

RFP 22-70230 – IEDSS System Maintenance and Operations Attachment F: Technical Proposal

Respondent:

Deloitte Consulting LLP

Pursuant to the instructions in Attachment F, Deloitte responds in a format of our choosing. Our response maintains the order proposed in the template for Attachment F; and where exhibits or samples are required, we reference them within the response to the particular requirement and include them as a legible attachment (i.e., Appendix).

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Minimum Requirements

Section 1

Deloitte understands your minimum requirements and far exceeds them. We bring unparalleled experience in implementing and maintaining Eligibility and Enrollment (E&E) solutions, and we are currently maintaining and enhancing 26 state systems whose scopes are similar to IEDSS. In addition, we are also market leaders in maintaining custom enterprise systems in Health and Human Services (HHS) across Child Support Enforcement, Child Services, Labor and Workforce Development, and Program Analytics, actively serving 49 states.

This level of experience is essential to maintaining business continuity and reliable operations of IEDSS. Vendors that do not exceed your minimum requirements and vendors that have not truly and successfully maintained, operated, and enhanced E&E systems will be a risk to Indiana.

With Deloitte, Indiana has access to Subject Matter Experts (SMEs) who bring experience across the spectrum of Medicaid, SNAP, and TANF programs; strong and tested capabilities within Enterprise Architecture components; and staff experienced in industry-leading methodologies and processes such as Agile, Information Technology Infrastructure Library (ITIL), and the Project Management Body of Knowledge (PMBOK®).

The table below confirms how Deloitte meets and exceeds your minimum requirements.

WHAT IT TAKES



Experience as a prime contractor, responsible for comprehensive E&E systems similar to IEDSS



Understanding of eligibility systems in the HHS landscape



Trusted relationships with the State, its stakeholders, and vendor partners.

WHY IT MATTERS

We are familiar with the system and its dependencies. Our experience provides Indiana a vendor that reduces risk.

Allows us to create synergies for Indiana by leveraging ideas, solutions, and innovation from more State E&E projects than any other vendor. We don't reinvent the wheel.

We hit the ground running and build on current momentum to keep delivering in-flight projects and accelerate progress against new innovations and optimizations like Hybrid Agile delivery.

1.a M&O Services for a Large System for 1 Client within the Last Five 5 Years

RFP Reference: Attachment F, 1. Minimum Requirements (RFP Section 1.4.2)

For each minimum requirement listed in items in RFP Section 1.4, please clearly explain how the Respondent meets the requirement.

- a. Provided maintenance and operations (M&O) services for a large system for at least one (1) client within the last five (5) years. "Large" is defined in this instance as a system that supports at least 1,500 users who are processing data for at least 1 million client records throughout a year and have the corresponding technical components to handle this capacity for intake, processing, batches/interfaces, and reporting. (Note: client records include records for current recipients, previous recipients, and historically denied applicants).

For each project described, please be clear about the client, your role on the project, whether you were the prime contractor or subcontractor, and time period the relevant work took place that meets the requirement. If you were a subcontractor, explain if you served primarily in a staff augmentation role or if you had a substantial role leading and executing delivery of a portion of the scope of work? If the latter, for what services did you lead and execute the delivery?

In this section, we describe how Deloitte **exceeds** Indiana's requirement for M&O of a large system for one (1) client within the last five (5) years. In the table below, we highlight **six qualified examples** that represent our experience providing M&O services for large systems, each supporting over **1,500 users** and over **1 million records annually** for current recipients, prior recipients, historically denied applicants, and corresponding technical components to handle this capacity for intake, processing, batches/interfaces, and reporting.

Project and Client Name						
Role on Project	<ul style="list-style-type: none"> Provide M&O services, which include program management, application maintenance, technical operation maintenance, security, operational guidance, and training Provide enhancement services, which include application design, development, and implementation 	<ul style="list-style-type: none"> Provide M&O services, which include technical support and project management Provide enhancement services, which include design, development, and implementation 	<ul style="list-style-type: none"> Provide M&O services, which include managing and implementing batch processes, monitoring and tuning performance, triage support, disaster recovery, and patches and upgrades. Provide enhancement services, which include design, development, and implementation 	<ul style="list-style-type: none"> Provide M&O services, which include program management, application maintenance, technical operation maintenance, security, operational guidance, and training Provide enhancement services, which include design, development, and implementation 	<ul style="list-style-type: none"> Provide M&O services, which include change leadership, field support, training services, strategic planning, and business IT strategy Provide enhancement services, which include application design, development, and implementation 	<ul style="list-style-type: none"> Provide M&O services, which include incident management, maintenance, production support, batch operations and monitoring, and performance upgrades Provide enhancement services, which include design, development, and implementation
Prime Contractor?	✓	✓	✓	✓	✓	✓
Time Period	2013 – Present	2007 – Present	2008 – Present	1992 – Present	1992 – Present	2016 – Present
1,500+ System Users?	4,400+	9,000+	5,000+	8,000+	7,200+	2,600+
1M+ Annual Records?	✓	✓	✓	✓	✓	✓
M&O Services?	✓	✓	✓	✓	✓	✓

M&O Services within the Last 5 Years?	✓	✓	✓	✓	✓	✓	✓
Corresponding Technical Components for Intake?	✓	✓	✓	✓	✓	✓	✓
Corresponding Technical Components for Processing?	✓	✓	✓	✓	✓	✓	✓
Corresponding Technical Components for Batches/Interfaces?	✓	✓	✓	✓	✓	✓	✓
Corresponding Technical Components for Reporting?	✓	✓	✓	✓	✓	✓	✓

Table 1-2. Experience Providing Maintenance and Operations Services for Large Systems within the Last 5 Years.

The following table highlights many of the technical and business metrics that demonstrate the size and complexity of E&E systems Deloitte serves. This experience prepares us well to take on Indiana's IEDSS M&O project.

Engagement Details
Programs Supported
Users
Client records processed (per year)
Interfaces
Batch Programs
Correspondence Generated (per year)
Tasks Completed (per year)
No-Touch Determinations (per year)
Eligibility Rules
Stored Procedures
Screens
Enterprise Components
Reports Generated

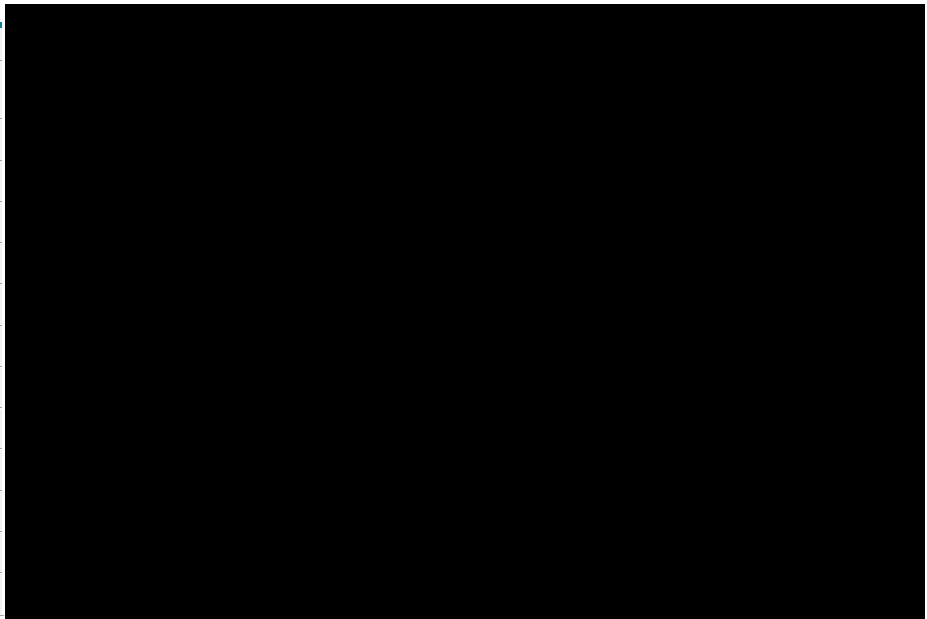


Table 1-3. How Our Experience Dovetails with Indiana's Needs.

1.b System Implementation or M&O Services for an HHS Agency within the Last Five (5) Years

RFP Reference: Attachment F, 1. Minimum Requirements (RFP Section 1.4.2)

For each minimum requirement listed in items in RFP Section 1.4, please clearly explain how the Respondent meets the requirement.

- b. Worked on a systems implementation or an M&O project for a city, county, state, or federal health or human services agency, or a project funded by a federal health or human services agency within the last five (5) years.

For each project described, please be clear about the client, your role on the project, whether you were the prime contractor or subcontractor, and time period the relevant work took place that meets the requirement. If you were a subcontractor, explain if you served primarily in a staff augmentation role or if you had a substantial role leading and executing delivery of a portion of the scope of work? If the latter, for what services did you lead and execute the delivery?

The State is seeking a vendor that has provided system implementation or M&O services for a large system for a city, county, state, or federal HHS agency, or a project funded by a federal HHS agency within the last five (5) years.

The **six** engagements discussed in the section above all qualify for this requirement as well. However, to highlight the breadth of our experience in this space, we are also providing **four** additional engagements to demonstrate how Deloitte **exceeds** the Minimum Requirements and provides stability and continuity to Indianans during times of uncertainty and change. Our large portfolio of E&E projects allows us to bring a wide range of specializations, solution components, and leading practices from other states. As highlighted in the demonstrations below and in the previous section, Deloitte has served as the **prime contractor** in each engagement.

Project and Client Name				
Role on Project				
Prime Contractor				
Time Period	2016 – Present	2011 – Present	1997 – Present	2019 – Present
DDI and M&O Services?				
Within the Last 5 Years?				
City, County, State, or Federal Human Services Agency?				

Table 1-4. Experience Providing System Implementation and M&O Services in Health and Human Services.

Background and Experience

Section 2

Deloitte has the combination of organizational experience, Indiana-specific eligibility program and technology knowledge and relationships, and the people to help the State of Indiana maintain system stability and compliance during these uncertain times. It comes from our 30-year history of implementing, maintaining, operating, and enhancing Indiana's critical systems that support the Medicaid, the Supplemental Nutrition Assistance Program (SNAP), and the Temporary Assistance for Needy Family (TANF) programs.

We combine our local delivery team with our organizational experience of being the national leader in large-scale Eligibility & Enrollment (E&E) systems. We also currently maintain 26 systems that are similar in scope and complexity to IEDSS. Beyond E&E systems, we are the leader in Maintenance and Operations (M&O) of custom enterprise systems in Health and Human Services (HHS) as well as public and commercial sectors. Given our experience implementing hundreds of enterprise solutions across HHS, we bring deep technology skills and hands-on experience with Indiana's Enterprise Architecture integration and IEDSS technology stack and infrastructure. This collective experience qualifies us to collaborate with you and realize continuity of services and stability for these mission-critical applications.

Our knowledge gives you a deep bench of talented professionals and the ability to shift resources if project strategy and vision change as we work together to keep your business running smoothly and continue to enhance the system.

WHAT IT TAKES



A vendor with breadth and depth of experience delivering eligibility determination system M&O and enhancement services to HHS clients

WHY IT MATTERS

As a national leader in innovation and continuous improvement of E&E systems, our teams understand your programs and are passionate about the work they do and its impact on the lives of people in need. Our robust staffing pool allows our staff to exchange ideas, develop best practices, and implement lessons learned from our combined experience across a broad spectrum of roles. We leverage our existing knowledge of IEDSS and our national experience to bring Indiana the right blend of continuity in service delivery, openness to innovation, and a qualified team tailored to Indiana's specific needs.



Knowledge and experience with federal rules

Our strong understanding of federal regulations and requirements as well as our experience helping the State of Indiana and HHS agencies across 48 other states enable us to provide secure solutions and assist in maintaining compliance with federal requirements. We bring Indiana-specific knowledge garnered from our years working with FSSA, DFR, and IOT to provide valuable insights into CMS, FNS, ACF, IRS, and SSA's expectations.



Longstanding, valued relationships across Indiana ecosystem

In the State of Indiana, we have longstanding, valued relationships with key stakeholders and 26 trading partners necessary to operate IEDSS. Our staff members know IEDSS and the State ecosystem. This familiarity keeps IEDSS operating smoothly and promotes efficient communication to keep management informed.

RFP Reference: Attachment F, 2. Background and Experience

Describe your company and proposed project staff's background and experience and how it will benefit the State in this Contract.

Indiana is looking for a vendor to operate IEDSS with continuity and minimal disruption of services for its population, maintain compliance, and remain responsive during current and future challenges. Deloitte is that demonstrated vendor. We bring a staff of 83 qualified practitioners, 39 of which we name in our proposal who have a combined 191 years of direct experience in Indiana. Our extensive knowledge of and experience with IEDSS gives the State a vendor you know and trust, thus minimizing the risk during the transition period and ramp-up efforts of training a new team.

We bring to Indiana the breadth and depth of our knowledge and experience to achieve your goals and objectives because we:

1. Implemented, operated, and enhanced IEDSS successfully with Indiana
2. Maintained ICES for almost 30 years
3. Have gained over 50 years of market-leading experience implementing and maintaining large-scale HHS systems and other public and commercial sector systems

Our knowledge of IEDSS and national experience allow us to bring a deep bench of experienced resources and critical relationships with government and technology partners to take IEDSS to the next level. Our mentioned staff bring a combined **191 years of experience in Indiana, 417 years of experience in HHS, 291 years of M&O experience, and 390 years of E&E system experience.**

Our experience presents Indiana with a skilled vendor that can deliver more value to the State through cross-collaboration across projects to share innovative ideas, leverage industry-leading solutions, and solve critical problems. Deloitte brings the agility, flexibility, and commitment to get the job done right the first time while other vendors must reinvent the wheel. Coupled with the State's long-term strategy and vision, Deloitte collaborates with Indiana to make IEDSS more efficient and stable by creating new components and enhancing existing functionality.

It is what allows us to help Indiana keep the momentum going forward.

KEEPING THE MOMENTUM GOING FORWARD

Deloitte has the right blend of experience and people to work with you to meet your vision:

- Our team commits to the State's vision by bringing a team of experienced staff with industry experience, technical knowledge of HHS applications, and deep-rooted knowledge of IEDSS.
- We know your people and systems and can hit the ground running to deliver IEDSS services in an efficient and effective manner.

Leading Maintenance and Operations and HHS Capabilities

Deloitte's U.S. Consulting practice provides services in six key service offerings: Core Business Operations, Customer and Marketing, Enterprise Operations, Human Capital, Mergers and Acquisitions, and Strategy and Analytics. We deliver these services to a broad set of industries, including government and public services. Our operate services include running, maintaining, or innovating a system, function, or process on behalf of a client organization. Deloitte's Operate Services **help clients embrace change and adopt fresh thinking** on how they run, manage, innovate, and enhance day-to-day operations, accelerating modernization and innovation while minimizing disruption. Key Operate Services priorities help close the gap between sustainment and innovation, helping organizations achieve mission efficiently and effectively while building foresight, agility, and resiliency. We are distinguished by our broad capabilities, deep industry knowledge, and ability to implement the advice we provide.

Our Government & Public Services (GPS) offering provides services to local, state, and federal organizations across the nation and around the world. Deloitte provides solutions that enable government agencies to operate with greater effectiveness and enhanced integration of service delivery to its constituents and end users. Specific to the public sector, we have provided technology consulting and delivery services for more than 45 years. Our firm differentiates itself by offering multiple integrated services designed to transform the complete enterprise, including mobile solutions, applications management, and systems integration. We move and innovate with our clients. No other organization offers the breadth of experiences and services in one integrated approach.

Deloitte has a robust global Operate to Innovate practice that **focuses on maintaining, operating, and modernizing systems such as IEDSS**. It allows us to bring stability, optimization, and innovation to clients by leveraging in-depth industry knowledge and domain experience, focusing on impact for its clients. We have delivered numerous large-scale complex services to both public sector and commercial clients globally. Deloitte has been recognized by ALM Intelligence as a best-in-class provider for System Management and Enabling Tools. We were awarded this distinction due to our delivery of unmatched results to our clients.

OPERATE PRACTICE



+50k

OPERATE
PRACTITIONERS



35

GLOBAL DELIVERY
CENTERS



30

GREENHOUSE &
INNOVATION LABS

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Figure 2-1. Deloitte's Global Operations Practice.

We are the market leader in Health and Human Services (HHS) and have an established track record serving clients in 49 states and D.C. This support includes delivering and maintaining large-scale, enterprise-wide solutions to clients of similar size and complexity as IEDSS. Our HHS space experience is unmatched by any other vendor in the market. We also provide M&O services in 26 states that leverage our reliable toolset and our experienced teams.

Over the years, Deloitte has created capabilities within our HHS practice to support our engagements across the nation. Our HHS Nerve Center serves as a centralized knowledge exchange for practitioners to connect on recent implementations and solutions to provide consistency across the organization to stay ahead of the curve. We leverage this center to respond to policy changes quickly as we work with you to integrate innovative solutions and to make system improvements. We also have longstanding relationships with federal agencies, allowing us to maintain a focus on compliance and promptly react to changing federal guidelines.

MAINTAINING MOMENTUM

We are committed to Indiana. We know the state and its systems and have the relationships to begin servicing you on Day One.

- Deloitte has over 30 consecutive years working with the State across 12 agencies
- As the original architect of the Indiana IEDSS, we have worked alongside you to develop and implement the system since 2012
- Over 500 practitioners call Indiana home; we have donated 5,000+ service hours and \$880,000+ to Indiana charities and community organizations since 2019

RFP Reference: Attachment F, 2. Background and Experience

- a. Provide a list of organizations for which you have delivered similar services of a similar in size, scope, and technical components.
 - i. Describe how that experience is relevant to the services in this RFP.
 - ii. Describe any problems and failures that you encountered in delivering your services, how these were resolved, and what were the lessons learned.

Deloitte has collaborated with numerous state and federal agencies across the country to successfully deliver projects with similar services and similar size, scope, and technical components. In providing services to these projects, we have demonstrated experience **providing stability** through the maintenance and operation of the existing systems **while being responsive to changing guidelines**. Our experience includes building on system foundations, enhancing existing features, and creating new components. The following table demonstrates our experience in successfully delivering services for systems of similar size, scope, and technical components relevant to this RFP. Benchmarks include large eligibility systems (serving over 1 million enrollees and over 1,500 end users), multiple programs served (Medicaid/SNAP/TANF), M&O and enhancement services, and similar technical components, including Java-based applications, Oracle databases, and IBM hosted platforms. Refer to *Section 2.e, Experience with Technologies* for additional information about our experience with the different software listed in Attachment J and our alliances with the vendors.

- Deloitte has renewed E&E M&O contracts with multiple states like [REDACTED] [REDACTED] within the last 5 years.
- In the last 3 years, Deloitte has added E&E services in [REDACTED], and we have retained each of our prior E&E States.

State	System or Project	> 1 million Enrollees	>1,500 Worker Portal Users	Medicaid	SNAP	TANF	M&O	Enhancements	Similar Technical Components to IEDSS
		✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓			✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
			✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
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	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓		✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓
			✓	✓	✓	✓	✓	✓	✓
			✓	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	

State	System or Project	> 1 million Enrollees	>1,500 Worker Portal Users	Medicaid	SNAP	TANF	M&O	Enhancements	Similar Technical Components to IEDSS
		✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓
				✓			✓	✓	✓

Table 2-1. Other Projects of Similar Scope, Complexity, and Technical Components.

How This Experience is Relevant to the Services in This RFP

IEDSS is a complex system that requires keys areas of experience from a vendor to be able to maintain the system and continue enhancements to meet state and federal guidelines. These experiences, as described in the table above, demonstrate our ability to maintain, operate, and enhance large-scale eligibility systems and the associated components that come with such large systems, like IEDSS. Our client working relationship over the years demonstrates our ability to provide quality deliverables, complete project tasks on time, and effectively deliver on complex, large-scale information systems. Deloitte has developed “muscle” over time in key areas required to successfully maintain IEDSS. Figure 2-2 presents key areas in which we have developed strengths through our experience working with clients on similar projects.

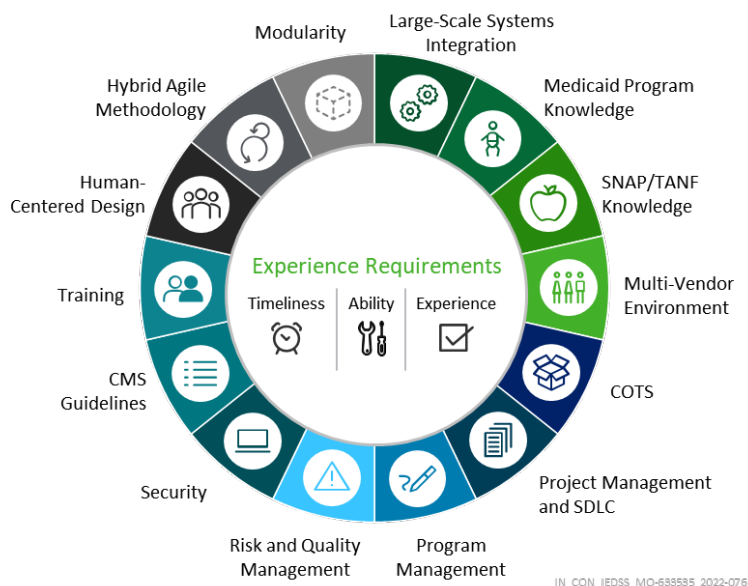


Figure 2-2. Deloitte's Experience Is Directly Relevant to the Services Required for the IEDSS Project.

Challenges and Lessons Learned in Service Delivery

During implementation, maintenance, and enhancements, it is common for projects to face challenges, especially given these solutions' sophisticated nature. However, each issue presents a learning opportunity. We apply these lessons learned across projects.

Success depends upon a well-orchestrated effort, reflecting hours of State and Deloitte personnel time gathering requirements, managing issues, and communicating to stakeholders in your agency and across the State of Indiana. Deloitte's lessons learned from previous E&E system engagements are crucial in helping IEDSS successfully predict and mitigate risks and manage the project. The table below highlights some of the common challenges we have faced across multiple implementations. It also highlights the resolutions and the lessons learned.

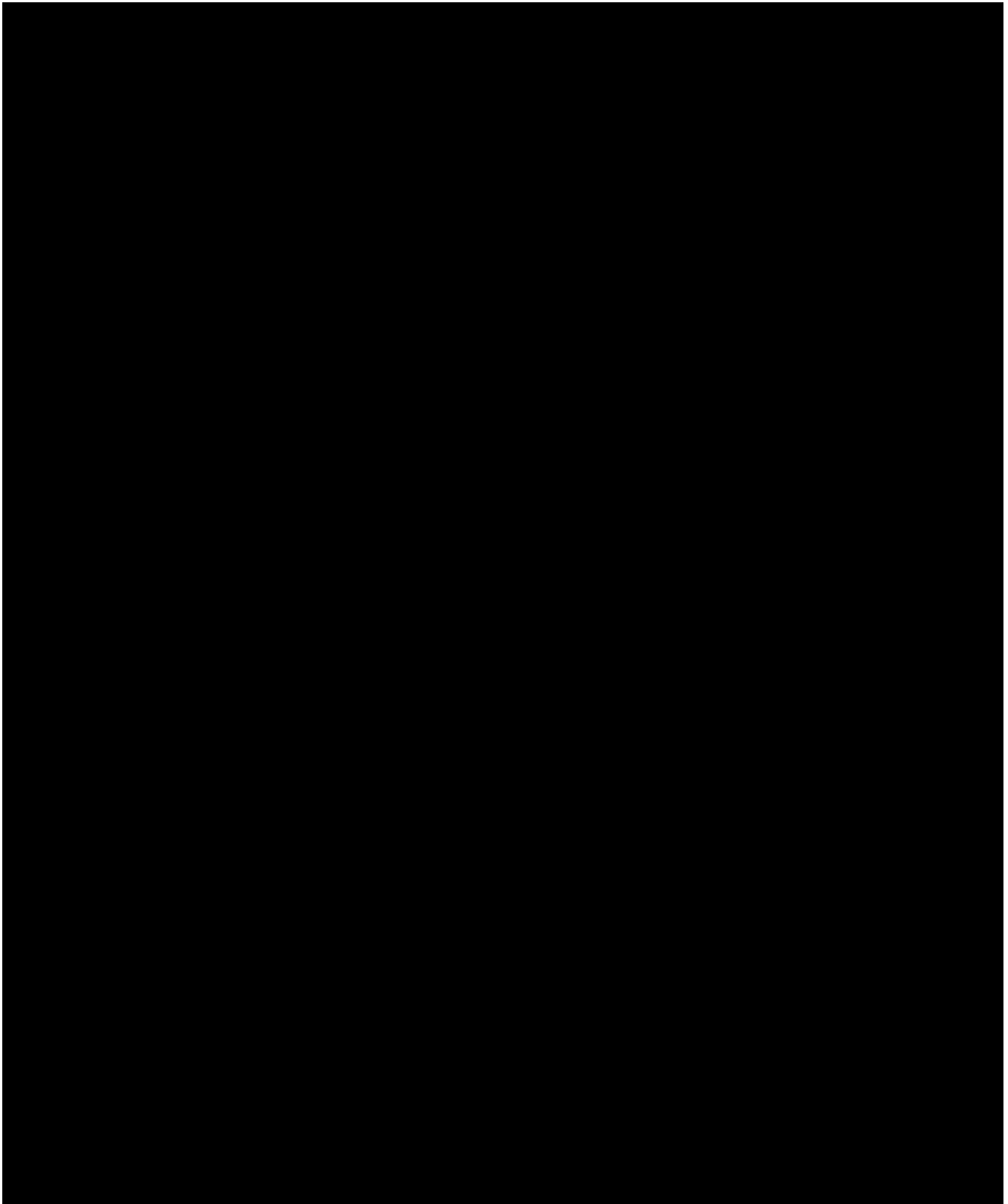


Table 2-2. Lessons Learned on Similar Projects.

2.b Experience with Health and Human Services Agencies

RFP Reference: Attachment F, 2. Background and Experience

b. Describe your relevant experience with city, county, state, and federal health and human services agencies, especially system DDI and M&O efforts.

Deloitte is the **market leader in HHS**, providing services including, but not limited to, project management, maintenance, operations, enhancements, incident management, help desk, reporting, security, training, and business continuity, and disaster recovery to state HHS agencies of similar size and complexity to the IEDSS solution. Our city, county, state, and federal experience, combined with our national HHS business and technology experience, give Indiana a skilled vendor to team with on the maintenance, operation, and enhancement of the IEDSS solution in alignment with the State's strategic vision. See the following figure for more information on our extensive U.S. HHS experience.

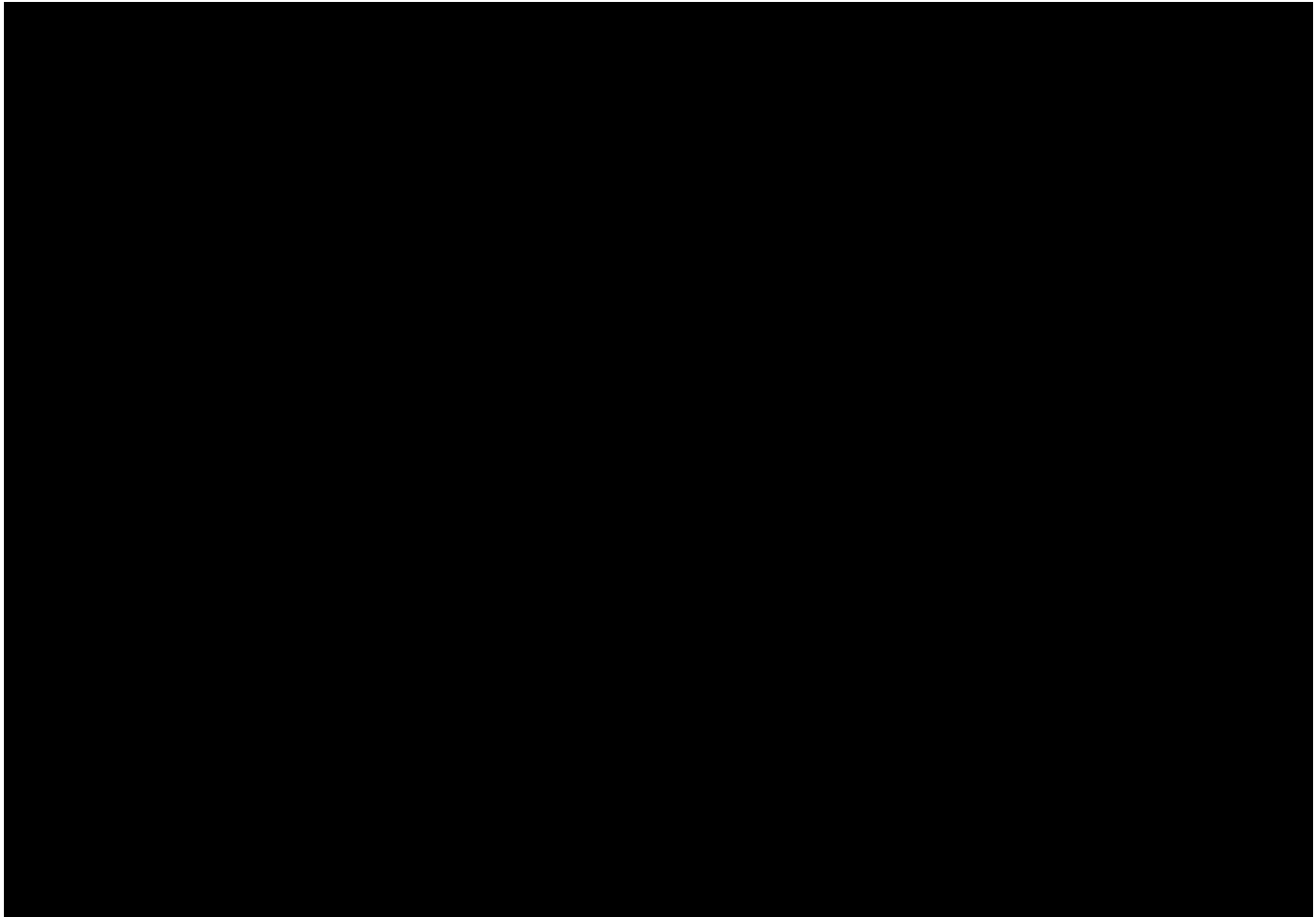


Figure 2-3. Deloitte's National Health and Human Services Experience.

Deloitte's HHS Nerve Center Benefits Indiana

Deloitte's HHS Nerve Center allows us to **share and collaborate on innovation, best practices, and lessons learned** from other states, thus benefitting Indiana. Practitioners leverage the HHS Nerve Center to gain significant knowledge in HHS programs and eligibility systems.

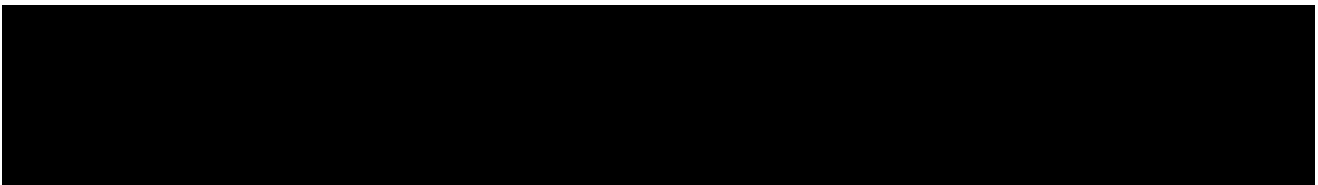


Table 2-3. Deloitte's HHS Nerve Center Benefits Indiana.

Our experience serving state and federal agencies has allowed Deloitte to build strong relationships with federal stakeholders. Our ongoing relationships with these federal counterparts allow for enhanced communication and facilitate our ability to stay abreast of legislation and its subsequent impact on our current and future systems. For example, our close working relationships with American Public Human Services Association (APHSA) and Human Services Information Technology Advisory Group (HSITAG) grant us access to meet with federal agency leaders to report on project status as well as share best practices and innovative solutions to continue Deloitte's alignment with the federal vision. We have **maintained longstanding relationships with APHSA for 30+ years and HSITAG for 27 years**, including past presidents and chairmen. Our extensive experience and established relationships with these agencies give us insight into client perspectives.

Our DDI and M&O Eligibility & Enrollment System Experience

Deloitte's unparalleled Eligibility & Enrollment (E&E) knowledge is part of our broader HHS experience. We specialize in the E&E system market, which includes Medicaid, SNAP, and TANF solutions of various shapes, sizes, and complexities. By teaming with Deloitte, the State gains access to the capabilities that set Deloitte apart:

1. Deep-rooted knowledge and experience in HHS programs, especially eligibility systems nationwide
2. Strong experience in design, development, implementation, M&O, and enhancements for eligibility systems across 32 states
3. National Community of Practice that gives nationwide access to 17,000 practitioners who have a deep pool of industry knowledge, experience, and skills

HHS is a dynamic and challenging environment, and vendors need to respond to the State's business needs, technology advancements, federal and state policy mandates, and the regulatory landscape. There is no room for error. Deloitte can get ahead through our federal policy insight, which allows us to anticipate changes and impacts to DDI efforts to minimize release planning disruptions. In Figure 2-3 above, you will see how Deloitte has provided extensive DDI services to state HHS agencies related to the requirements stated in this RFP.

Deloitte is now providing M&O services to states where we provided DDI services, and we are continuing to enhance the systems to meet business needs as well as federal and state policy mandates. As shown in the figure below, Deloitte's depth of experience allows us to bring these requirements to Indiana. We have aligned our M&O processes with **Information Technology Infrastructure Library's (ITIL's) best practices** to deliver high-quality, cost-effective results based on your needs. Incorporating ITIL has transformed our M&O services from a corrective to a preventative maintenance approach over time through continuous improvement practices.

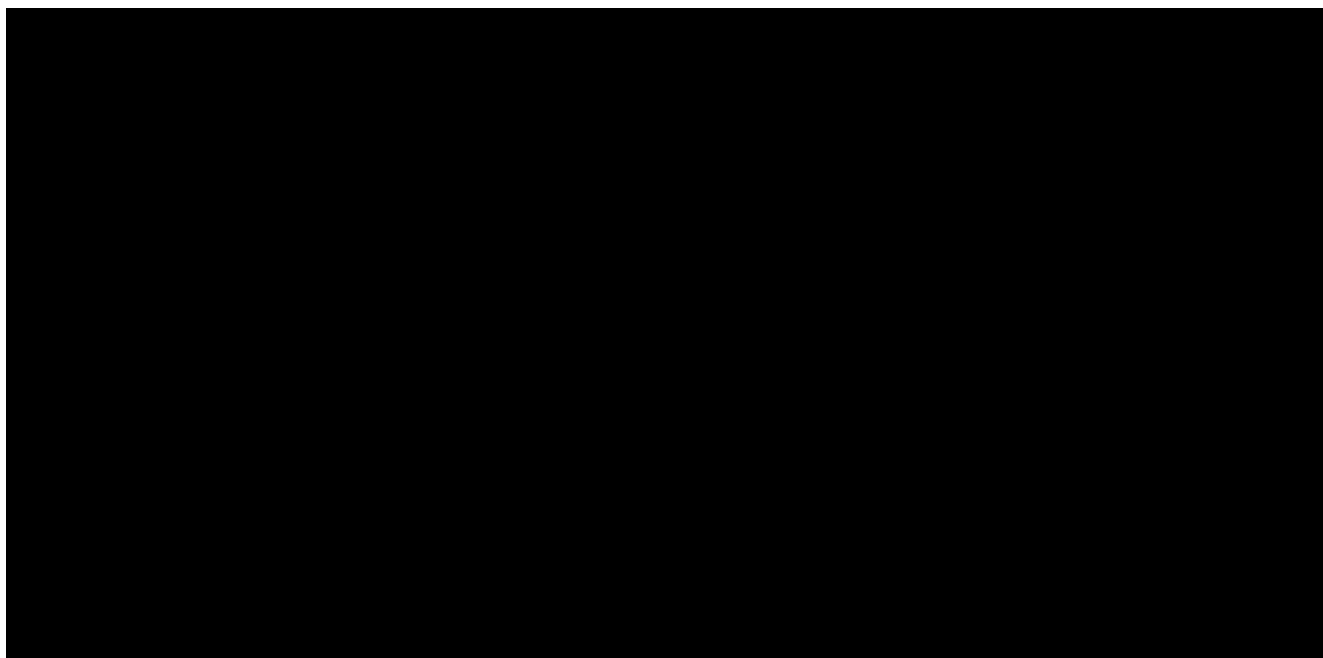


Figure 2-4. Deloitte's Eligibility and Enrollment Experience is Unmatched.

As illustrated above, Deloitte's national coverage providing a continuation of services to HHS clients is unmatched by any other firm. **We currently deliver M&O services for 26 state E&E systems that manage \$3.6 billion in monthly benefits for 40 million citizens.** Compared to many other vendors in the market, we have the greatest depth and breadth of knowledge to support the IEDSS solution and deliver services. Our demonstrated experience and extensive knowledge of the E&E solution market also gives the State access to our pool of highly skilled resources, who bring a business and technical understanding of Indiana's systems to hit the ground running on Day One. No other vendor can bring a team that has Deloitte's IEDSS knowledge and deep bench of additional resources who can help bring new ideas and perspectives to the team without disrupting the team's continuity. This deep pool of highly skill resources allows the State to scale up or down as needed. The Deloitte Team provides the State with tools to implement industry-leading solutions, innovative ideas, and critical problem-solving techniques.

2.c Experience in Meeting Compliance Requirements

RFP Reference: Attachment F, 2. Background and Experience

- c. For each of the following, provide a clear, separate description of your experience in meeting compliance:
 - i. Medicaid Eligibility and Enrollment Toolkit (MEET)
 - ii. Streamlined Modular Certification (SMC) Outcomes-Based Certification (OBC)
 - iii. Medicaid Information Technology Architecture (MITA) 3.0 and requirements of 42 CFR § 433.112
 - iv. Minimum Acceptable Risk Standards for Exchanges (MARS-E) 2.0 and subsequent versions, IRS Publication 1075, and SSA Security Requirements
 - v. ACF TANF requirements
 - vi. FNS Handbook 901 and FNS Major Change requirements
 - vii. FNS Test Plan requirements and System Integrity Review Tool (SIRT) requirements
 - viii. SNAP and TANF Employment & Training (E&T) requirements.

Indiana needs a knowledgeable and experienced vendor with in-depth knowledge of the regulatory requirements, technology, and business. With Deloitte, the State has that vendor. On the next few pages, we provide several illustrative examples highlighting our experience complying with each of the identified requirements.

Medicaid Eligibility and Enrollment Toolkit (MEET)

We follow the MEET checklist in our Medicaid eligibility and enrollment system projects nationwide. Through these projects, we have gained first-hand experience implementing and supporting projects that satisfy Centers for Medicare & Medicaid Services (CMS) conditions and standards. We regularly assist States with CMS gate reviews and checkpoints, and we participate in the preparation of monthly status reporting, often joining our State representatives at CMS monthly meetings. Our experience benefits the State as we can anticipate CMS questions in reviews and proactively address them in status reports. We also understand what CMS is looking for during gate reviews and address them early on. This knowledge and experience will save time for the State by having less follow up required by your staff.



- Helped 16+ states complete their MARS-E assessment and attain the CMS Authority to Connect (ATC).
- Strong relationships with regulatory counterparts enabling us to provide valuable insights into CMS, IRS, and SSA's expectations
- We have provided consultative advice to define MARS-E and IRS Pub. 1075 regulations and receive feedback from states due to our market presence and knowledge.

Federal Requirement	Highlighted State	Example
MEET		

Table 2-4. Examples Meeting MEET Requirements.

Streamlined Modular Certification (SMC) Outcomes-Based Certification (OBC)

Our firm has played an integral role in assisting state governments plan and execute OBC Reviews with CMS. We acknowledge the importance of state systems transitioning to the outcomes-based approach to streamline the process to meet the needs of the State and CMS. This process simplifies and streamlines the certification review process for the State and have a refined template to use for future reporting.

Federal Requirement	Highlighted State	Example
SMC – OBC		

Table 2-5. Examples Meeting SMC/OBC Requirements.

Medicaid Information Technology Architecture (MITA) 3.0

Utilizing experience from implementations nationwide, our team has developed a comprehensive framework of interoperability in a Service-Oriented Architecture (SOA) that adheres to principles of MITA and aligns with Indiana's enterprise architecture standards and technology stack. We have experience completing successful certification of our E&E projects in multiple states such as [REDACTED]. We have also provided MITA-related services to more than 40 clients, including working on some of the country's largest SI projects, such as the [REDACTED]. Our experience preparing for and participating in state and/or federal certification reviews as well as state and federal site visits is built into our processes from day one. Our firm supports the State's efforts to comply with federal funding guidelines and 42 CFR § 433.112 requirements through accurate cost allocation of DDI and M&O activities. We provide the State guidance in preparing the annual APDU report for federal approval.

Federal Requirement	Highlighted State	Example
MITA 3.0	[REDACTED]	
Requirements of 42 CFR § 433.112		

Table 2-6. Examples Meeting MITA 3.0 Requirements.

Minimum Acceptable Risk Standards for Exchanges (MARS-E) 2.0 and subsequent versions, IRS Publication 1075, and SSA Security Requirements

Deloitte is a leader in cybersecurity services. We have assisted 48 other states' health and human services agencies around the country, with systems integration, maintenance, and operation projects where we effectively and efficiently manage compliance requirements from federal standards and regulatory requirements. Deloitte worked together with the State to establish a structured approach to demonstrate compliance with CMS MARS-E 2.0 standards, IRS Pub 1075 and SSA Security Requirements. Deloitte leverages the experience from our Communities of Practice (CoPs) knowledge base to stay current on federal and state regulations, such as IRS-1075 and MARS-E 2.2.

Federal Requirement	Highlighted State	Example
MARS-E 2.0	[REDACTED]	

Federal Requirement	Highlighted State	Example
IRS Publication 1075		
SSA Security Requirements		

Table 2-7. Examples Meeting MARS-E, IRS Pub 1075, and SSA Security Requirements.

ACF TANF Requirements

Deloitte has supported our clients compliance with Administration for Children and Families (ACF) requirements across many of our state eligibility system implementations. We work alongside our clients to support compliance in response to State and Federal policy changes.

Federal Requirement	Highlighted State	Example
ACF TANF Requirements		

Table 2-8. Examples Meeting ACF TANF Requirements.

FNS Handbook 901 and FNS Major Change Requirements

Deloitte has collaborated with multiple states to support FNS Handbook 901 and FNS Major Change requirements. We support our clients' needs regarding the APD process, comply with SDLC phase requirements, and provide supporting information for FNS inquiries. The State can have confidence in our ability to maintain a federally compliant system and effectively navigate the review process. Our experience from other projects speaks to our ability to support IEDSS through federal review and enhances our ability to facilitate the review process.

Federal Requirement	Highlighted State	Example
FNS Handbook 901		
FNS Major Change Requirements		

Federal Requirement	Highlighted State	Example

Table 2-9. Examples Meeting FNS Handbook 901 and FNS Major Change Requirements.

FNS Test Plan Requirements and System Integrity Review Tool (SIRT) Requirements

With our demonstrable experience in helping other States, Deloitte works with State teams to complete the FNS SIRT tool as required. Deloitte understands and works with the State teams to prepare and submit the Test Plan and complete the SIRT tool prior to UAT start and submit the same to FNS with more details at various stages of SDLC phases. Our experience in supporting numerous states through the Federal Review process gives us a better understanding of the federal review process and timelines, deliverable/package requirements of FNS Test Plans and SIRT Requirements.

Federal Requirement	Highlighted State	Example
FNS Test Plan and SIRT Requirements		

Table 2-10. Examples Meeting FNS Test Plan Requirements and System Integrity Review Tool (SIRT) Requirements.

SNAP Employment & Training (E&T) and TANF Employment & Training (E&T) Requirements

Deloitte has worked with State agencies in [REDACTED] to develop the end-to-end implementation of SNAP and TANF E&T programs for the participants, state workers and contractor agencies. We collaborate with the states and FNS to develop the system in accordance with the SNAP E&T Program Toolkit. Deloitte has conducted several reviews and demonstrations with FNS to develop the system reporting, data retention, auditing, data sharing and training requirements in accordance with the federal guidelines.

Federal Requirement	Highlighted State	Example
SNAP/TANF E&T Requirements		

Federal Requirement	Highlighted State	Example
		capabilities, task-based workflows, and real-time dashboards for tracking. SNAP E&T participants track their employment and training activities through the Citizen Portal.

Table 2-11. Examples Meeting SNAP Employment & Training (E&T) and TANF Employment & Training (E&T) Requirements.

Refer to *Section 11, Compliance with Standards and Regulatory Requirements* to understand our approach and commitment to comply with State and federal regulations.

2.d Disclosure of Formal Corrective Actions

RFP Reference: Attachment F, 2. Background and Experience

- d. Corrective actions
 - a. Disclose any publicly reported formal corrective actions, security breaches, and lawsuits that your company has experienced under previous contracts in the last 10 years. For each lawsuit, include the court and the court issued case number.
 - b. Disclose any non-publicly reported formal corrective actions, security breaches, and lawsuits that your company has experienced under previous contracts in the last 10 years. For each lawsuit, include the court and the court issued case number.

[REDACTED]

[REDACTED]

Publicly and Non-Publicly Reported Corrective Actions, Security Breaches, and Lawsuits

Corrective Actions

[REDACTED]

[REDACTED]

Security Breaches

[REDACTED]

[REDACTED]



[REDACTED]

[REDACTED]

Lawsuits

[REDACTED]

[REDACTED]

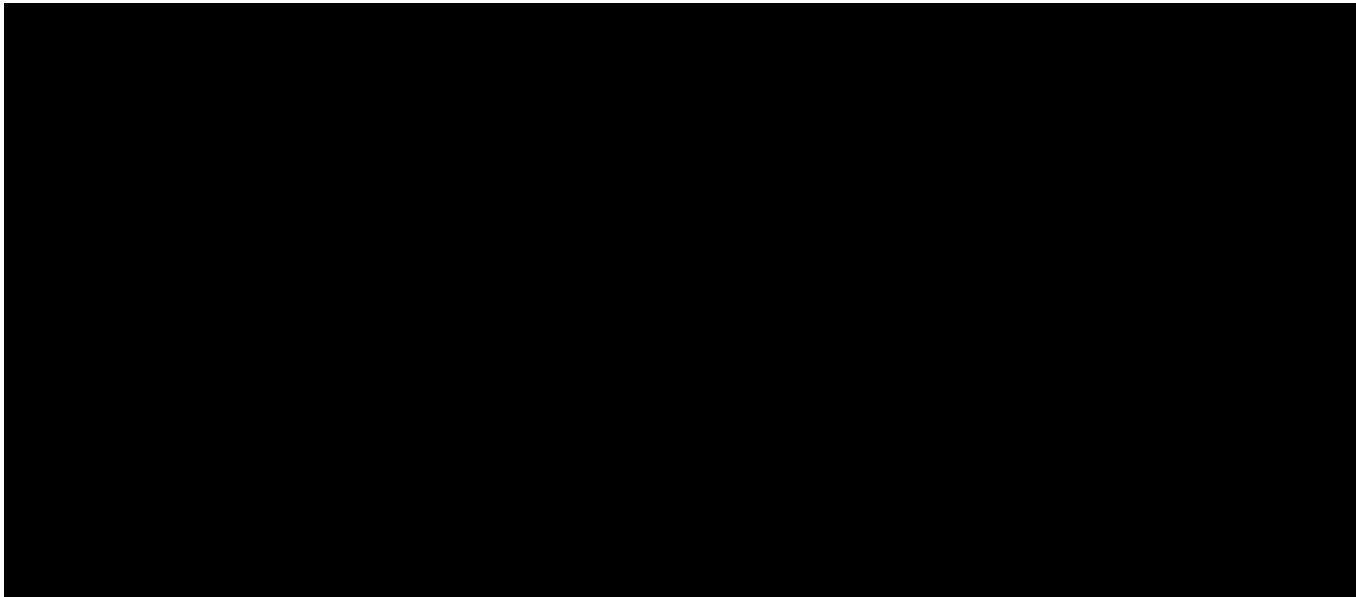


Table 2-13. Lawsuits including Court and Court Issued Case Number.

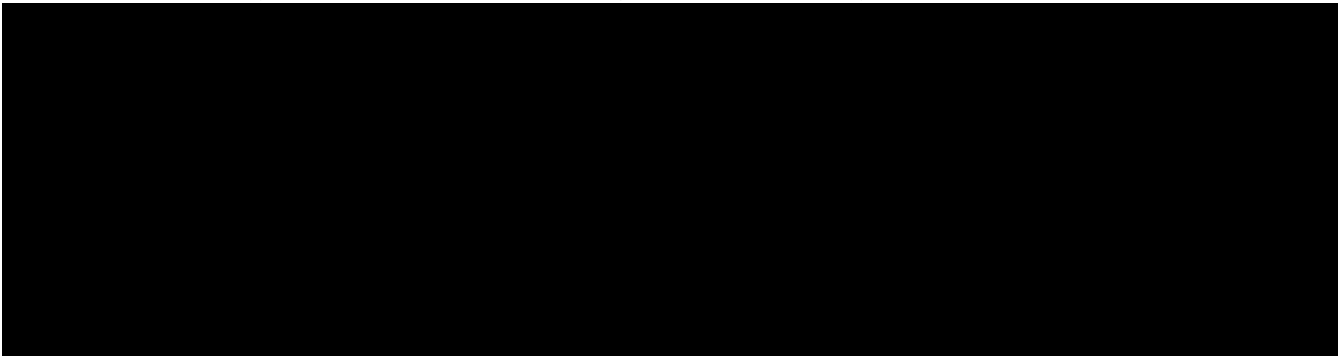
2.e Experience with Technologies

RFP Reference: Attachment F, 2. Background and Experience

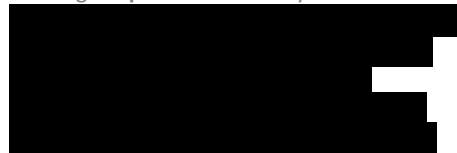
e. Describe your company's experience with the technologies described in Tab 3 of Attachment J.

As the original architect of IEDSS and its base solution, we have the people who understand IEDSS and its related technologies, and have years of experience with Indiana enterprise/infrastructure platforms. We have also implemented and maintained similar systems in other states, giving us a deep bench of technology practitioners experienced with the required toolsets and other innovative technologies. We have demonstrated these innovative capabilities working with you to bring new solutions to IEDSS, such as the [REDACTED]. Deloitte's deep knowledge of these products and trusted alliance with our technology vendors enable us to troubleshoot issues directly with vendors to resolve them efficiently and effectively. We leverage our partnerships to fast-track the needs of Indiana and provide resolutions as quickly as possible.

We have reviewed and analyzed the State's RFP and understand the responsibilities and deliverables required of us regarding the technology toolsets of IEDSS. The table below provides a sample of E&E systems we maintain where we have experience with the same technologies that are in the scope of the Contract.



- Leveraged **Splunk** to collect system data



- Deloitte's wealth of experience working with IEDSS technologies is described in more detail in *Appendix 1, Experience with the Technologies in Attachment J.*

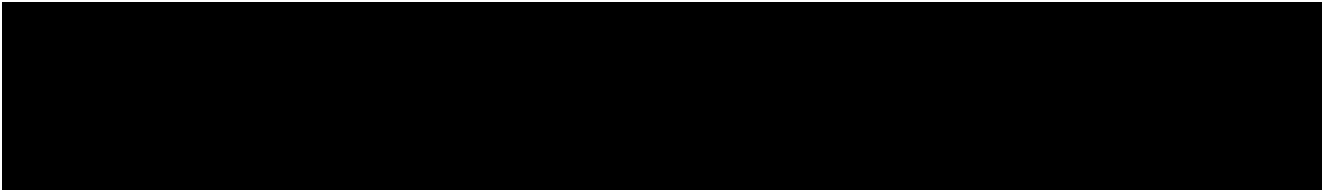


Table 2-14. Projects with Experience Utilizing Relevant Technologies.

Beyond just familiarity with these tools, Deloitte has a wealth of experience integrating these technologies on many large-scale eligibility systems like IEDSS. We have the product skillset, and we know how to use these technologies to deliver benefits accurately and on time to the residents who depend on them.

How Our Technology Alliance Benefits Indiana

Deloitte has experience serving a wide array of clients on technology projects across industries and service offerings, including the technology stack used for IEDSS. Our technology strategies are, in part, informed by Deloitte's extensive alliances with leading platform vendors utilized by IEDSS, such as HP, IBM, and Oracle. Our strategic technology partnerships provide our team with unmatched support to work with you to deliver the desired end-user experience and improved outcomes with innovative enhancements. Our relationship with vendors helps Indiana meet requirements and gather operation support from them to fix or avoid issues. In particular, our relationships with HP and IBM have allowed us to resolve issues and develop innovative enhancements to rapidly improve IEDSS. For example, our relationship with IBM in support of IBM Java and WebSphere plug-ins has enabled us to maintain system stability and promptly implement new functionalities such as dynamic workload management, memory-to-memory replication, and intelligent management. Having a diverse list of technology partnerships also means Deloitte is positioned to support any future implementation of newer technologies that are not currently used within IEDSS. For example, our alliances with vendors such as Salesforce have broadened and enhanced Deloitte's capability to implement no-code/low-code solutions. Similarly, our alliance with Google Cloud has allowed us to remain at the forefront of AI and machine learning technology integration on our engagements. Our existing relationships with automation innovators such as UiPath enable us to automate complex tasks across multiple business functions.

2.f Best Practices for the State's Consideration

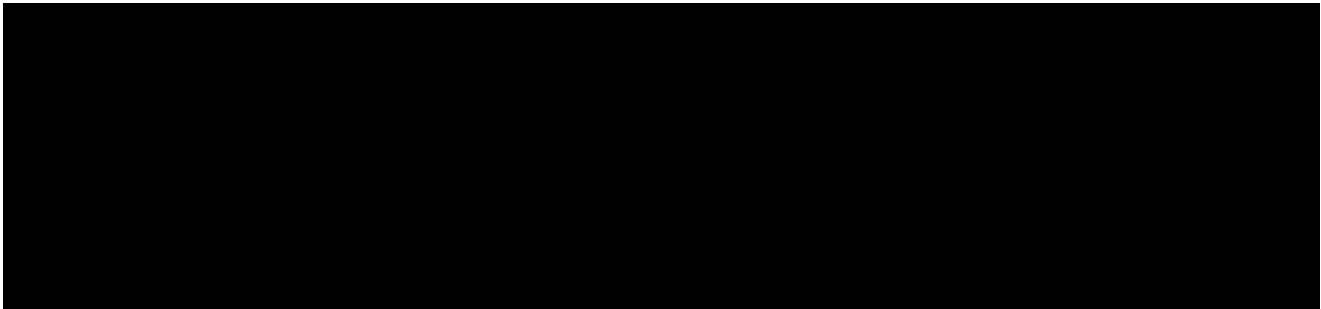
RFP Reference: Attachment F, 2. Background and Experience

Based on your experience, detail any eligibility system and SDLC/IT Management industry best practices with respect to the scope of this RFP that you would like to share for the State's consideration.

As the industry leader in delivering similar scope for eligibility systems such as IEDSS, we continually improve our delivery approach. Below, we highlight best practices for the State's consideration for M&O, DDI of enhancements, and staffing.

Best Practices for Eligibility System M&O

Successful M&O teams are led by three mission North Stars: to determine and deliver benefits accurately, to do so timely, and to maintain compliance with applicable requirements. These North Stars provide guidance for how the Deloitte and state team conducts their day-to-day activities, and for how the team makes decisions around the urgency and priority of their work. The table below documents leading practices that influence our approach to M&O.



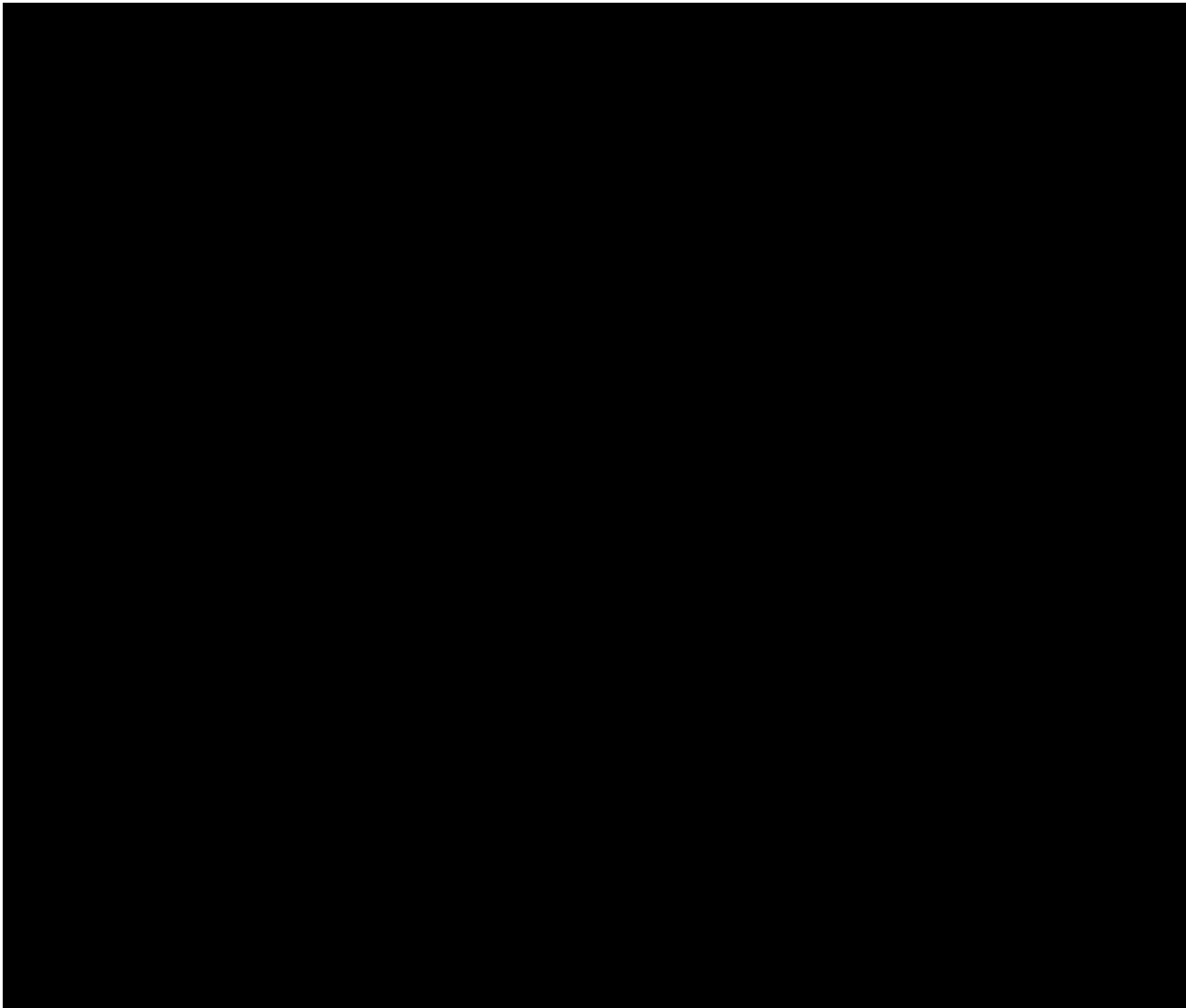
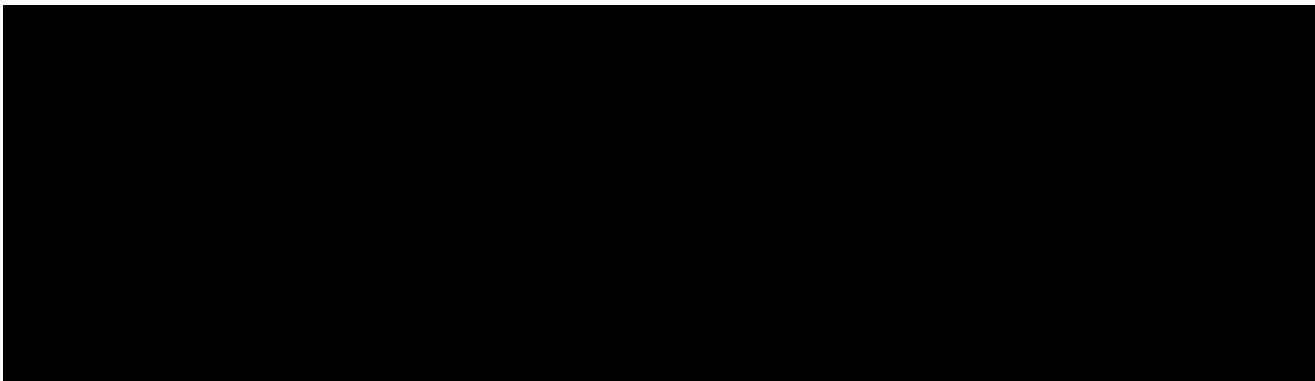
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Table 2-15. Best Practices for Maintenance and Operations.

Best Practices for Design, Development, and Implementation of Enhancements

Deloitte focuses on improving IEDSS according to your vision while maintaining stability and quality. We listen to your business needs and bring ideas and recommendations from our experience delivering similar solutions nationwide. The State benefits from the features of our approach, as documented in the table below.

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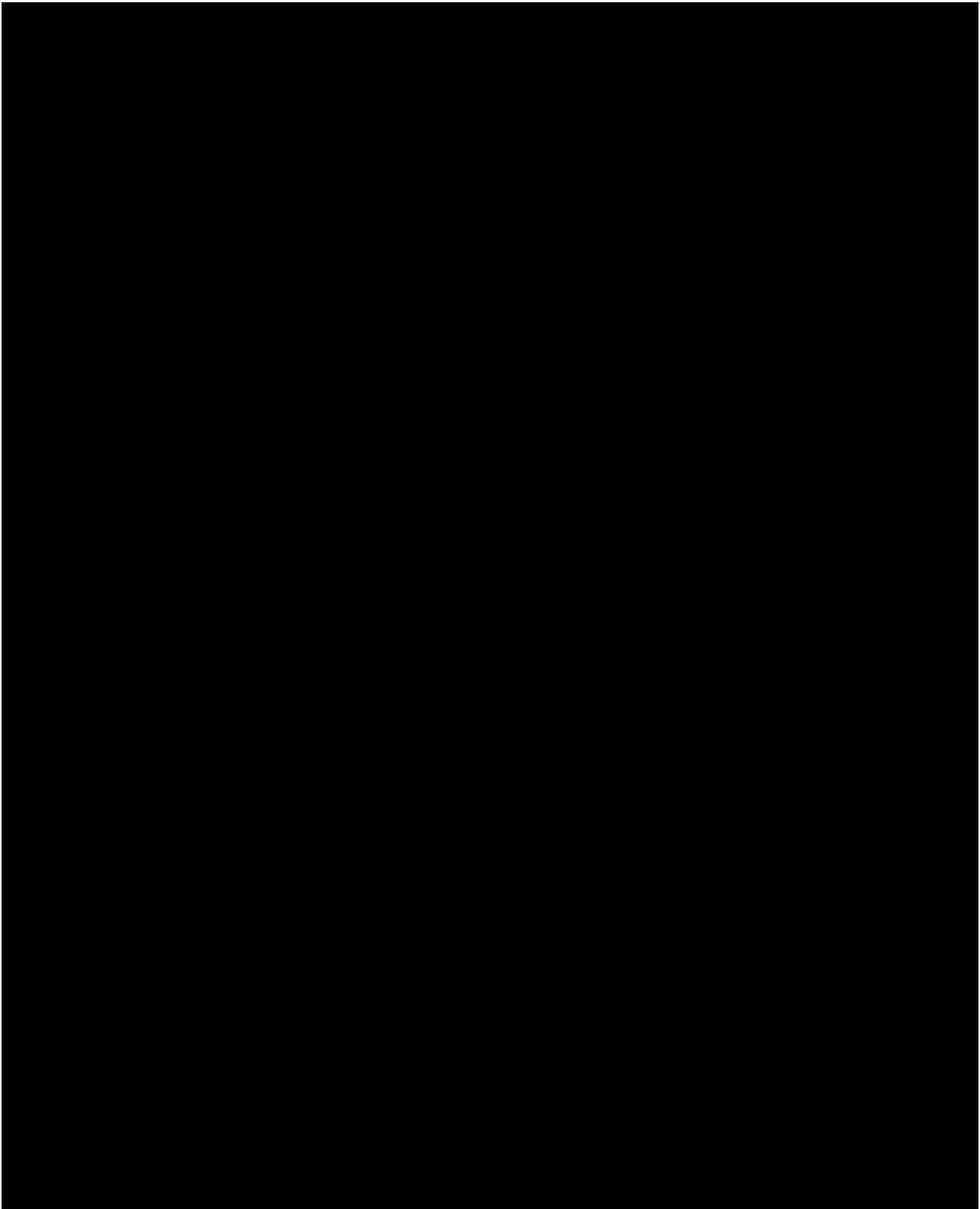


Table 2-16. Best Practices Used for DDI.

Best Practices for Staffing

Deloitte has a deep understanding of industry best practices that drive success. Our approach, as described below, will serve as a foundation to support continued success for the State with IEDSS.

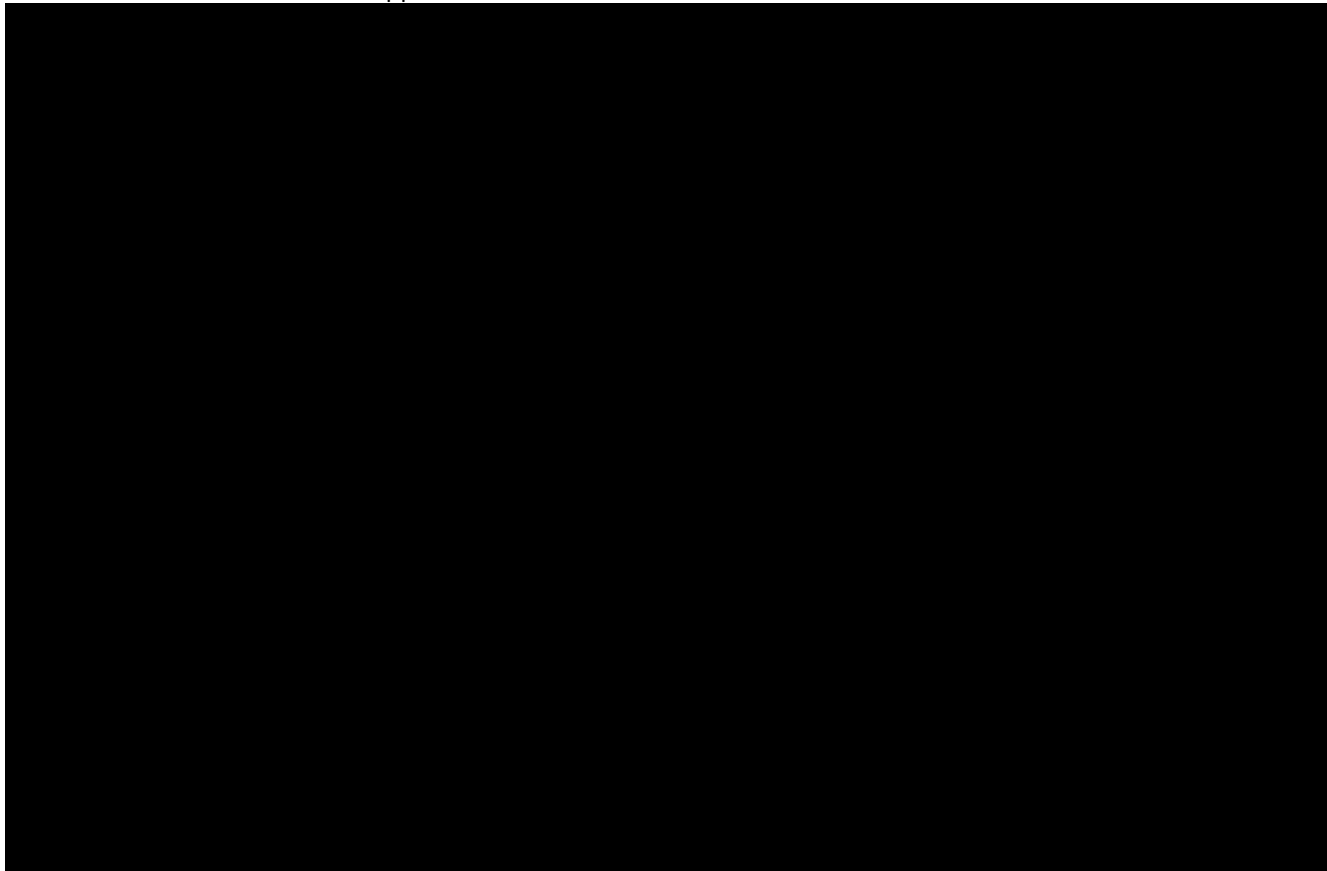


Table 2-17. Best Practices for Staffing.

IEDSS Solution Overview and Management

Section 3

Every day, we see evidence of the vital role IEDSS plays in supporting the State's mission to provide timely and accurate eligibility processing for Medicaid, SNAP, and TANF.

We are grateful and proud of our collaboration on the IEDSS implementation and look forward to supporting your continued efforts to streamline case worker processing, respond to changing program needs with speed and quality, maintain federal compliance, increase MITA maturity, and achieve technology sustainability.

We know many policy, operational, and technology differentiators make Indiana unique. We also understand the broader ecosystem of stakeholders and systems vital to your operations. That's why our team's 191 combined years of experience working side by side with the State and agency partners is so valuable in helping us to look ahead and build on our success. It helps us efficiently manage the daily operations of IEDSS and rapidly respond when the most challenging and unexpected situations arise.

WHAT IT TAKES



A robust understanding of Indiana's innovative program design, unique operating model, and feature-rich eligibility system



Experience, people, and solutions to support continuous improvement and innovation



Collaborative communication and transparency

WHY IT MATTERS

Our in-depth understanding of the Indiana public assistance ecosystem enables us to reduce risk, provide better quality, and make more efficient use of valuable State staff time than a less experienced vendor.

Your business and technology are continuously evolving. You need to keep pace with change and take advantage of new ideas to help do more with less. We continue to bring our experience from our client portfolio, [REDACTED], Splunk Monitoring, and various custom-designed tools for the IEDSS solution (described below in the section titled "IEDSS Solution Technologies and Tools").

We have developed a communication process that facilitates efficient information sharing, especially when critical issues or business situations arise. Our team owns the issues and works relentlessly by involving key stakeholders until the issue is resolved. For example, during Emergency Allotment, our team worked with business partners and UAT to make sure that additional benefit amounts were distributed on time and with "no surprises."

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management (Attachment C, Section 3)

Describe your understanding of the State's vision and needs for the IEDSS M&O scope of work. Be sure to address the elements of Attachment C, Section 1 and Section 3.1 to 3.6.

Deloitte has been at your side every day on the IEDSS journey, listening to your needs, adapting to continually evolving policy, and working with you firsthand on supporting these critical systems. You can rely on our expertise, commitment, and proactive thinking to help you maintain stability and achieve your desired outcomes. Our comprehensive knowledge of your programs, processes, and enterprise architecture equip us to be effective from Day One as we continue to work closely with you to drive positive outcomes for your stakeholders and the Hoosiers you serve. As you have seen, we are responsive and operate with a sense of urgency because your success is our success.

KEEPING THE MOMENTUM GOING FORWARD

We understand your business priorities, and we remain focused on key initiatives such as:

- Public Health Emergency unwind
- RCC/CCC transition
- Expedited waiver eligibility
- Resource assessment
- Medicaid no-change auto-renewals via Benefits Portal
- Disability interface changes to reduce manual intervention for MRT tasks
- Change in adverse action rules during Medicaid redetermination

Below is a summary of our understanding of the State's vision and needs for IEDSS:

- **IEDSS is mission critical.** It is essential to over two million Hoosiers, the daily jobs of thousands of workers, and the stewardship of billions of dollars in benefits. The State and its IEDSS vendor must comply with federal and state regulations and safeguard confidential data.

- **Indiana is unique.** IEDSS has evolved and been tailored to reflect the needs of Hoosiers, and we are uniquely positioned because of our insight stemming from Indiana-

specific customizations. Indiana-specific capabilities include innovative programs like the Healthy Indiana Plan (HIP), robust task management that supports the RCC/CCC model, a benefit recovery process that supports the manual establishment of underpayments and overpayment claims, and the sophisticated approach to identifying and displaying detailed reason codes on client notices.

- **IEDSS requires flexibility.** We have learned over the years how important it is to listen to your needs and be flexible to the rapid changes to system requirements and priorities. Over the years, we've worked with you to support initiatives with evolving requirements, aggressive timelines, strict compliance requirements, and a high level of external visibility and scrutiny. These include initiatives such as HIP 2.0, PHE, HIP Bridge, Electronic Notices, and Asset Verification System. During IEDSS implementation, we also worked with you to navigate changes related to several major concurrent system replacements, such as the Medicaid Management Information System (MMIS) replacement, Electronic Benefits Transfer (EBT) replacement, and Benefits Portal.
- **IEDSS is part of a broader ecosystem.** We have developed strong working relationships with DFR and other FSSA entities and key stakeholders such as OMPP, OALP, DST, and IOT. These established relationships and years of experience working with Indiana enable us to share the State's goals and embrace the criticality of the IEDSS system. This mission-critical system delivers benefits and serves case workers and other trading agencies who depend on IEDSS to serve the citizens of Indiana. Please refer to the following figure.

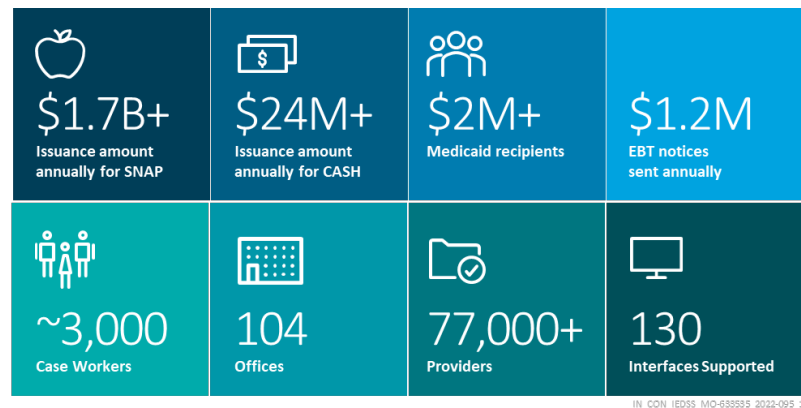


Figure 3-1. IEDSS is a Mission Critical System Delivering Substantial Benefits.

- **IEDSS is a sophisticated system.** Its goal is to make a complex set of programmatic, operational, and compliance requirements simpler to manage, administer, and maintain. The metrics below highlight the size and scale of this system, emphasizing the specialized resources required to maintain such a system.

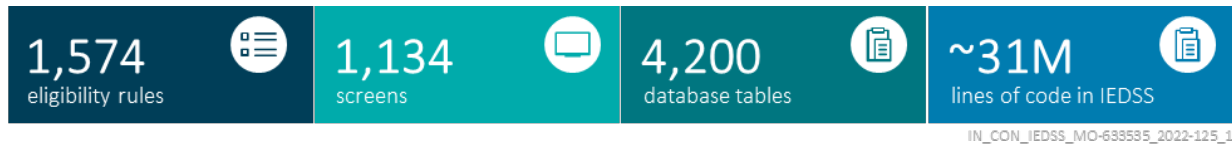


Figure 3-2. Metrics Demonstrating the Size and Scale of IEDSS.

- **IEDSS requires continued investment to achieve your vision.** There are more opportunities available to us to leverage evolving technology, Human-Centered Design (HCD), and innovations to streamline case worker processing. There are also opportunities to respond to changing program needs with speed and quality, continue to maintain federal compliance, increase MITA maturity, and achieve technology sustainability. We continue to work with you on system enhancements in areas such as data collection, task management, eligibility rules, interfaces, and appeal management. We also strive to improve the maintenance and sustainability of IEDSS through our new Hybrid Agile SDLC, ALM tool improvements, and enhanced security. The figure below demonstrates some impactful system improvements we implemented together to make the IEDSS system more robust and efficient.

	PROCESS AUTOMATION	OUTCOMES AND BENEFITS
1 APPLICATION PROCESSING	<ul style="list-style-type: none"> Manual tasks automation Applications are auto-file cleared If client misses the appointment, workers do not have to interfere to deny the SNAP application, system automatically denies it 	<ul style="list-style-type: none"> Post system enhancements, we saw application processing improved up to 26% 18% of total SNAP applications are auto denied per month
2 ELIGIBILITY DETERMINATION	<ul style="list-style-type: none"> Improvement in authorization rates Individuals' SNAP/TANF work registration Statuses are systematically determined as mandatory Reduced dependency on FIAT 	<ul style="list-style-type: none"> On average, 1,100 Medicaid category changes are authorized through MU Individuals' SNAP/TANF work registration statuses were determined manually in ICES; since September 2021 IEDSS determines it systematically Approx. 800 applications retro coverage are determined accurately by the system per month instead of FIAT
3 CORRESPONDENCE	<ul style="list-style-type: none"> Automated generation of Pending verification notices eNotices Auto-determination of Notice reasons 	<ul style="list-style-type: none"> Instead of manual intervention, system generates 480 pending verification notices per month On average, 8,500 eNotices per month alerting clients of changes/updates in their benefits, ensuring quicker delivery of notices and reducing call volumes 122 notice reasons are auto-determined instead of letting workers do manual work
4 ADMINISTRATIVE EFFICIENCY	<ul style="list-style-type: none"> Auto-scheduling appointments Feature to auto-renew Medicaid recipients receiving SNAP benefits SRED tasks 	<ul style="list-style-type: none"> 900 tasks were saved on a monthly basis by auto scheduling appointments 12,500 tasks were saved on a monthly basis by auto-renewing Medicaid benefits by routing 'Solicited Document Not Received' to SRED tasks which were as high as 30,000 monthly average

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Figure 3-3. System Improvements the State and Deloitte Have Achieved Together.

Services Overview

RFP Reference: Attachment C, Section 1.1

Deloitte understands the State's requirement to provides services in areas of M&O, enhancement services, and maintenance of decommissioned legacy systems. Our approach is based on established processes that we've fine-tuned in collaboration with you as continued improvements based on feedback, lessons learned, and a drive to continuously improve. Our M&O processes are aligned with Information Technology Infrastructure Library (ITIL) standards and emphasize the need to be preventative rather than corrective in nature. The State benefits from the key features of our approach, described in detail throughout our proposal. The following table summarizes our

approach to the required services, describes the outcomes of these tasks, and highlights where we maintain and build on the momentum of services we perform today.

Key Services	How Deloitte Exceeds Your Requirements	Maintains Momentum
Architecture Services	<ul style="list-style-type: none"> Support architecture lifecycle management, technical debt management, and system performance management; confirm application complies with federal requirements. 	✓
Software/ Hardware Management <ul style="list-style-type: none"> Infrastructure management Application Lifecycle Management (ALM) Database support Application monitoring 	<ul style="list-style-type: none"> Support the State in maintaining licensure agreements with applicable parties. Help solution components stay relevant, usable, and secure per the latest releases, patches, and upgrades. Continuously monitor and maintain the database using Conceptual Data Model (CDM), Logical Data Model (LDM), and Physical Data Model (PDM) concepts. Maintain the application source code and configuration artifacts. Monitor application using monitoring tools like Splunk Enterprise identifies performance and application bottlenecks in real time. Dashboards are built specifically to monitor behavior of the system and perform ad hoc analysis of performance data and prompt alerts to IOT stakeholders. 	✓
Software/Hardware Maintenance	<ul style="list-style-type: none"> Apply patches, COTS upgrades, and software end-of-life upgrades to be compliant with Minimum Acceptable Risk Standards for Exchanges (MARS-E) 2.0 and State-defined guidelines. 	✓
Incident Management and Helpdesk Support	<ul style="list-style-type: none"> Resolve functional and performance issues reported by users through incidents and tickets Our problem solvers bring extensive, specialized expertise to your business and systems. 	✓
Business and Operations Reporting	<ul style="list-style-type: none"> Our team has built the current IEDSS reporting structure, which includes reports by business groups, including State Management, Policy Management, Metrics, etc. The reports are categorized as real-time, data extracts, and IEDSS-created. We also understand that reporting needs change from time to time; in one such recent example, during the Public Health Emergency (PHE), we geared to meet expedited development timelines to meet new State and federal reporting requirements. 	✓
Security and Privacy	<ul style="list-style-type: none"> Continue maintaining MARS-E documentation (i.e., SSP, POA&M, Information Security Risk Assessment [ISRA]) for the Integrated Eligibility System (IES), including the applications in-scope for the IEDSS solution. Continue conducting annual self-assessment of systems within the IEDSS authorization boundary, including systems maintained by external service providers, to identify and address security and privacy issues and provide a detailed understanding of the current security and privacy posture. Determine and mitigate suspicious activity for possible security policy violation and/or security incident. 	✓
Training	<ul style="list-style-type: none"> Support the State with the development of solution usage training. Provide Software Development Lifecycle (SDLC) and PM processes training. Provide security training to contracted staff and role-based training for those with access to production data. 	✓
Business Continuity and Disaster Recovery	<ul style="list-style-type: none"> Work with DFR/IOT for maintaining many components of disaster recovery such as data processing continuity, testing, recovery procedures. Our team also understands Indiana's BCP goals. 	✓
Access Management	<ul style="list-style-type: none"> Help manage and maintain user access and master data in the application. Allow user roles and system profiles to be altered to align with shifting business priorities and streamline the process for new user creation/account deactivation while maintaining high security and privacy standards. 	✓
Enhancements	<ul style="list-style-type: none"> Collaborate with the State to suggest, prioritize, define, and implement enhancements. Perform thorough change impact analysis and communicate effectively with stakeholders such as State systems managers and vendor partners. Recommend innovative ideas to improve operational efficiency, enhance program accuracy, modernize technology, and streamline tools and processes. Such enhancements can improve the accuracy of eligibility determinations, increase agility, decrease delivery times, and provide integrity of client outcomes. Conduct Change Request (CR) prioritization, design, implementation, testing, and deployment. 	✓
Maintenance of Decommissioned Legacy System Data Archive	<ul style="list-style-type: none"> Collaborate with the State to provide Security and User access. Construct queries to pull required data in bulk to maintain all aspects of application and data layers. Work with the State during Patches and enhancements as well as while modifying legacy dashboards. 	✓

Table 3-1. Key M&O Services.

Staff Subject Matter Expertise

RFP Reference: Attachment C, Section 1.2

Smooth, effective, and compliant operations of the State's business depends on collaborative sharing of knowledge and experience across State and vendor SMEs. Throughout the contract, Deloitte provides SMEs who are well-versed not only in Medicaid, SNAP, and TANF, but also in Indiana's unique implementation of these programs' policies and operations. We provide SMEs not just in the technology components used in IEDSS, but also a unique approach to how they are integrated and maintained within the Indiana ecosystem. Our team's 191 years of cumulative Indiana-based eligibility program subject matter experience represents an invaluable collection of perspective, relevant experiences to draw upon, and expert judgment that we put to use each and every day.

Deloitte's personnel have a demonstrated track record of working closely with State SMEs in each of our successful Indiana-based implementations and have built a great rapport with business and technical stakeholders over the years. This collaborative and level of trust has formed a productive working relationship between the State and Deloitte. We leverage this relationship as we approach important future initiatives with the State. The following table details how State and Deloitte SMEs collaborate and communicate:

State SMEs	Deloitte's Collaboration Approach Makes Efficient Use of Valuable State SME Time
Office of Medicaid Policy and Planning (OMPP) and SNAP/TANF policy	The primary points of contact for the policy experts are our Eligibility Determination and Benefit Calculation (EDBC) leads and other respective functional Track SMEs. Our Track SMEs discuss policy-related questions to confirm the system is built in accordance with State and federal rules and regulations.
Business Process/ State SMEs	Our functional Track SMEs are the primary contacts who work with the State SMEs daily for business process-related questions and design.
IOT/Technical Experts	Deloitte's technical team works closely with their IOT counterparts and technical experts. IOT plays a key role in helping us keep the system environments up and running for uninterrupted daily activities.
Agency/Interface Experts	Our interface Track SMEs are in regular contact with the agency partners and other middle-party stakeholders like BizTalk. Our longstanding relationships with all the agencies allow us to be proactive in case of any data transfer issues or other connectivity problems.
UAT Test Managers	We share a common goal to confirm the system is behaving per the design and policy with every enhancement or defect fix. Deloitte provides technical support to UAT Test Managers during execution of test cases, environment support (including time travel), run batch sessions, mock interface files, etc. For example, when we promote new functionality to the UAT environment, the Deloitte UAT support team works with the State UAT team to inform them about the new functionality and secures a window to promote the functionality. Once the functionality is moved to UAT, a formal smoke test is performed to confirm that the environment is working as expected.

Table 3-2. State SMEs and their Deloitte Counterparts.

With the State transitioning RCC and CCC operations to a new vendor, Deloitte is committed to working with the State and the new vendor to support continuity of operations, minimize impact on constituents, and promote continuously improved performance. Deloitte has a rich history of researching and evaluating feedback provided by end users and the State's operations vendor. Our SMEs have conducted field visits, interviewed end users, and facilitated webinars with the field. Our commitment to listening to feedback, addressing impediments, and identifying enhancement opportunities is an example of how we go above and beyond to help you continuously improve your business.

Staff Skills Overview

RFP Reference: Attachment C, Section 1.3

We provide a team that is already on the ground and meets or exceeds your qualification requirements (Attachment K). Our team brings not only strong technology skills in the IEDSS solution and supporting components, but also extensive expertise in your business. We recognize that the State needs more than technologists—you require people who **understand your business, speak your language, and help you solve business problems.**

We understand not just the underlying technologies, but also the base HHS NextGen solution framework, the coding standards and practices, and the institutional knowledge of proven approaches that have been refined over time.

Our team avoids working in silos because they are trained to understand both the business and technical aspects of the system. Most staff have experience working in both M&O and enhancements and have opportunities to rotate across these responsibilities. As we've worked to further improve IEDSS and streamline our operations, we've reduced the team required to maintain and operate the system since Statewide rollout and demonstrate further reductions during the course of this contract. We discuss this further in our response to *Section 14, Drivers for Annual Cost Adjustments*. In the table below, we demonstrate the combined years of experience of our highlighted staff for the roles within each Team/Support Area. Refer to Section 3.b below for Deloitte's approach to staffing.

Years of Experience Our Highlighted Resources Bring in Each Area of Expertise									
Team/ Support Area	Health and Human Services	Eligibility and Enrollment	Indiana IEDSS	Similar Technologies	SDLC	PM Tools	System M&O	DDI / Enhancements	Similar Position as Proposed
TOTAL	417	390	191	359	485	353	291	304	314
Architecture	12	12	12	17	18	12	8	10	9
Program/Project Management	55	50	20	52.5	87	72	32	71	53.5
Business Analysis	48.5	42.5	21	52	51	29	16.5	20.5	21
Development	29.5	27.5	29.5	32	28	26	21	16	20.5
Testing	57	53	34	60.5	78.5	49.5	46.5	32.5	37
Technical	187.5	187.5	60	127.5	188.5	134	138	122	142
Security	28	18	14.5	18	34	31	29	32	31.5

Table 3-3. Years of Experience Our Highlighted Resources Bring in Each Area of Expertise.

Third-Party Partners

RFP Reference: Attachment C, Section 1.4

We understand the need for proper oversight on the project in the form of both Operational Verification and Validation (OV&V) and, if the State chooses, IV&V services performed by a third party. In our Indiana and national HHS experience, we have experience with and embrace working with independent entities, particularly OV&V and IV&V. We understand and fully support the federal mandates that govern the need to have independent oversight on large technology projects. Throughout the IEDSS implementation, we worked with the IV&V team to provide support and status reporting as well as participate in various status meetings. We work with OV&V to review changes in solution components (including application configurations and application releases), participate in post-implementation reviews (including lessons learned), review Service-Level Agreement (SLA) status reports, and monitor performance.

