requirements" tab will be populated while executing multiple tasks of the project, such as during Documenting Business Requirements, Documenting Detailed Requirements, and Performing Fit Gap Analysis. An asterisk (*) indicates a mandatory field.
2. If using IP5, copy and paste the Functional (type) requirements and their details from the "Requirements" tab in to the IP5 macro-generated Excel sheet. Synch with IP5 (The synching of Non-Functional requirements is optional).
3. Refine the requirements as required. However, once the deliverable has been signed-off, the addition of new requirements will have to go through the change control process. Note that this document will generate three deliverables.
4. Different process teams can use this spread sheet to capture their requirements, but the requirements from all the different teams must be consolidated into one worksheet before finalizing the deliverable.

Field Details

Field	Description	Associated Task
	Requirements Specification	**Completed during:**
Detailed Requirement ID*	Enter the detailed requirement ID. A team prefix can be used to help identify to which team each requirement is applicable. Example: PTP-001, OTC-001, RTR-001, PMO-001, etc.	**Document Detailed Requirements**
Detailed Requirement Name* (Level 2 Requirement)	Document the name of the detailed requirement	**Document Detailed Requirements**
Business Requirement ID*	Document the related high-level business requirements, if applicable. Not all projects will have high-level business requirements.	**Document Business Requirements**
Business Requirement Name* (Level 1 Requirement)	Document the name of the business requirement	**Document Business Requirements**
Requirement Name*	Document the name of the requirement	**Document Business Requirements** **Document Detailed Requirements**

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Description/Definition*	Describe the requirement in detail. Design elements should not be included in the description.	**Document Business Requirements** **Document Detailed Requirements**
Reference to Project Charter	Describe any related drivers from the project's charter. e.g. Are these requirements related to reduction of DII?	**Document Business Requirements** **Document Detailed Requirements**
Requirement Type*	Indicate the type of requirement that has been identified: **Business** (High-level statement of client's needs) **Functional** (Defines the capabilities and functionality of the solution) **Non-Functional** (Represents the properties or characteristics that the solution must exhibit or the constraints that it must respect, other than an observable system behavior)	**Document Business Requirements** **Document Detailed Requirements**
Team*	Indicate which process team captured the requirement	**Document Business Requirements** **Document Detailed Requirements**
Subteam	Indicate which subteam captured the requirement	**Document Business Requirements** **Document Detailed Requirements**
Business Unit	Indicate which business unit is affected by this requirement.	**Document Business Requirements** **Document Detailed Requirements**
Business Stakeholder	Indicate the business stakeholder responsible for this requirement.	**Document Business Requirements** **Document Detailed Requirements**
IP Code	Enter the IndustryPrint Code. At a minimum the IndustryPrint Code captured should be at the Subprocess level. However, it is preferred to map to the lowest level (task) if it is known during requirements gathering. If more than one IP Code relates to the requirement, separate each of the codes with a comma. **SAP** requires mapping of detailed requirements to the task.	**Document Business Requirements** **Document Detailed Requirements**
IP Name	Enter the IndustryPrint code name	**Document Business Requirements** **Document Detailed Requirements**
Priority*	Document the priority of the requirement. Consider the business impact (value) to determine the priority of the requirement. **Mandatory** (The product is not acceptable unless these requirements are satisfied. These requirements are critical for business operation therefore have a high impact/value to the business. They will be addressed prior to any consideration of the other categories.) **Desirable** (Would enhance the product, but the product is not unacceptable if absent. These requirements are "nice to have" therefore have a medium impact/value. These are requirements that will be implemented as long as funding allows.) **Optional** (Functions that may or may not be worthwhile. These requirements are non critical for business operation therefore have a low impact/value. These requirements will be implemented only if funding is available and all essential and conditional requirements have been addressed.) **Deferred** (Requirement to be addressed at a later time)	**Document Business Requirements** **Document Detailed Requirements**

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Complexity	Document the initial requirement complexity based on the Project Team's understanding at the time it is collected/documented. This is typically performed during the initial project phase. **High** – Out of the box features/functionality do not directly address the requirement AND the requirement drives a potential complex application design and/or build logic for components. Parts or all of the requirement are not easily quantified or measured at in this phase, thus requires more time for elaboration/analysis. **Medium** –Out of the box features and functionality do not address the requirement directly. However, build or design logic have a lower degree of complexity than High. **Low** –Out of the box features and functionality partially or completely addresses the requirement. Requirement is well understood and has a solid	**Document Business Requirements** **Document Detailed Requirements**
Ranking	Based on the priority, complexity and value identified, rank the Business requirements on sequential numbering way. Use this option for Business Requirements and Detailed requirements as needed.	**Document Business Requirements** **Document Detailed Requirements**
Rationale	For requirements assigned a high priority, select the reason for identifying the requirement as a high or critical priority requirement: **Customer** (Customer-facing impact if requirement is not met) **Efficiency** (Significant impact on efficiency if requirement is not met) **Legal** (Legal requirement that must be met for go live) **Supplier** (Supplier requirement that must be met for go live) **Other** (Please specify the rationale for critical priority within the requirement description) The pick list can be updated based on client requirements	**Document Business Requirements** **Document Detailed Requirements**
Localization*	Document for which geographies this requirement was defined (e.g. Global, North America, EMEA, etc.)	**Document Business Requirements** **Document Detailed Requirements**
Author*	Enter the name or user ID of the person who identified the requirement	**Document Business Requirements** **Document Detailed Requirements**

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Status*	Indicate the status of the requirement **Pending Approval (New)** (Requirement is new to the list and requires approval before any action can be taken) **Approved** (Requirement is approved to be fulfilled by the current project) **Rejected** (Requirement will not be fulfilled by the current project) Pick list can be updated to meet project team's requirements (i.e. add Deferred)	**Document Business Requirements** **Document Detailed Requirements**