3.a Current Eligibility System

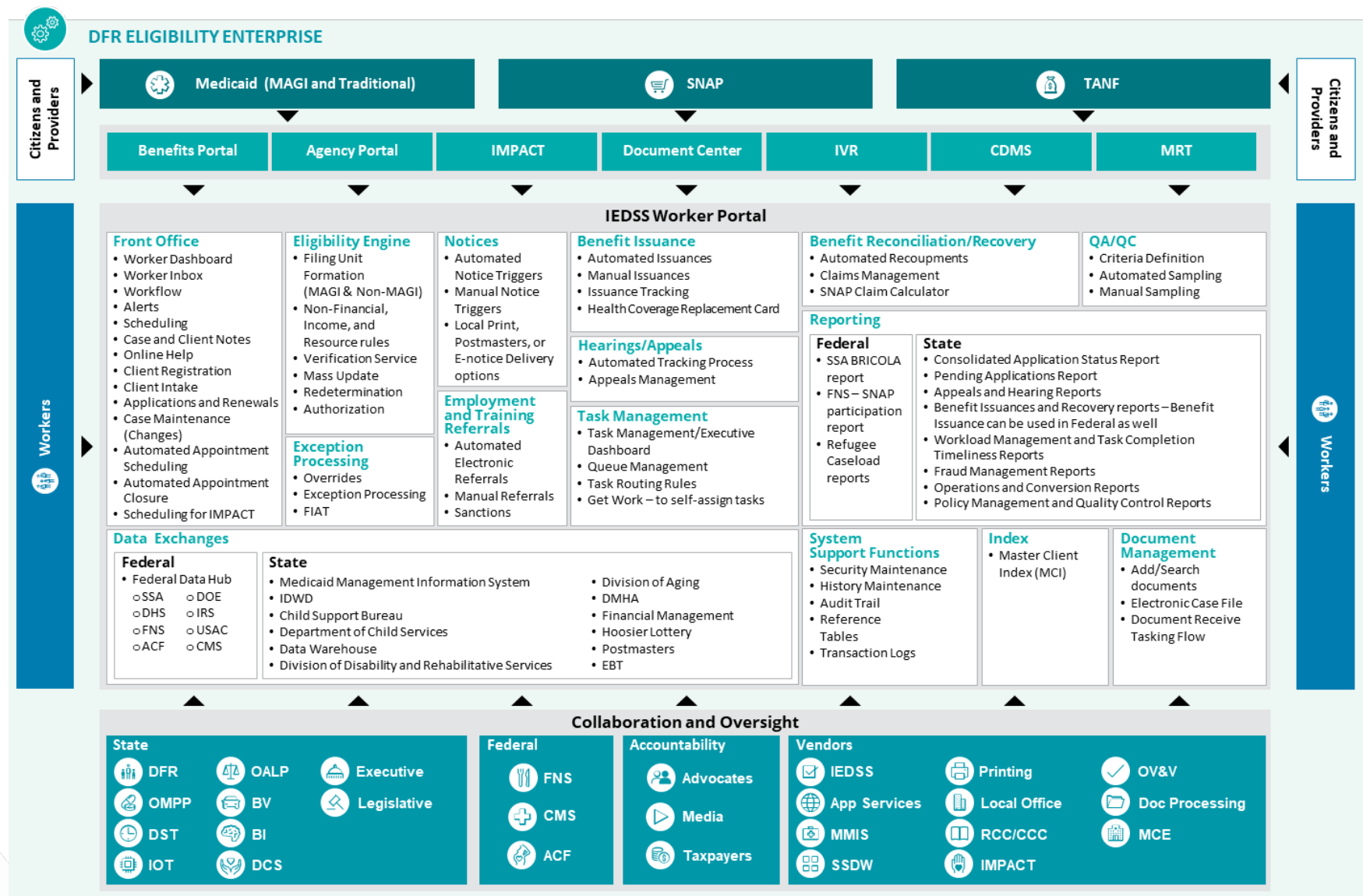
RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

RFP Reference: Attachment C, Section 3.1

a. Describe your understanding of the State's current IEDSS platform and architecture, and its support for casework and clients in Indiana.

Our understanding of the State's current IEDSS platform and architecture begins with an appreciation of the vital role it plays in supporting casework and clients in Indiana. Our knowledge of how and where it fits in the State's broader eligibility operations landscape also plays an important role in how we approach our work.

Indiana has a unique operational ecosystem. The following figure provides our understanding of the sophistication and diversity of stakeholders required to maintain and operate IEDSS. On an everyday basis, the IEDSS system helps Indiana residents, front-line workers, and case workers interface with the State as well as federal agencies.



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Figure 3-4. IEDSS Ecosystem.

With Deloitte, Indiana benefits from our institutional knowledge of the State's policy and operations and our extensive understanding of the IEDSS system. We also bring a deep understanding of how the ancillary support systems of the eligibility enterprise operate, interact, and integrate with the IEDSS solution.

We are ready to continue collaborating with Indiana to identify strategic opportunities that increase worker efficiency; promote client self-sufficiency; streamline application and case processing; align with Food and Nutrition Service (FNS) requirements, Centers for Medicare & Medicaid Services (CMS) standards, and conditions; and respond to changing federal, state, and local regulations. For example, we are actively working with the State to streamline the Redetermination Process, SNAP Interim Reports, and Expedited Waiver Processing.

We maintain and operate the in-scope eligibility components mentioned in the *RFP Section 3.1, Current Eligibility System*, and we support interface requirements with support systems mentioned, such as Benefit Portal, Agency Portal, IMPACT Worker Portal, Document Center, DFR Phone System, CDMS, and MRT. These support systems play a critical role for customers and case workers. Our approach involves maintaining the required uptime of interfaces, coordination and communication across SDLC activities for enhancements, and coordination of production support and technology upgrades.

Deloitte has experience developing and maintaining Benefit Portals and related systems in over 20 states. This means we bring Indiana perspective and insights about how IEDSS can continue to evolve as those interfacing systems are enhanced, such as improving worker support for enhanced self-service change reporting and redetermination or improved automated data population in IEDSS from OCR document processing.

System Users

RFP Reference: Attachment C, Section 3.2

In order to enable efficient operational performance by the system users outlined on your organization chart, we provide the following system features and support services:

Track Name	Understanding and Experience
Robust and flexible access management	<ul style="list-style-type: none"> Security module used for managing access to information at the field, business function, location, and page levels in the security module. In order to comply with MARS-E 2.0 standards, each user is mapped to one or more profiles that provide the level of access to the system. Each of the profiles is mapped to a user or user function that represents a business function. This business function is what gives access to the specific pages within IEDSS. Authorized administrators can manage user access by business function and user role. The user interface is customizable to allow access to business functions based on the type of users and their security roles. The roles are configured based on fine-grained access to the system functionality. IEDSS uses this information to dynamically build the user interface that matches the user's access profile. This approach enhances the user experience by only displaying and allowing access to system functionality that users are authorized to use and view.
System availability and performance	<ul style="list-style-type: none"> We have implemented Splunk alerts to inspect and escalate trends in incidents due to possible network connectivity, system outages or document upload process failures. We continuously monitor and improve system performance including response time and below our achieved statistics: <ul style="list-style-type: none"> IEDSS Response time for each transaction is 0.21 seconds IEDSS Worker Portal uptime since Pilot is 99.92%
Support for end user incidents	<ul style="list-style-type: none"> Deloitte has identified ways through which we can enhance the worker experience. Providing end user guidance, interim business processes, and automated data fixes to resolve user issues in a timely manner as part of our incidents triage process that we refined over the past three years to meet and exceed your expectations.

Table 3-4. System Features and Support Services.

Business Requirements

RFP Reference: Attachment C, Section 3.3

Deloitte continues to work with the State to prioritize, solution, and implement business requirements to meet requirements related to policy, operations, stakeholders, and compliance. We understand the importance of maintaining the "Security Matrix" and "Task List," both of which are specially designed to meet Indiana's unique operating model. We also understand that State of Indiana has unique aid categories and coverage, which we continue to support and enhance.

Our understanding of RFP tracks and responsibility areas is summarized below:

Track Name	Understanding and Experience
Back Office	<ul style="list-style-type: none"> • Task Management has been tailored to incorporate complex task management functionalities that have been in place at Indiana since modernization. We have developed efficient algorithms to handle ~10.5M tasks. We understand that, in IEDSS, tasks are generated depending upon multiple attributes (e.g., Office, County, Region and queue, type of work category), thus adding complexity. With all this information, tasks are displayed on the Task management dashboard for the State's executive leadership to view and manage workload. • Case History Maintenance is built to cater to the State's requirement to view the changes made on the case. IEDSS has built an efficient monitoring mechanism to display daily 75M transactions per month in the system. • The back office manages other key modules, including: <ul style="list-style-type: none"> – Critical Benefit Issuances for SNAP and TANF – Document management with special features like ECF to view the documents efficiently when navigating through data collection – Appeals and hearings and benefit recovery, which were specifically designed and integrated together with EDBC to confirm that court decision and claims are established correctly into the system – Case notes, workload balancing, case changes are other areas focusing on maintaining timely and uninterrupted services
Correspondence	<ul style="list-style-type: none"> • Deloitte built a modular and customizable notices module, leveraging OpenText Exstream technology to provide greater flexibility for changes to existing notices, as well as stand up new notices as requirements evolve. • IEDSS's correspondence framework was designed carefully to allow appropriate business teams to add and update verbiage for Eligibility and non-eligibility notices and dynamically map the data for the IEDSS ~200 type of notices.
EDBC	<ul style="list-style-type: none"> • We maintain and enhance eligibility rules per the policy with Corticon, a cutting-edge Business Rules Management System (BRMS) technology used by Deloitte in 12 states. • Our team has experience handling more than 1,500 eligibility rules that determine eligibility pertaining to SNAP, D-SNAP, TANF, Refugee Cash assistance, and Health Coverage depending on case and individual information. • Some of the key innovations and features implemented include service-based modularization of eligibility rules, revamping of eligibility reason codes, and offline eligibility to support complex and long-running eligibility determinations and public health emergency changes. One such key component in EDBC includes QualCheck to provide eligibility screening results. • Deloitte's Mass Change approach is optimized to deliver enhanced automation for caseworkers, accurate determinations, and reduced effort to complete Mass Change validation. Mass changes are complex and can cause a substantial adverse impact if not managed correctly, given the high volume of transactions directly impacting eligibility and benefit amounts. Our team's experience with IEDSS mass changes and our national HHS practice, which continually analyzes and shares insights on changes resulting from mass change, uniquely positions us to support your requirements, especially during periodic mass change (e.g., COLA, QMB/SLMB FLP adjustments, SNAP payment standards and daily mass update).
Front Office	<ul style="list-style-type: none"> • This module contains the application intake and data collection screens, scheduling screens, and MRT screens with over 1,000 screens that enable case workers to determine eligibility. • The base framework for IEDSS makes it easier to build and maintain screens. Our modern, out-of-the-box screen features, such as dyna tables and help text, are some of the key innovations and features we have implemented. Other examples are appointment scheduling and MRT screens.
Interfaces	<ul style="list-style-type: none"> • The Interfaces module verifies the IEDSS data with external agencies, receives the data needed by IEDSS from external agencies, and sends the data from IEDSS to external agencies. • Deloitte has developed approximately 195 interfaces, interacted with more than 28 vendor partners for the State, and used communication protocols ranging from flat files to real-time webservices; our longstanding relationship with BizTalk allows us to tackle anomalies in data transfer to vendors more effectively and efficiently.
Support	<ul style="list-style-type: none"> • We understand the State's robust organization chart and system users, as explained in RFP Section 3.2 System Users; we designed the security matrix that enables us to document the roles and access at the page- and field-level. • The support track reads cases, maintains quality control, maintains user actions and audit history, initiates timely mass change, triggers correspondence, and manages interface triggers to support the business continuity and functioning of the system.
Reports	<ul style="list-style-type: none"> • We understand that in a system of this magnitude, reporting plays a key role in determining the overall health of the system, tracking progress and identifying irregularities, and developing timely reports desired by the State. • Our team works closely with the Data Warehouse team; we helped them get up to speed with the new schemas that formed the basis of their reporting capabilities.
Technical	<ul style="list-style-type: none"> • The Tech team maintains 60 tools and technology elements required for the development team to implement the code and validate functionality and technical upgrades. • The Tech team works with IOT and other vendors to meet the State's technological needs while keeping a pulse on the latest technology trends in the industry, engaging in dialogue with State stakeholders to help formulate future technology visions.
Security	<ul style="list-style-type: none"> • We have been a trusted vendor since Day One, and we assisted in obtaining and maintaining the Authority to Connect (ATC) from CMS (in 2013, 2016, 2019 and 2022 [ongoing]).

Track Name	Understanding and Experience
	<ul style="list-style-type: none"> Deloitte has worked for 9 years with the State to establish a structured approach to minimize the security and privacy risk exposure, while demonstrating compliance with relevant federal standards and regulatory requirements (e.g., CMS MARS-E 2.2, IRS Pub 1075 Rev. 11-2021). We assist the State in seamless adaption of changes in CMS standards (e.g., from MARS-E 1.0 to MARS-E 2.0) at Indiana for IEDSS system. We've assisted the State in establishing Splunk ES Security Information and Event Management (SIEM) tool for compliance with MARS-E 2.2 requirements and provide near-real-time insights from a high volume of application audit logs. Deloitte conducts Static Application Security Testing (SAST) and Dynamic Application Security Testing (DAST) to validate that worker portal development is consistent with OWASP Application Security Verification Standard. To protect PII and PHI, we monitor user interaction and emails to identify any potential violations of policy. Weekly reports show user access and highlight when confidential data like FTI is accessed, including access to the system after normal business hours.
Testing	<ul style="list-style-type: none"> We have designed our testing structure with the right controls to deliver high quality throughout the SDLC process, with an arsenal of 3,500 test cases and 300 automated regression test scripts that we have written with our knowledge and your guidance. Our rigorous functional testing is designed to identify defects related to common and uncommon scenarios. Throughout the SDLC, our team undergoes different testing phases like Unit testing, system testing, Integration testing, end-to-end testing, regression testing, performance testing, security testing, and usability and acceptable testing, and works closely with the UAT team. During the production release, our team performs production testing.

Table 3-5. Understanding and Experience of IEDSS Tracks.

Key Health Coverage Business Flows

RFP Reference: Attachment C, Section 3.4

With nearly 30 percent of Hoosiers served, we recognize the significance and importance of Indiana's health coverage programs. Our experience as the national human services vendor, coupled with our longstanding working relationship with Indiana, provides you with valuable experience in maintaining and enhancing the State's current health coverage process flows.

We have developed communities of practice across our portfolio for E&E projects. These teams use our **HHS Nerve Center** to pull together the power of our cumulative expertise to solve today's problem and innovate for the future. When there are **changes to federal interfaces, new federal requirements, or new State plan / waiver options**, our Nerve Center analyzes and communicates with our teams. We coordinate with other teams to share knowledge, experiences, and lessons learned, thus improving quality, streamlining implementation, and making more effective use of the State staff's time.

During the IEDSS DDI and go-live journey, we redesigned, enhanced, and supported the key Health Coverage business flow described in RFP Attachment C, Section 3.



Deloitte collaborated with the State to prepare demonstrations of the following key functionalities during the MEET R2 reviews with CMS to substantiate traceability with MEET 1.1 checklist citations:

- Health coverage application
- Redetermination/change
- IEDSS-MMIS data exchange
- Application referred to FFM (account transfer)
- Application received from FFM (account transfer)

Flow	Our Experience Supporting Improvement of the Business Process
Health Coverage Application	<ul style="list-style-type: none"> Application processing was automated for Medicaid applications received from Self-Service for individuals who could be uniquely identified based on the data provided in the self-service portal. This automation included file-clearing the individual, associating the individual with an existing case, and scheduling an interview.
Redetermination/Change	<ul style="list-style-type: none"> Supporting auto renewing "may return" Medicaid benefits without working intervention when "no changes" are received for the Benefits Portal.
IEDSS – MMIS Interface	<ul style="list-style-type: none"> The MMIS data exchange, whereby our team reconciled CORE MMIS/IEDSS initial data and created the ongoing process, resulted in an over 98% records match. It has also effectively processed 200 batches that run effectively and increased the accuracy of the medical benefits coverage for our clients.
Application Referred to FFM	<ul style="list-style-type: none"> Made system improvements to identify unique individuals on the referral and transferring that information back on the response to CMS to improve data accuracy. Auto schedule appointments for elderly and disable individuals. Provide CMS with the most updated contact details; email & phone number for the CMS-initiated applications.

Flow	Our Experience Supporting Improvement of the Business Process
Application Received from FFM	<ul style="list-style-type: none"> Similar to the outbound FFM process above, we made system changes to identify unique individual on the inbound files from CMS to improve data accuracy and process efficiency. Key enhancements include auto-scheduling of individual appointments, especially for the ones who are disabled and elderly.

Table 3-6. Our Experience Supporting Improvement of the Business Process.

Technical Overview

RFP Reference: Attachment C, Section 3.5

IEDSS includes 19 vendor software component technologies that we use and maintain. Please refer to *Appendix 1, Experience with the Technologies in Attachment J* for details on our experience working with those technologies. As Indiana's technologies evolve, Deloitte supports the assessment of new technology, brings fresh thinking and innovative solutions, and brings the right product vendor expertise for continuous improvement. Specifically, we have a formal approach for product evaluation to provide objective analysis and recommendations about the future direction. We have established vendor relationships and product expertise that provides valuable insights and lessons learned that save time and reduce risk.

Architecture

RFP Reference: Attachment C, Section 3.5.1

The extendable and flexible IEDSS architecture solution Deloitte and Indiana built together meets the latest architectural and operational standards and best practices. The different tiers of IEDSS architecture, detailed below, correlate to the IEDSS eligibility technical architecture diagram found in the IEDSS DFR Eligibility Technical Architecture.pdf file within *RFP Attachment L and Attachment C, Scope of Work, Section 3.5.2*.

Deloitte Supports	We Acknowledge
Privacy Impact Assessment	✓
Privacy & Security Controls assessments and attestations	✓
Controls assessment and attestation	✓
Supporting new version of MARS-E which includes controls from NIST 800-53 Rev. 5	✓

Table 3-7. IEDSS Meets the Architectural and Operational Standards and Best Practices.

Deloitte recognizes the need to comply with Federal standards, State policies, and regulatory requirements for a feature-rich eligibility system like Indiana's current system. We have been a trusted partner since Day One, and we assisted in obtaining and maintaining the Authority to Connect (ATC) from CMS (in 2013, 2016, 2019, and 2022 [ongoing]). Deloitte has worked for 9 years with the State to establish a structured approach to minimize security risk and privacy risk exposure, while demonstrating compliance with relevant federal standards and regulatory requirements (e.g., CMS MARS-E 2.2, IRS Pub 1075 Rev. 11-2021). Please refer to *Section 11, Compliance with Standards & Regulatory Requirements* for Deloitte's plan to adhere to the federal standards and regulatory requirements.

System Overview

RFP Reference: Attachment C, Section 3.5.2

IEDSS technology services are defined within the MITA Technical Reference Model, CMS MEET, and FNS Handbook 901. Business requirements are developed as part of the IEDSS project during the DDI phase. Our system architecture, tailored for the State, utilizes Deloitte's NextGen base and has similar architecture and technology components referenced in Figure 6-2 in *Section 6, M&O Services Approach*. As the innovators of the NextGen digital platform, having implemented the solution in various states, Deloitte has a vast network of implementation SMEs with years of institutional knowledge, and they are readily available to aid in future enhancements and problem resolutions. Additionally, our in-depth knowledge of customized NextGen solutions unique to each client sets us apart in being able to meet the specific requirements as we move forward. Deloitte's unique knowledge of the NextGen platform and experience across all technology components provides full support of each layer of the IEDSS solution. The State benefits from Deloitte's continued research and development, such as the recent NG360 implementation, which brought new functionality and latest technical components.

Tiers	Description
Presentation Tier	The IEDSS Java-based web applications – referred to as “Worker portal” – are built and maintained using technologies and hosted on IBM WebSphere. The application complies with Section 508 and supports the JAWS tool. We continue to maintain reference material along with both page and field-level help for State workers. The NextGen Presentation Tier has custom JSP tags as well as traditional JSP pages and servlets. IEDSS addresses security vulnerabilities (e.g., cross-site scripting), by integrating with OWASP ESAPI in the presentation layer.
Business Tier	The IEDSS framework is designed to support business processes and user workflow management in IEDSS. The Business Tier is implemented with Enterprise JavaBeans, including stateless and stateful session beans. Corticon rules engine is embedded in-memory, which executes the business rules to determine eligibility.
Integration Tier	The IEDSS SOA based Mule ESB architecture allows IEDSS to efficiently integrate with external partners. A set of interface standards and protocols enables Deloitte to set up new web services with external partners. This flexibility was evident when we were called upon to react to last-minute changes to the WSDL for the Department of Revenue (DOR). Deloitte was able to deliver the interface in a short period of time. At DOR, the CA7 acts as the scheduler to trigger batch jobs. Deloitte achieved integration with backend Oracle Database through a proprietary framework called Fast4J.
Technical Service Tier	Deloitte utilizes Corticon rules engine to develop powerful and accurate business rules in the system. We also use OpenText™ Exstream correspondence engine to generate and build correspondence documents used to create, manage, and deliver electronic and print deliverables. IEDSS uses the technical services from COTS products such as Tibco Netrics, SAP DQXI, OpenText™ Exstream, Informatica, and Cognos.

Table 3-8. Tiers of IEDSS Architecture.

We continue to collaborate with IOT staff and other stakeholders to perform architecture, vendor, infrastructure, and database management. We also perform component administration, software upgrades, and other activities critical to maintaining high availability, optimal system performance, and functional integrity of the applications. Through collaboration with various IT teams, Deloitte has successfully performed the activities related to your requirements with rigor and discipline, and we look forward to doing so in the years to come. Please refer to *Section 6, M&O Services Approach* for details regarding the database administration, infrastructure management, and monitoring mechanisms in place to support the IEDSS system.

Datacenter Architecture

RFP Reference: Attachment C, Section 3.5.3

We are familiar with the IOT datacenter architecture described in the IOT Datacenter Architecture.pdf file within RFP Attachment L. The IEDSS solution is retained at IOT's data center in Indianapolis. The disaster recovery site is in Bloomington, about 50 miles away. The connection between the facilities is via a high-availability Gigabit speed connection. This multi-data center approach enhances the ability to recover quickly because one facility acts as a backup recovery site for the other. Deloitte's extensive knowledge of Data Center and Disaster recovery processes established over the years ascertains system stability even in case of unprecedented events. As we proceed with M&O, we will continue our existing effort in supporting and testing the disaster recovery exercise during this contract, evolving the process to be even more robust and efficient. Please refer to *Section 6, M&O Services Approach* for details regarding our disaster recovery experience and approach to support business continuity.

IEDSS Solution Technologies and Tools

RFP Reference: Attachment C, Section 3.5.4

IEDSS encompasses various software/hardware technologies and tools such as IBM WebSphere, Tibco Netrics, and Oracle Exadata. Deloitte maintains and supports the licensure (production and non-production) for these IEDSS solutions provided by the State, as listed in *RFP Attachment B, Bidders Library - Tab 3*. The State shall maintain State Windows 10 workstations with patched up Microsoft Edge, Google Chrome, and OpenText™ Exstream Live Editor plugin on workstations as required to support IEDSS application and correspondence. Deloitte personnel maintain their own workstations, applicable workstation hardware/software licensure (not covered under State-purchased software licenses), and applicable infrastructure support to maintain IEDSS application and proper integration with applicable State-owned components. Deloitte also has its dedicated IT support team to handle workstation issues in concert with the security controls team to promote security compliance and adherence to state guidelines.

Deloitte uses upgraded technology tools to maintain the pace of change and innovation without compromising quality. We align with industry standards and best practices and integrate with OWASP ESAPI to address security

vulnerabilities like cross-site scripting and SQL injection. Our framework is continuously improved to address the security vulnerabilities reported by Fortify Static Code Analyzer (SCA) and WebInspect (Dynamic scan).

Deloitte supports the State’s need to **assess new technology, bring fresh thinking and innovative solutions**, and assist in obtaining the right product vendor support as needed for continuous improvement. **Example:** In order to identify the best-fit application monitoring tool for the State of Indiana, Deloitte, after reviewing various industry-standard criteria, state requirements, and our evaluation framework, recommended Splunk as the right match for the goals of the State. Since go-live, the vast impact Splunk has made from continuous application availability, performance, and efficiency, is a huge testament to Deloitte’s extensive experience in recommending and implementing a plethora of solutions nationwide. We provide further details in *Section 6, M&O Services Approach*.

In addition to these enterprise tools, we have developed several custom-designed tools tailored to the IEDSS system to accelerate development, testing, and incident management, as highlighted in the table below.

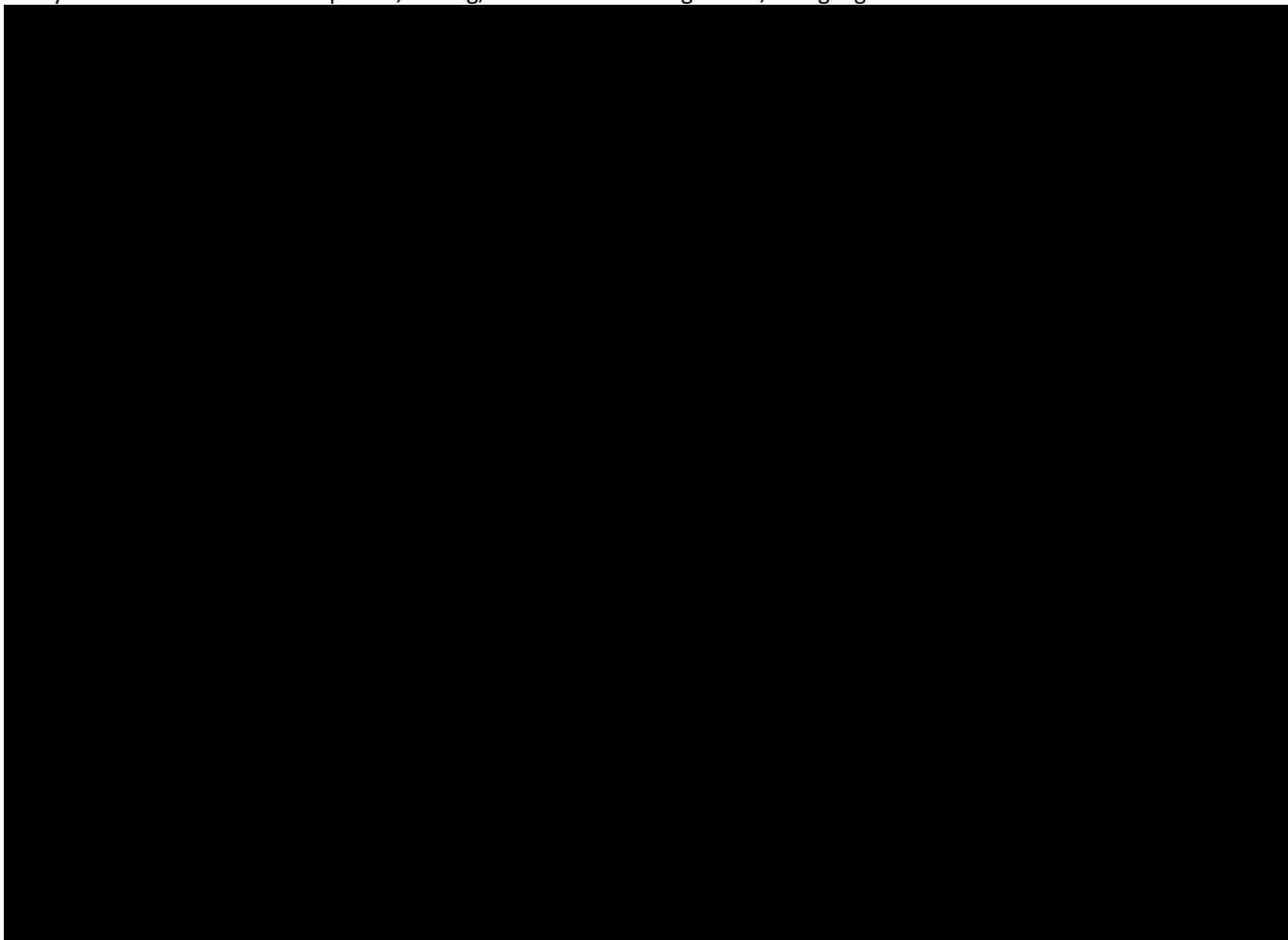


Table 3-9. Deloitte’s Custom Tools for Support IEDSS Delivery Quality.

IEDSS Servers

RFP Reference: Attachment C, Section 3.5.5

With our understanding of the IEDSS infrastructure ecosystem, our team can continue to provide high-quality services without disruption. Deloitte's strong technical server management experience provides the right mix of system knowledge, technical acumen, and a continuous improvement mindset to help the State continue to work toward the primary goal of serving the citizens of Indiana.

Deloitte offers professionals who have installed and managed infrastructure on an array of hardware platforms with different operating systems, including **Linux, Solaris, Windows**, and others. Our capabilities and experiences position us to meet your technical support services requirements now and in the future. Our production support team uses a proactive approach, structured processes, and tested methods to monitor and manage system/server operations, including configuration, maintenance operations, and server performance across application, web, business, batch, and data layers. Our monitoring mechanism spans **133 servers supporting ~2,300 concurrent users** (current production load), measuring system performance levels to maintain high availability, reliability, and performance.

Additionally, with our plans to move our SDLC process to Hybrid Agile, the code promotion process will evolve into a more modern and robust software delivery pipeline, allowing us to deploy more functionalities to Production in a quicker timeframe. For more details related to code promotion, please refer to *Section 4, Project Management*.

Alignment to Conditions and Standards

RFP Reference: Attachment C, Section 3.6

Our experience in meeting 42 CFR § 433.112 requirements—as well as CMS, FNS, and Administration for Children and Families (ACF) requirements—comes from not only implementing and maintaining IEDSS, but also having supported multiple E&E systems nationwide.

In recent years, Deloitte has implemented **10 new eligibility and enrollment systems**, including 8 for both Medicaid and SNAP, and 2 for Medicaid alone. In states where we have experience meeting Medicaid requirements, we have worked with our clients to address Medicaid Eligibility and Enrollment Toolkit (MEET), MARS-E 2.0, MITA, and CMS's seven standards and conditions. We provide **MARS-E support for over 20 states**, using specialized teams that enable compliance.

Requirement	Meeting Requirements	Approach to Continue to Meet Requirement
System meets system requirements, standards and conditions, and performance standards in Part 11 of the State Medicaid Manual	Together, we have conducted several reviews and performance system enhancements to meet CMS requirements. That enables the State to continue making tangible and measurable progress toward the next maturity level.	<ul style="list-style-type: none"> Deloitte, in collaboration with DFR, IOT, and DST works to assess the fit for future enhancements within the MITA framework. This assessment results in determining the impact on our current maturity levels, developing a roadmap to remain in compliance, and aligning future enhancements with MITA maturity in BA, IA, and TA. FDSH VCI, and AVS are examples of projects implemented as part of this roadmap.
Interoperability Condition - System must provide seamless coordination, integration with other entities and perform claims processing and information retrieval	IEDSS has implemented federal data exchanges, utilizing MuleSoft ESB and SOA, that provide a decoupled and seamless integration architecture with FDSH and FFM, meeting the interoperability requirement. State exchanges that comply with the interoperability condition must be validated as part of integration testing and UAT as end-to-end validation.	<ul style="list-style-type: none"> We continue to utilize and adapt new COTS products that will provide seamless integration with external data exchanges. Examples of interfaces implemented that will continue to meet this requirement are FDSH-SSA, VCI, VLP, AVS, and Equifax.
Modularity Standard – Use modular, flexible approach to systems development	Modularity and interoperability are met with implementation of reusable code, services, APIs, and separation of eligibility business rules from core programming. Our current SDLC methodology is a comprehensive and consistent approach for a modular and flexible systems development. Corticon Rules Engine as a service in batch, online, self-service screening application, and Dashboard demonstrates our	<ul style="list-style-type: none"> Our approach to meeting modularity standard is engrained in our SDLC process starting with inception and design. Our SMEs analyze the business and technical requirements and propose a new or existing module considering future reusability and seamless integration of the module. Our team enforces best practices on object-oriented, component-oriented, and service-oriented modularity and testing standards in alignment with industry standards including microservices.

Requirement	Meeting Requirements	Approach to Continue to Meet Requirement
	commitment to modularity and reusability of functionality, which are engrained in our test scenarios .	<ul style="list-style-type: none"> We continue to use Mule ESB and XML open standards for interoperability with external interfaces for new enhancements.
Section 508, American Disabilities Act (ADA)	IEDSS understands the importance of ADA and has designed tools to help render and make sure that Worker portal screens are compatible for "screen readers" and browsers to zoom/contract modes.	<ul style="list-style-type: none"> Our team enforces best practices on keeping the system in compliance with ADA and other industry standards. This effort includes all worker portal screens.
MARS- E 2.0 and subsequent version	IEDSS generates monthly or weekly reports that provide program-based metrics. For performance monitoring, an in-house tool measures and reports transaction times. Audit trail screen provides insight into view, add, or update transaction.	<ul style="list-style-type: none"> We implement program and policy effectiveness reports for new enhancements and for modification to existing functionality. This includes QC reports to identify any post-implementation issues. We implement federal and State-mandated reporting requirements such as CMS Performance Indicator reports, including New Application reports, Application processing timeliness, and Redetermination reports. We implement technical analysis reports that are helpful in analyzing technical issues and improving system performance (e.g., database transaction monitoring tool for long running transactions).
Produce transaction data, reports, and performance information that would contribute to program evaluation, continuous improvement in business operations, and transparency and accountability	Indiana IEDSS generates monthly or weekly reports that provide program-based metrics. For performance monitoring, an in-house tool measures and reports transaction times. Audit trail screen provides insight into view, add, or update transaction.	<ul style="list-style-type: none"> We implement program and policy effectiveness reports for new enhancements and for modifications to existing functionality. This includes QC reports to identify any post-implementation issues. We implement technical analysis reports that are helpful in analyzing technical issues and improving system performance (e.g., database transaction monitoring tool for long running transactions).
FDSH/FFM Integration; MAGI determinations	Together, we implement enhancements and automation that facilitate accurate and timely processing of new applications, change reporting, and redeterminations. Additionally, customer service improvements and performance standards are implemented to meet this requirement.	<ul style="list-style-type: none"> We work with you to identify the opportunities of improvement in areas of accurately and timely processing of applications and providing timely decisions regarding applications. For example, reducing the interruption in automated application process and, thereby, increasing the number of applications completed with at least partial automation to near 100 percent. We work with you to identify the opportunities of improvement in areas of benefit recipient communication, including decision notices, email, and text alerts (e.g., implementation of nudges to improve the response for Medicaid renewals).

Table 3-10. CMS Seven Standards and Approach.

3.b Approach to Managing and Staffing the Scope for Each Track

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

b. Describe your approach to managing and staffing the scope cited for each track.

Deloitte continues to work with the State to refine and enhance quality management, change management, release execution, and management reporting specific to each track. Our staff team members' key differentiators are as follows:

- Staff with long term ICES and IEDSS hands-on experience and established relationships
- Overlapping expertise and ongoing mentoring to support backups and succession planning
- New hire program including E&E Bootcamp program delivered by Deloitte nationally, supplemented with IEDSS specific training
- Continuous learning, such as our recent Scrum (Agile) certification program

As part of migration to Hybrid Agile SDLC approach, we assign sprint teams focused on enhancements. Additionally, our leadership team works across both M&O and enhancement activities to avoid work occurring in

silos. This approach also facilitates visibility, coordination, and knowledge sharing across M&O and enhancement activities. The following table demonstrates the primary responsibilities and required skills for each track and how they positively affect the well-being and outcomes of the system.

Track and Representative SME	Primary Responsibilities and Required Skills	Why It Matters
	<ul style="list-style-type: none"> • Extensive knowledge of Indiana and federal policies; communicates closely with policy and State personnel to confirm accurate eligibility calculations • In-depth understanding of the EDBC system; solves issues effectively and efficiently in a timely manner • Ability to manage and act swiftly on production incidents, identify affected cases, run queries to analyze the underlying issue, establish workarounds, and find solutions before the next scheduled release • Expertise with Standard Filing Unit (SFU), Financial, non-financial and resources eligibility and determination, authorization, disaster SNAP, and QualCheck 	<ul style="list-style-type: none"> • Detecting and managing problems in a timely manner reduces confusion among case workers • Timely benefit authorization achieves federal compliance • Clients receive benefits correctly and in a timely manner • Case workers can process more cases allowing for a speedier benefits process for the client
	<ul style="list-style-type: none"> • Extensive knowledge of task management, benefit recovery, document management and integration, hearing and appeals, notifications, benefit issuance, case management, history maintenance, redeterminations/recertifications, case notes, and workload rebalancing • Addresses functional components that provide core case maintenance functions after benefits are determined • Supports the core business functionalities of IEDSS through task management, batch frameworks, mass change, data archival, audit log, security profiles, reception logs, quality control, hearing and appeals, and help/User Interface (UI) 	<ul style="list-style-type: none"> • Effective task management throughout IEDSS • Successful daily and monthly benefits • Clients are able to establish fair hearings • Workers can effectively access the system in terms of maintaining the proper security matrix—the right people have the right access to the system • Cases get continued benefits • Generates triggers and tasks, so that the individuals fit into the right category of benefits and no one is under or overpaid
	<ul style="list-style-type: none"> • Enables case workers to perform initial interviews, data collection, and case changes, as well as schedule appointments • Expertise in application registration and entry, client scheduling, IMPACT, Disaster SNAP, Reception log, and MRT support 	<ul style="list-style-type: none"> • Correct data effectively moves from end users to storage in the application to drive the EDBC engine • Correct data enters the system in a timely manner • Correct eligibility results leave the system in a timely manner
	<ul style="list-style-type: none"> • Exchanges data between multiple agencies by communicating eligibility with other systems • Consolidates data appropriately, sharing data with external agencies; manages all real-time and batch interfaces between IEDSS; DFR; FSSA; and external state, federal, and DFR vendor partners • Achieves accuracy in processes: Deloitte achieved 99.98% accuracy between MMIS and IEDSS and has effectively processed 200 batches that run effectively • Expertise with interface screens, batch admin screens, and all interfaces of the IEDSS system listed in the interface tracker 	<ul style="list-style-type: none"> • Shares information about individuals requiring benefits with the appropriate system to provide the correct benefits • Transfers data accurately to confirm benefits are issued in a timely and effective manner • Oversees the system to effectively and accurately issue benefits to entitled recipients
	<ul style="list-style-type: none"> • Confirms that the client receives the required information regarding benefits • Works with different stakeholders to gather details for releases or ongoing activities • Communicates with State on ad hoc reports requested by the State and develops management reports/dashboards • Expertise with correspondence and reports, screens, eligibility and non-eligibility notices, federal, state, and ad hoc reports 	<ul style="list-style-type: none"> • Notices are accurate and client is notified in a timely manner on processing done on cases • Clients receive all communication on their benefits and are notified when pending verification is needed • Checks to confirm there is no missing information required from the client that would result in not receiving their benefit • Creates an easy, user-friendly, and informative way to access and gain information regarding IEDSS

Table 3-11. Deloitte's Approach to Managing and Staffing Tracks.

3.c Experience Handling Similar Scope

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

c. Describe your experience with handling similar scope as what is cited in each track.

Our experience handling scopes similar to what is cited in each track comes from our 9 years of experience with IEDSS and 29 years as the ICES vendor. It also stems from maintaining 26 E&E systems nationally, 13 others of which are based on the same underlying NextGen base as IEDSS. Below we highlight additional differentiators from our experience with each track:

Track	Deloitte Experience Differentiators
Back Office	<ul style="list-style-type: none"> We have implemented a task-based model in 13 states. We are issuing over \$3.6B monthly across E&E.
Correspondence	<ul style="list-style-type: none"> We use OpenText Exstream and a similar correspondence framework in 16 states. We use an established process for correspondence validation that we've used across projects. We've supported several states in redesign their correspondence to be more human-centered.
EDBC	<ul style="list-style-type: none"> We use the Corticon rules engine for EDBC in 12 states. Our eligibility data structure is based on fundamental principles used across our E&E implementations. Our differentiator EDBC development tools include MyEclipse, Corticon, Corticon comparator, DT trace too1, Sonar, SQL Developer which plays important role in successfully functioning of Eligibility determination. We have an internal national eligibility policy community of practice to share ideas and insights about evolving federal policy. Sandy Srinivasan participates from the IEDSS team.
Front Office	<ul style="list-style-type: none"> 750,000+ new applications across our E&E systems, monthly. The design of our solution is oriented to simplify tasks for the user. Key features include Intelligent navigational controls (driver flow); Calendars for Scheduling; Consistent History and Audit Management; Automatic triggering/invoke of third-party interfaces.
Interfaces	<ul style="list-style-type: none"> We understand Indiana's 185 Federal and State data sources. When standard federal interfaces change, our HHS Nerve Center pushes out information to our project teams.
Support	<ul style="list-style-type: none"> We have extensive experience handling all the modules in Support. Some of our key unique implementations to cater to State's need are as follows: <ul style="list-style-type: none"> Audit module and Security role-based which we have experience implementing in all 27 states Features such as Case Maintenance and Case reads are designed by taking into consideration our State of Indiana's needs
Reports	<ul style="list-style-type: none"> Deloitte has experience working on federal reports as well as we have experience supporting 3 other states with Cognos.
Technical	<ul style="list-style-type: none"> We describe our experience with the IEDSS technologies in <i>Appendix 1, Experience with the Technologies in Attachment J.</i>
Security	<ul style="list-style-type: none"> We helped 16+ states complete their MARS-E assessment and attain the CMS ATC. We work with federal agencies such as CMS, FNS and IRS and assist them with establishing federal standards and updating them to stay current with the cyber landscape. This experience allows us to stay abreast of upcoming changes in federal standards and regulations and rapidly evaluating its impact on our systems.
Testing	<ul style="list-style-type: none"> We have a repository of 351 regression test scripts which we have developed based on our experience working on IEDSS system and other states. We have the experience and judgment to know how to modify our test scripts to accommodate changing functionality.

Table 3-12. Our Experience in Each Track.

3.d Resources Required from the State

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

d. Describe what you would require from the State with regards to resources for supporting each track and the overall IEDSS solution.

We have established a successful business process in which State SMEs and Deloitte counterparts work as one team to support the IEDSS system. We work on enhancements and maintenance and answer questions from the field, State policy SMEs, and DFR as well as from federal, State, and business partners. Our approach to meeting your vision emphasizes collaboration to bring the best of IEDSS and Deloitte together on behalf of Hoosiers.

Collaboration, accountability, and transparency have all been fundamental to our strong working relationship and our move to Hybrid Agile further strengthens the implementation of those principles. The following table outlines what would be required from the State with regard to resources to support each track and the overall IEDSS solution.

Requirement	Support Required from the State
State SME and Policy Support	<ul style="list-style-type: none"> • Provide subject matter expertise and direction to support timely deliverables, review/approval process, and UAT submitted before production deployment • Provide support to resolve policy, functional, and business-oriented questions during the defect management and incident management process
Enforce Project Governance (Quality, Communication, Staff, General Management)	<ul style="list-style-type: none"> • Review work plan updates and approve changes where needed; approve changes to the integrated project plan; participate in resolving risk and issues • Identify and communicate relevant topics to project teams and stakeholders; review and approve changes to key personnel; manage State project team • Review and approve release calendar, release notes, and deployment plan
Change Control Board (CCB) Management	<ul style="list-style-type: none"> • Participate in CCB meetings; confirm the need for each CR presented at CCB • Approve CRs for impact analysis and estimation; approve release recommendations for each CR
Configuration Management (Including Build, Deploy)	<ul style="list-style-type: none"> • Provide server administration support for builds and deployments • Provide troubleshooting support for scripts to move application and database packages (including loading reference data) using Rational CLM to build and deploy components • Support IOT help desk software installed on Deloitte's machine to support IEDSS solution operations
Production Monitoring	<ul style="list-style-type: none"> • Monitor infrastructure and application by supporting renewing licenses for monitoring tools and infrastructure monitoring tools; resolve hardware and network issues identified • Maintain/upgrade/patch the Oracle grid/cloud controls; monitor the health of Exadata appliance, Golden Gate, database backups, recovery, database instance, and database storage
Incident Management	<ul style="list-style-type: none"> • Communicate production issues (from the field) to the IEDSS triage team per the incident reporting process in a timely manner after incident occurs, after having conducted reasonable due diligence to resolve prior to escalation to tier 2/3 • Assist with resolutions with other partners, agencies, and third-party vendors • Provide timely approvals to the resolution steps provided to resolve incidents and proposed cancellations
Batch and Mass Change Management	<ul style="list-style-type: none"> • Review and approve batch schedule changes • Review results and provide approval for execution in Production
Security Management	<ul style="list-style-type: none"> • Support secure code review and application vulnerability scanning by having a State representative review the Vulnerability Test plans; coordinate as needed with IOT • Provide support in Security Information and Event Management (SIEM) Implementation (QRadar monitoring)
SLA Compliance and Data Integrity	<ul style="list-style-type: none"> • Perform due diligence to confirm that the response time is not impacted due to any infrastructure-related issues • Review data integrity report and assist in resolving business exceptions
Hardware and Network Maintenance and Administration	<ul style="list-style-type: none"> • Maintain hardware of Windows Servers (rack, power, server), Storage Area Network (SAN)/Network-Attached Storage (NAS) devices, Wide-Area Network (WAN)/Local-Area Network (LAN)/Virtual Private Network (VPN)/Firewall/Domain Name System (DNS) • Support required for maintaining Infrastructure and Middleware, Database, Configuration, Architecture, and other hardware/software resources required for IEDSS

Table 3-13. Support Required from the State.

3.e Supporting the State in Managing the IEDSS Solution

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

e. Describe how you will support the State in managing the IEDSS solution for the number and type of users cited.

Because IEDSS is used by over 4,000 users across various State and federal agencies, it requires an approach that includes proactive planning, a sense of urgency, and intentional design to support the size and scale of the IEDSS operation. We have and continue to bring a portfolio of mature processes that have been refined through our national experience. Examples of these processes include our customized approach to parallel testing, production data testing, correspondence validation, batch stop and go, switch-based implementations, and use of custom supplementary development and testing tools.

In the table below, we detail how we manage the IEDSS solution for the number and type of users cited.

Requirement	How Deloitte Supports the Management of the IEDSS Solution and Its Users
Approach in Managing IEDSS Solution	<p>Ad Hoc Questions from the State We understand the State's need to obtain information quickly and accurately, and our team responds professionally and with a sense of urgency. We have established efficient communication channels that provide timely responses for the system-related questions coming from the SEMs, SECs, DFR, OMPP, OHA, as well as ESs.</p> <p>Performance testing confirms that the system performs adequately under peak load. We designed our testing approach to emulate production while meeting service levels. Deloitte differentiates itself through delivering a comprehensive performance testing methodology with automated test scripts and processes working side by side with IOT and DFR.</p>

Requirement	How Deloitte Supports the Management of the IEDSS Solution and Its Users
	<p>The Incident Management process strives to restore normal service operation as quickly as possible and minimizes the impact on business operations. Incident management proactively eliminates recurring problems, provides more effective and efficient incident handling, increases service quality, decreases the number of incidents, enables solution discovery, and provides proactive and reactive problem management.</p> <p>We provide system availability using monitoring tools and an availability management model. We leverage monitoring tools to provide comprehensive component monitoring to support IEDSS system availability per the State's requirements. The Availability Management Model maximizes availability by addressing both unplanned and planned outages to the solution. We work closely with the various State and Federal Agencies users to determine that we support all the interfaces, respond to system issues/questions, and remove any impediments, allowing us to provide uninterrupted services to our clients.</p>
IEDSS Support in Business and Policy	<p>We ask the tough questions to confirm the system not only addresses the most likely scenarios but considers the diversity of worker and constituent scenarios that can occur. Due to the number of users and high volume of constituents served, system changes require an increased level of rigor and thoroughness in the discovery/design process. We also leverage our advisors and peer project teams to internally review approaches as designs, just as we did during the public health emergency. By bringing an Indiana business-focused approach, we help mitigate the risk of functionality gaps.</p>
IEDSS Support in Managing Volume of Users	<p>We provide capacity planning to enable the recognition of the impact that lack of resources may have on the overall IEDSS performance. Working on priorities such as capacity planning projections for future system users and client growth and unexpected spikes in the system activity as well as provides behind-the-scenes support for an uninterrupted end-user experience. Deloitte conducts capacity planning by analyzing the current state, generating a capacity plan, conducting annual evaluation, creating CRs, implementing changes, and gauging plan changes.</p> <p>Ongoing transaction performance monitoring embeds technical proficiency and monitoring tools into ongoing operational processes and production systems management. By continually monitoring and collecting infrastructure and application performance metrics, we enable the State to achieve a lower mean time to resolve issues and lower total cost of infrastructure operations.</p>

Table 3-14. Deloitte Approach in Managing IEDSS Solution and IEDSS Support in Managing Volume of Users.

3.f Experience with Each of the IEDSS Solution Technologies and Tools

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

f. Describe your experience and background with each of the IEDSS solution technologies and tools cited.

Deloitte proudly serves the State as a vendor who is familiar with managing the IEDSS technical ecosystem. We demonstrate the ability to mature, stabilize, and successfully extend an enhanced technology architecture to support critical initiatives. Deloitte also works to keep technical platforms up to date, with frequent evaluation of applicable update or replacement options to achieve technical solutions that are modern, supported, cost-effective, and easier to maintain over time.

Our Deloitte practitioners possess a holistic understanding of the Indiana technical solution, including the interdependencies and different layers of the application architecture (from the data layer to the UI layer). We bring a wide range of resources with knowledge supporting technology components, issue resolution, architecture reviews, infrastructure and release planning, data governance, and modeling.

We use our experience with IEDSS's technology and tools to keep core business systems operational, maintained to operate efficiently, and modified and enhanced to meet the State's evolving needs with predictable and quality

service delivery. Our vendor alliance experience with key technology products such as IBM, Oracle, and HP help enable not only continuous support but further enhancement of our systems within an ever-changing landscape of new delivery approaches, new technologies, and evolving client needs.

The table below provides a sample of E&E systems we maintain. On these efforts, we have gained experience with the same technologies, size, scale, and level of complexity that are in the scope of the upcoming contract. For example, the performance dashboards we adopted for Indiana are based on our templates used in the State of Rhode Island. Our ability to collaborate across teams helps us accelerate delivery timelines, troubleshoot problems, and proactively anticipate issues.

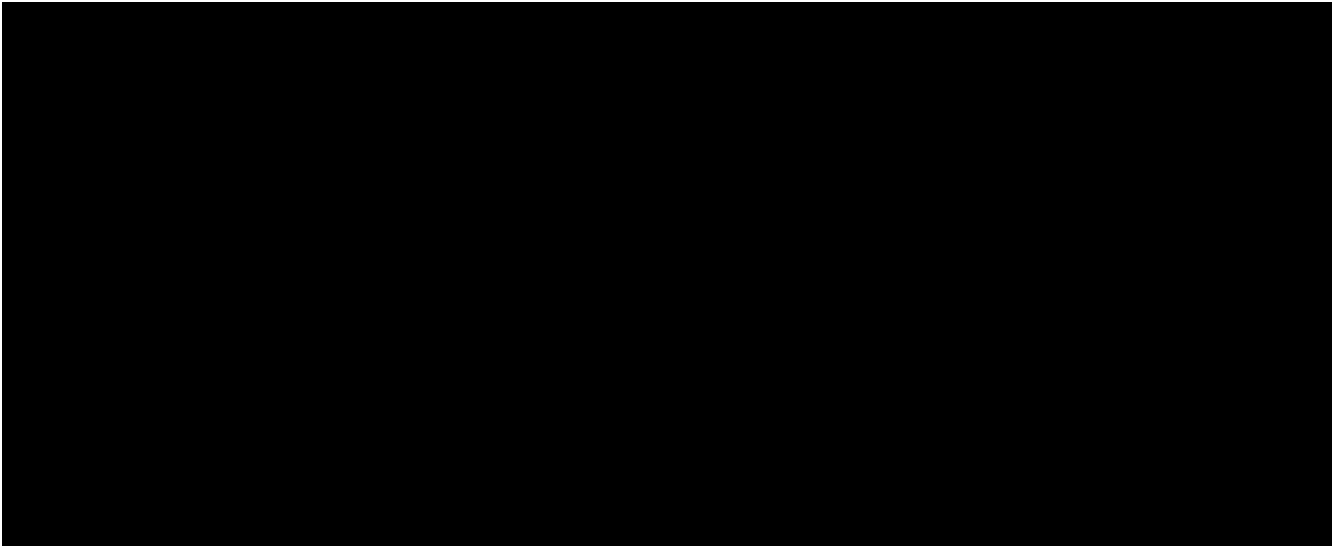


Table 3-15. Selected Projects with Proven Experience Utilizing Relevant Technologies.

Through these strategic alliances, we strive to deliver the desired end-user experiences and ongoing improved outcomes with innovative enhancements. Deloitte's extensive partnerships help Indiana meet requirements and gather operational support from vendors to fix or avoid issues. Please refer to *Section 2, Background and Experience* and *Appendix 1, Experience with the Technologies in Attachment J* for more details on Deloitte's national experience with technologies used in IEDSS and how our technology alliances benefit Indiana.

3.g Solution Technology and Tool Alternatives

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

- g. For each of the IEDSS solution technologies and tools cited, the State will need to consider alternatives throughout the term of the agreement due to version support ending, more cost-effective solutions, more readily federal-compliant technologies, etc. Describe your experience in conducting alternative analyses with each of the IEDSS solution technologies and tools. Confirm your willingness and ability to transition to State-approved alternatives throughout the term of the agreement.

Deloitte is willing, able, and committed to transition to State-approved alternatives throughout the term of the agreement. Throughout our tenure working with the State, we have built a unique understanding of the enterprise technology landscape inclusive of the State's tools, technologies, applications, and assets. We have also worked to bring, tailor, or adopt additional technologies and tools in support of delivering mission-critical services to Hoosiers. These tools complement the State processes and business cycles to reduce time to solution and drive efficiencies.

Approach to Technologies and Tools Fit Evaluation and Replacement

Deloitte's approach in helping the State consider alternatives for the IEDSS technologies and tools involves following the framework we use for other clients with similar replacement requirements. The requirements are defined, prioritized, and included in a questionnaire so that needs of the State are accurately and holistically represented. Our extensive experience in evaluating, recommending, and implementing a plethora of technology solutions across various states enables us to effectively help our clients get the best-fit solution in terms of system efficiency, robustness, functionality, and current technological advancement.

The primary goal of requirements definition focuses on business needs, technology compatibility, security, volume, dependency, priority, and usage. As the incumbent and system implementer, we are best suited to take on this challenging task to support the State with replacing the existing technologies and tools with emerging, next generation technologies and tools. Through strategic alliances with entities like AWS, Snowflake, Salesforce, Apian, and many others, we strive to deliver the desired end-user experiences and ongoing improved outcomes with innovative enhancements. We would focus on both functional capability and technical requirements for the technologies and tools to support the business needs of the State. These will further facilitate a detailed review/compare of current technologies and tools, and future needs regarding architecture, innovation standards, and performance.

The figure below is an example of the template that Deloitte used to work with the State to identify an Application Monitoring Tool for the State of Indiana. We ultimately recommended Splunk Enterprise based on various industry-standard criteria, state requirements, and Deloitte's evaluation framework.

#	Evaluation Criteria	Description	Weightage	Tools								
				Splunk			Elastic Stack			QRadar		
				Score	Comments	Weighted Score	Score	Comments	Weighted Score	Score	Comments	Weighted Score
1	Application Component Availability Metrix (Dashboard and Alerting Ability)	Ability to monitor online application availability during the online business hours	10	7	It needs IBM WAS plugin to configure the application monitor.	70	7	ELK Heart beat helps in collecting application availability Metrix.	70	0	Not possible	0
2	Infrastructure Health (Dashboard and Alerting Ability)	Ability to monitor the infrastructure status like CPU, Memory, and Disk I/O etc.	6	7	Universal forwarder reads windows event logs and forwards them for indexing which can be used to configure dashboard and alerts.	42	7	ELK Metric beat helps in collecting infrastructure health.	42	0	Not possible, unless a custom log file is created as a feeder to QRadar	0
3	Transaction Response Times (Dashboard and Alerting Ability)	Ability to monitor different transaction response times in real-time and proactively identify any performance issues.	8	9	Splunk has ability to read logs and DB tables and it can join and read data from both sources to generate alerts and dashboards.	72	9	ELK File beat helps in collecting the log files to create alerts and dashboards.	72	3	QRadar correlation rules determine the transaction response time based on when QRadar gets the event from the log file and not based on the time specified in the log files.	24

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Figure 3-5. Deloitte's Technology and Tools Selection Approach.

In the past, we have successfully utilized and demonstrated the advanced practical usability of our evaluation framework in determining one of the key technology aspects, namely the Application Monitoring solution, for the overall success of Indiana's E&E application (IEDSS). With the customized evaluation techniques intertwined with our state-of-the-art framework, we were able to evaluate multiple industry leaders in the Application Monitoring space, eventually recommending Splunk Enterprise based on the analysis of various criteria.

The table below highlights the current technologies and tools, supporting functionalities that integrate with our E&E systems, as well as potential alternatives we implemented in other states:

IEDSS Technology/Tools	Representative Alternative Tech Tool Option	Our Experience with Alternatives
IBM WebSphere Application Server	Red Hat JBoss EAP	
Oracle 19c Database Enterprise Edition	IBM DB2 Postgres Enterprise DB	
Mule	IBM Enterprise Service Bus (ESB) Microsoft Biztalk	
Active MQ	WebSphere MQ RabbitMQ	
Corticon	IBM iLOG Jrules	

IEDSS Technology/Tools	Representative Alternative Tech Tool Option	Our Experience with Alternatives
OpenText Exstream	Adobe Experience Manager (AEM)	
Exstream LiveEditor	Custom JSP solution	
IBM Rational Performance Tester	Apache JMeter Micro Focus Load Runner Neotys Neoload	
RTC, RQM, RRC	Atlassian Jira, Atlassian Bamboo, Jama Contour, Atlassian SVN	
SAP Data Services	Experian QAS Informatica Spectrum	
Netrics	Informatica Identity Resolution	
Informatica	Pentaho Kettle	
Cognos	SAP Crystal Reports Tibco Jasper Reports	
Splunk	DynaTrace Nagios	
Microsoft Windows Server	Red Hat Linux	

Table 3-16. IEDSS Technology/Tools.

This figure below highlights Deloitte's key activities in this framework's approach:

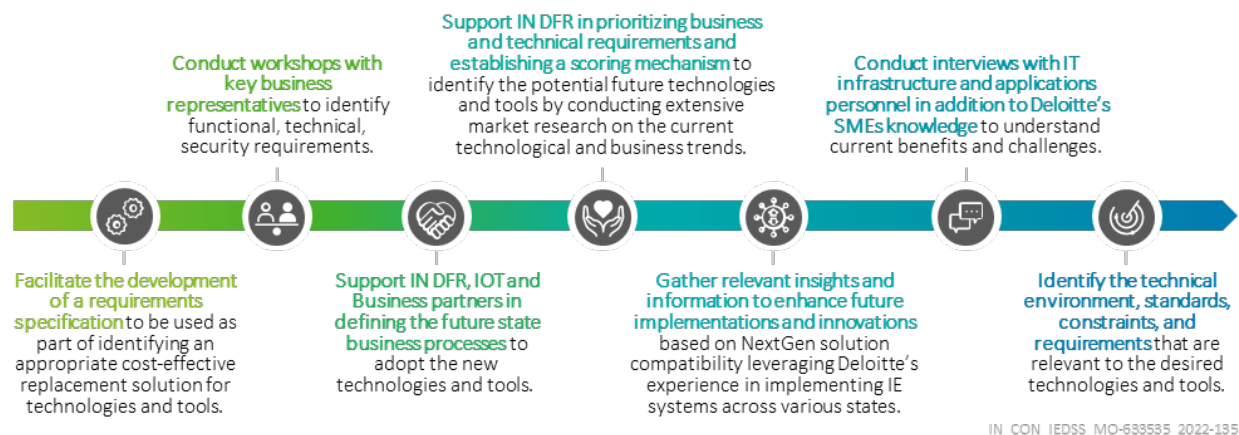


Figure 3-6. Deloitte's Technology and Tools Key Activities Approach.

3.h Background Managing and Supporting Similar Scale Systems

RFP Reference: Attachment F, 3. IEDSS Solution Overview and Management

h. Describe your background managing and supporting systems of similar magnitude and complexity.

In addition to having implemented HHS solutions in 49 states, we have recently been at the forefront of implementing, maintaining, and operating new solutions; incrementally modernizing legacy systems; meeting Affordable Care Act (ACA)-mandated deadlines; conducting MARS-E and Internal Revenue Service (IRS) compliance auditing; and helping HHS agencies find a path forward to achieving strategic objectives. As a leader in maintaining, operating, and enhancing HHS systems, Deloitte has collaborated with numerous state agencies across the country to successfully execute projects similar in scope to IEDSS.

We currently perform M&O of similar HHS **Eligibility and Enrollment systems in 26 states**. With Deloitte's shared pool of resources between these states, we will use our network to align our processes based on the M&O industrializations and previous technology improvements implementations. These connections mean that Indiana has access to experienced infrastructure management professionals who understand how to tailor and deliver the best approach for the State's long-term evolution of your data center, emphasizing consistent improvement and proactive planning throughout delivery. For more details about Deloitte's experience managing and supporting systems of similar magnitude and complexity, please refer to *Section 2.3.13, Experience Serving Similar Clients of the Business Proposal* and *Section 2, Background and Experience of the Technical Proposal*.

Project Management

Section 4

Through our work together during the initial design, development, implementation, and subsequent M&O for IEDSS, we have developed an efficient project management process through collaboration, a focus on transparency, clear and timely communication, and accountability.

We share Indiana's objectives of a robust project management approach, quality management, change management, release execution, and management reporting. We continue to work with the State to adhere to and refine these existing processes to create efficiencies for State and vendor resources and produce performance information that contributes to improved quality and reduced risk in business operations.

WHAT IT TAKES



Experienced team with a deep understanding of the HHS industry and compliance requirements



Established project management practices grounded in proactive planning, execution, and high-quality deliverables



Extensive understanding of IEDSS goals and objectives

WHY IT MATTERS

Enables Indiana to anticipate and address required changes and meet business goals. Experience delivering on compliance requirements is especially critical for Eligibility and Enrollment (E&E) systems, which interact closely with federal agencies such as CMS. Deloitte has assisted the State with obtaining and maintaining its Authority to Connect (ATC) from CMS for the past nine years, an example of our ongoing commitment to federal compliance.

Our established project management practices, agility, repeatable processes, guidelines, and techniques help manage IEDSS projects and enhancements effectively. We also improve productivity and quality of work to continue driving success through maintenance and operations (M&O). We have applied these practices during delivery of many enterprise-scale eligibility systems, and Indiana will benefit from our ability to deliver such systems under strict policy, compliance, and technology constraints.

Our approach to collaboration with your project leadership enables timely issue resolution and an on-time, in-budget system delivery through consistent communication and transparency between staff and vendor. Our rapid adherence to policy changes following the Public Health Emergency (PHE), and more recently our preparations for PHE unwinding, demonstrate Deloitte's ability to deliver on critical outcomes even as unexpected circumstances necessitate a change in requirements.

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

Explain how you propose to execute Attachment C, Section 4 in its entirety, including but not limited to the specific elements highlighted below:

The State requires a trusted teammate to continue the effective and efficient delivery of M&O services. Deloitte has built a strong working relationship with the State and jointly established mature project management processes. With our focus on continuous improvement, we will continue to refine these processes based on project needs.

Rooted in the heart of a successful M&O collaboration is a sound and practical project management approach, and our continually improving processes are evident in our delivery and maintenance of IEDSS and many similar platforms. Deloitte has provided customized and adaptive project management services to the State by maintaining the right balance of structure and agility. Our flexible approach has been particularly critical during the COVID-19 PHE, as policy changes have necessitated rapid adaptations. We enable this flexibility through ad hoc status reporting and quality and change management with a focus on maintaining higher quality, lower risk, and predictability in delivery of the solution.

The State is familiar with our project management approach through our delivery of the IEDSS platform. We not only maintain the system efficiently during M&O, but we also provide avenues for continuous improvement through frequent initiatives to further existing processes. Our [REDACTED]

[REDACTED] help inform priorities and identify potential improvements, which are essential to an on-time and in-budget system delivery.

During the design, development, implementation, and Production support phases of IEDSS over the past several years, Deloitte has worked closely with the State to establish robust processes. These are embodied in our planning and execution activities across the lifespan of the project and informed by our core project management principles.

KEEPING THE MOMENTUM GOING FORWARD

- Deloitte has worked closely with the State to develop robust project management practices currently being used at IEDSS.
- We have worked on the IEDSS project since 2012 and are intimately familiar with the current project management practices used by the State.
- Our transparent and collaborative project management approach focuses on quality, stability, and continuity of services in uncertain times.
- We strive to continually bring efficiency and innovation during M&O to improve our project management services at IEDSS.

Our Core Project Management Principles		Benefits to Indiana
	Don't Reinvent the Wheel	To align with the State's vision with the RFP, we will work on dynamic needs, requirements, and technology advancements that will drive the need for continuous improvement in existing processes and tools. The State's familiarity with our tools and methodologies supports a shorter ramp-up time and reduced learning curve .
	Clear Communication	We will quickly establish a stakeholder ecosystem map and related communication process, founded on the overarching principle of "no surprises," to facilitate rapid information sharing and collaboration as well as efficient decision making for Indiana.
	Transparency	We will provide the State with a clear and timely view of project progress – describing who is responsible for each activity, whom to contact to resolve questions and issues, and what decisions have been made.
	Measure Progress	We will establish a methodology to develop meaningful metrics based on experience. These metrics are tailored to the State's unique interests and schedule; they quantify project progress .
	Standard Methods	We will create predictability and reliability through proven project management methods and tools that support consistent, effective planning and control for project phases.

Table 4-1. Core IEDSS Project Management Principles.

Our commitment to process quality is exemplified not only in our delivery of the IEDSS platform but commended externally by certification authorities such as the CMMI Institute. Deloitte's GPS Operate practice recently secured a CMMI-SVC Maturity Level 3 Appraisal, which was approved in January 2022, and reflects our high standards in process quality. The appraisal was evaluated and approved based on our work on selected few projects, including

IEDSS. It demonstrates our commitment to continual performance improvement and the delivery of high-quality work to IEDSS and many other projects.

Our proven project management approach, tailored to Indiana and the IEDSS platform, represents an opportunity to improve upon an already mature platform from day one, rather than spending time identifying a new set of processes and resources with the requisite experience in eligibility system implementation. Together, we can continue executing the roadmap to achieving your objectives without introducing a learning curve or disrupting these essential services.

4.a Project Management Approach

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.1

a. Describe your Project Management approach in adherence with the requirements of Section 4.1, including federal project management requirements.

With our experience in Health and Human Services (HHS) projects across 49 states, 26 of which are active E&E engagements, our Project Management Approach includes proven and established project management standards. These align with Food and Nutrition Service (FNS) and Centers for Medicare and Medicaid Services (CMS) standards and requirements, including the CMS Medicaid Eligibility and Enrollment Toolkit (MEET) framework. Deloitte brings years of experience managing HHS projects at the state and federal levels, and our experience leading enterprise-scale HHS implementations for state government systems will enable the State to meet federal reporting requirements established by FNS and CMS. These systems include Texas TIERS, Michigan Bridges, Wisconsin CARES, and Pennsylvania CIS, where we played a similar prime contractor role for M&O services for comparable large-scale projects (see *Section 2, Background and Experience*). We have worked closely with our clients to prepare them for CMS readiness reviews and set them up for success with FNS requirements.



Years of E&E experience with IEDSS and many other systems has driven our ability to deliver compliance on federal standards set by CMS, FNS, and other agencies. We have:

- Helped the State prepare for the CMS gate check and demo presentation
- Prepared data for FNS review prior to go-live (case conversions, readiness metrics, etc.)
- Facilitated compliance with security requirements such as CMS "Minimum Acceptable Risk Safeguards for Exchanges" (CMS MARS-E 2.2)

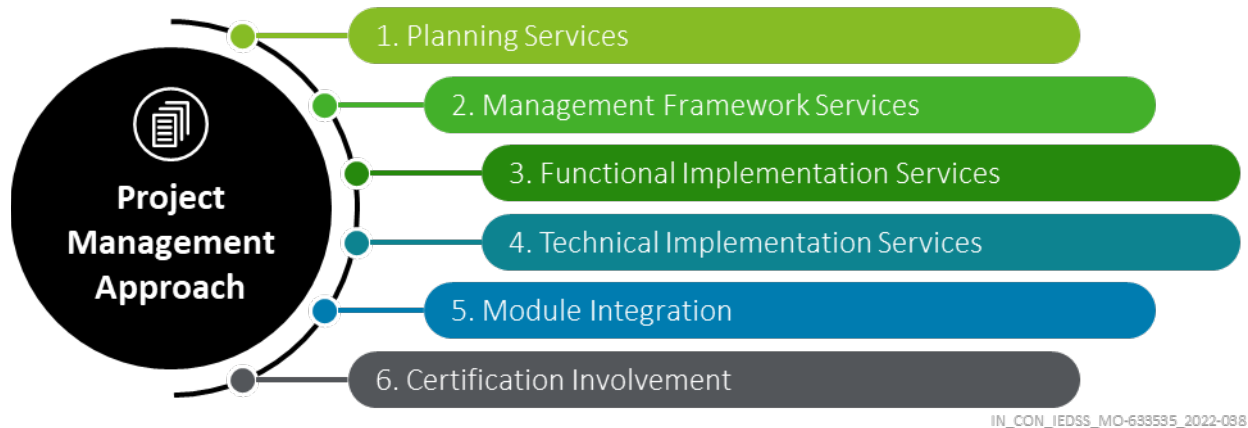


Figure 4-1. Components of Deloitte's Project Management Approach.

Our Project Management Approach is tailored to address the requested Project Management Standards and includes the six components listed above, as per the RFP requirements. This approach helps align our project management approach with PMI best practices. For example, clearly defining project milestones and deadlines in the earliest stage of project planning enables us to communicate milestone status quickly and accurately, identify and highlight project risks, and proactively suggest any necessary mitigations.

1. Planning Services

Deloitte collaborates closely with the State's leadership team to support planning with a focus on helping you achieve your vision in a complete, thoughtful, and efficient manner. As a trusted advisor, we work closely with stakeholders to listen and understand your goals and assist you with planning services through the project for the benefit of IEDSS stakeholders and users. The following table describes our approach toward supporting and providing these planning services.

RFP Requirement	Our Approach
Vision, strategy, and assistance in developing goals and objectives	<ul style="list-style-type: none"> • We work closely with leadership and stakeholders to understand needs, set short and long-term goals, and develop a strategy to accomplish goals and objectives. • [REDACTED] • We maintain a collaborative relationship with the State by discussing project goals and key enhancements proactively, rather than waiting for stakeholders to log Change Requests. By doing so, we can respond quickly and efficiently to anticipated system needs at both a technical and functional level.
Concept of operations	<ul style="list-style-type: none"> • During our initial planning, we identify the operational considerations related to any system upgrade or enhancement from the end user's perspective – our proactive planning helps improve system usability and mitigate loss of productivity due to operational changes.
Enterprise functional and non-functional needs analysis	<ul style="list-style-type: none"> • We help IEDSS leadership translate their business needs, obligations, and requirements to enterprise-level functional and non-functional requirements through discovery sessions, demonstrations, and solution walk-throughs with SMEs as part of our Hybrid Agile SDLC.
Continuity of operations and disaster recovery planning	<ul style="list-style-type: none"> • We understand the criticality of business continuity in the event of a disaster. Deloitte will continue to support the State and IOT in maintaining the existing BCP and DRP plans, and plan regular tests as requested by the State to confirm these plans can be put into action whenever the need may arise. • We have established a close relationship with the State/IOT over the last 30 years, during which Deloitte's BCP has been successfully tested several times, proving our ongoing reliability. Our staffing approach for BCP and DRP includes Database Administrators and Batch Control Specialists with 24/7 on-call availability in the event of an emergency. • We will continue to support the State's disaster recovery (DR) testing exercises, which confirm critical components of the IEDSS platform remain functional under varying disaster scenarios. This proactive approach reduces the risk of major system outages when unpredictable events occur.
Architectural & engineering decomposition	<ul style="list-style-type: none"> • Our documentation includes architectural and engineering diagrams necessary for efficient and stable system maintenance. Accurate and comprehensive system documentation is critical so State stakeholders can transition between roles quickly and perform their job duties in full.

RFP Requirement	Our Approach
	<ul style="list-style-type: none"> When implementing system enhancements, we will work with key stakeholders to identify the appropriate level of system design documentation and conduct walkthroughs with the State and Architecture teams to validate system behavior prior to the release. As part of the development process, we review and update our system documentation (including architecture diagrams) to reflect the relevant changes.
Communications planning	<ul style="list-style-type: none"> For upcoming system releases, we work with the State to identify impacted stakeholders, such as interface teammates, to confirm that communication planning targets impacted audiences. Our project schedule and release deployment plans identify stakeholders and timing for key communications and coordination.
Organizational change management	<ul style="list-style-type: none"> While the State is responsible for end-user training and stakeholder communications, we help the State plan for organizational change management associated with program changes and system enhancements. We provide this support by providing system documentation, solution demonstrations, and release notes for the State to use as part of your organizational change management approach.

Table 4-2. Planning Services Requirements.

2. Management Framework Services

Eligibility and enrollment systems require enterprise-level management frameworks. Deloitte works alongside IEDSS stakeholders to promote compliance with the following requirements, while customizing our project management frameworks to reflect existing strengths of our IEDSS implementation and management.

RFP Requirement	Deloitte's Approach
Enterprise design, pattern, and portfolio management	<ul style="list-style-type: none"> We work with stakeholders to understand and manage the system at the enterprise level, not just on the modular level. We work closely with the State and system owners to understand patterns across their enterprise and help them manage the portfolio. Based on our experience delivering similar enterprise-scale eligibility systems, we have often recommended changes to the IEDSS technical architecture that adhere to best practices (for example, our EJB upgrade from version 2.1 to 3.1, which improves security and system maintainability by decreasing file volume). We have made these recommendations as and when we identify their benefits, rather than waiting for State stakeholders to identify and propose such improvements.
Enterprise architecture, modelling, and integration	<ul style="list-style-type: none"> We take steps to understand and document the enterprise architecture of the system, using industry-leading modeling tools such as ERWin to create detailed architecture views to assist with both internal and external integrations and to help align your business objectives and your technology goals. We will continue to suggest modernization opportunities and tools that can be used to enhance these objectives as part of our efforts to support the State.
Enterprise technical roadmap orchestration with sequencing and transitioning plan	<ul style="list-style-type: none"> We create and update the enterprise technical roadmap for State stakeholders and hold a quarterly software upgrade review meeting to discuss the future state of each component in the IEDSS technical architecture. This roadmap informs and secures the long-term vision of the system's architecture by proactive determining the feasibility and benefit of all upgrades. [REDACTED]
Enterprise functional and non-functional requirements	<ul style="list-style-type: none"> We have worked with the State to establish enterprise functional requirements that include Audit History tracking, batch exception framework, and enhancements to the security matrix to provide additional fine-grained accessibility. We have also worked with the State to establish enterprise non-functional requirements such as scalability, browser compatibility, response time improvements, and enhancements to usability. As we work on enhancements, we maintain alignment with existing enterprise requirements by confirming compliance with established requirements. As part of the discovery phase for new enhancements, we proactively monitor for new or changes to existing functional and non-functional enterprise requirements.
Validation against MITA Maturity Roadmap & identify deviations from MITA Strategy	<ul style="list-style-type: none"> MITA envisions a streamlined, secure, and interactive customer experience with high adaptability and extensibility that will maximize automation and real-time adjudication while protecting privacy and PII data. IEDSS' data-hub-based, MITA-compliant solution allows the State to change the specifics of processes, data, or business rules using reference data, parameters, and configuration files to meet its specific needs. Deloitte works with the State to validate enterprise plans against the MITA Maturity Roadmap, identify deviations, and implement enhancements to improve MITA maturity over time, as prioritized by the State. We recognize the State's goal to maintain MITA maturity level 3 status during IEDSS M&O, and plan to support this goal by designing improvements that adhere to specific MITA standards – such as adopting national data standards and facilitating robust intrastate information exchanges.
Development life cycle	<ul style="list-style-type: none"> Our proposed Hybrid Agile SDLC is further described in <i>Section 5, Software Development Lifecycle (SDLC) Approach</i>.

RFP Requirement	Deloitte's Approach
	<ul style="list-style-type: none"> Our approach is based on building upon existing processes and standards defined in collaboration with the State, the industry standard Scrum Agile framework, and proven processes used across similar E&E clients. Our approach is aligned with CMS expectations for governance, risk mitigation, business owner responsibility, and ongoing monitoring. This iterative approach benefits the State in several ways, such as greater flexibility when responding to an unexpected change. For instance, using a product backlog allows us to pivot and address higher priority items when needed.
Enterprise management of the master integrated schedule, scope, change control, risk management, and quality assurance	<ul style="list-style-type: none"> We work with the State and the State's designated vendors to assist with the management of the master integrated schedule, scope, change control, risk management, and quality assurance through our documented processes, workflows, and configured tools. In our current contract, we have supported project planning at a macro level—that is, across other State and Federal agencies—since the IEDSS platform is a complex system with downstream impacts to other trading partners. In many cases, this macro-level approach has allowed us to proactively identify downstream impacts to IEDSS and mitigate issues before they occur; this approach contributes to overall system stability while minimizing system maintenance needs.

Table 4-3. Management Framework Services Requirements.

3. Functional Implementation Services

As we implement new functional enhancements, we align our design to the architecture principles and standards in areas such as identity and access management, document management, rules engine, and information architecture that we defined collaboratively with you during DDI. As IEDSS functional and technical enhancement needs evolve, we evaluate any needed changes to this architecture such as if the State moves to change its integration platform.

RFP Requirement	Deloitte's Approach
Standards selection	<ul style="list-style-type: none"> We help you adopt industry-leading standards across the IEDSS system (e.g., NIST 800-53 compliance to meet MITA standards). Our M&O processes are grounded in ITIL and, we will continue to provide recommendations for new standards that can be implemented as part of the IEDSS project.
Master data management, identity, and access management	<ul style="list-style-type: none"> We implement robust master data, identity, and access management for managing environments and assets. We comply with data, identity, and access management rules of IEDSS's partners and systems. Deloitte's data management process helps in understanding the potential of the data, compliance with the data privacy regulations to confirm security, and adoption of a consistent data governance policy. We employ the principle of least privilege, allowing access only for authorized users, when necessary, to accomplish assigned tasks. Deloitte complies with CMS MARS-E 2.0 control requirements for account management (e.g., inactivity, session timeout) and password management (e.g., unique identifier, password complexity). Our security team adds multiple layers of data and access management protection. Prior to granting access, they confirm security awareness trainings are complete (with additional training requirements for access to Production data), and they periodically review access to remove permissions when no longer needed. We deploy Data Loss Prevention (DLP) tools such as email filters to help prevent the release of confidential data, whether intentionally or unintentionally.
Document management	<ul style="list-style-type: none"> Our team was instrumental in designing and implementing document management functionality such as creation, retrieval, storage, data exchanges, and workflow integration. Experts from our national practice advised our team and the CDMS vendor as we "lifted and shifted" this critical functionality as part of the IEDSS delivery. As a result, users can now see documents within the Worker Portal itself, an important improvement to productivity and the user experience. With respect to any new enhancements to document management functionality, Deloitte will continue to work with the CDMS development teams to define and implement changes per existing SDLC guidelines and collaborating agency protocols.
Integration services	<ul style="list-style-type: none"> Our delivery of the IEDSS platform provides various methods of integration such as webservices, REST APIs, file exchanges, and ETL services, as part of our portfolio of integration services that can be leveraged by our external stakeholders. These services are available both internally and externally and are critical to the way the system was designed. Our team will continue to maintain these services and enhance them as required by the State to continue to support IEDSS operations.
Business architecture and modeling, business rules engine	<ul style="list-style-type: none"> Our team was instrumental in defining the standards and templates to be used to document and define business architectures and business rules. Templates from our national practice preloaded with SNAP, TANF, and Medicaid rules served as baselined accelerators and were used to kickstart design sessions and save time. These templates—now sourced with actual IEDSS business rules—continue to be the basis for ongoing design and

RFP Requirement	Deloitte's Approach
	<p>deployment efforts when changes to business rules are required. Similar standards and templates have been used for data modeling and business architecture as well.</p> <ul style="list-style-type: none"> Our team will continue to leverage these templates and work with the State to modify and/or enhance as required to support future goals.
Information architecture and modeling	<ul style="list-style-type: none"> We have continuously supported information architecture and data modeling efforts across both IEDSS and ICES. Our solution architecture principles reflect our capability and experience and are robust and scalable. Our architecture services are divided into three parts: architecture lifecycle management, technical debt management, and performance engineering. We maintain the Common Data Model and the Logical Data Model for the State and will enhance these as necessary. Our existing approach supports over 4,200 database tables and 37,000 database objects, and our approach to database changes includes standardized naming conventions and data normalization to minimize downstream impacts in such a large system.

Table 4-4. Functional Implementation Services Requirements.

4. Technical Implementation Services

Our staff for both the IEDSS and ICES projects have honed the process of successfully transitioning software between Deloitte's infrastructure team and IOT. The table below describes our proposed approach to meeting each IEDSS Technical Implementation Services requirement.

RFP Requirement	Deloitte's Approach
Environment/infrastructure	<ul style="list-style-type: none"> We manage both software and hardware components of development and testing environments. We collaborate with IOT to monitor the IEDSS solution components and the operational activities such as capacity planning, software upgrades, security vulnerability patches, automation, and server provisioning. We have established a cadence of quarterly upgrade meetings with the State to review our analysis regarding the product roadmap, planned upgrades, server configuration changes, infrastructure-related issues, and enhancements. Our team coordinates with the IOT to configure, build, and deploy each software release as defined in the SOW with respect to deployment to Production environments. Our approach reflects experience with highly complex environments and environment mappings. System enhancements and fixes are completed in a timely manner, in large part due to our pre-defined environment mappings (which are finalized during initial project planning) and environment transition orchestration tools.
Network services	<ul style="list-style-type: none"> We work with the IOT to configure network services across non-Production environments and support configuration of Production settings. We support the setup of State infrastructure (new servers, appliances, data centers, and consoles); the activities associated with defining network service protocols for new components and/or environments; prototyping new products that require network definitions and connections; and server and network monitoring. We propose an experienced team of engineers for IEDSS M&O who are familiar with your network infrastructure, has worked with you in the past, and are ready to support you as part of this new contract.
Portal, module portal	<ul style="list-style-type: none"> We work with State representatives to make updates to the Benefit Portal in the event of any changes to IEDSS-specific technical services, APIs, etc. We will continue to work with the State to confirm that portal updates remain in compliance with CMS requirements and maintain the Benefit Portal based on updates to IEDSS-specific services.
Enterprise service bus, adapters, metadata repository, transfer engine, process orchestration engine, dashboard, batch engine	<ul style="list-style-type: none"> While implementing IEDSS, our engineers worked with IOT to define the IEDSS technical architecture. Our team worked with the State to implement several components such as ESB, adapters, metadata repository, transfer engine, process orchestration engine, dashboard, and batch engine. As part of our ongoing work with this SOW, our team continues to support these tools and work with the State to modify as needed.
Identity management	<ul style="list-style-type: none"> We configure and manage identity management for applications in lower environments and help IOT with identity management in Production environments. To continually better our identity management strategy, we will work with the State to explore options such as implementing Multi-Factor Authentication (MFA), Single Sign-on, and Identity Governance. This improves system security and employee productivity by reducing the number and frequency of entry points into the system.
Platform services layer, data services layer, master data	<ul style="list-style-type: none"> We follow an agreed-upon methodology to manage and make changes to platform services layers, data service layers, and master data using middleware. IEDSS has been built on the Windows Platform; the Worker Portal is deployed on the IBM platform (WebSphere application server); and the services are deployed on the Mule ESB platform.

RFP Requirement	Deloitte's Approach
	<ul style="list-style-type: none"> IEDSS currently uses Deloitte's framework (Fast4J) as the data service layer for accessing data from the back-end database. It maintains master data in reference tables that can be accessed through the worker portal.
Enterprise services registry	<ul style="list-style-type: none"> We contribute to the enterprise service registry for requested applications. This process combines the advantages of language-independent modeling and application specifications in the Enterprise Services Repository, with the option of publishing application services in the Services Registry.
Standards selection	<ul style="list-style-type: none"> We follow both industry and policy-related standards. We identify, analyze, conduct a gap analysis, and propose remediation steps to stay within compliance. We will continue to leverage our national expertise to maintain and upgrade existing standards and implement new standards, as prioritized by the State. As an example, our team recently performed an upgrade to HTML 5—responding proactively to an appropriate web development standard—in response to Microsoft's retirement of the IE browser.
Security architecture and framework	<ul style="list-style-type: none"> Deloitte follows the IOT Cybersecurity Framework, a Production-proven and approved security architecture and framework, based on the standards established by NIST 800-53. We will collaborate with IOT to review this framework as needed and recommend improvements to better align with IEDSS goals (e.g., when NIST standards are updated).
API Management & synchronization with SOA governance, business strategy and goals	<ul style="list-style-type: none"> Deloitte embraces Service Oriented Architecture (SOA) to assist IOT with governance and business strategy. We will continue to work closely with IEDSS Stakeholders and IOT to manage, govern, and publish Application Programming Interface (APIs) to further promote SOA governance, business strategy and goals.

Table 4-5. Technical Implementation Services Requirements.

Deloitte has a record of accomplishment successfully executing large technical implementations within the State of Indiana, and we believe that *Deloitte meets* these requirements.

5. Module Integration

We understand the value of modular architecture and the long-term benefits it offers to Indiana. We are committed to further advancing Indiana's goal of extending its modular approach as we work with you on implementation of system enhancements. The table below describes our approach to meeting your requirements.

RFP Requirement	Deloitte's Approach
Advise source selection committee, assess modules for fit within enterprise architecture (EA) and integration platform	<ul style="list-style-type: none"> We offer an objective assessment of modules when evaluating a potential fit within the enterprise architecture. We provide technical advice to stakeholders regarding details of upcoming implementations (e.g., modules impacted by an upcoming upgrade). Deloitte's EA helps the State with its business goals. This practice promotes the translation of strategies into understandable and clearly defined procedures, processes, and technological requirements.
Validate open APIs and standards, fit/gap assessment documentation, inform configuration-over-customization decisions throughout project life cycle	<ul style="list-style-type: none"> We validate open APIs and standards, perform fit/gap assessment documentation, and inform configuration-over-customization decisions throughout the project lifecycle. We utilize a template to objectively compare relevant implementation details and help prioritize vital API components (e.g., to determine which protocols a potential API must support). We promote configuration-based changes as opposed to customized changes, which are reviewed with the State on an ongoing basis. We also maintain the integrity of the system and reduce defects by conducting thorough code reviews with SMEs and Technical Leads on the project.
Develop master data conversion, migration and test plans and associated procedures and standards	<ul style="list-style-type: none"> We work closely with IEDSS stakeholders to determine the need for conversion, to devise migration activities, and to develop test and conversion plans for change requests or applications that may be converted later in order to maintain data integrity. As we demonstrated with the ICES/FACTS conversion to IEDSS, our conversion approach includes planning, data mapping, data cleanup, dry runs, and conversion testing.
Define test acceptance criteria and standards enforcement	<ul style="list-style-type: none"> We participate in the development of testing plans and strategies and will collaborate with IEDSS to define acceptance criteria and enforce standards. We do so during multiple stages of testing to facilitate a robust acceptance criterion, and we develop these criteria prior to development to promote an unbiased and comprehensive testing strategy.
Oversee module vendor integration and deployment activities	<ul style="list-style-type: none"> We oversee module vendor integrations and deployment activities through weekly touchpoints for critical functionality implementation and thorough smoke testing. We discuss document management changes in a weekly touchpoint with CDMS to discuss risks, implementation, release timeline, and smoke testing.

RFP Requirement	Deloitte's Approach
Assist in module integration as required for modules vendors without sufficient native integration capabilities	<ul style="list-style-type: none"> We help the State determine required steps to integrate with module vendors without native integration capabilities (when implementing AVS, for example, which provides electronic asset verification and required integration with various internal modules). We also work closely with the BizTalk Team to test the configurations in lower environments and provide required support during Production implementations.

Table 4-6. Module Integration Requirements.

6. Certification Involvement

Throughout DDI, Deloitte worked with State leadership to provide the required documentation, reporting, and participation to support CMS and FNS oversight. As outlined in the table below, Deloitte will continue to provide such assistance when required.

RFP Requirement	Deloitte's Approach
Participate in and support certification activities with State, CMS, the OV&V vendor, and the IV&V vendor (if the State chooses to utilize one) and monitor necessary modifications.	<ul style="list-style-type: none"> We work closely with IEDSS stakeholders to identify and support certification requirements and activities. We provide necessary design changes, supporting materials, documentation, and prepare for demos and reporting to complete certification activities. Materials are published to the State SharePoint for OV&V or IV&V review and are available for meetings and system walkthroughs as needed.

Table 4-7. Certification Involvement Requirement.

Deloitte has extensive experience assisting states in demonstrating compliance with federal guidelines such as Medicaid Eligibility and Enrollment Life Cycle (MEELC), Medicaid Enterprise Certification Toolkit (MECT), and MEET, as well as its newest process, the Outcomes-Based Certification (OBC) review. For example, in Arkansas, the Deloitte team assisted the State with the definition of performance metrics for its OBC milestone. We established measures to address system and process performance and implementing procedures for the periodic reporting of this data to CMS. In addition, the Deloitte team worked closely with the State to prepare for the OBC demonstration of the new Arkansas IE system, which was successfully delivered to CMS in early March 2022.



Deloitte teams in Tennessee, North Dakota, Arkansas, and Louisiana are working with clients to help CMS pilot and shape the new review process using live system demonstrations and Key Performance Indicators (KPIs) from Production to measure certification.

We understand federal compliance goes beyond certification involvement. Our proven project management approach has been used in Indiana and across the nation to help our clients comply with federal requirements, including those from CMS and FNS. For example:

- We have supported requirements such as Program Design and Management Evaluation Systems (<https://www.fns.usda.gov/snap/fr-011916>) and Test Plan requirements as part of FNS Handbook 901.
- We have delivered many systems that satisfy CMS requirements using the Medicaid Eligibility and Enrollment Toolkit (MEET) to proactively certify that all acceptance criteria are met. While addressing a major change request, Deloitte worked with the State to support completion of Major Change and Test Plan documentation.
- We have supported Indiana's reporting obligations to its federal partners during our support of the IEDSS platform, and we will continue to support the State in providing any further clarifications needed for FNS and CMS review.

Lastly, we understand that the State's federal partners, including CMS and FNS, request that its partners and contractors adhere to specific project management best practices. Accordingly, to maintain a stable and continuously improving IEDSS platform, we will continue to adopt project management best practices such as those outlined by the Project Management Institute (PMI) in the following table:










Element	How We Exceed Expectations	PMI Best Practice
Define Life Cycle Milestones	Our project management plan incorporates overall project phases as well as specific Software Development Life Cycle (SDLC) phases with clear expectations and milestones established during each phase. Our project schedule, including deliverables and target dates for each phase, are described in Appendix 2.	
Document and Maintain Stable Requirements and Scope	During our delivery of the IEDSS platform, and ongoing during its most recent maintenance and operations phase, we have documented maintainable procedures at every stage of the delivery process. Our Change Management process (see Section 4.e) documents and maintains project scope and expectations.	
Define Organization Systems and Roles	Our project management team will implement a project team structure closely resembling our successful delivery of the IEDSS platform, which establishes clear roles (track leads, application managers, etc.) and allows us to scale our project team up or down as needed. We are closely familiar with the structure of the FSSA and other important agencies, both at the state and federal levels, and therefore understand how to best liaison with key State stakeholders.	
Enable Quality Assurance	Our familiarity with existing IEDSS system functionality allows us to measure quality at each stage of the software development life cycle. Our close relationship with the State has established a clear mutual understanding of what a successful system looks like and which metrics can be used to measure release quality and overall system performance.	
Plan Project Commitments	Our project plan reflects and commits to essential project elements such as schedule, budget, resource allocation, staffing, and quality standards prior to the project start.	
Track and Analyze Variance	Using industry-standard project management tools allows us to track issues and performance at a high level, and our project managers can easily identify any variance from the expected system behavior through custom dashboards and system reports.	
Develop Corrective Action Procedures	When our issue management platforms, dashboards, and reports indicate variance from expected system behavior, we follow a clearly outlined and agreed-upon process to triage and resolve issues.	
Define Escalation and Issue Management Procedures	Our many years of experience implementing and maintaining the IEDSS platform has established a clear escalation process, in which track leads and project managers communicate and prioritize new issues on a frequent basis.	
Authorize Change Controls	Our IEDSS team has established and will continue to adhere to strict change authorization controls, exemplified in status meetings such as the Change Control Board (CCB) and discussed further in Section 4.c.	

Table 4-8. Elements of Our Project Management Best Practices.

Our project management approach reflects a clear understanding of the relevant state and federal requirements when delivering enhancements to the IEDSS platform. Our prior experience with IEDSS and many other eligibility systems demonstrates consistent excellence in complying with these standards, while our adaptive approach within each requirement demonstrates our commitment to continually improving our processes.

4.b Project Plan Components

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.2

b. Describe your Project Plan as outlined in Section 4.2. Include a proposed draft Project Schedule based on the information in the RFP.

Deloitte's approach to the Project Management Plan (PMP) acts as the foundation to our project plan and is based on the Project Management Institute's Project Management Body of Knowledge® (PMBOK®) and the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI). While our PMP builds upon established processes we have defined in collaboration with the State, we view the development of the PMP as an opportunity to align with the new contract requirements, transition to our new Hybrid Agile SDLC, and to identify opportunities to further innovate how we work together towards efficiently meeting your goals and priorities. We have included an overview of our Project Schedule in the following section, as a critical component to the PMP, that will be used to manage project tasks against defined milestones. For the full proposed draft of our Project Schedule, please refer to Appendix 2.

Our Project Management Plan is Grounded in Proven Processes and Refined to Meet Changing Project Needs

We anticipate the opportunity to revisit materials currently being used on the project and to identify improvements as we look to the next phase of work supporting IEDSS. Deloitte will submit the new PMP plan within 30 days of contract start that addresses the execution of the scope of work and approach that adheres to the guidelines established by the State and federal requirements (CMS and FNS). To make sure our existing PMP is updated to align with all the requirements of the new Contract we will bring in dedicated staff to manage and update the PMP during the transition phase. Deloitte will also work with stakeholders to review and optimize the monthly process for updating the PMP plan through the duration of the project. We know that the PMP is subject to change throughout the project durations, so we have a PMO whose responsibilities include the ongoing maintenance and management of the PMP to confirm stakeholders are aligned properly and notified of any updates to the plan. Additional sections will be added to address Agile project management practices and other changes.

At a minimum, the PMP will include the following sections:

PMP Section	Our Approach and Section Content	Elevating through the Initial Transition
Project Schedule Management Plan	In the Project Schedule Management Plan we outline our approach and guidelines about project schedule maintenance, ownership, and policies. This provides stakeholders with a specific plan for managing the project schedule and expectations. This addresses the processes required to manage timely completion of the project with the following sections: <ul style="list-style-type: none"> • Project Schedule Introduction • Project Schedule Definition • Project Schedule Management 	Include additional details in the Project Schedule Management section to highlight our transition of merging our current PM Tools to Jira, which will simplify the management of the Project Schedule and increase transparency for the State.
Project Schedule	In the Project Schedule (refer to Appendix 2), we provide a detailed schedule of the project and include relevant activities and milestones. This project schedule is a draft version that will be reviewed and refreshed to match the exact needs of the project during project initiation. This includes timelines and progression reports with the following sections: <ul style="list-style-type: none"> • Initial Transition • Sprint Development • Recurring Activities 	Enhance the Initial Transition section to include details of all meetings from the Transition Preparation Kickoff Meeting to the Transition Closeout meeting and all SDLC Training Sessions to facilitate a smooth transition to the Hybrid Agile SDLC Methodology for the State.
Project Organization and Resource and Staffing Plan	Our staff is the key to project execution; therefore, we use a Project Organization and Resource and Staffing Plan to capture key personnel, their responsibilities, and the associated staffing plans. This details the organization, resource, and staffing plan with the following sections: <ul style="list-style-type: none"> • Project Team Structure & Org Chart • Vital Staff & Positions • Deloitte Team Roles & Responsibilities • Labor Resources (staff turnover, on-boarding, off-boarding processes) • Project Holidays 	Adjust our content in the Project Team Structure & Org Chart section to include an Agile Advisor, Agile Coach, and introducing a Scrum Team structure to provide additional details of our structure, roles, and responsibilities as we move to a more efficient Hybrid Agile SDLC for the State.
SDLC Management Plan	Our approach to Hybrid Agile project execution is captured and described within the SDLC Management Plan of the PMP. Our established SDLC Management Plan not only provides both predictability and dependability, but also flexibility as it is tailored for Indiana's needs. This outlines the plan for the IEDSS Hybrid Agile Methodology with the following sections: <ul style="list-style-type: none"> • Development & Testing • Security • Release Management • Artifact Management • Quality Management 	Update the Development, Testing, and Release Management sections to include details on the adjustment to the Discovery, Sprint Development Cycles, and the Sprint Hardening phases to bring in the Minimum Viable Product (MVP) mindset and deliver better value to the State.
Agile Configuration Management Plan	Our current experience with configuration management of IEDSS and our national expertise of Agile configuration managing is the perfect blend for the State of Indiana. Configuration management is one of the key disciplines in Deloitte's IEDSS Iterative Project Delivery method and is developed on CMMI and PMBOK guidelines. It is then further improved based on our experience in Indiana. This outlines the roles, tools, and processes to	Add any Agile automation tools that are agreed upon by the State to enhance the current IEDSS DevOps landscape to bring more focus on quality in earlier SDLC phases to reduce the cost of quality. Also include details of how we will configure the

PMP Section	Our Approach and Section Content	Elevating through the Initial Transition
	<p>identify, control, and maintain software configuration with the following sections:</p> <ul style="list-style-type: none"> • Introduction & Overview • Tools, Infrastructure, & Environments • Components & Configuration Items • Configuration Management Processes • Merge Procedures • Build & Deployment Process • Documentation Management 	<p>build process and documentation management plans to align with the Discovery, Sprint Development Cycles, and the Sprint Hardening phases of the Hybrid Agile SDLC Methodology.</p>
Issue Management Plan	<p>We understand that issues will come up, and we are ready to negate their impact. Effective issue management provides a mechanism for issues to be identified, documented, assessed, escalated, resolved, and communicated. This describes the plan for identifying, logging, and resolving issues through the PM tool with the following sections:</p> <ul style="list-style-type: none"> • Issue Process Summary • Create Issue • Manage & Resolve Issue • Escalate Issue • Close Issue • Monitor Issues 	<p>Enhance the content in sections to provide additional details on how issues will be created, managed, resolved, and monitored as we transition our PM Tools from PMC to Jira. With Jira, issues will be tracked more with greater transparency for the State which will allow for quicker delivery times in resolving any issues that may arise.</p>
Risk Management Plan	<p>All projects come with risks but identifying them ahead and managing the impacts is the purpose of our risk management plans. The purpose of risk management is to control risks using a structured and well-defined process. The IEDSS project employs standard methods and procedures to minimize the impact of risk and promote success throughout the duration of the project. This allows the plan to identify, monitor, and report risks using the PM tool with the following sections:</p> <ul style="list-style-type: none"> • Risk Process Summary • Identify & Analyze Risk • Develop Risk Response • Determine if Risk is Realized or Still Active • Risk Exposure • Monitor Risk 	<p>Re-define the process for identifying and monitoring risks through Jira and how this will affect the process of analyzing risks and developing a plan to respond to these risks. The new PM Tool will result in better analysis of risks and our delivery time of developing an encompassing plan to develop a response plan to these risks for the State.</p>
Communication Plan	<p>Transparency, efficiency, and predictability are key to effective communication. The Communication Plan describes how internal project communications are managed for the duration of the contract. This outlines the communication methods and escalation processes across all stakeholders with the following sections:</p> <ul style="list-style-type: none"> • IEDSS DFR Stakeholder Communications • IEDSS Federal Partner Communications • IEDSS Internal Project and Partner Communications • Deloitte IEDSS Project Internal Communications 	<p>Include information in sections to demonstrate how the Scrum Team structure encourages Deloitte team, State SMEs, and UAT Team to work together from Day One. This reduces the number of communication channels that we must actively manage, increasing the effectiveness of overall communications.</p>
Quality Assurance Measures	<p>Quality assurance is the application of planned, structured activities to help verify that the project team 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 and defines the assessment review plans for the project. This describes measures to monitor and control project quality with the following sections:</p> <ul style="list-style-type: none"> • Quality Management Overview • Quality Guiding Principles • Roles & Responsibilities • Project Quality Standards • Quality Control 	<p>Enhance the Quality Control section to explain how we will modify testing processes throughout the Hybrid Agile SDLC to inspect, identify, and monitor system changes from start to end, such as Unit Testing in Sprint Development, End-to-End Testing in Sprint Hardening, and Smoke Testing in Production Testing.</p>
PMP Management Tools	<p>We bring the right tools for the job. During project initiation we will review the requirements and needs of Indiana to bring the right tools to manage our PMP. This describes the tools used to manage our PMP with the following sections:</p> <ul style="list-style-type: none"> • Deliverable Feedback and Approval Forms 	<p>Modify the content in the Jira Software section to align with requirements defined by the new Contract and provide all details of the Jira PM Tool for the State. This will reduce the number of tools we currently</p>



PMP Section	Our Approach and Section Content	Elevating through the Initial Transition
	<ul style="list-style-type: none"> • Rational Jazz (requirements documentation and traceability) • Deloitte Internal Quality Project Reviews • Quality Assurance Assessments • Jira Software • FSSA IEDSS Project SharePoint Site 	use, resulting in an increase in efficiency for the State.
MITA Maturity Improvement Plan	<p>Helping Indiana stay compliant with federal and other guidelines is critically important to us. We understand that IEDSS is at a MITA Maturity Model (MMM) Level 3 which confirms that business processes and technology in IEDSS promotes collaboration, data sharing, interoperability and consolidation of business processes. We will continue to collaborate with the State to maintain our systems and processes at this Maturity Level through the following sections:</p> <ul style="list-style-type: none"> • Continued alignment of architectural updates with the MITA Maturity Roadmap • Continued facilitation of Secure Information Exchanges with Federal and other State agencies • Continued use of electronic media and business rules engine in processing all Medicaid applications and disbursing of benefits via the State MMIS system 	Deloitte's current IEDSS business, information and technical architecture aligns with MITA Architecture Framework 3.0. For example, our member eligibility and enrollment process is automated via use of business rules engine. We have automated data exchanges with Federal and other State agencies using secure communication technology. Our system design is modular which aligns extremely well with the MITA framework. We will continue to collaborate with the State on each of the applicable MITA framework and standards to prioritize and perform system upgrades that may be necessary as the MITA framework continues to evolve.

Table 4-9. Requested PMP Sections and Descriptions.

Project Schedule

The Project Schedule is an essential component to the PMP, outlined above, that enables transparency, predictability, and organizes resources for efficient utilization. The project schedule also standardizes the much-needed communication channel for a project of such size. Our team has worked with the State and its designees to maintain a project plan with regular updates as part of our DDI work for IEDSS in the past, and we recognize that those activities will continue as part of this scope of work. Please refer to Appendix 2 for a draft version of the Project Schedule we propose to the State as a baseline to accelerate project initiation and planning activities.

The structure of our Project Schedule allows us to effectively manage project tasks against defined milestones to execute and deliver the project. The format details each project task with a Task ID, Task Name, Task Mode, and Task Status to organize and categorize the tasks. To manage the execution of each of these project tasks, the structure provides the Task Completion Status in percentages, the Task Duration in days, the Task Timeline with start and end dates, and the Task Predecessors based on dependencies with other Task IDs.

With the above structure, the project tasks are categorized into sections within our Project Plan based on the following project phases: Initial Transition, Sprint Development, and Recurring Activities. The information included in each of these sections is detailed below.

- **Initial Transition:** This section outlines over 60 project tasks from the initial Transition Preparation Kickoff Meeting to the Transition Closeout meeting, so the State's goals are achieved as a part of the new contract.

Examples of these tasks include the submission of the draft and final versions of the PMP, SLAs Report, and SDLC Management Plan. It also outlines the plan for the 7 SDLC Training Sessions for a smooth transition to the Hybrid Agile SDLC Methodology.

- **Sprint Development:** This section includes over 70 projects tasks to manage the planning of the Sprint, in addition to the development and deliverable progress of each Sprint. For instance, we include 17 tasks under Plan Sprint Activities that range from defining the sprint plan and scrum teams to presenting the final user story template. After covering all Sprint planning tasks, we then outline the development progress of each Sprint Team such as the development, testing, and demonstrations of each requirement. The progress of the Sprint Deliverables is broken into over 15 tasks spanning from the initial submission of the detailed design to the final sign-off on testing scripts and deliverables.
- **Recurring Activities:** This section details over 55 project tasks and is separated by Monthly, Quarterly, and Annual tasks. For each month of the year, this section outlines the tasks surrounding the delivery of the M&O Status Report, Security Status Report, and SLA Report. The quarterly section provides the task progress related to the SW/HW Lifecycle Management Meeting in addition to the Plan of Action & Milestone (POA&M). The annual section includes the progress on 7 yearly tasks such as the Staffing Plan, Project Management Process Review, and the Safeguards Security Report (SSR).

Deloitte works with stakeholders during project initiation to review and adjust the existing Project Schedule to reflect the most up-to-date and collaborative version of the plan. The Project Schedule continues to be distributed to the State on a weekly basis as part of the new Contract.

4.c Status Updates

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.3

c. Describe your plan to provide the State Status Updates as outlined in Section 4.3.

Deloitte firmly believes in transparency and understands the importance of providing frequent updates on status, schedule, risks, and issues. This thought process defines how we approach status reporting at IEDSS.

We understand the value of your time, so we continue to optimize the number of meetings we have with the State to utilize that time most efficiently. While these meetings serve as an official channel to drive communication with project stakeholders, we do not consider them to be the only opportunity we have to escalate or work through critical issues. We also maintain regular contact with the State to work through issues as they arise without waiting for the next scheduled meeting for timely escalation and resolution. We remain in close contact to communicate transparently, anticipate and mitigate issues, and collaborate on solutions. Our years of experience working together, knowledge of your priorities and preferred working style, and strong relationships lead to efficient use of everyone's time, effective results, and easy resolution of issues.

At the onset of the COVID-19 PHE, naturally there were questions as to how the transition to the remote operating model would work between us. Our dedicated staff worked alongside the State so that we could quickly adapt to and overcome these obstacles together as one team. Whether these meetings are held virtually, in-person, or hybrid in the future, we continue to walk by your side both in and out of these meetings to facilitate the successful delivery of process improvements.

Deloitte provides project status updates as part of weekly status meetings and via frequent reporting channels such as the IEDSS Service Level Agreements Monthly Report, the Production Release Report, the Monthly M&O Status Report, and the Monthly Security Status Report.

We also work with the State to conduct additional ad hoc status update meetings to discuss specific initiatives and prepare presentation material for them. For instance, with the changes brought about by the COVID-19 PHE, we



Deloitte leads preparation for Status Update Meetings by:

- Collecting status updates from other vendors and stakeholders
- Consolidating this information and supporting the State in gathering information they would like presented in these meetings
- Our team is highly engaged in these meetings and we support the State by hosting the meetings and providing relevant insights and constructive feedback

introduced a status meeting to specifically discuss the system impacts, potential mitigations, and solutions due to the pandemic. Reports shared during status update meetings are further described in Section 4.g.

Details of proposed forums, including recommendations, frequency, and attendees, are listed in the following table.

Meeting/ Status Updates	Description	Frequency	Deloitte Facilitator	Stakeholders
IEDSS Weekly Status Meeting	Weekly meeting to update State leadership on overall project status, in addition to reviewing the progress of the Weekly Status Reports (i.e., Production Release Status, M&O Status, and Security Status Reports), submitted to the State that outlines: <ul style="list-style-type: none"> Updated risk logs Risk mitigation strategies Issue logs Latest approved Project Schedule Status Updates Due to other communication forums, a formal meeting may not be needed and can be handled as a weekly or monthly written communication based on the State's direction and preference.	Weekly	<ul style="list-style-type: none"> PMO 	<ul style="list-style-type: none"> Deloitte State leadership Appropriate project stakeholders as identified by the State
UAT Status Meeting	Ad hoc touchpoint to discuss high-level testing updates and escalate risks.	Twice a week	<ul style="list-style-type: none"> Testing Team 	<ul style="list-style-type: none"> Deloitte Appropriate project stakeholders as identified by the State
Defect Triage Meeting	Meeting to discuss defects, determine their severity, and prioritize defects to upcoming releases based on severity; status check of change requests and defects in the current release is also carried out to confirm on-track delivery or address impediments.	Three times a week	<ul style="list-style-type: none"> M&O Manager 	<ul style="list-style-type: none"> State Project Managers, State SMEs, Policy Team App Dev Leads, SIT Team, UAT Team, and Training Team
Tech/Infra Meeting	Weekly meeting to update IOT and the State on Infra/DBA progress. Information presented includes: <ul style="list-style-type: none"> Infrastructure-related upgrades, patches, change requests, and firewall needs for IEDSS Implementation plan, proposed timelines, scheduled downtime, and approval of activities 	Weekly	<ul style="list-style-type: none"> Tech Team 	<ul style="list-style-type: none"> IOT and State Stakeholders Deloitte
Change Control Board (CCB) Meeting	Includes the context/justification, proposed change, and potential impacts (e.g., project schedule, resources, cost) of the change request; the number of hours scheduled in each release and enhancements yet to be scheduled and tag it to a release; and revisit any enhancement that needs to be reprioritized based on business needs. We are open to reducing the frequency of this meeting and will respond accordingly based on the State's preference and direction.	Weekly/ As needed	<ul style="list-style-type: none"> PMO 	<ul style="list-style-type: none"> Deloitte State leadership Appropriate project stakeholders as identified by the State
Environment Planning Meeting	Monthly meeting with teammates to coordinate transitions to different releases. IEDSS and teammates' environments are discussed, along with transition dates, to avoid any confusion or constraints for any system. We are open to having this meeting more frequently depending on the current and future release cycle based on the State's preference and direction.	Monthly	<ul style="list-style-type: none"> Operations Manager 	<ul style="list-style-type: none"> Deloitte Moser, IOT, ILAT, and Test Teams
Ad-hoc Meetings	Ad hoc meetings as requested by the State to discuss new policy updates, new or updated regulations, project risks, project updates, and status outside of the Weekly Status Meeting.	Ad hoc	<ul style="list-style-type: none"> Deloitte Leadership 	<ul style="list-style-type: none"> Deloitte State leadership Appropriate project stakeholders as identified by the State

Meeting/ Status Updates	Description	Frequency	Deloitte Facilitator	Stakeholders
Periodic Review of Project Management Processes	Periodic meeting to review existing project management processes and the transition to Hybrid Agile SDLC, gather feedback from stakeholders, and provide recommendations for improvement of processes.	Periodic	<ul style="list-style-type: none"> Deloitte Leadership 	<ul style="list-style-type: none"> Deloitte State leadership
PMO Touch Point	Weekly meeting with state leadership to connect on any high priority items identified by Deloitte or the State, developing a plan to address the outstanding items, as well as managing the process and execution of all high priority items.	Weekly	<ul style="list-style-type: none"> PMO 	<ul style="list-style-type: none"> Deloitte Leadership Technology Team State leadership

Table 4-10. IEDSS Status Updates.

Most of Deloitte's project team lives locally in Indiana and all vital and specified non-vital personnel are available for meetings in Indianapolis during Indiana business hours, as per Attachment K. Deloitte's office is conveniently located close to the State at 111 Monument Circle.

4.d Project Quality Management

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.4

d. Describe your plan to perform the Project Quality Management responsibilities outlined in Section 4.4.

Our project management approach focuses on embedding quality in every aspect of our work from the very beginning and is integral to our delivery mindset. Our approach provides transparency and accountability, while getting quality work done quickly, efficiently, and collaboratively. It includes an extensive cycle of establishing quality objectives and standards, quality planning, quality implementation, and quality improvement.

As seen in the following figure, our project quality management components and activities consist of quality objectives and standards, quality management planning, implementing and maintaining quality management, managing deliverables, and corrective actions. These are described in detail in this section.



Our quality management approach allows us to sustain excellence for the State while limiting the need for corrective actions:

- 62% reduction in Production defects in 2021 due to our enhanced quality assurance effort
- 45% reduction in logged incidents from 2020 to 2021
- Over 60% reduction in data fixes in 2021
- 100% system availability in the current calendar year
- 100% compliance with response time SLA in current calendar year
- 100% user documentation compliance in the current calendar year
- 351 Regression Test scripts to validate code changes

Quality Objectives and Standards

Deloitte has developed and will continue to leverage and maintain the Quality Management Plan to adhere to quality objectives and standards. We also have a robust Service-Level Management (SLM) methodology that promotes compliance with quality objectives and standards where we monitor all standards, report compliance and non-compliances of the standards, resolve any non-compliances with the State, and work with the State to develop a plan to mitigate a similar non-compliance in the future. By doing this, quality objectives and standards will continue to be monitored and addressed through thorough quality planning, quality assurance, and quality control.

Quality standards of the system include coding standards (like how to develop and check in code changes), requirements standards (like effective ways of writing a requirement), and document standards (like the length of time taken to complete a document review). We quantify these standards in a way that can be easily measured by the State. For example, for the online system availability of both the IEDSS worker portal and client facing portal web services, we will calculate the percentage of actual uptime of the system every month. For the response times, we will calculate the percentage of transaction completed in less than 5 seconds, 8 seconds, and 15 seconds. These are just a few examples, but our quality standards captured in the Quality Management Plan used at IEDSS are aligned with the State's quality objectives, as detailed in the table below.



Figure 4-2. Deloitte's Quality Management Components.

IEDSS Quality Objectives	Processes Implemented to Meet the State's Objectives
Implementing mechanisms to satisfy the State's IEDSS solution expectations	<ul style="list-style-type: none"> • Deloitte SME reviews to verify accuracy and quality of the developed solution, such as peer code reviews, through development phase in addition to unit testing and support through SIT and UAT testing. • Establish standards and process documented within a robust Quality Management Plan, like how PMO maintains system documentation throughout the SDLC by reviewing all design deliverables, testing documentation, and requirements traceability prior to going into Production. • Leverage insights from leaders within Deloitte's HHS team to bring innovation, lessons learned, industry best practices, and derive effectiveness of existing processes. • Bring recommendations for continuous improvement and innovation.
Documenting and adhering to project-wide standards	<ul style="list-style-type: none"> • Our on-boarding process includes materials that are reviewed with each staff member that include the standards outlined below as appropriate for their role: <ul style="list-style-type: none"> – Documentation standards: outlines existing DEDs to create accurate, high quality deliverables – Document control standards describe deliverable management process and document monitoring – Software Development Lifecycle standards: explains expectations and timeline interpretations of releases – Requirements standards: provides expectations for system requirement wording and processes – Coding standards: details the guidelines for all code developments and the process of submitting changes – Testing standards: outlines the criteria for thorough testing and all the associated documentation – Configuration standards: describes process for deliverable/code changes requiring version management
Proactively avoiding issues by mitigating risks	<ul style="list-style-type: none"> • Thorough testing beginning in the early development, such as Unit Testing, System Testing, and Integration Testing, validates incremental code changes to mitigate potential risks and avoid future issues. • Continuous monitoring of the system and pre-run batches to identify incidents that could lead to issues with SLA compliance. • Detailed impact analysis of risks or issues identified during system monitoring to enable the State to make a sound decision on the resolution. • Based on the decided resolution, the next steps will be discussed with the State to determine possible impacts such as enhancement delivery, staffing, technology sustainability, and security to avoid future issues. • Management structure to identify and discuss these mitigations with the State in recurring meetings such as the Weekly Status Report.
Reporting and evaluating performance measures	<ul style="list-style-type: none"> • We monitor service levels using COTS such as Splunk, customized software assets, and ALM tools (e.g., Jira, IBM RTC/Jazz) that allow us to collect appropriate real time and batch data related to the Service Level measurements.

IEDSS Quality Objectives	Processes Implemented to Meet the State's Objectives
	<ul style="list-style-type: none"> This collected data is then aggregated to generate our monthly SLA dashboard and summary report which indicates whether the SLA is compliant. For each of the SLAs, this report provides details of the performance metric description, data source, and actual metric measure formula. It also includes a table that breakdowns the SLA calculation for each day of the month.
Clarifying questions and concerns regarding SLA performance status	<ul style="list-style-type: none"> We will provide analysis and information for any missed SLA based on our Service-Level Management (SLM) methodology: <ul style="list-style-type: none"> Monitor: identify incidents that could lead to SLA breaches and immediately communicate to the State Measure & Report: analyze the incident and impact on SLA, document the incident, conduct root cause analysis for overall impact, and create an Action Plan to resolve incident and submit to the State for approval Manage & Resolve: if the State approves, execute remediation plan, assess results, confirm with the State that the incident is resolved, and record impact of the incident to SLA for future reporting Review & Feedback: implement system and monitoring tool changes to identify similar incidents and prevent them from re-occurring

Table 4-11. Quality Objectives & Standards at IEDSS.

Quality Management Planning

The State needs a reliable vendor to successfully maintain and operate IEDSS who continues to maintain the quality standards established at IEDSS. They should also strive to bring innovation and industry best practices to refine the quality management approach across methods, processes, templates, and tools. We have been able to successfully conduct quality management planning, assurance, and control with initiatives at IEDSS, such as incorporating **lead testing** of sub-components to confirm that each deliverable and their respective modules work end to end and identify any cross functional impacts.

Additionally, we continue to implement multiple quality check points or checklists in various stages of our project implementation. For instance, we introduced **SME reviews** as a part of the development process, which resulted in a significantly lower number of defects found during UAT due to early detection as well as reduction of gaps between planned and executed functionality, further streamlining the SDLC process.

Our approach to quality management planning continues to benefit the State by maintaining security compliance and providing stability to the system, given the high quality of changes deployed to Production. Our approach consists of three areas: quality planning, quality assurance, and quality control. Our experience with quality planning is further detailed in the following table.

Quality Management Planning	Approach	Demonstrated Quality Management Activities at IEDSS
Quality Planning	<ul style="list-style-type: none"> Refine the quality standards and measurements for IEDSS building from established standards Collaborate with the State leadership to further refine and improve the quality of products crucial to producing quality outcomes Develop and maintain the Quality Management Plan with approved project standards, tools, templates, processes, and lessons learned Assist the State in developing and documenting a comprehensive disaster recovery procedure to follow in the unlikely event of disaster to fully recover the IEDSS application 	<ul style="list-style-type: none"> Successfully met and exceeded the Service Level Agreements and Standards for System Uptime and System Response Time, since go-live as demonstrated by the metrics below: <ul style="list-style-type: none"> 0.21 second average response time for all transactions 99.2% of all transactions have a response time less than 5 seconds 99.9% IEDSS Worker Portal uptime Helped the State efficiently implement 33 changes brought about by the PHE, without compromising quality
Quality Assurance	<ul style="list-style-type: none"> Continue to take measures to proactively prevent defects and quality issues by having a robust approach to documentation, standards, and training Perform verifications to validate the defined methods, templates, standards, guidelines, and processes are followed to produce quality products Validate proper linkage between all items in ALM to establish traceability Carry out engagement reviews with senior Deloitte leadership and SMEs to identify areas of 	<ul style="list-style-type: none"> Detailed review/audit with a robust checklist by the PMO Team to validate that the processes, guidelines, documentation, and tools are being followed by the project team Holistic onboarding packet shared with new members aligns expectations for documentation, standards, and training from Day One, as demonstrated by our ability to be fully compliant with user documentation SLAs in the current year

Quality Management Planning	Approach	Demonstrated Quality Management Activities at IEDSS
	<ul style="list-style-type: none"> improvement and provide actionable recommendations Confirm incidents, defects, and data fixes are addressed quickly and implemented efficiently and that all necessary documentation, standards, and training are updated when applicable to prevent the issue from re-occurring the future 	<ul style="list-style-type: none"> Added new fields in the RTC to track whether recurring data fixes were needed and created a schedule to triage defects, incidents, and data clean-up activities
Quality Control	<ul style="list-style-type: none"> Inspect and detect issues through performing quality checks such as testing and monitoring for each of the following: <ul style="list-style-type: none"> Batch operations Releases, incidents, defects, and data fixes Technology Security Monitor results for quality and identify corrective or improvement actions when results are unsatisfactory. Implement automated code and configuration quality checks to identify inconsistencies and deviations from best practices and standards Testing processes throughout the Hybrid Agile SDLC to inspect, identify, and monitor any issues that could exist in the system from start to end, such as Unit Testing in Sprint Development, End-to-End Testing in Sprint Hardening, and Smoke Testing in Production Testing. Please refer to <i>Section 5</i> for additional details on our approach to testing as aligned to Hybrid Agile SDLC. 	<ul style="list-style-type: none"> While conducting End-to-End testing for the electronic notice functionality with an outside vendor, we discovered that the delivery acknowledgement was not being shared correctly with our system and quickly helped them resolve the issue When EPPIC was updated by Conduent, we provided regression testing support between EPPIC and the IEDSS system to confirm there was no impact to IEDSS functionality Support end to end testing support whenever the State needs it, like we did with CaMMs and BDDS Utilize 351 Regression Test scripts to validate code changes Added IEDSS Splunk alerts to inspect and escalate trends in incidents due to possible network connectivity problems, system outages, or document upload process failures Altered Interim Business Processes (IBPs) with various review and approval measures so there is a system in place to maintain quality until issue is resolved

Table 4-12. Quality Management Planning Approach.

Code quality plays a vital role in software quality, which affects the security and reliability of the system. To introduce effective code quality assurance and control, we incorporated tools and best practices through rigorous quality planning to allow for superior level of work products at IEDSS. The quality control tools used at IEDSS are detailed in the following figure.

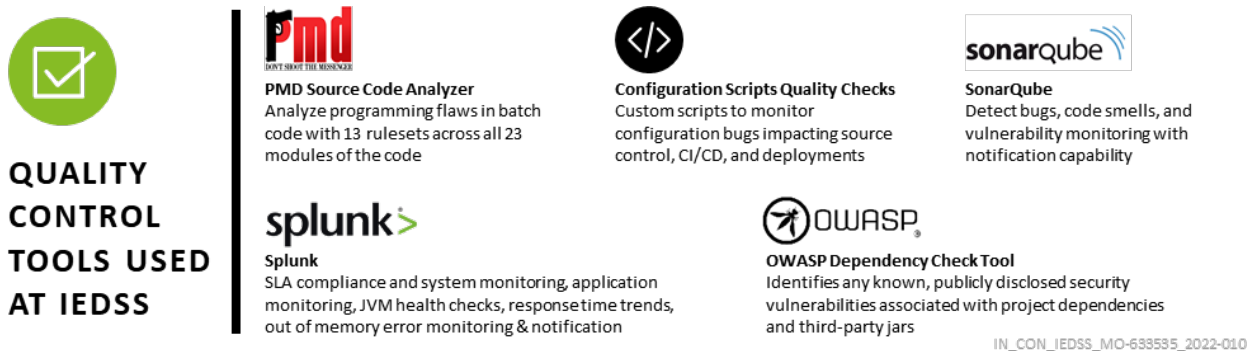


Figure 4-3. Quality Control Tools Used at IEDSS.

Implementing the Quality Management Plan

To carry out quality activities on time and escalate project risks, it is imperative that the project team is familiar with and follows the standards laid out in the Quality Management Plan (QMP). Deloitte is already familiar with the existing quality management processes which will allow us to easily follow the steps laid out in the following figure to successfully implement the new Quality Management Plan.

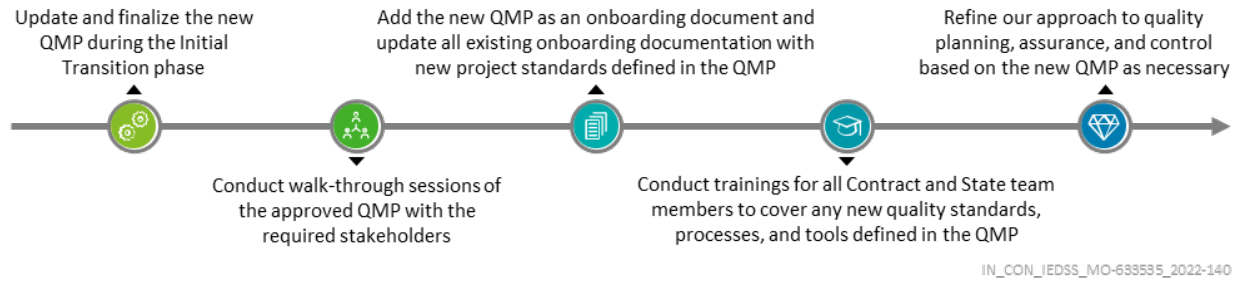


Figure 4-4. Our Approach to Implementing the Quality Management Plan.

The following table lists our proposed project standards. These standards are grounded in existing processes that have been successfully used on IEDSS, aligned with the State's expectations, and well understood by the existing team members who will continue to support this contract. We continue to work with the State to refine and modify these standards, as necessary.

Project Standard	Description	IEDSS Documentation for Standards	Updated During Initial Transition
Documentation Standards	<ul style="list-style-type: none"> Defines components required for project documentation Includes approved templates 	<ul style="list-style-type: none"> IEDSS Onboarding Guide System Documentation Overview 	✓
Document Control Standards	<ul style="list-style-type: none"> Defines procedures for submitting documents for review or approval and modifying documents as required Storing documents for future use 	<ul style="list-style-type: none"> Project Management Reference Guide System Documentation Overview 	✓
SDLC Standards	<ul style="list-style-type: none"> Defines notable criteria required to enter or exit an SDLC phase as outlined by the IEDSS Hybrid Agile SDLC Methodology Defines key characteristics of each SDLC phase as it relates to this engagement 	<ul style="list-style-type: none"> IEDSS Onboarding – Functional Project Management Reference Guide 	✓
Requirements Standards	<ul style="list-style-type: none"> Defines components required for requirement documentation Defines procedures for documenting and modifying requirements as required Maintains requirements in a shared location for reference as required 	<ul style="list-style-type: none"> Project Management Reference Guide System Documentation Overview 	✓
Coding Standards/ Configuration Standards	<ul style="list-style-type: none"> Defines best practices, architecture, and methodology to be followed across the project Automated code scans for inconsistencies using different COTS products 	<ul style="list-style-type: none"> IEDSS Onboarding – Technical Technical Architecture & Guidelines 	✓
Testing Standards	<ul style="list-style-type: none"> Defines standards for test scenario, test script, and test data development Defines criteria for defect documentation and prioritization 	<ul style="list-style-type: none"> System Documentation Overview IEDSS Onboarding – Testing 	✓
M&O Standards	<ul style="list-style-type: none"> Outlines the guidelines for standards related to databases, security and privacy, batches, and technology upgrades Defines criteria for ticket documentation and prioritization based on business needs Defines criteria for periodic releases to Production 	<ul style="list-style-type: none"> Technical Architecture & Guidelines Release Management & Build Process Security Policy 	✓

Table 4-13. Quality Management Plan–Project Standards.

Deliverable Management

To maintain the current state of IEDSS and identify areas for improvements, it is critical that system documentation, code, and other design artifacts are detailed, accurate, and accessible to the right users. Currently, at IEDSS, Deloitte has collaborated with the State for over 500 design documents and 150-plus testing deliverables since go-live in April 2019—and has worked through the approval cycle with the State. We have also been following the deliverable management process to create new high-quality deliverables that are accurate, user-friendly, and easily comprehended by stakeholders across domains.

Deloitte's familiarity with the current deliverable management process will allow for an efficient transition for the State. By continuing with Deloitte, the State will save the time and effort needed to educate a new vendor on this process. This time and effort can be then be devoted to improving the system and delivery to Hoosiers rather than educating a new vendor on this process. We are aware that when there is a change in circumstances, such as the PHE, it is still imperative to adhere to this process. Our experience allows us to adapt to these changes and accelerate the delivery management process to promote proper standards being followed when the State needs it the most.

Deloitte also realizes the different responsibilities that the State undertakes and the constraints on time that it places on its staff. As such, we propose recommendations to streamline the system documentation update process for Defects or Change Requests (CRs), which is currently in place at IEDSS. Given the different changes being made to the system across different tracks, it is essential that existing system documents be updated timely and that the most recent changes are documented and approved by the right stakeholders. Our approach to each of the requirements defined by the State is laid out in the following table.



Figure 4-5. Deliverable Management Process.

RFP Requirement	Deloitte's Approach
The Contractor will submit electronic copies of all deliverables, including non-written deliverables (e.g., source code and software and network configurations) for each task or subtask. Each deliverable submitted to the State for review and approval will have a formal transmittal letter from a Contractor Project Manager.	<ul style="list-style-type: none"> Deloitte submits electronic copies of deliverables requested by the State and will include a formal transmittal letter from the Project Manager for new documentation that is created at IEDSS. Our Deliverable Management Process is in line with the process requested in the RFP and is consistent with the process currently followed at IEDSS, outlined in the figure above. As requested by the State, all SDLC deliverables and reports will adhere to this robust deliverable management process that we have developed together.
The Contractor is responsible for validating that Contractor staff uses the appropriate, approved templates and project tools for deliverables.	<ul style="list-style-type: none"> Our team is familiar with existing DEDs and templates being used at IEDSS. The team will continue to use these in preparing the deliverables while providing recommendations for improvement when necessary. In addition to internal audits by the PMO Team to validate adherence to deliverable requirements, we make the Deloitte staff aware of these expectations right when they onboard by providing them with the IEDSS Onboarding Guide, System Documentation Overview, and Project Management Reference Guide.
The Contractor shall submit deliverables that are complete, meet all contract requirements, and on time per the approved Project Schedule.	<ul style="list-style-type: none"> Our PMO Team at IEDSS follows a well-defined system documentation update process. They perform a quality check on each document after the document has been updated at two stages during SDLC—once after design approval from SMEs and again after UAT has signed off on the functionality. This process makes sure that only the highest-quality documents are being produced by our team of experts, in accordance with the approved Project Schedule.

Table 4-14. Our Approach to Deliverable Management Requirements

Our experience with complex implementations, and our sound project team, enables us to bring best practices from other states to confirm we produce quality deliverables on time and in accordance with contract requirements. This has been demonstrated by our ability to maintain 100 percent user documentation compliance in the current calendar year.

Corrective Actions

As one of our quality management principles, we are continuously monitoring quality assurance and quality control standards referenced above. Should we notice a deviation from the established quality standards at IEDSS, Deloitte will continue to escalate these deficiencies—either code issues, data issues, technical infrastructure issues, or worker errors—to the right stakeholders immediately. We continue to document quality issues in our PM tool and take responsibility for resolving any non-compliance with quality standards. For action items, our team will conduct a thorough root cause analysis to create a remediation plan which will be communicated with the State to determine if an issue, risk, or change is needed. All issues, risks, and changes will be tracked and published in the Weekly Project Status Report. In the event these require a change to a process or standard, the change will be communicated immediately to the State. Any quality standards issues that require additional training will be also communicated to the State, to promote improved quality control in the future. Our team will develop a plan to mitigate similar issues in the future.

We recognize the importance for the State to adhere to quality standards and our diligent team, including our Project Manager, will support the State in resolving any deviations from standards that may arise. We have continuously built quality into the IEDSS solution, and we will continue to refine it during IEDSS M&O through a proactive quality management program, that includes stable and repeatable processes that are incorporated into each stage of the project.

Our Project Quality Management Meets Your Goals

We are committed to delivering and embedding IEDSS quality management across all teams, in addition to providing an experienced PMO team dedicated to overseeing this process. Our commitment to the IEDSS quality management, goals and how our approach aligns with them, is detailed in the following table.

IEDSS Quality Management Goals	Our Quality Management Approach Helps You Meet Your Goals
Defines the approach to verify that project methods, processes, templates, and tools are being used by the project team properly and are effective	<ul style="list-style-type: none"> • Leverage the Quality Management Plan, which documents quality control processes and standards being used at IEDSS. Before a release goes into Production, PMO conducts a review of our electronic library to quality check and track all designs, change logs, test scenarios, and test cases to facilitate proper merging into the system documentation folder. • Conduct internal audits of our own documents and processes to verify that the defined approach is being carried out correctly and effectively by the team. We promote this from the start with the System Documentation Overview that is sent as part of the onboarding packet. • Leverage best practices from other states and innovations for process efficiency by requesting information across Deloitte's project portfolio, as we did for the Cognos Upgrade and Medicaid No-Change Auto-Renewal enhancements. • Make recommendations for process improvements, as we did for the application processing enhancement that accelerated processing times for self-service Medicaid applications.
Defines the approach to verify that deliverables are meeting project standards and quality expectations	<ul style="list-style-type: none"> • Robust deliverable management process from developing and reviewing the DED to attaining deliverable approval to create accurate, high-quality deliverables like we have in that past with over 500 design documents with State. • Standard deliverable expectation documents to align with the State's expectations from the deliverables. • Prototypes, frequent demos, and code reviews along with other participatory techniques to validate that the developed solution delivers to IEDSS vision. • Thorough and early iterations of code reviews with quality tools such as PMD Source Code Analyzer, SonarQube, and OWASP Dependency Check allows for more efficient testing to improve quality and reduce defects related to design gaps. • Thorough review by our PMO team to confirm deliverables meet project quality standards and are current.
Defines what additional groups outside the core project team will be supporting the project to help achieve these quality objectives	Engage dedicated, independent team of advisors to bring the full capability of Deloitte's corporate experience. The following Project Advisors are engaged with the project staff to discuss the issues/challenges or opportunities for innovation and help draw upon applicable experiences and solutions from other states:

[illegible]

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)	RFP Reference: Attachment C, Section 4.5
e. Describe your company's plan to conduct the Change Management Process activities outlined in Section 4.5.	

We understand the importance of a well-defined and robust change management process to a mission-critical and ever-evolving system, such as IEDSS. We plan, manage, and implement these changes with the same rigor and transparency as our project management processes. However, we also know that policy requirements change often and that the ability to be adaptive is not only a benefit, but also a necessity to a well-functioning change management process.

From our experience with the State, and on similar projects across the country, we understand that the eligibility and enrollment business requires flexibility. Following a plan is always prudent, but when changes are required, we have consistently demonstrated the ability to adjust and adapt to the situation to focus on the State's highest priority items whenever they arise. We will work with the State at every point in the process to develop requirements, approve designs, and test new changes in a timely fashion. We recently demonstrated this ability was when a legislative change updated the TANF income rules to exclude student income from the income budget on a case. The change was approved in April, but it had to be complete and functioning in Production by July. This short turnaround time necessitated that we adapt, and work closely with the State, to act on the matter promptly and deliver the change to Production on a short timeline. We have valuable experience on IEDSS, and other projects, in refocusing our work and reallocating our resources to meet the changing priorities of the State.

Our proposed change management process is illustrated in the following figure:

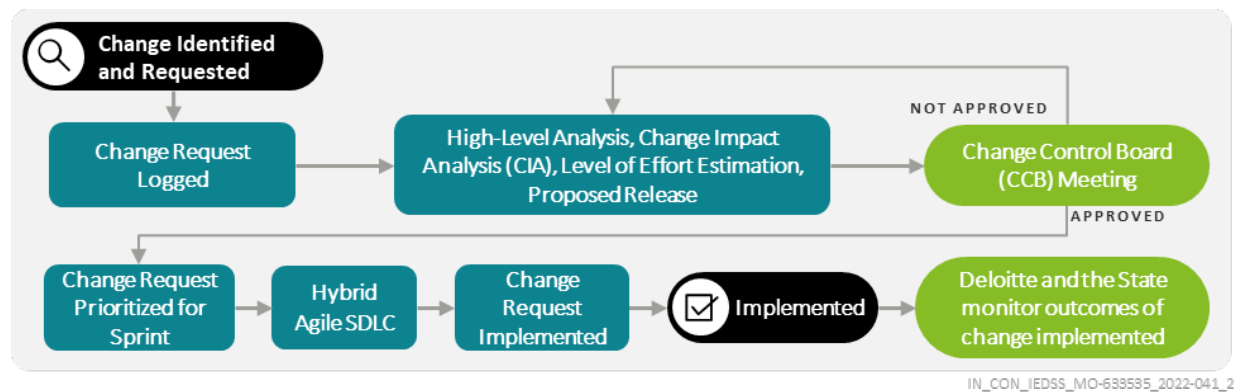


Figure 4-6. Change Management Process.

As we transition into our Hybrid Agile methodology, Deloitte proposes we plan frequent planning meetings to discuss the priorities and direction of the project for the upcoming release cycle(s), as well as the budgeting and prioritization aspects of the changes. Specific changes will be discussed throughout the year to prioritize different changes and schedule releases as per the State's inputs for the pipelined CRs. Once a change is identified, the following steps from the previous figure will be followed:

1. **Change Request Logged:** The State will formally log the CR.
2. **High-Level Analysis, Change Impact Analysis (CIA), Level of Effort Estimation, Proposed Release:** Deloitte will analyze the CR after the State logs it and will determine the estimated scope of the change. This information will be used to determine a high-level effort estimation, at which point the change can be proposed for a specific release based on release bandwidth.
3. **Change Control Board (CCB) Meeting:** Deloitte and the State will meet, and a decision will be made on whether each specific CR will be Approved or Not Approved for the proposed release.
4. **Change Request Prioritized for Sprint:** After the CR is approved by the State, it will be planned for a specific Sprint based on change priority and sprint bandwidth.
5. **Hybrid Agile SDLC:** The Software Development Lifecycle outlined in the *Section 5, Software Development Lifecycle (SDLC) Approach* will be followed to design and develop the CR in the planned Sprint while providing regular status updates to the State.
6. **Change Request Implemented:** The CR will be implemented into Production in a planned Release by Deloitte after all design, development, and testing phases of the SDLC are complete.
7. **Deloitte and the State monitor outcomes of the change implemented:** all CRs implemented to Production will be monitored to make sure they are working as expected. If anything unexpected occurs, Deloitte will work with the State to decide on the next course of action.

Change Management Process

RFP Reference: Attachment C, Section 4.5.1

Changes to project schedule, budget, and scope are inevitable on a complex system implementation like IEDSS. CRs may be the result of several factors, including federal mandates, state legislative changes, changes to state regulations, users, input from project team members and sponsors, the bi-annual planning meeting, or external agencies. Change can often lead to a better solution or an improved business case. However, if changes occur in an unregulated manner, they can lead to project delays due to an inability to manage the impact on scope, resources, cost, and/or schedules. Our goal for IEDSS is to continue to operationalize a streamlined process for change management and change control to reduce risk and the number of changes required over a period of time—while still adjusting as needed to implement all high priority items in an efficient timeframe according to our Agile approach. The requirements for the Change Management Process are outlined and explained in the next sections.

Change Request Content

Deloitte aims to identify changes that may potentially affect the IEDSS solution and will continually monitor the outcomes for any changes. We want to continue to use ALM as a tool to support change management, where the Change Request Roadmap is reviewed against the existing prioritized and new CRs. For each CR that is identified and planned to be prioritized, Deloitte will receive the following contents from the State:

- Description of the proposed change, including requirements
- Justification of Change, including cost benefit analysis if requested
- CR implementation date
- Type of Release (Major, Minor, Fix)
- Resource needs
- The State's decision as to whether the CR will utilize a fixed-fee or time and materials-based pricing
- Anticipated work location(s) and non-standard work hours, if applicable
- Deadline for Deloitte to provide a Change Impact Analysis
- Applicable program/funding source for the change

Change Impact Analysis

After the initial requirements for a CR are received from the State, Deloitte delivers the change impact analysis requested considering feasibility and information availability. This analysis is provided to the State within 15 days of the receipt of any CR. This process is implemented to assess quality, accuracy, and client usability of the change implemented. Each impact analysis conducted by Deloitte focuses on the impact of the proposed changes on project size, deliverables, requirements, existing assumptions and constraints, and schedule including milestones, statuses of current sprints, and dependencies.

The change impact analysis includes the following at a minimum with the assessment and evaluation of the impact of the proposed change on the current scope, price, and performance. Below we show a sample change impact analysis for a Medicaid Auto-Renewals CR:

Component	Sample Description for Medicaid Auto-Renewal Change Request
Description of the proposed Change	Develop a process to trigger auto-renewals in IEDSS via a webservice from the Benefit Portal when clients log in and indicate that there were no changes to their household. If changes are indicated in the Benefit Portal, a PDF of household changes will be accepted, and a task will be triggered for the case workers to process the Medicaid redetermination.
Justification of the proposed Change	Improve efficiency of processing Medicaid redetermination while improving alignment and compliance with electronic interaction requirements as cited by CMS in MEET and OBC requirements.
Type of Release-Major, Minor, or Fix	Major Release
Staffing plan and cost breakdown	The plan is to utilize four resources full-time for this CR, for a four-week period of design and implementation.
Staffing projection analysis	To implement this task successfully, four story points are needed, and two sprints will be required.
An analysis of the impact of the proposed Change on the following (as appropriate given the nature of the proposed Change):	<p>A detailed analysis of the proposed change to be entered here:</p> <ul style="list-style-type: none"> • Scope of the Contract: this change will be implemented in one major release cycle • Projected or anticipated savings, if any: savings are projected in state worker time needed to process redeterminations manually, • Performance standards: this will improve performance by auto-renewing individuals who indicate no changes in their redetermination • Delivery dates: 02/28/2022 • Security impacts and how they will be addressed: No additional security impacts anticipated • Any other matter reasonably requested by the State or reasonably considered by the Contractor to be relevant: this will require coordination with the Benefit Portal for seamless integration throughout the system
List of work products or deliverables	<p>The list of deliverables for implementing the change:</p> <ul style="list-style-type: none"> • Requirements List • High-Level Design

Component	Sample Description for Medicaid Auto-Renewal Change Request
	<ul style="list-style-type: none"> • Design Documents • Testing Scenarios
A timetable for implementation of the proposed Change	This change is proposed to be implemented in Major Release 16.0.
An assessment of the added value of a proposed Change to the State and to meeting the policy objectives	This change will add value to the State by streamlining the process for redetermination when no changes are reported by the client. Rather than having a case worker process every redetermination when no changes are being reported, now they will only need to process redeterminations with changes reported.
Anticipated work location(s) and non-standard work hours, if applicable	On site, with additional activities required outside standard working hours (such as performance testing and deployment activities).
SLAs and any performance withhold or incentives in addition to those in the Contract	No additional SLAs, withholds, or incentives to those in Contract.

Table 4-16. Change Impact Analysis.

Change Control Board Meetings

Our change control procedure is a successfully established process, proven to be very efficient, and effective for both the State and Deloitte. Identifying and qualifying changes in a timely manner is critical to the project, and both State and Deloitte staff apply appropriate effort and follow a robust process of analysis to support timely CR disposition. Our experience with this process has proven successful and will continue to do so. Since 2019, we have successfully scheduled over 400 CRs, spanning nine major releases, with additional minor releases along the way. Even as we transition into a Hybrid Agile methodology, Deloitte brings our expertise in Change Management to our new SDLC by effectively identifying potential system enhancements and prioritizing them based on their urgency and importance using the State's input.

The CCB meeting process adheres to the following the approach:

- Deloitte performs analysis on potential inherited issues and/or enhancements, and based on the due diligence will keep stats on the impact of this enhancements/fixes on the system ready to discuss in the CCB meeting that needs to be prioritized during the connect.
- The State's Chief Product Manager makes decision on what CRs will be prioritized, considering input from Product Owners. If any change is requested at a later phase of the project, the Chief Product Manager will analyze the requests from each of the sprint teams and prioritize accordingly for the upcoming sprints.
- The State's Chief Product Manager considers the impact and severity of the changes when making decisions on these prioritizations.
- In the CCB meeting, the State's Chief Product Manager presents the context/justification, proposed change, and potential impact to project schedule, resources, and cost (when applicable).
- In the CCB meeting, the Deloitte PMO documents the name of the CR creator, CR approver, the date the CR is approved, and comments associated with the CCB meeting (e.g., date, attendees, decision).
- Within one day of the CCB meeting, the State-identified approver modifies the ALM CR with the approval status.

Change Request Approval

We acknowledge and agree with the RFP requirement that states that Deloitte and the State continue to discuss the scope and nature of each CR and related Change Impact Analysis. The Steering Committee meets to discuss different aspects of the CRs, including the Change Impact Analysis, to review each potential CR to determine its priority—and decide which ones they will approve, defer, or cancel. Our new Hybrid Agile SDLC methodology allows us to prioritize changes in an ongoing fashion, while refining our product backlog on a consistent basis. As new enhancements are identified, they are prioritized according to their urgency, and we also regularly bring defects from the backlog to State for prioritization. Please refer to the CR submission and process overview in *Figure 4-6*.

Right to Contract with Other Service Providers

RFP Reference: Attachment C, Section 4.5.2

We acknowledge and agree that the State will retain the right to contract with one or more service providers for any matters that are the subject of a CR. Deloitte has a proven track record of working collaboratively with other service providers to implement CRs related to IEDSS in the past. In the past two years we have collaborated with several different vendors to implement various changes to the IEDSS system. We have worked closely with MMIS for a change involving PV Reconciliation and Reseed, with EBT to start expunging SNAP benefits for deceased individuals, with SAPN to implement a way to send payment information directly to the FSSA Financial Management System, and with Application Services to implement automatic processing of applications. As part of this process, we strive to understand the changes, assess their impact, and support the service provider in implementing the CR per the requirements. As part of the coordination efforts, members of our team work collaboratively with other service providers to:

- Conduct a holistic impact analysis involving both IEDSS and the external system (to the extent the information is available) the other service provider is managing
- Work collaboratively to implement the changes as required to support an end-to-end successful system flow

Priority of Change Requests

RFP Reference: Attachment C, Section 4.5.3

We acknowledge and agree the State will evaluate the progress of the ongoing CRs and, if determined that they cannot be accomplished within the expected timeframes or sprint due to various factors, the implementation priority for the CRs will be changed by the State.




As priorities change, we adapt in real time to adjust our release schedule to fit the State's needs. One specific time we showed this flexibility was in the implementation of the Asset Verification System, a CMS requirement that had to be prioritized and delivered within a shorter timeframe than usual. Our ability to adapt and update our roadmap based on the State's priorities allowed us to deploy this change when it was needed.

Deloitte works with the State to understand the re-prioritization of these changes and assess their impact. We understand the importance of our State's priority and help them deliver high quality for each of our changes. Our Agile approach will allow us to prioritize and re-prioritize quickly and efficiently to meet the State's needs. The process to effectively manage change in the priority is described below:

- Analysis of the current progress of the change to bring it to a logical end
- Re-prioritization of the CRs in collaboration with the State
- Re-estimation and re-scheduling of the release date based on the new priority of the CR
- Development of the CR by the Implementation Team as per the new release schedule

Experience in Continuous Improvement

In addition to the proposed changes identified by the State, Deloitte will listen to the State's needs and leverage our vast network of experienced practitioners and experience on similar projects to bring ideas that will enhance the system above and beyond what is immediately required. By proactively suggesting proven enhancements from both Indiana projects and others across the country, we can anticipate improvements to the system that may be needed in the future. The following figure shows just a few of the many times we have planned innovative enhancements to the IEDSS system to increase efficiency, usability, and effectiveness.

INNOVATION	CHALLENGE	APPROACH	IMPACT
 Introduce Electronic Notices (E-Notices) to IEDSS System	IEDSS only had the capability to send paper notices to clients, which increased paper output and cost to the State.	Work with a third-party vendor to implement an e-notice system that would send notices to clients electronically rather than sending physical paper notices.	Since its implementation, over 70,000 e-notices have been successfully sent to clients, drastically cutting paper waste and cost.
 Expanding Auto-Redetermination Criteria for Medicaid Benefits	Only about a third of all clients were eligible for auto-redetermination, while another third were receiving must-return Medicaid redetermination mailers.	Expand the criteria for auto-redetermination to decrease the percentage of clients receiving must-return Medicaid redetermination mailers.	Drastically decreased case worker redetermination workload by increasing the percentage of clients eligible for Medicaid auto-redetermination each redetermination period.
 Implementation of NextGen 360 System	Case workers currently need to visit multiple different screens to enter, view, or change client or case information, which wastes time and efficiency.	Integrate new NextGen 360 system with IEDSS, which will allow case workers to see case information on a single screen.	Caseworkers were able to review results quicker and more accurately. We also received feedback from the field that they really like the new screen design.

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Figure 4-7. Experience in Continuous Improvement.

As part of the change management process, we bring our knowledge of the latest industry trends, strategies, and visioning information to allow the State to keep planning and moving forward. We understand the State's E&E business including its unique background, history and system set up and we will continue to use this knowledge to analyze every aspect of the system for potential enhancements. With our project management process, we look to provide constant support and analysis of the most important aspects of the system, allowing us to anticipate needed enhancements and provide value to the State as we undertake them. We know that federal compliance can change quickly and that we need to be ready to react to anything that comes our way. Our experience working within changing federal compliance guidelines to deliver necessary system enhancements is necessary to continue to keep the system up to date and fitting the current needs of the State.



Our experience in the past two years during the public health emergency has made us more equipped to adjust our change management timelines on the fly, to meet the changing needs of the State. For example, we needed to change MAGP eligibility rules and the post-partum period on short notice to meet the demands of the public health emergency. We introduced other new eligibility rules and adjusted some existing ones to make sure all applicants were getting the care and treatment that they needed during such a difficult time. Special rules were put in place around patient and waiver liabilities, and we also updated the Expedited SNAP rules to postpone asset verification. As we transition to a Hybrid Agile methodology, this experience will prove valuable as we will need to prioritize and re-prioritize different changes in real time to implement the most urgent requirements of the State.

4.f Release Execution Plan

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.6

f. Describe your company's plan to execute releases according to the requirements outlined in Section 4.6.

Deloitte understands the importance of release management and the impact that it has on maintaining a stable and operational system. Regular maintenance is important to keeping the system running, as well as introduction of new enhancements to adhere to policy changes, while at the same time striving to minimizing downtime to keep your workers productive. Our approach to release management and use of ALM tools prioritizes important changes and fixes, optimizes the use of State and vendor resources, and allows necessary parties to have visibility into release information. We have a rich history of building and maintaining systems for the State spanning several decades. At the heart of this work are solid fundamentals and a commitment to release management from an end-to-end perspective.

Part of our approach for success is the integral role of the Release Manager. The Release Manager acts as the gatekeeper of changes impacting IEDSS. The Release Manager oversees the scope and timing of each release and confirms that releases do not conflict with any key operational events. In addition to managing the scope and timeline, the Release Manager also coordinates the availability of environments used for each phase of the release. Throughout this whole process, a strong working relationship with the key technological experts and business leads from the State is of the utmost importance. Our experience in working with the State IOT department will make this process smooth and easy as we have experience coordinating our releases with them to best fit the needs of the State.

Our current and proposed structure of release planning provides a mechanism for three types of releases: major, minor, and fix releases. Once the releases are defined, we coordinate with business and technical stakeholders to align environments to support these releases. This allows us to track dependencies and assess environment availability and provides an early opportunity to resolve the conflicts without impacting business delivery. Our release plan involves three crucial pieces: Release Planning, Environment Mapping, and Release Deployment and Monitoring.

Release Planning

The structure and timeline of each release is documented in a release runway schedule, and releases occur in a consistent rhythm with stakeholder approval. The Release Management Plan addresses the challenges that are faced in the many environments that are needed to support multiple releases with overlapping development and testing timelines.

Different release types are scheduled to provide a mechanism for a steady flow of changes; enhancements and defect fixes to meet new business needs and maintain system stability.

During the implementation of IEDSS, Deloitte defined three different types of releases to support IEDSS in consultation with the State to be used to schedule defects and CRs. For this reason, our numerical naming convention for each release will include three slots between decimal points: the first representing the associated major release, the second the minor release, and the third the fix release.



During the Cognos upgrade in October of 2021, some configuration changes were required that were not originally scoped for that timeframe, but we deployed these changes in a patch release earlier than planned due to the urgency of the ticket. This involved increased validation testing scope and it required careful planning to deliver the fixes requested by the State by the new deadline.

Release Type	Purpose of the Release
Major (Ex. 10.00.0)	New version of software for enhancements, new features, and functionality; meant for large CRs and enhancements, any defects necessary previously planned, upgrades to COTS products impacting the system.
Minor (Ex. 10.01.0)	Upgrades (e.g., cumulative security patches, bug fixes, minor enhancements); minor CRs as requested by the State, based on business priority and prioritization meetings; upgrades to COTS products impacting the system depending on the size and scope
Fix (Ex. 10.01.1)	Patches for security, bug fixes, functional error correction

Table 4-17. Types of Releases.

Release Structure and Prioritization

Deloitte works with the necessary stakeholders—including the State, test teams, interface partners, and IOT—to create and publish a release structure to best fit the business needs. This is used through the development lifecycle to provide transparency into critical parties when releases are scheduled. The Release Management Plan schedules dates for major and minor releases and can be flexible depending on other events and priorities. Sometimes the State's priorities need to change due to critical changes or defects that need to be included in a specific release. We have years of experience adapting to changes in release plans, and this expertise will prove valuable if a release ever needs to be adjusted to include specific tickets on short notice.

Fix releases are not pre-scheduled in the Release Management Plan but are instead scheduled as needed according to the severity of defects logged. A DevOps practice is used to allow continuous prioritization and delivery of changes and fixes as they are identified, and their severity is determined. This provides necessary flexibility based on the urgency of the issue and business need. Our experience in safely managing multiple development streams and code merges will allow us to move fixes into Production when they are required by the State. We have expertise in this area from our previous work on the IEDSS project, and firm-wide from multiple other fully Agile projects. Deloitte is proposing to follow an Agile release cycle involving a two-week sprint cycle.

When it comes to planning a specific release, the process starts with the CCB meeting, where the State team and Deloitte group changes together by severity and priority. Defects are prioritized in the Defect Triage Meeting, held three times a week. The timing of each release is fairly standardized, which means we need to adjust the number of tickets in each release according to their level of effort and priority to fit everything we need in each release. Currently, the length of the design and development phase can fluctuate, while the testing phase remains roughly the same length. However, as we transition to Hybrid Agile, we use a sprint approach that has a standardized length. We currently submit our release plan to the State once a year for the upcoming year, and it is discussed and approved over email. We propose that we continue this process as we transition to an Agile methodology. The Release Plan will be displayed in the IEDSS Production Dashboard in RTC to make it easily accessible.

The ALM tool is used to track incidents, defects, CRs and pending work items in an organized manner, will be accessible to parties that requiring it. Items in ALM are stored with unique numbers, which provides the ability to communicate and share details on decisions and issues. ALM has the relevant project data configured and customized with dashboards and tools to meet project needs. These include, but are not limited to, high-level dashboards of release closure progress, integration with the migration processes, and a repository for code baselines, which provides a foundation for testing, training, and subsequent releases.

Environment Mapping

RFP Reference: Attachment C, Section 4.6.1

The IEDSS environment structure is robust to deliver changes to Production; therefore, it is necessary to keep an organized environment plan to manage the intricacies of each release cycle. Releases have multiple phases including design, development, testing, and validation, which will be used to promote changes to the IEDSS system and the multiple trading partners' systems.

The following environments will be used within IEDSS. All Server, Database and Network Infrastructure will be owned by IOT:

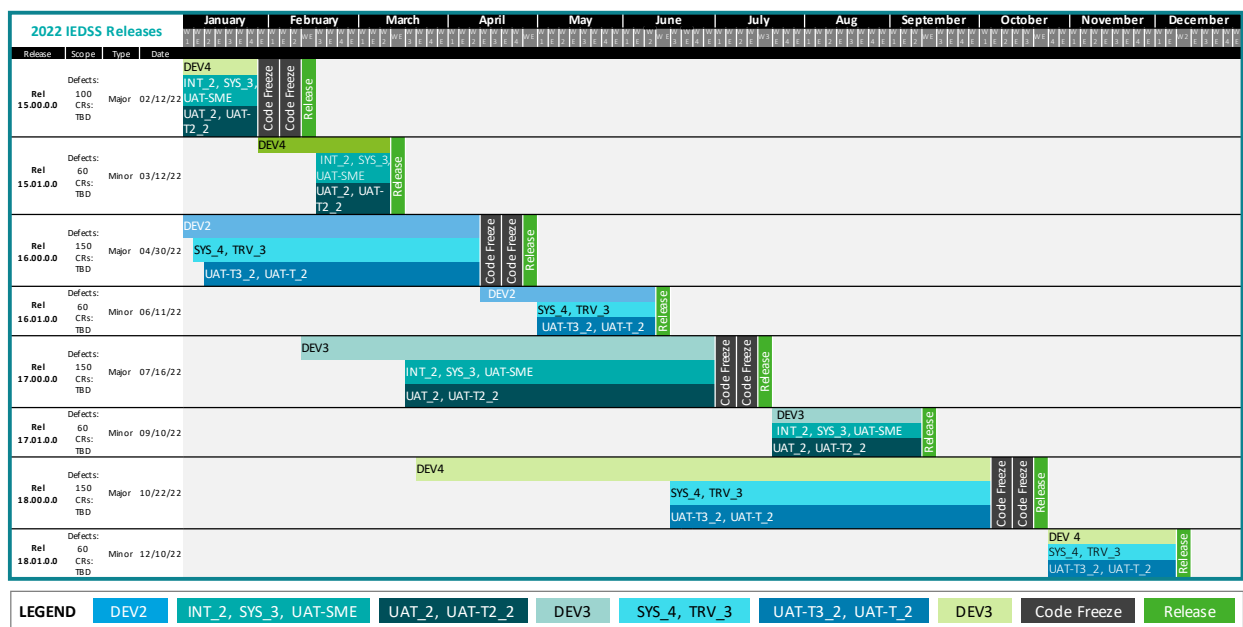
IEDSS Environment Name	Environment Owner	Ownership Responsibilities (Owner)
Development (DEV)	<ul style="list-style-type: none"> Deloitte Application Development Manager 	<ul style="list-style-type: none"> Development Activities, Unit Testing, (Deloitte Application Team) Marking components ready for system testing to support selective delivery (Deloitte Application Team) Build and Deployment activities (Deloitte Technical Team)
System Test (SYS)	<ul style="list-style-type: none"> Deloitte Test Manager 	<ul style="list-style-type: none"> System Testing activities, defect creation and prioritization (Deloitte Testing Team) Build and Deployment activities (Deloitte Application and Testing Teams)
Integration Test (INT)	<ul style="list-style-type: none"> Deloitte Test Manager 	<ul style="list-style-type: none"> Integration Testing activities, defect creation and prioritization (Deloitte Testing Team) Build and Deployment activities (Deloitte Technical Team)

IEDSS Environment Name	Environment Owner	Ownership Responsibilities (Owner)
Integration Time Travel Test (INT Time Travel)	• Deloitte Test Manager	<ul style="list-style-type: none"> Integration Testing activities, defect creation and prioritization (Deloitte Testing Team) Build and Deployment activities (Deloitte Technical Team)
User Acceptance Test (UAT)	• Deloitte Test Manager	<ul style="list-style-type: none"> UAT Activities (State Staff with assistance of vendor partners) Build and Deployment activities (Deloitte Team) Troubleshooting UAT defects (Deloitte Team)
User Acceptance Test Time Travel (UAT Time Travel)	• Deloitte Test Manager	<ul style="list-style-type: none"> UAT Activities (State Staff with assistance of vendor partners) Build and Deployment activities (Deloitte Team) Troubleshooting UAT defects (Deloitte Team)
Training Development (TRN-DEV)	• DFR Training Manager	<ul style="list-style-type: none"> Build and Deployment activities (Deloitte Technical and Training Teams) Developing training materials (Deloitte Training Team)
Training Production (TRN)	• DFR Training Manager	<ul style="list-style-type: none"> Build and Deployment activities (Deloitte Technical and Training Teams) Developing training materials (Deloitte Training Team)
Production Staging 1 (PRD-S)	• DST Eligibility Systems Manager	<ul style="list-style-type: none"> Build and Deployment activities (Deloitte Technical and Training Teams)
Production (PRD)	• DST Eligibility Systems Manager	<ul style="list-style-type: none"> Build and Deployment Activities (FSSA and IOT) Providing deployment guidance and support to IOT (Deloitte) Helping troubleshoot and resolve Production issues (Deloitte)

Table 4-18. Quality Management Plan–Project Standards.

At any given time, work will be occurring on multiple releases. With the overlapping nature of the work across releases, environments can be in conflict; having an environment mapping plan in line with the release management plan is critical to success. It is also important to understand the environments of our interfacing systems such as CDMS and IMPACT, along with their testing schedules and release dates. This allows us to work collectively and in collaboration to help with testing functionality that must be delivered across systems. Having a background of working with those interfacing systems, knowing their functionality and how it intertwines helps to communicate a full understanding of needs. Our expertise with IEDSS environment management, the IOT landscape, and enterprise implementation standards will be applied to continue to support the needs in a dynamic Production setting.

We format the system environments in an easy-to-understand format that is approved by the State, which includes transition details from one release to another. The following figure shows how these environments will be used together between releases:



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Figure 4-8. Screenshot of Draft Project Environment Schedule.

We understand the need for the environments listed in RFP *Attachment C Scope of Work, Section 4.6*, and recognize that the environments are highly dependent of release cycles. As an eligibility system with integration points with other partner applications, IEDSS requires a well-planned release calendar synced with an environment mapping plan. We work with the State to create a release calendar that meets business needs and plan environments to support the release structure.

Deloitte is familiar with IEDSS and interfacing partners, and understands that IEDSS interacts with BizTalk, IMPACT, CDMS, Data Warehouse, and Application Services environments. We continue to support vendor integration for changes impacting vendor services or impacted by vendor system changes.

Release Deployment and Monitoring

The last and potentially one of the most important steps in release management is proper planning of release deployment activities including monitoring. Releases will be validated through tests across environments prior to being deployed. We follow a multi-step approach to cover release deployment and monitoring activities. These steps are what Deloitte implemented in the initial go-live phase. As the system stabilizes and priorities shift, Deloitte will proactively provide new processes to match the speed of deployment and maintain quality.

Activity	Approach
Release Notes	Release notes to be published a few days prior to each major, minor release. These communicate the ALM unique tracking number and description of incidents and CRs. Timelines of publication can be refined based on business needs. When defects are discussed in the defect triage meeting (to be held three times per week), the release notes are created on the call with necessary SMEs and stakeholders.
Go No-Go Decision	The week prior to each release a green light decision will be communicated to critical stakeholders to provide the go or no-go decision for each release.
Release Deployment Plan	Meetings are held with technology and business partners to create a deployment plan. This plan has detailed steps for each involved stakeholder. Deployments are communicated a month in advanced to provide transparency and improve planning.
Release Deployment Activity	Release deployment activities are initiated and followed up via emails or conference calls, where stakeholders are involved.
Release Validations	After the release is deployed, Deloitte coordinates with State counterparts to validate the release's critical functionality. Initially these meetings were held in person for critical early releases. As the system stabilized, Deloitte scaled back to a virtual meeting for smoke testing validations.
Release Monitoring	Deloitte provides post-release support based on the software warranty (refer to <i>Section 9, Software Warranty</i>). We introduced new tracking in Rational Jazz to effectively monitor and close out warranty defects in a timely manner using a series of dashboards, reports, and queries. In addition, our proactive functional monitoring will identify potential issues before they become defects to fix them in an expedited manner.
Release Closure	After any warranty defects are closed, the release is marked as closed.

Table 4-19. Approach to Release Deployment and Monitoring.

One of the most important aspects of this plan is Release Validations. Following each release, Deloitte will coordinate with members of the State to make sure all critical components of the release were implemented successfully. The State will validate each release and review the tickets that were deployed, using Deloitte's assistance to close out items in our ALM tool. We have utilized successful processes for accomplishing this on multiple projects, including a project in Colorado where we used a Command Center to coordinate with county testers as they tested the critical changes made with the release. We will bring this experience and expertise to our release validation approach for IEDSS.

Another very key aspect of this plan is Release Monitoring. Following each release, Deloitte will coordinate with members of the State to monitor each item within the release and make sure they are continuing to work as intended. Our Release Monitoring process has helped us to identify some key issues in the past and make the necessary adjustments in a timely manner. For example, after we implemented the electronic notices functionality within IEDSS, we produced a weekly report showing how many e-notices were sent in the previous week. On one report, we noticed that no e-notices were sent the previous week, which allowed us to pinpoint the issue—that the vendor web service responsible for sending the e-notices was not functioning properly—and to fix the issue immediately.

4.g Management Reporting

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.7

- g. Describe your Management Reporting in adherence with the requirements of Section 4.7. Explain how the Respondent will track and report hours spent by each team member.

Deloitte recognizes the need for meaningful and timely status reporting, as requested in the RFP. Status reporting helps measure work performance, promote continuous improvements, and provides the State with insight into the quality, efficiency, and timeliness of the overall services so it can make informed decisions. If a change is ever straying from its intended timeline, reporting the correct status is the only way to make sure the issue is identified, and the proper steps are taken to remediate it. We take the lead on driving issues affected the project to resolution even when the root cause is not from our deliverable or is not an application issue. For example, if there is a network issue or scheduled delay by a third party, we will still take the lead on troubleshooting and doing everything in our power to get the change back on track. Deloitte's approach of using the proper tools, techniques, and processes helps us make sure team members and stakeholders, such as State agencies, are informed of the project status to avoid undue surprises and confusion. Reports will be made available weekly for analysis and discussion with DFR, OV&V, and any other applicable stakeholders.

Our reporting standards in the past have helped us to identify potentially at-risk items in a timely fashion to keep all our deadlines on track. Sending our status reports on a regular basis helps the State to identify and follow up on key backlog items. This allows us to take quick action and close any tasks that might have been left open for too long.

Status and Performance Reports

RFP Reference: Attachment C, Section 4.7.1

Deloitte's status and performance reporting is cover by three primary reports: Production Release Status Report, Monthly M&O Status Report, and the Monthly Security Status Report.

Production Release Status Report

The Production Release Status Report will address the status of CRs on a weekly basis. The information from this report is gathered from project resources and using our ALM tools. The Production Release Status Report reports on the CRs and defect fixes related to IEDSS solution components, including those applicable to IEDSS interfaces and will include the fields as requested in Section 4.7.1 of the RFP:

- Project Status, Description, Benefits, Key Updates, Critical Issues, Risks, and Mitigations
- Listing of the State, IOT, IEDSS Project Manager, Track Lead and Release Manager
- Requirements Status and Status Items depending on the Release and Timing
- Red/Yellow/Green Status for Schedule, Quality and Cost
- Milestone Summary, Open Issues, and SLA Compliance Status
- Initial Resource Estimates (Hours) by Resource Type and Actuals Expended

Production Release Status Report (Including CR and Defects for IEDSS)

Sponsor: IEDSS Project Manager:

Project Description: Critical Issues:

Project Benefits: Risks and Mitigation:

Key Updates: Requirement Status:

Schedule	Quality	Cost
R	Y	G
R	Y	G

Milestone Summary

	Planned Start Date	Actual Start Date	Planned End Date	Actual End Date

Open Issues

Description	Created By	Date	Resolution	Last Updated	Status	Impact	Assigned To

Initial Resource Estimates

Project Mgt	BA	Development	Testing	Technical	Other
SLA Compliance	BA	Development	Testing	Technical	Other
Testing Status					

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Figure 4-9. Sample Production Release Status Report.

- Testing Status, aligned with FNS Test Plan Requirements
- Trendline of data fixes in the project for the past year to show how much Production data has been manually updated
- Summary of the 5 most impactful CRs or System enhancements.

As we transition to a Hybrid Agile approach, this report will be updated to include information from different sprint teams. Items in the report will be reported on regarding their impact on a specific sprint.

Monthly M&O Status Report

Deloitte provides an accurate and timely representation of the M&O activities for IEDSS, through the Monthly M&O Status Report. As requested in the RFP, this report will include:

- Status of defects identified in or worked on during the reporting period
- Helpdesk incidents logged or worked on during the reporting period
- Performance Standards as detailed in *Section 13, Service Level Agreements*.

Deloitte will work with the State to refine the existing Monthly M&O Status Report to confirm it covers the Production release, maintenance activities, system metrics, and upcoming release details, as necessary. We have experience providing a similar report, and it has helped us identify potential issues and make sure they are taken care of in a timely fashion. A sample Monthly M&O Status Report is illustrated in the following figure:

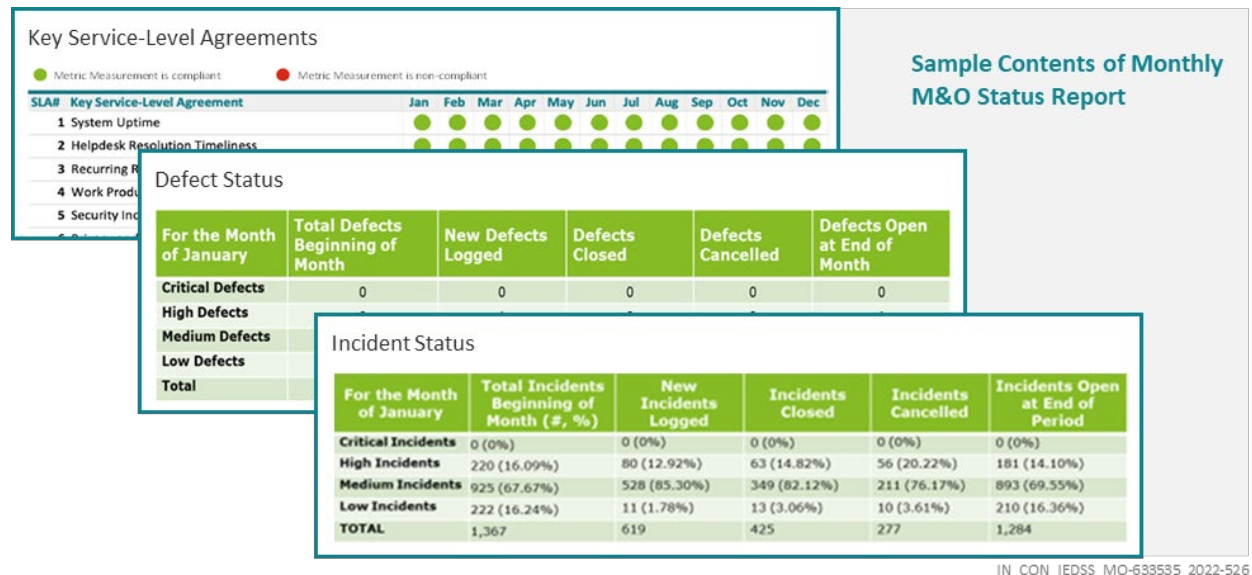


Figure 4-10. Sample Contents of Monthly M&O Status Report.

Monthly Security Status Report

It is critical to the success of the project to monitor and report on the security and compliance of the system. Deloitte produces a Monthly Security Status Report to keep the State and other stakeholders updated on the security status of IEDSS solution components.

As requested in Section 4.7.1 of the RFP, the Monthly Security Status Report will include update on assessments, defect fixes, security testing, and mitigation

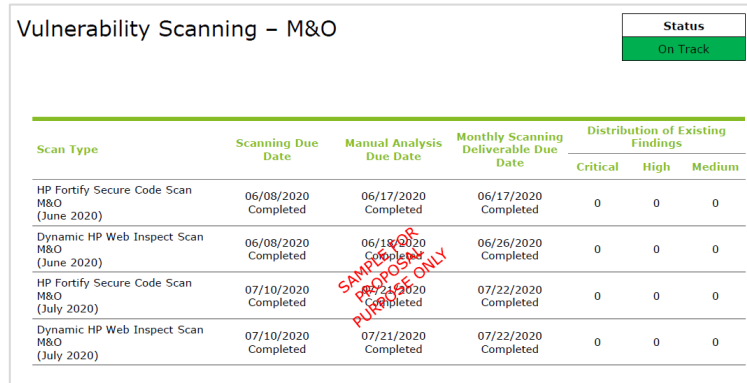


Figure 4-11. Sample Production Release Status Report.

activities. The report includes status updates on the following:

- Monthly application vulnerability scans (i.e., Fortify static code analysis, and Web Inspect dynamic scan) and vulnerabilities identified
- Monthly infrastructure scans (i.e., Rapid 7 infrastructure scan)
- Quarterly OWASP dependency checks
- Security functional testing for every major release and defects identified during testing
- Summary of assessment activities (e.g., CMS Annual Self Assessments)
- Summary of mitigation activities for:
 - Vulnerabilities identified during scanning
 - Defects identified during testing
 - Gaps identified during assessment
- Weekly user activity reports
- Summary of continuous monitoring (e.g., alerts generated by Splunk Enterprise Security) and other ongoing operational security activities.

The report will also provide a single snapshot view to track and monitor the current status of security activities. It will include a graphical representation of the upcoming major system activities for the next three months.

Ad hoc Status Reports

Deloitte works with the State and sponsors to meet any additional reporting requested on ad hoc basis, while taking into consideration feasibility, team capacity and information availability. Timelines for these ad hoc reporting needs will be within ten (10) business days unless otherwise specific by the State. Our dedicated PMO team uses tools ALM tools to generate the ad hoc reports requested by the State, to keep the project status up to date with both Deloitte and State.

Task and Hours Tracking

RFP Reference: Attachment C, Section 4.7.2

Deloitte understands the need to track hours worked for cost allocation purposes and has performed the type of tracking requested by the State on numerous state and federal contracts, including on the ICES project in Indiana. During the Initial Transition phase of the project, Deloitte works with the State to further define the applicable scope and operational processes to track and report the required information. This process is documented in the Project Management Plan.

By the 10th day of each month, Deloitte provides an electronic report of actual hours worked by position and activity any approved enhancement performed on a time and materials basis. After the completion of an enhancement, Deloitte will provide an enhancement-specific report of actual hours worked by position and activity within fifteen (15) days of the completion of the enhancement. The State will check invoice details before the invoice is processed.



- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

[REDACTED]

4.h Infrastructure Coordination Management

RFP Reference: Attachment F, 4. Project Management (Attachment C, Section 4)

RFP Reference: Attachment C, Section 4.8

h. Confirm your understanding acceptance of the requirements in Section 4.8.

Deloitte confirms our understanding and acceptance of the requirements in *RFP Attachment C, Section 4.8*. As the incumbent vendor who worked with the State to design and build the infrastructure for the solution, our teams coordinate across vendors, IOT, and State teams to maintain the Infrastructure Coordination Calendar that captures upgrades, patches, and infrastructure related activities. We know that managing infrastructure is not limited to developing an infrastructure calendar, it also includes activities to establish roadmap for upgrade and patch, forecast infrastructure capacity planning, discussion on performance issues and enhancements. We have coordinated efficiently with IOT, vendors, and State teams throughout the project history (e.g., the response to the Log4J vulnerability, emergency certificate changes, and database patching). This holistic view of infrastructure helps provide transparency and efficient planning for the State.

We continue to maintain the Infrastructure Coordination Calendar which is stored on the State SharePoint site to track and maintain the upcoming upgrades and patches. The Infrastructure Coordination Calendar also describes the upcoming meetings scheduled on weekly, monthly, and quarterly basis with different teams of the State's technology department (IOT). Deloitte has a weekly meeting with IOT and the State teams to discuss the following topics:

- Identify potential infrastructure and database issues and activities to mitigate risk if these were to occur.
- Design new plans for upcoming upgrades and patches.
- Software renewal/new licenses and upgrades/patches to confirm there no business impact on quarterly cadence. Table 4-21 explains the existing process related to Software/Hardware Lifecycle Management.

The following is our proposed meeting cadence which aligns with established processes. Every Infrastructure related topic is elaborated to explain our understanding of the current process and how it leads to collaborated effort from Deloitte and State to achieve seamless implementation and uninterrupted services. Additionally, these meetings facilitate a clear and concise communication channel that helps synchronize all relevant teams on topics.

Meeting Type	Meeting Agenda	Deloitte Facilitated Activities
Bi-weekly DBA Meeting	<ul style="list-style-type: none"> • DB upgrades pertaining to IEDSS • DB patches pertaining to IEDSS • IOT CMRs impacting IEDSS • Server instance level issues • IEDSS Application release deployment 	<ul style="list-style-type: none"> • Database related upgrade, patches, and other scheduled activities, will be discussed in the biweekly touchpoints • Implementation plan, proposed timeline and approval for the activities will be decided

Meeting Type	Meeting Agenda	Deloitte Facilitated Activities
	<ul style="list-style-type: none"> Anticipated upcoming mitigations 	<ul style="list-style-type: none"> Based on bi-weekly DBA meeting outcome, corresponding updates will be made on the State coordination calendar
Weekly Infra Meeting	<ul style="list-style-type: none"> Infra upgrades pertaining to IEDSS Infra patches pertaining to IEDSS IOT CMRs impacting IEDSS IEDSS Application release deployment Firewall needs Anticipated upcoming mitigations 	<ul style="list-style-type: none"> Infrastructure related upgrades and patches, CRs, and firewall needs for the IEDSS will be discussed in the weekly meeting Agenda would include (not limited to) implementation plan, proposed timeline, scheduled downtime, and approval for the activities Review performance test results and address concerns prior to changes being released into Production Based on weekly Infra meeting outcome, corresponding updates will be made on the State coordination calendar
Quarterly Capacity Planning Meeting	<ul style="list-style-type: none"> Reports on system performance and recommendation on hardware needs pertaining to infrastructure, DB and application Licensed product upgrades 	<ul style="list-style-type: none"> Reports on actual and desired system performance, upcoming hardware need will be discussed Proposed timeline for license upgrades, hardware and system upgrades will be discussed and approved Based on quarterly capacity planning meeting outcome, corresponding updates will be made on the State coordination calendar
Quarterly Software Upgrade Meeting	<ul style="list-style-type: none"> Review End of Life (EOL), End of Support (EOS), and plan for upgrades Recommend the upgraded version and benefit to the State 	<ul style="list-style-type: none"> The activities and processes are explained in detail in Table 4-21 Software/Hardware Lifecycle

Table 4-20. Deloitte and IOT Meeting Cadence.

Deloitte maintains and operates the IEDSS infrastructure upgrade process to address security concerns and vulnerabilities, introduce new features, and enhance features of the various products that make up the IEDSS ecosystem. Our operations include the identification of products that are nearing end-of-life or end-of-support—and require upgrades to the next version. We will also evaluate suitable alternates that will reduce overall cost of infrastructure management over time, that are best positioned to continue to meet project management expectations and provide the services described in the following table.