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Fit/Gap*	Indicate whether the requirement is a fit or a gap with respect to standard software functionality Fit Gap	**Conduct Fit Gap Analysis**
Fit/Gap Description*	Describe the Fit (how the requirement will be met by the system) or the Gap (why the system cannot satisfy the requirement)	**Conduct Fit Gap Analysis**
Alternative Solution*	Document all options with a minimum of two alternative solutions for accommodating the requirement	**Conduct Fit Gap Analysis**
Resolution Type (Transaction / RICEF)*	Indicates if the requirement will be fulfilled by a transaction or a RICEF object. **Transaction/Program/Etc.** **Report** **Interface** **Conversion** **Enhancement** **Form** **Workflow** **BI**	**Conduct Fit Gap Analysis**
Gap Resolution Description*	Document the selected resolution and explain how the requirement will be accommodated within the context of the resolution type	**Conduct Fit Gap Analysis**
Gap Resolution Complexity*	Estimate the level of effort required for the gap resolution. **Critical** **High** **Medium** **Low** **Deferred**	**Conduct Fit Gap Analysis**
Gap Decision Solution Status*	Track the approval status of each software gap resolution. The list of values in this field may vary by project. **Proposed** **Approved** **Rejected**	**Conduct Fit Gap Analysis**
Development Object	For requirements with an approved resolution type of F, R, I, C, E, or W, enter the development ID (RICEFW ID) for the associated development object	**Conduct Fit Gap Analysis**
System	Indicates the system. Legacy Oracle EBS SAP PeopleSoft	**Conduct Fit Gap Analysis**
Configuration Design	Document the configuration design related to this requirement, if applicable.	**Develop Configuration and Control Values Design**
Functional Specification*	Document the Functional Specification ID related to this requirement, if applicable.	**Develop Functional Specifications**
Technical Specification*	Document the Technical Specification ID related to this requirement, if applicable.	**Develop Technical Specifications**
Test Case*	Document the test case(s) designed to test this requirement. Add additional columns for additional test types.	**Develop Test Cases** **Develop Test Traceability Matrix**
Sprint	Indicate the name or number (as appropriate) of the sprint in which the requirement is baselined	**Document Business Requirements** **Document Detailed Requirements**
Remark/ Example	Enter comments such as supporting information or open questions	**Any task**

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	Requirement Type	Definition	Description
Product Requirements	Functional	A lower-level statement that defines the capabilities and functionality of the final solution (i.e. "what the system will do")	• Organized by business process • Identifies what the solution must do from a business process viewpoint • Includes: – System functionality – Business process procedures – Data conversion and retention – Interfaces to external systems Example of a Functional Requirement: Create an outbound interface to Bank of America in order to process net payroll.
	Non-Functional	A lower-level statement that defines the capabilities that the system must maintain and any constraints placed on the system. (i.e. "how the system will work")	• Performance • Reliability • Legacy system retirement • Security • Support Example of a Non-Functional Requirement: System response time of less than two seconds when processing an order.

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- **Custom views are setup for viewing and printing of each deliverable generated from this document. Custom views include Business Requirements, Detailed Requirements, and Fit Gap Analysis.**
  - From the View menu, select Custom View to see the available views.
  - Select the appropriate Custom View that aligns with the desired deliverable.
- Please update PageSetup properties to include all the rows that has data, before printing final deliverables.
- Please update Header and Footer with Project specific information (E.g. Project Name, Document Name, Document ID, etc.) before printing final deliverables.

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Requirements Specification																				Traceability						
Detailed Requirement ID* (Level 2 Requirement)	Detailed Requirement Name* (Level 2 Requirement)	Business Requirement ID* (Level 1 Requirement)	Business Requirement Name* (Level 1 Requirement)	Description / Definition*	Reference to Project Charter	Requirement Type*	Tester*	Submitter	Business Unit	Business Stakeholder	Priority*	Complexity	Ranking	Rationale	Author*	Status*	Sprint	Development Object	System	Configuration Design*	Functional Specification*	Technical Specification*	Unit Test Case*	Integration Test Case*	UAT Case*	Regression Test Case*
Enter the project requirement ID. A naming convention can be used to help identify to which business requirement the applicable. Example, PTP-001, OTC-001, HYR-001, PMO-001, etc.	Document the name of the detailed requirement.	Document the related high-level business requirements from the project charter, if applicable. Not all projects will have high-level business requirements available from the client.	Document the name of the business requirement.	Describe the requirement in detail. Design elements should not be included in the description	Describe any related drivers from the project's charter e.g. Are these requirements related to reduction of Dt?	Indicate the type of requirement that has been identified. Business (High-level statement of client needs) Functional (Defines the capabilities and functionality of the solution) Non-Functional (Requirements that describe or characterizes that the solution must exhibit or the constraints that it must operate within or interface with)	Indicate, most probable tester assigned to the requirement	Indicate which customer is customer is affected by this requirement	Indicate which business unit is affected by this requirement	Indicate the business stakeholder responsible for this requirement.	Document the priority of the requirement. Consider the business impact related to delivering the priority of the requirement. Mandatory (The product is not accepted unless these requirements are satisfied. These requirements are critical for business operation therefore has a major impact/failure to the business. They will be implemented prior to any consideration of the other categories.) Desirable (Would enhance the product, but the product is not unacceptable if it doesn't. These requirements are "nice to have" therefore have a medium importance. These are requirements that will be implemented if owning as funding allows.) Optional (If available that may or may not be worthwhile. These requirements are non critical if / business operation therefore have a low importance. These	Document the initial complexity and value identified. Here is the business requirements an equated numbering may have this option for Business Requirements and Detailed requirements as needed.	Based on the priority, complexity and value identified, rank the business requirements an equated numbering may have this option for Business Requirements and Detailed requirements as needed.	For requirements assigned a high priority, state the rationale for identifying the requirements as a high or critical priority. Customer (Customer-owned request for requirement at risk mid) Statutory (Requirement meet an statutory if complies hand in hand mid) Legal (Legal requirement that must be met for go live) Supplier (Supplier requirement that must be met for go live) Other (Please specify the rationale for critical priority within the inquiry case description)	Enter the name or user ID of the person who identified the requirement	Indicate the status of the requirement Pending Approval (New) (Requirement is new to the list and requires approval before any action can be taken) Approved (Requirement is approved to be fulfilled by the current project) Rejected (Requirement is does not be fulfilled by the current project) This list can be updated to meet project teams requirements (i.e. add Delayed)	Indicate the sprint as number (as appropriate) of the sprint in which the requirement is to deliver it	For requirements built as a/an approved creation type of P, R, I, C, I, or W, enter the development ID (CR/DEM ID) for the associated development	Indicates the system, such as: Legacy Oracle EBS ASP PeopleSoft	Document the configuration design related to this requirement, if applicable	Document the Functional Specification ID related to this requirement, if applicable.	Document the Technical Specification ID related to this requirement, if applicable.	Document the test case(s) designed to test this requirement. Add additional columns for additional test types	Document this test case(s) designed to test this requirement.	Document the test case(s) designed to test this requirement.	Add additional columns for additional test types	Document the test case(s) designed to test this requirement.	Add additional columns for additional test types	Document the test case(s) designed to test this requirement. Add additional columns for additional test types