Activities	What Deloitte Delivers
Platform, Hardware and Software Inventory	<ul style="list-style-type: none"> Deloitte conducts periodic reviews of the platform, hardware, software, and monitoring tools used across IEDSS. This will be addressed during the Quarterly Software Upgrade meeting with the State on a regular cadence to identifies the need for upgrades and patches. Our team performs an impact and risk analysis for the upgrades and confirms the right balance between the need to perform a software upgrade versus the appropriate moment to execute it. Needed software documentation and the installed libraries are stored in a configuration management repository for better version control and future reference. The focus of operations to maintain the lifecycle of the products that support IEDSS currently include, but not limited to: MuleSoft, OpenText Exstream, Corticon, WebSphere, Oracle Java, IBM SDK, Informatica, TIBCO Netrics, etc.
Software Upgrade Calendar	<ul style="list-style-type: none"> Deloitte works with the State counterparts to finalize the technology roadmap based on the outcome of the software upgrade meetings and assists in implementing through major/minor release cycle. Our quarterly cadence will include periodic review of platform needs and software licenses in use. Deloitte will establish a monthly upgrade calendar aligned to major releases and conducts reviews with the project CCB for prioritization.
Potential Licensing Costs	<ul style="list-style-type: none"> We will work with the State to identify any right-sizing opportunities that exists for capacities utilized on IEDSS infrastructure resources to confirm that there are no unplanned cost overruns.
Potential Product Line Switches and End-of-Life Schedules	<ul style="list-style-type: none"> We will conduct a thorough assessment and impact analysis around any product line switches, or any software coming to end-of-life and plan an upgrade or provide alternate option to avoid any system downtime.

Table 4-21. Software/Hardware Lifecycle.

Our approach to infrastructure management provides the State with reduced risk of unexpected business disruptions and helps protect sensitive data by keeping your infrastructure up to date. Our consolidated view of patches, upgrades, and infrastructure activities within the Infrastructure Coordination Calendar promotes transparency and efficient planning. We coordinate across State teams, IOT, and vendors and advocate for approaches that can help bring new, advanced capabilities which provide future business benefit to IEDSS such as new digital communication channels, improved performance, and reduction in planned downtime.

Software Development Lifecycle (SDLC) Approach

Section 5

We look forward to the opportunity to transform the way work is performed on IEDSS. We have been preparing to support the State's desired transition to a Hybrid Agile SDLC by training our team, performing a pilot project, and refining our proposed approach.

Deloitte is a leader in delivering large-scale IT solutions using Agile and Hybrid Agile methodologies. We have a robust network of talented professionals, including **1,700+** certified Agilists and **12,000+** professionals with at least five years of Hybrid Agile and DevOps experience. We facilitate over 100 mission-critical agile projects, including two such ongoing projects for the State of Indiana ([REDACTED]).

Our proposed approach helps improve communication between IEDSS stakeholders, allows enhancements to go live more quickly and effectively, allow IEDSS to react nimbly to changing policy and operational needs, and promotes a culture of continuous delivery improvement.

WHAT IT TAKES



A lasting commitment to Indiana with deep experience with IEDSS functionality



Proven experience in delivering a methodology transition of E&E systems on a similar technology platform



Rigor and focus on disciplined execution of the SDLC methodology transition

WHY IT MATTERS

This SDLC methodology transition requires a team that knows the E&E business and understands the IEDSS system's unique design aspects and their impact on the end client.

While managing ever-changing Medicaid, SNAP, and TANF program and operational requirements, transitioning to Hybrid Agile for E&E is more complex than a simple transition to Hybrid Agile.

Our understanding of the IEDSS solution, current processes, and their nuances positions us to focus on the SDLC transition at the start of the project.

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

Explain how you propose to execute Attachment C, Section 5 in its entirety, including but not limited to the specific elements highlighted below:

A strong suite of disciplined SDLC practices is paramount to the continued success of a large-scale system like IEDSS. Through our successful commitment with ICES and then IEDSS, we have learned that Indiana's eligibility system and related business processes are unique and nuanced. We have incorporated your feedback over the years and developed an SDLC approach tailored to meet the needs of your organization, staff, roles, and existing processes. We are ready for the next evolution of that SDLC and are pleased to share our IEDSS Hybrid Agile SDLC.

Changing something that works can pose risks. However, for highly customized systems like IEDSS, the SDLC methodology must be adjusted over time to continue the momentum of excellence. That also means that the SDLC methodology needs to evolve as we embark on this next journey with you. With that in mind, this section describes our vision for the evolution of the IEDSS SDLC.

The changes we propose are based on our experience with you. This effort promotes IEDSS system stability, continued quality of delivery, enhanced collaboration between stakeholders, and an approach to deliver to production more frequently. We understand the value placed in the current SDLC by the State and the significance of leveraging those practices into the Hybrid Agile methodology. We bring forward an SDLC that makes effective use of your time, here are some important aspects that we are proposing to change with our proposed IEDSS Hybrid Agile SDLC.

KEEPING THE MOMENTUM GOING FORWARD

- Introducing IEDSS Hybrid Agile Methodology as an incremental shift that blends the familiarity of established processes with the transformational benefits of Agile
- Using Scrum Framework to increase transparency and client engagement throughout the SDLC
- Establishing new standards and expectations (for both State and Deloitte teams) designed to further improve IEDSS and meet Indiana's needs

- **Improved collaboration** where State, Deloitte, and UAT staff work together in a scrum team
- **Shorter lead times** because sixteen (16) week sprint cycle provides additional opportunities to do a production release at the end of eight (8) and twelve (12) weeks, rather than end time end time frame of 7-9 months today
- **Intentional focus** on developing minimum viable product (MVP) mindset
- **Transition approach** that enables gradual shift to Hybrid Agile supported by training sessions and two pilots
- **Continuous improvement** with planned retrospective sessions planned at end of each sprint cycle

As always, we are committed to working with the State to adjust, adopt, and make the SDLC more effective.

5.a Adherence to Stated SDLC Requirements of Section 5

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- a. Confirm your adherence with all stated SDLC requirements of Section 5, including federal project management requirements.

We confirm adherence with all stated SDLC requirements of Section 5, including federal program management requirements. The table below gives a summary of our plans to meet the State's SDLC requirements. Throughout this section, which is dedicated to our Hybrid Agile SDLC, we detail the following summary items.

Requirement	Our Plan to Meet or Exceed the Requirement	Meet
Federal Project Management and SDLC Requirements	Our approach meets federal project management and SDLC requirements. We provide a project schedule, risk register, a formal structure and SDLC procedures for the project staff, experienced project management professionals, and a Project Management Office (PMO) team, all of which are the key principles required and recommended by FNS and CMS.	✓
Use of Hybrid Agile for DDI and M&O	We employ IEDSS Hybrid Agile methodology for DDI (enhancements) and M&O work (defect fixes, patches, and upgrades). Refer to <i>Section 5.b SDLC Process and Expectations</i> and <i>Section 5.d Approach to SDLC Management</i> for more details on our approach to use Hybrid Agile.	✓
Maintaining Artifacts	We organize and maintain all artifacts within SharePoint and the ALM approved by the State. We also accept responsibility for configurations of build and deployment components within the ALM.	✓

Requirement	Our Plan to Meet or Exceed the Requirement	Meet
Meetings	We acknowledge the responsibility for coordinating logistics, preparing the meeting agenda, identify necessary stakeholders, documenting, and publishing meeting notes and action items.	✓
OV&V contractor Checkpoints	Deloitte supports the assessment of OV&V contractors. We participate in OV&V meetings if requested and provide the information requested for the OV&V team to perform the necessary analysis.	✓
SDLC Deliverables	Deloitte maintains SDLC deliverables, and more details can be found in <i>Section 5.c, SDLC Process and Expectations</i> .	✓
Security Requirements	Deloitte adheres to Security Requirements, and more details can be found in <i>Section 5.e, Security Requirements</i> .	✓
Testing Requirements	Deloitte adheres to Testing Requirements, and more details can be found in <i>Section 5.f, Multi-Phased Testing Approach</i> .	✓
SDLC Artifacts Requirements	We acknowledge and agree to meet requirements related to SDLC artifacts, and more details can be found in <i>Section 5.h, SDLC Artifacts Management</i> .	✓
SDLC Quality Management Requirements	Deloitte will adhere to SDLC quality management requirements, and more details can be found in <i>Section 5.i, SDLC Quality Management</i> .	✓

Table 5-1. Our Plan to Meet SDLC Requirements.

5.b SDLC Process and Expectations

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- b. Describe your proposed SDLC process and expectations of State staff and resources. Explain how you will employ Agile methodologies in your Hybrid Agile SDLC process. Explain any alternate methodologies or enhancements to the SDLC and architecture models described in Attachment C.

Below, we describe the format of our proposed Hybrid Agile SDLC and detail how this evolution will increase the rate at which we deliver tangible solutions to the State. Our process focuses on collapsing all relevant phases of a release's life cycle into a condensed timeline. We can achieve this because the focus of our methodology is effective decomposition of work.

Transitioning to Hybrid Agile does not mean reinventing the wheel in terms of how we deliver with you. It means **restructuring the way in which work is organized to produce better outcomes at regular intervals**. We reference the time periods for each of our SDLC phases so you can see that enabling IEDSS with this methodology means a **faster timeline from project inception to release**. The following figure illustrates our SDLC and how our proposed SDLC phases compare with the current Waterfall-based SDLC. It is composed of five key phases, which are then described in further detail.

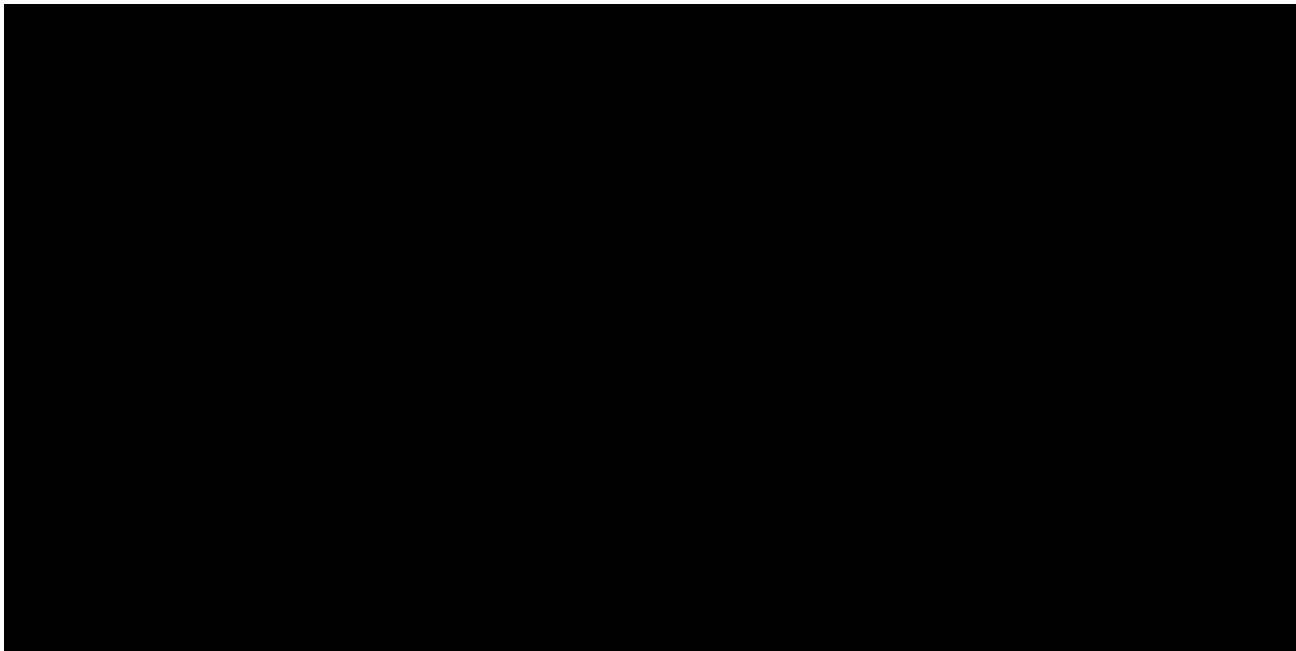


Figure 5-1. How Our Proposed IEDSS Hybrid Agile SDLC Compares to the Current Waterfall SDLC.

The following table describes the key activities in each phase.

Phase	Key Activities
Product Backlog Creation	<ul style="list-style-type: none"> Help the State prioritize (business needs, federal requirements, etc.) and schedule Change Requests (CRs). Understanding of the required effort and providing rough order of magnitude for each CR.
Discovery	<ul style="list-style-type: none"> Eliciting requirements in the form of user stories. Documenting project dependencies. Defining, refining and estimating epic, which is a high-level description of a project's business case and the preliminary functional and technical analysis of impacts. Each Change Request (CR) may have one or more epics associated with it, depending on a CR's scope.
Design and Sprint Planning	<ul style="list-style-type: none"> Do technical/functional/UI design and finalize implementation approach. Estimate user stories and assign user stories to the sprint team.
Sprint Cycle – Development Phase	<ul style="list-style-type: none"> Developing features to meet requirements elicited in user stories. Conduct Interim and final demo and address feedback received during the demo. Conduct unit testing, system testing and interim UAT testing.
Sprint Hardening & Deployment	<ul style="list-style-type: none"> Perform integrated UAT, regression, security, and performance testing. Deployment and release go-live.

Table 5-2. Key Activities in Each Phase.

The timeline and structure of these phases accelerate the pace at which enhancements are delivered. From the time projects enter discovery until their first potential production release, 12 weeks elapse. We state it here as a “first potential” production release because in instances of more complex projects, or for projects with external dependencies, their release can be scheduled an additional four or even eight weeks out. This timeframe depends on factors such as environment availability and at what point a project is undertaken in the defined release. Following diagram illustrate the number of planned waterfall releases in current year and number of releases when the State transitions to Hybrid Agile as per our proposed SDLC.

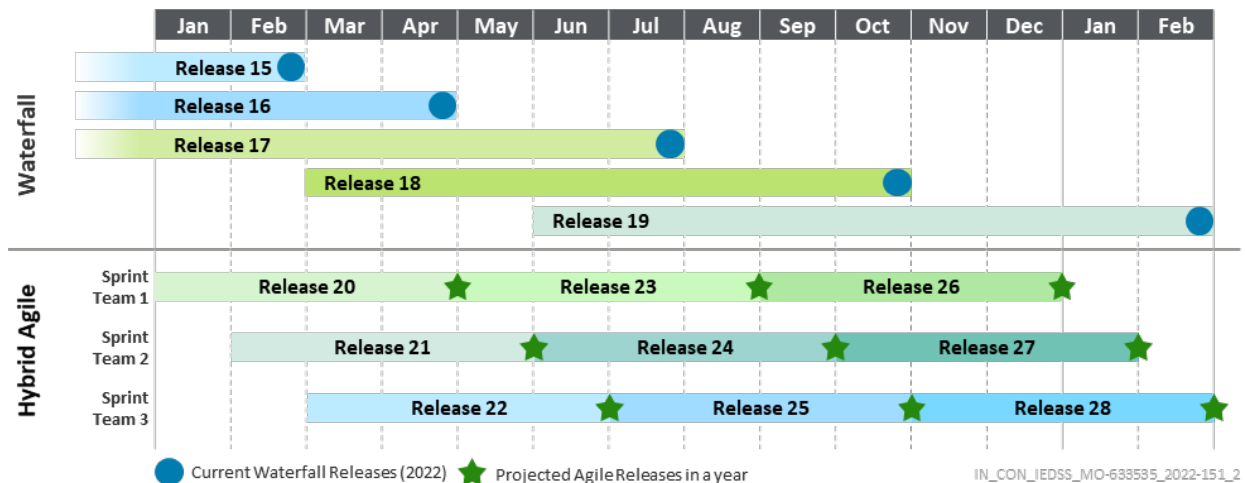


Figure 5-2. Releases per Year in Waterfall vs. Hybrid Agile.

The table below outlines the **benefits of our Hybrid Agile methodology brings to the State.**

Benefits	How Benefits Are Realized
Reduced lead time from scope identification to production release	IEDSS Hybrid Agile methodology uses Scrum principles that allow continuous prioritization of work and delivery in shorter Sprint Cycles. This allows enhancements to go live more quickly and effectively, reducing time to release by 50% to 16 weeks (as opposed to an average of 32 weeks).
Iterative development delivers business value	Iterative development allows the State an opportunity to provide frequent feedback, which improves delivery effectiveness.
Improved collaboration within the project organization	Scrum ceremonies, like daily standup meetings, encourage regular and active communication within the entire team (State and Deloitte).
Flexibility in responding to change	Product Backlog refinement allows us to quickly pivot and choose higher-priority items for which requirements/user stories have been completed.

Benefits	How Benefits Are Realized
Improved Testing Coverage	UAT testers are part of the Sprint team. Testing is integrated with development and conducted iteratively throughout the sprint, which means more collaboration in testing and high test coverage. This effort leads to quality improvements and more effective use of resources.
Opportunities for more frequent release to production	Sprint development planned in shorter sprints allows earlier deployment of production-ready enhancements and M&O items.
More structured approach to continuous improvement	The rigor of conducting planned retrospectives facilitates regular structured opportunities to continuously improve processes and quality.
Improved transparency throughout the SDLC	Daily scrum meetings and use of information radiators (e.g., Sprint Burndown chart, Cumulative Flow Diagram) improve transparency and enable better risk monitoring and decision-making for the State.

Table 5-3. Benefits of the IEDSS Hybrid Agile SDLC.

IEDSS Hybrid Agile SDLC Phases

In the below section, we compare the current IEDSS Waterfall SDLC and the proposed IEDSS Hybrid Agile SDLC. While we do have set heuristics and practices for our Hybrid Agile SDLC offerings, our goal is not to compel the State to our suggested methodology, but rather to shape each phase to best fit the needs of IEDSS. We put together a collaborative review process during the initial transition phase to refine the playbook as we progress. We start with a pilot sprint and revise and tailor the processes and standards based on the feedback in retrospective sessions. Additionally, we also work with State to continuously improve SDLC throughout the contract based on ongoing retrospectives and feedback. The below sub-section is dedicated to painting a crisp picture of what an IEDSS delivery methodology looks like, enhanced with our guiding Hybrid Agile framework.

1. “Scoping” becomes “Product Backlog Creation”

During the Product Backlog Creation phase, Deloitte and the State collaborate to assign a target release to CRs. Deloitte responds to ad hoc CRs submitted by the State and produces order of magnitude estimates leveraged by project leadership to schedule work in a fashion that meets all dependencies and adheres to the strategic goals of the State. This is a continuous process and not tied directly to a release cycle.

Agile Terms for Product Backlog Creation	
Term Name	Description
Product Backlog	The Product Backlog is a running backlog of all potential CRs we recommend maintaining in ALM. The State will assign a priority for each CR (High/Medium/Low). This prioritization ranking will be used as one of the data points for scheduling the CR to a release.
Rough Order of Magnitude Estimate	You are already aware of the term “Rough Order of Magnitude,” as it is used to provide a high-level estimate of the number of hours to accomplish an individual CR. Within our Hybrid Agile methodology, this estimate will be given in terms of sprint capacity and used as an input for release prioritization.
Impact assessment	An impact assessment is held prior to the submission of Deloitte’s response to a CR. During this assessment, all impacted stakeholders gather and discuss their respective dependencies and inputs.
Epic	An epic is a high-level description of a project’s business case and the preliminary functional and technical analysis of impacts. Each CR may have one or more epics associated with it, depending on a CR’s scope.
Release Charter	A release charter shows all the CRs that will be developed over the course of two development sprints, with a corresponding release assigned to each CR.

Table 5-4. Terms Used in Product Backlog Creation.

Process for Product Backlog Creation Phase

Phase Length: Continuous, with recurring joint Deloitte-State leadership meetings.

As CRs come to inception, Deloitte will detail the CRs submitted by the State in ALM in the form of one or more epic(s). The epic is used to document the CR with information about the business case for the CR, a high-level functional and technical change, and a rough order of magnitude estimate. For Deloitte to capture accurate estimates and analysis that reflect all CR dependencies, impact assessment sessions will be held to integrate all project stakeholders and receive the necessary inputs. The estimate along with the priority given to the CR in the Product Backlog Creation will be used to assign its release within the release charter. State and Deloitte project leadership participate in change control board (CCB) to discuss upcoming. The below graphic offers an illustration of the process described above for quick reference.

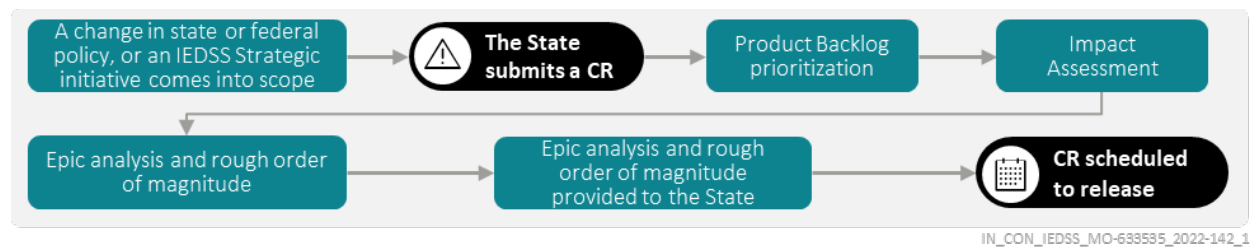


Figure 5-3. Process Flow for Product Backlog Creation.

Our proposed Hybrid Agile SDLC empowers the State to make informed decisions on the way releases are planned and supports a level of flexibility unavailable within a traditional Waterfall delivery method. The below table describes the expectations for State and Deloitte team members during the Product Backlog Creation phase.

Expectations during Product Backlog Creation	
State Staff Expectations	<ul style="list-style-type: none"> Review the Product Backlog and assign priority rankings to each. Participate in Impact Assessments to help identify all potential CR impacts. Provide input regarding scheduling of projects within IEDSS release charters.
Deloitte Staff Expectations	<ul style="list-style-type: none"> Deliver timely responses to State CRs in the form of epics with analysis details and an accompanying high order of magnitude estimate. Collaborate with the State to shape release charters, leveraging the IEDSS Product Backlog and a Deloitte-provided Rough Order of Magnitude estimate for each CR.

Table 5-5. Team Member Expectations during Product Backlog Creation Phase.

Hybrid Agile in Action — Product Backlog Creation

From time to time, CRs address policy requirements with imminent or immediate implementation dates, or otherwise address black swan events (as was recently observed with Log4j vulnerabilities). In instances such as these, Deloitte reacts quickly and effectively. Even when teams are in the middle of a development sprint, through collaboration with the State, we will remove a CR in the current development sprint and shift focus to address the prioritized CR. We still complete all phases of our SDLC, but on a collapsed timeline, and schedule the project for the earliest possible planned release. The below table captures the Agile principles to be applied during the Product Backlog Creation phase as well as the benefits the State will see through their application.

Agile Values Applied	Benefit to the State
Responding to Change	The underlying process of our Product Backlog Creation phase is similar to what we successfully adhere to today for CR planning. We maintain CRs in ALM and use Change Control Board (CCB) meetings to prioritize them accordingly. Our proposed Hybrid Agile Approach enhances the benefits IEDSS receives from this phase, as the overall life cycle of an individual CR is reduced from around eight months (from Design to Go-Live) to 4 months. In addition, the ability to prioritize and execute work on our accelerated timeline will help reduce the number of CRs in “work in progress” status, allowing the State flexibility to reprioritize CRs more frequently as new information becomes available.
Client Collaboration	The maintenance of the IEDSS product backlog through regular reprioritization of projects enables the State to make timely decisions on release assignment for individual CRs.

Table 5-6. Agile Practices Applied and their Benefit — Product Backlog Creation Phase.

Outputs of the Product Backlog Creation Phase

As you have read throughout this section, the purpose of the Product Backlog Creation phase is to enhance the ability of the State to pivot quickly and prioritize CRs on an as-needed basis. In addition, this initial phase lays the ground work for the success of all proceeding phases.

- **Product backlog** provides full visibility into all potential CRs, providing the State a view of strategic landscape.
- **Epic analysis and order of magnitude estimates** allow releases to be scheduled for CRs to meet IEDSS goals.
- The **release charter** establishes a holistic view of how CRs will be developed over the course of multiple sprints.

2. “Requirement Definition and Analysis” becomes “Discovery”

Over the course of the Discovery phase, we drill down and come to a mutual understanding of all epic requirements and dependencies at a deeper level.

Agile Terms for Discovery	
Term Name	Description
User Story (US)	A user story is a concept in Agile used to capture a description of a system feature from a user's perspective. The user story describes the type of user as well as what they want and why. User stories create a simplified description of requirements and function as a way to decompose high-level business requirements (addressed in the epic) into units of work that can be completed in an incremental and iterative fashion.
Acceptance Criteria (AC)	Acceptance criteria are used as the definition of done for user stories. They detail the specifications the work developed must meet for the user story to be considered complete. User stories may have one or many acceptance criteria.
Discovery Session	Discovery sessions are facilitated by Deloitte practitioners during the discovery phase in order to elicit and decompose all epic requirements.
Product Owner (PO)	The PO is the State representative assuming ownership of the project. POs are responsible for monitoring the project from discovery through deployment. They provide valuable functional expertise and confirm the requirements of the State are met.
Subject Matter Expert (SME)	A State representative or a Deloitte Team member with functional and/or technical expertise specific to the impacted functionality detailed in the epic.
Scrum Master (SM)	The Deloitte practitioner responsible for facilitating discovery sessions and capturing epic requirements in the form of user stories. Managing delivery of the enhancement assigned to scrum team.
Deputy Scrum Master	The Deloitte practitioner supporting scrum master in delivery of enhancements.
Scrum Team/Sprint Team	A team established of Deloitte developers, testers, technology, security staff, state's PO and UAT testers working together on group of enhancements for release. It is recommended to not change the team members as much possible.

Table 5-7. Terms Used in Discovery.

Process for Discovery



Figure 5-4. Process Flow for Discovery.

Our proposed Hybrid Agile SDLC requires teams to collaborate efficiently and quickly during the discovery phase so that the CRs can be transitioned into the subsequent design and development phases with all requirements defined. This phase will require a commitment from all stakeholders. Please see the below table for the high-level responsibilities for State and Deloitte teams during the discovery phase.

Expectations during Discovery	
State Staff Expectations	<ul style="list-style-type: none"> Participate in discovery sessions to assist in gathering all CR requirements. Provide expertise and direction on proposed functional/technical approaches. Review and approve user stories and acceptance criteria.
Deloitte Staff Expectations	<ul style="list-style-type: none"> Facilitate Discovery Sessions in collaboration with project Product Owners, relevant State business stakeholders, trading partners, and SMEs.

Expectations during Discovery

- Create and revise user stories based on feedback provided during discovery sessions.
- Update existing requirements within the RTM.

Table 5-8. Team Member Expectations during Discovery.

Hybrid Agile in Action — Discovery

One of the key value propositions of our Hybrid Agile approach is the ability to deliver tangible solutions to IEDSS on an ongoing basis. To enable this aspect of our approach, CR requirements must be captured in user stories as incremental and iterative chunks of functionality. The ideal user story is self-contained, meaning the functionality detailed in it could be deployed to production without any dependency on another user story.

Agile Values Applied	Benefit to the State
Individuals and Interactions	As we have explained throughout this phase, discovery is conducted to understand the requirements of the State. This phase is dependent on high-value interactions between all team members, with free-flowing knowledge transfer and a mutual commitment to determining the best solution to meet the needs of all stakeholders.
Working Software	The underlying heuristic in the creation of user stories prioritizes two key objectives: (1) capturing all epic requirements and (2) confirming that user stories are appropriately sized so that the development work to satisfy the requirements is achievable within the development sprint. By thinking in a forward fashion during discovery, we keep our focus on the end goal, achieving tangible solutions for the State and Hoosiers.

Table 5-9. Agile Practices Applied and Their Benefit — Discovery.

Outputs of the Discovery Phase

The primary outcome of discovery is appropriately sized epic requirements with details on what standards must be met for the requirement to be considered complete. Effective requirement elicitation and decomposition during discovery defines the full scope of impacts stemming from the epic.

- **User stories** are created by decomposing epic requirements into incremental and iterative chunks
- **Acceptance criteria** associated to each story detailing the definition of done.

3. “Functional and Technical Definition and Analysis” becomes “Design and Sprint Planning”

Design transposes all requirements captured in user stories into a clear plan to modify the existing functional and technical modules to be impacted. We have chosen to include this phase for IEDSS as we recognize the complexity and scale of the system, as well as the State’s need for quality documentation to track proposed changes to system architecture and functional flows.

Agile Terms for Design	
Term Name	Description
Sprint Team/Scrum Team	Sprint teams are composed of developers, testers, a scrum master, a deputy scrum master and support staff to do technical support, security testing and performance testing. Sprint teams are responsible for delivering development work to meet requirements captured in user stories.
Design Spike (DS)	Design spikes are sessions held by sprint teams to decide on a technical approach to address the business requirements detailed in user stories.
Story Point Estimation (SPE)	Story point estimations are an additional Agile ceremony performed during the run-up to the development sprint, where sprint teams weigh in with their estimation to accomplish each user story.
Task Breakdown	An activity taken up by sprint teams during which an itemized list of all tasks necessary to satisfy user story acceptance criteria is created.

Table 5-10. Terms Used in Design.

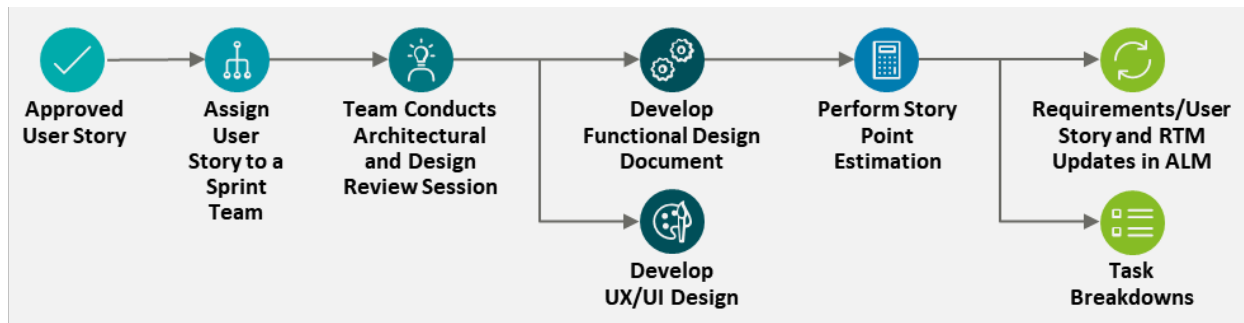
Process for Design and Sprint Planning

Phase Length: 2 weeks

Over the course of the design phase, Deloitte practitioners will develop functional and technical artifacts to outline the impact of necessary changes to IEDSS. We hold design spike sessions, during which sprint teams will discuss in depth the impacts stemming from each user story. Once an approach has been agreed upon, the sprint team will create and/or modify artifacts as needed to document the impact to functional processes, and technical specifications. The type of documentation created will be dependent on the proposed scope of changes. If the data

captured in these fields must be shared with trading partners, then questions arise regarding how batch, interfaces, and web services should be modified to accommodate the exchange of this data. Each team will be working on a scope defined for a four (4) weeks of sprint timeline and thus helps team to complete the design work for the Epics that are modular and decomposed to a limited scope.

In the second week of the design phase, sprint teams conduct story point estimations and task breakdowns to prepare for the upcoming development sprint. During story point estimations, sprint team members vote to assign story points to the backlog of user stories they have reviewed. Story points are assigned to a story based on the complexity of the work, the velocity of the team, and in context with other user stories be voted on. The story point estimations provided will be used to determine the number of stories to be taken up in the development sprint. The final activity performed before transitioning to the development phase is task breakdown. The purpose of task breakdown is to create an itemized list of development tasks necessary to meet the conditions of each acceptance criterion. Over the course of development, sprint teams log their hours against each respective task.



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Figure 5-5. Process Flow for Design.

Please see the below table for the high-level responsibilities of State and Deloitte teams during the design phase.

Expectations during Design	
State Staff Expectations	<ul style="list-style-type: none"> Where applicable, provide functional input from State SMEs in shaping approach/documentation. Review and approve design documentation created by Deloitte.
Deloitte Staff Expectations	<ul style="list-style-type: none"> Develop or modify functional and technical artifacts. Give story point estimations to user stories. Submit revised estimates for work with consideration of vetted technical approach.

Table 5-11. Team Member Expectations during Design.

Hybrid Agile in Action – Design

One key Agile tenet is the concept that we should value working systems over comprehensive documentation. Within the traditional Waterfall methodology, comprehensive documentation is itself a key tenet. Our approach to design is tailored to meet the quality of documentation and artifacts the State is accustomed to, while prioritizing the end result of delivering working functionality.

Agile Values Applied	Benefit to the State
Customer collaboration	During the design phase, Deloitte practitioners rely on the feedback loop provided by State stakeholders to create a design approach that aligns with the strategic goals of IEDSS. When modifications must be made to the underlying architecture of IEDSS, we are careful and deliberate in our approach. To understand the full scope of changes required, we will continue to rely on inputs from State technical and functional SMEs.
Working software	Our story point estimations allow sprint teams to give their perspective on how much effort each user story will require. This practice allows us to limit the number of user stories deferred at the end of the development sprint, and instead focus on providing working functionality for IEDSS.

Table 5-12. Agile Practices Applied and their Benefit — Design.

Outputs of the Design Phase

Our proposed design phase serves as an opportunity for functional and technical impacts to be fully identified. By allocating time for thoughtful analysis and determination of functional and technical design, we fortify our approach to deliver high-quality functionality.

- A revised **order of magnitude estimate** with greater clarity based on the complexity of functional and technical changes.
- Meaningful **design documentation and artifacts** created with a mutual understanding between the State and Deloitte.

4. "Development and Testing" becomes "Sprint Development"

Sprint development focuses on the iterative and incremental development of working functionality to address the requirements of the State. Given the short delivery timelines associated with Hybrid Agile delivery, it is of great importance that we effectively monitor and track Sprint progress. Over the course of the sprint, multiple forms of testing are executed to substantiate requirements including Unit, System, and interim UAT and Integration testing (by both Deloitte and UAT teams). Sprint teams facilitate demos to receive feedback for State stakeholders and obtain approval for completed work.

Agile Terms for Sprint Development	
Term Name	Description
Scrum Master (SM)	The SM empowers the team to make development decisions and acts as a team player to collaborate effectively with the Product Owner and Scrum Team. The SM's main responsibility is to recognize and act on team conflict or impediments and drive the project towards a successful demo at the end of the sprint.
Scrum of Scrums (SOS)	Due to constraints in environment allocation, technical and functional dependencies, we understand development does not happen in a vacuum. The SOS serves as a platform for all Scrum Masters to meet and discuss if any work taken by an individual team will in any way impede changes being made by another team.
Sprint Retrospective	At the end of a Sprint cycle, it is beneficial for the team to reflect on what went well and what could use improvement from the previous cycle. Our development teams conduct retrospectives at the end of each development sprint in order to understand how to sharpen our approach in the next cycle.
Interim Demo	In the third week of the development sprint, the Scrum Team will demonstrate the progress made to the PO through an Interim Demo. The PO provides feedback, and the team integrates changes into the final product delivered to the State.
Final Demo	On the last week of the Sprint, the Scrum Team conducts a Final Demo to highlight the work and final product to the PO.

Table 5-13. Terms Used in Sprint Development.

Process for Sprint Development

Phase Length: 2 weeks

Development of working functionality is the main objective of the Hybrid Agile SDLC. In addition to coding, sprint development features a preliminary suite of testing to reduce the number of defects found once projects transition to the Sprint Hardening and Deployment phase. Deloitte follows a rigorous process throughout the Sprint Development phase, with defined outputs and expectations for each week. The below table provides a description of the tasks to be taken up during each week of the sprint development phase, with accompanying outputs and expectations.

Timeline for Sprint Development	
Description of Weekly Activities	Outputs and Expectations
Week 1 - Front Load Development Efforts	
<ul style="list-style-type: none"> • Establish a timeline for when user stories or components of user stories will be available for testing • Complete the creation of the testing scenario by the end of the first week • Meet with Deloitte's SMEs to confirm coding approach • Prepare data for testing scenario execution within the provided development environment • Start development and unit testing 	<ul style="list-style-type: none"> • Task breakdown for individual Acceptance Criteria added in ALM • Documented testing scenarios • Conducting unit testing on the completed work
Week 2 - Development and Testing Underway	
<ul style="list-style-type: none"> • Continue development and testing work • Work with teams to coordinate version control and code merging through Scrum of Scrum meetings 	<ul style="list-style-type: none"> • Confirm significant coding progress • Confirm all test cases are documented
Week 3 - Testing and Interim Demo	
<ul style="list-style-type: none"> • Confirm that code completed up until the third week has been delivered to testing environments and adheres to testing protocol 	<ul style="list-style-type: none"> • Interim demo completed

Timeline for Sprint Development

- Execute Unit, System, Integration and Usability and Accessibility testing - utilizing automation where available
- Document bugs in ALM and track resolution
- Prepare for and conduct interim demo
- In collaboration with UAT testers, conduct interim UAT testing for the modules where system testing is completed and there are no open defects against the user story
- Confirm team has updated task status correctly

Week 4 - Delivery

- Wrap up pending coding activities and perform peer code reviews
- Confirm that all test cases are executed and ready for final demo in development environment
- Confirm all prioritize defects are closed, and development tasks are completed prior to final demo
- Review ALM tasks and confirm that all open tasks are closed, and time logging is complete and accurate
- Close the sprint
- Confirm team has updated task status consistently during the Sprint
- Close Sprint by end of the day Friday
- Schedule the retrospective for the Sprint
- Any work which does not receive approval from the Product owner will be deferred and backlogged

Table 5-14. Description of Weekly Activities over the Course of the Sprint Development Phase.

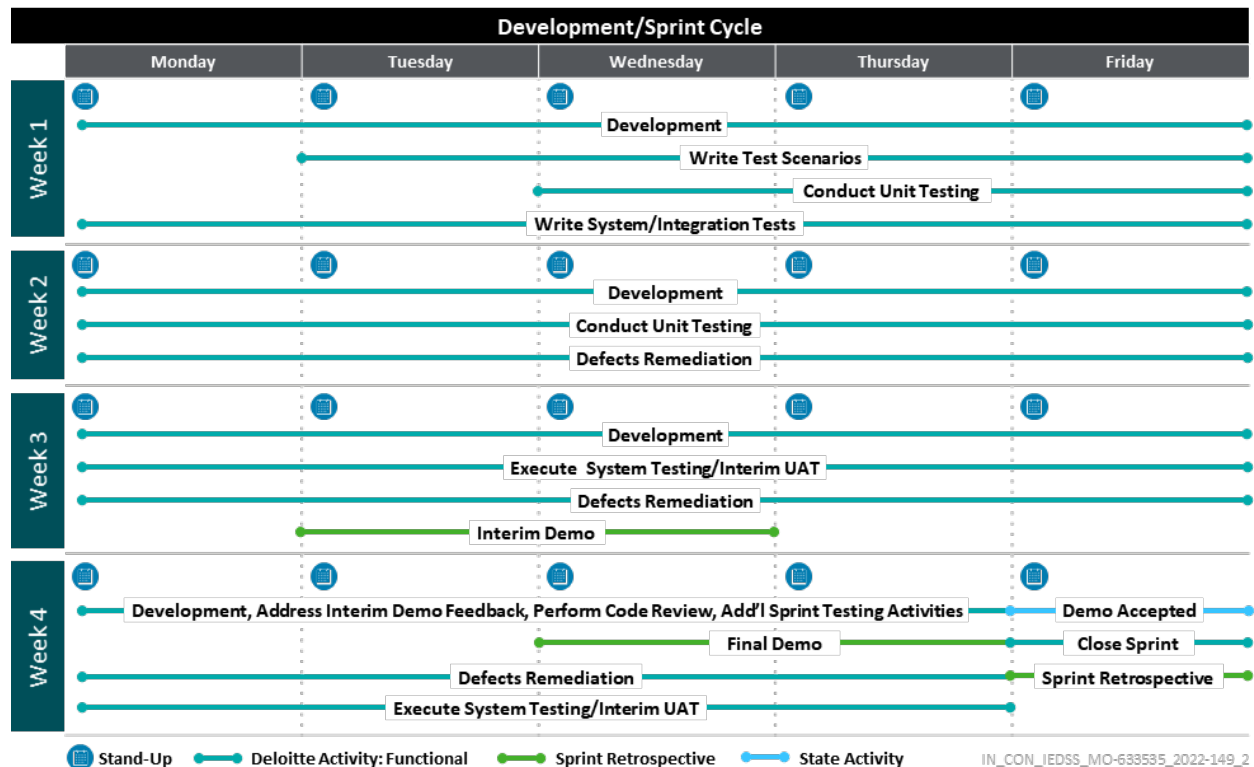


Figure 5-6. Key Activities Over the Course of Development.

Given the short delivery timelines of our Hybrid Agile SDLC, it is of great importance that we effectively monitor and track sprint progress to deliver the work associated with each user story. Through these established controls, our team can successfully deliver solutions to address the requirements of user stories in the four-week sprint development phase. As part of our proposed approach, Deloitte requests that the State assign a dedicated UAT tester to each sprint team over the course of the sprint development phase. Although we carry out UAT within the sprint hardening, we recommend that UAT tester be part of the scrum team and an interim UAT is conducted alongside system testing.

Expectations during Sprint Development

- State Staff Expectations**
- Give feedback during interim demos on developed functionality.

Expectations during Sprint Development	
	<ul style="list-style-type: none"> • Approve development work associated with each User Story based on adherence to their respective acceptance criteria. • Assign a UAT tester to work with the development team over the course of the sprint development phase.
Deloitte Staff Expectations	<ul style="list-style-type: none"> • Complete all development work in adherence to user stories and accompanying acceptance criteria. • Participate in daily scrum and SOS meetings to discuss impediments and progress of work. • Incorporate feedback from the business group elicited during demo sessions into development work.

Table 5-15. Team Member Expectations during Sprint Development.

Hybrid Agile in Action – Sprint Development

At the end of each sprint development cycle, teams gather in sprint retrospective meetings to give input on three key questions: What went well in the prior sprint, what needs to be improved upon, and what practices should we continue? Our team will use retrospectives to not only discuss the changes that happened during the recent sprint, but also revisit the improvements the team aimed to make based on the previous sprint's retrospective. Activities such as these align with our commitment of continuous improvement and increase the velocity at which sprint teams complete work, especially when applied to efforts spanning multiple development sprints.

Agile Values Applied	Benefit to the State
Customer collaboration	During this phase, our teams utilize Iterative Development to incorporate feedback from stakeholders. Incorporating the feedback from the product owner provided in both interim and final demos improves transparency for the State and reduces the risk of work being developed incorrectly.
Responding to change	We understand that requirements evolve as new information comes to light. Through our interim and final demos, we leave the door open to addressing additional changes requested by the State for work developed and add these features in the product backlog.

Table 5-16. Agile Practices Applied and their Benefit – Sprint Development.

Outputs of the Sprint Development Phase

The outcome of the Sprint Development phase is a tangible piece of development work meeting the acceptance criteria captured within the user stories assigned to the sprint. All work performed up until this phase is done to enable sprint teams to deliver timely and complete functional modules of work that meet the needs of the State.

- The delivery of **working functionality** that meets the requirements of the State and incorporates feedback from State stakeholders.
- Preliminary **testing** conducted to confirm that work delivered meets functional requirements, prior to additional testing performed during sprint hardening.

5. “UAT & Deployment” becomes “Sprint Hardening & Deployment”

The purpose of the Sprint Hardening and Deployment phase is to fortify all work developed in the prior sprint(s) with additional testing before the new functionality is deployed to production. During this phase, multiple forms of testing occur, including integrated UAT, usability and accessibility, End-to-End, Regression, Performance, and Security. For additional information regarding the specifics of our testing approach, please see Section 5.f.

Agile Terms for Sprint Hardening and Deployment	
Term Name	Description
Defect Triage Meetings	To address defects found over the course of sprint hardening, Deloitte conducts daily meetings to communicate defect status and targets for the next day. Defects identified during the sprint hardening and deployment phase will be triaged and assigned to the supporting sprint team to resolve the defect.
Baseline	A baseline is a static (unchanging) snapshot of code to be promoted to production. The purpose of the baseline is to have a static reference point for changes that occur once the baseline is created.

Table 5-17. Terms Used in Sprint Hardening and Deployment.

Process for Sprint Hardening and Deployment

Phase Length: 4 weeks

Prior to the final demo, application code scheduled to be deployed in production at the end of the sprint hardening phase will be delivered to a designated testing environment to holistically test the IEDSS system and its interdependencies. During this phase, the Deloitte testing team will collaborate with the State to perform an array of testing, including UAT.

Sprint hardening begins the week following the close of development sprints. User stories enter sprint hardening only after all bugs have been resolved and the product owner has signed off on each acceptance criterion. Testers execute both automated and manual scripts, and capture the results of each attempt in ALM. Should the test fail, a defect is created in ALM and subsequently analyzed and resolved by the assigned sprint team prior to re-executing the failed script. Defects are tracked through weekly defect triage meetings. Defects requiring escalation are discussed and a plan is set to resolve each.

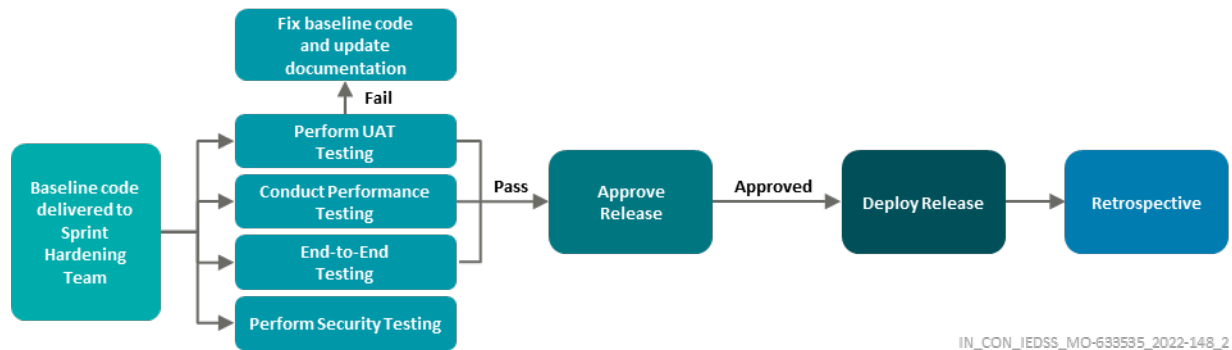


Figure 5-7. Process Flow for Sprint Hardening and Deployment.

After testing has been completed and cleared of any defects, the State and Deloitte meet to make the final decision regarding whether to promote the new functionality to production. Our build process compiles the application source code with the new functionality from each CR to create a single deployment package for the baseline. The baseline package is deployed to Development, Test, and Production environments using Deploy Scripts. After the production release, any defects found are handled through M&O activities.

Expectations during Sprint Hardening and Deployment	
State Staff Expectations	<ul style="list-style-type: none"> Assign a dedicated State UAT tester to each scrum team entering sprint hardening to perform UAT. Finalize release scope and approve CRs to be promoted to production.
Deloitte Staff Expectations	<ul style="list-style-type: none"> Manage traceability of defects and prepare to discuss in Defect Triage Meetings with solutions to defects identified in this phase. Review development changes to confirm multiple metrics meet quality expectations. Continue monitoring the system to confirm the new release seamlessly integrates with production. Discuss Go/No-Go details with Indiana following performance testing outcomes.

Table 5-18. Team Member Expectations during Sprint Hardening and Deployment.

Hybrid Agile in Action – Sprint Hardening and Deployment

At the end of each Sprint Hardening and Deployment phase, teams gather the key metrics like how many defects were found during the Sprint Hardening and discuss the reason why these defects were not discovered during the Sprint Development phase and what action can be adopted to improve the overall escape defects.

Agile Principle Applied	Benefit to the State
Working Software	New working functionality will be delivered incrementally and iteratively through regular deployments. The ability to deploy modularize functionality will allow the State to go live more quickly and effectively, reducing time to release by 50% to 16 weeks (as opposed to an average of 32 weeks).
Responding to Change	A new requirement discovered during the Sprint Hardening phase will be discussed with the product owner and the product owner is empowered to decide to either move the item in the product backlog or shift the priority to address a newly discovered requirement.

Table 5-19. Agile Practices Applied and their Benefit – Sprint Hardening and Deployment.

Outputs of the Sprint Hardening and Deployment Phase

At the conclusion of the Deployment phase, the primary output is a well-tested baseline deployed to production. The State also receives documentation of all testing scenarios executed throughout sprint hardening, in addition to clear traceability from CR inception to deployment.

- Traceability of all user story defects found in sprint hardening and record of their resolution
- Thoroughly tested working functionality promoted to production

- Sprint retrospective with collection of lessons learned during the Sprint

Applying SDLC to Maintenance and Operation

Our above proposed Hybrid Agile SDLC would also be leveraged for Maintenance and Operation defect resolution, upgrades, and patches. We do understand that there is a sense of urgency when it comes to getting the defect fixed as it impacts the business operation and our end users. Keeping that in mind, we have proposed an approach that tailors the SDLC for IEDSS M&O and allows the State to build on the best processes and standard that exists today and deploy the fixes at the earliest. We propose to deploy the maintenance release along with the closest enhancement release once the State has approved the root cause analysis and release assignment. Additionally, the State will also be able to deploy ad-hoc or emergency releases on a need basis. We will have one dedicated maintenance sprint team who will be working in collaboration with the enhancement team and the State by following the Hybrid Agile SDLC to prioritize, develop and deploy the defect fixes. The following table outlines some of the activities and ceremonies that will be different for M&O compared to Enhancement SDLC for each of the SDLC phase.

Phase	How M&O Activities will be Different than Enhancements
Product Backlog Creation	Team will continue to follow the established process of documenting the root cause analysis and proposed solution in the ALM and not have any epic created for the defects.
Discovery Phase	As we start our transition journey to Hybrid Agile, our proposed approach is to follow the current process of documenting the resolution in ALM and not develop user story for defects, however, as we mature in our journey of adopting the Hybrid Agile in enhancement, we can adopt the approach of converting the defects as a user story and acceptance criteria.
Design and Sprint Planning	The Maintenance Sprint team will continue to perform the detail design analysis, but Maintenance Sprint team would not conduct the user story estimation ceremony for the prioritized defects.
Sprint Development	No Change.
Sprint Hardening & Deployment	M&O release will not have its own sprint hardening, this is not changing from the procedures we follow for minor releases today.

Table 5-20. Key Difference in M&O Activities Compared to Enhancement.

The following figure illustrates how our approach aligns the maintenance and enhancement releases along with the opportunity to deploy an Ad-hoc/patch or emergency fixes in between the major releases.

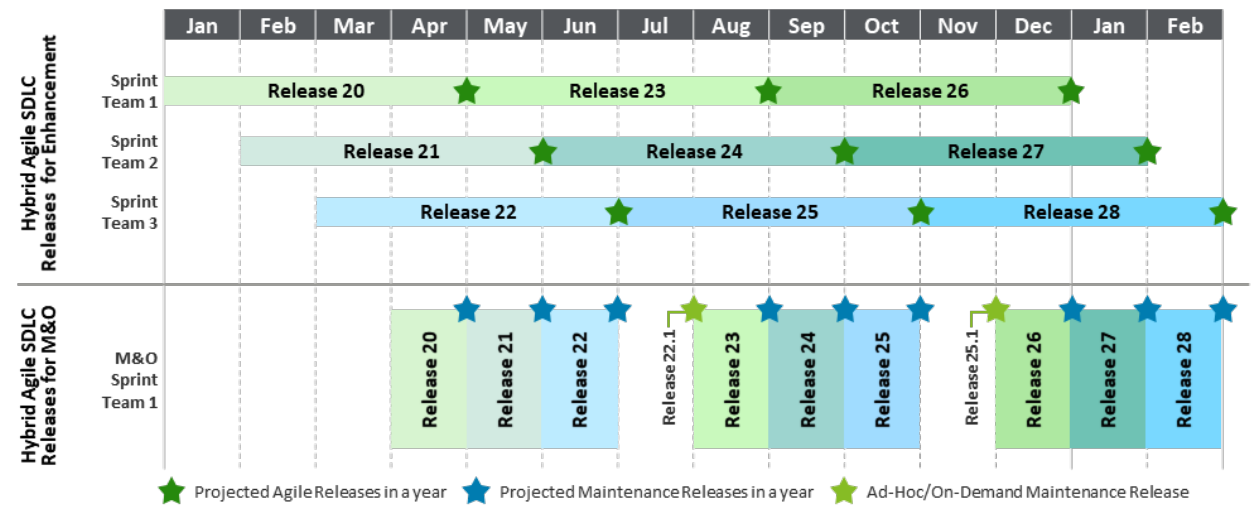


Figure 5-8. Anticipated Release for Enhancements and M&O.

5.c SDLC Deliverables

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

c. Confirm your agreement to provide the SDLC deliverables described in Section 5.1 as required.

We confirm our agreement to provide the deliverables or their Agile equivalent as described in Section 5.1. The practice of our Hybrid Agile methodology suggests that the format of some of our deliverables may take on a different shape. As we adopt a new methodology to deliver enhancements to IEDSS, we must also tailor the deliverables we produce to suit the accelerated pace at which work is produced. We have worked continually with the State to shape the IEDSS solution and our deliverables in a manner that caters to Indiana and its needs. The quality of our deliverables has contributed to the success of IEDSS. With our transition to Hybrid Agile, the format of many of our deliverables will change, but the purpose they are fulfilling will not.

The below table maps each phase of our proposed Hybrid Agile SDLC to the deliverables the State has requested. As noted above, moving into a new SDLC means the format of deliverables will change along with it; however, this does not mean deferring the value each deliverable produces within IEDSS's current Waterfall methodology. Rather, we will work together to reinterpret the deliverables to best suit the processes and procedures of our integrated Agile principles.

Agile Deliverable Evolution	Benefit to the State
Project Definition > Product Backlog Creation Phase	
<ul style="list-style-type: none"> Change requests for IEDSS enhancements will continue to be submitted by the State within ALM, with the addition of an accompanying epic outlining the business case behind why the request is being submitted. Project Schedule, Production Release Program Timeline & Production Release Scope Document will be accounted for in the form of our release charter. Our release charter lists all projects that will be taken up by development teams across the span of two linear sprints, with associated releases. The project release charter is regularly reassessed and updated regularly. 	<ul style="list-style-type: none"> The addition of epics to CRs sets the stage for assessment of impact by serving as a living document as CRs are being analyzed and estimated. By consolidating Project Schedule, Production Release Program Timeline, and Production Release Scope Documents into one regularly updated deliverable, we simplify release and project planning for easy reference.
Requirements Definition and Analysis > Discovery Phase	
<ul style="list-style-type: none"> High-level analysis of CRs at the beginning of the discovery phase is derived from completed epic analysis. We use this artifact to steer initial conversations during discovery and explain our understanding of anticipated impacts. As discussed within Section 5b, throughout the discovery phase, we decompose stated business requirements into user stories. User stories and accompanying acceptance criteria will be used to detail new requirements for IEDSS and will be captured in ALM. When existing requirements are being updated, updates will be made in the existing IEDSS RTM. Attached to user stories will be relevant artifacts such as form and user interface specifications, as well as process flow documents to be leveraged by developers. Acceptance criteria will be written in such a way that for the user story to meet the definition of done, it must be demoed to business that all specified security and ADA compliance standards are adhered to. Security impact analysis will be complete at a release level. Deloitte practitioners analyze each CR scheduled within the release and submit their findings to the State. As mandated by NIST 800-53 and CMS MARS-E requirements. 	<ul style="list-style-type: none"> High-level business requirements come into scope during the Product Backlog Creation and Inception phase for Deloitte to respond to CRs submitted by the state. As CRs are assigned to a release and discovery begins, epic requirements are decomposed into user stories. User stories allow us to appropriately size work and capture a greater level of requirement granularity. Acceptance criteria function as a tool to directly tie a functional or technical expectation to work to be developed. Because associations are created from CR down to testing scenarios, requirements traceability is established implicitly in ALM. We will continue the creation of security impact analysis at a release level.

Agile Deliverable Evolution	Benefit to the State
Functional and Technical Definition and Analysis > Design Phase	
<ul style="list-style-type: none"> • The design phase will center on producing high-quality artifacts in the form of functional and technical documentation. As projects transition into this phase, the development team assigned to the respective project will fully vet any supporting documentation created at the time of discovery and modify/enhance it where needed to outline the approach for development. Artifacts modified/created will be attached to user stories in ALM. • Architectural specs will be created and updated on an ad hoc/as-needed basis. Architectural specs will be attached to relevant discovery documentation (User Stories, Acceptance Criteria, epics, etc.). In addition, Deloitte agrees to publish architectural specifications to any State knowledge sharing/archival repository. • As detailed in the prior section, acceptance criteria will be inclusive of ADA and security standards relevant to the requirements captured in the user story. Supplemental documentation can be attached for further clarity. 	<ul style="list-style-type: none"> • Adopting an iterative and incremental approach to development will mean adopting a just-in-time mentality for deliverables, including functional and technical artifacts. Our design phase is intended for completion of all necessary artifacts only for the subsequent development sprint, as opposed to the comprehensive documentation of a PSD or DSD that can cover development over multiple months. • After all design artifacts have been reviewed and approved by the State, Deloitte practitioners leverage all new information derived from discovery and design to give the State a more realistic idea of the effort necessary to deliver on their requirements.
Testing > Sprint Hardening	
<ul style="list-style-type: none"> • Acceptance criteria explicitly dictate the standards that developed work must meet, go/no-go criteria for testing translate to satisfaction of user story acceptance criteria. • As described prior, acceptance criteria will be captured for all related security and accessibility standards, thereby establishing guidelines for related testing. • As we transition into our Hybrid Agile SDLC, Deloitte will continue to maintain and enhance our existing IEDSS master testing plan document in accordance with FNS Test Plan requirements and Federal and State security requirements. • Test cases will be created in ALM to affirm individual acceptance criteria. They will feature both positive and negative scenarios to help confirm that all variants of testing are considered. As testers proceed through each scenario, they will complete the steps detailed in each case and affirm that the expected outcome was accomplished, or otherwise escalate the outcome as a defect. 	<ul style="list-style-type: none"> • For work to be approved to move into the sprint hardening phase, each user story must meet the definition of done as dictated by its acceptance criteria. • Test cases will be captured in ALM over the course of the development phase will be reaffirmed, and additional scenarios not covered over the course of development will captured and executed as scripts in ALM. • At the end of the sprint hardening phase, the key outcome will be a fully tested, production-ready baseline ready for deployment.
Implementation > Deployment	
<ul style="list-style-type: none"> • Prior to production implementation, the release charter will be reevaluated to the exclusion of any projects that have not passed through sprint hardening, with all defects remedied. • Smoke testing in prod environment prior to deployment to validate that the new functionality does not disrupt any mission-critical activities. • At the time of deployment, a snapshot will be taken of the thoroughly tested IEDSS system within the testing environment and promoted to production. 	<ul style="list-style-type: none"> • After all testing has been finalized, the State will have the opportunity to determine which CRs will be consolidated into the baseline and deployed and which CRs will otherwise be excluded. • The results of the testing will be aggregated and reported to the State prior to any ultimate decision on project release.
Post-Implementation Support (Production Support)	
<ul style="list-style-type: none"> • At the conclusion of each cycle, our teams host sprint retrospective sessions during which teams discuss what worked well and what needs improvement going forward. These takeaways are memorialized in the form of a "Lessons Learned" document and referenced during future sprints to increase the velocity and efficiency of teams. 	<ul style="list-style-type: none"> • The lessons learned document corresponding to the CRs included in the release will be posted in SharePoint or any other knowledge sharing site at the discretion of the State. • All final deliverables and documentation for the CRs deployed to production will be uploaded to SharePoint
Defect Management	
<ul style="list-style-type: none"> • As you have read throughout prior sections of this table, defects identified throughout a project's lifecycle will be logged within ALM along with an accompanying testing priority and severity ranking. • Defects found in production after release will be addressed through M&O activities. Remedied defects will be pushed into production either through patch releases or timed with a regular production release, depending on the business prioritization of the defect. 	<ul style="list-style-type: none"> • Our approach to defect management will not deviate from our current approach. The life cycle of captured defects will be tracked and monitored. Reports and statistics relevant to each defect will be generated and supplied to the State.
Change Management	
<ul style="list-style-type: none"> • As described earlier in this section, CRs will be submitted and tracked through ALM. Each CR will have a completed analysis in the form of an epic associated with them, including a rough order of magnitude assessment. • Regarding preventative maintenance items, these activities will be tracked by dedicated M&O teams and documented in ALM. 	<ul style="list-style-type: none"> • Change management will continue to be orchestrated through ALM. The only deviation from the current approach will be the inclusion of an epic attached to each CR.

Table 5-21. SDLC Deliverables for Each Phase.



We understand that adhering to deliverable requirements provides State stakeholders with visibility into our processes and performance. In this spirit, we will continuously work to tailor and submit deliverables that are impactful and that enable meaningful business decisions.

5.d Approach to SDLC Management

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- d. Provide your approach to SDLC management. Explain how you would transition the system and State IEDSS team to Agile methodologies for prototyping, rapid quality delivery, and other best practices and the timeframe for the transition activities.

Considering our history of making gradual shift in IEDSS SDLC, we would recommend a pilot-based shift to a true Hybrid Agile SDLC. This phased transition not only gives us enough time to train the team to new techniques but also helps us refine our process based on our learnings from the pilot implementations. This refinement of processes also helps us maintain the quality and consistency of work delivered while gradually integrating transformative Agile principles into our operations. At the onset of our transition, we dedicate a month to reviewing, refining, and training all relevant stakeholders with the practices, roles, and terminology of our SDLC. This first month will frontload our training activities and after the initial training period, we will transition our scrum team into first pilot sprint. As our first pilot Sprint ends, retrospectives will enable us to understand which elements of our playbook are working and which are falling short and position the State for upcoming pilot Sprints.

Deloitte brings extensive experience managing complex HHS system projects for many states. The Deloitte IEDSS team in Indiana has collaborated with our practitioners from HHS projects including Texas, New Mexico, Louisiana, and Washington. These states have integrated Agile principles into their SDLC, or the projects are fully Agile. We bring in best practices and lessons learned from these and other projects to guide the IEDSS team in the transition and are able to work more effectively with State staff in order to enable all team members to adapt to our new Hybrid Agile SDLC.

Transition to Hybrid Agile

In this section, we discuss how the transition will impact your people, processes, tools, and technologies. In addition, we paint a clear picture of Deloitte's plan to gradually transition the existing SDLC to the new Hybrid Agile methodology tailored for the State. The following figure shows how we approach this transition at the high level.

Phased Transition

Deloitte proposes a phased approach to the transition of the IEDSS SDLC from Waterfall to Hybrid Agile. The transition begins with an initial period of planning and analysis during which we come prepared with the following on day one:

- Lessons Learned from other Eligibility and Enrollment Projects
- Draft IEDSS Hybrid Agile Playbook
- Draft Transition Plan
- Draft Training Materials
- CSM Certified Practitioners
- Agile Coach and SDLC Advisor
- Experience gained from IEDSS Hybrid Agile pilot - [REDACTED]

We update the playbook and other draft materials as per the review and feedback from the State. The playbook allows us to document and explain how existing roles and processes will be redefined in the new SDLC. During the first four weeks, we train stakeholders on key principles and explain how their responsibilities and daily activities change as we move into a Hybrid Agile SDLC. We begin the process of identifying and training representatives from the State for roles as product owners. The product owner provides functional expertise for the project.

Deloitte completes an Agile Readiness assessment to determine the areas in which IEDSS staff need additional education and training and where they have achieved competence. A month is a relatively short run-up before our first pilot Sprint. We have prepared for this by proactively training our Deloitte staff on Hybrid Agile principles and obtaining Scrum certifications for all the Scrum Masters of our proposed teams. Our Scrum masters bring the minimum viable product (MVP) mindset that allows the State to get the most critical functionality developed and

deployed in a shorter duration. In addition, our process have guiderails in the form of retrospectives and refreshers where needed. The following figure illustrates a timeline of the transition:

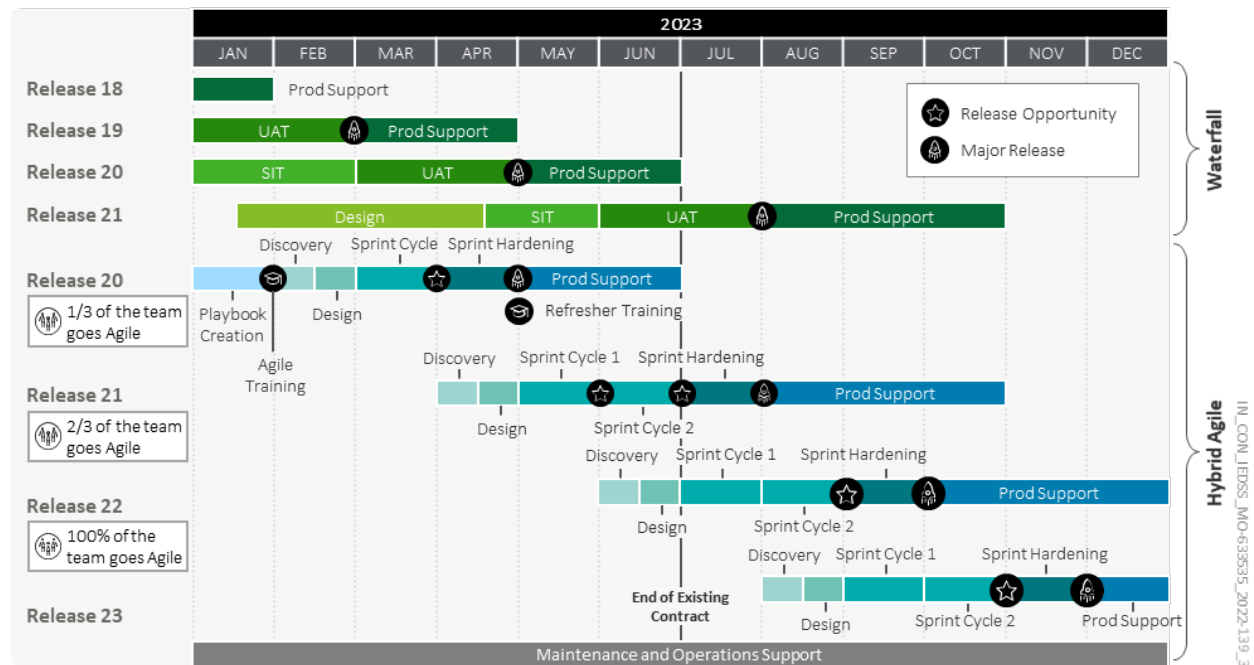


Figure 5-9. Hybrid Agile Transition Timeline.

After the initial four-week training period in January 2023, we will transition into first pilot sprint. One scrum team participates in the initial pilot sprint. As shown above, the pilot sprint runs during February. Once the sprint concludes, a sprint retrospective is conducted to understand what worked well for teams and what they struggled with. This feedback helps in shaping our approach for the second pilot as well as updating the training which is used to train broader team before initiating second pilot.

The pilot Sprint begins in the first week in February. We have chosen this start date so that the timeline of delivery for work coincides along with Release 20. Upon deployment of release 20, we immediately begin development for our second pilot sprint for release 21. We can do this because the discovery and design phases for this Sprint cycle are accomplished in parallel with Sprint hardening for the prior cycle, meaning that we maintain near continuous development. While transitioning to Hybrid Agile, different activities of disparate cycles can run in parallel. In this second pilot Sprint, we select an additional team to transition to Hybrid Agile. We aggregate lessons learned in the prior pilot to position our teams for success. Now there will be two teams functioning within Hybrid Agile SDLC with the third still completing work in Waterfall. The release for the work being completed both in Waterfall and Hybrid Agile will again coincide with the same release. For pilot sprint 2, this maps to release 21. We complete the same set of debriefing activities that occurred after the first pilot.

From the deployment of release 21 and onward, all three teams complete work within the new Hybrid Agile SDLC. At this point, IEDSS will have completed its transition from Waterfall to Hybrid Agile. Further revision and finetuning may be necessary, but this is an important milestone for the State. Undergoing this transition means restructuring and repurposing the way we organize our teams.

In the following section, we describe the critical success factors during this transition.

Sponsorship

The transition to Hybrid Agile does not occur in a vacuum. It impacts all operations and results in some growing pains. For it to succeed, Hybrid Agile must be embraced at all levels including executive leadership of both the IT and business teams. Sponsorship entails key stakeholders from the State advocating for the transition and helping guide all team members toward success within the new framework.

Expectations of Leadership During Transition

State	<ul style="list-style-type: none"> Participate in educational sessions on Hybrid Agile principles and advocate for their adherence throughout IT operations.
Leadership	<ul style="list-style-type: none"> Make themselves readily available to State staff during the transition to help guide them toward our shared vision.
Deloitte	<ul style="list-style-type: none"> Respond to questions and concerns posed by IEDSS Leadership.
Project Leadership	<ul style="list-style-type: none"> Routinely assess and provide update to State stakeholders tracking the progress of the transition to Hybrid Agile SDLC.

Table 5-22. Expectations of Leadership During Transition.

Agile Coach and SDLC Advisor

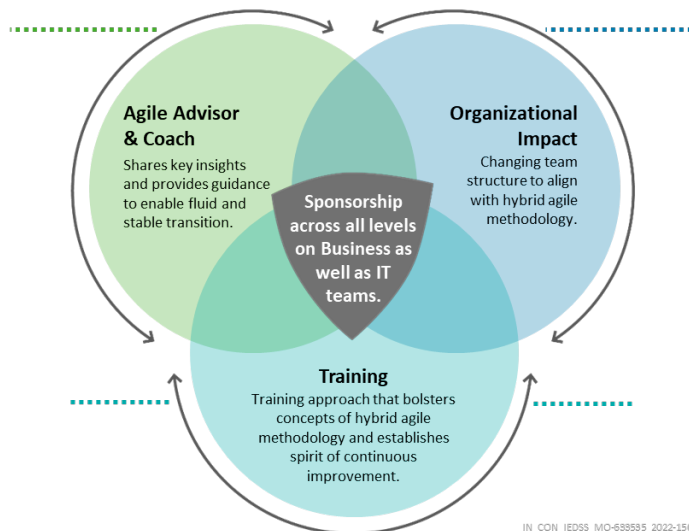
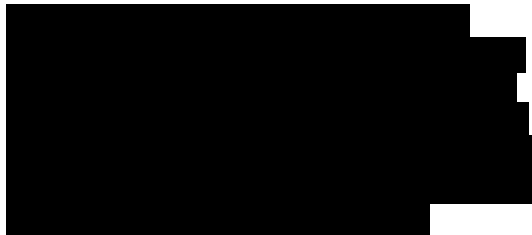


Figure 5-10. Key Components for a Successful Transition.

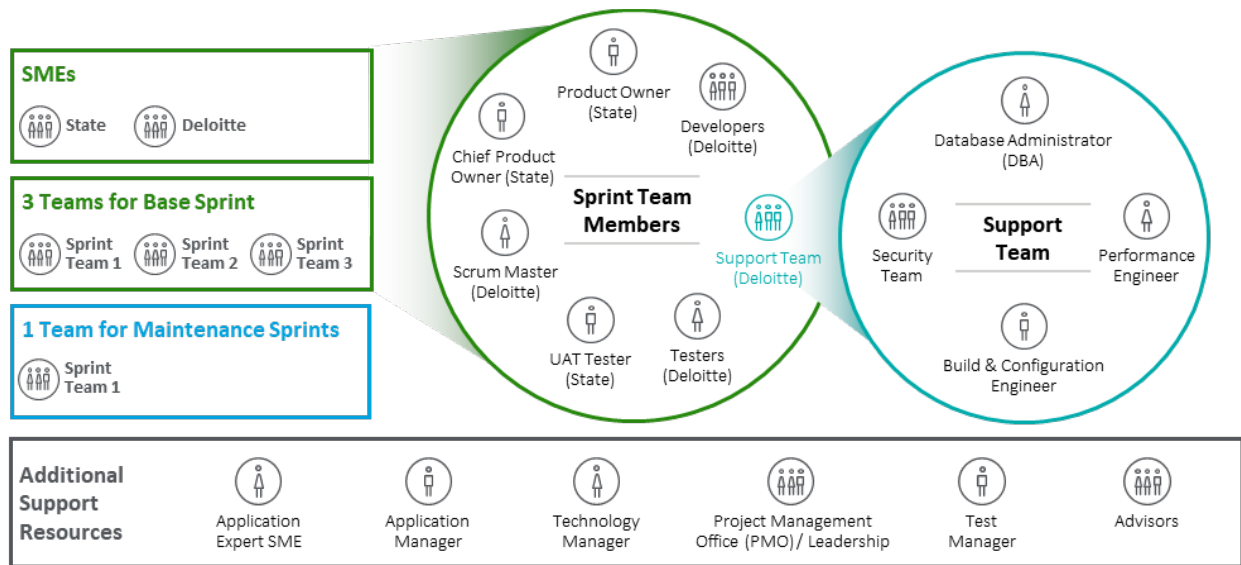
Training

Deloitte has pioneered a training approach that maximizes the Sprint-based Agile software development method. Already, 16 of our proposed named staff members are Certified ScrumMasters (CSM), and we recommend that State staff assigned as product owners to optionally become Certified Scrum Product Owners (CSPOs). At the onset of our transition, we first refine our methodology and finalize the SDLC training plan in preparation for two pilot sprints going live with Release 20 and Release 21 to ease into the transition while maintaining IEDSS functionality. During these pilot sprints, we learn from the experiences and revise the SDLC documentation based on feedback received from the State before training a broader group of identified staff.

We work with the State to develop a Project Training Plan, a detailed list of training documents, and targeted exercises teams as needed. To prepare for the transition, we have engaged an Agile coach to help us train new skills and enable us to manage this change.

Organizational Impact

A successful Hybrid Agile project depends on the right team structure with resources who have embraced and adopted the Agile mindset. To this end, Deloitte collaborates with the State to refine our Hybrid Agile playbook that outlines how current roles are mapped into the new methodology. We also identify meaningful channels of communication to confirm all participants are aware of the transition and are actively engaged in it. We have analyzed the existing team structure and roles and given considerable thoughts on how our practitioners will transition into the Hybrid Agile role. We have already started the process of training our current track leads into a scrum master role, so on Day One the State will have the team members who have the institutional knowledge of IEDSS and trained and certified for the Hybrid Agile methodology as well.



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Figure 5-11. Enhancement and Maintenance Sprint Team Composition.

Current Role	Proposed New Role in Hybrid Methodology	Description	Deloitte Differentiator
Track Lead	Scrum Master (SM) – Deloitte	The SM empowers the team to make development decisions and act as a team player to collaborate effectively with the Product Owner and Scrum Team. The SM's main responsibility is to recognize and act on team conflict or impediments and drive the project toward a successful demo at the end of the Sprint.	<ul style="list-style-type: none"> 100% of the proposed Scrum Masters are Certified ScrumMasters (CSMs). Strong understanding of IEDSS and related federal and Indiana regulations. Deep bench of experienced practitioners who can provide SM services.
Track Lead	Application Expert (SME) – Deloitte	Our Scrum Masters and project leaders play a dual role of subject matter experts (SMEs). They are accessible to our sprint teams for the area of their expertise. For example, Vasu Bodapati, our test manager plays a role of SME in the Correspondence area, Sandhya Srinivasan, our Application Manager duals as EDBC SME. SMEs' deep functional knowledge of one or more business processes is critical to smooth functioning of the IEDSS application.	<ul style="list-style-type: none"> Deep knowledge of IEDSS domain and related federal and Indiana regulations. Ability to translate technical concepts into business language for product owners to understand. Our SMEs have, on average, 10 years of E&E experience.
Developers	Sprint Developers – Deloitte	Each Scrum team has developers responsible for coding/configuring and unit testing the IEDSS suite of applications to implement the identified User Stories in their Sprint cycle.	<ul style="list-style-type: none"> Dedication and commitment to the State with low attrition. Trained in Agile fundamentals and understanding of the dynamics and collaboration required.
System Integration Tester	Sprint Tester/Sprint Hardening Tester – Deloitte	Deloitte also provides a Sprint tester for each team who will make sure each User Story acceptance criterion is met by performing additional testing such as System Tests and System Integration Tests on the software.	<ul style="list-style-type: none"> Hands-on experience with E&E program and policy knowledge.
Framework, Architecture, Build and Environment Team	Technical Support Team Deloitte	The Technical Support Team for a Scrum team may include the following resources: <ul style="list-style-type: none"> A Database Administrator (DBA) who will work to manage all database changes done by the Scrum teams A build engineer who will schedule and monitor builds and deployments for the Sprint teams 	<ul style="list-style-type: none"> Hands-on experience with the technical intricacies of the IEDSS. Strong technical skills, relevant certifications in relevant domains including database administration, build, and configuration management.

Table 5-23. Proposed Organizational Structure for Agile Transformation – Deloitte Team.

Current Role	Proposed New Role in Hybrid Methodology	Responsibilities
State SME	Product Owner	<ul style="list-style-type: none"> Once initiatives are prioritized for work, work closely with Discovery team, Business, and IT SMEs to confirm epics have enough information for accurate high-level epic estimates. Support developing User Story content to reflect the scope needs and engage the organization in reviewing User Stories. Accept/Reject User Story and Acceptance Criteria content developed during Discovery. Prioritize Sprint backlog to support Scrum Team understanding of most valuable scope in preparation for Story Point Estimation during planning week. Participate in Daily Scrum to confirm team scope clarifications are addressed. Coordinate with Chief Product Owner to address any changes in scope. Participate in Sprint review/demo meetings and accept/reject User Story changes made by the Scrum Team. Servs as lead representative for the business area and is the point of contact for all questions that need to be addressed by the business areas.
State Leadership	Chief Product Owner (CPO)	<ul style="list-style-type: none"> Decision maker for release scope, makes executive prioritization decisions. Consolidates a minimal and uniform "Definition of Done" that applies to all teams. Resolves dependencies and impediments raised by the teams.
UAT Tester	Sprint UAT Tester/Sprint Hardening UAT Tester	<ul style="list-style-type: none"> Take a more "real process" approach to perform interim UAR testing, simulating (to the extent that it is reasonable to do so) how the modified application will be used and checking that the functionality provided by the Sprint meet End User needs. These are typically the final set of tests performed during the Sprint.

Table 5-24. Proposed Organizational Structure for Agile Transformation – State Team.

Environment Considerations

Environment management is essential to support a successful promotion of application code and configuration changes from lower to higher environments. We closely work with the State for Environment Management in order to identify and align the development and testing activities as per SDLC schedule. We recommend continuing with three parallel code streams with each scrum team owning their assigned code stream. This reduces the number of communication channels and fosters ownership. This in turn gives the scrum team the freedom and control of the development environment. We continue to use the existing tools and techniques for code merges and migrations. Release Manager, Application Manager, Test Manager and Tech Manager will coordinate to align environments to sprint releases. The release manager gathers and communicates the environment details with respective stakeholders.

The following table describes our approach and the benefits to IEDSS environment management process.

Tasks	Approach
Collaboration with release stakeholders for Environment Management <ul style="list-style-type: none"> Information sharing between stakeholders involved Continuous communication to manage changes during SDLC process 	<ul style="list-style-type: none"> Continue to have a transparent communication between all the stakeholders involved on migration of changes from lower environment to higher, availability of features in various environments and impediments to testing, if any. Continue to coordinate between all stakeholders and development teams in troubleshooting issues related to deployment environment and application issues. Focus on bringing in automation in processes related to build and deployment. Emphasis on continuous efforts towards improving efficiency of the build processes and thus saving time.
Develop Environment Agnostic Scripts	<ul style="list-style-type: none"> Establishes consistency and standardization across all environments during build and deployment. Same build script created and tested in lower environment executes in upper environments. Easy scripts adoption between lower and higher environments.

Table 5-25. Deloitte's Environment Management Approach and Benefits.

ALM and DevOps Tools

An Agile transformation requires a high level of automation and developer self-sufficiency. The State can continuously improve system and operational efficiencies by leveraging proper Agile tooling. Further, efficient automation mitigates the risks associated with frequent Agile releases and product quality. Different tools and

capabilities are required when managing change in a Hybrid Agile environment. We propose using the following Agile automation tools to enhance the current IEDSS DevOps landscape.

Activity/Task	Proposed Tools	Description	Approach
Requirement Elicitation/ User Story Development	ALM	State provided ALM tool will be configured to maintain requirements as well as user stories as applicable in order to document and track their status and traceability. Transition to Hybrid Agile requires enhancement of the State provided ALM tool for managing user stories along with requirements.	Enhance
Continuous Integration	Jenkins, Maven, Ant, SonarQube, Selenium, ALM	Continuous Integration allows developers to check-in their changes to the integration stream frequently. Each check-in is then verified by an automated build, allowing teams to detect problems early in the cycle. Continuous Integration allows multiple teams to develop software in parallel reducing the chances of regression.	Enhance
Risk Management	ALM	Risk management process focuses on risk identification and risk monitoring. It also monitors the execution of planned mitigations. We recommend continuing the use of state provided ALM tool to log and track risks.	Continue
Continuous Testing	SonarQub, Junit, Selenium	Continuous testing tools enable execution of automated tests as part of the Agile software life cycle. These tools provide fast and continuous feedback regarding the level of business risk in the latest build or check-in. This information is then used to progress the software to the next level of testing. Continuous testing becomes an important component for continuous delivery.	Enhance
Automated Testing	Selenium, Junit, Agile Dashboard	Automated testing tools execute tests and then compare the actual outcomes with the predicted outcomes. We propose to continue to utilize current automation framework that is built using Selenium.	Continue
Continuous Delivery	Jenkins, SonarQube, Selenium	Continuous delivery tools can push new features, configuration changes, bug fixes, and data fixes into production quickly and frequently. Continuous delivery pipeline includes building checked in code, unit testing, deployment, regression testing, functional testing, integration testing, and production deployment.	Enhance
Continuous Monitoring	Splunk, Oracle Enterprise Manager	Continuous monitoring tools provide real-time insights across stages of the delivery life cycle—from application development to test and production monitoring. Continuous monitoring tools help improve the velocity, quality, and business impact of application delivery. We recommend continuing using tools like Splunk for continuous monitoring.	Continue

Table 5-26. Agile Tooling.

Metrics Tracking and Reporting

To maintain transparency throughout the process and make sure stakeholders are aware of the progress, we have defined key metrics tracked throughout the life cycle. Visibility into these key performance metrics confirms software quality, reduces risk, and maximizes business value. The following table describes the main performance metrics and indicators that we propose to track and monitor.

Key Performance Metric	Description	Benefits of Tracking to the State
Sprint Burndown	A chart that shows the correlation of cumulative remaining estimate against the elapsed time.	<ul style="list-style-type: none"> • Greater transparency and visibility to Sprint progress. • Effective monitoring of scope changes and Sprint progress. • Early identification of risks and/or impediments for teams.
Accuracy of Estimation	Comparison between the actual number of Sprints required to implement an epic versus the estimate provided.	<ul style="list-style-type: none"> • Identification of root cause(s) for variances. • Improved processes and quality of estimates over time.
Team Velocity	Number of story points that a given team can accommodate within a single Sprint. This number will be unique to each team.	<ul style="list-style-type: none"> • Higher Agile maturity in User Story estimation. • Helps the team improve efficiency by determining how much it can achieve over time which helps the State in improved release planning.
Cumulative Flow Diagram (CFD)	Chart that shows how much work has been done, what is in progress, and how much is still waiting to be done in the backlog.	<ul style="list-style-type: none"> • Reduced time spent on identification of bottlenecks and areas with higher work in progress. • Allows Scrum Masters and teams to focus on right issues for successful completion of Sprint and Sprint cycle.
Escape Defects	Defects that escaped testing and are found in production.	<ul style="list-style-type: none"> • Identify quality improvements during the Sprint phase to delivery better quality work product. • Improvements in the areas of automated and continuous testing.

Table 5-27. Key Performance Metrics Descriptions and Benefits.

5.e Security Requirements by Phase

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

e. Confirm that you will comply with all security requirements in Section 5.2

We confirm that our SDLC processes are compliant with relevant security and privacy requirements for the in-scope standards and regulations. In the last nine years, we have worked with the State to mature the security posture of the IEDSS worker portal application while demonstrating the importance of continuous improvements to drive increased value. These lessons, combined with our understanding of your business, form the foundation of our approach. This approach is driven by a core team that you know and trust and that is ready on Day One.

Proven Experience

SPECIFIC ACHIEVEMENTS TO DATE



Security Requirements

- Adopted to change in regulatory requirements (e.g., MARSEV2) and identified updated security requirements
- Streamlined process to incorporate updated security requirements into the design



Secure Design

- Early integration of security requirements resulted in secure design
- Results of Independent assessment by external vendors reflect the robustness of security design



Vulnerability Scanning

- Worked with developers to reduce the critical, high, and medium code defects to zero
- Extensive manual verification of application scan results is performed upon completion of scans to identify and eliminate false positives



Functional Security Testing

- Identified business requirements that have security impact on the system (e.g., document upload functionality)
- Coordinated with business and security stakeholders to develop security requirements and test cases



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Figure 5-12. Proven Experience.

Our Path Forward

As the State transitions to a Hybrid Agile SDLC, we continue to manage and remediate security risks as well as improve security operations. Our team achieves strengthened security by including security activities throughout the SDLC phases. The following figure illustrates our proposed SDLC at a high level and shows the security activities included throughout the five proposed SDLC phases.

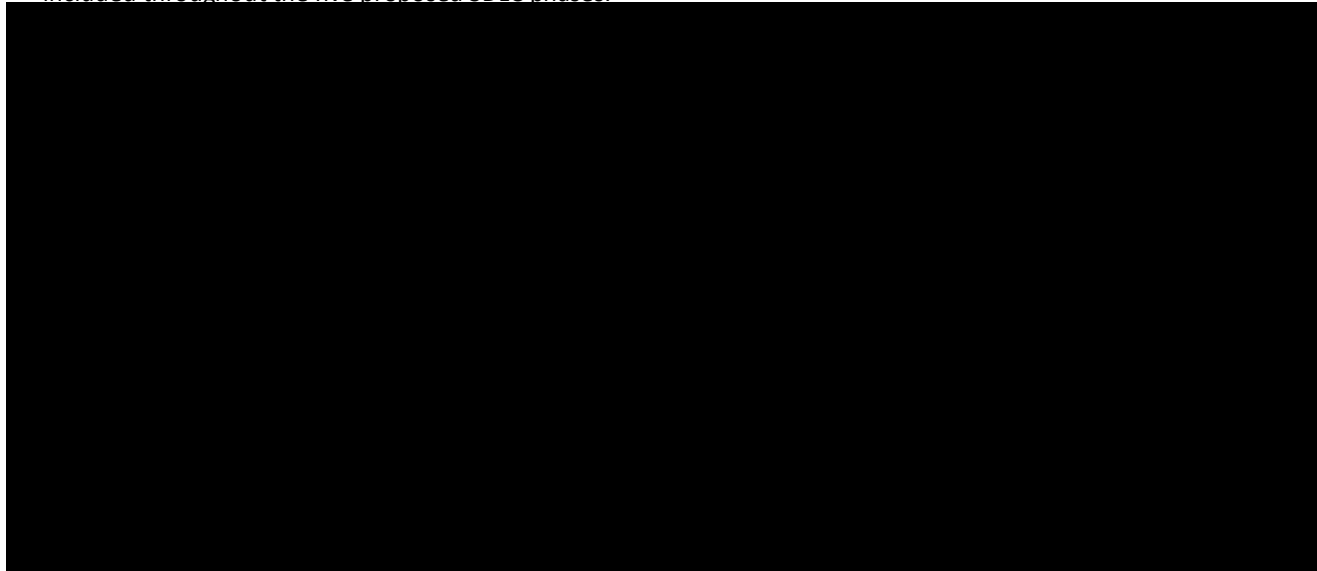


Figure 5-13. Security Activities Across the Hybrid Agile SDLC Phases.

We confirm our agreement to provide security relevant deliverables (or their Agile equivalent) as requested in the RFP Attachment C, Scope of Work, Section 5.1. Deloitte is responsible for maintaining the security posture of the legacy ICES archive and the IEDSS worker portal application and supporting COTS products. The State maintains the enterprise-wide infrastructure and its compliance. The table below lists detailed security activities that Deloitte performs in each applicable phase of the proposed SDLC.