WEST VIRGINIA IES PROJECT

Exceptions and Clarifications

Deloitte Consulting has reviewed RFP CRFP 0511 HHR1700000004 (Integrated Eligibility Solution Request for Proposal) and in accordance with Section 2, Instructions to Vendors, subsection 11 (Exceptions and Clarifications), Deloitte Consulting has identified the issues that it seeks to discuss, clarify and/or modify in the final agreement.

For any mandatory items included in the list below, Deloitte Consulting does not take exception to those mandatory terms or requirements, but does request certain clarifications as outlined below.

In the event other issues are identified based on the project as finally awarded, we will identify those issues for discussion promptly.

General Terms and Conditions

1. Section 1, Contractual Agreement: Our proposal is subject to reaching mutual agreement on a definitive contract that addresses the exceptions and clarifications described herein. Exceptions and Clarifications are permitted per the RFP Instructions at Section 11.
2. Section 4, Notice to Proceed: Deloitte Consulting understands that this applies once Deloitte Consulting and the State execute a definitive contract.
3. Section 8, Insurance: Deloitte Consulting will validate required insurance with the State should it be selected (this has not been an issue in prior contracts with the State).
4. Section 11, Liquidated Damages: Deloitte Consulting acknowledges the State has identified Section 11 as N/A. However, given the "Right to Payment Reductions" in Appendix VIII effectively functions as liquidated damages (i.e., the parties have agreed to liquidated damages to stipulated amounts that may reduce payments upon the occurrence of certain events), we include our clarification and discussion items around Appendices VIII and IX in this section.

   Deloitte Consulting seeks to discuss events that excuse its performance and would further seek to discuss and clarify the process around the assessment of any liquidated damages agreed to in the resulting contract, including for example, clarification that (a) Deloitte Consulting is not responsible for liquidated damages where it is not the cause of the event giving rise to the liquidated damage assessment; (b) where assessed, collected liquidated damages constitute the sole remedy for the event giving rise to the liquidated damage assessment; and (c) the State will select the applicable SLA to be applied to a given event. We would also seek to clarify the process for addressing disagreements around an actual assessment. In addition, we would like to discuss reasonable and appropriate cap(s) on liquidated damages, which we understand is not precluded via Question and Answer #23, and we would seek to discuss an earn back right for sustained good performance.

   For Appendices VIII and IX, consistent with the approach used by the State in RFP CRFP 0511 HHR1600000001 and the Periodic Review process, we would seek to validate and revise the approved SLAs as needed in connection with each Phase and prior to Solution Acceptance.

   In addition, we would like to discuss the process for promoting Appendix IX Performance Measures to KPIs and we would seek to clarify any ambiguous Performance Measures.
5. Section 12, Acceptance: Deloitte Consulting does not take exception to any Mandatory terms of the RFP and in compliance with RFP Section 2, subsection 11, Deloitte Consulting has identified its exceptions, clarifications and proposed modifications.
6. Section 17, Additional Fees: Deloitte would seek to clarify this provision for purposes of, for example, delays or changes by the State that impact the Vendor's cost of performance.
7. Section 18, Funding: Deloitte Consulting accepts the provision but would seek to add a notice requirement for purposes of cancellation and would seek to clarify the State's obligations around payment for work in progress and unrecovered facilities and other costs.
8. Section 19, Cancellation: Deloitte Consulting requests this section be made mutual and revised to include a 30 day cure period wherein the written cure notice would identify the alleged material breach so as to allow Deloitte Consulting the ability to respond/cure the breach/or initiate the correction where a cure is not susceptible of being completed within the 30 days. For all non-performance related terminations, we also request a reasonable notice period be added and that payment for services in progress and facility and other unrecovered costs be addressed in the contract.
9. Section 20, Time: Deloitte Consulting requests this provision be removed from the contract given the volume and nature of the services, the inclusion of liquidated damages, and the State's right to terminate for default.

General Terms and Conditions

10. Section 22, Compliance: Deloitte Consulting agrees to comply with all laws applicable to its business and understands this provision does not apply, for example, to requirements related to the systems. The State will retain responsibility for complying with laws applicable to it and its operations.

11. Section 24, Modifications: We agree with this provision and the requirement for written mutual consent, including the required approvals. To give effect to this provision, a change control provision should be discussed and included in the contract with the expectation the Change Management Plan will be aligned with Section 24 and the change control terms.

    For further clarification, change control would be used to address changes to requirements or planned performance resulting from post RFP changes/updates to, for example: laws, regulations or policies; security policies and procedures established by DHHR and the WVOT; incorporating any additional programs (outside of the identified in-scope support programs); WVOT supported software version for laptop and desktop computers; HIPAA regulations; Federal and State of West Virginia security requirements and regulatory changes; requirements or enhancements to delivered systems; software components or third party vendors; Federal and State of West Virginia regulations or requirements regarding data retention and accessibility; security monitoring requirements or approach; or the requirements and approach for Biennial Data Quality reviews.