Deloitte's Approach to Security Activities by Phase	How This Benefits the State
<p>Project Definition > Product Backlog Creation Phase</p> <p>During this phase, we work with State stakeholders to establish the groundwork for upcoming releases as well as the future of IEDSS from security and compliance perspectives. Effective requirements planning activities are as much a business issue as a technology issue. For this reason, our approach combines equal parts business insight and technology know-how. The following security activities are included in epic analysis and order of magnitude estimate:</p> <ul style="list-style-type: none"> • Establish a clear understanding of security enhancements planned for future. • List of in-scope federal standards and regulatory requirements. <p>The following activities are conducted by Deloitte's Security Officer (CISO):</p> <ul style="list-style-type: none"> • Scheduling and prioritizing the security enhancements in the production release program timeline. 	<p>With cyber threats greater than ever, investing in a long-term cyber strategy is crucial to protect against cyber threats.</p> <p>Deloitte Differentiator: Deloitte is the leader in cyber security consulting globally, as recognized by Forrester, and other leading market research firms. Our significant breadth of capabilities within the cyber security consulting space and our trusted partnerships with 26 states (where we deliver and maintain eligibility systems) allow the firm to bring strong insights and innovation to recent trends in the space, driving cyber security strategic changes.</p>
<p>Requirements Definition and Analysis > Discovery Phase</p> <p>Deloitte recognizes that incorporating security while performing the requirements planning, validation, gathering, management and traceability is critical to any project's success. Throughout the discovery phase, we decompose stated security requirements into User Stories. User Stories and accompanying acceptance criteria will be used to detail new requirements for IEDSS and will be captured in ALM. The following security activities are included during this phase:</p> <ul style="list-style-type: none"> • Threat modeling is performed to understand the threat landscape of the application environment and hence better understand how to protect the application. • Rationalize the security requirements from State Privacy and Security policies, procedures, federal standards (e.g., MARS-E, SSA, IRS Pub 1075, and FNS Handbook 901) and regulatory requirements (e.g., HIPAA) into baseline security requirements. • Relevant requirements from IOT Security Engagement Checklist are considered during the requirements identification phase. • We will use ALM on the IEDSS project to document, and manage requirements to show traceability between requirements and source of the requirement. • We will analyze each CR scheduled within the release and submit to the State the security impact analysis. As mandated by NIST 800-53 and CMS MARS-E requirements, Deloitte analyzes the changes and enhancements to IEDSS system to determine potential security impacts prior to implementation of the change. <p>The following activities are conducted by Deloitte's CISO:</p> <ul style="list-style-type: none"> • Review each stated deliverable where there is a security change or impact. • Assess the security changes and document the identified risks, plan for reducing the residual risk to an acceptable level in Security Impact Analysis. • Review proposed changes or enhancements and conduct the security impact analysis to determine potential security impacts prior to change implementation. 	<p>Comprehensive security requirements provide a benchmark by which the security of the application is measured and offer traceability of requirements to State privacy and security policies, procedures, federal standards, and regulatory requirements.</p> <p>Deloitte Differentiator: Our methodology leverages Deloitte's Security & Privacy Risk Framework that helps organizations effectively and efficiently manage requirements from federal standards and regulatory requirements. We also demonstrate traceability between the requirements to the source. The federal regulations and regulatory requirements that are in-scope for this RFP are already included in our Security & Privacy Risk Framework.</p>
<p>Functional and Technical Definition and Analysis > Design Phase</p> <p>During this phase, we validate that security requirements are integrated into the technical design. We also determine if additional compensating controls are required to further remediate or reduce the security impact of the changes or enhancements or to address change in the threat landscape. The following security activities are included:</p> <ul style="list-style-type: none"> • Review the technical design to determine if the design complies with the security requirements identified in the earlier phase. • Review impact of proposed design on security posture of application and determine additional security controls required to mitigate risks to an acceptable level. • Work with State and IOT stakeholders to leverage existing security controls and tools to mitigate the risk to level acceptable to State. • Document any new and significant changes to security functions and additional security controls and evaluate any impact to compliance documents. If required, update the Security Architecture document and baseline configuration. <p>The following activities are conducted by Deloitte's Security Officer CISO:</p> <ul style="list-style-type: none"> • Review and approve security specific components in technical design and architectural specifications. • Review and approve the security architecture document. • Review baseline configurations and security architecture annually and, if required, make updates to the documents to keep them current and up to date. 	<p>Secure design and architecture of the application dictate many of the principal elements of confirming security within the application.</p> <p>Deloitte Differentiator: As the incumbent vendor, our team understands the nuances of safeguards implemented for systems within the IEDSS authorization boundary. For example, when document upload functionality was being incorporated into IEDSS design, we analyzed the change from security point-of-view to identify the risks and options to mitigate them. We can leverage our extensive knowledge of the system to analyze the changes and enhancements to the IEDSS system to determine potential security impacts prior to implementation of the change.</p>

Deloitte's Approach to Security Activities by Phase	How This Benefits the State
Construction and System Integration Test > Sprint Cycle - Development	
<p>When executing the security test plan, we validate that working functionality (Sprint output) meets the security requirements and security requirements are implemented as designed and functioning as expected. Vulnerability scanning is conducted during the next phase. Functional security testing is performed only for security relevant changes. The following security activities are included during this phase:</p> <ul style="list-style-type: none"> • Develop security test plan to validate that implemented security and privacy safeguards comply with federal, State and agency security requirements (including but not limited to State policies, IOT Security Engagement Checklist). • Conduct security testing per the security test plan to validate that the security controls are implemented and functioning as expected. The topics covered under security testing include but are not limited to role-based access controls (both positive and negative testing), identification and authentication, audit logging and monitoring, data protection at rest and in transit. • Classify the defects based on security risk level. The defects are grouped by the OWASP categories for the purposes of reporting. • Work with application developers to remediate the high and medium security defects and/or apply compensating controls to mitigate risks to level acceptable to State within timelines defined by CMS MARS-E. <p>The following activities are conducted by Deloitte's Security Officer CISO:</p> <ul style="list-style-type: none"> • Review and approve the security test plan and security test cases. • Review and approve the results of security testing. • Confirm that high and medium vulnerabilities have been remediated and/or compensating controls have been applied with State approval. 	<p>Security testing should complement the vulnerability scanning and provide a different lens on the application environment. It identifies weaknesses that may not typically be detected through vulnerability scanning.</p> <p>Deloitte Differentiator: Through collaboration with State stakeholders and Deloitte, we have developed comprehensive functional security testing that has full traceability to the security requirements. Over the last 4 years, we have also frequently updated the functional security test plan to keep it up to date with the functionality (e.g., security test cases for document upload).</p>
UAT & Deployment > Sprint Hardening & Deployment	
<p>During this phase, we validate that quality of application code against secure coding guidelines and general application security development standards. We also remediate vulnerabilities of supporting COTS products using the infrastructure scan results provided by State. The following security activities are included during this phase:</p> <ul style="list-style-type: none"> • Conduct both Static and Dynamic vulnerability scans (outlined in the security test plan) to confirm that no new security vulnerabilities have been introduced by the changes. • Use automated scanning tools as required by mandated by NIST 800-53 and CMS MARS-E RA-5 and SI-2 to validate that development is consistent with General Application Security Development Standards (e.g., OWASP Application Security Verification Standard). • Identify security weaknesses and flaws that may be leveraged by malicious individuals to compromise the application and/or data. • Findings discovered by the automated tools are further tested to provide aggregation launch points and to identify false positives. • A series of sophisticated tests then follow where our team leverages our extensive experience and proprietary knowledge base of security software, attack profiles, test scripts, and exploit programs to evaluate the risks. • Work with application developers to remediate application vulnerabilities and to mitigate risks to level acceptable to State. • Work with infrastructure team to identify relevant vulnerabilities of supporting COTS products using the infrastructure scan results provided by State. • Remediate the vulnerabilities of supporting COTS products. • If required, conduct scans against specific pages (and/or URLs) to identify that no new vulnerabilities have been introduced and targeted vulnerabilities are resolved. • Classify the defects based on security risk level. The defects are grouped by the OWASP categories for the purposes of reporting. • Work with application developers to remediate the high and medium security defects and/or apply compensating controls to mitigate risks to level acceptable to State within timelines defined by CMS MARS-E. <p>The following activities are conducted by Deloitte's Security Officer CISO:</p> <ul style="list-style-type: none"> • Review and confirm that changes or enhancements are developed consistent with the secure coding guidelines. • Review and confirm that vulnerabilities and flaws are remediated as required by NIST 800-53 and CMS MARS-E RA-5 and SI-2. 	<p>Identify code quality issues and allow developers to remediate issues early within the SDLC.</p> <p>Deloitte Differentiator: Deloitte's vulnerability assessment approach combines extensive manual assessment techniques with the automated scanning approach. Our manual assessment techniques involve testing of automated scan results through a series of analytical routines to normalize, validate, de-duplicate and prioritize to eliminate false positives.</p>

Deloitte's Approach to Security Activities by Phase	How This Benefits the State
Post-Implementation Support (Change Management & Defect Management)	
<p>During this phase of SDLC, we maintain the security posture of the application as changes occur over the lifetime of the application. We also remediate vulnerabilities of supporting COTS products using the infrastructure scan results provided by State. We review the change requests for security impacts on the application. The following security activities are included during this phase:</p> <ul style="list-style-type: none"> • After each production deployment, verify security functions of the system to determine if they are working as expected. • Perform vulnerability scanning as required by NIST 800-53 and CMS MARS-E RA-5 and SI-2 to identify new vulnerabilities and keep the application secure from new threat vectors. • Work with application developers to remediate application vulnerabilities and to mitigate risks to level acceptable to State. • Develop New Application Scan Baseline Report. • For each production deployment, review proposed changes or enhancements and conduct the security impact analysis to determine potential security impacts prior to change implementation. Also determine if any additional security controls are required to mitigate risks to level acceptable to State. • Work with infrastructure team to identify relevant vulnerabilities of supporting COTS products using the infrastructure scan results provided by State. • Remediate the vulnerabilities of supporting COTS products. <p>The following activities are conducted by Deloitte's Security Officer CISO:</p> <ul style="list-style-type: none"> • For each production deployment, assess the security changes and document the identified risks, plan for reducing the residual risk to an acceptable level in Security Impact Analysis. • Confirm compliance with security requirements during post implementation support. • Review and confirm that vulnerabilities and flaws are remediated as required by NIST 800-53 and CMS MARS-E RA-5 and SI-2. 	<p>Maintain robust security posture of IEDSS in dynamic environment of operation with changing threats, vulnerabilities, and technologies.</p> <p>Deloitte Differentiator: Deloitte follows a well-established practice to analyze changes to IEDSS system to determine potential security and privacy impacts. For example, we use automated tools to scan enhancements and change requests to validate that vulnerabilities are not introduced as part of a new release.</p>

Table 5-28. Security Activities by SDLC Phase.

5.f Multi-Phased Testing Approach

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- f. Describe your proposed testing approach.
 - o Approach to each testing cycle
 - o How automation will play a role
 - o Approach to defect resolution and within the contractual time frames
 - o Proposed defect tracking tool
 - o Your experience with security testing using the methodologies cited by MARS-E 2.0 and subsequent versions, IRS Publication 1075, and SSA Security Requirements
 - o Provide a sample Master Test Plan for a release that indicate the level of detail and quality the States should expect from you during this Contract. The sample Master Test Plan should be compliant with FNS and CMS testing requirements.
 - o Provide your approach on supporting UAT efforts

The State's vision, in collaboration with our testing strategy built on industry-leading practices and standards, **shifts focus from detecting issues to issue prevention** through systematically planned early intervention. We believe in the "Design to Achieve Quality" approach—that is, if the design is set up to eradicate bugs, a high-quality product is achievable. We involve our testing leads along with the application leads during the design phase to shape the final product.

The Hybrid Agile testing methodology offers an iterative approach with a focus on continuous feedback, improving quality, lowering risks, and driving predictable outcomes. It combines manual and automation testing stages to deliver a high-quality product that meets the State's goals. Our experience serving the State, and our ability to bring qualified staff with the necessary depth and breadth of experience, qualifies us to support this transition, while keeping the project on track with a focus on quality.

Strengthening automation plays an important role in our testing approach. We have the vision to continuously improve our automation capabilities for IEDSS, which enables successful outcomes (e.g., improving the automated regression suite cycle run duration to 2.5 hours for current IEDSS releases for a test suite of 350+ test scripts). Testing faster makes it possible to **test more with increased run frequency** and more time for fixing any identified issues. Today, we utilize the IBM® Rational Quality Manager tool for comprehensive **traceability, test planning, test construction, and test artifact management** throughout the SDLC. We are also prepared to use alternate State-approved ALM tools such as Jira which supports a transition to Hybrid Agile SDLC.



- **Experienced staff** who know the nitty-gritty of the IEDSS solution and can prevent deficiencies during design and testing
- **Established processes** provide a well-structured, reliable, and predictable testing approach to confirm quality of the final product and avoid disruptions to daily operations
- **Strong testing standards** based on industry best practices and lessons learned from ICES and IEDSS implementation
- **Extensive Test Automation** for increased testing efficiency and code quality
- **Expansive Regression Test Suite** with more than 350 test scripts to cover all business critical functionality
- **Involvement of State SMEs** throughout the testing phase
- **Wide-ranging support and close collaboration** for UAT test activities with UAT team

5.f.1 Approach to Each Testing Cycle

A system as nuanced as IEDSS requires careful coordination of testing activities that can validate and confirm that the functional and technical requirements lead to desired outcomes for the State. Testing is an iterative process that continues until the software is stable and functioning, according to the design's business and technical requirements. The Hybrid Agile approach allows the **State and Deloitte testing team to collaborate** through continuous feedback and improvement loops until the code functions as expected and meets the acceptance criteria.

During Sprint Planning, prioritization of test scenarios and requirements is key, and our approach to the IEDSS solution components involves identifying the impact of each requirement by reviewing them with the State and bundling them into critical, high, medium, and low impactful requirements. These bundles are then planned for test execution in order of priority. This approach identifies critical defects early in the testing phase and provides the time required to resolve them before introducing other testing requirements. We involve the testing team,

State SMEs, and the relevant stakeholders from the discovery and design phase so that we can work together to improve testing effectiveness through continuous feedback. We come to you in time for clarifications and make the changes needed to promote the best possible outcomes for the system.

The diagram below identifies how the required types of testing identified by the State will be aligned in the Hybrid Agile methodology across each Sprint with their outcomes defined within each sprint phase. Each Sprint has the scope of testing identified as part of Sprint Planning. Sprint Development will comprise of Unit testing, System testing, Integration testing, and Interim UAT. Sprint hardening will comprise of Integrated UAT, End-to-End Testing, and Regression testing. Security Testing and Usability & Accessibility Testing will span across both Sprint Development and Sprint Hardening phases of a sprint, whereas Performance Testing will be executed within the Sprint Hardening phase of the sprint.

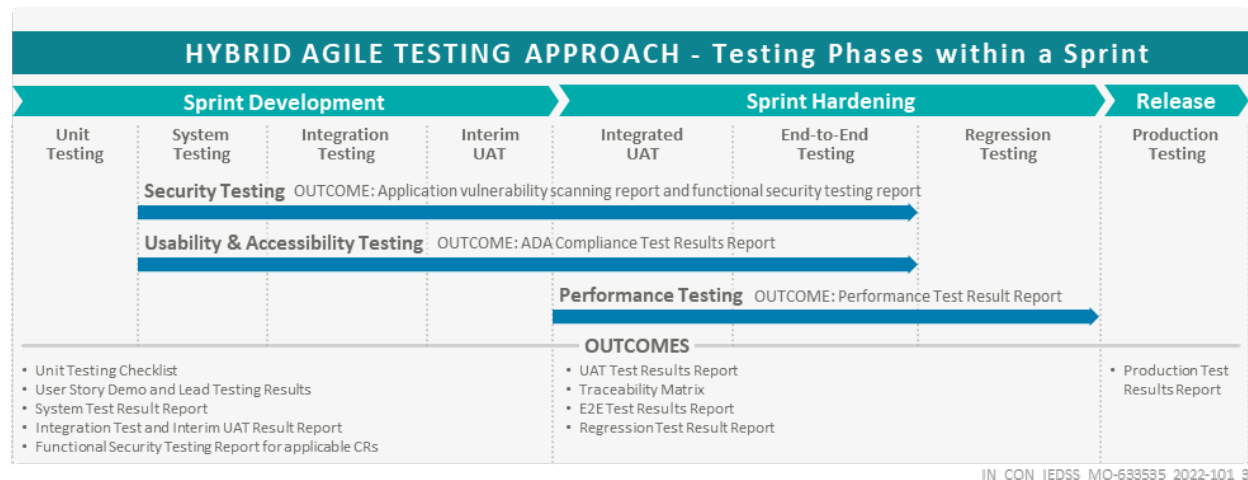


Figure 5-14. IEDSS Hybrid Agile Testing Approach.

As you will note in diagram above and the key test phase table in the subsequent section, when compared to the required types of testing requested in the Scope of Work, UAT has been identified twice here, across the Sprint Development (called Interim UAT) and Sprint Hardening (called Integrated UAT) phases within each Sprint. To clarify this further – Integrated UAT within Sprint Hardening is intended to function as UAT has functioned traditionally for IEDSS till date where the State certifies releases as being ready for production. The intent for our recommendation to introduce Interim UAT within the Sprint Development cycle, is rooted in one of the biggest benefits the transition to Hybrid Agile promises for testing, which is to integrate UAT testers as part of the Sprint team so they can also benefit from understanding the functionality from the very beginning of development and get a head start on UAT, thereby improving collaboration among all test phases. Additional details are provided about UAT in subsection 5.f.1.i below.

The testing cycles within each Sprint are multi-phased and drives toward an extensive list of usability scenarios, including possible permutations and combinations for each release. A successful production release is a result of planning, management, and execution of consistently strong testing that includes multiple testing sub-phases. Lessons learned from each release are used to plan the upcoming releases and deployments. To support testing efforts, Deloitte coordinates with the Indiana Office of Technology (IOT) to maintain and support multiple environments, and maximize the usage of test environments to run parallel testing efforts across multiple development code streams. We have worked with IOT to configure environments for new releases, with appropriate batch and file transfer processes to support integration and end-to-end testing relevant to the functionality being tested. Our team also works closely with IOT to keep their Operations and Biztalk teams informed of changes in established schedules that could impact testing, such as needing to enable a few connection ports for file transfer with an interfacing partner, or to not execute scheduled batches during multi-day testing processes, so the test data is not disturbed. All these steps allows flexibility in testing new functionality, regression testing current functionality, vendor and trading-partner testing, and time-based or time-lapsed code testing ("time travel" testing) with the end goal of a thoroughly tested production release.

Key Testing Phases and Sub-Phases

The use of distinct testing phases enforces structure in the overall testing process. Each testing phase in a Sprint serves a unique purpose and contributes toward quality checks and the overall validation of the system. Although each sub-phase occurs in sequence, it may overlap as new or updated functionality is delivered over time. The following table details our Key Testing Phases.

Testing Phase and Description	Execution Owner	Sprint Phase	Activities within Sprint Phase
Unit Testing Process of testing individual units of functionality for IEDSS Development components	Deloitte	Sprint Development	<ul style="list-style-type: none"> Functional Testing (API/Services) Boundary Condition Testing Negative Testing Error Handling Testing Regression Testing
System Testing Process of validating the system being developed against functional requirements and detailed design specifications for system components including testing the interaction between system units to identify inconsistencies in the combination of units	Deloitte	Sprint Development	<ul style="list-style-type: none"> Smoke/Sanity Testing Business Functionality Testing (API/Services) Business Cycle Testing (Time-Dependent Functionality Testing) Boundary Condition Testing Negative Testing Error Handling Testing Usability Testing Security testing
Integration Testing Process of validating the interaction of Business and Functional components to find disparities between implementation and specification in an integrated testing environment, including the end-to-end testing and interaction with interfacing systems	Deloitte & Interfacing System-Partners	Sprint Development OR Sprint Hardening (if testing cannot be completed within the Sprint Development phase due to interface system partner readiness)	<ul style="list-style-type: none"> Smoke/Sanity Testing Component Integration Testing Flow-Through Testing Business Functionality Testing (API/Services Functionality Testing) Error Handling Testing Regression Testing Usability Testing Security Testing
Interim User Acceptance Testing Testing activity that can start in parallel with Integration Testing to validate system functionality.	State of Indiana (Supported by Deloitte)	Sprint Development	<ul style="list-style-type: none"> Smoke/Sanity Testing Business Functionality Testing
Integrated User Acceptance Testing State-owned testing activity where production triggered simulated scenarios are executed for State Acceptance of the Application.	State of Indiana (Supported by Deloitte)	Sprint Hardening	<ul style="list-style-type: none"> Smoke/Sanity Testing Business Functionality Testing Business Cycle Testing (Time-Dependent Functionality Testing)
End-to-End Testing Process of validating the integration and system transaction flows in the IEDSS solution with its vendor-partners and their systems by executing end-to-end test cases	Deloitte	Sprint Hardening	<ul style="list-style-type: none"> Smoke/Sanity Testing Business Functionality Testing (API/Services) Business Cycle Testing (Time-Dependent Functionality Testing) Vendor-Partner Testing (End-to-End scenarios) Usability Testing
Regression Testing Process of validating that the related functionality does not fail following defect fixes	Deloitte and State Staff	Sprint Hardening	<ul style="list-style-type: none"> Core Functionality Testing High-Risk Functionality Testing

Testing Phase and Description	Execution Owner	Sprint Phase	Activities within Sprint Phase
or enhancements development and no new defects are introduced in the production software by executing repeatable core and high-risk test scenarios			
Performance Testing Performance testing is the process to assess whether the system, as built and deployed, can maintain adequate throughput, agreeable response, and timely completion of operation under different conditions of volume and stress PHI a designated period. Performance testing also determines whether, or at what point, extreme conditions are likely to cause a system failure.	Deloitte	Sprint Hardening (parallel activity across the phase)	<ul style="list-style-type: none"> • Performance Testing • Volume Testing • Stress Testing
Security Testing This process validates that the security safeguards are implemented as designed, functioning as expected and complying with State and federal regulations.	Deloitte	Sprint Development and Sprint Hardening (parallel activity across the phase)	<ul style="list-style-type: none"> • Vulnerability (Dynamic and Static) Scans • Security functional testing <ul style="list-style-type: none"> – Role-based access controls – Audit logging – Encryption
Usability and Accessibility Testing This process validates the system's compliance with the ADA.	Deloitte	Sprint Development and Sprint Hardening (parallel activity across the phase)	<ul style="list-style-type: none"> • Web Content Accessibility Testing • Browser/Operating System Compatibility Testing
Production Testing This process validates that the build deployed to production is appropriate for production use by performing a smoke test which is performed by the state identified end user and SME staff. Read-only smoke tests are also performed by Deloitte staff.	State of Indiana (Supported by Deloitte)	Release	<ul style="list-style-type: none"> • Smoke Testing

Table 5-29. Testing Phases at a Glance.

a. Unit Testing

In development related to enhancements and defect fixes, we give utmost focus to code quality and maintainability. To enhance consistency in coding across teams and projects, we establish a set of coding standards to follow and standard frameworks to be used during development to produce clean and consistent code. Team productivity is enhanced by providing team members easy access to a knowledge base containing guidelines, templates, and tools for development activities. This establishes better programming practices and appropriate use of design patterns and new programming tools.

Our approach includes accelerators for code peer reviews, tools, and unit test checklists to identify code not conforming to standards early in the process. Each unit test checklist contains general items that apply to the entire solution and includes items such as **screen-level validation, correct formatting, spell checking, code quality PMD, and SonarQube rulesets** as well as a section to certify that the business rules operate

Project Name:	IEDSS	Date:	
Track-Subsystem:		Component:	

#	Item / Description	Test Results		
		Pass	Comments	Not Applicable
1.	Is the data properly displayed on the page			
2.	Are all Command Buttons tested and functioning properly?			
3.	Does the general appearance of the page conform to standards and guidelines			
4.	Do all hyperlinks function properly?			
5.	Does the navigation to/from the screen function properly?			
6.	Is security enforced?			
7.	Are all mandatory fields indicated on the screen according to project standards?			
-	All mandatory fields must have the sign to indicate mandatory field – exceptions are conditional			

Figure 5-15. Screenshot of Sample Unit Testing Checklist.

successfully for each software component being tested. The unit testing checklist is updated and modified with every new release to incorporate changes as they apply. The approach of the unit testing checklist has benefitted IEDSS in identifying issues at a very early stage, thereby benefitting the State with the timely execution of testing cycles. Additionally, we use WAVE plug-in to validate usability and accessibility compliance.

Today, upon completion of unit testing, our lead developers and technical module leads perform Lead-testing of sub-components to confirm that each deliverable and their respective modules work end to end and identify any cross functional impacts. Lead testing also confirms that the requirements are mapped to the deliverables. The module leads then conduct a demo of new functionality for State SMEs, UAT, and the training teams, and feedback is reviewed against the scope and incorporated into the design as applicable. This practice carried out today by our team translates excellently into an important Agile ceremony as the State transitions to Hybrid Agile: System Demo.

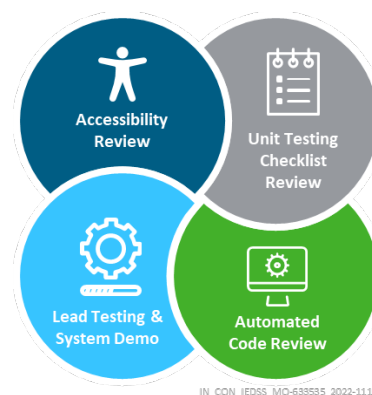


Figure 5-16. Our Approach to Unit Testing.

b. System Testing

Deloitte's testing team relies on a regimented System Testing approach to confirm that the IEDSS solution components have met the documented requirements and system functionality. Experienced IEDSS resources and their knowledge of functionality, end-user perspective, and work processes improve the effectiveness of our test plans. The purpose of this phase is to validate the IEDSS solution's functionality (application, reports, batches, and interfaces) to confirm the application's accuracy and completeness in meeting the established requirements and design.

Our testers prepare scenarios that are based on functional requirements, and each scenario includes the related requirement(s), a description of the test, a step-by-step process needed to complete the test, and the expected results of the test. We start writing these detailed test cases early in the testing SDLC based on the State-approved test scenarios. This is important for testing preparedness and readiness. Because we know the system inside and out and **have delivered over 4,650 test cases since go-live**, we know how to write scenarios and cases that resonate with the State. Accuracy and quality of these test cases can be measured by the fact that no critical defects have gone to production keeping our production system stable and reliable. Our test cases cover Negative Testing, Business Functionality Testing, Business Cycle Testing, and Interface Testing and are defined in the below table.

Sub-Phases	Objective
Negative Testing	Checks each testing screen subject for accuracy in areas such as correct spelling of field labels, the population of drop-down lists, appropriate field size, on-screen edits, and button functionality and confirms that the application can handle unwanted input and user behavior.
Business Functionality Testing	Builds a case to specific business specifications by capturing required data and executing rules against that data to produce a pass/fail results for a specific business program.
Business Cycle Testing	Facilitates artificially aging a case to test time-dependent functionality.
Interface Testing	Verifies testing "send" files and "receive" files using specific data sets obtained through entering cases through the online system, mocking file data or services by making use of production standards.

Table 5-30. System Testing Sub-Phases.

As the State transitions to Hybrid Agile, we focus on the preparation of test scenarios and test cases during the Sprint Planning phase, with the execution of System testing occurring with the sprint development phase of each cycle. We provide well-documented System Test results that provide the State participants opportunities to pose questions and request clarifications early in the process, thus saving time and providing for improved UAT preparation. We use best practices and lessons learned from working on the other M&O projects to anticipate testing issues and plan appropriately. The following table gives examples of efforts for which we recorded zero post-production defects for CRs post-go live.

Zero post-production defects change request examples from IEDSS Releases

CR570187 - Appeal against the 40 Quarter details in SSA
CR499280 - OHA - Scheduling Validations
CR647136 - Preventing OHA scheduling on Non-Availability dates for Conf. rooms in offices
CR652729 - Allow IEDSS Worker Portal users to open multiple IEDSS (CDMS) documents concurrently
CR590986 - Change in the Eligibility benefits for the Child turning 18
CR655565 - Validation on Summary page when individual jointly owns resource with individual not in the current case
CR666998 - Changes to reduce Business Exception happening due to case being in change mode



Table 5-31. Example Change Requests with Zero Post-Production Defects.

c. Integration Testing

Integration testing confirms the successful system interactions within the modules and sub-modules of the IEDSS application and its integration with interface partners, where applicable. This validates that Indiana's needs are met while focusing on reduced disruption to existing functionality and business processes. Through direct collaborations with various interface partners, test files, and scenarios specific to each, change may be created to analyze cross-platform communications. In support of IEDSS, Deloitte takes ownership of this testing piece and drives it with various agencies and interfacing partners, regardless of whether the change occurs at their end. We are able to do this not only because of our intensive experience and specialization with the IEDSS solution, but because we understand the various systems and trading partners that interact with IEDSS, such as MRT, DXC, IMPACT, CDMS, and Postmasters. Our extensive testing approach during the MRT functionality addition to IEDSS, for example, was a success for the IEDSS solution as Deloitte worked closely with the business analysts of the interfacing partners to help drive the testing cycle.

We agree with the State and acknowledge the importance of an approach that avoids the usage of "stubbing out" or utilizing mock data or services for validation that occurs during Integration Testing and will not utilize the approach unless it is unavoidable due to vendor partner dependencies or readiness, as will work with the State as such situations arise. As the State transitions to Hybrid Agile, we propose to complete Integration Testing within the Sprint Development phase. In the event integration testing cannot be completed within the Sprint Development, due to vendor partner dependencies or readiness, this can be accommodated within the Sprint Hardening phase of the SDLC.

d. End-to-End Testing

Deloitte conducts End-to-End (E2E) testing after system components have been verified through system and integration testing, as part of the Sprint Hardening process. The primary focus of E2E testing is to test the enhancement or defect with vendor partners and their system and validate typical system and business transaction flows. A key element of success throughout the E2E testing is our understanding of the batch requirements of testing partners that facilitate planning, coordination, and communication activities that take place among stakeholders regularly. One such example is the testing of the CORE interface.

Our E2E testing approach is to work in tandem with the State's SME team across the test scenario identification process and finalize the scenarios based on system/business transaction flows. This confirms that our E2E test scenarios have the maximum coverage and instills confidence in the State team as they work with us through the test design phase. A traceability matrix is created for mapping requirements to Preliminary System Design Documents (PSD), PSD to test scenarios, and test scenarios to test cases to confirm requirements and code coverage. A few examples of E2E testing that was complete or is currently underway to validated business critical functionality are listed below:

- **EBT EPPIC Upgrade E2E Testing:** Deloitte supported the State in planning, execution, tracking, and coordination of end-to-end testing between IEDSS and the vendor partner involved with upgrading the EBT benefits issuance system and validating business critical systems and exchanges were tested thoroughly.



- **Support solution quality** via a combination of Manual and Automated regression tests
- **Expansive Regression Suite.** Maintained and updated after each major release to System Test phase
- **Status Reporting** after each automated cycle execution and taking corrective action
- **Stabilized and Reduced response time** with progressive releases
- **Reduced manual effort** with automated performance tests

- **CaMMS and BDDS waiver updates E2E Testing:** Deloitte supported the State in planning, execution, tracking, and coordination of end-to-end testing between IEDSS, state agencies, and the vendor partners involved with changes to the waiver processing, and validating business critical systems and exchanges were tested thoroughly.
- **PHE Closure: Undoing all COVID changes E2E Testing:** Deloitte is working with the State to support all end-to-end testing related to undoing the changes implemented to support the COVID public health emergency.

e. Regression Testing

We place high importance on regression testing across all our work and perform regression testing before every production release to confirm that no new defects are introduced in existing functionality during M&O or enhancement related changes. Our regression testing execution has helped us identify issues and prevent them from reaching production. Examples include system/application errors after hitting submit buttons on few screens, array index out of range technical errors, and eligibility notice reason not generating issues. Our regression suite covers all State programs, case actions, household compositions, and critical case maintenance processes such as Redeterminations or Recertifications. While the regression testing primarily leverages the benefits of automation testing, we also utilize a manual regression testing approach to check on business-critical test cases that either cannot be automated or need to be check upon an ad-hoc basis, to provide coverage for the necessary regression testing.

We continue to update our automated regression suite, from a business functionality and a technical standpoint, to help reduce disruption to existing functionality, while balancing the need of the regression suite to be agile and efficient in meeting its objectives. Our regression suite currently supports a total of 351 test scripts, which includes 20 test scripts created specifically to monitor and validate scenarios related to the Covid PHE changes. While the relative size of the regression suite has increased marginally since IEDSS go-live, each major release, on average, has represented an introduction of 21 new test scripts for the new functionality being introduced, with 20 scripts being descoped simultaneously as the functionality associated with those scripts is no longer applicable. The new test scripts that are introduced for each major release, on average, represent coverage for 9 CRs and 16 high priority defects identified during the other test phases, to confirm those scenarios are always verified. The regression test suite is executed concurrently with other test phases, helping maximize testing efficiency throughout the lifecycle of the project. We develop and document repeatable test standards to facilitate analysis and regression testing of identified defects throughout the test phases, primarily in the System Testing, Integration Testing, and UAT. Deloitte works with the State's SME team to identify candidates for regression testing based on the core functionalities and enhancements, after each major release reaches system testing, so that the regression test suite can stayed updated and support quality SDLC.

f. Performance Testing

Deloitte understands that performance and scalability are significant to the IEDSS solution components’ success. We work with the State to fine-tune the IEDSS solution components and to establish acceptable response times under normal as well as peak load conditions. As part of performance testing, we measure memory, network bandwidth, and CPU utilization of the IEDSS solution and validate that the system is performing per the approved Non-Functional Requirements and design modules.

Our approach for performance testing is grounded in a deep understanding of your business, and we collaborate with you to define a plan and execute extensive performance testing prior to the implementation of a major release in production. We start by analyzing the system changes being implemented in the production release. We then estimate production traffic and case workload based on estimates provided by the State, and our analysis based on relevant historical data and impact to the IEDSS solution components. We then create a plan that prioritizes the coverage of business-critical functionality which is expected to be resource intensive, such as a batch process that is expected to significantly increase the records it processes which may have a knock-on effect on system availability or performance, or changes to the eligibility rules processes that could require longer run times for different program requests and household configurations. A deep understanding of E&E systems and your business allows our team to accurately gauge the impact to system performance, for what may even look like subtle changes to system design, and this ability is crucial to effectively execute performance testing.

As the State transitions to a Hybrid Agile methodology, the performance testing will be run in parallel with the Sprint Hardening processes. Issues identified as part of the test results are then escalated with the State and vendor partners with the intent of keeping the system available for the State’s end users to continue to meet and exceed the defined SLA. We use reporting and performance statistics to calibrate our performance tests to ascertain the IEDSS application infrastructure strength and make agreed-upon changes needed to meet project goals. Deloitte is currently exceeding the SLA threshold since the statewide rollout of IEDSS. The following activities include inbound and outbound services to support IEDSS solutions behavioral conditions under normal and peak loads.

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- IEDSS has maintained the response time SLA with 99.11% transactions below 5 seconds, 99.60% transactions below 8 seconds, and 99.88% below 15 seconds even after 4000% growth in production traffic.
- IEDSS utilizes only 50% of its available infrastructure capacity after State-wide implementation.
- Performance test suite coverage extends to 65% of all available functionality for coverage of resource intensive and business critical functionality.



Figure 5-17. Performance Testing Approach.

Our Approach		Benefits	
Improvement with every release		Deloitte performs rigorous and extensive performance runs for each major production software release and reports any performance degradation or increase in response times. Any performance degradation is analyzed, and code is fine-tuned to improve the response time (e.g., screen load time, file transfer, batch completion).	
Test-bed mimicking PROD		An environment with production-like configurations and real production data is set up for the performance runs of IEDSS releases. The actual data helps in mimicking the would-be PROD behavior of the solution code and arrive at the response times like the production environment.	
Batch Performance Numbers		The average time taken by the nightly batch cycle was 3 hours during the IEDSS pilot go-live in April 2019. Even after eight major releases and Statewide conversion, the duration of the batch cycle is maintained at an average of 3 hours. There is minor to no increase in the batch cycle time duration, indicative of optimized code, our efforts to optimize batch cycle, and quality performance testing.	
Automated Performance Testing		We will leverage the licensure of the Performance Tester tool owned by the State to perform the Performance testing and automate the test data creation scripts.	

Table 5-32. Performance Testing Benefits.

g. Security Testing

Our security testing approach is based on federal standards (e.g., CMS MARS-E 2.2 and IRS Pub 1075 Rev 11-2021) and regulatory requirements (e.g., HIPAA). Security testing includes two components:

Vulnerability scanning: Our team conducts Static Application Security Testing (SAST) and Dynamic Application Security Testing (DAST) to look for security vulnerabilities such as Cross-site scripting, SQL Injection, Command Injection, Path Traversal, and insecure server configuration.

Functional Security Testing: We conduct functional security testing to complement the vulnerability scanning and provide a different lens on the application environment. It aims to identify weaknesses that may not typically be not detected through vulnerability scanning. The functional security testing includes, but is not limited to, the following topics:



Security testing approach provides several benefits to the State:

- Integrates security requirements in early phases of the development lifecycle.
- Safeguards confidential information stored, processed, and transmitted through IEDSS.
- Adheres to federal and State security requirements.

Subphases	Objective
Role-based access controls	Validating that access of authorized roles is limited (positive and negative testing) to appropriate functionality that is necessary to accomplish the assigned tasks.
Audit logging & Monitoring	Validating that audit records contain the required information to establish what type of event occurred, when the event occurred, where the event occurred, the source of the event, the outcome of the event, and the identity of any individuals or subjects associated with the event. We will also validate the SIEM tool alerts and reports to identify indications of inappropriate or unusual activity.
Encryption	Validate that approved mechanisms (e.g., digital signatures) to protect the integrity of data while in transit from source to destination.

Table 5-33. Subphases of Functional Security Testing.

Through collaboration between State stakeholders and Deloitte, we have developed comprehensive functional security testing that has full traceability to the security requirements identified in the design phase. During the DDI phase, we have also frequently updated the functional security test plan to keep it up to date with the functionality (e.g., security test cases for document upload). While the current functional security testing provides full coverage across the security domains, we have realized that there are features we can improve. Deloitte's goal is to take a risk-based approach towards functional security testing to customize the scope of testing for the security risks relevant for that release. A risk-based approach to functional security testing facilitates in-depth testing of relevant security risks in a shorter turnaround time.

As part of security testing, we work with the State to enhance our security test plan, which defines what is tested, the mechanisms used to test, who tests, and which environments are used. Based on the agreed-upon security test plan, the security testing team executes documented test cases and logs any identified defects. After completing the security testing activities, we work with the development team for remediation of the gaps and retest the remediation to validate that the gaps identified are remediated as expected. The security test plan includes the following:

Key Features of the Security Test Plan
<ul style="list-style-type: none"> • Security test cases to validate the security and privacy safeguards, including logging and monitoring. The test cases and scenarios are mapped to the security requirements identified during the design phase to establish traceability. • Deloitte leverages its controls catalog to develop test cases for providing the right coverage to security and privacy requirements <ul style="list-style-type: none"> – Requirements from CMS MARS-E, HIPAA, State policies, and IOT Security Engagement Checklist are included in the security test cases. • Description of the test case, step-by-step process to complete the test, and expected results of the test case. • Approach for SAST and DAST of the system <ul style="list-style-type: none"> – Our team performs manual analysis of scanning tool results using custom-developed scripts, techniques, and use cases based on the business of the web applications to identify potential gaps or vulnerabilities – Approach for scanning aligns with the industry standards such as National Institute of Standards and Technology (NIST), Center for Internet Security (CIS), and OWASP. • Criteria for the severity of security defects. • Periodicity at which the security testing and vulnerability scanning is conducted. • Tools used for security testing and vulnerability scanning.

Table 5-34. Key Features of Security Test Plan.

We have reviewed and acknowledge the entry and exit criteria listed for Security testing in *attachment C – Scope of Work* of the RFP and agree to meet them to record completion of the test phase. We will work with the State to define the entry and exit criteria in further detail as part of the finalization of the Master Test Plan.

Please refer to *Section 5.f.5 Our Experience with Security Testing - MARS-E, IRS Publication 1075 and SSA Security Requirements* for Deloitte's security testing experience.

h. Usability and Accessibility Testing

Usability and Accessibility testing are performed to confirm the solution's compliance with accessibility requirements laid out by the American Disabilities Act (ADA). Deloitte follows the guidance of the Web Content Accessibility Guidelines (WCAG) 2.1 or an equivalent standard, which covers a wide range of recommendations for making Web content more accessible. Usability testing includes manual testing and testing with automated tools such as WAVE (Web Accessibility Evaluation Tool) to inspect Web pages for compliance with ADA sections 504 and 508 covering Web Accessibility and W3C's WCAG 2.1.



Our team has worked directly with Easter Seals and a differently-abled end user to determine accessibility and identify areas for improvement. Upon identification, issues were isolated and appropriate fixes were incorporated in the solution.

We understand that while system compliance with these standards is essential, it also plays a critical role in the system's usability by differently abled users. Our team and user groups strive for ADA compliance both in letter and in spirit and utilize these standards across the M&O scope and within any enhancements for the IEDSS system. We run JAWS to validate usability and accessibility compliance for any new enhancement as part of this testing.

Deloitte has reviewed and complies with Website Accessibility per Title II of the Americans with Disabilities Act (ADA)* for both Enhancements & M&O



* Title II of the Americans with Disabilities Act (ADA), 28 C.F.R. § 35.160, 28 C.F.R. § 42.503, Section 504 of the Rehabilitation Act, Section 508 of the Rehabilitation Act, HHS CMS MEET requirements, FNS Handbook 901 requirements (as well as "SNAP Guidance Best Practices for Online Applications") and Web Content Accessibility Guidelines 2.1 (WCAG 2.1) for the ongoing Software Development Lifecycle (SDLC) requirements, design, testing, and defect resolution of the IEDSS solution Life Cycle.

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We have reviewed and acknowledge the entry and exit criteria listed for Usability and Accessibility Testing in *attachment C – Scope of Work* of the RFP and agree to meet them to record completion of the test phase. We will work with the State to define the entry and exit criteria in further detail as part of the finalization of the Master Test Plan.

i. User Acceptance Testing (UAT)

As noted in the RFP, UAT is the critical test phase which confirms that the IEDSS solution releases are production ready. Through the DDI and M&O phases of the IEDSS project, Deloitte's team has worked hand in hand with the UAT Staff to support their test execution by assisting all UAT teams with environment setup, test data creation and identification, batch execution, functional clarifications for test cases and system design, and reporting requirements. We recognize that constant collaboration, open communication, and knowledge sharing between UAT team resources, and Deloitte project staff facilitates accurate and comprehensive UAT.

Deloitte has provided guided knowledge sessions to the UAT team before major functionality is released for testing so that the UAT team has time and knowledge to design test cases for scenarios for validation. Our technical staff and testing resources are also available to assist UAT staff in reviewing scenario results and addressing questions and concerns regarding system functionality. The UAT team now also attend JAD sessions for enhancements and are welcomed and supported to work with their counterpart Deloitte test leads for guidance needed to build test scenarios for major functionalities.

We remain committed to providing that same high-level quality of support and keep that momentum going forward, by leveraging one of the major benefits of the proposed Hybrid Agile SDLC to dial up this team collaboration to the next level. As noted in section 5.d – Approach to SDLC Management, we have proposed that a UAT tester be part of each Sprint team, so they are involved in the day-to-day activities associated with the Sprint functionality. This enables UAT testers to be integrated as part of the design, development, and testing activities. The communication and collaboration efforts currently undertaken by the State team, Deloitte team, and the UAT team for testing coordination, will organically transform to “one test team” approach as the UAT testers will already be working side by side with the developers and system and integration testers.

Additionally, as noted in the section above, we also recommend introducing an Interim UAT test phase within the Sprint development cycle, in conjunction with Integration testing, so that UAT team can get started a lot earlier in the SDLC. This Interim UAT provides the benefit of starting UAT testing in an iterative manner, while validating the core business and end-to-end functionality as part of the Integrated UAT phase within the Sprint Hardening phase. This incremental UAT approach allows for faster and more detailed UAT testing, which provides the State the confidence that the enhancements implemented for IEDSS work for the end-users in real-world scenarios.

Our continuous efforts to promote a quality code for UAT and the how we support UAT staff for timely execution are also mentioned in detail in the below subsection 5.f.7 - *Approach on Supporting UAT Efforts*. We work closely with the State and UAT testers to assist in the development of a UAT plan, and through collaboration with all stakeholders, we achieve effective time allocation for comprehensive UAT testing. We have reviewed and acknowledge the entry and exit criteria listed for User Acceptance Testing in attachment C – Scope of Work of the RFP and agree to meet them to record completion of the test phase. We will work with the State to define the entry and exit criteria in further detail as part of the finalization of the Master Test Plan.

j. Production Testing

Production testing is executed as the final step in our build and deploy process of a major release being implemented in the production environment. Production smoke testing is a non-exhaustive suite of read-only tests developed in conjunction with State SMEs by our Operations and Test managers. This list of tests, typically around 10 in count for each release, inspect critical components of IEDSS and validate that changes implemented as part of the release can be verified through read-only flows and the existing system functionality also works as expected. Read-only testing is conducted by manually accessing application features using production test users during non-business hours after every production deployment. On the day of a major release, Deloitte coordinates the smoke testing with State SMEs and end users for running the identified test scenarios on the actual production cases to test and confirm the stability and functionality of the production environment. The figure below displays a few of the test scenarios executed as part of the production testing performed for Release 15.0.

Smoke Test #	Team	Test	Result	Smoke Tester	Pass/Fail	Notes
1	SIT	1. From the top navigation bar, select 'Correspondence' in the other dropdown. 2. From Correspondence sub-navigation bar, select 'View History'. 3. From the View Correspondence History page, click Case, fill any Case No., and click Search. 4. From Search Results, select any correspondence case and click Next. 5. From the Correspondence History Detail page, select Preview (button below).	Validate the correspondence document displayed when clicking Preview.	SIT team	Not Started	to test CDMS connectivity
3	DFR	1. Select any case, and navigate to Household Address in Data Collection 2. click the edit (pencil) icon for the residential address 3. On the Household Address page, click the "Validate Address" button.	Confirm that no errors occur		Not Started	To test SAP connectivity
5	DFR	1. Select any case, and navigate to Case Change action in Data Collection 2. Navigate through the driver 3. Run Wrap-Up.	Confirm that no errors occur while running EDBC, and confirm that the Eligibility Results Summary page is displayed		Not Started	TBD

Figure 5-18. Production Testing Example from Release 15.0.



- **Continued commitment to support UAT activities** through collaboration and knowledge sharing with UAT staff.
- **Iterative UAT approach** to allow UAT staff to validate system functionality sooner in the SDLC.
- **Improved UAT coordination and effectiveness** as a result of UAT testers being a part of the Sprint team which improves transparency, effectiveness, while eliminating redundancies in communication efforts and overlapping testing.

We have reviewed and acknowledge the entry and exit criteria listed for Production Testing in *attachment C – Scope of Work* of the RFP and agree to meet them to record completion of the test phase. We will work with the State to define the entry and exit criteria in further detail as part of the finalization of the Master Test Plan.

How We Meet Your Testing Requirements

Deloitte's extensive experience working on multiple public sector E&E implementations and IEDSS has allowed us to refine our testing approach to meet and/or exceed the State's testing requirements.

Testing Requirement	Deloitte's Approach
Submission of test data requirements to system owners when interacting with the non-IEDSS system	Our test team analyzes the functional and technical requirements and lists the test data setup needed to execute End-to-End scenarios involving non-IEDSS systems such as Benefits Portal, IMPACT Worker Portal, Interactive Voice Response (IVR), Communication & Document Management System (CDMS), and Medical Review Team (MRT). The depth of knowledge and experience of our team results in accurate assessment of test data requirements, and we engage the State team to confirm data needs and accuracy for the functionality under test. We also work with respective system owners and their SDLC staff to drive the end-to-end testing and not just support it.
Test Data compliance	We work with the State to identify synthetic production-like (non-production) data that can be used for testing. This data does not include PHI/PII or other secure data. Using production-like data during testing helps uncover issues that are likely to occur in production and hence can be identified during testing and resolved before deploying the codebase into production. Deloitte performs data masking per Federal and State requirements and complies with those guidelines before loading the data in the testing environment. Case cloning and data masking in the pre-production environment helps to replicate production defects. Where applicable, test data from external is utilized to execute test cases, and the transactional test data is used to complete business flows.
Build verification testing (Smoke Testing)	As part of the environment readiness checklist, Deloitte performs a round of smoke testing to make sure the newly deployed codebase into the testing environment is stable enough to proceed with testing. It is done at the start of a new phase and with every new build to uncover any showstopper issues. We have automated smoke tests kicked off on DEV environments as soon as the build is done. Continuous verification results in stable environments. We also perform build verification in the production environment to proactively avoid downtime for workers.
Testing phase initiation criteria	Deloitte adheres to the entry criteria outlined by the State before the start of each testing phase as applicable. We use a deployment validation checklist to verify component integration, configuration, and connectivity with vendor partners that may be applicable. Automated scripts are used to smoke test the environment prior to a testing phase.
Testing phase completion criteria	Deloitte adheres to the exit criteria outlined by the State for each testing phase. We hold a stakeholder's meeting to present the test report and discuss observations from the execution of test scenarios. We work with the UAT team to do a walkthrough of open defects and discuss impacts, if any, maximizing UAT time.

Table 5-35. How our Approach Meets State Requirements.

5.f.2 Role of Automation in Testing

In addition to traditional testing practices, Deloitte brings our extensive testing experience and innovation to employ automation testing services. We support automated testing tools to diversify our quality approach, increase efficiencies, create time savings, and decrease risk.

As part of this approach, we utilize proven tools and technologies to automate test case execution, smoke tests, accessibility testing, performance testing, code quality testing, unit testing, web service testing. The efficiencies gained through this automation offer numerous benefits, such as allowing for more thorough testing and identifying and resolving errors earlier in the testing process. Automation greatly reduces the occurrence of human error and simultaneously reduces the investment required in performing repetitive regression and smoke testing. Effective automation in testing allows for a level of quality in testing that could otherwise be difficult to achieve.

Deloitte uses a Selenium-based automated testing suite across different projects and states, including a library of pre-built automation scenarios specific to HHS E&E programs. Selenium is one of the most widely used open-



- Deloitte brings automation to each testing phase to improve efficiency.
- Performance Testing, Regression Testing, and Usability and Accessibility Testing are mostly fully automated.
- Continuously expanding regression suite with major production releases.
- Reduction of automated regression suite cycle run time to 2.5 hours to enhance repeatability.

source automation testing tools, which reduces the cost of automation for the State. It supports testing web applications, web services, and APIs built on various platforms and languages. Drawing on our experience in implementing automation for IEDSS and several other states, additional regression, and new regularly developed scenarios are incorporated in the pre-build framework and pre-packaged scripts. Deloitte completed the upgrade of Selenium upgrade to version 3.14 that resulted in the reduction of the overall regression suite to 2.5 hours for 350 regression scripts.

Due to the many benefits automation testing provides, we always look for avenues where it can apply to all test phases. For example, we create test cases during unit testing and system testing using automation scripts, and we also utilize automated test scripts to create effective test beds when required. Our testing team incorporates repeatable and high-risk scenarios in the automated regression suite that can be executed continuously to validate business critical test scenarios. Automation testing therefore helps us maintain high test coverage across test phases, while also reducing risks related to functional failures.

The table below highlights the different automation techniques utilized through the SDLC test phases.

Test Phase	Automation Tool	Process
Unit Testing and Batch Monitoring	SonarQube and PMD	SonarQube and PMD tools are utilized for continuous inspection of code quality which enables automatic reviews to detect bugs and common programming flaws.
Usability and Accessibility Testing	JAWS, WAVE	The automation features provided by JAWS and WAVE tools are utilized to validate new changes implemented meet ADA and section 508 standards expectations.
Security Testing	HP Fortify and HP Webinspect	Security vulnerability scans such as Static Application Security Testing and Dynamic Application Security testing is executed using automated tools like HP Fortify and HP Webinspect.
Performance Testing	Rational Performance Tester	All test scripts executed as part of the automated suite for performance testing are created in the State provided Rational Performance Tester tool.
Test Data Automation	Selenium	The repeatable scripts executed to support test bed creation or test data creation for specific scenarios are developed using Selenium WebDriver.
Regression Testing	Selenium	The test scripts executed as part of Regression testing are developed using Selenium WebDriver.

Table 5-36. Automation Techniques used for Testing.

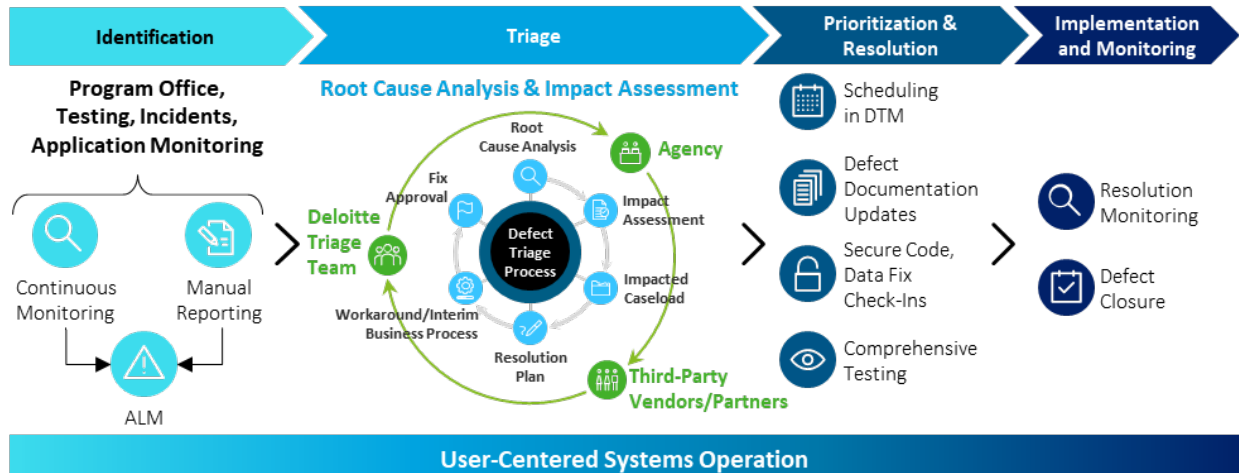
5.f.3 Approach to Defect Management, within the Contractual Timeframes

RFP Reference: Attachment C, Section 5.4

We recognize that timely defect resolution is vital for the State when it comes to M&O services, and incidents and defects are not just numbers but disruptions to some of Indiana's most vulnerable populations in promptly receiving their benefits. We understand and align with the State's approach for triage and overall defect management of keeping their citizens at the center. An issue or a defect reported in the system is not just a unit of work but could impact a family in need. Our team recognizes that a timely workaround, root cause correction, and remediation of any impacted dataset can greatly reduce adverse impacts to the end users. We speak the language of the State and end users' and understand the nuances of their circumstances, enabling us to quickly assess, escalate, and resolve issues to minimize the impact of a defect.

Deloitte works with the State to finalize defect management practices, including priority and severity guidelines, that leverage the guidelines documented in the RFP. We also work with the State, end users, and other partners to triage and resolve a variety of user, application, and operational issues through the Defect triage and management processes. Our collaborative and partnering relationship with the State has been instrumental in the successful implementation and ongoing operations. We remain committed to this partnership and will continue to bring the agility, expertise, flexibility, and commitment to get things done right.

Our team of professionals has deep knowledge of Indiana business and the IEDSS system, helping us quickly identify, triage, prioritize, resolve, and monitor defects. We continually improve our repeatable, proven processes to identify, prioritize, and execute changes associated with defects. The following graphic summarizes our proposed approach to Defect Management, which we will develop and finalize with the State.



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Figure 5-19. Defect Management Process.

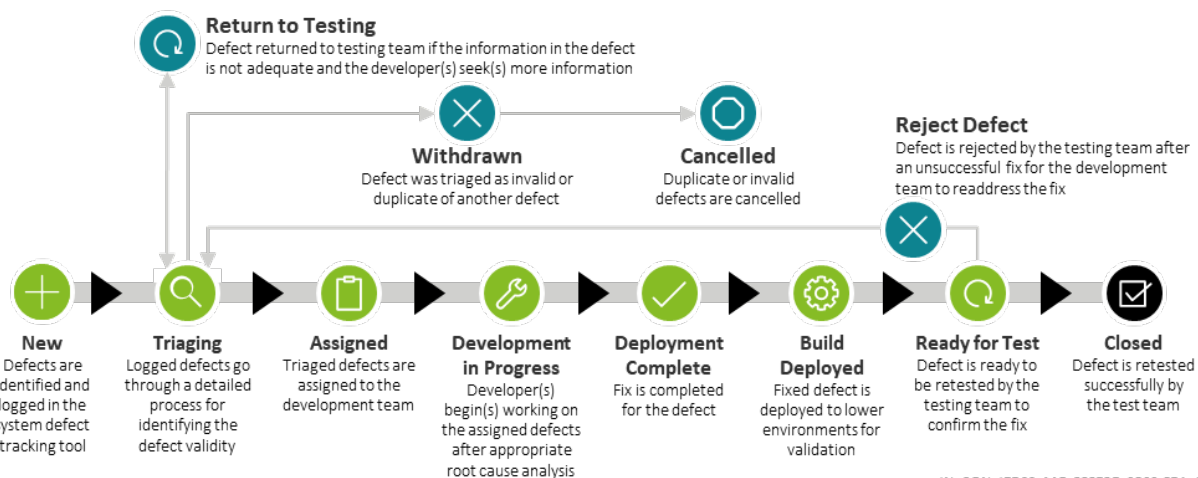
Lifecycle of a Defect

Defects can be identified at any stage of an SDLC and from the incidents reported from the field because of a discrepancy between expected and actual system behavior, which requires development and/or documentation updates. Once a defect is identified, the tester records the ALM tool defect using the defect logging guidelines currently followed and outlined by the State in the RFP. A well-written defect that utilizes the defect logging guidelines promotes quicker analysis of the issue being reported and will contain the following information, supported by the defect template in the ALM tool:

- Description or summary of the defect
- Detailed description of the defect that includes clear steps to reproduce or encounter the error
- Actual results and expected results associated with the test case and reported steps to reproduce
- Test case name and ID
- Supporting documentation such as application screenshots showing steps to reproduce or encountered errors
- SQL query statements

The tester will also assign the defect severity and priority based on State requirements, facilitating defect analysis and discussion in the Defect Management meeting. The defect description and summary will be documented in the State ALM tool and available to relevant parties for review, including third-party reviewers.

The following figure illustrates the lifecycle of a defect, from being logged into the tracking tool to either being closed or canceled.



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Figure 5-20. Defect Lifecycle.

Severity, the primary parameter for defect categorization, along the testing priority level, represents the impact on application and testing processes. The following are the defect severity levels being proposed per the State's requirements:

Severity or Priority Level	Description	Example	Deloitte's Approach	Post-Go-Live Escalation Timeframe
Severity 1 or Priority A	System Failure. No further processing is possible.	Defects critical to solution availability, results, functionality, performance, or usability are classified under this severity level. Examples could include widespread issues related to users not being able to log into IEDSS, eligibility rules not running for any case.	If a quick resolution is not feasible, then the next approach would be to find a workaround to minimize the issue's impact. We have received 0 Severity-1 Defect in production until now.	One hour from identification
Severity 2 or Priority B	Unable to proceed with a selected function or dependents.	Defects like application sub-system available, key component unavailable, or functionally incorrect are classified under this severity level. Examples could include system exception errors in driver flows or on running eligibility that stops progress on the case action.	The fix would be accommodated in the immediate build to production. For example, when issues related to appointment scheduling were reported, severity-2 defects were logged. Because there could not be any workaround identified, it was promoted to production with an expedited release; in the meantime, data fixes were provided as immediate remediation.	One day from identification
Severity 3 or Priority C	Restricted function Capability: however, processing can continue.	Defects that impact non-critical component availability or functionality, incorrect calculation results in functionally critical key fields dates are classified under this severity level. Examples could include the incorrect calculation of redetermination due date or verification due dates, benefit amount calculation that can be corrected with an interim process.	Workarounds are provided for such issues, so day-to-day business operations are not impacted. Workarounds such as data-fix or back-end reports are normally available. For example, when an issue was reported related to notices being incorrectly suppressed, a data fix was provided to create those notices as part of the daily batch cycle. The defect fix was prioritized for the next prod release.	Three (3) Days from identification
Severity 4 or Priority D	Minor cosmetic change.	Defects that impact usability errors, screen or report errors that do not materially affect quality and correctness of function, intended use, or results are classified under this severity level. Examples could include spelling errors on field labels, incorrect spacing on notices.	Workarounds are provided if available and the defect is prioritized based on State recommendation. These are prioritized for fixes when there are no Severity 1, 2, or 3 levels of pending defects due to the minimal impact of such defects.	One (1) Week from identification

Table 5-37. Approach to Defect Severity.

UAT Defect Remediation Schedule: Deloitte teams follows the guidelines and timelines identified below as part of the sprint cycle for every change request and release to minimize disruptions of UAT execution. Once a defect is logged with the required information for analysis, we work with the State for any clarifications that may be required, and then prioritize the resolution of the defect for the next available UAT build or on a schedule confirmed by the State.

As part of the transition to Hybrid Agile, a UAT team member is recommended to be part of the Sprint team, thereby facilitating easier collaboration and communication to define defect resolution priorities to aid UAT execution. We remain committed to meeting the thresholds set by the State, as we will further define in the Master Test Plan.

Defect Severity / Priority Level	Turnaround Time as per State's Remediation Schedule
Severity 1 or Priority A	Resolution within one business day. Our test leads and module lead triage the defect together for faster turnarounds.
Severity 2 or Priority B	Resolution within two business days. Our test leads triage the issue and may seek additional information from the UAT team if needed. The triaged items are assigned to module leads for further analysis and resolution, including workarounds. The resolution for these defects is made available with the next UAT builds.

Defect Severity / Priority Level	Turnaround Time as per State's Remediation Schedule
Severity 3 or Priority C	Resolution within one week, unless otherwise approved by the State. Our test leads triage the issue and may seek additional information from the UAT team if needed. The triaged items are assigned to module leads for further analysis and resolution. The correction is promoted once all critical and high defects have been corrected or approved by State.
Severity 4 or Priority D	Deloitte works with the State to confirm criteria for resolution timeframes for all other severity level and priority level defects.

Table 5-38. Defect Severity/Priority Levels.

Defect Management Meeting

The defects logged during testing are reviewed during a standup Defect Management Meeting (also known as a Defect Triage Meeting or DTM). The core participants are Deloitte test leads, Development leads, State UAT testers, and State SMEs. This approach has facilitated transparency and communication across all stakeholders since IEDSS go-live. The primary focus is to confirm the severity and priority of the identified defects and get them scheduled for a release based on the module leads root cause analysis and mitigation steps presented by the. The outcomes from the defect management meeting will be documented in the ALM tool, which will be an input for the defect status reports for State leadership awareness through regular management and testing meetings.

5.f.4 Proposed Defect Tracking Tool

The State-provided ALM tool will be used by Deloitte and the State to track defects on the IEDSS project. Our team has worked with the State team since the DDI phase of the project for the setup and maintenance of the Jazz suite tools, namely RTC, RQM, and RRC. We know and understand the current processes, workflows, customizations, dashboards, traceability, and reporting requirements that can be met by the tool. We tailored the tool based on State's requirements and added many custom fields to facilitate reporting and managing activities across the entire project lifecycle, in addition to defect management. Our in-depth knowledge of working with RTC facilitated a smooth transition from the DDI phase of the project to M&O as we created processes and work items to support production releases, incident management, production defects, and data fixes.

We understand that the State may decide to move to another ALM tool. Our team has a diverse set of skills and experiences, and we can work with the State to assess the impact and determine the effort to make that switch. The impact analysis would need to assess that the current capabilities and processes utilized for defect management, and other project lifecycle activities such as requirements traceability, or test plan execution continue to stay supported in the new tool. In addition, the new tool would also need to support a transition to Hybrid Agile SDLC, and the artifacts that may be required to facilitate that transition as agreed upon with the State, with an example being that the defect work item template be modified so defects identified within a sprint can be reviewed as part of the Sprint Retrospective to gain insights and become an input towards continuous improvement.

5.f.5 Our Experience with Security Testing - MARS-E, IRS Publication 1075 and SSA Security Requirements

Security testing is a key component of our approach to complying with State policies, federal standards (e.g., CMS MARS E 2.0, IRS Pub 1075, SSA and FNS Security), and regulatory requirements (e.g., HIPAA). As a leader in delivering eligibility and enrollment services, Deloitte currently collaborates with 26 state agencies across the country to successfully deliver projects similar in size, scope, and function. We have refined our security testing approach for agencies of similar size and scope to State through our implementation work with large state technology transformation projects. Over the years during IEDSS DDI phase, we have become adept at identifying, testing, and implementing security controls to meet federal standards and regulatory requirements (e.g., our current security testing for IEDSS worker portal includes validating the hardening of the Oracle database as per IRS Pub 1075 standards). Through collaboration between the State stakeholders and Deloitte, we have developed comprehensive functional security testing that has full traceability to the security requirements from the State policies, federal standards, and regulatory requirements. For example, to comply with State Application Security Policy and SI-10 requirement from CMS MARS-E, our security testing for IEDSS worker portal includes validating syntax and semantics of information system inputs to verify that inputs match specified definitions for format and

content. Please refer to *Section 5.f Multi-Phased Testing Approach, sub-section g. Security Testing* for Deloitte's approach to security testing.

5.f.6 Master Test Plan

Our Master Test Plan describes the approach to meeting various testing and testing deliverables requirements. It is an **extensive test planning document** that **complies with CMS and FNS Test Plan requirements**. It includes several key components essential to the success of each testing phase and defines our proposed approach to organizing schedule, scope, structure, and communication of testing effort. Deloitte's Test Manager works diligently with the State to finalize the plan that provides Deloitte's testing team and the State's testing team with the testing policies and processes used to support the IEDSS solution. The IEDSS MTP document is organized into the following sections. A sample MTP has been attached as part of *Appendix 4, Sample Master Test Management Plan*.

Sections	Description
Salient Requirements for CMS and FNS Approval	Details the requirements and test plan compliance guidelines for Centers of Medicare & Medicaid Services (CMS) and Food and Nutrition Service (FNS) requirements and test plan compliance guidelines.
Test Strategy	Articulates the overall test strategy, testing objectives, principles and defines test scope, assumptions, dependencies, and risks for the testing phases.
Approach to Test Planning	Outlines and describes the overall test planning approach, including test scope, test processes, participants and responsibilities, test environment, test tools, test data, and schedule for the various testing types described above.
Suspension and Resumption Criteria	During test execution, unplanned and/or unforeseen circumstances may trigger a suspension and/or followed by a resumption of testing activities. This section describes the suspension and resumption criteria for the testing activities.
Roles and Responsibilities	Outlines the roles and responsibilities of participants for the test phases and activities.
Test Environment	Provides the list of environments in which the testing activities are conducted.
Test Data	Provides the test data approach used during test execution.
Test Tools	Lists the names and purpose of the test tools, supporting software, and test documentation repositories utilized during testing activities.
Test Reporting	Lists daily, weekly, and end of phase testing reports being provided to the State.
Test Schedule	Provides the high-level test design and execution schedule for the planned testing activities.
Defect Management	Documents the defect management process, defect triage, point of contacts, defect severity levels, defect escalation, and defect logging guidelines.
UAT Support	Details the support activities that will be carried out during UA.

Table 5-39. IEDSS Master Test Plan Sections.

5.f.7 Approach on Supporting UAT Efforts

We understand that the UAT phase confirms that the IEDSS solution releases are production-ready and therefore strive to deliver a quality product to UAT while adhering to the timeliness of delivery. Our continuous efforts to improve the quality code to UAT has resulted in 85 percentage of valid defects associated to enhancements being identified from non-UAT test phases. This helps drive a smoother UAT with minimal disruptions during test execution and after go-live.

The following table provides a list of major tasks that occur for UAT testing phase and how Deloitte supports the State's UAT:

Test Phase	Task	Description	Deloitte's Role and Responsibilities
Test Analysis	Requirements Review	Identify and review requirements and CRs	Deloitte works with the State to identify applicable artifacts for requirement reviews.
Test Analysis	Design Documentation Review	Identify and review design documents that implement the requirements	Deloitte works with the State to conduct design document review sessions. Help UAT team to understand decision table impacts due policy change .
Test Analysis	Traceability Review	Identify and review the requirement traceability to identify any potential gaps in coverage that need to be addressed during UAT	Deloitte reviews the requirements with the State and identifies possible gaps that may need to be addressed. As example analyzing impact on reports due to changes in database design .

Test Phase	Task	Description	Deloitte's Role and Responsibilities
Test Planning	Metrics Reporting Development	Develop, document, and communicate the metrics to be reported during UAT and the mechanism for communication of those metrics	Deloitte has vast experience in generating and producing metrics for testing. Deloitte works together with the State to effectively communicate the metrics during UAT.
Test Design	Workflow Mapping	In conjunction with State SMEs, identify and document the high-level workflows implemented by the system, including end-to-end workflows incorporating interfaces, including those with interface partners	Deloitte reviews these high-level workflows with the State and guides on the best possible ways to incorporate the vendor partners' interfaces .
Test Design	Test Case/Test Script Development	Identify, prioritize, and document test case scenarios and the positive, negative, and alternate flows necessary to validate requirements and design specifications	Deloitte shares its experiences on testing with the State in documenting thorough and detailed test cases that provide maximum coverage.
Test Preparation	Test Data Development	Define and create the test data required to successfully execute documented test case scenarios	Deloitte brings its expertise in working with multiple external systems and mocking the test data (if necessary) to successfully validate with external systems. Deloitte shares the best practices and standards that can be utilized to identify and create the required test data.
Test Preparation	Test Case Review	In conjunction with State SMEs, review test case scenarios to confirm that necessary flows have been incorporated into test scripts and that requirements are covered	Deloitte performs multiple rounds of test case review with the functional and business team to validate functionality. Deloitte assists the State in building a strong test case review process that provides the State confidence in their test coverage and will address any questions or concerns.
Test Preparation	Test Script Validation	A dry run of test scripts on the UAT environment	Deloitte provides the required assistance to the State and answers any questions or concerns they may have regarding the dry run of test cases. Example, helping UAT to finalize the scope of time-travel environment or how to time share trading partner environment .
Test Execution	Test Case Execution	Execute each test case scenario and document execution results, including defects	Deloitte provides the required assistance to the State and answers any questions or concerns they may have regarding the test execution or defect management process. Example – how can we test functionality while waiting for approved correspondence language .
Test Execution	Execution Results and Defect Reporting	Develop, document, and communicate test case execution results, including defect status, through standardized reports.	Deloitte has years of experience in generating and producing metrics for testing. Deloitte works together with the State to effectively communicate the metrics during UAT.
Defect Resolution	Defect Management	Triage and fix defects for a retest. (See Section 5.4 for details.) May repeat this Phase and Test Execution Phase as applicable.	Deloitte conducts and schedules Defect Triage meetings to analyze the defects and monitor and manage them through the defect life cycle.
Test Closeout	Test Closeout	Develop, document, and communicate test closeout results upon completion of UAT.	Deloitte works with the State to generate the Test Closeout report, which provides details of the testing results, defect report, and the overall metrics of testing that confirms the completion of the UAT phase.
Test Closeout	UAT Sign-off	Upon successful completion of UAT, provide a recommendation to the State about the IEDSS solution component's readiness for production deployment.	Deloitte works with the State to generate the Test Closeout report, which provides details of the testing results, defect report, and the overall metrics of testing that confirms the completion of the UAT phase and that the IEDSS release is ready for production.

Table 5-40. Deloitte's Approach to the UAT Requirements.

The table below provides some recommendations on how the transition to Hybrid Agile SDLC can accelerate important outcomes to improve the UAT effectiveness.

UAT outcomes	How Hybrid Agile helps accelerate these outcomes
Plan testing early and test early	Up-front planning in collaboration with the State facilitates starting the test on time and staying on schedule; this especially holds for coordinated testing efforts between Deloitte and State UAT teams with vendor partners during UAT. It is less costly to fix errors early in the systems development life cycle rather than later. This principle can be built upon significantly as the State transitions to the Hybrid Agile SDLC and the coordination between Deloitte and State team within each Sprint increases organically.

UAT outcomes	How Hybrid Agile helps accelerate these outcomes
Define and/or update test cases during design activities.	Create UAT test cases or user stories during design and construction activities to validate a direct correlation between business requirements and UAT test cases as part of the Discovery phase. Considerable coordination between the development, test, and Agency user teams is necessary to confirm complete functional coverage for UAT. The traceability between UAT test cases and business requirements is established using the State-approved tool.
Prioritize what is tested and in what order.	Determine that the critical, significant, or riskiest business requirements are addressed as early as possible to provide the time needed to resolve possible issues and allow for enough time to comprehensively complete UAT for applicable functionality, including the opportunity for regression within the Sprint Hardening phase.
Test with appropriate user involvement.	Users take ownership of the system, having the business expertise and the necessary position to determine and validate if the application conforms to the business requirements; end users are incorporated into requirements and design sessions and ultimately have significant input on UAT scenario definition and coverage and the system's ability to meet the designated specifications.
Exercise end-to-end business process lifecycles early and often.	Structure UAT to support the testing of E2E business processes and execute early and often to increase test exposure across the IEDSS solution; to determine the preparedness for acceptance testing, complete UAT test scenarios that simulate how the application is used are executed throughout the various test phases. As noted earlier in this section, this approach and objective can be achieved organically during the transition to Hybrid Agile, as both UAT and E2E test phases would be aligned within the Sprint Hardening phase.

Table 5-41. UAT Road Ahead.

5.g Release Management

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- g. Provide your approach to the release management process for major, minor, and any other applicable releases into non-production and production environments.

We understand the importance of not only building a product but validating that it remains usable through its lifecycle. For this reason, we provide a proven release management process that enables solutions to move through build and test environments to a production environment successfully in a scheduled, predictable manner. Deloitte's release management facilitates how changes flow through any pre-production environment to the production environment. Deloitte's approach to release management reduces cycle time, increases predictability, maintains a high degree of compliance, and contributes to reduced costs.

IEDSS Release Promotion

It is normal for a feature-rich system such as IEDSS to have parallel implementations and work being performed for multiple releases at any given instance to support the business. For example, while the Release 15 UAT was in progress, Deloitte and State teams were fully engaged in performing SIT testing for Release 16 and conducting design for Release 17. IEDSS code migration traverses multiple environments and spans multiple parallel releases

The release promotion from one environment to another is a part of the mature SDLC that has been cultivated in IEDSS. Deloitte follows industry-specific practices and processes to facilitate the promotion of releases from one environment to another only after they have been tested and successfully satisfy the entry and exit criteria needed to migrate components from one environment to the next. The following diagram depicts the release promotion process.



- Collateral approach of release promotion with parallel release implementation.
- IEDSS team works on multiple parallel releases in DDI and M&O streams at a given instance.
- Deloitte's IEDSS team has successfully implemented 4 major and 25 minor releases since go live in April 2019.
- Automated no-touch code migration processes.
- We deliver continuous stable releases across code branches with around 56 Dev, 20 SIT, and 10 UAT builds every week.

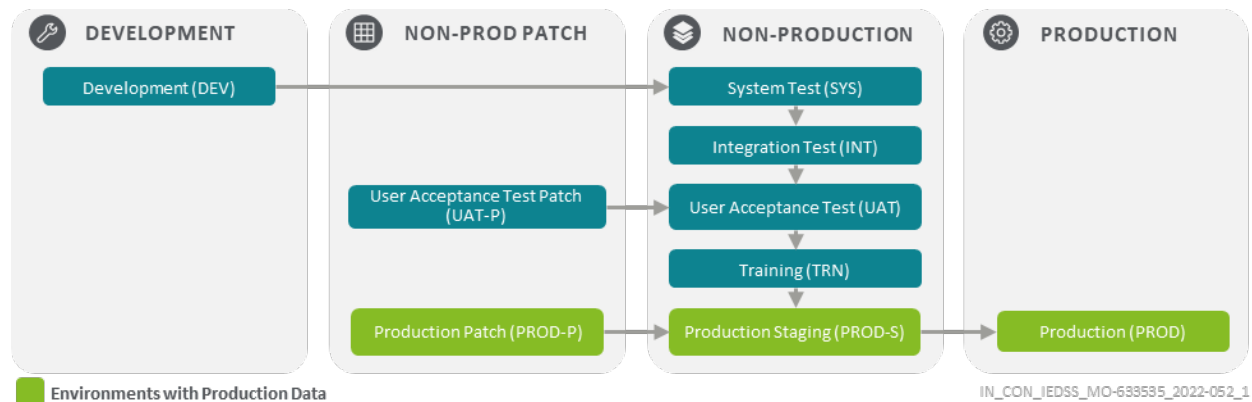


Figure 5-21. Code Migration Diagram.

Our Code Migration Approach for Different Release Types

Type of Release	Code Migration Features and Approach
Major Release	<ul style="list-style-type: none"> Enhancement Release promotion path is utilized for major releases that deliver major functionalities to production. On successful finalization of release items based on capacity & impact analysis, a release is created and managed through ALM. During a major release lifecycle, several builds are carefully planned to support various testing initiatives and promote defect fixes and enhancements. We have established A DevOps tool chain for source code management, continuous integration, code building, packaging, configuring, and monitoring on the ALM platform that acts as the change and configuration management tool for IEDSS. The team's build system will be integrated with State-provided ALM, providing build awareness, control, and traceability to the team. Database, ETL, and Cognos are integrated with code deployments as a single unit by resolving dependencies Post-deployment checklist is completed upon successful migration.
Minor Release	<ul style="list-style-type: none"> M&O release promotion path is utilized for minor releases. Automated process as part of no-touch deployment by integrating ALM with build automation. Build request is created by the client with necessary approvals. Automated build is triggered per the build request. Each minor release is a combination of minor enhancements, defects that require a fix in the production environment and configurational changes.
Fix Release	<ul style="list-style-type: none"> M&O patch release promotion path is utilized for fix releases. The code fixes for patch environments (INT-P_2, UAT-P_2, and PROD_P) are checked into the development stream and then selectively promoted into the patch stream using an automation approach through the DevOps tool chain. After successful deployment and testing in the patch stream, these are patched into the respective environment stream. For instance, code in INT-P is patched into INT, and UAT-P is patched into UAT. Deployment happens as soon as possible based on agreed-upon timelines from stakeholders and proximity to the next upcoming release.

Table 5-42. Code Migration Process.

5.h SDLC Artifact Management

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

h. Provide your approach to SDLC Artifact Management.

On IEDSS, Deloitte has a proven track record of creating, maintaining, and publishing accurate system documentation. This success can be attributed to our solid project management approach, which provides transparency and promotes accountability among parties who contribute to this process. We have consistently received accolades from State leadership on our thorough processes and deliverables.

As such, these best practices, which we have jointly established with the State, serve to maintain existing artifacts and update or create new artifacts throughout the SDLC lifecycle. We have produced several artifacts for major milestones, and each was built on templates approved by the State. By adhering to these templates, we successfully facilitate JADs, gather requirements, and develop the system, as detailed in this proposal.

KEEPING THE MOMENTUM GOING FORWARD

- Established a strong suite of artifact management practices, jointly with the State, that works for IEDSS.
- Constant feedback and reviews on artifacts and effective version controlling help keep documentation up-to-date.

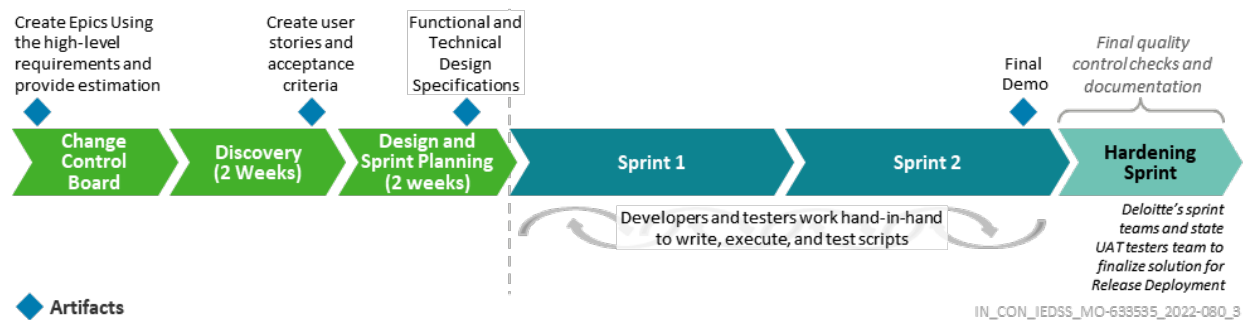


Figure 5-22. Artifacts Created as Part of Hybrid Agile.

We plan to retain some of our best practices cultivated over the last several years and evolving our artifact management approach to be more of a Hybrid Agile-oriented in close collaboration with the State. Once a change is logged, we would create epics using high-level requirements, which will assist us in estimation and prioritization. At the end of discovery, we would create and submit user stories written from the perspective of an end user of the system. This would be followed by functional and technical design specifications submitted at the end of sprint planning. Knowledge of the existing artifacts significantly reduces the time spent updating the artifacts. Deloitte is familiar with the expectations regarding the format and the content of the artifacts. For new artifacts, where there is a need to move fast to address urgent priorities and unexpected challenges, we bring the agility, expertise, flexibility, and commitment to get it right the first time. Besides sharing the artifacts in a document repository such as SharePoint, Deloitte maintains code, requirements, design artifacts, testing artifacts, and build management/configuration within the State's Application Lifecycle Management (ALM) tools.

Our approach, with the features described below, consists of steps that align with PMBOK standards. As a product of our experience working with Indiana and other states, we bring a deep understanding of the approach to system documentation and align our processes to meet State documentation needs.

Features of Our Approach	Benefits to the State
Designed to be a clear and repeatable process that reduces risk and enhances team collaboration by including multiple iterative review cycles, with version control, and a standard plan for distributing documentation to the right audience	<ul style="list-style-type: none"> • Provides a clear and repeatable process to establish and maintain standards • Reduces risk and enhances team collaboration • Confirms compliance with State standards
Collaborative with State's tools and technologies to streamline the documentation submission and review cycles, reducing risk and driving efficiency for the agency	<ul style="list-style-type: none"> • Streamlines the documentation submission and review cycles • Reduces overall risk and improves the overall efficiency

Features of Our Approach	Benefits to the State
Maintains strict document control information that includes a revision history, a description and date of the changes, and a revision number	<ul style="list-style-type: none"> • Provides traceability with enforcing version control • Provides efficiency • Minimizes change and rework

Table 5-43. Features and Benefits of Our Artifact Management Approach.

Deloitte maintains strict document control information that includes a revision history, a description and date of the changes, and a revision number. Throughout the enhancement efforts, we maintain overall accountability for managing technical/system documentation and follows the procedures to maintain established documentation standards while updating system documentation, work products, and artifacts. These project documents are stored and maintained in the State's SharePoint site with versioning, check-in/out, and search functionality.

5.i SDLC Quality Management

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- i. Provide your approach to SDLC Quality Management, including how you will support the State's UAT team and how you will confirm quality prior to production releases.

Quality is key and at the forefront of our delivery approach for the State. Our qualified team has been working with you for the past 9 years, understands the nuances and intricacies of the IEDSS solution, and has a proven track record of delivering the quality standards envisioned by the State, which have been crucial in the successful delivery of multiple major releases.

We aim to uphold these standards by building on the ongoing SDLC Quality Management (QM) process and enhancing the processes through **Sprint Reviews and Retrospectives** as we transition to Hybrid Agile. We do this while keeping an eye on the necessary safeguards and expertise to protect the confidentiality, integrity, and availability of the State's PHI and PII data. Our QM methodology, integrated into our overall project management approach, seeks to objectively evaluate the project delivery process and the resulting artifacts, documentation, system code, and system features. It is based on and compliant with IEEE standards, SEI CMMI, and other industry standards that guide quality.

Please refer to *Section 5.f.7, Approach on Supporting UAT Efforts*, earlier in this document, for details about how we are committed to promoting a high quality of software, and support UAT activities today and as we transition to the Hybrid Agile SDLC.

KEEPING THE MOMENTUM GOING FORWARD

- Compliant with IEEE standards and Software Engineering Institute (SEI) CMMI.
- Improve upon existing QM processes by integrating State feedback.
- Quantify quality and work on reducing the cost of quality by integrating QM throughout the SDLC.

Approach to Quality Management

Our approach to quality management can be summed up in three steps: **Define Quality, Monitor Quality, and Improve Quality**. Deloitte maintains quality in the day-to-day execution of the project and development of project deliverables. The objective of Deloitte's QM methodology is to continue to utilize the process governance structure and monitor its usage and applicability in the State's environment. We instill confidence and transparency in our work with relevant stakeholder groups by using established processes and standards. Our approach also leverages the best practices and lessons learned from our ICES and existing IEDSS engagements to establish common continual improvement goals and objectives. Our QM methodology is depicted in the following figure.

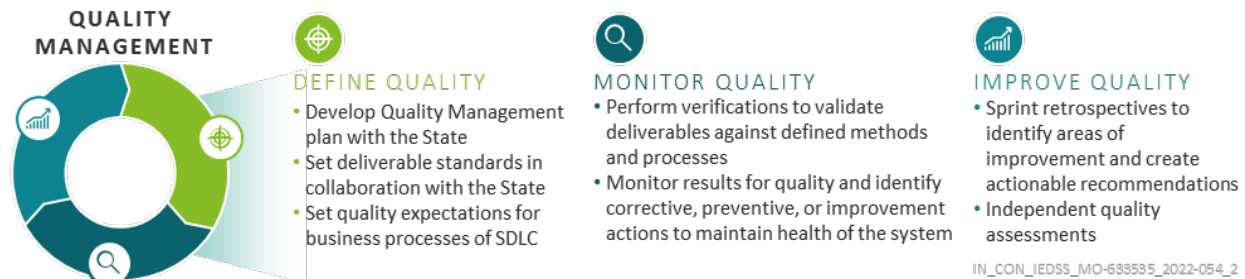


Figure 5-23. Quality Management Processes and Activities.

Activity 1: Define Quality

The Quality Management Plan forms the basis for overall quality management by focusing on defining functions that regularly monitor the performance and compliance of each business process that encompasses project-specific requirements. These standards and functions are regularly used to evaluate project performance through all SDLC phases and monitor the specific project results to provide confidence that the project complies with the relevant quality standards. We will work with the State and the OV&V vendor if directed by the State, to develop a Quality Management Plan that builds on the quality standards which enable proactive monitoring and meet business objectives, end-user expectations, and defined requirements through the execution of CRs and maintenance in both the DDI and M&O activities.

Activity 2: Monitor Quality

The goal of monitoring quality is to prevent quality issues from occurring on the project and to confirm that products and deliverables meet the quality standards and processes defined by the State through regular reporting on metrics that include information about QA status and improvements in MR reporting, as noted in examples below.

Documentation and Deliverable Approval Reviews

Documentation and deliverable reviews, both internal to our team and the State's staff, are a core component of our quality monitoring approach. Each team lead is responsible for the work products delivered by their teams. We employ different review types (ranging from informal offline reviews to formal inspections) in response to the rigor required for the process. Multiple review cycles may also be conducted, including reviews by peers, management, and State resources.

The following table highlights Deloitte's review types in response to project activities and needs.

Core Delivery Area	Type of Reviews Conducted	Description
Project Management	Project Schedule Reviews	Reviews of project plans weekly with the work orders for compliance and quality
	Project Estimation Peer Reviews	Review from technology and leadership on estimations Scope and CRs
	Staffing Evaluations	Quarterly internal evaluation of staff for performance improvement
	Customer Satisfaction Reviews	Specific customer satisfaction reviews (two per year) to evaluate overall State satisfaction with Deloitte
Application Development	Software Quality Reviews	Independent software quality reviews are done by the application manager and architect
	Performance Load Testing Review	Shared services execution and review of software performance testing
	Code Review	Detailed code reviews with remediation steps
	Architecture Review	Conduct review of application architecture
Organizational	Quality Assurance Process	Deloitte has a Quality Assurance Partner to assess the quality of AS project delivery
	Internal Architecture Review Board	The ARB conducts internal reviews of the proposed architecture of systems and applications
	Methodology Training	Conduct CSM, CMMI, and ITIL training for the project staff

Table 5-44. Quality Reviews.

Impact and Root Cause Analysis

In the event of a solution component deficiency, Deloitte will, upon detailed impact analysis and root cause analysis of the deficiency, provide a well-researched and detailed analysis that clearly explains the description of the problem, along with the action plan to be taken to resolve the issue, including a temporary workaround where applicable. The ALM tool will document the root causes analysis and resolution steps, where the incidents or defects associated with the deficiency are logged. The written root cause analysis of the deficiency will be provided within seven calendar days from the resolution of the issue. Additionally, Deloitte will also document applicable measures that will be taken to prevent a similar problem in the future. We believe our diligence in performance and root cause analysis, and collaboration with the State will rarely, if ever, result in the State requiring a Corrective Action Plan (CAP), and we will work with the State to implement one if needed to correct quality concerns.

Audit Results Report

In response to a State-required or Federal-required audit, Deloitte provides a report of the audit results within thirty (30) calendar days. Our report includes our response to detailing steps to effectively correct any negative findings, including any actions already taken. Following the initial audit response, Deloitte also completes all necessary corrective measures and provides a report detailing the corrective measures within ninety (90) calendar days of receipt of the audit findings or on a schedule agreed to by the State.

Activity 3: Improve Quality

Quality Assessments

Quality assessments are an integral part of our approach for continuous improvements and quality assurance and are performed to confirm that the IEDSS team follows our processes and standards for producing quality products. [REDACTED], serves as an independent reviewer of the IEDSS project delivery. Through regular discussions with IEDSS leadership, staff, and reviewing project artifacts, [REDACTED]

Sprint Retrospective

A critical element of the quality management process is an ongoing effort to analyze and improve processes over time. The monitoring process includes identifying lessons learned and other feedback loops associated with the review activities to help improve project processes and the quality of project deliverables throughout the project timeframe. The transition to Hybrid Agile will facilitate Deloitte and the State to engage in an additional sprint ceremony of unique importance for continuous feedback – Sprint Retrospective. The sprint retrospective is a closed team ceremony scheduled at the end of each sprint that can be facilitated in various methods to solicit feedback. The objective is to openly discuss improvement opportunities based on the recently completed sprint, and devise and agree upon an improvement plan with specific key areas identified.

5.j Sample Requirements Document(s)

RFP Reference: Attachment F, 5. Software Development Lifecycle (SDLC) Approach (Attachment C, Section 5)

- j. Provide examples of sample requirements document(s) that indicate the level of detail and quality the States should expect from you during this Contract.

Sample requirements documents that indicate the level of detail and quality the State should expect are provided in Appendix 3.

Deloitte uses the State-approved ALM tool to maintain application requirements. We recognize that the design phase is one of the most important parts of the SDLC, and the detail and specificity of our requirements reflect this importance. As explained in our approach, if there is a change in the existing requirement then we recommend editing existing requirements in ALM. In case enhancements demand new requirement(s), we recommend creating a user story with a user story ID, which can then be used to establish traceability. We have attached sample for both **changes to existing requirements** and **new requirements** scenario.

To demonstrate the level of detail and quality the State can expect from us during this contract, we attach the requirements documents from one of the bigger changes we have implemented on the IEDSS project, the Asset Verification System, in *Appendix 3*. This change involved elements from six different functional areas and multiple requirements were created for each functional area to document and give a detailed description of each small part of the change. Each requirement covers one small part of the change and includes proposed design changes needed to implement that piece. Requirement traceabilities are then created to show clear traceability between requirements/user stories, design documents, test scenarios, and development requests.

M&O Services Approach

Section 6

Deloitte has been working with you side by side on the ground on IEDSS for the past nine years. Our team possesses broad and deep system, business, and program policy knowledge, and utilizes processes that we established collaboratively with the State. And most importantly, you are familiar with and comfortable working with our team. Deloitte has consistently demonstrated reliability in our efforts to foster technical stability and innovation. Continuing our work together allows State leadership and staff to focus more of their time on providing reliable customer service, continuously improving service delivery, and evolving program policy to meet changing State and federal requirements and objectives.

Deloitte's Maintenance and Operations (M&O) scope includes the services you need and expect. Our proposed vital staff are highly qualified and bring a combined 191 years of IEDSS experience, allowing us to deliver these services efficiently and effectively. Our experienced IEDSS team understands what it takes to deliver service that meets the compliance needs of Indiana. Our team will focus on best practices and compliance to monitor and deliver services like infrastructure and incident management, security and privacy, batch operations, and reporting mechanisms. Our approach will maintain business continuity with no transition time and without any disruption to services. Our team will continue to focus on maximizing value for the State from Day One of the new contract.

WHAT IT TAKES



A thorough understanding of IEDSS programs, business, technologies, and stakeholders

WHY IT MATTERS

Given the sophistication of IEDSS and the dynamic and challenging business it supports, the State needs more than a vendor who can keep the lights on. You need a partner who can help you navigate the inevitable social-political situations, offers a technological advanced solution to implement the State's core missions, brings in ideas to implement cost-effectiveness of program administration from a national knowledge base, and one who has collaborated with you and supported you in delivering vital services for Indiana's citizens. The State's business depends on developing improvements, and resolving issues and user questions in a quick, accurate, and complete manner.



Established processes that are collaborative, transparent, and foster robust communication

Communication, collaboration, and continuous feedback are essential to a stable IEDSS, while also providing the State with the ability to easily monitor, assess, and report on compliance and business outcomes. Our established processes facilitate consistency and quality, which are essential for delivery of mission critical program benefits, and services.



A demonstrated commitment to continuous improvement, federal compliance, and use of industry best practices

Continuous improvement is necessary to make the most effective use of State and vendor resources, providing the ability to get more done with less effort and greater value.

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

For each of the following M&O services described in Attachment C, Section 6, describe your experience and your proposed approach to fulfilling the responsibilities as described in the RFP. Additional questions have been included for of the listed services.

Deloitte has the hands-on experience to successfully maintain and operate an Eligibility and Enrollment (E&E) platform as sophisticated as IEDSS, proven by our long and successful track record in Indiana and by performing M&O services for E&E platforms across 26 states. Our proposed team brings unique operational knowledge of the State's technical environment, having collaborated with you to successfully deliver, and maintain two large E&E systems. Our cadence of continuous improvement and our approach of constant refinement is grounded in our passion to support the State in serving Hoosiers.

Building on a Track Record of Proactivity and Continuous Improvement

Indiana benefits from an IEDSS System M&O vendor who understands the mission-critical nature of the services that IEDSS provides and has a proven M&O track record and approach to **deliver business stability, continuity, accuracy, compliance, security, and performance**. As the current provider of M&O services, our team has demonstrated a **commitment to efficient and effective service** and to continuous improvement. We will be fully prepared on Day One of the new contract to provide M&O services that are aligned with the way you operate, address the needs of the State, and meet the RFP's requirements.

We have demonstrated operational success via our collaboration with the State and its partners. We've developed **proactive processes designed to prevent issues** in the production system, such as monitoring for and avoiding incorrect correspondence. We've reduced defect counts and operated on-time and accurate batch runs.

Our incident resolution approach is informed by insights such as how EDBC rules have evolved over time, the nuances of converted data, the impact of public health emergency rules, and the perspective of how interfacing systems provide and consume data.

We provide the State the partner it needs in a landscape that is increasingly dynamic and uncertain. During the Public Health Emergency (PHE), we rapidly worked with the State to meet changing federal and State requirements. Our collaboration enabled the State to support accurate adjudication of benefits.

KEEPING THE MOMENTUM GOING FORWARD

Deloitte knows how to get the job done when it comes to delivering successful M&O services in Indiana.

- With our experience serving Indiana for the past three decades, we understand IEDSS, the business, and the people you serve.
- Our expertise provides stability and business continuity, providing a well-planned approach for releases and maintenance activities.
- Since IEDSS go-live, we have helped the State serve over 2.2 million Hoosiers getting active benefits with more than \$3 billion overall benefits provided and over 16 million notices sent.

We prioritize reducing risk and minimizing the impact to ongoing day-to-day operations, while striving to provide system stability and continuity so you can focus on providing high-quality service to the citizens of Indiana. The table below provides examples of improvements that Deloitte has made in collaboration with the State to continuously improve the quality of M&O services. We continue to work to identify and implement these types of improvements.

M&O Services	Improvements Implemented	How it Benefited Indiana
Architecture Services	Scaling Infrastructure Footprint	<ul style="list-style-type: none"> Enhanced IEDSS infrastructure for optimization and increased capacity for a surge in benefit applications as statewide load conversion for IEDSS system recipients increased to almost 2M in Jan 2022. Scaled-up document upload size from 50MB to 199MB allowing workers to store large hearing packets in DPS. Increased IEDSS availability from 11 hours to 13 hours on business days. There was no impact to business users, despite an increase in case load and adding new system functionality.
	Increasing System Accuracy	<ul style="list-style-type: none"> \$1.7B of SNAP and TANF benefits were issued with no delay in transfer of benefit files to the EBT vendor. IEDSS completed batch cycles 100% on time and maintained a 99.9% online system up-time, which provided increased hours for workers to handle COVID-related additional client volume.
Software and Hardware Management	Optimizing Batch Operations	<ul style="list-style-type: none"> Retired four conversion environments and associated processes which eliminated the time needed for Biztalk freeze and file merge processes, allowing IEDSS interface files to be directly delivered to external trading partners, resulting in a 100% on-time delivery of EBT file transfers for SNAP and Cash Assistance. Reduced the batch cycle processing time up to 30 mins by modifying batch sequences and enabling us to deliver files to print vendor sooner.
	Increased Automation	<ul style="list-style-type: none"> Reduced the build time by automated HPE Pub file generation using HPE Designer CLI and integrated with build process. Help/Web Help application is isolated from Worker Portal and streamlined to have its own automation rules for compilation and deployment enabling the training team to trigger the build process on demand.
	Enhancing System Processes	<ul style="list-style-type: none"> Enabled auto-refreshing of databases from prod environments and minimized manual intervention which helped in reducing overall batch cycle time by 15%.
Software/Hardware Maintenance	Performance Improvements	<ul style="list-style-type: none"> Upgraded database infrastructure from on-prem to Oracle ExaCC (Cloud) that resulted in 15% improvement in overall Worker Portal average response time. Upgraded Selenium from 2.0 to the 3.0 version has resulted in an expediting execution time by 35%, along with reduced maintenance during compatibility upgrades.
	Increased Agility to Deliver	<ul style="list-style-type: none"> Modified Medicaid & SNAP business rules in IEDSS per dynamically changing State requirements while always meeting State and Federal deadlines early by increasing scheduled Releases from 2 releases to 4 releases per year and supporting over 7 major, 9 minor and 39 ad-hoc releases to support State meet federal policy compliance.
Incident Management and Helpdesk Support	Managing Incident Escalation	<ul style="list-style-type: none"> Added IEDSS Splunk alerts to inspect and escalate trends in incidents due to possible network connectivity problems, system outages, or document upload process failures.
	Prevent Production Incidents	<ul style="list-style-type: none"> Facilitated the creation of a "one-pager" style refresher training material for Tier 1 teams which enhanced system understanding enabling Tier 1 teams to solve worker issues before an incident is logged.
Security and Privacy	Optimization of cost and resources	<ul style="list-style-type: none"> Replaced QRadar with Splunk Enterprise Security (ES) which provides cost-effective opportunity for the State to expand security monitoring to other systems within the IEDSS authorization boundary.
	Streamline generation of compliance artifacts	<ul style="list-style-type: none"> Enhanced Governance Risk and Compliance (GRC) tool capabilities to automate the generation and maintenance CMS System Security Plan (SSP).

Table 6-1. Examples of Continuous Improvements to M&O Services.

Our M&O Approach Provides Stability and Continuous Improvements to Your Business Operations

Deloitte's M&O approach follows an **industry based ITIL standard** focused on reducing risk, increasing efficiency, and minimizing the impact to ongoing M&O activities. Our processes are consistent, transparent, and help proactively identify potential issues and mitigate them before they occur.

Our team's extensive experience in M&O delivery will enable them to keep the system predictable and stable, while accounting for the specific needs of the State. The team will continue to excel in managing and delivering all nine categories in the M&O services as requested by the State. Sections 6.a to Section 6.i, below, provide details on our experience and our approach to these services.

We use **Hybrid Agile for SDLC of Defect Management** (refer to *Section 5 Software Development Lifecycle [SDLC] Approach*, for more information on our Hybrid Agile approach). This approach blends established Agile concepts and techniques with the predictability of defined scope—iteratively and within cycles—to drive speed, flexibility, and transparency. This enables us to deliver our M&O services with discipline and a focus on quality, predictability, and value.

The figure below describes our M&O approach, which has been fine-tuned over years of experience in Indiana to fit your business needs.

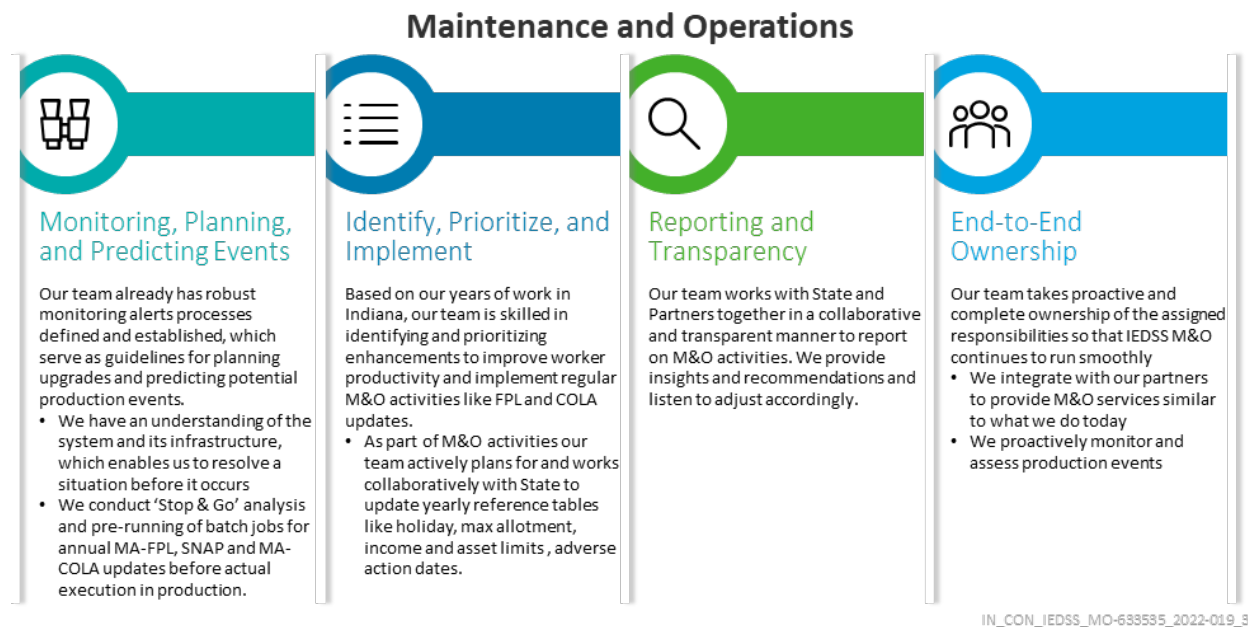
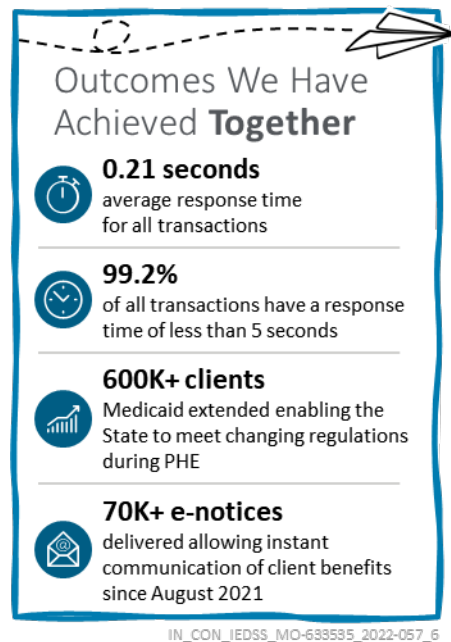


Figure 6-1. IEDSS M&O Approach.

We Continue to Identify and Implement Improvements

As we continue to provide high-quality IEDSS M&O services for the State, we know that continuous improvement is key. This understanding has led Deloitte to recently secure a **CMMI for Services (SVC) Maturity Level 3 Appraisal** in January 2022, reflecting our high standards in process quality. The appraisal was evaluated and approved based

on our work on several projects, **including IEDSS**. It demonstrates our commitment to continual performance improvement and the delivery of high-quality work.

Deloitte has identified additional improvement opportunities based on self-reflection, feedback from the State and other stakeholders, and our experience working with other state clients with similar challenges and opportunities. We continue to bring innovations and lessons learned from other clients, assess applicability, and propose ideas or innovations that bring value to Indiana.



We have proven we are a reliable, collaborative M&O partner, and we work tirelessly to help the IEDSS succeed. Improvements we have achieved together include:

- Automated application process clearing 100K+ no-touch applications
- 100% State and federal interface files delivered on time
- 351 Regression Test scripts to validate and improve IEDSS stability

6.a Architecture Services

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

- Architect Services. Include your approach to understanding and maintaining the current architecture while using industry best practices in compliance with federal requirements to enhance IEDSS architecture throughout the term of the agreement.

Our Experience

Our experience maintaining and operating the architecture of IEDSS highlights our alignment to best practices, compliance with federal requirements (including MITA, maturity level 3), and ability to comply with MEET and SMC OBC. Additionally, we utilize CMS-based standards to allow interoperability with other partners (e.g., BizTalk, CDMS), using standard technologies such as JEE, Corticon, OpenText Exstream, SOAP Web services (utilized by Account Transfer, Non-ESI MEC, and other federal interfaces), and Mule ESB. This adherence to standards helps the State improve intrastate information exchanges, alignment and adoption of national data standards, shared business services, use of performance measurements, and helps facilitate strong collaboration with other agencies.

Below are key examples of how our architecture services align to your requirements:



- Deloitte collaborated with over 15 states to achieve their CMS MARS-E 2.0 certifications and has experience performing MITA assessments.
- Indiana, with Deloitte by your side, has met and maintained federal compliance and MITA standards through DDI and M&O phases.
- We understand and align our plans with your MITA Maturity Roadmap to help achieve your organizational goals for Indiana.
- We will comply with MEET and SMC OBC through maintaining the appropriate models, designs, and architecture artifacts.
- 100% of critical, high, and medium vulnerabilities identified by static and dynamic application scans are remediated.

Architecture	How Our Services Align to Your Requirements
MITA	<ul style="list-style-type: none"> • MITA envisions a streamlined, secure, and interactive customer experience with high adaptability and extensibility that will maximize automation and real-time adjudication, while protecting privacy and PII data. IEDSS's data-hub-based, MITA-aligned solution, allows the State to change the specifics of processes, data, or business rules using reference data, parameters, and configuration files to meet its specific needs. • IEDSS architecture has adopted federal, MITA standards for interoperability and protection of data privacy and secured information exchange, allowing the interface services to exchange data in real-time between IEDSS business areas and external partners. • IEDSS is based on a Service-Oriented Architecture (SOA) that defines common business services and technical services that can be modified relatively easily to accommodate changing business requirements. IEDSS technical services are

Architecture	How Our Services Align to Your Requirements
	designed with layers of abstraction that confirm their vendor and platform independence and simplify the insertion of new technology.
MEET and SMC OBC	<ul style="list-style-type: none"> Our teams enable proper procedures to maintain logical, physical, and conceptual data models as well as database design and architecture artifacts. Changes are captured through our software and hardware management approach and documentation is updated appropriately.

Table 6-2. How Our Architecture Services Align to Your Requirements.

The IEDSS solution is designed and built on a reliable software platform using proven frameworks, architecture, and experience that we bring from both implementing and maintaining the IEDSS system, as well as from our national experience. We have helped maintain federal compliance of the current architecture and are uniquely positioned to help the State work through the intricacies of selecting alternatives due to technology necessity or cost savings. For more details on Deloitte's experience with IEDSS solution, please refer to *Section 3f, IEDSS Solution Overview and Management*. The figure below presents an overview of the IEDSS architecture, illustrating its business and technology components.

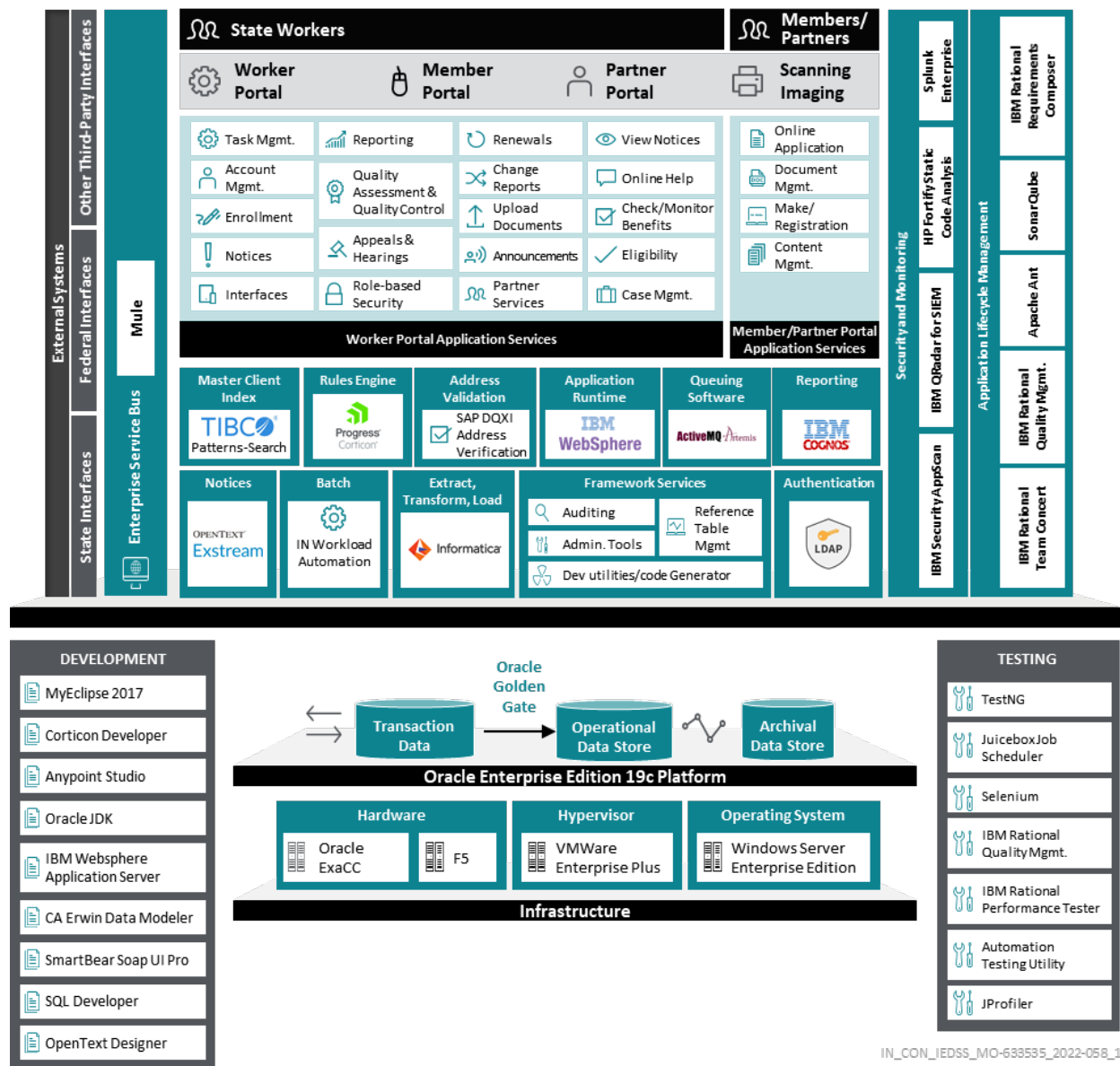


Figure 6-2. IEDSS System Architecture.

Our Approach

Deloitte recognizes that proper maintenance of and enhancements to the application architecture is necessary to maintain performance levels and user satisfaction. Leveraging our best practices, we have designed our architect services, described in the table below, to support the State's continued needs to comply with applicable federal requirements and **MITA maturity improvements, as well as MEET and SMC OBC**. As such, the best practices that we have jointly established with the State not only serve to maintain existing artifacts, but to also update or create new artifacts throughout the SDLC. For example, we maintain our existing **technical architecture artifact** with timely updates to the embedded work products like physical and logical network, and server design artifacts, with every major release. With our existing database design artifact, we maintain and manage the historical logical and physical data model, standards, entities, relationships, definitions, domains, and entity-relationship diagrams and introduce changes to the existing model only with the enhancement phase to adhere to business data model standards.

Category	Our Industry Best Practices Based Approach	What We Deliver
Architecture Improvement & Management	<ul style="list-style-type: none"> • Create roadmap and strategy • Customized diagnostic solutions • Maintain Logical Data Model (LDM), Conceptual Data Model (CDM), and Physical Data Model (PDM) to comply with MEET standards • Manage and develop application security vulnerabilities, application and physical architecture documentation, enterprise standards and guidelines, and dependency documentation. 	<ul style="list-style-type: none"> • Production-proven, jointly developed strategy involves the modernization of technical components on an as needed basis • Enhance technology framework like Fast4j framework to mitigate "Out of Memory" errors and JVM crashes • Fine-tune session-based time travel functionality to reduce IEDSS infrastructure footprint by enabling virtual time • Augment application security controls like ESAPI to mitigate application security vulnerabilities • Maintain reusable components to meet CMS requirements, MITA maturity level, and support expansion
Technical Debt Management	<ul style="list-style-type: none"> • Platform architecture reviews and code refactoring • Plan upgrades and patches required as part of the continuous process improvement • Automated build process includes code quality check. 	<ul style="list-style-type: none"> • Incorporate coding standards by integrating Sonar and custom PMD checks to achieve continuous inspection of code quality to perform automatic reviews to detect bugs, code smells, and security vulnerabilities • Conduct Fortify scans for entire code base to analyze the source code for security vulnerabilities • Fine tune operation standards with Splunk monitoring artifacts • Refine development activities to improve productivity using custom tools such as Tools App and Query Builder
System Performance Engineering	<ul style="list-style-type: none"> • Proactive and continuous monitoring to identify performance bottlenecks and evaluate system health • Targeted application and infrastructure optimization using Splunk: <ul style="list-style-type: none"> – Real-Time Infrastructure Monitoring – Application Monitoring • Targeted database optimization using Oracle OEM: <ul style="list-style-type: none"> – Monitor and tune resource intensive SQLs and jobs – Monitor objects and events for resource contentions and blocking sessions. 	<ul style="list-style-type: none"> • Evaluate Oracle's built-in performance gauge reports such as Automatic Workload Repository (AWR), Automatic Database Diagnostic Monitor (ADDM), and Active Session History (ASH) during the performance testing for every major release to identify the performance degradation transactions for that release • Analyze dashboards, alerts, and advanced searches to spot critical, meaningful, and infrastructure events • Monitor DB resource utilization (e.g., CPU, I/O, disc space), capturing resource intensive SQLs along with bind variables for expedited issue analysis and resolution
Technology Analysis	<ul style="list-style-type: none"> • Continuous culture of improvement • Understanding of system intricacies and dependencies 	<ul style="list-style-type: none"> • Work with the State to consider alternative technologies and understand the impacts of implementation, using our established product evaluation framework • Seek opportunities for more cost-effective solutions such as transitioning to Splunk from QRadar • Help align technologies to federal compliance

Table 6-3. Application Architecture Services.

6.b Software/Hardware Management

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.2

b. Software/Hardware Management, including infrastructure management, ALM, database support, application monitoring, and batch processing.

Our Experience

Deloitte has hands-on experience with Indiana's Enterprise Architecture integration, the exact tools (listed in *RFP Attachment J, Bidders Library - Tab 3*), and infrastructure used in IEDSS. This gives us cross-functional, cross-system knowledgeable and technology-literate resources to enhance and maintain IEDSS. With nine years of experience maintaining over 150 VMs in the State Data Center, Deloitte is committed to the IEDSS scope of services of Standard Server Operations, as well as to the maintenance activities—such as performance monitoring and tuning, software upgrades, and patches to enhance business productivity and continuity at IEDSS. Deloitte is a trusted partner of choice and has helped many States with their software, infrastructure, ALM, application monitoring, and batch processing needs. The State will benefit from our strong partnerships and alliances across cloud providers such as AWS and Azure, as well as vendor alliances such as Oracle and RedHat. Please refer to *Appendix 1, Experience with the Technologies in Attachment J*, which details **additional privilege and priority in accessing vendor resources** that we bring to our clients.

Our Approach

Deloitte's approach to managing the Software and Hardware (SW/HW) components of the IEDSS technology stack is not limited to simply maintaining the list of software with current version versus latest version in the market, description, and interrelationship with other components (listed in *RFP Attachment J, Bidders Library - Tab 3*). Deloitte's approach also provides a unified IT monitoring covering aspects of **formal asset tracking, capacity planning, performance, database management, artifact traceability** with SharePoint and ALM, DevOps, CI/CD pipeline, configuration management processes, BCP/DR planning, security and privacy, and incident lifecycle management to support the underlying infrastructure.

The following sub-sections—**Infrastructure Management, Application Lifecycle Management, Database Support, Application Monitoring and Batch Processing**—showcase our established processes and activities we continue to perform to support the solution components of IEDSS. Additionally, the process we follow to maintain, update, and generate new artifacts with enhancement release to support our SDLC artifact management process as explained in *Section 5.h, Software Development Lifecycle (SDLC) Approach*.

Infrastructure Management

RFP Reference: Attachment C, Section 6.2.2

Our Experience

Deloitte has experience with each of the 19 vendor software components, that breakout into 73 subcomponents, as listed in *RFP Attachment J, Bidders Library - Tab 3*. This collective experience provides our team a deep understanding of IEDSS infrastructure and allows us to continue to support and maintain services that have been tried and tested through decades of providing best practices and technology operations. We share the same vision as the State, "Cost effective platform and reduced infrastructure footprint," through increased automation, monitoring, adherence to proven technology best practices, and working with IOT to manage overall server strategy for right-sizing capacity.

Our Approach

Our proven experience managing IEDSS infrastructure in collaboration with IOT is driven through our established monitoring artifacts to monitor the IEDSS solution components and the operational activities such as **capacity planning, software upgrades, security vulnerability patches, automation, server provisioning**, etc. We have



- We bring deep technology expertise across a broad range of COTS products like IBM WebSphere, Mule, SAP(DQXI), Corticon, TIBCO Netrics, Apache Web server, Informatica, OpenText, Active MQ, and Splunk monitoring servers.
- IEDSS server operations span 150+ servers supporting 20 environments with less than 50% of infrastructure resources utilized due to continuous improvements and tuning.

explained our monitoring artifacts and alert mechanism in the sub-section *Application Monitoring* to address the monitoring requirement.

Deloitte has established a cadence of quarterly upgrade meetings with the State to communicate any available information on the product roadmap, licensure management, planned upgrades, server configuration changes that helps the State manage the licenses with applicable product vendors. We have weekly meetings to discuss and plan the infrastructure-related issues and enhancements, confirming minimum technical debt, and keeping the IEDSS solution components relevant and usable. For details related to the software patching roadmap please refer to the sub-section *SW/HW Maintenance*. For details on the SW/HW lifecycle process please refer to *Section 4, Project Management*, sub-section 4.h, *Infrastructure Coordination Management*.

Throughout the course of this M&O, the State is housing the IEDSS components (e.g., servers, utility software) and is responsible for providing the connectivity (i.e., network connections and line to the components in the State datacenter). The State will own all purchased hardware and software. Deloitte will be responsible for providing support and maintenance to the necessary workstations for Deloitte staff. For the Deloitte staff working outside the State building, Deloitte is responsible for providing required infrastructure such as firewalls, switches, and routers to connect to the State's trusted network.

Our teams conduct thorough analysis of infrastructure changes and the impacts to current and forecasted utilization of license consumption in both non-production and production environments. We provide all necessary support to the State during technology refreshes, patches, and version updates for both hardware and software to maintain first- and third-party support.

The following table demonstrates our infrastructure capabilities, activities, and processes to address the requirement for managing software and hardware components, current and forecasted utilization of licenses, and technical debt management (e.g., resolution of functional issues, application of patches, performance monitoring, and reporting) in accordance with SDLC and federal mandates. Please refer *Section 5, Software Development Lifecycle (SDLC) Approach* for more details on SDLC processes and procedures.

Activities	What We Deliver
Capacity Planning	Review current-state infrastructure assessment by performing load testing and performance monitoring. Our go-forward actions are the outcome of monitoring artifacts and performance testing (e.g., monitoring CPU, memory, and SAN usage of our underlying infrastructure servers to plan for optimization effort and determine the future infrastructure capacity sizing to support users and transactions), trend reports from Splunk, as well as several other inputs. Other examples include: <ul style="list-style-type: none"> • Tuning web application servers by configuring parameters such as heap size, thread pool size, DB connection pool settings, etc., with every minor and major release • Decommissioning and repurposing hardware in the event of overallocation, which leads to infrastructure optimization • Analyzing the overall license impact with the State as the outcome of capacity planning recommendations • Transparent communication, troubleshooting, and collaboration with the State when implementing server configuration changes
Provisioning and Firewall Requests	Collaborate on the infrastructure management effort with IOT. The IOT ticketing process to request server details (memory, CPU, RAM, and OS) in a dedicated network, followed by firewall requests and group policy settings to prevent unauthorized access to or from a protected zone, and is well-tested and implemented by the IOT server admin team to achieve the desired success. An example is the case copy tool, which lives in a protected zone to copy masked data from PZ to lower environments. IOT played a vital role in making this tool a success for the triaging team by putting in firewall groups and opening the necessary ports on the selected servers.
Permissions and Data Access	Implement permissions and access policies to protect resources on the server. Unrestricted user permission and access could lead to accidental data exposure, intentional misuse, and abuse of data. As part of the collaborative effort between Deloitte and IOT, we work with multiple application teams to determine the type of access and, via the IOT ticketing process, define user group policies to meet the user requirement. We have a Power User Group with admin access for installing the IEDSS COTS products, and DFR Admin App Log Reader Group with read only access to logs generated by COTS products.
Vendor Management	Alleviate risks to gain increased value throughout the product lifecycle. We continue to work with multiple vendors to get the product's latest updates/features, review security vulnerabilities, and fix bugs. Deloitte has a strong alliance with the product vendors that are part of IEDSS technology stack such as Oracle, MuleSoft, IBM, etc.
Architecture Design	Maintain a robust architecture through strategies including usage of requirement and lifecycle processes to drive efficiency and efficacy. Depending upon the change requirement, we install products in various topologies on one or more machines. For example: <ul style="list-style-type: none"> • The development environments are set up to use IBM standalone JVM.

Activities	What We Deliver
	<ul style="list-style-type: none"> Production environments are set up using IBM WebSphere Network Deployment Manager to provide clustered environment with high availability and load balancing.
Security Compliance	Identify the vulnerability issues on a monthly basis and apply the recommended fix patch or the complete release package as per SDLC to remediate vulnerability and re-run the Rapid 7 scan to confirm the resolution to comply with MARS-E 2.0 and MEET/SMC OBC requirements. Additionally, facilitate the necessary meetings required for middleware patches and upgrades.
Automation	<ul style="list-style-type: none"> Automate daily routine activities and repetitive tasks to effectively manage our server operations such as: <ul style="list-style-type: none"> Reboot APACHE and WAS servers on a regular interval during the week to clean unused resources and enhance load balancing mechanism Automate alerts in the event of server failure/crashes Set up scheduler to achieve logs to cold storage on daily basis
Performance	<ul style="list-style-type: none"> Conduct performance test for major releases to monitor infrastructure stability and scalability: this helps us achieve real-time performance metrics. Underlying infrastructure performance is vital to enhanced applications like IEDSS to prevent issues and: <ul style="list-style-type: none"> Improve response time due to high transactions from concurrent users Remove inconsistencies across different platforms Provide correct capacity sizing
Alerting & Monitoring	<ul style="list-style-type: none"> Configure automated notifications and alerts through Splunk. Development of tailored dashboards to help represent key performance indicators such as SLA's and exceptions. Monitor metrics shown in various dashboards such as response times, concurrent users, and unique login users. Act upon unanticipated data to help identify root causes before they become an issue. Create appropriate incidents and defects because of monitoring. Maintain & configure all aspects of SIEM monitoring for IEDSS.
Cloud Management	<ul style="list-style-type: none"> Support the State with deployments to the state such as the ICES Archival platform. Help configure appropriate cloud monitoring and alerting. Collaborate with the State for future deployments and designs.

Table 6-4. Infrastructure Management Features.

Exploring Possible Future Innovations and Enhancements

Application Lifecycle Management (ALM)

RFP Reference: Attachment C, Section 6.2.3

Our Experience

ALM is of high significance in an integrated system such as IEDSS. It provides a wide range of benefits such as governance, development, maintenance, operations, and impact analysis. Deloitte **brings its best practices in ALM processes** to facilitate the quality of the software, enable teams to make informed changes and improve agility. Our experience with ALM tools like IBM Rational Jazz (RRC, RTC, RQM, RRD) and the Atlassian software suite (Jira, Confluence, Bitbucket) helps in project management, collaboration, and code management. We **specialize in integrating Jira with version control systems** and CI/CD tools like Subversion, Git, Bamboo, and Jenkins for end-end traceability. With the **proven experience of our team** working on various ALM tools, we continue to be proactive in assessing interdependencies within IEDSS.

Our Approach

Our approach to application lifecycle management covers several aspects, including artifact traceability, configuration management, build, deployment, and workflow management. This set of processes **facilitates faster application delivery**, stable environments and builds, improved collaboration, and concise development lifecycle. We will continue to use the State-approved ALM tool to link the project artifacts, gather real time information, and to keep up-to-date versions of artifacts. Design documents, architecture diagrams, business process models, security diagrams, build processes, infrastructure listings and other relevant SDLC artifacts are maintained in SharePoint locations and the ALM tool, which are available to the State upon request.

Currently Deloitte maintains the application source code and configuration artifacts along with managing user roles and permissions in IBM Rational Team Concert (RTC). RTC acts as an integrated environment for agile planning, change management, build automation, source control, defect tracking and reporting.

We have customized the powerful features of IBM Rational Jazz as per the IEDSS requirements, including personalized dashboards and RTC Java API's for build automation. These functionalities help in the timely processing and expedited resolution of the Worker Portal application promoting solution through test, UAT, and to the Production environment.

Our ALM tool processes and documentation will allow us to provide an efficient handoff of the most recent and up-to-date versions of requirements, design artifacts, architecture diagrams, Business Process Models (BPMs), security diagrams, build processes/configurations, infrastructure listings/diagrams, and other SDLC artifacts prior to contract expiration. We will use the State's IEDSS ALM tools that are in place at the time of initial transition.



- No-touch, end-to-end build automation with flawless integration of RTC work item functionality and builds using customized RTC Java APIs
- Approximately 250 automated build events every week, across a span of parallel releases and environments
- 100% efficiency in automated Production deployments with no manual intervention resulting in 40% reduction in overall build time since IEDSS go-live
- In-house IEDSS Dashboard web application as a single-point destination for build status, server information, release version, defect tracking, request builds, etc.

The figure below shows our approach to traceability utilizing IBM Rational Jazz. These same concepts would apply if the State uses another ALM tool.

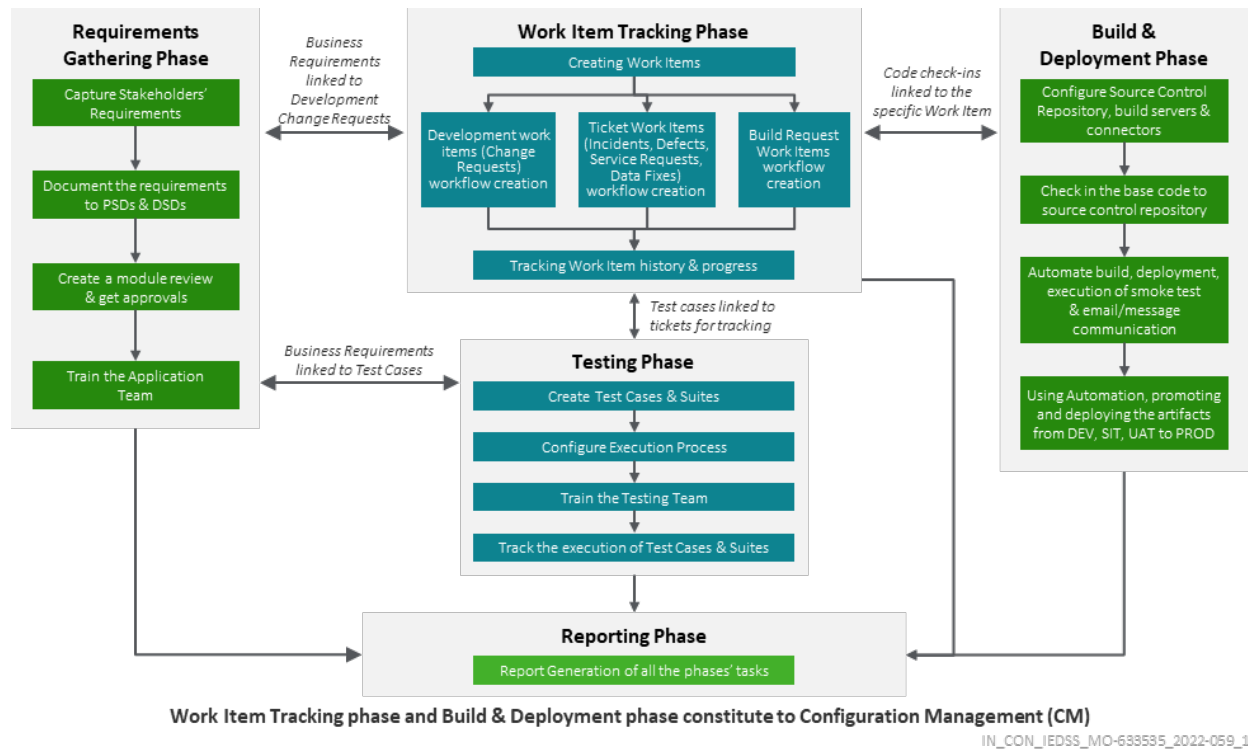


Figure 6-3. Deloitte's Artifact Traceability using ALM Tool.

Our approach to utilizing IEDSS ALM tool embeds the core configuration concepts listed in the following table.

Category	Description	What We Deliver
Artifact Traceability	Traceable relationships between software artifacts across disciplines, including requirements, work tracking, source control management, build automation, reporting, and quality management.	<ul style="list-style-type: none"> Share and combine information about the modules/artifacts so that the sub teams and stakeholders are better able to understand the application being developed Assess and manage the impact of change on elements in the design by performing impact analysis Confirm that the design satisfies the business requirements View related artifacts and make informed decisions about the project
Configuration Management (CM)	We use a set of principles to control, track and document changes made during the life of a project. These include key areas such as release activities, change and configuration control, revision control, etc.	<ul style="list-style-type: none"> Maintain application and build scripts source code in IEDSS ALM source control repository Implement continuous delivery of the code to each environment Identify snapshots from revision control and implement rollback processes in case of critical build failures Perform code quality checks as part of builds using SonarQube Implement expedited patch releases and code merges for major releases Monitor build process with alerts to notify failures Configure and track work items such as incident, data fix as per project requirements, and collaborate it with the build process
Build and Deployment	We have established DevOps tool chain for source code management, continuous integration, code building, packaging, releasing/patches fixes, configuring, and monitoring using the change and configuration management tool for IEDSS. We use the ALM	<ul style="list-style-type: none"> Set up an automated process as part of no-touch deployment with build automation and deliver continuous stable releases across multiple code branches with around 56 Dev, 20 SIT, and 10 UAT builds across releases each week Traceability between builds and work items Database, ETL, and Cognos are integrated with code deployments as a single unit by resolving dependencies Integrated test suites with the build process to make the process efficient and robust with email notification to stakeholders

Category	Description	What We Deliver
	tool to provide awareness, control, and traceability to the team.	<ul style="list-style-type: none"> • Leverage DevOps principles to simplify deploying the application code for projects in scope, automating the software release process and monitoring the efficacy of delivering applications and services into production • Modernized deployment methods supporting zero downtime

Table 6-6. Configuration Activities.

Database Support

RFP Reference: Attachment C, Section 6.2.4

Our Experience

Our database management principles reflect our capability, experience, and collaborative work over the past several years. Our ability to support database management activities, help you to fully leverage the potential value of analytics and information, and deliver operational excellence and growth demonstrates our commitment to serve the State.

Deloitte is **designated an Oracle Global Elite partner** and has held the highest level of alliance relationship with Oracle for almost two decades, allowing us to provide stronger support to the State with our access to that relationship. Deloitte has a talented group of Oracle practitioners and Database Administrators (DBAs) embedded into IEDSS operations, who would continue to apply their in-depth knowledge and experience by proactively identifying and implementing processes that address future unplanned downtimes. Our DBAs are intimately familiar with IOT's database infrastructure (Oracle Exadata, Oracle GoldenGate) and are also capable and ready to move into next-generation technologies as required by IEDSS.

Our Approach

Our database management solution spans across multiple disciplines and technologies providing a complete set of activities, processes, templates, and accelerators that help cater to current business demands and is designed to deliver services specific to database management activities (explained in the following table). We provide DBA support, enhance, and maintain the different database components such as the Real Application Cluster (RAC), advanced compression, advanced security, partitioning, tuning pack, Oracle Enterprise Manager (OEM), etc. In addition to Oracle, our DBA supports the SQL Server utilized by the ICES Archival Platform within Azure. This aligns extensively with **industry best practices** for maintaining and enhancing various database artifacts such as logical and physical data model that includes database segmentation, memory, and tablespace management. To support the IEDSS application changes during the technological advancements and application enhancements, along with maintaining current artifacts, we also modify the existing artifacts as per the SDLC process for continuous database efficiency and standardization.



- Maintain 4 Production and 8 non-production Database instances across 25 environments.
- Migrated Oracle Exadata Database instances from 11g to 19c Version.
- Supported IOT during the migration of Oracle 11g to Oracle 19c GoldenGate Version.
- Migrated Production to Oracle ExaCC (cloud) and supported IOT efforts to perform a similar migration.
- We have gone above and beyond to support the State to help resolve issues unrelated to application code. We assisted in the resolution of Oracle ExData patching issues which required many hours of coordination and leveraging our alliance networks.

Database Maintenance Service

Deloitte's standardized process and approach to effectively perform these activities can be seen below.

Activities	What We Deliver
Database Administration and Management	<ul style="list-style-type: none"> • Coordinate with the State to successfully install and patch database software; create and maintain database instances, sized appropriately to provide efficient operation • Administer, diagnose, and tune multiple databases instances through OEM monitoring such as SQL Tuning Advisors, ADDM reports via single pane • Configure resource utilization limits (e.g., CPU, I/O, limiting elapsed time of SQL) and analyze resource contentions and blocking sessions for expedited resolution • Maintain knowledge base of the issues and potential fixes used by the team to maintain operation continuity

Activities	What We Deliver
	<ul style="list-style-type: none"> Provision new instances and tables as necessary within Azure SQL
Backup and Restore	<ul style="list-style-type: none"> Perform regular database backup to provide flexibility to clients to move to an older version in scenarios like data corruption or data loss Schedule physical backup (Oracle RMAN backup): FULL database backup every weekend with an incremental backup every night; ARCHIVELOG log backups at least thrice a day Schedule logical backup (data pump): Full data pump export backup every night, used to refresh the PRE-PROD and various staging environment based on business needs Configure snapshots for Azure SQL databases
Archive, purge, and anticipate data volume & growth	<ul style="list-style-type: none"> Perform consistent archival activities on growing database tables such as data purging Retain archived data based on business needs and direction provided by the State Implement efficient capacity planning procedures on anticipated data volume and growth Execute data archival processes for ICES cold storage
Performance Tuning	<ul style="list-style-type: none"> Perform extensive performance testing and load testing of the application in a staging environment Identify long-running SQLs and other DB performance issues through AWR, ASH, ADDM, memory advisor, segment advisor and SQL tuning advisor Analyze report statistics and recommend appropriate fixes and resolutions for the impacting events like ITL/Lock waits and tuning recommendations for unoptimized SQLs Apply fixes/solutions to the Performance database for the next iteration of the test and fix the issues in the production with the upcoming release Monitor growth and adjust compute capacity for Azure SQL
User Account Management	<ul style="list-style-type: none"> Adhere to the State security policy standards related to authentication and authorization Leverage user account management to control and limit access to the staging and the production database environments that contain sensitive PII (Personally identifiable information) data of the client Provision additional access as necessary for Azure SQL

Table 6-7. Database Maintenance Services.

Database – Conceptual Data Model (CDM)

RFP Reference: Attachment C, Section 6.2.4.1

Our DBAs use Erwin Data Modeler, which satisfies federal CDM requirements to transform conceptual data models into logical models for builds and optimizations. The CDM includes high-level data constructs and non-technical names so that the business can understand the data basis of the architectural description. Our created CDM for IEDSS is part of the Erwin models with details such as Functional Area with High-Level Structures having Business Related Object names. Throughout the maintenance and operations efforts for IEDSS, we will align our database maintenance activities explained in Table 6-7 as an input to update plans, design documents, and data models as necessary to follow the established documentation standards and processes.

Database – Logical Data Model (LDM)

RFP Reference: Attachment C, Section 6.2.4.2

The LDM consists of entities and attributes along with their relationships with one another. Data structure changes are documented using the LDM. Our created LDM for IEDSS is part of the Erwin models with more details such as data types and primary/foreign keys in it. The Erwin data modeling tool has out of the box capabilities to allow a user to change the database platform in the tool to view how the model would look on another DB platform and even generate a DDL from it.

We leverage our best practices to manage the established business model standards and to maintain and support the historical logical and physical data model, entities, relationships, definitions, domains, and entity-relationship diagrams and introduce changes to the existing model only with the enhancement phase to adhere to business data model standards. The LDM details have been captured within the Database Design components that satisfy the CMS requirement for Logical Data Model. The following view depicts our current process to generate database artifacts.

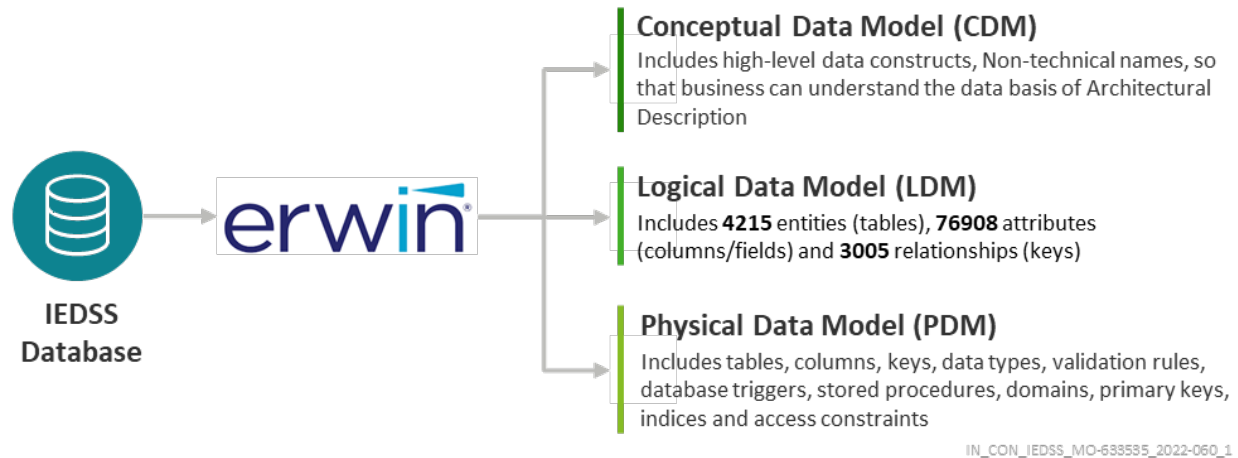


Figure 6-4. IEDSS Database Artifacts.

Database – Data Standards

RFP Reference: Attachment C, Section 6.2.4.3

By working together, we bring the right people, processes, and technology to drive improvements in the quality management of critical internal data and effectively meet business goals to achieve IEDSS success. To achieve this, we effectively manage various facets of data standardization such as managing metadata, vocabulary, structure, integrity data standards, and publishing related artifacts throughout the SDLC to confirm our data models are relevant, useable, and align to the database architecture standards. The activities identified in the following table are key for successful operationalization of an organization's data quality program.

Activities	Description
Data Dictionary Documentation	<p>Contains the details of the database objects inherited from the base solution components. The data dictionary describes the following:</p> <ul style="list-style-type: none"> • A description of each table, stored procedure, view, and function used by the system • An explanation of naming conventions • Detailed information for each data element in each table including, but not limited to, the Title, Category, Objective, Source, Type, Version, Status, Applicability, Terms, and possible values for enumerated value data elements • A depiction of table relationships using an entity relationship diagram <p>Deloitte will apply technical and business expertise and follow the process to update the data dictionary as changes are made to the database.</p>
Data Definitions	Standard and comprehensive documentation of data elements with data definitions, data hierarchy, and other data relevant information
Data Flows/Lineages	Mappings to identify source, consumption, transformation, storage, and system of record related to data elements across various domains and functions
Workflows	View the business processes, functions, and domains associated with the data elements to identify the business groups and data owners
Data Quality Rules	Maintain a list of checks that monitor and measure the data quality to identify gaps/issues in data produced or transformed across systems

Table 6-8. IEDSS Data Standards.

Application Monitoring

RFP Reference: Attachment C, Section 6.2.5

Our Experience

Our **production-proven monitoring mechanisms** are the key factors for the smooth statewide rollout through multiple waves and maintaining system stability between releases. This monitoring enables meeting/exceeding SLA expectations. Our implementation of an extensive application monitoring processes encompasses various facets of IEDSS infrastructure, application health, and availability of other related systems. These processes depict our **vast experience**, capability, and collective endeavor that has demonstrated our commitment toward serving the people of Indiana over the last several years.

We continue to apply our **immense experience with Splunk** Enterprise and Oracle Enterprise Manager (OEM) on developing advanced alerting systems, real-time monitoring dashboards, and capacity planning reports, enabling us to automate diagnosis of performance and availability problems across the technology stack before productivity is compromised.

Our Approach

The IEDSS monitoring team leverages its holistic monitoring setup to monitor the IEDSS solution components, safeguarding their availability along with their applicable SLAs and enhancing the IOT monitoring procedure. Our monitoring approach has three primary aspects:

- **Real-Time Infrastructure Monitoring:** Accurate measurement of ongoing server health across multiple utilization dimensions, including CPU, memory, storage, sessions, threads, locks, and log files.
- **Application Performance and Security Monitoring:** Continuous monitoring of performance metrics across various application facets, including key metrics such as user concurrency, transaction response time, user analytics, production traffic, and key security alerting.
- **Batch Monitoring:** Continuous monitoring of executed cycles and outputs, with transparent alerting and reporting on metrics.

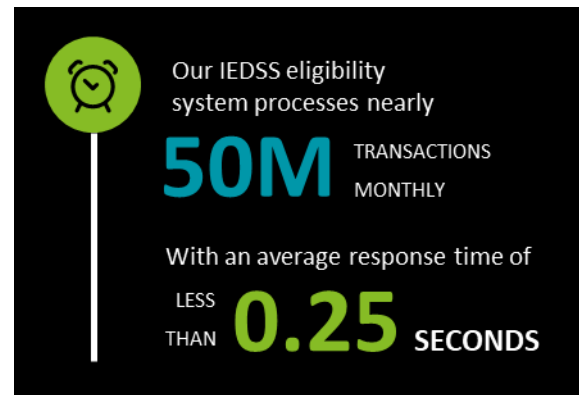
Our overarching strategy includes not only monitoring the infrastructure and application but also troubleshooting security incidents, maintaining Splunk SIEM monitoring (refer to sub-section *Security and Privacy*) and providing Tier 2/3 Helpdesk Support (refer to sub-section *Incident Management and Helpdesk Support*). We continue with the key monitoring dashboards that we have maintained since go-live, demonstrating no negative impact on application performance and infrastructure. We deliver not just the right tools to monitor your systems but have the experience to understand the nuances and interconnectivity of your systems—this experience can only be gained through operation of the IEDSS. Please refer to *Appendix 5, Sample Splunk Reporting Dashboards* for additional details.

Application Monitoring Lifecycle

Splunk forms the backbone of our monitoring ecosystem, triggering alerts in the case of infrastructure outage, high response time, and performance degradation. Splunk does this via customized dashboards, as shown in *Appendix 5, Sample Splunk Reporting Dashboards*. Our production support team is promptly notified of alerts from Splunk, and they complete RCA and assign it to appropriate teams for the SDLC process.



- IEDSS supports an average of 2,300 concurrent users daily.
- IEDSS has maintained the response time SLA with 99.11% transactions below 5 seconds, 99.60% transactions below 8 seconds, and 99.88% below 15 seconds even after 4,000% growth in Production traffic.
- As an outcome of continuous monitoring, performance optimization, and tuning, IEDSS utilizes only 50% of its available infrastructure capacity even after statewide implementation.



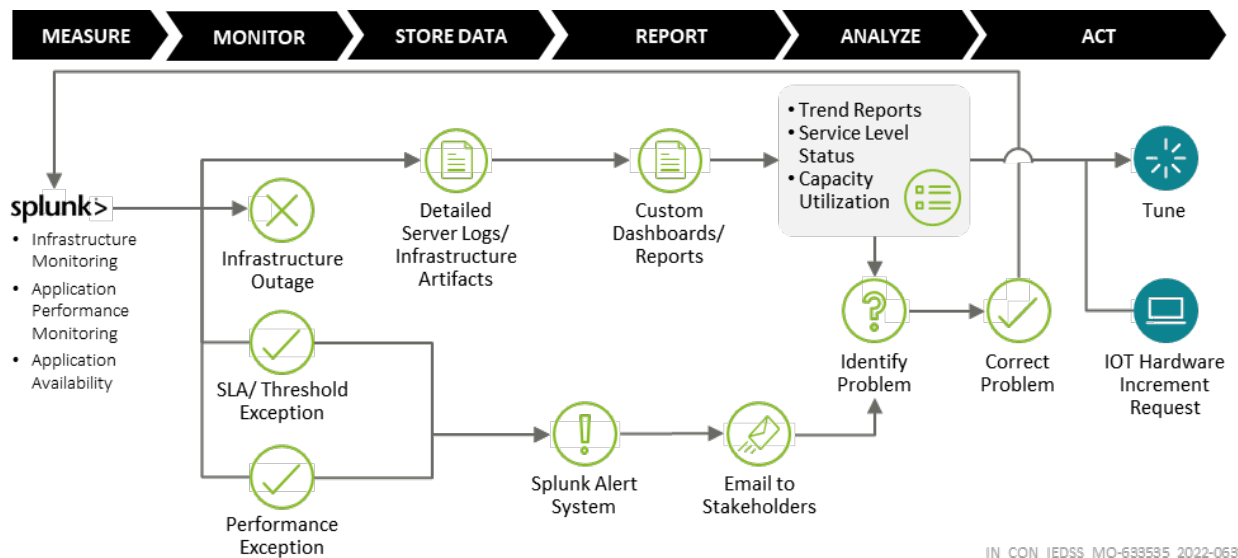


Figure 6-5. IEDSS Infrastructure and Application Monitoring Lifecycle.

As seen in the diagram above, we leverage the process for identifying areas of risk before they become an operational risk, making architectural and infrastructural tuning recommendations based on resource utilization and application behavior reports. We also use the performance test reports to generate capacity utilization and SLA reports to validate that each release complies with our SLAs. For more details on the SLAs, refer to *Section 13, Service Level Agreements*.

Table 6-9. Enhancing Monitoring Artifacts.

Worker Portal Monitoring Tools

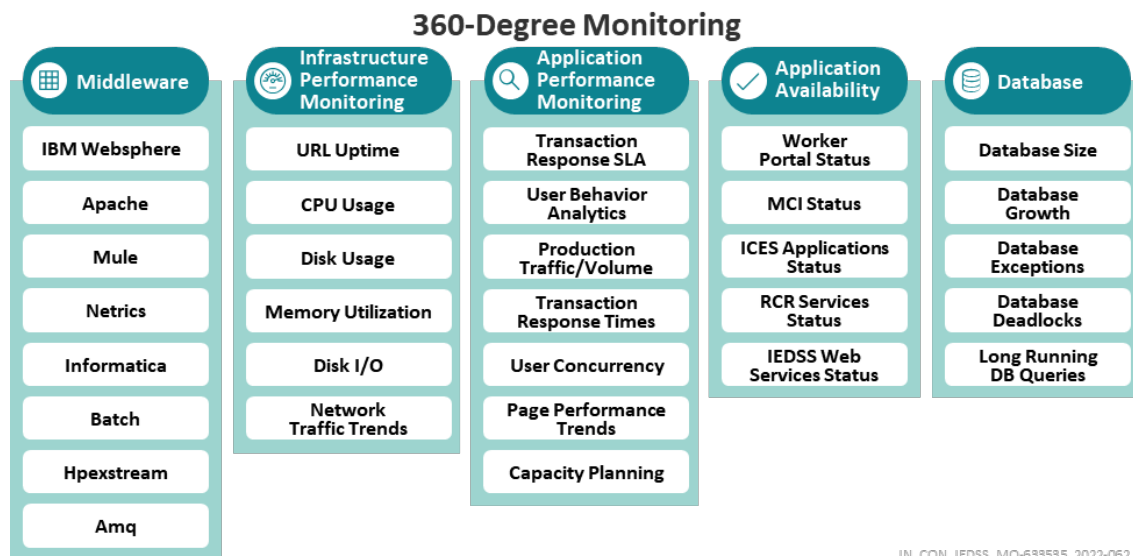
IEDSS requires an operations organization equipped with the experience and tools to detect any variation from expected performance, and either proactively prepare for these anomalies or reactively engage to remediate. We extensively use Splunk (Splunk 8.0.3) and OEM for IEDSS monitoring along with leveraging IOT-maintained System Center Operations Manager (SCOM) artifacts for enhancing our monitoring capability. The following table shows relevant details.

Tools	What we deliver	Benefit to the State
Splunk Enterprise	Provides the unique ability to monitor system behavior and performance by creating custom dashboards tailored to the requirements of various IEDSS performance and infrastructure artifacts and can also perform ad hoc analysis of performance data as required.	<ul style="list-style-type: none"> • Identification of application bottlenecks in real time • Reduction of IOT's Mean Time to Respond (MTTR) to outages • Prompt alerts to project team and IOT stakeholders • Proactive capacity planning • Enhanced ability to surface business-critical and meaningful transactional/infrastructure events • Modern tooling that can readily expand to new data streams
Oracle Enterprise Manager (OEM)	We continuously monitor and tune performance of resource-intensive SQLs and jobs. We work with IOT on overall database management along with making recommendations for system efficiency with ongoing support (e.g., Exadata monitoring).	<ul style="list-style-type: none"> • Proactive identification of database bottlenecks, mitigating application/infrastructure issues before being an operational risk • Identification of database scaling needs early in the SDLC • Using Exadata monitoring created various incident rules allowing us to generate alerts when system threshold is breached • Exadata monitoring by creating various incident rules and alert system when system threshold is breached
Security & Network Operations Center (SOC & NOC)	We support and augment IOT on infrastructure management and capacity planning endeavors by analyzing the IOT-generated SCOM monitoring reports/artifacts.	<ul style="list-style-type: none"> • Enhanced IEDSS infrastructure management process • Early identification of potential infrastructure bottlenecks

Table 6-10. Worker Portal Monitoring Tools.

Monitoring Artifacts

The IEDSS application requires 360-degree monitoring with focus on infrastructure and application performance, along with a holistic approach. We have each layer of the infrastructure and performance artifact engrained in our monitoring solution. By doing so, we identify and resolve issues quickly and efficiently and reduce MTTR.



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Figure 6-6. IEDSS Component Monitoring Overview.

The infrastructure and performance artifacts cover the components in the IEDSS solution and have been configured in Splunk, enabling us to gather accurate real-time metrics as well as store data/logs to generate analytical reports for tuning purposes. Deloitte maintains these artifacts and will update and generate new artifacts during M&O to support the ongoing operations. The following table contains a list of the critical server and application metrics that are currently monitored along with their purposes.

Monitoring Artifacts	Purpose
URL Uptime Monitoring	Availability of the IEDSS application, web services, and external services such as CDMS
CPU Usage	Optimal CPU utilization within the operational limits for the IEDSS servers
Disk Usage	Availability of enough disk space for the IEDSS servers with ability to take proactive measures
Physical Memory	Detection of memory leaks in servers before performance is affected
Disk I/O	Detection of any read/write issues leading to impact on application performance

Monitoring Artifacts	Purpose
Load Balancing	Confirm distribution of load across the JVMs and stop any request overload on an instance
Transaction Response SLA	Confirm user experience is within the agreed SLA
Transaction Response Time	Confirm the business transactions are performing within the standard response time limits
User Concurrency	Correlate user concurrency with infrastructure metrics analyzing system capacity
Traffic/Volume	Confirm the system is handling the required throughput with minimal resource utilization
Page Performance Trends	Identify performance degradation early to mitigate future user experience impact
User Behavior Analytics	Generate user analytic reports to simulate real-world scenario in the load tests
Database Size/Growth	Identify database capacity to handle current and anticipated data growth
Database Exceptions/Deadlocks	Identify database issues such as deadlocks early before impact is faced by larger user base
Long Running DB Queries	Identify long-running and resource-intensive queries so they can be tuned before business impact

Table 6-11. Monitoring Artifacts and Purpose.

Batch Processing

Our Experience

Batch scheduling, monitoring, execution, and reporting is a crucial piece of the M&O process. Deloitte has experience nationally with batch processing across E&E projects of similar size, scale, and complexity. We emphasize cross-functional training of all members of the batch team to help provide a holistic view across the application and its functionality. This provides members with an intrinsic understanding of the intricacies of the batch framework, its dependencies, and its relevance to your State-specific implementation.

We understand the responsibility delineation for IOT. We will support IOT regression testing of the CA-7 platform, manage schedules beyond those in *Attachment J*, and configure schedules within the framework of access given in the CA-7 platform.

Critical IEDSS batches such as **benefit issuance, correspondence, renewal packets, and eligibility mass change** are dependent on the batches completing within prescribed windows. To facilitate this, our batch team has developed robust batch orchestrations, procedures, and associated governance. These foundational components help allow batch processing to **complete within anticipated timeframes, avoids data corruption, and mitigates exception events**. Recent examples of our team's quick response to potential issues include detected Golden Gate issues which our team mitigated through well-documented exception handling procedures, ultimately enabling the batch cycle to complete within expected timeframes. Deloitte's structured approach to batch processing has helped the State maintain a high level of quality with no unexpected user impacts due to batch processing.

Our IEDSS teams has extensive knowledge of your production system and Indiana's business operations, positioning us to best support your batch operations. This understanding of your system and processes has helped us prevent downstream impacts before they can occur. Examples of this include **dry runs of annual processes such as COLA and FPIL updates to be able to estimate anticipated volumes of impact and identify any potential performance issues or negative impacts to the end client.** In addition, we have helped the State in support of various PHE-related activities, such as projections of **EBT COVID benefits to be issued, potential case closures, self-attestation estimation, and special data fix executions in support of virtual appointments.**

We continuously look for methods to decrease execution windows; for example, integrating the data fix process directly into the batch cycle to reduce manual effort and leverage the dependency features of the batch scheduler. We have also optimized several other processes, including the following: reduced Post Master Transmission (PMT) processing runtimes by 50 percent while supporting 6 million records, with a further runtime reduction of 30 percent anticipated; reduced archival processing times through increased instances; and added weekend processing procedures for EBT, Expungement, Claims, and Aging files.

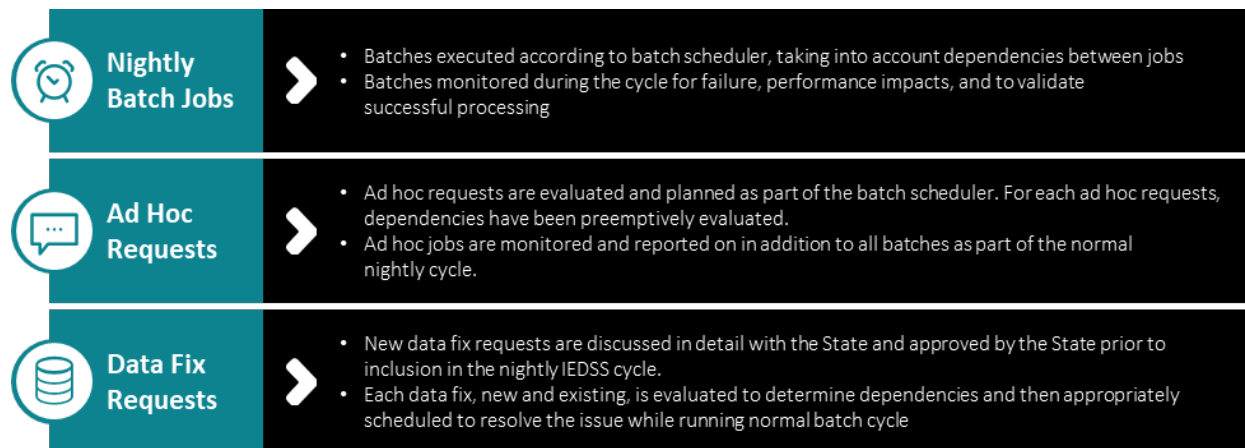
Our teams work with the State to develop batch job prioritization, escalation procedures, approval models, and reporting cadence.

Deloitte's current contract provides the State with ongoing batch management, monitoring in adherence to the defined schedule (daily, weekly, monthly, quarterly, yearly, and on-demand), and on-call support for IOT. The following figure describes a typical batch cycle.



Deloitte has shown we are able to effectively manage batch execution in the State of Indiana. Some strategies we have used are:

- **Proactive test cycles to find issues and provide forecasting:** We perform dry runs of batch cycles prior to production runs. This provides the State with transparency and validation opportunities for anticipated volumes, runtime windows, notices, and helps identify potential issues prior to production.
- **Ability to minimize impact of the unexpected:** We coordinated with multiple teams from DFR, IOT, DBA, CA-7 Operations, and internal Deloitte teams, and managed communications with agency partners such as EBT and Gainwell, to mitigate impacts of a discovered Oracle issue that impacted batch windows. We adjusted the batch to minimal required jobs to send critical benefits and notices within shortened windows.



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Figure 6-7. Activities Performed in Typical Batch Cycle.

Our Approach

Our batch management starts with clear communication and collaboration with the interface teams and State staff. We validate that files are appropriately received on a daily basis, batch jobs can be executed successfully during the given batch window, and any ad hoc or high-priority requests are managed in accordance with the overall batch schedule each night.

Even though a batch schedule has been created and implemented, it is consistently reviewed with each release, introduction of new functionality, or changes to business requirements to validate that batch dependencies are accounted for and the batch process can be completed in the appropriate window. The table below lists activities of our overall batch processing approach.

Activities	Our Approach to Success	Deloitte Difference
Batch Schedule	<ul style="list-style-type: none"> Creation of annual batch schedule (annual, half-yearly, ad hoc, quarterly, monthly, weekly, and daily) Configuring batch schedules and dependencies Integration with Job Prose in production CA-7 to provide IOT team visibility into batch processing health Operational optimizations such as removal of deprecated schedules (e.g., conversion) 	<ul style="list-style-type: none"> We project updated job forecasts for validations prior to any production implementation We support multiple environments each with their own customized schedules
Batch Coordination	<ul style="list-style-type: none"> Manage batch activities with stakeholders (e.g., FSSA BizTalk [the ESB], IOT, CDMS, Gainwell, Postmasters, DXC, SSDW, EBT, SSA, CMS) Work with IOT, DFR, and trading partners such as IRS and SSA to support legacy file transmission, communications, transfer (incoming/outgoing) confirmations, and resolve unexpected issues (delays or data corruption) Plan and execute release deployment activities, including coordinate with partners (FSSA, BizTalk) to configure ports for data exchange Maintain tracker to manage activities (batch tracker, schedule internal Visio tracker, CA7 schedule master) and communicate to partners as necessary Escalation and mitigation procedures for exceptions impacting IEDSS operations 	<ul style="list-style-type: none"> We understand the intricacies and dependencies of the components from our experience with IEDSS We have pre-built and tailored communication and deployment plans to your operating model Deep level of transparency and reporting of batch activities
Batch Execution	<ul style="list-style-type: none"> Plan and coordinate batch execution with IOT and manage data fix Stop & Go activities will be performed in pre-prod environments 1 week prior to release and adjusted for go-live in production Special batch window support for annual processes such as SUA, SDX, COLA, MA, and FPL updates Work with functional teams to track, analyze, and prioritize short and long-term fixes for batch issues Monitor batch execution cycle and escalate any issues noted (potential delays or failures) Report exceptions and daily run statistics to State and functional teams 	<ul style="list-style-type: none"> Prior to production release, jobs are pre-staged and executed through live cycles to validate assumptions and functionality
Batch Monitoring	<ul style="list-style-type: none"> Compare historical runtimes against forecasted batch window based on volumes and estimated completion times Update execution plan to include special request for inclusion/exclusion of jobs in batch cycle Communicate, coordinate, and adjust batch cycle for any planned/unplanned outages Follow established escalation procedures based on criticality of batch job and client impacts 	<ul style="list-style-type: none"> Continuous monitoring team through the year Production of detailed metrics and intelligent forecasting models based on historical performance analysis
Special Batch Execution	<ul style="list-style-type: none"> Plan, coordinate, and execute special batch run (COLA/FPL) Share plan and results with the State and functional teams on batch exceptions Create IEDSS monthly availability calendars Coordinate with vendors and partners to integrate planned maintenance activities Communicate with partners such as CDMS and Gainwell for special activities such as annual runs Adjust processing times to support large volumes of transactions 	<ul style="list-style-type: none"> Special events are detailed in a common playbook, enabling expectations and processes to be set up front Full view of collective maintenance windows supports a tailored batch execution plan Batch cycle optimizations allowing us to process multiple files on the same day from a vendor enabling us to avoid batch delays on the next business day
Batch Environment Management	<ul style="list-style-type: none"> Set up and manage batch environments and execution Set up CA7 and Juicebox for environments that need batch capabilities (CA7 for production, CA7 and Juicebox for non-production environments) Communicate schedule changes to SIT, ILAB, and BSC UAT teams 	<ul style="list-style-type: none"> Automated and staggered batch executions provide optimized utilization of core infrastructure and cost savings through a shared resourcing model
Environment Upgrades	<ul style="list-style-type: none"> Support IOT in planning and configuration of required upgrades (e.g., CA7) Coordinate with required SIT and UAT user groups for testing and validation 	<ul style="list-style-type: none"> Minimized downtime and end user impact Complete end-to-end verification for upgrades

Table 6-12. Key Batch Activities.

6.c Software/Hardware Maintenance

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.2.1

- c. Software/Hardware Maintenance, including the Contractor's understanding of what constitutes M&O, no additional cost, work versus Enhancements, in alignment with RFP expectations. Include information on how platforms would be tracked throughout the Contract term and "future proofed" in alignment with the RFP.

Our Experience

As the incumbent vendor, Deloitte brings the technical knowledge and experience required to manage the Enterprise IT Service Lifecycle for the components and software listed in *RFP Attachment J, Bidders Library - Tab 3*. This involves maintenance and support services for software and hardware upgrades, and patches in accordance with established release management process discussed in *Section 5, Software Development Lifecycle (SDLC) Approach, sub-section 5.g, Release Management*. Our technology expertise, combined with our strong technical infrastructure management experience, provides the right mix of system knowledge, technical skillsets, and a **continuous improvement** mindset to help the State continue to serve Hoosiers—its ultimate mission.



- We have successfully implemented and supported 21 upgrades and 49 functional and security patches since Go-Live.
- We have proven experience in maintaining the COTS products and other software of IEDSS within the two major releases from the current release, published by the vendor.

We worked with the State to identify and incorporate the software listed in *RFP Attachment J, Bidders Library - Tab 3*, and have worked with the State throughout the DDI phase and post-go-live to establish a stable, structured, and **production-proven process** to provide routine software patching and upgrades in **compliance with MARS-E2.0** and State-defined guidelines. Our experience working together as a team has helped the State and Deloitte staff to:

- Allocate appropriate time for the upgrade planning and impact assessment on application design, architecture, and security vulnerabilities.
- Identify the right set of stakeholders during the upgrade, not just including DFR, IOT, FSSA, but other system interface partners such as Application Services, IMPACT, MMIS and EBT.
- Clearly establish priorities between business and technical tasks to better streamline and align the integration of software upgrade releases into the overall release runway.

Our Approach

We understand and **acknowledge the requirement to support upgrades and patches as part of M&O services**, in alignment with RFP expectations. The following table highlights some of your requirements and our compliance.

R.NO	Requirement	Comply
1.	As part of M&O, at no additional cost, the Contractor agrees to maintain all COTS products within two (2) releases of the current, vendor published release unless a more recent release is necessary to mitigate a critical or high or moderate vulnerability.	✓
2	Test and implement vendor release updates, including security updates and patches designed to resolve critical and high and moderate vulnerabilities expeditiously and within the timeframes mandated.	✓
3	Maintain the Worker Portal application and supporting COTS products in support of timely patching of supporting operating systems such that operating system patches employed are within one patch cycle.	✓
4	Maintain the security settings and profiles of the Worker Portal application and supporting COTS products such that the security settings and profiles are up-to-date and consistent with current industry best practices, not deprecated or in danger of near-term deprecation, do not represent a substantive security risk, are compliant with the requirements of MARS-E, and as otherwise reasonably required by the State.	✓
5	Any Enhancements that introduce new COTS platforms will be incorporated into M&O upon successful implementation, with the expectations cited in this Section considered applicable to these new platforms.	✓

Table 6-13. We Comply with Your Requirements.

The State can feel confident that our M&O services incorporate these expectations at no additional cost to it because we have thoughtfully estimated and planned for the effort to maintain COTS products within two major

releases of the current, published by the vendor and maintain the operating systems (OS) within one release of the latest release supported by IOT.

Over the past few years working with the State, we have acknowledged our common goal to build a future-proof platform, mitigate the security risk, and demonstrate **compliance with CMS MARS-E 2.0, RA-5, SI-2**. To achieve these goals, we have designed the process below in collaboration with the State to address upgrades and patches. The key factor to be considered in the process flow is the joint decision between the State and Deloitte to prioritize and schedule upgrades and patches to accommodate the needs and preferences of stakeholders.

Step Number	Step	Approach
1.	Identify Need for Upgrade or Patch	Deloitte communicates the need for upgrade/patch in the quarterly software upgrade meeting with the State based on the analysis of functional and business features published by the product vendors as well as in the monthly security meeting with the State based on the RAPID 7 scan report. The need for an upgrade/patch is categorized into: <ul style="list-style-type: none"> • Major/minor version upgrades for the COTS products and other software to stay compliant • Upgrades needed due to end-of-support / end-of-life of software • Upgrades needed to support new product functionality • Upgrades to fix performance-related issues • Change in licensing model to support reduced licensure cost • Fix packs and upgrades on minor version of products to remediate security vulnerability
2.	Preliminary Impact Analysis	<ul style="list-style-type: none"> • Perform impact analysis to identify possible impacts that could affect overall system functionality, quality, and stability. Often, dependencies or compatibility issues between COTS products, middleware, DB, and OS versions are uncovered during this analysis. We will work with the State and obtain the required change approvals in accordance with established change control processes.
3.	Develop Proof-of-Concept Solutions	<ul style="list-style-type: none"> • As part of the upgrade and patch process, create proof of concept as needed to validate that the code, framework, and platform components continue to perform optimally; use sandbox environment to perform the upgrade/patch for validation, which includes preliminary business function, regression, and performance tests.
4.	Approval Process	<ul style="list-style-type: none"> • Discuss the initial impact analysis of the upgrade or patch with the State and prioritize for the upcoming release based on the Deloitte and stakeholder's resources availability.
5.	Determine Level of Effort (LOE) & Timeline	<ul style="list-style-type: none"> • Based on the outcome of the approval process, perform a thorough analysis to identify the business impacts, technical impacts, and define mitigation strategy, if needed. • Determine the estimated timelines, staffing, and department interdependencies.
6.	Conduct Patching & Upgrade Activity in Lower Environments	<ul style="list-style-type: none"> • We will conduct the initial patching/upgrade activity in the development environment. • After the preliminary testing is completed in the development environments, we promote the upgrade/patch to system test environments.
7.	Establish & Implement Release Plan	<ul style="list-style-type: none"> • We work with the release management team and the State to identify an appropriate release schedule for the higher environments. • This release schedule governs the deployment plan for UAT, integration testing, and production.
8.	Future Proofing	<ul style="list-style-type: none"> • As part of the upgrade and patch process, we analyze long-term outlooks of software. We will work with the State to discuss future potential functionality shifts in software as well as possible alternative software that helps position the State for upcoming technology trends.

Table 6-14. Deloitte's Approach for Patch and Upgrade Management.

We work with the State to schedule patches and upgrades for COTS product/infrastructure critical, high, and moderate vulnerabilities identified by authoritative sources such as MS-ISAC, vendors, Symantec, and RAPID 7, as mentioned in the RFP *Attachment C, Scope of Work, Section 6.2.1* within the timeframes mandated by MARS-E 2.0 (30 days for critical/high vulnerabilities and 90 days for moderate vulnerabilities). The vulnerability severity level, risk analysis, and availability of compensating controls to mitigate the risk will determine the urgency of the patch and whether to align with a major, minor, or expedited release. Prioritization to minor or expedited release will be a joint decision between Deloitte and the State. Vulnerability patches with a significant code change will generally be aligned to a major release to provide enough testing time unless prioritized by the State for a sooner release. We work with the State to perform a risk assessment of the vulnerability and identify controls that mitigate the risk to comply with MARS-E v2.0. We track the vulnerability in POA&M until the vulnerability is remediated by applying the appropriate patch.

Tailored Upgrade and Patching Plan for IEDSS

We have optimized our M&O team capacity to support expected upgrade and patch activities. Our understanding of IEDSS and its software, RFP requirements, and publicly available information for software products listed in *Attachment J* have allowed us to estimate the number of upgrades and patches anticipated during the M&O period, and we have appropriately planned our staffing. Our planning is based on the following:

- Our understanding of upgrade and patching activities over the last 9 years
- Published release frequencies of major, minor, and emergency releases by product vendors
- COTS products maintained at N-2 major releases of the current version published by product vendors (N denoting the current major release of the product)
- Operating System (OS) maintained at N-1 release of the latest release supported by IOT (N denoting the current major release published by the vendor)
- Software vendors introducing functional patches that introduce new features or security patches that address critical, high, or moderate severity issues
- Coordination efforts with IOT to identify necessary patches, testing, implementation, and validation

In addition, we will work with the State to perform appropriate regression, testing, and tracking efforts in alignment to proposed release management processes at no additional CR cost under M&O. Further details can be viewed in Table 1 of *Appendix 7, Anticipated Upgrades and Patches*.

We have embedded our **best practices** in our existing processes to maintain the security settings and profiles of the Worker Portal application and supporting COTS products, such that the security settings and profiles are up to date, not deprecated or in danger of near-term deprecation, do not represent a substantive security risk, are consistent with current industry best practices, and compliant with CMS MARS-E v2.0. Our current process includes:

- Work with IOT to leverage State-approved Group Policy Object (GPO) settings required to **maintain security and interoperability**.
- Hardening the supporting COTS products per the security configuration guidelines published by federal agencies and vendors.
- Leveraging FIPS 140-2 compliant encryption solutions for encrypting data-at-rest and data-in-transit. Work with IOT to use the State-approved communication protocols, cipher suites, encryption levels, and certificates.
- For service accounts management and administrative account management, employ the principle of least privilege to allow only authorized access for users who are necessary to accomplish assigned tasks.

6.d Incident Management and Helpdesk Support

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

- d. Incident Management and IEDSS Contractor Tier 2/3 Helpdesk Support. Include how you would ensure incident resolution within the contractual time frames.

Our Experience

Since April 2019, we have worked with the State, end users, and vendor partners to troubleshoot and resolve a variety of user, application, and operational issues through the IEDSS incident management and Tier 2/3 helpdesk support processes.

We have continuously matured and implemented various process improvements to improve productivity and efficiency while providing a high level of service. Our team brings agility, expertise, and commitment to get things done right. We monitor incoming incidents to identify trends and proactively look at ways to reduce them by cleaning data before the issue is reported on other cases or provide Interim Business Processes (IBP) thus stopping future incidents from being logged.

We recognize that incident management and helpdesk support is at the core of a successful M&O approach. We understand that an incident may have a direct impact on an individual or their family getting benefits. Our ITIL-based standards and experience with M&O of the existing IEDSS application enables us to bring forward the right people, processes, and tools to get the incidents resolved quickly, efficiently, and accurately. Most importantly, our approach is informed by insights such as **how EDBC rules have evolved over time, the nuances of converted data, the impact of PHE rules, and the perspective of how interfacing systems provide and consume data.** This helps in providing timely and complete support to help users solve their most complex issues.

We understand that over 35 percent of incidents are related to eligibility scenarios. These incidents require a deep understanding of **Indiana program policy, EDBC implementation, and patterns of end user interaction** to resolve them in a correct and efficient manner. Our team conducts thorough research into user activity and a functional/technical analysis to understand the nuances and circumstances leading to an incident. Our holistic understanding enables us to complete the root cause analysis and resolve the incident in an expedited manner.

We minimize risk by bringing an experienced incident management team that can work independently and efficiently **while not consuming valuable State time** with trivial questions. While other vendors might claim they have helpdesk experience, this experience does not benefit the State unless it is combined with in-depth knowledge of Indiana's policies, people, and processes. Continuity of knowledgeable staff complemented by our HHS subject matter expertise gives the State the benefit of not losing time due to transition and to continue to focus on maximizing value for Hoosiers.

Our Approach

Our ITIL-based incident management approach provides the flexibility and structure required to predictably manage and monitor incident management activities. Our processes are built on the fundamentals of the ITIL incident management process and specifications mentioned in *RFP Attachment M, Incident Management Overview*. This standardized approach helps us in logging, triaging, prioritizing, tracking, and resolving incidents in an effective and efficient manner.

We recognize that a timely interim business process, root cause correction, and remediation of any impacted dataset can greatly reduce adverse impacts to IEDSS end users. Our incident management team speaks the language of the State and end users and understands the nuances of their circumstances—leading us to quickly assess and escalate issues to mitigate risk. In addition, the team routes policy or training questions and issues to



Your users rely on the IEDSS tier 2 / 3 to resolve their most complex issues. Our staff bring extraordinary qualifications because that's what it takes to respond thoughtfully and completely. Here's a sampling of the robust experience our incident team brings:



the appropriate staff in a timely manner for quick resolution. With years of experience managing the DDI and M&O for Indiana, the team understands how different systems integrate and work together to provide better services for Indiana residents. The team works closely with key stakeholders (e.g., Application Services, IOT) to identify and transfer the incident to the correct stakeholder for quicker resolution. The table below describes the key principles embedded in our approach to incident management.

Our Principles	Benefits to Indiana
Responsiveness	Our team provides appropriate, accurate, courteous, efficient, timely, and proactive responses to inquiries and incidents. We analyze the issue and provide the appropriate steps for resolution. If there is an escalated issue impacting users, our team is prepared to take swift action to resolve the issue with priority. We understand that incidents associated with critical functions like SNAP benefit issuance and the CORE interface may require top priority.
Thoroughness	Our team tests incident resolution in lower environments before proposing the solution to end users. We validate that our resolution is working end to end, and the end user can process the case.
Traceability	The incident resolution process is organized with well-defined steps. This process prescribes a problem ticket to be created for similar issues being reported by one or multiple incidents. Each incident/group of incidents is linked to a defect and/or data fix (for temporary solution). The entities involved in incident resolution Problem, Incident, Datafix, defect is linked together, which enables end-to-end traceability.
Clear Communications	Our team clearly communicates the root cause of identified issues and the interim resolutions or workaround when available. Awareness of the existing issues and their potential impact is foundational to our incident management process.
Transparency	Our team seeks SME guidance when needed, as we recognize that business is the true decision maker when it comes to policy and operations. We defer to their judgement, but we have the right experience to know when to escalate and when to work independently to make effective use of their time.

Table 6-15. Incident Management Principles.

Ticket Routing Overview

RFP Reference: Attachment C, Section 6.3.1

We have worked side-by-side with the State to create a collaborative environment between Tier 1, our Incident team, and other stakeholder teams to manage and resolve user-reported incidents to prevent disruptions in IEDSS functioning and will continue to align our incident management processes with the workflow depicted in *RFP Attachment M, Incident Management Overview*.

We understand that incidents are reported by different stakeholder groups such as DCS, DFR, DST, IOT, Central office staff, eligibility workers, IMPACT workers, OHA workers, and OMPP workers, and can either be directly called in, sent via email, or reported by website.

Tier 1 (DFR Helpdesk/IOT) logs the ticket in State-approved ALM tool and depending on the problem area, re-routes the ticket to appropriate resolver groups; the ticket is routed to the IEDSS resolver group if it is related to IEDSS. As shown in the figure to the right, our team owns the incidents received from the Tier 1 team (assigned to IEDSS resolver group) and triages, prioritizes, and resolves them. After initial analysis, if our Tier 2 team concludes the ticket does not belong to the IEDSS resolver group, they enter appropriate comments and update the group.

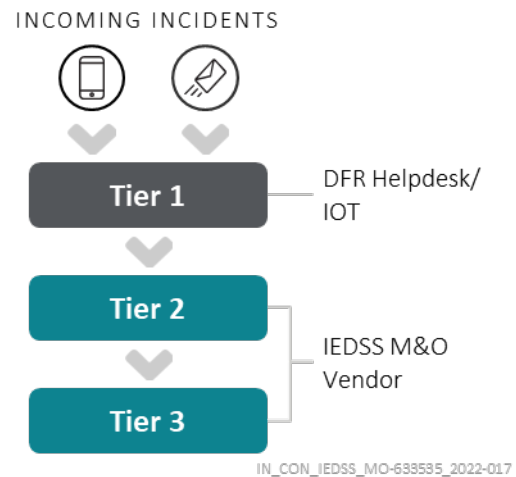


Figure 6-8. Incident Inflow and Routing.