12. Section 28, Warranty: This section requires discussion as it appears to contain warranties that are not consistent with the services to be provided and its application to the project is not clear and should be clarified in context of the services. Given the complexity and importance of this procurement, and consistent with other complex technology and IE projects, we have proposed a 6 month warranty for each of Phase, beginning at the respective Phases' Pilot. While the parties will need to include in the contract the specific agreed to terms for the contract warranty, we would expect that all system requirements, including those necessary to meet CMS and FNS requirements and ACF Certification Requirements required to ensure enhanced Federal Financial Participation (FFP) where enhanced funding is available, and normal FFP where enhanced match rates are unavailable, will be set forth in the approved final design document(s) for each Phase. Deloitte Consulting would then warrant the system will conform to the approved design document(s) for the specified warranty period and subject to mutually agreed process terms and industry standard exceptions (and where the system does not conform to the approved design, it will constitute a "deficiency"). For purposes of the certification warranty: it will be retroactive to first day of operation if federal rules and process allows; the warranty of certification will be for the system and not include State responsibilities for other program, policy, and organizational measures that are required of the State for federal certification; and any changes to federal certification requirements that occur after design initiation would be addressed via the contractual Change Control process.

13. Section 31, Privacy, Security and Confidentiality: Deloitte Consulting recognizes the importance of protecting PII and confidential information. Deloitte Consulting employs robust protocols and security measures to protect PII and looks forward to finalizing, as part of contract discussions, the specific protective standards to apply based on the nature of our services, should we be awarded the services. We would also seek mutual protection of any of our confidential information that the State will have access to in connection with this engagement.

14. Section 36, Vendor Relationship: Deloitte Consulting understands the indemnity in this section pertains to the scope/context of this section and would seek to confirm the same in the contract. We also request the process (including notice, control etc.) be added.

15. Section 37, Indemnification: Deloitte Consulting request this section be revised to be consistent with the indemnity obligations agreed to between Deloitte Consulting and the State in prior negotiated contracts.

16. Section 39, Additional Agency and Local Government Use: Deloitte Consulting is happy to permit Other Government Entities to use this Contract on a case-by-case basis, subject to mutual agreement.

17. Section 40, Conflict of Interest: We would like to discuss what outside activities or interest of the Deloitte Consulting team could compromise delivery of the services. In addition to clarifying what constitutes a conflict for purposes of the Deloitte Consulting team's compliance, we would seek to limit the obligation to make inquiries to the team assigned to work the project given the overall size of our organization. Any changes in this section should also apply to the certification in Section 35.

18. Section 41, Reports: We would like to discuss this provision to clarify its application, including that it is for administrative reporting requirements versus system or solution reporting.

19. Section 42, Background Check: Deloitte Consulting understands the State would like to conduct these Background Checks. We would seek to align on the scope and process for the background checks as part of contract discussions.

Clarifications and Additional Items to be Addressed

1. For Third Party Software/Hardware: With regard to the procurement and licensing of any third party software/hardware, Deloitte Consulting's proposal is based on the assumption that Deloitte Consulting's products subsidiary will act as a reseller and procure any third party hardware/software on behalf of the State (consistent with RFP Section 4, Subsection 5.27 State Ownership). The resulting contract would need to include certain terms governing such arrangement, including that (a) the State will be responsible for executing the hardware/software license agreements directly with the applicable third party vendors, and Deloitte Consulting will coordinate the invoicing, and collecting payment, with respect thereto, and (b) the State's use of such third party hardware/software and related services, and the vendor's obligations with respect to the hardware/software and related services (e.g. warranty, support, performance/service level commitments, escrow arrangements, etc.), will be governed by those license agreements and the State and the third party vendors (and not Deloitte Consulting) will be solely responsible for compliance with those terms.

   Deloitte Consulting can act in this manner with respect to both third party software/hardware included in our proposed solution and third party software/hardware for the State's legacy system, until such time as the new solution is implemented, provided that we have reseller arrangements in place for all such third party vendors and acting in this capacity would not violate any laws or independence or professional rules.

2. For Hosting and other Managed Services: Deloitte Consulting has teamed with top tier vendors to provide a solution that meets the modular, technical and solution expectations of the State as set forth in the RFP. For certain of the services, such as hosting, there are only one or two vendors who can meet the Sate's requirements. Per RFP Section 4, Subsection 5.27, the State will enter into those applicable licenses/agreements directly with those vendors and such licenses/terms shall specify, govern and control those services.

3. Right of Access and Third Party Audit: We would like to discuss reasonable parameters regarding access and audit rights, such as frequency, notice and conditions to using 3rd party auditors. We would also seek to clarify that the scope of access to systems and facilities would be mutually agreed, except where such access is required by law. Finally, we would like to specifically identify in the resulting contract those third party audits that the State would like to review, such as a SOC 2 Report.

4. Escrow: We would seek to clarify the obligation to escrow would not apply where we provide a copy of the source code directly to the State.

5. Responsibility for the Conduct of Subcontractors: We would seek to clarify this is intended to apply to any entity contracted with Deloitte Consulting to assist in performing the services under the resulting contract, and not, for example, to State contractors/vendors with whom Deloitte Consulting may have to work in connection with the project.

6. Deliverable and Solution Acceptance: An agreed to deliverable acceptance process should be included in the Contract. The proposed work plan assumes deliverable sign-offs or rejection will occur promptly (within specified time frames with the reason/deficiencies identified so that the identified items can be corrected and resubmitted per the agreed to process for resubmission and approval). The Parties may also mutually agree during the course of performance to extend review periods. Once accepted, Deliverables become controlling and updates/changes to deliverable will be done via change control. For purposes of solution acceptance, the parties should confirm and validate the process and include in the Contract as mutually agreed.

7. Enhanced Staffing: Deloitte Consulting agrees to increase staffing where insufficient staffing causes Deloitte Consulting not to meet the contract's requirements, or other contractual obligations around timeliness, quality, or other contract standards, and the addition of staffing would bring Deloitte Consulting into contractual compliance. We do seek the opportunity to discuss this provision for purposes of process and to validate our mutual understanding around the use of this provision, including that it will not be used in a manner that causes disruption, inefficiency or otherwise won't achieve the intended correction.

8. Vendor Staff Approval and Removal: To promote the orderly assignment and staffing of the project and to avoid disruption or other adverse impact to the project, we would seek to discuss and include a contract provision addressing the approval/removal process.

9. Intellectual Property: Deloitte Consulting fully accepts and acknowledges the federal requirements and rights around intellectual property in connection with projects that utilize federal funding such as this one. The final contract should clearly set out the required ownership and licensing rights and we will want to validate application of the provisions to the various components of the solution (including COTs and other pre-existing IP), and we will also seek to validate application to any derivative works and consistent with other similar projects, we request a license(s) back to works that may otherwise transfer to the State or federal government. Deloitte Consulting uses a proprietary tool to facilitate the application modernization work as describe in the Proposal. This tool is subject to a separate license agreement.

10. Project Execution: If selected for award, we will seek to discuss and include in the contract a provision that addresses the State's responsibilities, including a process for addressing constructive changes and delay. The Deloitte Consulting team will have dependencies upon the State that if not timely achieved may impact the Deloitte Consulting team's ability to perform. The contract should address the process for identification and resolution of those matters, including allowance for equitable adjustments to address schedule and cost impacts.

Clarifications and Additional Items to be Addressed

11. Issue Resolution: Given the complexity of this project and the multiple parties and components, a dispute resolution and escalation process should be mutually agreed to and included in the contract. Given the payment milestone process and the expenditures that will be incurred by the contractor, it will be necessary to promptly address issues that impact project progress, payment, and that otherwise put project success at risk.
12. Transition of Medicaid and Family Assistance Programs: In the event selected for award, we will seek to confirm the transition process to Deloitte Consulting, including the roles and responsibilities of the State and other parties not on the Deloitte Consulting team. To the extent appropriate, the Contract may require update to address the transition and responsibilities.
13. Limitation of Liability: We also request the inclusion of a commercially reasonable limitation on damages, including both a consequential damages disclaimer and overall aggregate cap(s). In addition, anywhere in the RFP or resulting contract where it says the vendor will be responsible for/liable for certain amounts or types of damages, we would seek to clarify that this means that the vendor may be liable for such amounts/damages, subject to the State demonstrating fault on the part of the vendor and subject to the LOL. In connection with any liability associated with system deficiencies or deficiencies noted during Federal reviews, we will seek to discuss the review and escalation process as well as the applicable cap.

Deloitte Consulting will work in good faith with the State to address the areas and issues identified above. It is important that the final contract accurately and clearly address these matters. We value our relationship with the State and look forward to building upon our prior mutual success and supporting the State and its citizens on these important programs. Our proposal is submitted subject to reaching mutual agreement on the final contract terms.

GENERAL TERMS AND CONDITIONS:

1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.

2. DEFINITIONS: As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.

2.1. "Agency" or **"Agencies"** means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.

2.2. "Bid" or **"Proposal"** means the vendors submitted response to this solicitation.

2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.

2.4. "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.

2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.

2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.

2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.

2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.

2.9. "Vendor" or **"Vendors"** means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:

☑ **Term Contract**

Initial Contract Term: This Contract becomes effective on award and extends for a period of six year(s).

Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to four successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed 48 months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.

Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.

☐ **Fixed Period Contract:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed within _____ days.

☐ **Fixed Period Contract with Renewals:** This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within _____ days.

Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional _____ successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed _____ months in total. Automatic renewal of this Contract is prohibited.

☐ **One Time Purchase:** The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.

☐ **Other:** See attached.

4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.

5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.

☐ **Open End Contract:** Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.

☑ **Service:** The scope of the service to be provided will be more clearly defined in the specifications included herewith.

☐ **Combined Service and Goods:** The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.

☐ **One Time Purchase:** This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.

6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.

7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.

☐ **BID BOND (Construction Only):** Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.

☐ **PERFORMANCE BOND:** The apparent successful Vendor shall provide a performance bond in the amount of N/A. The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

☐ **LABOR/MATERIAL PAYMENT BOND:** The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award.

In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under $100,000. Personal or business checks are not acceptable. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.

☐ **MAINTENANCE BOND:** The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.

☐ **LICENSE(S) / CERTIFICATIONS / PERMITS:** In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.

☑ Project Management Professional Certificates

☑ Certified Information Systems Security Professional (CISSP) or Certified Information Systems Auditor (CISA) Certification

☐

☐

The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.

8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below prior to Contract award. Subsequent to contract award, and prior to the insurance expiration date, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies mandated herein, including but not limited to, policy cancelation, policy reduction, or change in insurers. The insurance coverages identified below must be maintained throughout the life of this contract. The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed in this section.

Vendor must maintain:

☑ **Commercial General Liability Insurance** in at least an amount of:
Bodily Injury (including death): $500,000.00 per person, up to $1,000,000.00 per occurrence;
Property Damage and Professionals Liability: Up to $1,000,000.00 per occurrence.

☐ **Automobile Liability Insurance** in at least an amount of: _____

☐ **Professional/Malpractice/Errors and Omission Insurance** in at least an amount of:
_____

☐ **Commercial Crime and Third Party Fidelity Insurance** in an amount of:
_____

☐ **Cyber Liability Insurance** in an amount of: _____

☐ **Builders Risk Insurance** in an amount equal to 100% of the amount of the Contract.

☐

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☐

☐

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9. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.

10. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or $5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.

11. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount of N/A

for N/A

This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

12. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.

13. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.

14. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.

15. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.

☐ Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.

16. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

17. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.

18. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.

19. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

20. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.

21. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.

22. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.

23. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.

24. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.

25. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.

26. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.

27. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

28. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.

29. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.

30. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.

31. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html.

32. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential," "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

33. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

34. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

35. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

36. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

37. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.

38. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of $1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.

39. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.

40. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.

41. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

☑ Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

☐ Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at purchasing.requisitions@wv.gov.

42. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

43. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:

a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars ($2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or
d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

44. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars ($50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)
Kenneth J. Smith, Principal

(Printed Name and Title)
191 Peachtree Street; Suite 2000 Atlanta, GA 30303-1749

(Address)
304.685.2947/844.244.5892

(Phone Number) / (Fax Number)
kensmith@deloitte.com

(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Deloitte Consulting LLP

(Company)

Kenneth J. Smith

(Authorized Signature) (Representative Name, Title)

Kenneth J. Smith, Principal

(Printed Name and Title of Authorized Representative)

August 8, 2017

(Date)

304.685.2947/844.244.5892

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFP 0511 HHR1700000004

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

- [x] Addendum No. 1
- [x] Addendum No. 2
- [x] Addendum No. 3
- [x] Addendum No. 4
- [x] Addendum No. 5
- [x] Addendum No. 6
- [x] Addendum No. 7
- [ ] Addendum No. 8
- [ ] Addendum No. 9
- [ ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Deloitte Consulting LLP

Company

Kenneth J. Smith, Principal

Authorized Signature

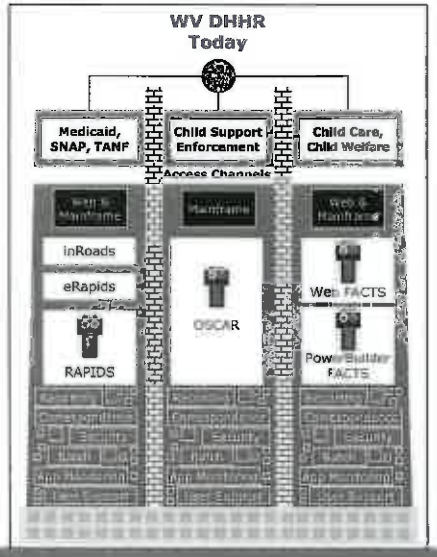
August 8, 2017

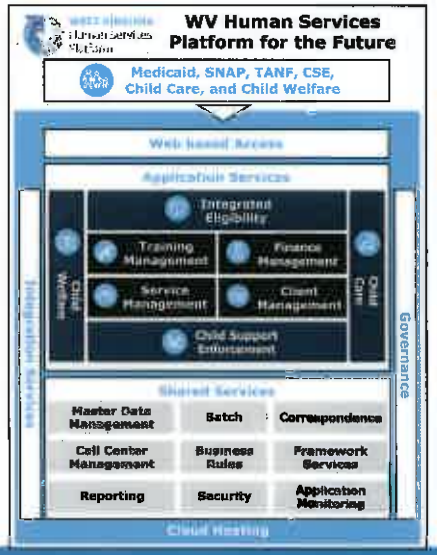
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Deloitte.

WEST VIRGINIA WV DHHR TODAY VS. WV HSP FOR THE FUTURE





	Less accessible, Program siloed Citizen Access
	Disparate, multiple log ons
	Data siloed by program, not outcome focused
	Business Rules in COBOL, hard to maintain
RAPIDS OSCAR Web FACTS PowerBuilder FACTS	Disparate application technologies, siloed by program and hard to maintain, increasing maintenance and enhancement cost
	Mainframe – Antiquated technology, inflexible, rigid, hard to scale, on premise/State hosted
	Repeated functionality - hard to maintain and inefficient
	Inconsistent Governance Standards Across Enterprise
	Resource Intensive manual processes for County office workers and other State employees

	DHHR Enterprise Customer Portal
	Single sign on
	Master data management, commonly identified citizens - MDM for all programs (Medical Assistance, SNAP, TANF, CSE, Child Care, and Child Welfare)
Drools	Rules in Open-source business rules engine, conforming to CMS 7 Standards and Conditions
	Modern, homogeneous application technology, easy enhancements, SOA, modular, maintainable, reliable
amazon web services	Scalable, flexible, agile, cloud hosted with Amazon Web Services, fully web-based
	Shared Services provide a seamless integration layer to promote efficiency, consistency and improved security
	Enterprise Value Delivery for System Integration (EVD for SI) methodology provides consistent governance standards
	Industry-leading process mapping tool (IndustryPrint) reduces manual work and accelerates modeling through automation

Strategy #1: Reuse and re-platform newer applications and tools

Current Solution	Current Attributes	Implementation Approach	WV HSP Module	Future Attributes
InRoads	Hosted on Premise	Re-platform recent IT investments by taking the applications and tools from your current environment and moving them to a modern, scalable, cloud-hosted platform to extend system life and provide support for future expansion. Our WV HSP solution approach will enable these assets to be extended and serve across the DHHR enterprise rather than just select programs. They will be enhanced as necessary to fully meet your requirements.	Client Management Module (InROADS) Integrated Eligibility Case Management Module (eRAPIDS) Data Marts (Informatica, ORACLE COGNOS)	Hosted on Amazon Web Services (AWS) Cloud • **InRoads:** Web Based, User Friendly Interface, Easy to Access Self-Service Features, Integration Across other Enterprise Applications. • **eRAPIDS:** Web based, Easy Navigation, Business and Program Workflows, Eligibility Rules across Multiple Programs and Integration across the DHHR Enterprise. • **Data Marts:** Data Analytics, Reporting across Integrated Eligibility, Child Welfare, Child Care, and Child Support Enforcement, RAFT, RAILS and OSCAR. Implemented on Amazon Web Services (AWS) cloud platform. **Shared Components:** • HTML/CSS, Java J2EE, Rules Engine, Oracle, Oracle Warehouse Builder, Informatica MDM, Cognos, Cloud Hosted, Self-Service, Case Management, Referrals and Renewals.
eRAPIDS	Hosted on Premise			
Oracle Data Marts, Cognos, Informatica MDM	Hosted on Premise			

Strategy #2: Leverage successful solutions from other States

Current Solution	Current Attributes	Implementation Approach	WV HSP Module	Future Attributes
Various Tools for Training	Various Disparate Technologies	Stand up a modern, open source and comprehensive learning management system, Moodle, which will be cloud hosted providing a suite of Web-based, live- and video-based trainings for WV DHHR.	Training Management Module (moodle)	• Modern and Open Source Learning Management System and Online Help for Case Worker. • Robust Online Management of Learning Materials, Scheduling Trainings, Evaluations, Tracking and Reporting of Training Results. • Supports Delivery, Controls and Tracking of the Entire Training Program for Centralized Management and Reuse.
FACTS	Hosted on Premise: MicroFocus COBOL, PowerBuilder, PL/SQL	Replace the current legacy system with pre-configured and proven Salesforce modules in the Cloud, including migration of data from legacy into a modern relational database.	Child Care Case Management Module Child Welfare Case Management Module Reuse	Hosted on the Salesforce SaaS Cloud • Reliable, Configurable, and Certified Application Components to Speed Implementation Timeline and Lower Risk. • Automation of Case Management Processes and Components. • Enable Worker Efficiency for Child Care and Child Welfare Programs. **Shared Components:** • Java J2EE, Cloud Hosted, Web Based