Incident Management

RFP Reference: Attachment C, Section 6.3.2

One of the **strengths of our team** is our ability to understand the issues, **quickly assess and escalate issues**, and **mitigate risk**. Our team is involved in Incident Management processes (end-to-end) because we believe in getting to the root of the issue by talking to field staff. These processes help us triage, analyze, resolve, and respond to inquiries in a courteous, appropriate, and timely manner.

Once the incident is reported, we focus on **matching the incident with other known problems**, resolving the incident as **quickly** as possible to **restore service**, prioritizing incidents based on impact, and escalating to other teams where necessary.

The figure below depicts a high-level workflow of incidents being reported followed by the triage process. It shows the incident management process can result in other work items (such as service requests, data-fixes, and defects).

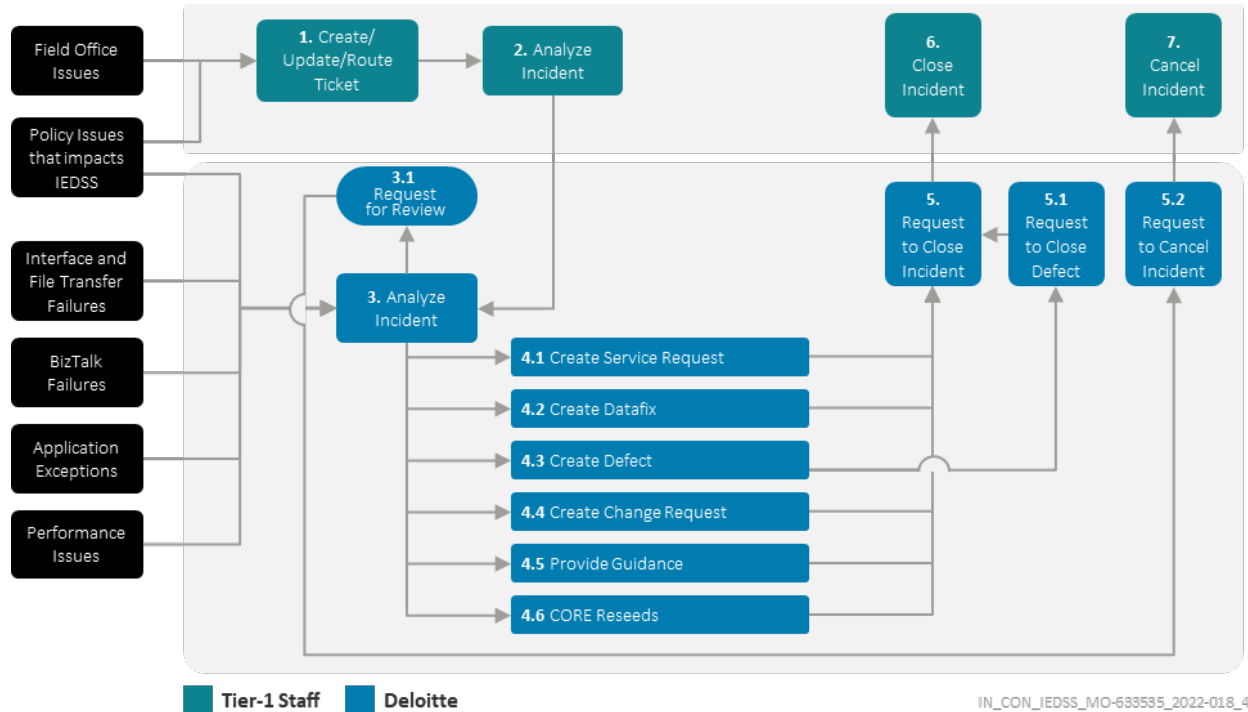


Figure 6-9. High-Level IEDSS Incident Management Workflow.

As the incident is further analyzed, additional work items are created to support resolution. Our team recognizes that an incident is a representation of a potential issue for one given case. These types of issues can result in multiple incidents being logged for the same issue. If such an event were to occur, our team analyzes the root cause and identifies a fix for it. Such reported incidents are then linked to an appropriate work item. If a code fix is needed, our team creates a defect and works on it based on the priority defined in the Defect Triage Meeting (DTM).

The team continues to analyze a short-term fix that can resolve the issue as quickly as possible on a given case, which may be in the form of a data-fix or by an IBP (by providing guidance to the workers). This data-fix entity is also linked to the incident. This linking process results in complete end-to-end traceability from incidents, to problems, to defects, to data-fixes. When the issue is resolved using short-term fix that resulted for an incident, the incident will be closed, and any associated defect remains open for the broader fix.

There is a defined list of activities that are performed in the incident management process. Each activity has defined ownership and a timeline to govern the whole process. The table below highlights the high-level activities that are performed by the IEDSS incident management team.

Activities	Key Advantages
Helpdesk Services	Our team has created a direct line of communication with field staff, provide guidance, and understand the issue. This allows our team to understand the root of the issue and enables faster resolution.
Trend analysis	The team analysis incidents being reported to create trends of most commonly reporting issue, which provides guidance to isolate an issue which is causing broader business impact.
Root Cause Analysis	A structured process is in place to find the root cause of an issue and properly document the root cause and issue, as well as analysis of downstream impacts. RCA will lead to a recommendation on the best way to holistically correct the problem.

Activities	Key Advantages
Work item Creation	Create defect, data-fixes, service requests, change requests. Refer to <i>Section 5, Software Development Lifecycle (SDLC) Approach</i> for our approach on defect management.
Prioritization	Input from Trends analysis is then fed into prioritization process, where defects and data fixes are tracked and prioritized based on business impact.
Interim Resolution and Validation	Once the cause of the issue is determined, it will be determined if any workaround or data fix can be implemented and validated to resolve the issue prior to a code fix.
Additional process and tool enhancements	We have engaged additional processes and tools used to manage the incident process. These improvements include Case Clone ability, Decision Table Trace tool, and enhanced data integrity checks.

Table 6-16. Incident Management Activities.

We **proactively minimize the occurrence of incidents**. Once an issue is identified, our team identifies if the issue impacts a bigger dataset and checks if providing a workaround or whether a data fix can be applied proactively to resolve the issue for cases where the issue is not reported yet. This approach plays a larger role in reducing the volume of incoming incidents and providing necessary support to the workers before the issue impacts them.

We **provide necessary training** and information to our staff to enable them to deliver the services **effectively and efficiently** you need and expect. After every release, we do refresher training for our team so that they understand the changes done in the system to facilitate timely and accurate responses to incidents. Our team specifically **looks for trends in the incidents** that are being reported to identify issues that are impacting a broader base of users, which drives our effort on prioritizing defects and data fixes. Our focus continues to be on prioritizing the specific defects, incidents, change requests, and support that have the greatest business impact in addition to any escalations and aging incidents.



Highlights of IEDSS incident management:

- Reduced incidents reopen rate by more than half from Nov 2021 to Jan 2022
- Over 60% reduction in data fixes in 2021
- 45% reduction in incidents logged from 2020 to 2021.

Our team recognizes the need for evolution of the incident management processes as business needs change over time. We have **incorporated lessons learned** into our day-to-day operations. We updated our process to identify the most impactful issues by categorizing of incidents being reported and forming them into various unique buckets of trends. This helped in identifying high impact areas of the application that needs either a system fix or re-enforced user training.

Additionally, our team has implemented Splunk to monitor key activities and generate alerts if any discrepancies are detected. Splunk can be configured based on our requirements to identify key monitoring events to create an alert based on a threshold set up for that activity. For example, if there are high numbers of exceptions getting generated, then Splunk can generate an alert to check if there is an issue, thus helping us to identify the problem early and fix it. The following table shows the support our team will provide.

Support Days	Support Hours
Monday To Friday – Business Hours	Our team will provide onsite support from 7AM to 7 PM ET except State holidays for incident management activities (triage, analysis, and resolution) during business hours.
Monday to Friday – After Hours,	Our team will provide 24-hours support, for after-hours 7:01 PM to 6:59 AM ET via phone and email as needed to provide the support needed.
Weekends and State Holidays	Our team will provide full day weekend and State Holiday support via phone and email as needed to provide the support needed.

Table 6-17. Incident Management Support Hours.

Incident Prioritization, Triage, and Resolution Timeframes

RFP Reference: Attachment C, Section 6.3.3

With our experience in M&O and incident management services we recognize that a clear prioritization model is of utmost importance in the incident management workflow. We acknowledge the incident priority levels described in the *RFP Attachment C, Scope of Work, Section 6.3.3* and will work with the State to enhance the model to better serve business needs of Indiana.

We use the ALM tool to manage the workflow for incident management. The workflow status allows us to track different phases of triage and analysis work within the incident management process. The figure to the right shows various statuses of an incident. Our team acknowledges receipt of the incident in the IEDSS resolver group and updates incident status at initiation of resolution activities and other applicable status. We acknowledge the triage and resolution timeframes as defined in *RFP Attachment C, Scope of Work, Section 6.3.3*.

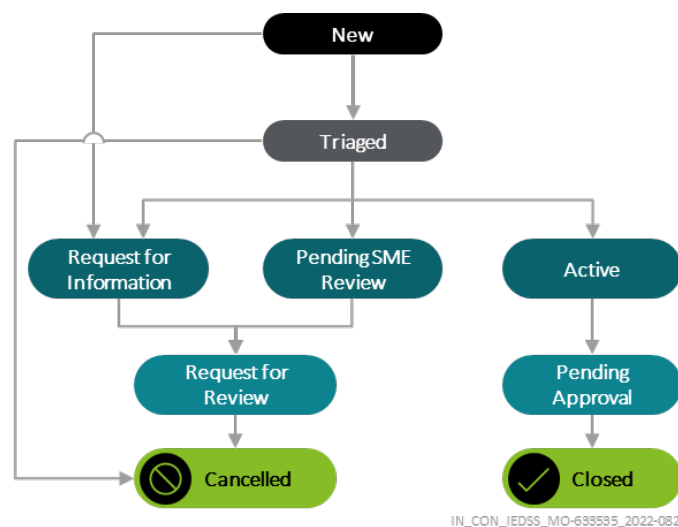


Figure 6-10. Incident RTC Workflow.

Triaging of Incidents

We start our analysis on each incident assigned to the IEDSS resolver group based on the defined priority model. As our team continues with the analysis, any incident which is out of scope of our service shall be further assigned to the designated State staff within one business day. If the incident is in scope of IEDSS, then initial analysis is completed, and incident is assigned to the appropriate team for resolution.

One of the key factors in Incident management is **effective triaging** of incidents. We recognize that the source of incidents can be both external and internal. While external incidents can be reported from various field offices; internal incidents can be reported from batch failures, internal analysis of exceptions, interface file failures, performance, other application issues identified during internal analysis. We understand that overall responsibility of setting initial severity and priority of external incidents is with Tier 1 team, but the State can recommend that to be changed based on its business needs.

Resolution of Incidents

Our team uses a variety of tools to resolve an incident. For example, if the incident relates to eligibility results, then the test case is run through our decision table analysis tool to analyze how the results are computed to identify the issue. Similarly, for issues with integration with interface partners, we look at the interface file to check if incorrect values were being placed in the file by application logic. These tools help us in triaging and resolving incidents in an efficient and expeditious manner.

Our team strives to complete incident resolution in an expedited manner. We continuously train the incident team and bring them up to date with release changes for faster resolution of incidents. We continuously update our knowledge base enabling team members to quickly triage incidents and solve them in timely manner. Our team works closely with end users to understand the issue and provide effective resolution.

The incident triage and resolution process often involve collaboration, information gathering, and discussion across several stakeholders in addition to Deloitte, such as the end user, State Help Desk, State business and technical SMEs, IOT, interfacing system partners, and COTS product vendors. Given the collaborative nature of incident resolution and the State's expectations for incident management, we work with the State to further define the end-to-end incident management process, criteria for incident resolution, timeframe measurement process for triage and resolution, and incident priority definitions.

Access Management

RFP Reference: Attachment C, Section 6.4

Through DDI and M&O, Deloitte has worked with the State to drive user, role, and access creation in the system. Our team understands the nuances and complexities of the unique system roles, and how different system users interact. We have experience in implementing and then maintaining accounts and system role/security profiles. Our team with collaboration with State has created 100+ roles and 7,180+ user profiles. This experience allows us to better recommend user profile configurations and assess the impact of system changes to user access.

Deloitte understands that new business requirements may dictate the need for updated user access/security for user roles, and our solution will give IEDSS the ability to configure user profiles as necessary to support their business. Due to our institutional knowledge, our team successfully makes role changes and profile updates quickly and successfully.

Our access management approach allows the Indiana business security administrators to assist the role configuration and user management process. It allows for user roles and system profiles to be altered to align with shifting business priorities and streamlines the process for new user creation/account deactivation, while maintaining high security and privacy standards. The figure below shows our approach to access management.

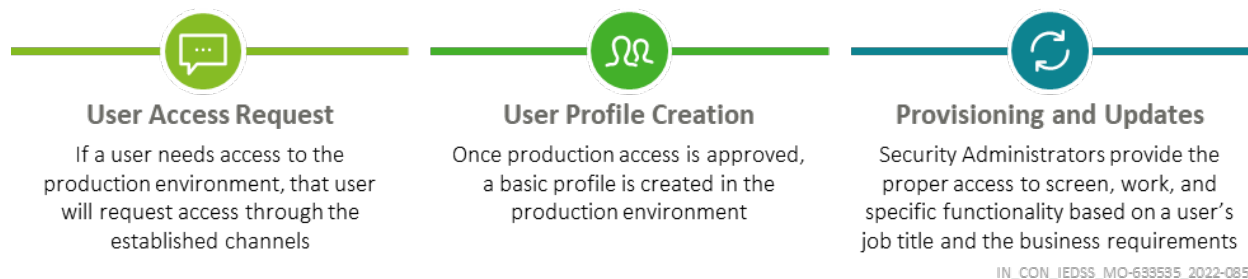


Figure 6-11. Access Management Process.

Deloitte assists in the **definition of production user roles and security configurations**, including the creation of new roles and monitoring user access to the production environment. Anytime a new change is implemented in the system, it can lead to new roles and user creation. Our team addresses it along with the new change being implemented. Changes to the system are reviewed by a cross track team, and role and/or profile considerations are evaluated for each relevant change. The changes are then reviewed with the State for formal approval. As the team gets ready to implement the changes to Production, our team reaches out to the State for list of users who need access. These users are then provisioned with specific access matching their business profile.

As a part of ongoing M&O activities, Deloitte also **manages credentials for non-production environments and security profiles** for users authorized by the State including other contractors. While this provisioning is separate from the production access, the same established access request processes is followed for both new requests and deactivation of existing accounts in both production and non-production environments.

During new resource onboarding, our PMO team collects the required PII along with required roles and shared with the State's team to generate credentials for the newly joining resource. Our team will use these credentials to

access IEDSS servers/infrastructure, ALM, and SharePoint to conduct IEDSS support activities. Our team will continue to complete State-mandated trainings in a timely manner to keep the user accounts active. Our PMO team coordinates with the State to remove the user access during off-boarding process as required.

6.e Business and Operations Reporting

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.5

e. Business and Operations Reporting

Our Experience

We understand the complexity and importance of the data the State of Indiana deals with on a day-to-day basis. Being on the ground, we intimately know the importance of accurate and timely reporting, and how that impacts operational decisions. Our reporting capabilities provide IEDSS stakeholders with the information they need to effectively manage benefits and workloads across the system. Our team has built the current IEDSS reporting structure that includes reports by business groups such as State Management, Policy Management, Fraud Management, Benefit Recovery, Issuance, Hearings, Data Exchange, Conversion, Command Center, Quality Control, Appeal/Lifecycle Dashboards, and Metrics. The design and generation of each dashboard report is based on business needs, and all IEDSS dashboards are near real-time. Some reports are real-time, whereas others are ad hoc, daily, monthly, quarterly, or yearly.

Our team is **well versed with the nuances of the IEDSS application dataset**. IEDSS has 6.8 terabytes of data, with 5.6 billion rows maintained in over 4,000+ tables and an architecture based on maintaining historical data as needed. These tables are designed based on partial audit history, full audit history, or temporal history needs. This **experience gives us a unique advantage** in our understanding of the business, our ability to generate reports accurately, and our ability to respond to reporting requests in a timely fashion. The reporting framework is built on Informatica and Cognos for data extraction, transformation, and generation of reports. Our team has extensive experience with these tools, and we can implement necessary changes as needed to existing reports, resolve issues with reporting logic, and create new reports.

Our Approach

Our approach to business and operations reporting provides the State team with the information they need to successfully process benefits, and it enables more proactive monitoring of issues and incoming tasks and workload volume. Our team uses Informatica and Cognos to extract the data to build the dashboards and canned reports.

Our **reporting structure minimizes the impact on the production system** as data is extracted for reporting purposes, allowing production activities and operations to continue smoothly and uninterrupted. We utilize GoldenGate synchronizing from the production database and achieve data replication, enabling us to create timely reports. We support the State's EDW team to extract data from the GoldenGate infrastructure and generate reports for the executive team. Deloitte supports reporting requests from both State and federal trading partners teammates (FNS, CMS, ACF, SSA, and IRS) to support their legislative inquiries, public queries, State Board of Accounts, and other state agency audits, FNS Program Access Reviews, FNS Management Reviews, CMS Payment Error Rate Measurement (PERM) reviews, and other CMS audits, ACF inquiries, FNS/CMS program and/or E&E certification needs, and security audits (SSA, IRS, and CMS).

The provided business and operations reporting approach, as shown in the following table, will address the key IDESS reporting needs.



We geared up to meet expedited development timelines during the PHE to meet new State and federal reporting requirements by:

- Creating a monthly SNAP Emergency Allotment report enabling the State to receive FNS approval in advance for issuance of emergency allotments
- Creating a PHE closure report that helped in planning the end of PHE closures and downgrades to estimate the volume of documents received and tasks created, allowing the State to plan the work
- Creating Adverse Action allowable report to identify the correct list of individuals getting closed for non-PHE reasons and communicate to Core-MMIS system for appropriate actions

Reporting Need	Deloitte's Approach
Real-Time	Deloitte utilizes GoldenGate which allows near real-time data integration and replication on a parallel database, allowing us to develop reports and show the latest data from the replica database to reduce the impact on the mission-critical application database. Our team created automated alerts to inform IOT DBA if there is a synchronization lag of 15 minutes or more between application and replica databases, enabling us to maintain the accuracy and consistency of the replica database.
Data Extracts	Deloitte understands the importance of providing data extracts to the State's Enterprise Data Warehouse (EDW) to support reporting requests from state and federal teammates. We will continue to maintain the data dictionary and provide timely and accurate data extracts to the EDW team, allowing them to produce reports per business and technical requirements.
IEDSS-Created Reports	Deloitte's approach is to generate timely and accurate canned reports conforming to State-specific guidelines. Our team will continue to maintain the existing and newly introduced canned reports for the worker portal team related to business and operations.

Table 6-18. IEDSS Reporting Needs and Deloitte's Delivery.

Our team also **maintains and generates existing IEDSS** business, operations, technical, and infrastructure (Splunk) **reports** as required. Our tenure in Indiana has taught us the nuances of **state, federal, and business-area defined report formats** and delivery methodologies, and we will continue to adhere to these guidelines. In addition, our team will **support development, testing, and implementation** of new recurring reports in a timely manner, in accordance with the SDLC. As part of new report creation, we will continue to **maintain existing artifacts and generate new documentation** as applicable throughout the SDLC process.

Deloitte maintains the existing **infrastructure to enable other partners (EDW) to extract data** to generate their reports. Our team understands the current IEDSS reporting capabilities and will continue to fulfill existing quantitative and qualitative data needs. This includes **providing historic reports and extracts** in accordance with state and business defined retention schedules. Reports are generated and **stored based on the State's approved protocol/repository**. Our team also works with the State to communicate details and rationale as to when the timeliness and quality of reporting requirements cannot be met.

We understand the importance of **clear communication and are transparent in our fulfillment of regular and ad hoc reporting requests**. This includes clearly communicating with requesters if a report request cannot be completed in a timely manner, or with the expected accuracy. Additionally, new report requests are documented and followed by review of the existing reports and data sets to validate if changes are required to existing or new reports to appropriately meet business needs. We will **update existing measures, reports, and extracts when requested**.

We understand that new requests can come in for canned or ad hoc reports. If a new report is needed, our team will follow the SDLC process as defined in *Section 5, Software Development Lifecycle (SDLC) Approach*. We work with key stakeholders to understand the report requirements and business needs, and then design the report to meet the defined criteria. Once the design has been reviewed and approved, the report will be developed, tested, and validated before it is included as a standard canned M&O report.

We continue to use Informatica and Cognos for report data creation, storage, and distribution. While some of the reports are stored on the server, others can be accessed by the users in real-time. Reporting distribution strategy is primarily decided at design level and then refined based on the operational need of business. The solution can either distribute the report to a predefined list of stakeholders, or access can be given to a specific set of individuals on the Cognos server.

Data Analytics

We work with the State to develop, maintain, and update any analytical logic that is required for qualitative and qualitative reporting. We continue to provide additional predictive details (analytical analysis) in special Mass Change executions (e.g., COLA, FPIL updates). Our team maintains existing capabilities of data summarization, data comparison, forecasting, trending, statistical data analysis, and establishing priority.

Our team also conducts modeling and analysis to review what-if scenarios on any planned system changes to understand and assess impact across modules and validate that report impacts are accounted for. Our team manages program monitoring to provide quality and management reports per business needs, and support initiatives to track activity and effectiveness across monitoring levels.

Data Presentation

Our team analyzes any newly created reporting requirement to understand data requirements and proposes best suited design and presentation options to the State. We recognize that the State is best suited to make report presentation decisions. We maintain the SDLC methodology for report development and maintenance of the data visualization and presentation capabilities and support data presentation to include options like Word, Excel, HTML or PDF.

Recurring Reports

There are currently 79 active reports, of which 58 are recurring reports, 5 are dashboards, and 16 are real-time reports that provide information about IEDSS help to manage daily operations and application processing. These reports are generated on a recurring basis with different frequency, depending on business needs. Deloitte will continue to maintain existing reports mentioned in *RFP Attachment J, Bidders Library - Tab 5*.

Ad Hoc Reports

We know that there are situations where reporting needs become a critical and immediate function of the State. The State of Indiana needs a contractor that can respond to such situations and providing the necessary support within State timelines. This is especially true when there is a need for an ad hoc report or data extract, as these requests are typically made to help resolve or act on a production issue, rather than to generally monitor the system. Our team is committed to adhere to timelines defined by the State where Type 1 (Critical) requests will be responded to within 24 business hours, Type 2 (High) requests will be responded to within 2 business days and Type 3 (Medium and Low) requests will be responded to within 5 business days.

Our team has experience with DDI and M&O in Indiana, and we understand the data model intimately. This expertise gives us a unique advantage over other vendors, and it enables us to generate ad hoc reports quickly, accurately, and in the State's desirable format. We work with the requestor to meet the ad hoc reporting needs and guidelines. We recognize the need of accuracy in the report; therefore, we follow a defined process to understand, create, validate the report. The figure below illustrates our approach for building ad hoc reports.



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Figure 6-12. Ad Hoc Report Lifecycle.

6.f Security & Privacy

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.6

f. Security & Privacy. Include your experience conducting Security Impact Analyses (SIAs) in accordance with federal requirements.

Our Experience

Deloitte recognizes the need to comply with federal standards, State policies, and regulatory requirements for a feature-rich eligibility system like Indiana's current system. In addition to maintaining federal compliance as required, safeguarding customers' personal information is essential for the State's ability to provide critical services.

We have been a trusted teammate since day one and we assisted in obtaining (in 2013, 2016, 2019, and 2022 [ongoing]) and maintaining the Authority to Connect (ATC) from CMS. One of the key factors of our mutual success is the **strong collaboration between all parties involved in IEDSS**, starting with DFR, FSSA, IOT, and including other vendor team members. Deloitte has worked with the State for last nine years to establish a structured approach to minimize the security and privacy risk exposure, while demonstrating compliance with relevant federal standards and regulatory requirements (e.g., CMS MARS-E 2.2, IRS Pub 1075 Rev. 11-2021). Being the current incumbent vendor, we have a deep knowledge of the relationships across DFR, IOT, and vendor team members (e.g., Application Services), and we have already established effective communications across the groups. Our team also understands the nuances of safeguards implemented for systems within the IEDSS authorization boundary. Other vendors might claim similar experience in federal standards, but our understanding of the worker portal system and intricate dependencies and interactions of systems within the IEDSS authorization boundary makes us the right choice in meeting your requirements.

Our experience in assisting 48 other states' health and human services agencies around the country has afforded Deloitte the opportunity to build strong relationships with federal stakeholders such as CMS, FNS, and IRS. Additionally, we have professionals in our firm who work with these federal agencies, assisting them with establishing those standards and updating them to stay current with the cyber landscape.

Our ongoing relationships with these federal teammates allow us to stay abreast of upcoming changes in federal standards and regulations and rapidly evaluating their impacts on our systems. Efficient adaption of changes in CMS standards (e.g., from MARS-E 1.0 to MARS-E 2.0) in Indiana for the IEDSS system is a testimony of our ability to adapt to changes in regulatory landscapes better than others. During the DDI & M&O phase of IEDSS worker portal, we analyzed numerous change requests to determine the security impact of the changes on the system and suggested appropriate mechanisms to mitigate the security risk of the changes (e.g., hardening of Oracle 19c database upgrade). As demonstrated above, our team has worked to continuously improve the processes to maintain robust security posture of the IEDSS system in a dynamic environment of operation with changing threats, vulnerabilities, and technologies. We bring experienced resources you know and trust and are ready on Day One. We have a track record that you can count on to assist the State in safeguarding its customer's personal information.

Our Approach

Compliance with Security and Privacy Standards

Continuous compliance with security and privacy requirements from federal standards and regulations is key to maintaining the State's ATC. Deloitte's knowledge of federal standards and regulations for information security is



Deloitte's approach to incorporating security and privacy requirements into the M&O process is aligned with State's vision because:

- **We have done this before.** We have assisted state government clients in 40+ states with services that include security strategy, risk and vulnerability assessments, applications security review, and security technology implementation services.
- **We have demonstrated tools and accelerators.** Our tools (e.g., controls catalog) are developed through hands-on engagement experiences and can be leveraged during the life cycle of proposed engagement.
- **We bring the right team.** We have successfully met the CMS requirements for last six years in maintaining IEDSS security artifacts, which in turn helps in maintaining ATC.
- **We collaborate with you.** We are working with the State to create a plan to comply with the latest federal standards (CMS MARS-E 2.2, IRS Pub 1075 Rev. 11-2021) and maintaining ATC.

codified into our proprietary controls catalog that we have used for over 10 years in hundreds of projects. Our controls catalog includes requirements from 350+ laws, regulations, industry standards, and common practices across 45+ countries and includes the in-scope standards (e.g., CMS MARS-E 2.2, HIPAA, FISMA, IRS Pub 1075 Rev. 11-2021, FIPS 140-2, NIST 800-53 Rev 5). The controls catalog is designed to identify a rationalized set of security controls as well as streamline the compliance management process on an ongoing basis.

Please refer to *Section 11, Compliance with Standards & Regulatory Requirements* for Deloitte's plan to adhere to the federal standards and regulatory requirements.

Security Monitoring

Security monitoring provides the State with an in-depth defense strategy to secure the systems processing confidential data. Deloitte assisted the State in establishing the Splunk ES Security Information and Event Management (SIEM) tool for compliance with MARS-E 2.2 requirements and provide near-real-time insights from a high volume of application audit logs. Our alliance with the leading SIEM vendors (e.g., Splunk for Splunk ES) means we bring experience and leading knowledge gained from multiple engagements where we have deployed, developed, and/or operated these various SIEMs for our clients.

We leverage Splunk ES for security monitoring of the IEDSS system.

Splunk ES is used to centrally automate and integrate correlation, analysis, and review for IEDSS worker portal access and auditing. The State is responsible for monitoring the physical security of facilities that house the IEDSS systems. To comply with CMS MARS-E 2.2 and IRS Pub 1075 Rev.11-2021 requirements, we generate the following alerts and reports through Splunk ES SIEM tool. We plan to continue to leverage the alerts and reports:



Deloitte has assisted the State in developing a continuous monitoring mechanism via SIEM tool monitoring, annual assessments, and vulnerability scanning to maintain the Authorization to Connect (ATC) from CMS while staying compliant with relevant federal requirements.

Type	Name	Type	Name
Alert	Authentication: Multiple Login Failures for Same Username	Report	Database: Role & Privilege Management
Alert	Authentication: Multiple Login Failures from Same Source	Report	Database: After Hours Activity by User & Event
Alert	Authentication: Multiple Login Failures to Same Destination	Report	WP: Inactive Users
Alert	Authentication: Login Failures Followed by Success for Same Username	Report	WP: RBAC Mapping Changes
Alert	Authentication: Login Failures Followed by Success from Same Source	Report	WP: Account Additions
Alert	Authentication: Login Failures Followed by Success to Same Destination	Report	WP: Account Changes
Alert	IE Inactive User	Report	WP: Role Management
Alert	Log Outage Warn	Report	WP: FTI Access
Report	Database: Account Additions	Report	WP: Unauthorized Access Attempts
Report	Database: Account Changes	Report	WP: Unauthorized Access Summary
Report	Database: Account Removal	Report	WP: After Hours Activity
Report	Database: Security Policy Modifications	Report	WP: After Hours Summary by Session
Report	Database: FTI Access		

Table 6-19. Splunk ES Alerts and Reports to Meet CMS MARS-E 2.2 and IRS Pub 1075 Rev.11-2021 Requirements.

Our specialized SIEM team receives alerts as outage or threshold breaches occur, prompting action. We perform first-level triage of SIEM alerts and escalate potential security violations to State stakeholders for further investigation.

As requested in the RFP, we will also develop the security monitoring plan that provides an overview of the current mechanisms in place for security monitoring. The security monitoring plan includes:



300+ SIEM alerts have been triaged since the pilot, providing us with data to analyze user behavior and helps us in faster triaging of new alerts.

- Details captured in the existing audit logs (i.e., logging of security events)
- Criteria for suspicious activity and alerts defined to detect suspicious activity
- Alert triage process to find the root cause of the alert and the mechanisms for taking corrective action for security violations
- Communication plan to report and escalate potential security violations/deviations from the plan
- Periodic testing of security monitoring plans

As a part of security testing for each production release, Deloitte reviews and tests the security monitoring plan to validate the process is working efficiently, effectively, and in compliance with State policies and federal regulations. We will update the security monitoring plan based on the test results and lessons learned to keep it up to date. Our team also provides weekly reports on alerts, event type, and alert severity.

Maintaining the SIEM Tool Use Cases

Security monitoring requirements are ever evolving because of the increasing sophistication and accuracy of cyber-attacks. Therefore, Deloitte recognizes the need to be innovative and vigilant when it comes to the use cases for monitoring. In addition to triaging the current alerts, there may be a need to design new use cases to address changes in the threat landscape. We leverage industry leading cybersecurity frameworks such as MARS-E, NIST, and CIS in the development of new security monitoring use cases. Such an approach begins with the mindset of understanding the environment through the eyes of the potential attacker. In addition to Indiana-specific institutional knowledge, our team combines the intelligence about relevant threat actor motivations and contemporary exploits to assess the relevance of use cases to detect potential security violations.



Deloitte launched **Managed Extended Detection and Response (MXDR)**, a managed detection and response SaaS platform to deliver military-grade threat hunting, detection, response, and remediation capabilities as a managed security service. IEDSS can leverage the threat feeds and threat hunting capabilities offered by this service.

Federal Compliance Status Reporting

Deloitte has been collaborating with the State to update and maintain the CMS mandated security artifacts since its initial ATC in 2013. We have worked closely with State staff to create and refine a federal compliance status reporting process that is tailored to the complexities of IEDSS. Being the incumbent vendor, we play a pivotal role in the current process. We have a deep knowledge of the systems within the IEDSS authorization boundary and relationships across DFR, IOT and vendor teammates (e.g., Application Services) and have already established effective communications across the groups. We continue to use the established methods to collect the information, document, and communicate issues to the appropriate stakeholders.



Deloitte launched an internal initiative to improve the security posture of systems managed by us. Example of initiatives arising from this initiative in Indiana are:

- We initiated and coordinated with IOT to harden the operating systems to comply with DISA requirements.
- Eliminated PII data elements captured in audit logs that aren't aiding in triaging of audit events.

Our federal compliance status reporting process allows for discussion, review, and approval while maintaining the flexibility so processes can quickly be updated to meet changing business requirements. For example, when the legacy benefits portal was replaced by an enhanced benefits portal, security artifacts were updated iteratively for quick turnaround. Deloitte's federal compliance status reporting process consists of several key steps, shown in the following figure.

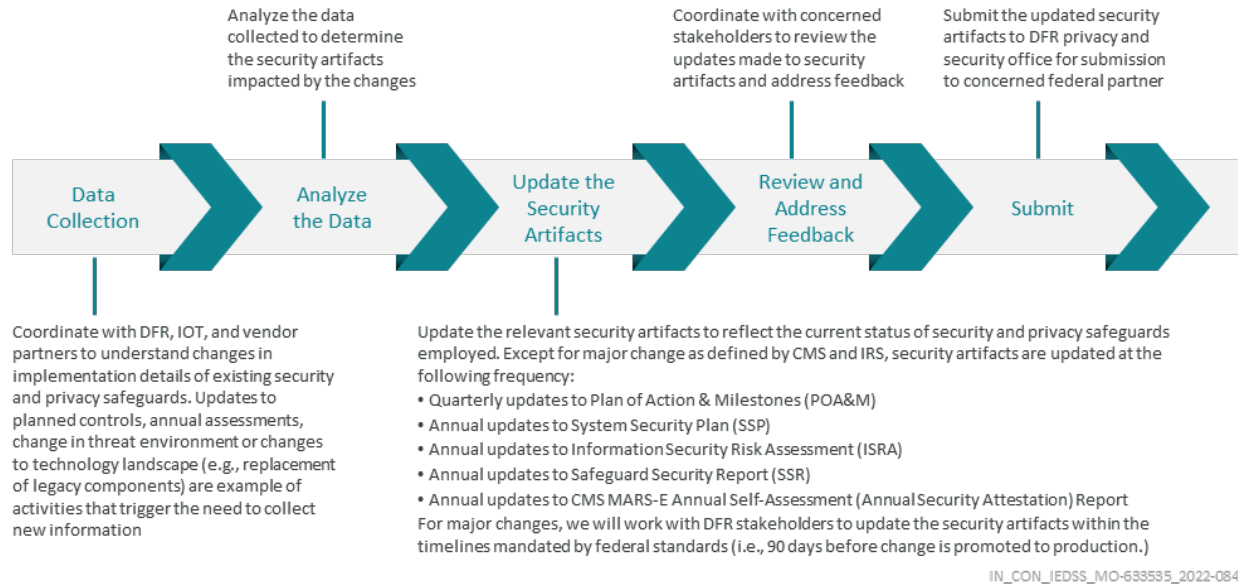


Figure 6-13. Process Flow to Update Security and Privacy Compliance Artifacts.

Deloitte also assists the State in maintaining other artifacts related to federal compliance status reporting including supporting third party assessors by making artifacts, data, SDLC resources for interview, and other related information available as needed.

Adapting to Subsequent Releases in Federal Standards

With the release of NIST 800-53 Rev 5 in September 2020, CMS is expected to release new federal standard MARS-E 3.0 to align with new NIST guidelines. Deloitte will leverage our professionals working on state and federal projects, with similar compliance requirements, to identify the related impacts of these changes on IEDSS. Our approach to comply with subsequent releases in federal standards is as follows:

- Step 1: Identify the changes to the security and privacy controls from the recently released federal standards as compared to previous standards and guidance and categorize the controls as in the following table.



- Successfully meeting CMS requirements for **last nine years in maintaining IEDSS security artifacts** required for ATC
- Assisted in documenting implementation details of **353 controls** for all the systems within IEDSS authorization boundary within the SSP
- Assisted in **remediating 100+ items** in the POA&M and maintain ATC with CMS

Category	Description
New	Requirement that was not present in previous standard and has been added in recently released version
Updated	Requirement that was partially modified in the transition to recently release version
Cosmetic	Requirement text was modified to include minor clarifications or a change in phrasing (requirement intent has not changed) in the transition to recently release version
No change	Requirement identical in the transition to recently release version
Removed	Requirement that was present in previous standard and has been removed in the recently released version

Table 6-20. Category of Changes.

- Step 2: Conduct high-level impact assessment of the system design against the recently released federal standards:
 - Categorize the gaps into managerial, operational, and technical
 - Socialize the gaps with State stakeholders
- Step 3: Develop an implementation roadmap (e.g., key initiatives, resource/funding requirements, and timeline for planned controls)
- Step 4: Assemble the authorization package, as mandated by recent federal standards, and submit the package to the authorizing official for an authorization decision



Deloitte has developed similar impact analysis when CMS MARS-E 2.2 was released and is a testimony of our ability to adapt to changes in regulatory landscape better than others.

We propose to work with the State to develop a detailed impact analysis of new industry standards that may come into effect after the submission of our proposal to this RFP. Following the processes outlined in section 4.e Change Management, our team proposes to discuss changes to the system based on the impact analysis with the State, and formal approval is sought from State to include them in the enhancements pool or no-cost CR as appropriate.

Security Impact Analysis (SIA)

As mandated by CM-4 of NIST 800-53 (Rev. 5) and CMS MARS-E 2.2 requirements, Deloitte analyzes the changes and enhancements to IEDSS system to determine potential security impacts prior to implementation of the change. Security impact analysis includes reviewing system design, identifying security risks, determining the impact on security posture, and researching leading practices to mitigate the risk. Security impact analyses also includes determination of additional security safeguards that may be required to reduce residual risk to acceptable level.

As mandated by CM-4(1) of NIST 800-53 (Rev. 5) and CMS MARS-E 2.2 requirements, Deloitte conducts the security impact analysis and security testing in a "production-like environment" (e.g., SYS environment) that is physically or logically isolated from the production environment. To comply with CM-4(2) of NIST 800-53 (Rev. 5) and CMS MARS-E 2.2 requirements, Deloitte tests the security functions to validate that the functions are implemented correctly, operating as intended, and producing the desired outcome during security functional testing.

One of the strengths of our team is our first-hand experience gained from implementing and supporting projects of similar scope. We bring these leading practices and lessons-learned to you to streamline operations. Deloitte follows a well-established practice to analyze changes to IEDSS system to determine potential security and privacy impacts. For example, when document upload functionality was being incorporated into IEDSS design, we analyzed the change from a security point-of-view to identify the risks and options to mitigate them.

6.g Training

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.7

- g. Training. Describe your company's plan to perform the training responsibilities (for your team as well as for the State IEDSS team) outlined in Section 6.7, specifically including the following elements: Solution Usage Training, SDLC and PM Training, and Security Training. Provide a proposed Training Plan that meets the needs of the State.

Our Experience

During DDI of IEDSS, we worked with the State to create the IEDSS training curriculum by using leading practices from our experience with systems of similar size and scale. We then tailored it specifically to Indiana's needs. We worked closely with the State and conducted training sessions to confirm users were fully equipped with the knowledge and skills to successfully navigate IEDSS.

As we have continued to enhance the system, we have developed processes to support solution usage training. This includes the **JAD sessions** held for each change request and the supporting documentation **including design documents, PSDs, change logs, test cases**, and scenarios that stems from such sessions. We have also developed tools and processes to support effective information sharing including support for **release notes, interim business processes, and online help**.

We have also worked closely with the State to define and document our Project Management and SDLC processes and prepare associated training materials. This experience has enabled us to build a strong library of training materials and proven training processes that allows new staff and stakeholders to become well acquainted with project processes in a timely fashion. We have **trained numerous Deloitte and State staff** through onboarding,

refresher, and process updates trainings and communications. Our national experience and capabilities benefit the State because we can provide additional learning opportunities to our practitioners, such as our **E&E Bootcamp** and **Agile training** series.

Our Approach

Deloitte continues to provide effective Solution Usage training, SDLC and PM Process training, and Security training to State and Deloitte staff alike. We incrementally improve existing processes by listening to your needs and implementing leading practices from similar projects.

Solution Usage Training

For every new production release our team collaborates with the State to produce release notes that inform users about the changes that are being deployed with that release. In addition, we update existing user documentation and design documents to reflect new changes and enhancements done to the system. This is a key piece of the Deloitte M&O approach, and system changes and enhancements are rigorously tracked and evaluated to make sure design documentation reflects current system functionality at any given time. While solution usage training artifacts and delivery is not in scope of this contract per the RFP, we are trusted advisors to support the State. If the State ever has questions on design, documentation, or the details of system changes, our team will clarify and answer questions so these changes can be communicated to staff properly through training exercises and communications. The following table displays the processes currently in place that promote solution usage knowledge.




Deloitte and the State have collaborated to provide IEDSS staff with resources that empower workers to process benefits effectively. We are committed to building on this success.

- Deloitte automatically updates **Web-Help Content** that the State has created in both production and non-production environments, addressing common questions users may have.
- **Interim Business Processes** guide workers through approved processes until new code is pushed into production.
- Extensive **Software Development Lifecycle Training** for the transition to Hybrid Agile as well as Technical Overview Training and Testing Concepts Training.
- To maintain **Security**, we have multiple training materials and requirements on cybersecurity, confidentiality, PII and PHI.

Activity	Purpose	Benefits to State
Interim Business Processes (IBPs)	Establishes approved processes that guide workers through the necessary steps to complete processing when a change or fix is pending implementation.	Workers can see these approved IBPs directly in IEDSS, preventing blockers in processing or interruptions to seek guidance.
Release Notes Distribution	List of all Defects, Change Requests, and other items, such as Service Requests, that are being introduced into Production.	Staff maintain apprised of what changes have been recently made to the system with a single e-mail.
Planning Discussions	Various meetings, including Change Control Board (CCB) and DTM meetings, communicate high level plans for activities to occur over several weeks/months.	Stakeholders are informed of outstanding fixes or anticipated enhancements and can prioritize accordingly.
System Documentation/Artifact Management process	Requirements and design changes are transformed into formal documents and submitted to the State for approval. The detailed deliverables contain the specific screen, system, and functionality changes. Deloitte also is responsible for the way IEDSS documents are managed on IEDSS SharePoint, the project's electronic library.	Staff can locate System Documentation (Master Document and Task lists, Change Logs, PSD's, etc.) with ease. These documents serve as artifacts reflecting the point in time changes to the system occurred and are useful material for understanding specific changes.

Table 6-22. Processes that promote Solution Usage Knowledge.

The following figure depicts an example of the Release Notes that are sent out for each release to communicate fixes and changes.

 Release 15.00.0.0 2/12/2022							
Defect/Change Request	Component/s	RTC Defect #/Change Request #	Issue Description	Netfor Problem [Y/N]	Netfor Problem #	IBP Resolved (Y/N)	IBP Name
Change	Correspondence	216087	CR 720892 - Update notices to support clarity on AVS impacts and remove 2014 MA ABD related language	N	N/A	N	N/A
Change	Interfaces	194968	CR 690336: Automated appointments for FFM auto cleared apps if individual is disabled	N	N/A	N	N/A

IN_CON_IEDSS_MO-633535_2022-143

Figure 6-14. Sample Release Notes.

SDLC and PM Processes Training

Transition to Hybrid Agile

The RFP objective of transitioning to a **Hybrid Agile Methodology** requires effective training material development and delivery, which is critical to the success of UAT and M&O production release management. Deloitte is committed to providing the State and its partners with the necessary training on SDLC and PM Methodologies prior to the completion of the Initial Transition Phase, detailing how their responsibilities and day to day activities will change as we move into a Hybrid Agile SDLC.



Over 75% of our proposed vital staff hold Certified Scrum Master certifications while 55% of our proposed vital staff are PMP certified.

As detailed in *Appendix 9, Initial Transition Plan*, Deloitte proposes a phased approach to the transition of the IEDSS SDLC from Waterfall to Hybrid Agile. During the first month of the transition (January 2023), Deloitte will work closely with State Leadership and subject matter experts (SMEs) to **refine the methodology and our Hybrid Agile SDLC Playbook**. This process and the resulting document will familiarize all relevant stakeholders with the Agile principles, practices, and terminology employed in our SDLC. Much of this information is summarized in *Section 5, Software Development Lifecycle (SDLC) Approach* and will be communicated to State and Deloitte staff **via live trainings**. Additionally, our training includes a significant focus on how existing roles will be redefined in the new SDLC and what their associated responsibilities and day-to-day activities will look like.

Deloitte and the State work together to identify the individuals who will be involved with the SDLC activities for training programs. A detailed list of training documents and targeted exercises for each team will also be created. These materials are developed using the same deliverable management process we currently follow to create high-quality and accurate documentation that is user-friendly and easily comprehended by all stakeholders. A draft SDLC Training Plan and training schedule will be submitted and revised as necessary.

After finalizing the SDLC Training Plan, we will conduct several training sessions with State, Deloitte, and other identified staff in preparation for Pilot. This **training will be delivered to the Pilot Group during month two** of the transition via live walkthroughs of the materials and hands-on exercises.

During month six, after the completion of the SDLC Pilot phase, the Training Plan will be updated based on feedback from our retrospectives, and **a revised training will be delivered** accordingly. It is important to note that training materials will be continually tailored to fit to the needs of the State as we proceed with the full transition to the Hybrid Agile SDLC.

Ongoing SDLC and PM Training

We maintain a library of documentation as part of our onboarding process, which acts as training material for anyone new who joins the project and serves as reference material and knowledge enhancers for veteran staff. To help promote adoption of proper processes and operational knowledge, our training covers the details of public assistance programs (**SNAP, TANF, and Medicaid**), and the financial and non-financial requirements necessary to determine eligibility for these programs. Our onboarding materials describe the **lifecycle of applications and cases**,

the **driver flow framework** including the **function of each track**, and even includes **case creation exercises** for the new hire.

Identified staff are trained in project management functions to understand quality and process expectations for tasks and deliverables. Along with SDLC training, this brings staff up to speed on the processes and tools used throughout requirements, design, development, and testing.

At no cost to the State, we will utilize our in-depth onboarding processes, and our clear documentation on system design, SDLC, and PM methodologies, to confirm that our staff are prepared to support M&O activities. **The same set of trainings are used to train State and contractor staff** who become involved in SDLC processes, so that everyone who is part of the SDLC process is aware of the standards, expectations, and steps followed by the team.

Our processes put staff—Deloitte, State, and teammates—on the same page, so that the parties are equipped to serve and support M&O to the best of their abilities. The following table lists examples of the onboarding processes and materials. A detailed description of each is available in *Appendix 6, Training Plan*.

Onboarding Processes & Materials	Delivery Method
IEDSS Onboarding	Formal training sessions
IEDSS Onboarding – Functional	Formal training sessions
IEDSS Onboarding – Technical	Formal training sessions
Eligibility & Enrollment Boot Camp	Formal training sessions
SDLC Playbook	Formal training sessions
SDLC Playbook: System Documentation Overview	In-depth documentation review
SDLC Playbook: Release Management & Build Process	In-depth documentation review
SDLC Playbook: Technical Architecture and Guidelines	Code walkthrough, Configuration and Architecture reviews
Project Management Reference Guide	In-depth documentation review
Functional: Track specific	Knowledge Transfer sessions, demonstrations, and reference materials
Mentoring Program	One-on-one shadowing, hands-on exercises

Table 6-23. Examples of Training Processes & Material.

Security Training

Deloitte recognizes the importance of complying with the federal and state regulatory requirements for IEDSS, as we describe in *Section 11, Compliance with Standard & Regulatory Requirements*. To adhere to these requirements, Deloitte staff members undergo initial and annual security awareness training through online courses. Each contractor is required to take a mandatory e-learning course within two weeks of their hire date. This course details Deloitte's expectations and guidelines across ethics, anti-corruption, confidentiality, cyber-security, and privacy. Deloitte staff are required to take **annual assessments** on privacy, security, confidential information. Both groups attend, either virtually or in person, quarterly security "refreshers", and best practice reminders are communicated regularly.

We continue to integrate standards and regulatory requirements into our M&O processes to keep the system secure and compliant with the regulatory standards mentioned in *Attachment B, Clause 12*. All staff are fully aware of the sensitive nature of Protected Health Information (PHI) and Personally Identifiable Information (PII) and are trained to take the necessary measures to secure this information and shared only as needed. Any staff that who requires access to protected databases must undergo additional extensive security training which covers the categories of confidential information as well as the **internal controls and security measures** in place to protect them. This includes **encrypting** sensitive information; utilizing the State **VPN** and multifactor authentication; and numerous other administrative, physical, and technical **safeguards** to maintain the confidentiality, integrity, and availability of Indiana's most vulnerable residents. Lastly, our trainings educate staff on the critical next steps in the event of a potential security breach.

IEDSS users undertake State-mandated privacy and security trainings as required. These trainings include, but are not limited to, ransomware and phishing, pretexting credential harvesting, mobile device security, identifying

disinformation, social media risks, and handling and sharing sensitive information. Additionally, each IEDSS member is required to review and sign the **Information Use Agreement Resource (IRUA)** document upon joining the project and annually thereafter. This is the most important security document developed for Indiana government and covers the technology and data we use daily.

Training Plan

The high-level training plan provided in Appendix 6 outlines the basic responsibilities of the Deloitte training team and how we will support IEDSS through our training activities.

6.h Business Continuity and Disaster Recovery

RFP Reference: Attachment F, 6. M&O Services (Attachment C, Section 6)

RFP Reference: Attachment C, Section 6.8

h. Business Continuity and Disaster Recovery, in alignment with State and Federal requirements.

Business Continuity

RFP Reference: Attachment C, Section 6.8.1

Our Experience

Deloitte has developed and maintained Business Continuity (BC) programs for more than 20 states including Tennessee, Georgia, North Carolina, Oklahoma, and Indiana. Deloitte has been providing business continuity support to the State since 1992, starting with ICES. Our broad understanding of the core business and design of IEDSS enables an efficient response and expedited resolution to emergency situations. Additionally, our staffing approach for Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP) includes Database Administrators and Batch Control Specialists with 24 hour per day on-call availability in the event of an emergency.

Our experience and deep knowledge of your business and supporting technologies, combined with certified contingency planners from our national practice, will allow us to keep improving the delivery of these services during disaster situation.

Our Approach

Our approach is focused around three primary areas:

- Maintenance of a Comprehensive BC/DR Plan
- Support ongoing BC/DR Training and Exercises
- Live Event Response Support

Deloitte maintains the existing Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP) and supports the State in updating these plans, as applicable, based on evolution of data, infrastructure/architecture, and tools to maintain compliance with CMS MARS-E 2.0 and subsequent versions, SSA security requirements, and IRS publication 1075. We continue to follow prevailing structured contingency and escalation processes in the event of any system outage.

To comply with federal regulations, Deloitte assists the State in supporting ongoing testing and validation of the BCP annually, at a minimum. One example of our commitment towards assisting State in meeting business continuity objectives is our **collaboration with IOT DBAs** to resolve the issues identified in the backup of Oracle Exadata production databases. We will continue our efforts in supporting and testing the business continuity exercise during this contract and support the State with an action plan for correcting issues found during the exercise. The following table illustrates the key features of our business continuity approach.



- Over the last three months (i.e., Dec 2021 to Feb 2022), we have been working with IOT DBA's and Oracle SME on **defining the backup frequency and testing the recovery** of all production databases.
- We have identified and **documented the critical infrastructure and application components** in the IEDSS SSP.
- We have worked with DFR stakeholders to **conduct Business Impact Analysis (BIA)** to identify prioritization of infrastructure and application components, and recovery objectives.

Feature	Benefits to the State
Operations Continuity	<ul style="list-style-type: none"> • We have deep technical understanding of the IEDSS system and the implemented BCP Strategy and processes. • Deloitte can provide enhanced support through our knowledge gained from maintaining the system security plan for all the IEDSS components. • There is no transition time or learning needed by our staff.
Responsiveness	<ul style="list-style-type: none"> • We have a deep understanding of your systems, technologies, tools, and processes and can respond to changes quickly. We operate with a sense of urgency because your success is our success.
Productivity	<ul style="list-style-type: none"> • Our staff are 100% productive from Day One while new, inexperienced vendors will be trying to transition in and learn the basics of State's implemented systems and BCP strategies.

Table 6-24. Features and Benefits to the State using Deloitte's Approach.

The table below provides a detailed understanding of our processes and procedures in place to adhere to the BCP requirements.

Indiana's BCP Goals	Deloitte's Approach
Meet Recovery Time Objective (RTO) and Recovery Point Objective (RPO)	<ul style="list-style-type: none"> • The team collaborates with IOT to set the data backup and recovery frequency to meet the approved business recovery objectives (RTO and RPO). • Deloitte collaborates with IOT in maintaining backups and recovery procedures and the data for the in-scope functions to protect against accidental destruction and other hazards to business operations.
Identify all critical information areas	<ul style="list-style-type: none"> • Deloitte continue to work with IOT to document current critical infrastructure and application components in the existing BCP documents and maintain/update the BCP document as changes are made to infrastructure and application components. • Deloitte continues to work with the State in maintaining the current Risk Assessments Reports to prevent any threat scenarios and potential business disruptive events.
Scope and Plan Initiation	<ul style="list-style-type: none"> • Our skilled BCP specialists work with the State to: <ul style="list-style-type: none"> – Review the existing BC plan, BCP Test plans, Communication & Documentation, BCP Training, and Testing and Exercising procedures. Update and review the BCP artifacts annually to keep them current. – Identify and regularly update contact details of the key stakeholders, including external vendors, required in need of any disaster. Deloitte also updates the roles and responsibilities of the stakeholders. – Provide training and awareness for the involved BC/DR team members to keep them aware of where to access checklists and how to execute them when any disruption occurs.
Business Impact Analysis (BIA)	<ul style="list-style-type: none"> • Deloitte works with State stakeholders to update the BIA analysis to reflect the current infrastructure and application components. • Deloitte continues to support the State in information gathering for BCP related assessment activities to obtain estimates of their projected operational impacts. • We analyze this data and the impacts to define and support our recommendations for establishing business recovery objectives (RTO & RPO) that are aligned with the State's Continuity of Operations Plan. • We use the defined recovery objectives and impacts of loss to determine the overall priorities and ordering of recovery actions.
BCP Development	<ul style="list-style-type: none"> • Deloitte continues to work with the State in maintaining the existing Recovery plan and the existing Business Continuity Strategy. • As part of M&O, Deloitte continues to support the State to perform BCP testing and BCP/DR drills annually to validate the RTO and RPO objectives as defined in Section 13, Service Level Agreements. • Deloitte continues to work with the State to track and keep logs of any changes in processes, people, and resources.

Table 6-25. BCP RFP Response Matrix.

Disaster Recovery

RFP Reference: Attachment C, Section 6.8.2

Our Experience

Deloitte has supported Disaster Recovery (DR) programs, including DR testing and data recovery design principles, for numerous states including Tennessee, Georgia, North Carolina, Oklahoma, and Indiana. In the case of a disaster or emergency, it is critical for parties involved to work together to securely restore operations as soon as possible, while also striving to understand the root cause that resulted in the disaster. We also need to work towards implementing mitigating steps to prevent a reoccurrence in the future.

We have also worked with State personnel on annual DR tests while acting as the M&O vendor for ICES. Additionally, we assisted in the recovery testing of IEDSS Oracle Exadata databases. We have a deep knowledge of the State infrastructure setup as the incumbent vendor. Our team also understands the nuances of system interactions within the IEDSS authorization boundary. Other vendors might claim similar experience in disaster recovery process, but our understanding of the Worker portal system and intricate dependencies and interactions of systems within the IEDSS authorization boundary makes us the right choice in meeting your requirements.

To maintain compliance with CMS MARS-E 2.0 and subsequent versions, SSA Security Requirements, and IRS Publication 1075 requirements, Deloitte will continue to support the State in maintaining, testing, and updating these plans, as applicable, based on the evolution of data, infrastructure/architecture, and tools.

Our Approach

To comply with CMS MARS-E 2.0 and subsequent versions, SSA Security Requirements, and IRS Publication 1075 requirements, our approach follows the below three step process to develop and maintain an effecting DR plan:

- **Create contingency strategies:** Deloitte, in collaboration with the State teams, continues to maintain structured contingency strategies in the case of system outage. This is in response to any major disruption to regular State business. It includes a natural disaster, significant system interruption, and hardware failure. During the DDI and M&O phase, Deloitte has assisted the State in developing and documenting a comprehensive disaster recovery procedure to follow in the unlikely event of disaster to fully recover the IEDSS application.
- **Develop DR plan:** Deloitte continues to support the State in maintaining and updating the existing DRP, as applicable, based on the evolution of data, infrastructure/architecture, and tools. We continue to work jointly with the State teams and provide guidance for maintaining the components (i.e., server infrastructure, system configuration, and data requirements) that support the emergency preparedness and disaster recovery strategies in the DR plan.
- **DR plan testing, training, and exercises:** Deloitte supports the State in facilitating a disaster recovery exercise annually to test the DR functionality and document the results with an action plan for correcting issues found during the DR exercise.

Deloitte follows a well-established response to any major disruption to regular state business. For example, in the aftermath of issues with Oracle Exadata database backup, Deloitte collaborated with Oracle and IOT DBAs to develop a **plan of action and timelines** to remediate the root cause of the issue. We worked with the IOT DBAs to **implement the remediation and validated that remediation** is effective in mitigating the gap.

Deloitte assists the State in maintaining the plans and supports ongoing testing and validation of the DRP at a minimum, annually. The DR plan for IEDSS includes:

- Safeguards implemented before, during, and after a disruptive event. Example of safeguards include backup procedures and clustered architecture for high availability.
- Recovery strategies to foster quick and efficient system recovery following a disruption. Example of recovery strategy include failover to DR site.



As part of M&O activities, Deloitte worked with IOT and DFR stakeholders to **update the DR checklist for IEDSS worker portal**. We also identified the **key infrastructure and application components** required that support the emergency preparedness and disaster recovery strategies in the DR checklist.

The following table explains our DR activities that Deloitte performs in collaboration with the State team during Disaster recovery process.

DRP Objectives	Deloitte's Approach
Data Processing Continuity	<ul style="list-style-type: none"> As part of M&O, in collaboration with the State teams, Deloitte continues to maintain the lists of active infrastructure sites and the applicable redundancy options (like DR site at Bloomington) involved in alternative data processing sites in running the critical business functions and applications in event of disruption events. Deloitte would collaborate with the State in maintaining backups and recovery tools for data processing continuity to protect against accidental destruction and other hazards to business operations.
Testing	<ul style="list-style-type: none"> In collaboration with the State teams, Deloitte supports the ongoing testing and validation of the DRP plans and distribution of the testing checklists to involved stakeholders. In collaboration with the State teams, Deloitte conducts sessions with business managers to review the DR test plan. Additionally, Deloitte conducts practice sessions with involved stakeholders. In collaboration with the State teams, Deloitte continues to maintain an IT disaster recovery plan, including details of corrective action program, to address deficiencies identified during the parallel and full interruption testing. Deloitte supports the State teams to continue to maintain and review recovery documentation annually.
Recovery Procedures	<ul style="list-style-type: none"> Our team works with the State to implement recovery procedures after a disaster and install and verify that critical functions are operating successfully. In collaboration with the State teams, Deloitte continues to maintain, review, and update the existing matrix of the Salvage Team members and their specific duties as part of existing IEDSS DRP. In collaboration with the State teams, Deloitte continues to maintain procedures to return to normal operating conditions after disaster. As documented in our exiting IEDSS DRP, all the activities (recovery services for application and data servers) related to IOT's data center are IOT's responsibility. Any other recovery issues identified during the DR testing are reviewed, prioritized, and remediated.

Table 6-26. DRP RFP Response Matrix.

Enhancements

Section 7

Deloitte realizes that in the spirit of the State's goal to continuously improve services to Hoosiers you plan to continue enhancing IEDSS to coincide with the natural evolution of technology, operational efficiency, and government regulations. We understand the importance of implementing federal and State regulations in a timely fashion. With our business insights and expertise we continue to keep IEDSS complaint while implementing these changes, like we did during the beginning of the public health emergency (PHE). We were able to accommodate additional changes while also rolling back changes like HIP Bridge during the PHE. By continuing with Deloitte as your vendor, the State can continuously improve the IEDSS system in an efficient, timely, and high-quality manner while maintaining continuity and stability for your clients and workers. We have a collaborative and structured approach to working with the State and other stakeholders to analyze, prioritize, and implement each enhancement under the State's guidance and direction.

WHAT IT TAKES



Diligently delivering enhancements to upgrade and improve IEDSS functionality based on extensive experience with IEDSS and similar systems



Capability to accurately analyze impact, thoughtfully design, efficiently develop, effectively test, and promptly implement policy changes



Make impactful and innovative recommendations to improve operational efficiency, enhance program accuracy, modernize technology, and streamline tools and processes

WHY IT MATTERS



By building, implementing and maintain IEDSS we have gained a deep knowledge of the system which is essential to delivering innovative enhancements for the State that improve system functionality like promoting program integrity, increasing worker efficiency, and enhancing system useability with the newest technologies desired.

A system as functionally nuanced as IEDSS requires a rock-solid team that understands the impact on the entire ecosystem of each enhancement so that the State can stay focused on effective operations while we systemically enable them.

Our familiarity with your business, understanding of your stakeholder's priorities, and ability to also draw down lessons learned and use best practices from our national portfolio of projects uniquely helps the State identify and implement impactful innovation.

7.a Understanding of the Enhancements

RFP Reference: Attachment F, 7. Enhancements (Attachment C, Section 7)

a. Explain your understanding of the enhancements activities in Attachment C, Section 7.

Deloitte understands the ever-changing and dynamic nature of the HHS environment. We recognize that the ongoing need for enhancing E&E systems stems from legislative and policy mandates, from a drive towards continuous improvement, and from technological advancements. Deloitte does not just respond to these changes; we proactively work with the State to identify enhancements that help increase system capabilities, such as the application processing enhancement that significantly accelerated processing times for self-service Medicaid applications. With Deloitte, the State has a vendor that brings extensive experience in successfully enhancing large-scale E&E systems and excels at delivering the best-in-class solutions to solve your most complex business problems.

We have learned that enhancements originate from regulatory, operational, and technological changes through our experience with the State. Throughout this relationship we have listened to you and implemented enhancements based on your priority and needs. Each enhancement that we introduce is analyzed by our team to determine impact on functionality, estimated development and testing effort, implementation constraints, internal and external dependencies, and assumptions. This thorough analysis allows us to provide recommendations for proposed releases and keep Indiana's interests first while still accounting for impact to other stakeholders including IOT, OHA, Core MMIS, Benefits Portal and CDMS team, and Asset Verification.

Efficient Change Management Process

Deloitte works with you to prioritize and schedule each enhancement to release, while also keeping in mind the business needs and the State's vision through the change control board meetings. This process allows us to schedule enhancements well in advance and efficiently manage the enhancement pool of up to 60,000 hours a year, so the State gets the most value for these hours with Deloitte. Our experience and familiarity with the IEDSS system help us analyze the change and impact on the system and other stakeholders, provide recommendations when required, and accurately propose releases.

Uninterrupted Services

With 30 years of experience with you, we have intimate knowledge of your schedule and desired enhancement needs. We continue with the same stride to deliver impactful outcome for the agency, your clients, and stakeholders. There is no disruption to the project schedule, and enhancements will continue as planned by continuing the long collaboration between the State and Deloitte.

It is critical for the State to provide uninterrupted services to the most vulnerable Hoosiers, and we provide you with an experienced set of people, methods, and tools to achieve that. We understand the importance of delivering thorough enhancements that improve the system rather than disrupt and have a unique experience of delivering to our understanding of these needs as seen in the following table.

KEEPING THE MOMENTUM GOING FORWARD

- Deloitte brings a deep understanding, cross-functional knowledge, and the proven ability to design, develop, implement, and enhance mission-critical HHS systems, including ICES and IEDSS.
- Since the IEDSS Go-Live in April 2019, our team has delivered over 404 enhancements to align with ongoing policy and operational requirements as well as regularly enhance the technology IEDSS is built on.
- Deloitte brings business innovations crucial to improve processes under the guidance and leadership from the State. This helps simplify processes, cut down workload, and increases case worker efficiency.

What the State Needs	How Deloitte Delivers
Changes are implemented on time and accurately	Experience in helping the State implement over 400 system enhancements that meet your operational schedule by scheduling and maintaining 100% compliance with the release schedule with an expert staff that has experience in measuring the system impact of enhancements and the effort needed to design and implement those changes.
Unexpected changes are accommodated, and plans are adjusted	Experience in confirming unexpected changes brought about by enhancements are accommodated by implementing a switch-based approach on enhancements to set the implementation date to a high date 12/31/2999 to turn off changes made by all tracks for the enhancement in addition to marking interface jobs as inactive and removing from the schedule as plans are adjusted.
Notices are accurate and complete	Maintaining the IEDSS system with the State that generates over 10 million correspondences a year and experience in designing over 450 unique notices with the State to confirm the client is notified of their benefits and pending verifications in a timely manner and accurately through our notice validations.
Interfaces contain the expected data in expected format	Expertise in managing the 185 interfaces we have designed alongside the State whether it is real-time webservices or one of the 200 Interface batches that run effectively. We do this with great success, such as achieving 99.98% accuracy between MMIS and IEDSS.
Eligibility rule changes address the full spectrum of business scenarios	Unique experience in implementing 1,574 eligibility rules to meet business requirements defined by the State to calculate accurate benefits for over 2 million Indiana citizens.
Worker portal is available and performs as expected	Experience in maintaining the 1,134 worker portal screens and updating the 4,200 database tables to confirm proper communication and performance of the screens while achieving 100% system availability in the current calendar year.
Data integrity is maintained	Developing custom-designed tools and data validation queries for the State to maintain data integrity, such as the Security & Office Matrix Validator which confirms that data configured in the database is in sync with the client provided data.
Personally Identifiable Information (PII) is protected	Leveraging user account management to control and limit access to the staging and the production database environments that contain sensitive PII and launching an internal initiative to minimize PII data elements captured in audit logs that are not aiding in triaging of audit events.

Table 7-1. How We Deliver Uninterrupted Services for Your Needs throughout the Enhancement Process.

Our familiarity with the system and experience in promoting system quality as outlined above allows us to avoid or minimize any potential disruptions. With a robust, comprehensive, and detailed impact analysis, we are able to identify impacted components, make necessary design and/or code changes, and perform rigorous SIT, regression, and performance testing to avoid the disruption. The design, development, and testing approach for enhancements are primarily structured to predict and address possible disruptions to the workers, clients, and other stakeholders much before the implementation.

Together with the State, we have delivered enhancements throughout the public health emergency (PHE) without affecting delivery timelines, quality, or system stability. You have witnessed this process in action with Deloitte and can trust that, together, we will continue to build upon our current momentum of system enhancements for IEDSS.

Compliance with State and Federal Requirements

We acknowledge and understand that we shall maintain IEDSS solution components and enhancements that comply with expectations laid out by the Centers for Medicare & Medicaid Services (CMS), United States Department of Agriculture (USDA) Food and Nutrition Service (FNS), and Administration for Children & Families (ACF). We continue to support you in confirming that enhancements comply with CMS, FNS, and ACF requirements and respond whenever there are updates to these throughout the Contract, just as we have done with the State during DDI. Enhancements are implemented in compliance with the Project Management (PM) and Software Development Life Cycle (SDLC) expectations laid out by CMS and FNS. Below are some of the enhancement specific measures we take to support the State's compliance with these expectations.

Federal Agency	Requirement Document	How We Support You Throughout the Enhancement Process
Centers for Medicare & Medicaid Services (CMS)	Medicaid Eligibility and Enrollment Toolkit (MEET)	While implementing new enhancements we work alongside the State to comply with the checklist requirements detailed in the MEET, as applicable.
	Streamlined Modular Certification (SMC) Outcome-Based Verification (OBC)	We use enhancements to support desired business outcomes while reducing the burden on the State to help you continue your compliance with the relatively new standards being introduced through the OBC when any new major change is introduced.
	Medicaid Information Technology Architecture (MITA) 3.0	We strive to make IEDSS a more efficient and integrated system through enhancements that communicate effectively through interoperability and common standards and processes to support the State in your ongoing compliance with MITA 3.0 and maturity improvements, as we are now.




Federal Agency	Requirement Document	How We Support You Throughout the Enhancement Process
	Minimum Acceptable Risk Standard for Exchanges (MARS-E) 2.0	We support the State to confirm that the design and implementation of enhancements comply with the risk-based Security and Privacy Framework laid out in the MARS-E 2.0. When an enhancement qualifies as a "Significant change" based on the definition in the MARS-E 2.0, we will support the State in submitting updates to the Plan of Action and Milestones (POA&M) and System Security Plan (SSP) to CMS prior to the enhancement's production implementation for approval.
Food and Nutrition Service (FNS)	SNAP Review of Major Change in Program Design and Management Evaluation Systems	We understand that as part of the provision to this document the State has to notify FNS whenever there is a major change in operations, such as an enhancement that is implemented, and is categorized as a major change as laid out in Section 7 CFR 272.15(a)(2) of the document. When an enhancement qualifies as a major change, we support the State in their report to FNS by helping collect and report data that can be used to identify and correct any problems relating to integrity and access, particularly for certain vulnerable households. Whether the enhancement is a new component or a major configuration change to an existing one, we support you in reporting this information to FNS.
	System Integrity Review Tool (SIRT)	We work with the State to confirm enhancements meet the reporting and mass changes requirements laid out in Section B of the SIRT. When a significant enhancement requires Major Change, Master Test Plan, or SIRT updates, we support the State in submitting this to FNS for their approval prior to the enhancement's production implementation.

Table 7-2. How We Support You in Complying with CMS and FNS Requirements throughout the Enhancement Process.

We understand that the CMS certification requirements and FNS approval for system and business process updates may be updated throughout the term of the Contract and will continue to adjust accordingly.

Innovating through Enhancements

IEDSS, as it exists today, is a realization of your vision and the result of significant investments of time, energy, and resources by the State. As the system continues to evolve, Deloitte is committed to putting you first, listening to your needs, and delivering upon those needs with minimal impact to you and your workers. We bring ideas and recommendations based on our understanding of your business and from our experience delivering similar solutions nationwide to solve those challenges. Our knowledge of the IEDSS solution, your operating model, program policy, and understanding of the stakeholder and vendor environment enables our team to identify and suggest enhancements for your consideration proactively. Below, we highlight a few examples of innovative enhancements that we have collaboratively identified and implemented.

INNOVATION	CHALLENGE	APPROACH	IMPACT
 Increasing System-based Worker Efficiency by Reduction of Tasks	Task backlog was increasing as the number of tasks generated on a daily basis was greater than the number closed.	Adjusted screen navigation, created new screens, added task auto closure rules, and modified triggering conditions for high volume tasks.	One such improvement, saves an average of 30,840 tasks per month by routing 'Solicited Document Not Received' to SRED tasks.
 Improving Application Processing Efficiency	Numerous time-consuming tasks were leading to prolonged and late application processing times.	Automated Medicaid application workflows to auto complete full match and no match applications and auto schedule appointments where applicable.	An average of 5,061 Medicaid applications with complete SSNs are auto processed per month, with 26% of applications being auto file cleared.
 Eligibility Results Screen Redesign	Reviewing eligibility results for cases with multiple programs or individuals was tedious and error prone.	Redesigned the eligibility determination screen to display separate tables for SNAP and TANF and each individual MA AG thereby making it easier to review cases.	Caseworkers were able to review results quicker and more accurately. We also received feedback from the field that they really like the new screen design.

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Figure 7-1. Past Innovative Enhancements Implemented Alongside the State.

We continue to work with the State to identify and resolve challenges. Deloitte, through its presence across various eligibility and enrollment systems in different states, has identified various opportunities to solve our clients' challenges through innovative solutions. A snapshot of the range of these ideas for future innovation can be seen in the figure below.

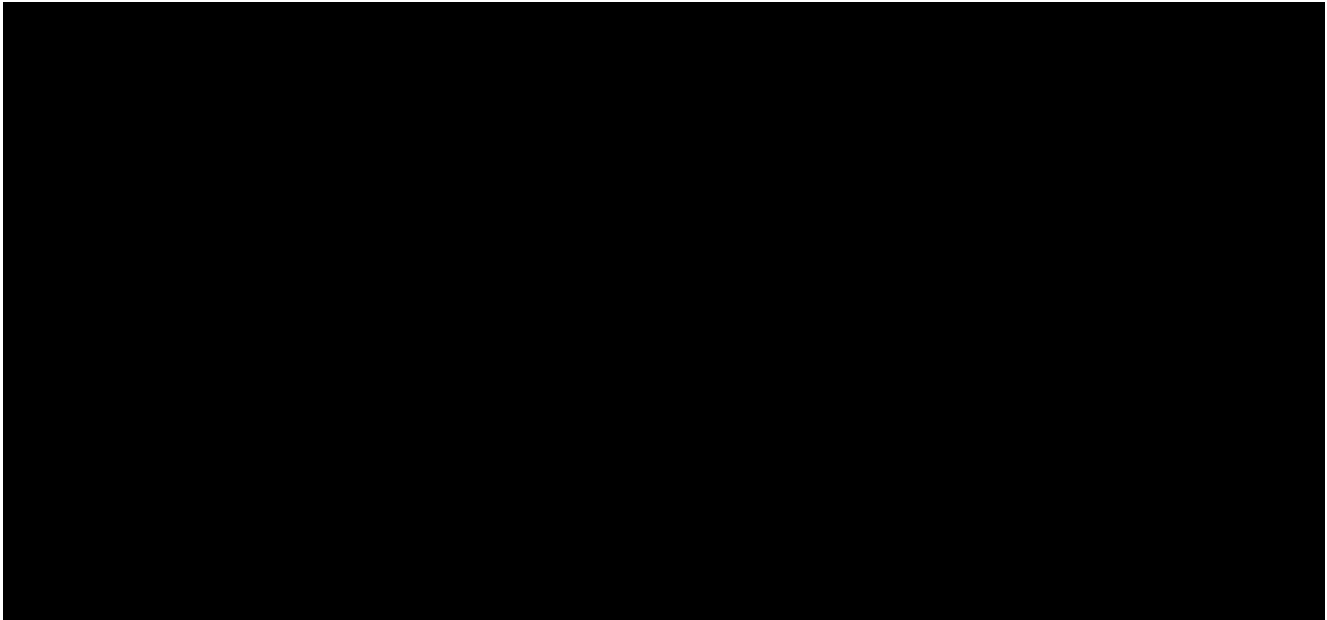
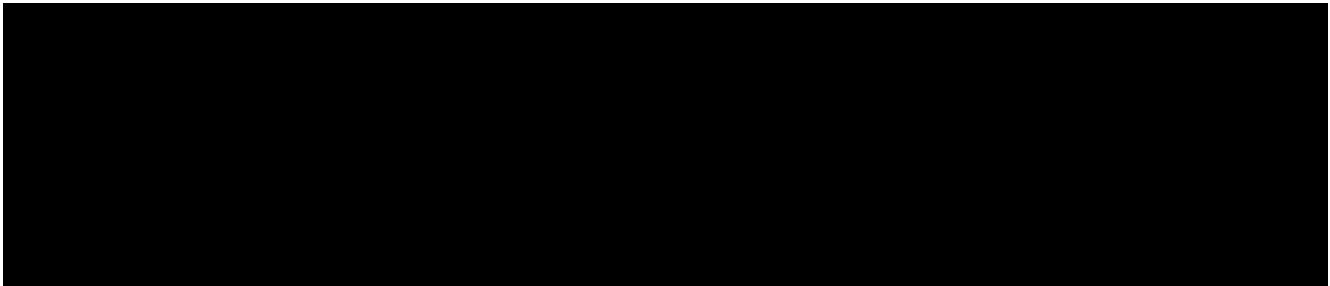
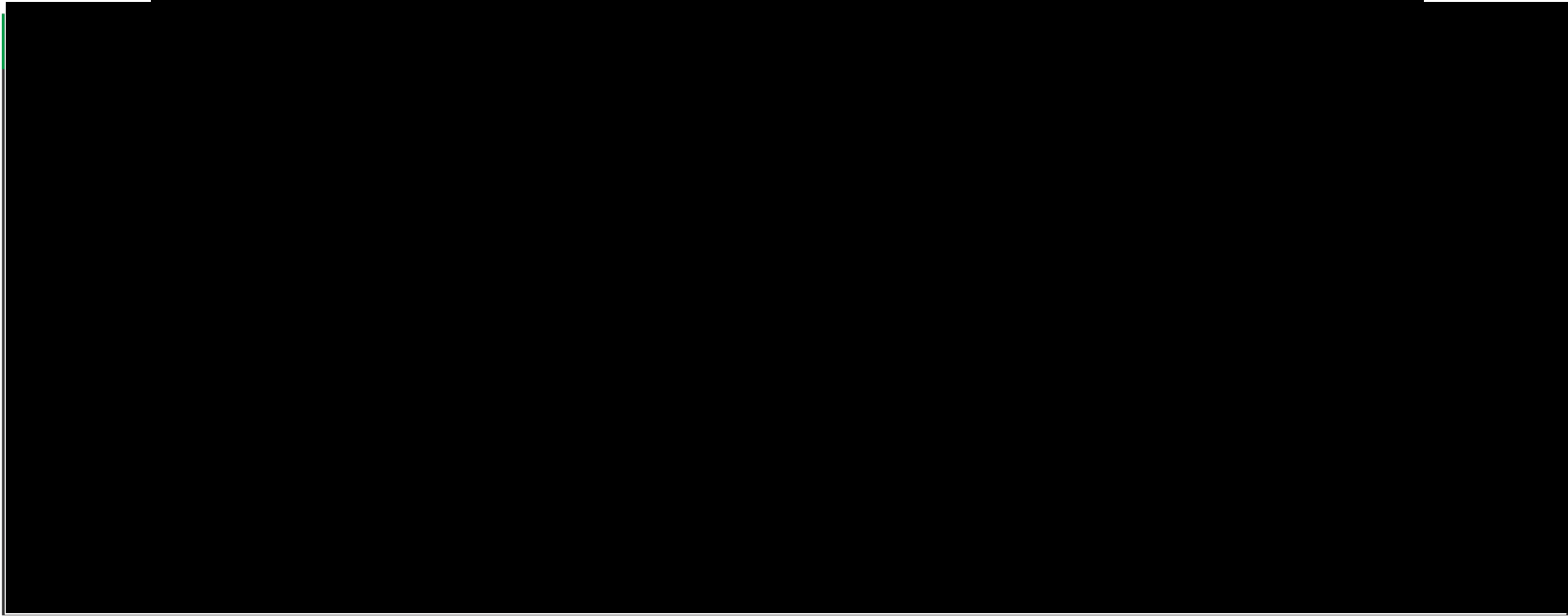


Figure 7-2. Our Range of Capabilities for Future Innovation.

We have implemented these in other states and have assets and accelerators that can be used for faster implementation while delivering quality work. While each state has its unique challenges, Indiana's business objectives align with what we are seeing nationally as listed below. When proposing these new enhancements, we make sure to keep the business priorities of the State at the top of mind and how each enhancement can add value to the State as seen in the table below.

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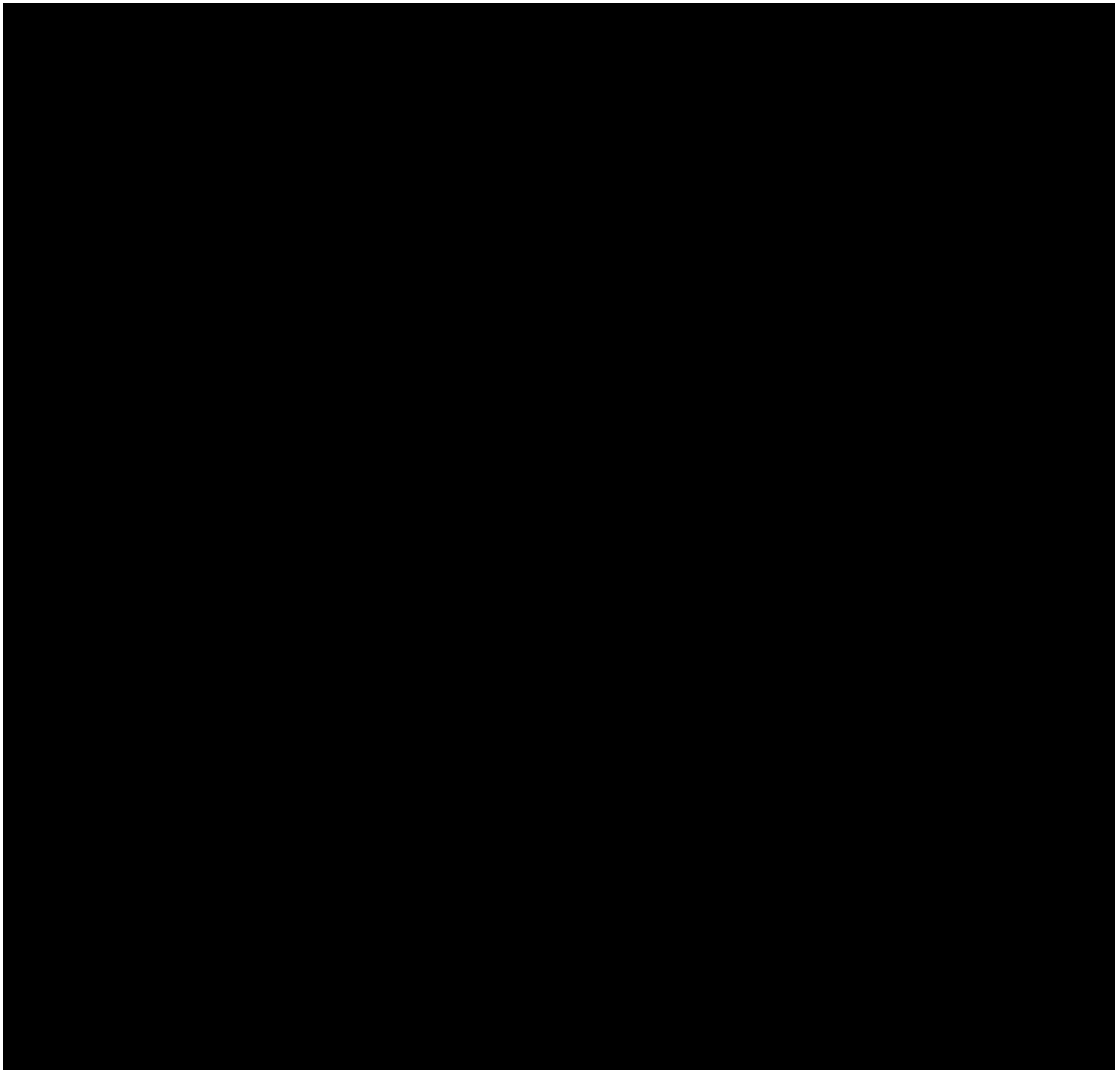


Table 7-3. How We Think of Enhancements in Terms of Key Business Drivers for the State.

Our capabilities include a wide array of innovations drawn from our national experience which each address one or more of the key business drivers above. The table above shows enhancements that we believe could improve the IEDSS system and its ability to respond to the dynamic nature of external factors that the State encounters.

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7.b Enhancement Pools and Enhancements Pricing

RFP Reference: Attachment F, 7. Enhancements (Attachment C, Section 7)

b. Describe your approach to the requirements for the Enhancement Pools and Enhancements Pricing.

Deloitte's approach to enhancement pools and pricing is measurable, transparent, and has a collaborative approach to providing uninterrupted system availability and performance through ongoing enhancement releases. Our process includes weekly change control meetings and regular reviews to discuss strategic priorities, major enhancements, and implementation schedules.

Enhancement Pool

We will provide the State with an enhancement pool of 60,000 hours a year (estimated 5,000 hours per month). We understand that, per the RFP, the State is not required to use to completion all the hours and dollars allocated for the enhancement pool each contract year.

Deloitte has experience providing the State with up to 120,000 hours per year in enhancements for IEDSS. This demonstrates that we can provide the State with the type of qualified and knowledgeable resources that are needed to support the diversity of enhancements that the State may prioritize for a given release. Recent enhancements ranged across the full spectrum of business functionality, such as auto scheduling appointments, adding new notices for children with disability, interfacing with vendor partners including premium vendor, Department of Child Services (DCS), updating eligibility rules for Hoosiers from Compact of free association (COFA) migrants and streaming resource assessment.

We have also scaled our team up and down in size by more than 50 percent within a three-month period. This demonstrates we have the **organizational strength and capability to adapt to the State's changing needs**.

As we transition to a Hybrid Agile SDLC, we bring forward proven practices from State clients who have made similar transitions. We have found that the most common and successful way to manage an enhancement pool in Hybrid Agile is to define a fixed number of sprint teams to work through the product backlog (the State's approved CRs and their associated user stories/requirements). The State product owner prioritizes which items from the backlog will be worked on during each sprint. We propose using a similar approach for IEDSS.

If the enhancement pool fluctuates due to budget, lack of backlog items, or other State decision, we would identify this several sprints in advance and adjust the number of available sprint teams accordingly.

This approach gives the State more control in what work gets prioritized and substantially reduces the lead time between when prioritization occurs and when changes are implemented, compared to the current waterfall SDLC. It also provides consistency and predictability for the State, its stakeholders, and Deloitte. This sprint-based prioritization approach is also the most cost-effective approach because it maximizes staff productivity.

If the State reduces the enhancement pool, it will have no impact to the vital positions for the State and Maintenance & Operation of the IEDSS system.



- Deloitte has delivered over 404 enhancements since Go-Live of IEDSS, providing us with expertise to deliver thoughtful solutions in a cost-effective manner.
- In the most recent release, Deloitte was able to provide the following for the State:
 - 35 enhancements
 - Enhancements that impacted the most sophisticated parts of the system including auto scheduling appointments, adding new notices for children with disability, and streaming resource assessment

Enhancement Pricing

We understand and are prepared to support enhancement pricing following either the fixed fee deliverables-based approach or the time and materials-based approach based on contractual hourly rates, per the State's decision.

Given our Hybrid Agile SDLC, we recommend that the State consider uniformly using a fixed fee sprint team-based approach. We have successfully used this sprint team-based approach on similar Hybrid Agile projects with other State clients, as well as on several other health and human services projects within the State of Indiana.

The following describes three models for enhancement pricing which elaborate on what is discussed in the RFP:

Approach	How Enhancements Are Priced
Fixed Fee - Sprint Team Based (recommended)	<ul style="list-style-type: none"> The price is fixed for a sprint team's worth of enhancements (a release). Deloitte provides estimates for CRs and their associated user stories (requirements). The user stories (requirements) are prioritized by the State Product Owner in advance of each sprint. Completion of the sprint milestone is based on meeting the "definition of done" of the completed user stories. The State maintains full control of managing scope changes, as they can reprioritize work based on those changes. The State benefits from optimizing the amount of work that can be done within a fixed period.
Fixed Fee - CR Based	<ul style="list-style-type: none"> The price is capped based on the detailed estimated hours for each CR. Within Fixed Fee, we provide a high-level estimate to the State Change Control Board (CCB). Upon completion of design, we perform a second round of estimation. This is done so that any additional scope and design changes discovered during the design phase can be appropriately taken into final consideration. These hours constitute the fixed fee for the enhancement. If the scope changes, we adjust the hours and share those details with you and adjust the fixed fee as necessary. If there is no scope change, Deloitte assumes the risk for any overage, and we would be responsible for any costs exceeding the fixed fee.
Time and Materials	<ul style="list-style-type: none"> Deloitte estimates the hours required for an enhancement so that it can be prioritized and scheduled for a given release. During implementation, we log the hours required to implement the enhancement to determine the State's total cost. The maximum hours invoiced for an individual will not exceed 45 hours a week, regardless of the number of hours worked by the individual to meet service levels and complete deliverables on time. Any change to the scope will require re-estimation.

Table 7-4. The Differences in Our Fixed Fee and Time and Materials Approaches for Enhancement Pricing.

Estimation plays an important role in each of the above models. We have refined estimation methodologies and tools customized for IEDSS to effectively predict the amount of effort required to implement projects of varying size and complexity. The number of enhancement staff and type of enhancement services that we provide depend on the State's needs, and we work closely with the State to assess these project requirements.

The estimation process for an enhancement involves two steps: High-Level Estimates and Detailed Estimates as shown in the following figure. High-level estimates are pre-design and enables us to schedule the enhancement. Detailed estimates are post-design created using the IEDSS estimation tool.