Strategy #3: Modernize existing mainframe applications

Current Solution	Current Attributes	Implementation Approach	WV HSP Module	Future Attributes
RAPIDS	Hosted on Premise COBOL, PLATINUM, MOBIUS, Control M	Modernize with automated conversion process of legacy COBOL code to Java to provide the current system functionality on a modern hosted Cloud technology platform to support all core business requirements. These modules will be enhanced as necessary to fully meet requirements.	Service Management Module Finance Management Module Child Support Enforcement Case Management Module Application Modernization Solution	Hosted on Amazon Web Services (AWS) Cloud • Reliable, Configurable, Scalable and Certified Application components to Speed Implementation Timeline and Lower Risk. • Automation of Case Management and Core Modules in the system provides Shared Functionality, Eligibility Rules, Automated Workflows, Electronic Documents, and Alerts or Tasks across All Programs. **Shared Components:** • Java J2EE, Cloud Hosted, Web Based
OSCAR	Hosted on Premise COBOL, PLATINUM, MOBIUS, Control M			

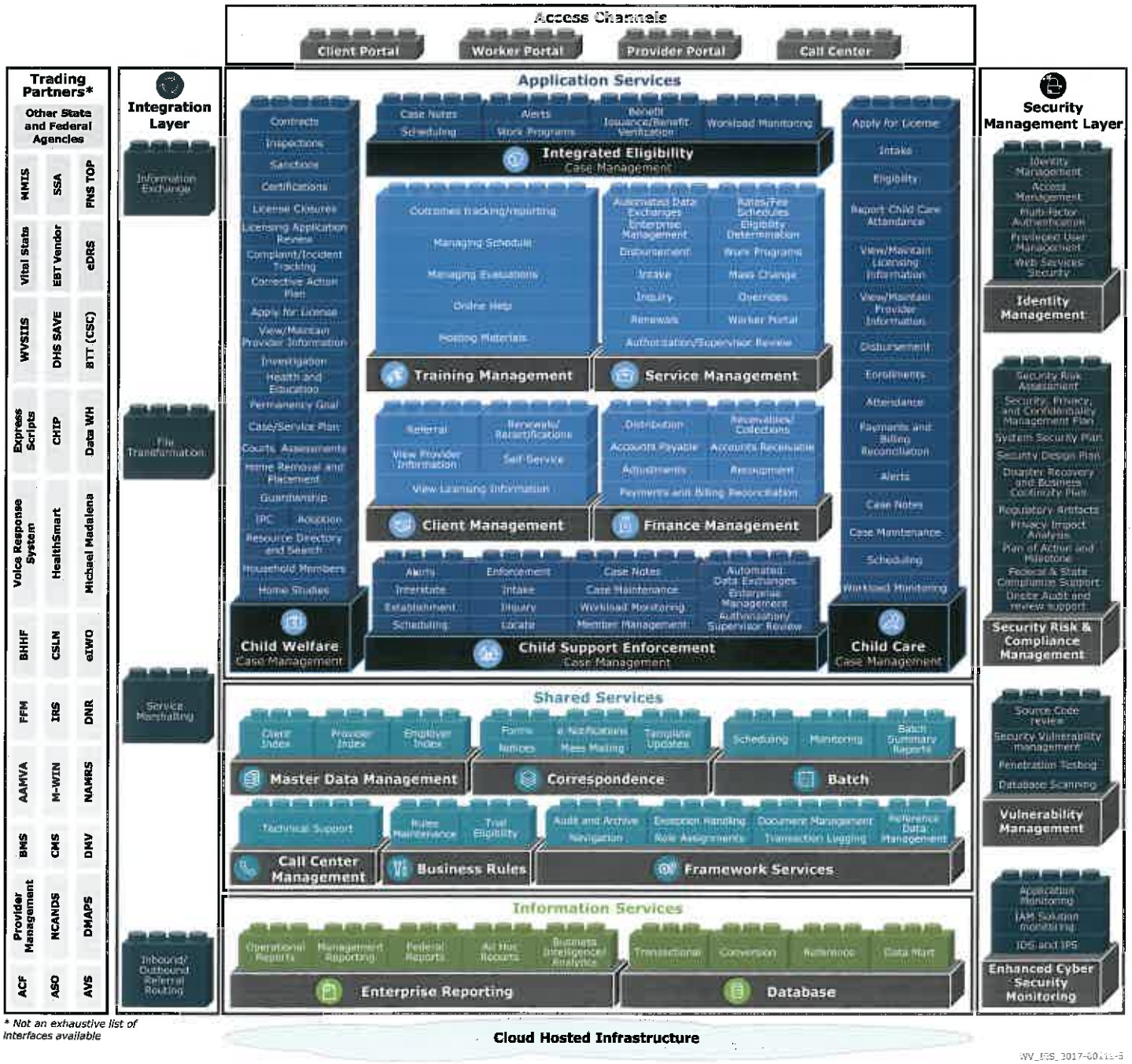
Hosting Strategy

Current Solution	Current Attributes	Implementation Approach	Cloud Hosting	Future Attributes
Mainframe, UNIX, Windows Server	Hosted on Premise: COBOL, Z/OS, Windows Server 2003	Hosted on Amazon Web Services (AWS) providing enterprise class hosting with the ability to automatically scale to meet West Virginia's current and future business demands.	amazon web services	Amazon Web Services (AWS) has a long history of innovation and leadership in providing hosted IT infrastructure. Amazon has made a continued substantial investment in building and managing the global, reliable, and efficient IT infrastructure that powers numerous organizations across industries, including the Public Sector. Amazon launched Amazon Web Services, Inc. (AWS) so that other organizations could benefit from Amazon's experience and investment in running a large-scale, distributed, transactional IT infrastructure. The cloud-hosted platform provides significant advantage over traditional IT computing landscape because it is flexible, scalable and elastic, innovative and secure.

Deloitte.

WEST VIRGINIA
HUMAN SERVICES PLATFORM

A MODERN, MODULAR, RELIABLE CLOUD HOSTED SOLUTION FOR THE FUTURE



* Not an exhaustive list of interfaces available

MEETING DHHR GOALS

BUSINESS

- **Common Governance Structure**: WV Human Services Platform (HSP) follows standardized, transparent, and predictable project management processes across the enterprise to increase efficiency and productivity.
- **Completion of Functional Requirements**: WV HSP complies with state and federal regulations, and meets all of DHHR's technical and functional requirements.

APPLICATION

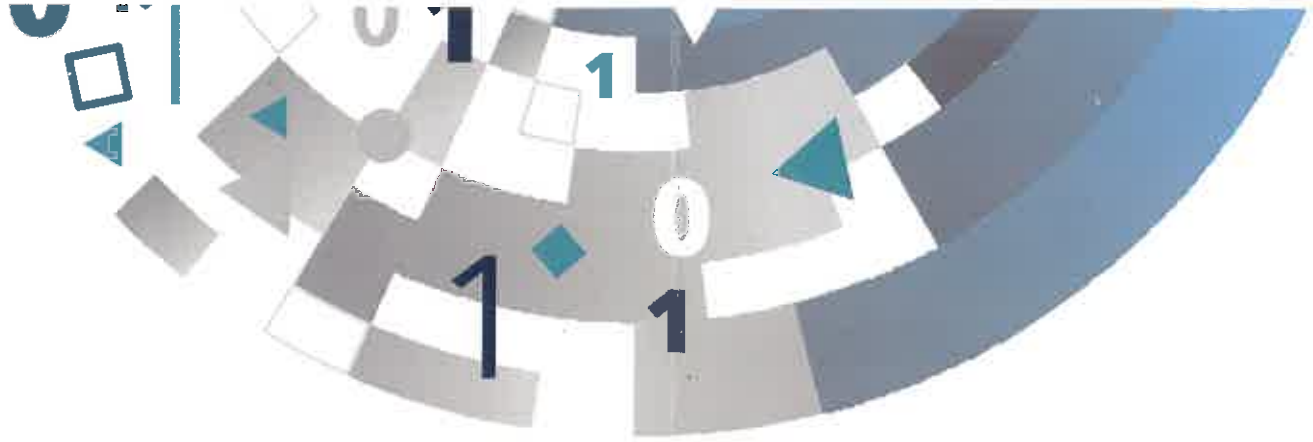
- **Shared Use**: WV Human Services Platform (HSP) provides reusability, modularity, interfacing with the data warehouse, multi-vendor, and cost effective solution, which reduces implementation and maintenance costs.
- **Modernization:** WV HSP is a proven cloud hosted, scalable, interoperable and enterprise solution that includes automation of workflows to meets DHHR's design, development and implementation goals and schedule.

HOSTED SOLUTION

- **Enterprise Hosting:** WV Human Services Platform (HSP) will be hosted on FedRAMP compliant Amazon Web Services (AWS) providing the ability to automatically scale to meet West Virginia business demands and seamlessly access SaaS solutions for an integrated solution.
- **Scalable Architecture:** WV HSP utilizes a seamless enterprise solution using an n-tier Service Oriented Architecture (SOA). The HSP is a modular, modern, and flexible solution built using SOA and is hosted on the AWS cloud.
- **Enhanced Security**: WV HSP includes enhanced Identity and Access Management and Event Monitoring which provides single sign-on, role-based access, multi-factor authentication, and privileged access management together with proactive security event monitoring.

MAINTENANCE, OPERATIONS AND ENHANCEMENTS

- **Reduce Maintenance Cost :** The WV Human Services Platform (HSP) enables Faster Maintenance, Software Upgrades, and Enhancements, Reduced Redundancy, Improved Interoperability with other systems, and Reduced Operations and Maintenance Costs.
- **Ease of Maintenance:** Our approach to design is Holistic and develops modular establishment components that promote Ease of Maintenance and Support.



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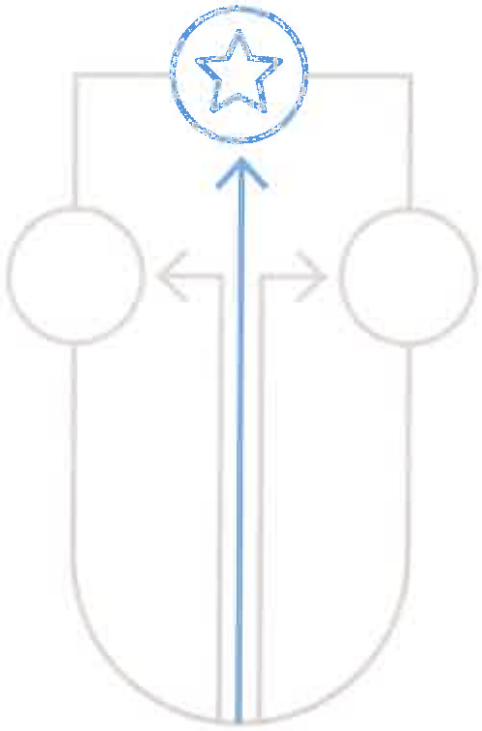

WHY DELOITTE STANDS APART

AUTOMATION. With millions of lines of code across multiple platforms, most enterprises can't afford to wait out a manual upgrade. Deloitte's fully automated code refactoring makes the process not only faster but more reliable.

DEPTH. Many providers offer semi-automated code refactoring. But they don't also offer the full range of disciplines that make Deloitte the world's largest professional services organization. That's the difference between a narrow tech solution and an intelligent enterprise solution.

IMPLEMENTATION AND ITERATION
Execute the vision and continue to refine

MAINTENANCE
Run modernized systems while monitoring workload and efficiency

BENEFITS YOU CAN EXPECT

With Deloitte, our Application Modernization process delivers both IT and business benefits:

LOWER RISK
No core requirements to define, no missed functionality, minimal end user training, and the ability to modernize at your own pace

LOWER COST
Full automation prior to modernization reduces the number of developers required to refactor applications, while the ROI is realized earlier due to ability to release high-value functionality early in the project

HIGHER QUALITY
1-to-1 functional test scenarios result in high-quality releases, with no interruption of current business process

HIGHER INTEROPERABILITY
Modernized systems make it easier for current applications to connect with ones the business hasn't requested—yet—and to take advantage of cloud services