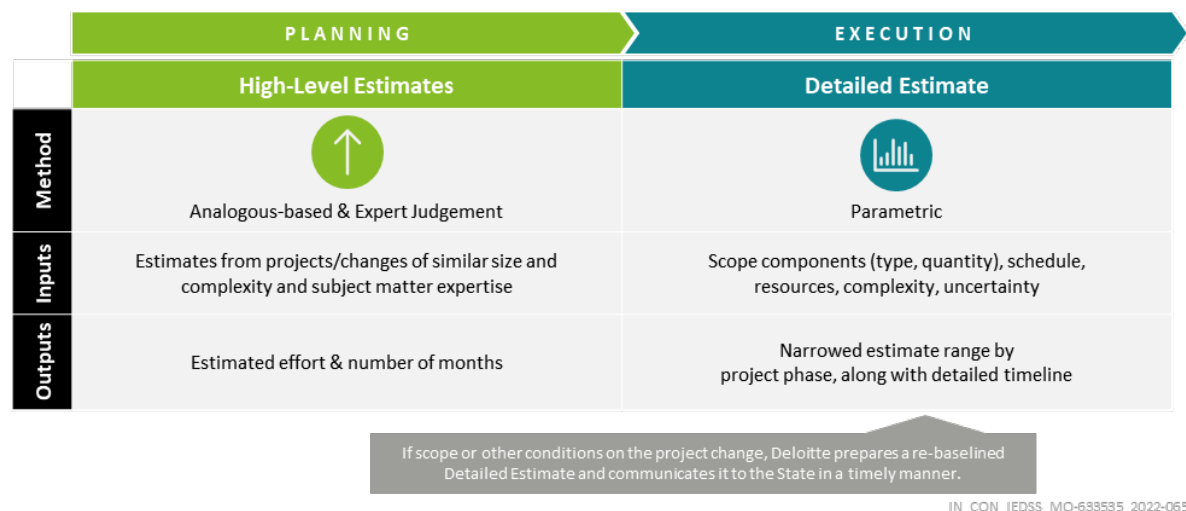


Figure 7-3. Estimation Process.

High-Level Estimates

Our approach to the high-level estimate and timeline is based on the business requirements, deep understanding of the system's architecture, and years of experience working with the State on a range of enhancements of similar scope and size. We assist the State with understanding how many hours are likely to be spent on each enhancement which helps inform prioritization, scheduling, and preliminary budget planning months in advance.

Detailed Estimates

To determine the detailed estimate we use Deloitte's IEDSS estimation tool which has been configured using the Deloitte Estimation Center of Excellence (COE) and historical IEDSS data. Our team has measured time taken for each component including requirements definition, design and documentation, development, unit testing, system testing, and implementation support. Deloitte's estimation tool is refined and tailored based on our team's extensive knowledge and understanding of the IEDSS system.

7.c Enhancements High-Level Impact Analyses

RFP Reference: Attachment F, 7. Enhancements (Attachment C, Section 7)

- c. Tab 6 of Attachment J includes list of six (6) example enhancement CRs, including a breakdown on those that are considered Enhancements (and thus subject to Enhancement pricing). For each enhancement:
 - i. Please provide mock, high level impact analyses against these example enhancements, along with number of hours for each Core Team position and Additional Position listed in Attachment D, "Example CR Pricing". DO NOT PROVIDE COST INFORMATION IN THE TECHNICAL PROPOSAL. The FTE counts must match the number of hours entered in the "Example CR Pricing" tab.
 - ii. Describe your proposed execution approach for each CR, including how you will ensure compliance with State and Federal requirements
 - iii. Describe your experience and qualifications in executing the work required for each enhancement.
 - iv. Provide the implementation steps that you would execute (along with the timing of those steps) for Project Management and SDLC in compliance with federal Project Management and SDLC requirements. Explain how you will ensure sufficient testing and QA support was provided per the Master Test Plan, and how you will support UAT in their determination of production readiness.
 - v. Create a high-level requirements/design artifact.
 - vi. Explain how you would transition the scope of the CR to M&O support.
 - vii. In the event that FNS does not approve of a Major Change due to PM and SDLC deficiencies, how would you support the State in addressing Federal concerns and garnering approval.
 - viii. In the event that CMS does not approve of a Significant Change due to PM and SDLC deficiencies, how would you support the State in addressing Federal concerns and garnering approval.

Deloitte has a collaborative way of working with the State, each track, and external stakeholders to determine the impact and effort required to implement an enhancement. Each enhancement goes through various phases of the Hybrid Agile SDLC approach to carefully comprehend the impact of a change and its implementation. Prior to the design, we perform an impact analysis for each enhancement, which would help us determine the correct release.

The impact analysis consists of the following steps:

- We break down each component into smaller requirements and tag them to individual tracks: Front Office, Eligibility, Correspondence, Interfaces, Back Office, Support, Reports, and Other Vendor Contractors. Such granular requirements help reduce errors and make it a more sustainable system.
- Deloitte reaches out to required stakeholders, including the State and, as applicable, external stakeholders such as the MMIS vendor, Application Services vendor, and AVS vendor to understand business requirements.
- Since Deloitte is currently supporting eligibility and enrollment systems in 26 states, we provide the benefit of being able to quickly compile ideas, considerations, and accelerators from other states who have implemented similar changes. When appropriate, we consult with our colleagues through Deloitte's internal Microsoft Teams collaboration site or through information requests across our project portfolio. A few examples of IEDSS enhancements where we used this support include: Electronic Notices, Cognos Upgrade, Medicaid No-Change Auto-Renewals, Migration to JIRA Cloud, and Automate SNAP IR 'No Change' Functionality. To demonstrate the benefit of this process, we also requested for information from other Deloitte projects for the mock enhancement "Implement Telephonic Signature for SNAP".
- We gather information by researching policy and leveraging the policy specialists at our HHS Nerve Center, many of whom are former state and federal officials.



Our experience with the State's programs, operations, and technologies allows us to effectively break down enhancements into smaller track requirements and is demonstrated by the successful delivery from each of our tracks:

- 31M+ lines of code from **all tracks**
- 1,134 screens by **Front Office**
- 1,574 eligibility rules from **Eligibility**
- 450+ notices from **Correspondence**
- 185 interfaces from **Interfaces**
- 575+ tasks from **Back Office**
- 4,200 database tables from **Support**
- 74 reports from **Reports**
- 599 batch programs from **Batch team**

Please refer to *Appendix 8, Enhancement Impact Analysis* for an impact analysis of the six example enhancements listed in Attachment J.

Maintenance of Decommissioned Legacy Systems

Section 8

It is crucial to maintain the ICES Archival Platform to house historical ICES data supporting federal and State retention requirements, while providing necessary data for business, policy, and other State users who may need to access historical information. Deloitte worked with the State to realize your vision of developing the ICES Archival Platform by leveraging modern technologies such as native Azure cloud architecture and Microsoft PowerBI dashboards. Using these technologies saved the State money, provided rapid scalability, and enhanced agility, stability, and reliability.

Because Deloitte developed this application alongside the State, we are adept at supporting it and applying patches, maintaining necessary user access, and developing data queries in case of a lawsuit or federal partner inquiries. By retaining Deloitte, you gain our institutional knowledge of ICES and the ICES Archival Platform.

WHAT IT TAKES



Technology expertise as well as a deep understanding of program, policy, and archived legacy data



Proactive monitoring of availability, performance, and usage



Collaborative communication, transparency, and responsiveness

WHY IT MATTERS

Our team has the business knowledge, cloud technologies expertise, and an extensive knowledge of the legacy data stored in Azure cloud—this is key to supporting the State in maintaining and using the ICES Archival Platform.

Proactively monitoring with the Azure Application Insights feature allows us to address items before they significantly impact the end user and system availability.

We have collaborated with the State to focus on what is essential and to engage the right stakeholders at the right time. In case of Archival Portal Legacy inquiries, clear communication is vital.

RFP Reference: Attachment F, 8. Maintenance of Decommissioned Legacy Systems (Attachment C, Section 8)
Explain how you propose to maintain the decommissioned legacy systems listed in Section 8 of Attachment C.

As part of the decommissioning efforts for ICES, the State chose an innovative cloud-native approach for the ICES Archival Portal. Together, Deloitte and the State developed a portal that meets federal and State data retention requirements while providing visualization and clarity for business, policy, and other users needing to access historical information.

We integrated our knowledge of historical requests for data into a Human-Centered Design philosophy. The resulting low-maintenance, serverless-yet-scalable COTS system is flexible, compliant, and secure, and it controls cost. We drew on our extensive Indiana eligibility systems experience and our proven strategies and core assets used in other states to launch the State's Azure cloud adoption journey.

Our approach to the State's requirement for maintaining the ICES Data Archival Portal is based on key elements of the solution architecture and functionality:

- The portal is a cloud-native application leveraging PowerBI Pro and multiple Azure cloud services
- The cloud approach provides an on-demand, scalable, pay-as-you-go model that facilitates a low Total Cost of Ownership (TCO) and superior performance
- Azure PaaS features enable the storage and rapid retrieval of data to the scale of petabytes in seconds in a highly secure manner compliant with government laws and industry regulations
- The PowerBI Pro online model is a SaaS service used to share and distribute interactive dashboards among end users

ICES Data Archival Portal Documentation Playbook

Deloitte's playbook with system documentation includes data models, operational documentation, and user guide documentation. These documents include instructions on how to add/remove users' access, write data queries to pull subsets of 10 years of archived ICES data, modify existing dashboards, and support IOT in applying patches and performing regression testing.

In working side by side with the State, Deloitte has developed and retained core technical knowledge as well as a deep functional understanding of ICES data. This body of knowledge coupled with our national cloud portfolio and experience enabled the successful launch of a Data Archival Portal for State staff. Since portal development team members with diverse skill sets are being proposed for the M&O team, we are positioned to deliver a cost-effective approach to maintain the portal while being prepared for and responsive to needs as they arise. Unlike other vendors who may need to dedicate full-time resources to support this, we can scale support capacity up or down as needed. The bottom line is that the maintenance and operations of this portal will not add any burden to the State, because our project team on the ground will already have the requisite skills to support the portal.

During the development of the dashboards against the SQL data model, we worked with the State to come up with the most frequently used queries and developed these standard dashboards for those queries. One of the main reasons we created those queries is because the legacy ICES data was stored in a non-hierarchical database.

KEEPING THE MOMENTUM GOING FORWARD

- Because we employ 19,000+ cloud-enabled professionals with experience in architecture, development, maintenance, and operations, we can draw on a substantial pool of resources to maintain the highest standards of the IEDSS system and provide uninterrupted service to system users.

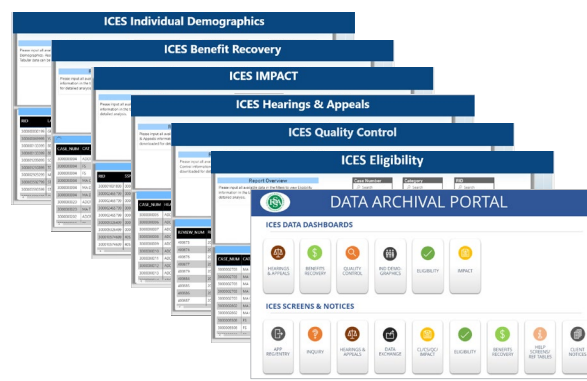


Figure 8-1. Data Archival Portal.

It requires significant legacy data model knowledge to develop those queries. These dashboards will give the information the State needs for most situations.

When there is a need to create queries not supported by the standard inbuilt dashboards, knowledge of the ICES database data model and SQL server data model is essential. We have staff who worked on the ICES system for the past 20+ years with extensive knowledge of the ICES data model of the data archived from the mainframe system. This data is essential in critical situations when historical data must be retrieved, in case of a lawsuit, for instance, or when the post Public Health Emergency (PHE) processes are reactivated. Our knowledge of the ICES data model and the current system means we can easily find the data in the SQL tables or Object storage and design appropriate data pulls to serve business needs.

Supporting Your Requirements

While the IOT team is expected to handle ongoing maintenance for Azure cloud and PowerBI, Deloitte will support the State and IOT with regression testing after any regular maintenance, patches, or upgrades. Our proposed staff, who worked on the development of the Data Archival Portal, will handle this, with assistance as needed from our nationwide cloud portfolio resources. The table below outlines our understanding of the requirements in the RFP's Attachment C, the responsibility across each area, and scope details pertaining to our activities.

Activity	State Responsibilities	Deloitte Responsibilities
1. Security and User access: <ul style="list-style-type: none"> a. Audit user logins b. Add/Delete user access c. Comply with security requirements 	<ul style="list-style-type: none"> • The State provides list of approved system users and updates Deloitte with changes to master list 	<ul style="list-style-type: none"> • Deloitte collaborates with the State to provide audits and “sanity checks” to maintain Identity and Access Management • Deloitte maintains ongoing compliance with security requirements, HIPAA requirements, security incident timelines, and provide notifications if such an incident were to occur (per pages 26-28 of RFP Attachment B and as described in <i>Section 11, Compliance with Standards & Regulatory Requirements</i>) • Deloitte grants or removes access to ICES Data Archival System based on State requests
2. Maintain each aspect of the application and data layers <ul style="list-style-type: none"> a. Data pulls of ICES stored data (available in Azure SQL and Object Storage) 	<ul style="list-style-type: none"> • The State provides business requirements for specific data to be pulled 	<ul style="list-style-type: none"> • Deloitte constructs query to pull required data
3. Patches and enhancements <ul style="list-style-type: none"> a. Apply patches to confirm latest standard and Microsoft upgrades are incorporated b. Create/Modify dashboards 	<ul style="list-style-type: none"> • The State provides the necessary business case and business requirements for dashboard customizations 	<ul style="list-style-type: none"> • Deloitte maintains necessary Azure services, functions, code, and provisioning to connect with new API standards; Azure DevOps is used for code versioning and deployment • Deloitte scopes out requirements and iterates through each step of the development life cycle to create/modify dashboards; Azure DevOps is used for code versioning and deployment

Table 8-1. Activities to Support ICES Archival Portal.

Software Warranty

Section 9

Our mature project management processes, numerous quality assurance mechanisms, and use of experienced professionals with extensive IEDSS business and technology knowledge are all focused on delivering quality and mitigating risk.

We understand that even with the most diligent efforts, post-implementation defects **can** still occur. We are **committed to adhering to the State's requirements regarding software warranty** and to work diligently with the State to resolve the defects identified within the warranty period.

In addition, routine changes, as we will jointly define in the M&O support plan, will be performed at no additional cost to the State.

WHAT IT TAKES



**Proactive and transparent
identification of defects**



**Timely and accurate
defect resolution**



**In-depth understanding of
routine changes necessary
to support IEDSS**

WHY IT MATTERS

Defects must be identified in a timely manner to minimize business impact. We identify defects by performing data validations, monitoring batch outcomes, and analyzing incidents.

Defects must be rapidly resolved to minimize business impact. Deloitte has demonstrated our commitment and capability to act quickly. For our releases in 2021, the average resolution time for identified high-severity defects was 8 days.

Since we are already performing routine maintenance of IEDSS, we understand the State's expectations, the effort involved, and the frequency of these routine efforts. This experience helps you avoid surprises and misalignment of expectations. Our routine activities include dry runs for annual processes, data integrity validation, and support for an average of 350 daily batch jobs.

RFP Reference: Attachment F, 9. Software Warranty (Attachment C, Section 9)

9.a Acceptance of Software Warranty Requirements

RFP Reference: Attachment F, 9. Software Warranty (Attachment C, Section 9)

- a. Confirm your acceptance of the Software Warranty requirements in Attachment C, Section 9.

Deloitte stands by the quality of our work and **confirms our acceptance of the software warranty requirements in Attachment C, Section 9** as may be further defined in the Contract.

9.b Understanding of the No Cost Impact Requirements

RFP Reference: Attachment F, 9. Software Warranty (Attachment C, Section 9)

- b. Explain your understanding of the No Cost Impact: Routine Changes and Software Warranty requirements.

Our Understanding of Software Warranty Requirements

Deloitte will fix at no additional cost to the State (1) any post-production defects discovered during the 90-day warranty period and (2) any defects discovered during the 90-day warranty period that arise in a previously working component due to the rollout of a new change or enhancement. The hours required for the fixes will not count against the Enhancements Pool hours.

Process	How Deloitte Supports Warranty Requirements
Defect avoidance	While the software warranty provides an important level of vendor accountability, Deloitte provides the State the additional benefit of a proven team and proven process that have minimized occurrence of production defects. As part of our SDLC, we perform a set of regression testing scenarios (described further in <i>Section 5, Software Development Lifecycle (SDLC) Approach; Subsection 5.e, Multi-Phased Testing Approach</i>) to determine whether the modifications made to the system are having any adverse impact to existing functionality. As an example of our enhancement release quality, IEDSS releases in 2021 had no critical severity defects and fewer than 2 high severity defects per 10,000 hours of enhancement scope.
Defect identification	Our team works with the State to finalize requirements and obtain design approval before we start development. The approved version of the design is the agreement for how the system should work. An issue is identified as a defect when the IEDSS does not materially conform according to the approved design specifications.
Defect root cause analysis	Our pragmatic approach to root cause analysis identifies the code that caused the issue. We use our code repository's version control mechanism to pinpoint when and where a defect was introduced. This process identifies whether a defect has arisen in a previously working component due to a new change or enhancement.
Defect prioritization and scheduling	Deloitte works with the State and seeks your approval for prioritization and scheduling of defect fixes per the established process. Warranty defect fixes are deployed with scheduled releases unless otherwise deemed critical for expedited deployment by the State.

Table 9-1. Deloitte's Process to Support Warranty Requirements.

Our Understanding of No Cost Impact: Routine Changes

We understand and accept that routine changes made in the ordinary course of the Contractor's provision of M&O services defined within the scope of the Contract shall be made at no additional cost to the State. We also understand that the following activities are examples of routine changes that are included in the routine M&O of IEDSS that will be performed at no additional cost to the State, as we will jointly define in the M&O support plan:

- Activities necessary for IEDSS solution components to (1) function in compliance with federal and State laws and administrative rules, the State Plan, State waivers, State policies, and the operating manuals in effect at the time of this proposal submission, and (2) to correct deficiencies found after implementation of modifications
- Activities necessary to comply with new industry standards and operating rules associated with those standards
- Changes to operating procedures, schedules, and equipment configurations
- Activities necessary for the solution to meet the contractual performance requirements
- Activities necessary to confirm that data, tables, programs, and documentation are current, and errors are found and corrected
- Data maintenance activities for updates to tables, including database support activities
- Changes to scripts or solution parameters concerning the frequency, number, sorting, and media of reports

In *Section 6, M&O Services Approach*, we describe our approach for performing the M&O services defined within the scope of the Contract. We seek the State's direction for prioritization and scheduling of each work type, whether it is a defect, data fix, service request, or CR, and align to release. Deloitte works with the State to identify timelines for implementation based on joint prioritization of work within our Agile-based M&O Sprint team.

We also provide a detailed description of our approach to maintaining federal and State regulation compliance in *Section 11, Compliance with Standards and Regulatory Requirements*.

Based on our experience and knowledge of the existing IEDSS technical and functional landscape, we have thoughtfully proposed an M&O team that has the right knowledge, skills, and capacity to address the routine changes that are required. We facilitate delivery of routine changes that are required for the IEDSS solution and its operating environment, including batch schedule changes, access management, and COTS upgrades. The changes are performed in the regular course of M&O, without the State incurring any additional cost.

We understand and accept the requirement to follow the change management process for all CRs to avoid impact to the delivery timelines of the CR. In *Section 4, Project Management; Subsection 4.E, Change Management*, we describe our approach to performing the change management process activities defined within the scope of the Contract. We understand the requirements around CRs and their relationship to the Change Management process, and the relationship to the disputes clause which will be further defined in the Contract.

Transition and Turnover

Section 10

Transition and turnover of large, robust, and mission-critical systems like IEDSS can be costly, time-consuming, and risky. Even the most thorough transition of responsibilities does not capture the knowledge or replace the experience lost through departure of an incumbent organization.

By selecting Deloitte, the State maintains stability of business operations, continuity of in-flight priorities, and our momentum in successfully implementing and supporting IEDSS. This is particularly beneficial as the State navigates substantial changes such as the unwinding of the public health emergency, Central and Regional Change Center eligibility operations vendor transition, and the continuous improvement of IEDSS functionality, processes, and tools.

We look forward to a collaborative transition process that aligns with new contract requirements, enhances established project processes, and gradually leads to a Hybrid Agile SDLC.

Deloitte maintains talented professionals ready to support this contract transition and retains a cohesive team with intimate knowledge of your eligibility programs and systems. Our team members have optimized how they work together, with you, and with your vendor partners. Our experience minimizes your risk and saves your staff time because they can count on trusted hands to continue operating IEDSS.

WHAT IT TAKES



Experience performing similar services for Eligibility and Enrollment systems, knowledge of Indiana's business, and experience with each IEDSS technology



A seamless approach to transition activities that results in no disruption to business



Knowledge and experience to support an early, gradual transition to Hybrid Agile

WHY IT MATTERS

Without these fundamentals, the transition will take longer and be riskier. Our expertise across these areas, combined with our real-life experience operating and improving IEDSS, mitigates risk and maintains momentum for enhancing and optimizing the program.

The needs of your business and your constituents don't stop during a transition. Your stakeholders expect timeliness, accuracy, and compliance—only possible if you avoid business disruptions from IEDSS.

Our incremental and iterative Hybrid Agile transition approach maintains quality and consistency while we integrate transformative Agile principles into our operations.

Our Understanding of Your Transition Requirements

An efficient and low-risk approach is the best way to meet your objectives. As the incumbent vendor, we know there are transition tasks to meet your new RFP requirements and performance expectations, such as documentation of a State and Federal compliant project management plan, documentation of Hybrid Agile SDLC, and Hybrid Agile training for the State.

Further, we understand the importance of building on what we have accomplished together and accelerating the transition period for our collaborative team. Working with you through the challenges and lessons learned of implementing a new system and processes, we have a foundation of system knowledge, process know-how, and business understanding that allows us to build on this momentum when transitioning to your new contract requirements. This foundation allows us to complete the transition **faster**, with **low risk** and **efficient use of your staff's time**. It also allows us to support RFP contract enhancement activities and Hybrid Agile SDLC transition early.

By selecting Deloitte, the State of Indiana will avoid the risk, effort, loss of productivity, and uncertainty associated with a contractor transition. We offer **uninterrupted quality service delivery**, which in turn supports the State and its agencies in continuously serving the needs of over 2 million Hoosiers.

Why Deloitte – Our Approach to Initial Transition and Benefits

By choosing Deloitte, you will continue normal day-to-day operations with no impact to M&O activities, no lost productivity, and no delay to enhancement work. The following figure, based on the high-level activities put forward in the RFP and our experience, emphasizes the efficiencies that the State gains by selecting Deloitte over a vendor new to the project.

KEEPING THE MOMENTUM GOING FORWARD



Our strengths as the incumbent vendor:

- Our IEDSS team retains critical business, system, and program knowledge.
- We avoid operational risks related to system stability, timeliness, and program integrity.
- We document a state and Federal compliant project management plan that focuses on continuous enhancement of existing project practices.
- We can start Year One enhancement activities early.
- We gradually transition to a Hybrid Agile SDLC by performing a pilot before full rollout.

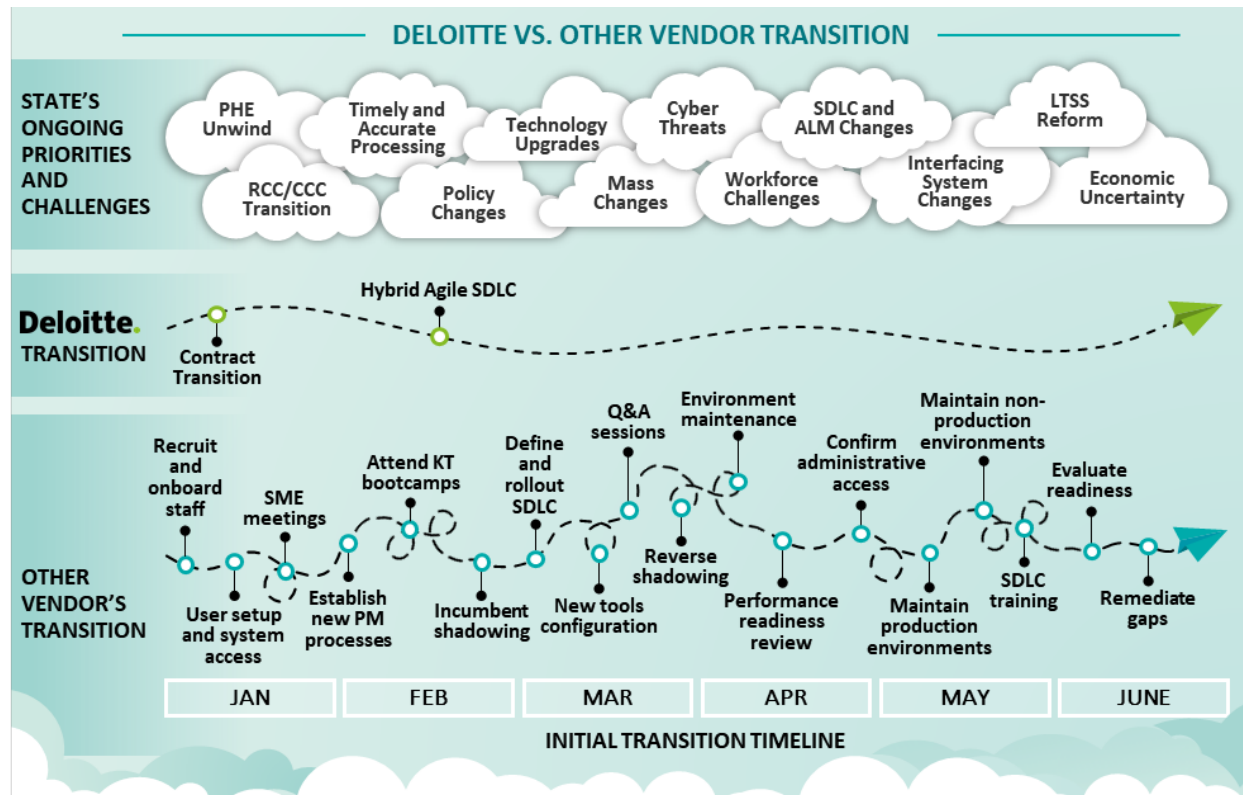


Figure 10-1. Road Map of Activities for Deloitte and Other Vendors in the Transition Period.

Even when a transition plan is well-executed, a new team still has a significant amount to learn at the end of six months about your programs, policies, operations, and technical environment. If the learning curve extends beyond the initial transition period, the State staff and stakeholders may bear the additional burden to continue KT and training and lose business continuity. This resource diversion would pull directly from the same pool of State staff critical to the success of your business operations. With our team providing IEDSS maintenance and operations services, there is no drain of limited State resources.

Our experienced team understands the size, scale, and scope of IEDSS and the technology that supports it. Our team also understands the underlying policy and business drivers that have influenced the system's current advanced state. Continuing with Deloitte as the M&O vendor offers the following benefits.

Focus Area	Benefit of Selecting Deloitte
Continue Driving Innovation and High Performance from Day One	<ul style="list-style-type: none"> Deloitte knows IEDSS business processes and the process goals of the State and thus can help Indiana rapidly adopt incremental improvements to productivity and efficiency. We are aware of the pending scope of work in the pool of enhancements, as well as the issues logged that need resolution. We can balance that work with the State's priorities. Deloitte can continue delivering major enhancement releases at the frequency the State is accustomed to. This means the first release as part of the new contract can go to Production as early as July 2023, as opposed to other vendors who may have a six-month gap until a major release, due to transition time. Our understanding of the IEDSS system architecture and our national network of talented technology practitioners lead to creative solutions and the identification of modern technologies that complement the existing framework.
Continue Day-to-Day Operations Without Disruption	<ul style="list-style-type: none"> Deloitte provides exceptional batch support and we have consistently completed batch jobs timely in the current contract period. Deloitte knows the IEDSS architecture, enabling us to help Indiana analyze and apply necessary changes. Maintenance activities can continue into the operation phase unabated because the Deloitte team's familiarity with maintenance activities remains intact. Project milestones and deadlines are not impacted by transition because the teams collaborating on projects remain the same.

Focus Area	Benefit of Selecting Deloitte
Maintain Workload and Efficiency of State Staff	<ul style="list-style-type: none"> State staff won't see an increase in workload or the addition of new responsibilities due to a vendor transition. Also, with no vendor transition, you eliminate budget risks associated with a full transition. Communications between Deloitte and the State remain stable with reliable project management processes already in place.
Maintain Effectiveness of Contractor Staff	<ul style="list-style-type: none"> The State can continue to benefit from the unique system and business knowledge Deloitte developed during our time collaborating on IEDSS. This is done by retaining Deloitte's staff, carefully selected for their skills and expertise which have evolved based on project requirements. This includes seamlessly guiding IEDSS through abrupt changes to interfacing partners and technologies because our teams understand the existing integrations with other systems. Deloitte teams continue to solely focus on their primary roles throughout transition, providing excellent support for operations, maintenance, and project activities. The successful history of collaboration with the State continues due to the relationships built and maintained with Indiana over the past decade. Our dedicated reporting team can continue to deliver accurate and timely data when requested because the team remains intact.

Table 10-1. Benefits of Selecting Deloitte.

Continuity of State operations and important initiatives impact the residents of Indiana and must be supported during the transition period and beyond. Deloitte provides the lowest risk for maintaining the momentum of these initiatives, and we limit the overall resource and business impact to the State that comes with a transition.

10.a Transition Approach

RFP Reference: Attachment F, 10. Transition and Turnover (Attachment C, Section 10)

- a. Describe your company's plan to perform the transition and turnover responsibilities outlined in Attachment C, Section 10 of Attachment C, specifically including the Initial Transition and the End of Contract Turnover. If certain enhancements and M&O activities are expected to be in-progress at the end of the Initial Transition Period, explain:
 - i. How you will support the in-progress enhancements and M&O activities (e.g., patching according to IOT monthly schedule, batch scheduling, security POA&M) and ensure a seamless transition
 - ii. What you will need from the incumbent vendor as part of transition activities
 - iii. How you will ensure there is no gap in service
 - iv. What assumptions you have about the incumbent and State's roles and responsibilities in the Initial Transition Period.

Our approach reflects our extensive IEDSS knowledge and experience that will enable the State to save time during the transition. As the incumbent vendor, our approach to transition is inherently different from that of other vendors. **We do not require any transition effort to continue the maintenance, operations, and enhancements of IEDSS.** We use our knowledge to continue operating IEDSS without disruption while enhancing project processes to meet new requirements and streamline project operations.

In this section, we describe how we approach transition requirements. Note that our approach minimizes State staff time commitment and allows you to prioritize your identified value-added activities. Our plan to perform the end of contract turnover appears in *Section 10.d, End of Contract Turnover Plan*.

Transition Overview

Due to our current work with the State, we know your business processes and understand the new scope in this contract. We are ready to transition on an accelerated timeline while continuing to maintain IEDSS functionality with **no gap in service**. As our transition activities are substantially simpler than those of a non-incumbent vendor, we propose adjusting the timeline outlined in the RFP to effectively use the six-month period to transition to the new contract and focus on your top business priorities, such as transitioning to Hybrid Agile methodology. Here is why this approach is optimal for the State:

- We focus on key activities that align with your business interests, such as transitioning to Hybrid Agile and continuing to support IEDSS functionality with no gap in service.
- We use time productively, because we build on existing documentation and processes and initiate the transition to Hybrid Agile from Day One of the transition.
- We mitigate risk of transitioning to Hybrid Agile through our proposed incremental transition and two pilots.

We plan to complete the six months of Initial Transition in two phases: Contract Transition and Hybrid Agile SDLC Transition. The details of activities in each phase are in *Appendix 9, Initial Transition Plan*.

Based on our experience and knowledge of IEDSS, we propose completing activities related to contract transition in the first three months. The following figure provides an overview of these activities. The timeline for each activity, which will be finalized upon project initiation, includes time for a Deliverables Expectation Document (DED), walkthrough and discussion, State review, Deloitte revisions, and final review/approval by the State.

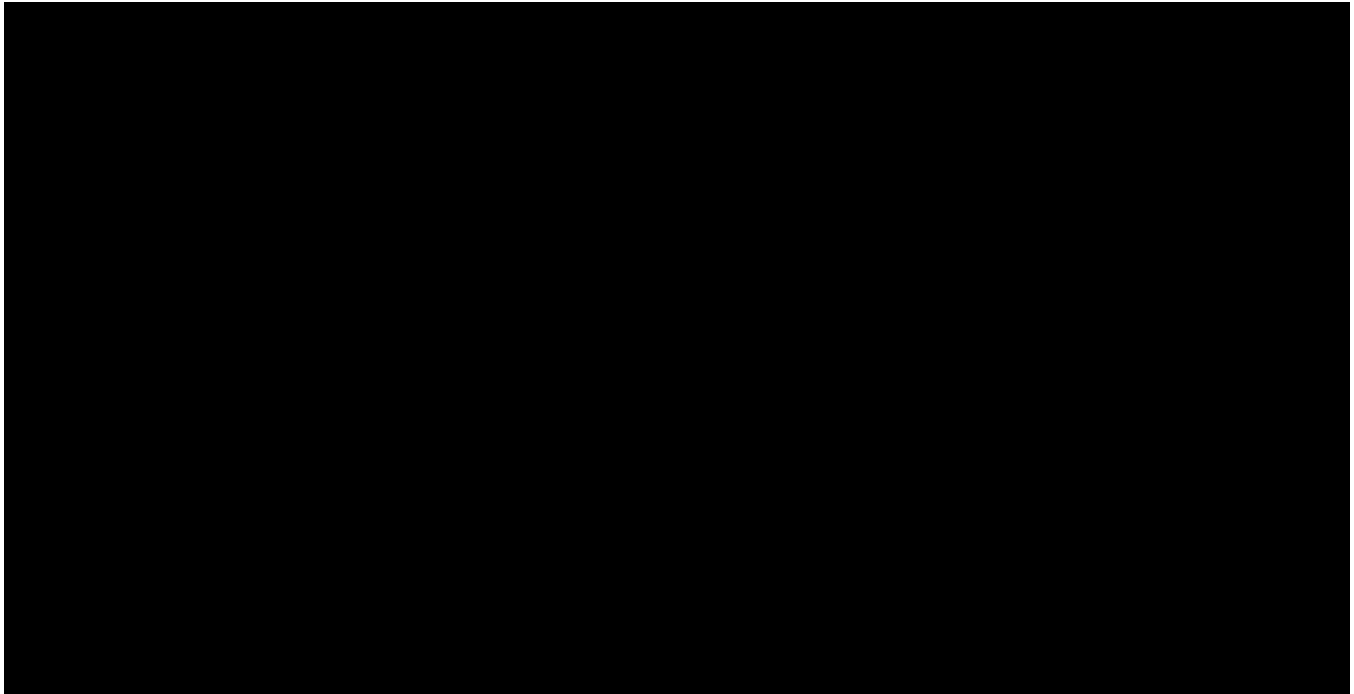


Figure 10-2. Contract Transition Major Activities Overview.

Due to our expertise and experience, we can shorten the time needed to transition to the new contract and use the transition period to begin our incremental transition to Hybrid Agile in the first month. We first refine our methodology and finalize the SDLC training plan in preparation for two pilot sprints of the new Hybrid Agile methodology to ease into the transition while maintaining IEDSS functionality. During these pilot sprints, we learn from the experiences and revise the SDLC documentation based on feedback received from the State before training a broader group of identified staff. The detailed approach for the transition to Hybrid Agile is in *Section 5, Software Development Life Cycle (SDLC) Approach*. The following figure gives an overview of our proposed gradual, low-risk transition to Hybrid Agile. Based on our experience working on Waterfall to Hybrid Agile transitions on similarly sized projects, we have found that a gradual approach with incremental refinement leads to improved stakeholder understanding and adoption of Agile principles.

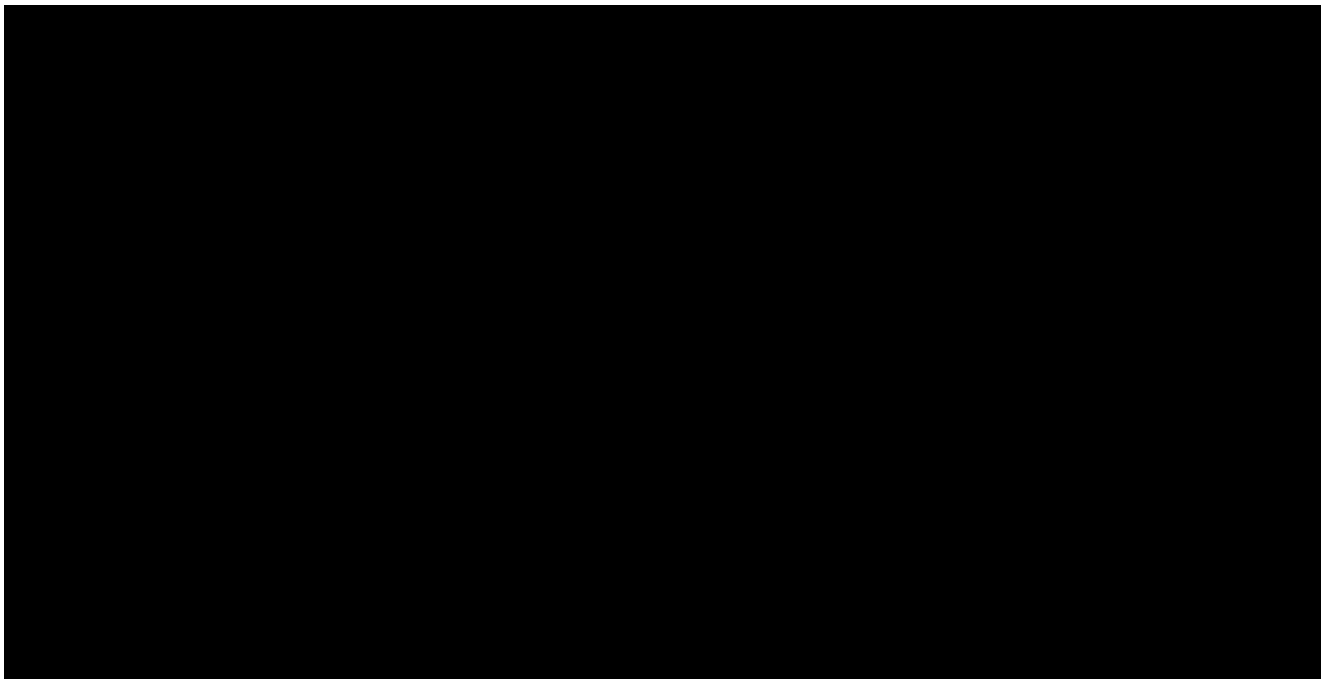


Figure 10-3. Hybrid Agile SDLC Transition Major Activities Overview.

Each activity is informed by our direct knowledge of the State's objectives, risks, organizational structure, communication preferences, and quality standards. As the incumbent, we can dedicate the transition to enhancing project processes and transitioning the complete processes and operations to the new Hybrid Agile methodology.

Transition Plan Activities

We classify the transition deliverables into the following categories:














As the incumbent, our team is already prepared to meet the requirements in the RFP. In contrast to vendors new to the project, Deloitte requires significantly less investment of the State's time.



No effort or investment of time is required from State or vendor resources due to our status as the incumbent vendor.

The detailed work plan for Initial Transition is in the *Appendix 9, Initial Transition Plan*.

Transition Month Per RFP	Deloitte Recommended Transition Month	Activity/Deliverable	Transition Effort	How Deloitte Meets this Requirement
1	1	Initial Transition Plan finalized, subject to State approval, including resources (quantity, type, and role) who will be available for all six months of the Initial Transition. Indicate what State and incumbent would make available to Contractor for Transition. Further, indicate the activities to be executed in each of the Initial Transition months. Items such as the Draft Initial Transition Plan expectations, timeline, activities listing, resources, etc., will be provided		Our Initial Transition Plan includes only activities related to contract startup. Based on our understanding of the new contract, we develop a work plan including the transition activities required to be completed during the accelerated transition period. These include: <ul style="list-style-type: none"> Facilitate kickoff meeting between State and Deloitte leadership to review scope and approach differences between existing and new contract Conduct contract overview session with key members of Deloitte Team Conduct contract overview session with key members of State team Update SLA Management Plan Update Project Management Plan (PMP) Update Master Test Plan

Transition Month Per RFP	Deloitte Recommended Transition Month	Activity/Deliverable	Transition Effort	How Deloitte Meets this Requirement
		by Contractor in their initial response to this RFP		<ul style="list-style-type: none"> Update Incident Management Plan Update Quality Management Plan Update Defect Management Plan Please refer to <i>Appendix 9, Initial Transition Plan</i> , for additional detail.
1	N/A	Evidence of participation in all training provided by the incumbent vendor in IEDSS operations and procedures		There is no IEDSS operations and procedures training to be performed, as we continue resources from the existing contract.
1	N/A	Confirmation of working read-only access to all aspects of the infrastructure and ALM, including State-issued credential process understood and realized for initial Contractor users		Deloitte continues to maintain the appropriate level of access through ongoing activities. We work with the State to identify any new users who require access to the infrastructure and ALM, and we provide the required access per our current process.
1	N/A	Begin shadowing the incumbent vendor and State on all aspects of Project Management, SDLC, and other IEDSS Support phases. This shadowing includes the monitoring of Helpdesk tickets that are routed to IEDSS and/or opened with IOT by IEDSS/workers		There is no IEDSS operations and procedures shadowing to be performed, as we continue resources from the existing contract.
1	1	Creation of ongoing Transition meetings with the incumbent vendor, DFR, and IOT		Transition meetings with the incumbent vendor do not apply to us. We work with the State to schedule ongoing Transition meetings with DFR and IOT as outlined in the finalized Transition Plan.
1	N/A	If applicable, work with the incumbent vendor on the timing of any change of employment of incumbent vendor staff		This does not apply as Deloitte is the incumbent vendor and we continue with our existing staff.
2	2	Clarify points of contact for all aspects of IEDSS support that DFR and its partners will use going forward		As part of the Project Management Plan, Deloitte clarifies the points of contact for all aspects of IEDSS support activities for DFR and its partners. There is continuity of points of contact from Deloitte's existing contract.
2	N/A	Begin incumbent Contractor "reverse shadowing" activities for supporting the Contractor awarded this RFP and the State as this new Contractor takes on additional IEDSS responsibilities		Deloitte will not require reverse shadowing activities for supporting the current and ongoing process and support activities.
3	2	Documented Project Management Plan, in compliance with State and federal requirements, subject to State approval		We review and update the existing PMP to align with the requirements of the new contract. We submit the updated PMP to the State within 30 days of the contract start date and work with the State to revise and resubmit for final approval by the end of the second month of the project initiation.
3	N/A	Confirmation of transition of the incumbent vendor to read-only access to all aspects of the infrastructure and ALM		Deloitte continues to maintain the appropriate level of access through ongoing activities.
4	1-6	Documented Hybrid Agile SDLC, in compliance with State and federal requirements, subject to State approval		We understand your RFP objective to use and improve a Hybrid Agile approach for application development, and we work with you to achieve that through process definition, documentation, and training.





Transition Month Per RFP	Deloitte Recommended Transition Month	Activity/Deliverable	Transition Effort	How Deloitte Meets this Requirement
				To mitigate the risk associated with transitioning to a new methodology, we propose an incremental transition that begins in the first month. We first refine our methodology and train pilot cohorts in Months 1 and 3, perform two pilots and retrospect beginning from Month 2, and train the remaining identified staff in Month 5.
4	1	SDLC Training Plan finalized for training DFR and its partners who will be involved in requirements/design, testing, implementation, and other SDLC monitoring and/or supporting activities		During the first month of the initial transition period, we review and finalize the SDLC training plan. We revise the plan in the third and fifth months based on our pilots. Please refer to <i>Appendix 9, Initial Transition Plan</i> , and <i>Section 5, Software Development Lifecycle (SDLC) Approach</i> , for more details on how we will finalize the SDLC Training Plan.
5	1	Execution of SDLC Training Plan		In the first month, we begin conducting training sessions per the SDLC training plan with the identified Pilot 1 cohort. In the third month, after learning and incorporating feedback from Pilot 1, we conduct training sessions with the rest of the team. In the sixth month, after learning and incorporating feedback from both pilots, we conduct training sessions per the revised SDLC plan with the remaining staff. Please refer to <i>Appendix 9, Initial Transition Plan</i> , and <i>Section 5, Software Development Lifecycle (SDLC) Approach</i> , for more details on how we will execute the SDLC Training Plan.
5	N/A	Completion of all training provided by the incumbent vendor in IEDSS operations and procedures		Deloitte does not require KT related to IEDSS operations and procedures from the incumbent vendor because we are already familiar with the system and related procedures.
5	N/A	Completion of shadowing of the incumbent vendor staff in the promotion of releases to production, as well as maintenance of the production and non-production environments		As the incumbent vendor, Deloitte does not require shadowing of the promotion of releases into production, or of the maintenance of production and non-production environments.
5	N/A	Confirmation of full administrative, edit access for appropriate staff		Deloitte continues to maintain the appropriate level of access through ongoing activities.
6	5	Complete Execution of SDLC Training Plan		We complete training sessions per the revised SDLC plan with the remaining staff following the pilots of the transition to Hybrid Agile.
6	N/A	Role of promotion of releases to production, as well as maintenance of the production and non-production environments, fully transferred to Contractor		During the initial transition period, all promotion of releases to production and maintenance of the production and non-production environments will be performed as part of the incumbent contract.

Table 10-2. Transition Plan Activities.

10.a.i Continuous Support of In-Progress M&O Activities and Enhancements

As the incumbent vendor, we continue executing in-progress M&O activities as part of our incumbent contract with the State throughout the transition period per the terms of that contract. We plan and prepare for M&O activities that occur after the transition phase during the initial transition period, such as batch scheduling and release plans. We take a coordinated approach to managing the two contracts concurrently such that the distinction is nearly invisible to State staff.

After the transition period, we begin to perform M&O activities under the new contract per the terms of that contract. The cutover between contracts will appear **virtually seamless** to stakeholders. The changes that occur upon the July 1 contract cutover include:

- Execution of project management processes as agreed upon in the Project Management Plan
- Execution of M&O processes as agreed upon in operational documentation, including delivery of technology upgrades and patches as part of M&O services and tracking performing against new service levels

The following figure visualizes how our incumbent contract aligns with this RFP contract's initial transition and Year One M&O phases:

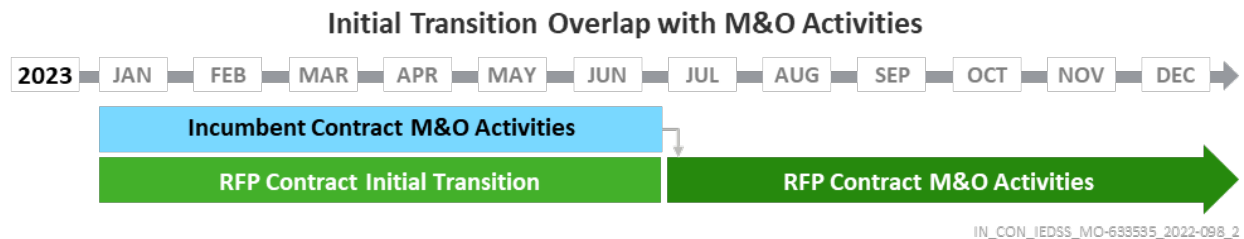


Figure 10-4. Initial Transition Overlap with M&O Activities.

Similarly, we continue executing enhancement work as part of our incumbent contract with the State through the transition period per the terms of that contract, where the final release starts in August 2022 and completes in June 2023. In accordance with what is indicated in the RFP, we can start working on enhancement activities starting with Year One, which is July 2023. However, we propose discussing an alternative approach where we begin working on the enhancement pool scope as early as Day One of the initial transition phase. This approach allows for **seamless continuity of enhancement releases** and continued progress towards the State's vision with a **similar release frequency** you and your stakeholders have become accustomed to. It minimizes the gap between enhancement releases that would otherwise occur during the transition between the incumbent contract and this RFP's contract. This approach is visualized in the figure below:

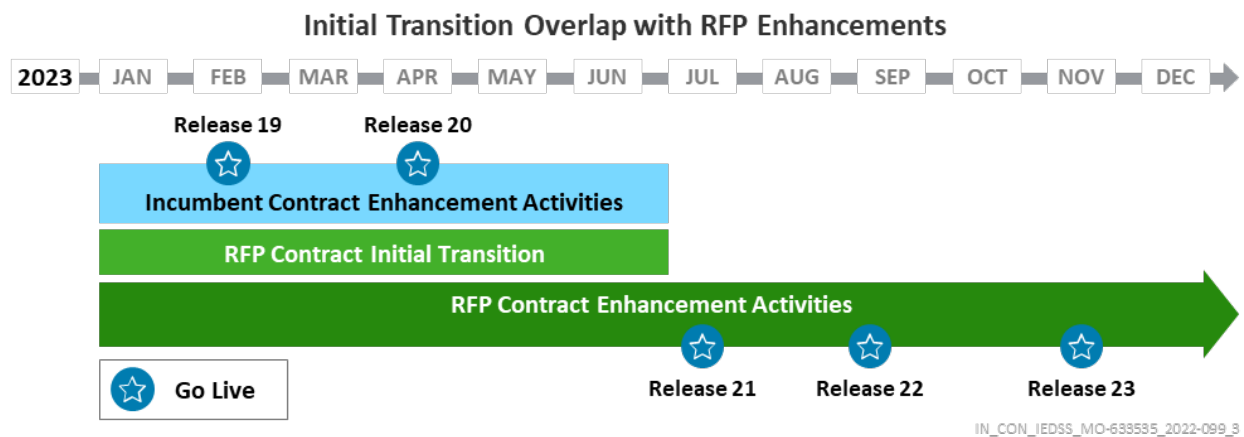


Figure 10-5. Initial Transition Overlap with RFP Enhancements.

We carry the knowledge and experience in seamless execution and delivery of some of the complex key M&O activities and enhancements. We have gained expertise in handling such timebound activities parallel to planned transition activities through our continuous lessons-learned approach and innovation. During the transition period, as part of the incumbent contract, we continue delivering the ongoing M&O activities and enhancements necessary to maintain IEDSS functionality while executing activities related to contract start-up. After the transition period, we continue to support those key activities without any gap in service as part of the new contract.

10.a.ii Transition Activities

Since we are the incumbent and are continuing existing resources, our transition activities will be managed in an integrated and coordinated manner.

10.a.iii Confirming No Gap in Service

As the incumbent vendor, we continue to use existing resources and processes, incrementally enhanced per this proposal and transition activities, to maintain IEDSS functionality throughout the transition period with no gap in service. We use this transition period to finalize and improve operational processes for the new contract.

10.a.iv Transition Assumptions

Assumption	Assumption Description
Assumption 1	The State will provide owners for their tasks in the workplan who can perform the tasks within the proposed timeframes of the work plan.
Assumption 2	The State will provide timely review and feedback before all formal deliverable approvals.
Assumption 3	The Contract Start Date will be January 1, 2023, which is when Transition activities will begin. Year One of the contract begins July 1, 2023.
Assumption 4	Deloitte will have access to State-provided staff to participate in documentation review and standardization discussions during the documentation review phase of the transition.
Assumption 5	Our approach is based on the terms of the incumbent contract that is in effect at proposal submission.

Table 10-3. Transition Assumptions.

10.b Initial Transition Plan

RFP Reference: Attachment F, 10. Transition and Turnover (Attachment C, Section 10)

- b. Include a proposed Initial Transition Plan with your proposal. Provide a detailed timeline for all Initial Transition activities, including the proposed start and end date for each activity. Include as part of the activities any data requests for the State and incumbent vendor, system access requests, transition meetings, shadowing activities, reverse shadowing activities, and gradual change in ownership for specific M&O tasks and system access (read, changes, admin).

Our proposed Initial Transition Plan is detailed in *Appendix 9, Initial Transition Plan* and includes a timeline and descriptions for all Initial Transition activities.

10.c Identifying and Recruiting Qualified Staff

RFP Reference: Attachment F, 10. Transition and Turnover (Attachment C, Section 10)

- c. Describe how you will identify and/or recruit the necessary qualified staff as part of the Initial Transition, and the timing on recruiting, training, and onboarding activities.
 - o Please confirm that you have factored into your Initial Transition Plan risk mitigations for delays in identifying or recruiting qualified personnel to fill each position and in conducting the necessary knowledge transfer from the current contract to the new contract awarded through this RFP.

As we continue to **retain our existing highly experienced IEDSS staff** for our ongoing M&O activities, we also strategically address the specific staffing needs for enhancements by investing in the selection of qualified staff with our industry-recognized recruitment process.

Continuity of Existing Staff + Focused Transition Team

As the incumbent vendor, we continue our existing staff who know your systems and stakeholders. This helps mitigate the risk of recruiting new staff, providing no loss of momentum or time with ongoing M&O activities/enhancement as we transition to the new contract. During Initial Transition, we engage our experienced Transition Manager [REDACTED] and a supporting team focused on the Hybrid Agile transition, who are supplemental to our incumbent team. Our incumbent IEDSS staff provide subject matter expertise, participate in future state visioning, and join learning activities during the initial transition period, but remain primarily focused on business as usual with minimal disruption to day to day activities through June 2023.

While we bring resources who have worked with the State in the past and know your applications, processes, and stakeholders, we recognize there are changes between the current contract and this one. We conduct all-hands meetings with existing staff to train them on the changes to services, stakeholders, performance standards, processes, and expectations in the new contract. This focused session enables us to expedite training and get the team focused quickly on productive work.

We invest in our personnel's continuous learning and development through our robust and structured training programs. These training programs can scale up the knowledge of our existing experienced IEDSS staff in Hybrid Agile methodology.

Recruiting New Qualified Staff

As the enhancement pool hours specified by the State for this RFP are less than the enhancement pool hours allocated for the current contract, we have an opportunity to carefully and selectively scale our team down to meet the new contract's demands and anticipated scope of work. While we have a full team identified to continue into the new contract, we understand there will be times where business needs require us to bring in different skillsets or fill vacancies, and we follow our existing process to bring in new resources.

Please refer to *Section 12, Staffing* for more details on our staffing, onboarding, and offboarding approach.

10.d End of Contract Turnover Plan

RFP Reference: Attachment F, 10. Transition and Turnover (Attachment C, Section 10)

- d. Include a proposed Turnover Plan with your proposal. Provide a detailed timeline for all Turnover activities, including the proposed start and end date for each activity. Include as part of the activities any requirements of the State and successor contractor, turnover meetings, shadowing activities, reverse shadowing activities, and gradual change in ownership for specific M&O tasks and system access (read, changes, admin).

Our Understanding of Your Turnover Requirements

Deloitte works collaboratively with the State, the successor contractor, and other project stakeholders during the turnover phase to support the successful handover of the M&O activities and responsibilities. We know that the primary concern during the turnover phase is a smooth and timely turnover that reduces adverse impacts to workers or end users. In addition, we know that the new successor contractor's primary objective is to gain the system knowledge required to take over M&O responsibilities. Our proposed Turnover Manager and team on the ground work with you, the new successor contractor, and other stakeholders through our three-step turnover approach to support a smooth transition of services, transfer tasks and operations, and aid in the future success of the overall project.

Having been both a new incoming successor contractor and an incumbent, Deloitte has unique insight into what IEDSS-specific turnover challenges to expect. We also have plans to mitigate these risks. Recognizing that IEDSS applications M&O activities must continue with minimal adverse impacts to stakeholders during this period, our turnover approach is based on achieving several key critical success factors:

- A **Turnover Manager coordinates the turnover activities** to confirm we do not adversely impact ongoing M&O activities that must continue in parallel.
- Deloitte continues our practice of **open communication** and provides M&O turnover status reports to State leadership, IEDSS application business and technical owners, and other stakeholders.
- Together with the State, Deloitte **maintains a team** with the functional, technical, and operational knowledge of IEDSS Applications, supporting effective Knowledge Transfer (KT) to the new support organization.
- Deloitte's **proven KT methodology** utilizes combinations of baselining exercises, training sessions, system demonstrations, job shadowing, and ongoing KT assessments to prepare and assess the proficiency of IEDSS and the successor contractor to take over IEDSS M&O responsibilities.



- Proven knowledge transfer methodology to prepare and assess the proficiency of the State and the new support organization for successful Turnover
- Gradual, low-risk approach to limit the potential for adverse impacts on IEDSS stakeholders
- Our collaborative approach to maintain the right team of functional, technical and operational knowledge to support effective knowledge transfer to the new support organization

Turnover Approach

The key to an effective project turnover includes working side by side with the State throughout the project, so the State understands key decisions made, how the project is operated, and what the key assets are and where they are stored. We propose that the turnover phase be completed in a gradual, low-risk approach to limit the potential for adverse impacts on IEDSS stakeholders. To achieve this, Deloitte has a Turnover Manager responsible for confirming that the IEDSS Project receives the needed support, commitment, and oversight to meet its contractual requirements related to turnover activities. KT is also built into normal project activities, providing resources with a more extensive timeframe to learn the system and operations. Our Turnover approach consists of three steps to support effective turnover of functional, technical, and operational knowledge and responsibilities of the IEDSS Applications M&O to the new support organization.



- Deloitte’s proven turnover approach:
- Leverages proven knowledge transfer methodology
 - Brings extensive successful experience from turning over a number of large complicated systems
 - Provides incremental, thoughtful approach for successful Turnover, including ongoing KT that may be integrated into project work

The State’s requirements for the turnover task are well-defined, and our ability to provide a structured and disciplined approach helps us collectively achieve this complex and risky task efficiently and effectively. We have found that establishing a collaborative environment and well-defined processes early on are important aspects of delivering a smooth, timely, and uninterrupted turnover. These techniques help us be prepared in the event a turnover is required. The objectives of the turnover task are realized using a structured approach that provides benefits to the State as outlined in the following table.


Objectives	Our Approach	Benefits to the State
 Transfer of Knowledge	We maintain well-defined and disciplined documentation standards for the design, processes, and architecture of IEDSS established during the project. Our team is accessible to the State and successor contractor staff during the Turnover process to answer questions and provide guidance.	Deloitte provides the State and successor contractor access to project documents, content, and work products throughout the contract. This increases familiarity and decreases additional time and effort to become familiar with supporting documents and content during the turnover period.
 Collaboration	Deloitte executes project activities collaboratively throughout the contract. Our team members actively work side-by-side with their State and successor contractor team members to successfully prepare and accomplish project activities.	We provide the State and successor contractor the opportunity to absorb and practice completing the same project tasks, applying the same procedures, and using the same tools as our resources. This alleviates the burden that a large volume of information creates when a formal turnover is scheduled for a set period at the end of the contract.
 Continued Business Operations	We prioritize business-critical activities and align resources based on knowledge and technical skillset to address issues proactively.	Our well-defined process enables a continuous transition to avoid impact to existing business operations, enabling a smooth and timely turnover without disruption.

Table 10-4. Benefits of Our Turnover Approach.

Turnover Stages and Activities

System turnovers carry an inherent risk due to changing roles and responsibilities. Through our experience, we have found that one of the best mitigations of this risk is effective reporting of turnover activities. During the turnover phase, Deloitte continues open communication and provides an M&O Turnover Assessment Report at least monthly to report on the progress of turnover activities by Deloitte, the State, the successor contractor, and other stakeholders as appropriate. We work closely with the State to define the key reporting metrics required to effectively report progress and identify activities at risk of falling behind during the turnover phase.

Turnover Planning

During Turnover Planning, Deloitte begins activities by reviewing the transfer system turnover plan. The team will review the documented objectives and collaborate with project stakeholders to expand the project's current governance structure to include turnover governance. In addition, we will create a detailed timeline for activities, roles, and responsibilities of key turnover personnel for our team; and manage the turnover process by assigning ownership for turnover activities. This is done to help confirm that services are turned over smoothly while minimizing adverse effects to the State, its customers, or stakeholders. The final Turnover Plan elements are discussed and determined through collaboration between Deloitte and the State.

During the turnover planning, Deloitte understands the importance of communications and interactions with the State. Whether reporting the turnover status to the State and other stakeholders or interfacing with the successor contractor to turnover IEDSS knowledge, Deloitte extends our practice of open communication and professionalism to the successor contractor and other turnover stakeholders.

At the beginning of the turnover phase, Deloitte works with the State, new support organization leadership, and other required stakeholders to review a detailed Turnover plan covering turnover roles and responsibilities and a mutually agreeable turnover schedule.

Turnover Plan Execution

To enable a smooth and successful Turnover, Deloitte's Turnover Manager monitors progress and manages scheduled and ad hoc meetings and other communications, mitigating risks and issues regarding the Turnover Plan and activities. Deloitte provides consistent staffing to the State, including key personnel and management throughout the turnover execution. As part of turnover plan execution, the existing M&O team is utilized to assist in executing turnover activities and to make sure that assistance does not impact current operations. As part of the turnover execution portion of the Turnover Plan, Deloitte provides operational procedures that describe how maintenance is performed for the solution through M&O Procedures, Operating Manuals, and End-User Support/Training documents.

A description of how Deloitte executes our Turnover Plan, per your requirements, is provided in the following table.

Asset	Description of Asset
Deliver Key Assets	The turnover schedule defined in the Turnover Plan details the delivery timeline for the key assets identified above. Deloitte commits to delivering the key assets in the agreed-upon format per the schedule.
Hold Briefings	Deloitte understands that turning over project assets also requires comprehensive KT associated with those assets, as documentation and assets for a system of this size and scope are often complex. We hold briefings and walkthroughs with relevant participants to discuss the status of the assets, the relevant history of the assets, and a comprehensive overview of the asset purpose, structure, and other key information.
Complete Training	Deloitte recognizes that complete KT is one of the most critical pieces of the turnover process. We utilize various methods for facilitating the KT, such as training, meetings, demos, and documentation reviews, and collaborate with IEDSS and new contractors to determine the most effective method for turning over IEDSS.
Provision Location for Information Storage	Approved project documentation is stored on SharePoint and/or ALM. Subsequent updates to documentation are also stored in the same place, so IEDSS always has access to the latest version. Individuals with access to this site (State M&O staff or new service providers) may acquire their desired documents and make copies.
Address Issues in Relation to Turnover Plan Execution	Having authored and completed successful turnovers, Deloitte has a solid understanding of the process. We do, however, understand that issues may arise that affect successful execution. In such instances, we facilitate meetings or communications to the necessary parties to mitigate the risk and confirm that stakeholders have what they need to perform their turnover responsibilities successfully.

Table 10-5. Assets Deloitte Executes in Our Turnover Plan.



We successfully turned over the maintenance of IEDSS reference materials and online help to the State's selected vendor. As part of this turnover process:

- Turnover timing occurred in tandem with last update/build under Deloitte control to provide a clean start for the vendor.
- The Release Manager and team provided State/vendor points of contact exposure throughout planned releases.
- We scheduled kickoff and status meetings to set expectations on activities, timing, and documentation location and process updates.
- Deloitte conducted 8 to 10 sessions side-by-side with the State and the vendor to reinforce the approach.

We assemble KT materials needed to guide transfer sessions with the State and the new support organization near the beginning of project turnover. Deloitte also establishes a process so that there is no interruption of the provision of the services and no reduction in service levels during the handover period. We complete the KT of the services to the State or successor contractor and introduce the new successor contractor to relevant information and training to allow the successor contractor to maintain IEDSS.

The Deloitte Turnover Manager makes sure that the KT continues throughout the Project timeframe and the relevant training is completed two months before the contract ends. The Turnover Manager is also available for the last two months of the contract to provide support for questions or assistance requested by the State.

Knowledge Transfer

Deloitte uses its experience with effective adult learning to design each KT channel for the way adults learn best—from definition and clarity of skills, through demonstration, to hands-on immersion in the work, to support and shadow the State. The channels are used together to support skill acquisition, including shadowing activities, small workgroup sessions, and participation in ongoing IEDSS related items, status meetings, code walk-throughs, and activities related to critical operations of IEDSS (e.g., batch execution, correspondence, system configurations). We use both standard learning channels and unstructured Agile methods for knowledge sharing and mentoring. The figure below depicts the variety of learning channels offered during KT.



Figure 10-7. Turnover Manager Responsibilities.



Figure 10-8. Formal KT Services Focus Areas and Phase.

Most traditional approaches to KT involve individual specialists who remain focused on their role and area of knowledge. We believe KT and mentoring should be integrated and embedded into daily operations. Our approach encourages ongoing learning and higher levels of collaboration with State staff and the new successor contractor to promote the development of generalized specialists who acquire a broader set of skills and KT. True teaming increases the amount of exposure individual team members have to each other's knowledge and eliminates the risk of one team member monopolizing critical information. The figure on the following page describes the KT focus areas.

Each KT session focuses on the unique skills for the area, tasks, and the staff working in a particular role. In this way, these KT sessions apply the right channels to address ongoing learning until the State becomes fully self-sufficient. For each skill or activity area, the right channel should be selected to foster work while learning takes place, with the highest possible retention rate. Deloitte's experience in Indiana allows us to identify the combination of KT channels that are most effective in delivering the nuanced needs of the system and services of IEDSS.

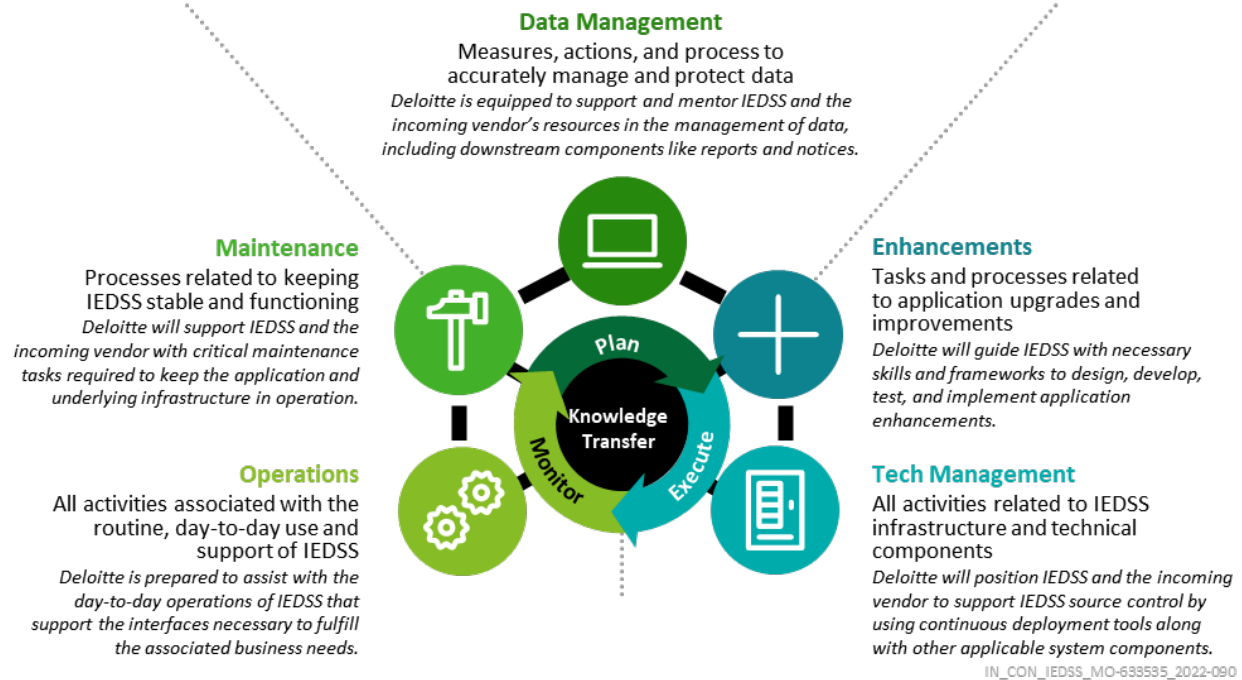


Figure 10-9. Formal KT Services Focus Areas and Phase.

Post-Turnover Activities – Support


The final phase is when we work with the State to weave into the turnover plan activities required to close out the project. We prepare the Turnover Checklist and Results Report, which provides written verification that items defined by the Turnover Plan have been successfully turned over and removed from Deloitte systems and that the project has been successfully closed. The Turnover Checklist and Results Report is reviewed and accepted during Turnover Closeout.

Turnover Roles and Responsibilities

Based on our experience in taking over and turning over HHS applications and systems, Deloitte knows that the right team is paramount to supporting a successful system turnover with minimal adverse impact to State stakeholders. It is not uncommon for outgoing successor contractors to immediately downsize their team and limit collaboration with the State or the successor contractor.

We emphasize our commitment to a successful turnover at the contract end and continuity of operations during this time. Based on the information available, our approach helps achieve these goals in the most cost-effective manner since we proposed no additional costs for turnover. We also understand that since turnover occurs at the end of the contract, circumstances may change (for example, there could be a very large, complex enhancement underway). If they do, Deloitte will determine in collaboration with the State whether an alternate approach is necessary.

The role of our proposed Turnover Manager is to manage activities related to turnover of the system, including serving as the POC between the Deloitte turnover team and the State, as well as managing activities to the Turnover Plan. Deloitte's proposed Turnover Manager has a background in systems analysis and project management and is already familiar with IEDSS and your team. He also brings extensive knowledge of HHS applications and systems and how to turn over those systems. Deloitte's Turnover Manager is highlighted below:



We expect the responsibilities of the Turnover Manager to vary based on the activities and timeframe, but do not expect this to require a full-time commitment, given that turnover activities will be performed by many members of the team, such as for the various knowledge transfer sessions.

The rest of our proposed turnover team consists of functional, technical, and operational SMEs serving in project roles within the on-the-ground IEDSS team in Indiana so that the best system knowledge is present during the turnover phase. Throughout the turnover phase, this team is available to answer questions and provide system information. Turnover activities need to be performed and managed to comply with the expectations and continue the project's momentum.

Overcoming Turnover Challenges

Turnovers carry inherent challenges due to conflicting high-priority activities occurring simultaneously. The following figure summarizes some of the challenges we have overcome as the successor contractor or incumbent vendor while providing turnover. It also highlights our strategy for mitigating risks during the turnover phase.

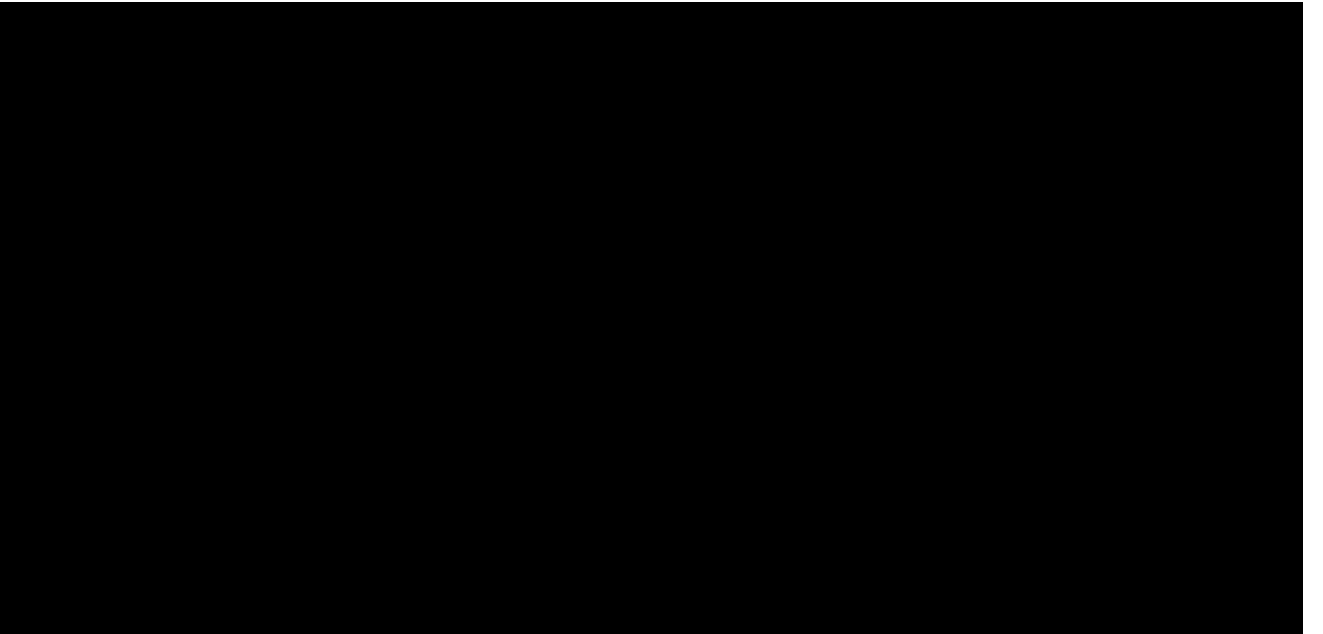


Table 10-6. Risks and Impacts of Turnover Activities.

Deloitte's approach to turnover activities is based on successful transition-in activities as well as turning over systems to both State staff and other successor contractors. Deloitte's plan and approach are based on a collaborative effort and desire to see our clients succeed. Refer to *Appendix 10, Turnover Plan* to view our proposed turnover plan.

Meeting End of Contract Turnover RFP Requirements

The State's requirements for the turnover task are well-defined, and our ability to provide a structured and disciplined approach helps us collectively achieve this complex and risky task efficiently and effectively. We have found that establishing a collaborative environment and well-defined processes early on are important aspects of delivering a smooth, timely, and uninterrupted turnover. These techniques help us be prepared in the event a turnover is required. Below, we describe how Deloitte plans to meet each End of Contract Turnover RFP requirement.

Eight Months Prior to the End of the Base Contract Period

Deloitte agrees to develop and implement a turnover plan at least eight months before the end of the contract. This M&O Turnover Plan identifies a turnover strategy and approach that reduces adverse impacts to end users and beneficiaries. This turnover includes three phases that drive the knowledge and system asset transfer from Deloitte to the State or successor contractor. Our approach utilizes a blend of KT mediums based on the audience and topic. Deloitte establishes turnover activities budget; outlines turnover governance; and finalizes, submits, and receives approval for the State's turnover plan. We attend weekly and monthly meetings and provide a monthly assessment report.

Upon agreement with the State, we plan activities with stakeholders such as baselining exercises, training sessions, system demonstrations, job shadowing, and knowledge transfers assessments to prepare and assess the proficiency of the State and the new support organization. Our plan is based on a collaborative effort and the desire to see our clients succeed.

Features of Our Approach	Benefits to the State
Leverages proven KT methodology	Proven KT methodology to prepare and assess the readiness of the State and the new support contractor to support successful turnover of M&O activities and enhancements.
Enhanced Collaboration with the State and new support contractor	Our collaborative approach to maintaining the right team of functional, technical, and operational knowledge to support effective knowledge transfer to the new support contractor.
Extensive experience successfully turning over several large, complicated systems	Brings uniquely qualified team to overcome both common and unforeseen challenges.

Table 10-7. Benefits of Our Approach.

Deloitte will provide a KT plan with the new contractor and State as part of the turnover plan. The plan will include activities such as Deloitte appointing a Turnover Manager who manages and coordinates turnover activities set forth and is available as needed for the entire turnover period of eight months. More information on roles and responsibilities may be found in the Turnover Roles and Responsibilities section.

Requests for updated data and reference files, scripts, and other documentation and records required by the State or agent are provided within 15 business days of request.

Please refer to *Appendix 10, Turnover Plan* for a detailed turnover plan.

Six Months Prior to the End of the Base Contract Period

Deloitte agrees to transfer the information listed in *RFP Attachment C, Section 10, Transition and Turnover*, to the State or its agent on a medium acceptable to the State six months before the end of the base contract period, including extensions. This includes user, provider, operational manuals, interface documentation, and other documentation developed to support business activities. For example, Deloitte maintains and updates the IBM health policy artifact that depicts our strategy to monitor the health of the JVMs in terms of load balancing of the active users, excessive memory usage, and higher response time. The artifact contains:

- Process to implement the IBM health policy and automate the monitoring mechanism
- Parameters considered to drive optimal efficacy through IBM health policy
- Outcome of the implementation

Deloitte agrees that four months before the end of the contract, we will train the State staff or its designated agent's staff. Our approach utilizes a blend of options to meet the State's learning objectives in the way adults learn best. Our proven KT methodology utilizes combinations of the following: job shadowing, boot camps,

immersive learning, self-study, etc. Also, the full team is available for the last two months of the contract to provide the requested support.

The First Four Months

During the initial four months of the turnover period, Deloitte will focus on conducting KT sessions to the State and successor contractor, allowing the State's and successor contractor team to shadow us in day-to-day activities and making them familiar with the system and business processes. This will help the State and successor contractor teams to execute future releases more independently.

The Final Two Months

In the last two months of the turnover period, Deloitte will actively be involved in reverse-shadowing the successor contractor in each aspect of M&O and release activities to production/nonproduction environments. Deloitte will continue to support the successor contractor for aspects related to application access and infrastructure access.

By the End of the Contract

At the end of the contract and completion of the turnover period, Deloitte will submit a Turnover Checklist and Results Report for review, acceptance, and approval. The checklist will include returning any State-owned property and termination of Deloitte personnel's access to State infrastructure and facilities.

Optional Contract Terms

Deloitte agrees that those turnover activities shift to the next year if optional contract terms are exercised during turnover activities. If turnover is halted due to the State exercising an optional term extension, invoices do not include Turnover Manager costs after the date for halt until those activities resume in the following year.


Compliance with Standards and Regulatory Requirements


Section 11

Deloitte remains committed to working together with the State to comply with federal standards and regulatory requirements, including agency policies, by using an industry-proven approach informed by our experience helping the State of Indiana and HHS agencies across 46 other states. We bring leading practices, lessons learned, and Indiana-specific knowledge from our 30 years working with the State. Deloitte continues to work with the State to maintain the IEDSS security posture and regulatory compliance through regular assessments of security control effectiveness, proactive identification of vulnerabilities and gaps, remediation of vulnerabilities and gaps, and security monitoring of the IEDSS worker portal. Deloitte documents the security posture in compliance artifacts such as the System Security Plan (SSP) and Plan of Action and Milestones (POA&M) to demonstrate how IEDSS addresses regulatory requirements and supports the State with internal and external audits.

WHAT IT TAKES

 **Security Monitoring:**
Deep understanding of IEDSS application framework, security-related business processes, underlying infrastructure, and data stores

 **Compliance Management:**
Rationalized security requirements by combining State policies, federal standards, and regulatory requirements into a single baseline

 **Vulnerability Management:**
Years of experience in application security vulnerability scanning coupled with institutional knowledge of IEDSS intricacies

WHY IT MATTERS

IEDSS operational knowledge is critical to Security Information and Event Management (SIEM) alert triaging. Mapping SIEM tool alerts to business contexts and historical event patterns provide insight into suspicious activities and determine whether those activities constitute a threat.

This provides the State a structured methodology to identify, manage, track, and measure compliance against the standards and regulatory requirements, which also assists in maintaining Authority to Connect (ATC).

This activity secures the application to defend against evolving cyber threats and increasingly malicious and sophisticated attackers.

RFP Reference: Attachment F, 11. Compliance with Standards & Regulatory Requirements (Attachment C, Section 11)

Deloitte recognizes the importance of complying with the accessibility, security, and privacy requirements for sophisticated systems such as Indiana's IEDSS worker portal. Integrating relevant security and privacy requirements into Maintenance & Operations (M&O) processes is key to keeping the systems secure and compliant. The State is entrusted with the public's trust to safeguard citizens' personal information. Safeguarding this information is essential to providing critical services to Hoosiers in need. Deloitte understands the importance of accessibility requirements, not just from a compliance perspective but also its impact on the lives of differently-abled users. We have tailored the IEDSS worker portal to make the web content more accessible by implementing Americans with Disabilities Act (ADA) compliant web pages and simplifying visuals.

Deloitte is a leader in providing end-to-end compliance services to state and federal clients. Our professionals specialize in providing Compliance Management services based on federal and state regulatory requirements (e.g., Minimum Acceptable Risk Standards for Exchanges [MARS-E] V2.2, IRS 1075 Rev 11-2021, HIPAA Security, ADA) relevant to the scope of services requested in this RFP. In addition to the State of Indiana, we have assisted 46 other states' health and human services agencies around the country with system integration, maintenance, and operation projects where we effectively and efficiently manage compliance requirements from federal and state regulatory requirements.



Deloitte not only has experience creating cybersecurity strategies and performing assessments against the NIST cybersecurity framework, but also has worked closely with National Institute of Standards and Technologies to support the development and the latest update to the Cyber security framework.

Our ability to provide business-aligned services, our hands-on "in the trenches" project implementation, M&O, and strategic experiences differentiate us in the marketplace. Our experience assisting state HHS agencies across the country has allowed Deloitte the opportunity to build strong relationships with federal stakeholders such as CMS, FNS, and IRS. We have professionals at Deloitte who work directly with these federal stakeholders, assisting them with establishing guidelines for the federal standards. Our ongoing relationships with these federal clients allow us to stay abreast of upcoming changes in federal standards and regulations and rapidly evaluate their impact on the systems we support. We understand the risks and key remediations that align with the regulations, making us the right vendor for this effort.

11.a Plan to Adhere to the Standards and Regulatory Requirements

RFP Reference: Attachment F, 11. Compliance with Standards & Regulatory Requirements (Attachment C, Section 11)

a. Describe your company's plan to adhere to the standards and regulatory requirements outlined in Sections 11 of Attachment C.

During the IEDSS DDI phase, we worked with the State to establish activities to comply with Federal standards (e.g., CMS MARS-E 2.2), Regulatory requirements (e.g., FISMA and State policies), and FSSA (Application Security Policies and Standards). One of the key factors of our success is our strong collaboration with DFR, IOT, FSSA, and other vendor partners. For annual self-assessments, Deloitte has worked with the State to establish a structured approach to demonstrate compliance with CMS MARS-E 2.0 standards. We are also currently assisting the State in understanding the changes in the new MARS-E 2.2 and creating a roadmap to comply with the new standards. As the incumbent vendor, our team understands the nuances of safeguards implemented for systems within the IEDSS authorization boundary. Going forward during the M&O phase, the plan to comply with relevant and evolving security and privacy requirements builds on the activities designed earlier.

The scope of Deloitte's compliance with security and privacy requirements from federal standards and regulatory requirements for our solution (i.e., IEDSS worker portal, supporting COTS products and ICES Archive portal) is CMS MARS-E v2.2, IRS Pub 1075 Rev 11-2021, NIST 800-53 Rev 5 and other regulations (listed in RFP Attachment C Scope of Work, Section 11 that are in effect at the time of proposal submission). We will work with the State to develop an impact analysis of new industry standards that may come into effect after submitting our proposal to this RFP (e.g., CMS MARS-E 3.0). Following the processes outlined in *Section 4.e, Change Management*, our team proposes to discuss changes to the system based on the impact analysis with the State, and formal approval is sought from the State to include them in the enhancements pool or no-cost CR, as appropriate. Additionally, the scope of maintaining compliance artifacts documentation (e.g., SSP) includes each of the systems that exist within the IEDSS authorization boundary (i.e., Agency Portal, Benefits Portal, CDMS, MRT, DFR Phone System, Worker Portal, ICES [Archive], and Biztalk) at the time of submission. Security and privacy activities established to comply with State policies, federal standards, and regulatory requirements are listed in the table below.



In addition to the worker portal application, we collaborate with the State to maintain the compliance artifacts of systems within the IEDSS authorization boundary (e.g., Benefits Portal, IVR, MRT).




Deloitte has shown our ability to effectively adapt to changes in regulatory landscape better than others:

- **We have collaborated with you** to seamlessly adapt to changes in CMS standards (e.g., from MARS-E 1.0 to MARS-E 2.0 and from MARS-E 2.0 to MARS-E 2.2)


Activity Name	Detailed Tasks	Comply with Standards and Regulatory Requirements
Compliance Assessments	<ul style="list-style-type: none"> • Track ongoing compliance with State policies, federal standards, and regulatory requirements • Conduct annual self-assessment of the information systems as mandated by CMS-MARS E V2.2 • Develop remediation plans for the gaps identified in the assessments • Update CMS MARS-E annual self-assessment report 	✓
Safeguards and Compliance Artifacts	<ul style="list-style-type: none"> • Implement administrative, physical, and technical safeguards to protect the confidentiality, integrity, and availability of the Personally identifiable information (PII), Protected Health Information (PHI), And Federal Tax Information (FTI) created, received, maintained, or transmitted • Authenticate against the IOT-managed Active Directory (LDAP) service for access (user and service accounts) • Implement Data Loss Prevention (DLP) tools on endpoints to prevent unintended disclosures of confidential data • Work with the State to create a role-based access matrix that defines the minimum access required by various roles to perform their work without enabling elevated privileges • Enforce authorization (role-based least privilege) requirements in compliance with State policies, federal standards (e.g., CMS MARS-E 2.2), and regulatory requirements (e.g., HIPAA) • Secure non-production and production environments according to required security standards 	✓

Activity Name	Detailed Tasks	Comply with Standards and Regulatory Requirements
	<ul style="list-style-type: none"> Update the relevant security artifacts (defined below) to reflect the current status of security and privacy safeguards. Except for major changes as defined by CMS and IRS, security artifacts are updated at the following frequency: <ul style="list-style-type: none"> Quarterly updates to Plan of Action & Milestones (POA&M) Annual updates to System Security Plan (SSP) Annual updates to Information Security Risk Assessment (ISRA) Annual updates to Safeguard Security Report (SSR) 	
Vulnerability Scanning	<ul style="list-style-type: none"> Conduct monthly Static Application Security Testing (SAST) and Dynamic Application Security Testing (DAST) to validate that existing vulnerabilities are resolved and that no new vulnerabilities are introduced Conduct manual analysis of the automated application scanning tool findings to determine false positives Conduct manual analysis of the automated infrastructure scanning tool findings to determine false positives Report security vulnerabilities to State stakeholders Remediate critical, high, and medium severity vulnerabilities and/or implement compensating controls, within the timeframes mandated by the MARS-E RA-5 and SI-2 controls, to reduce the residual risk to a level acceptable to the State Apply relevant security patches to the software and hardware to remediate infrastructure scan findings within the timeframes mandated by the MARS-E RA-5 and SI-2 controls Align IEDSS solutions to leverage existing security architecture (e.g., three-tier Protected Zones) 	
Application Security Monitoring	<ul style="list-style-type: none"> Generate, retain (90 days online and 10 years archive storage) and integrate (with State SIEM tool) audit logs Leverage Splunk ES SIEM tool for monitoring of audit logs to detect indications of suspicious activity Perform first-level triaging of alerts and escalate to the designated State stakeholders for investigation and resolution Create incidents and track as part of incident management for potential security violations 	
Security Testing	<ul style="list-style-type: none"> Update security test plan to conduct security testing for each major release to validate that security safeguards are implemented as designed, functioning as expected, and comply with federal standards, regulatory requirements, and State policies The topics covered under security testing include but are not limited to role-based access controls (positive and negative testing), identification and authentication, audit logging and monitoring, data protection at rest and in-transit Conduct security testing using CMS MARS-E V2.2 guidelines Remediate the gaps identified in the security testing Support the State during the third-party security assessment that is required every 3 years 	
Security Impact Analysis	<ul style="list-style-type: none"> Analyze the changes to the IEDSS system to determine potential security impacts prior to change implementation Security impact analyses include understanding the impact of changes and determining if additional security controls are required 	
Security Training and Background Check	<ul style="list-style-type: none"> Conduct security awareness training during the project onboarding for new vendor staff joining the project Annual refresher of security awareness training for vendor staff Periodic reminders on security do's and don'ts and security guidelines Completion of necessary background checks before joining the IEDSS Project 	
Data Handling and Incident Management	<ul style="list-style-type: none"> PHI and PII data to be handled securely and safeguarded by Deloitte staff and sub-contractors Limit using production data for testing or non-production usage Limit the collection and retention of PII (data minimization) to the minimum elements that are necessary to accomplish assigned tasks in accordance with the business need Triage potential security incidents to determine the impact on confidentiality and integrity of confidential information If confidential information is involved, notify State stakeholders within one (1) hour of when the potential security incident is discovered Mitigate, to the extent practicable, any harmful effect of security incidents of PHI and PII obtained under this contract 	
Status Reporting	<ul style="list-style-type: none"> Report weekly status of security and privacy relevant activities to State Stakeholders 	

Table 11-1. Security and Privacy Activities to Comply with State Policies, Federal Standards, and Regulatory Requirements.

[illegible]

Outcomes We have Achieved **Together**

- 15** iterations of functional security testing have been conducted to validate that security safeguards are implemented as designed and functioning as expected across release cycles
- 2** independent third-party assessment results from different vendors in 2016 and 2019 are a testament to the robustness of the security design
- 100%** of critical, high, and medium vulnerabilities identified by Static and Dynamic application scans are remediated
- 300+** security alerts from IBM Qradar/Splunk have been triaged since pilot, providing a profile of user behavior that fast tracks the triage process
-  successfully meeting CMS requirements for the last 8 years in maintaining IEDSS security artifacts required for ATC

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11.b Compliance with Requirements and Standards

RFP Reference: Attachment F, 11. Compliance with Standards & Regulatory Requirements (Attachment C, Section 11)

b. Confirm that the Respondent complies and will support the State in complying with the requirements and standards as written in Section 11.

We will comply with in-scope requirements and confirm that, our processes for M&O will also comply with relevant security and privacy requirements from the in-scope standards and regulatory requirements. The scope of Deloitte’s compliance with security and privacy requirements from federal standards and regulatory requirements for our solution (i.e., IEDSS worker portal, supporting COTS products and ICES Archive portal) is CMS MARS-E v2.2, IRS Pub 1075 Rev 11-2021, NIST 800-53 Rev 5 and other regulations listed in RFP Attachment C Scope of Work, Section 11 that are in effect at the time of proposal submission. The following table maps the M&O security activities we perform to the relevant agency policies, standards, and regulatory requirements, demonstrating how we plan to comply with each of the requirements.

Standards & Regulatory Requirements	Current and Continued Compliance Status	Ongoing M&O Security Activities to Maintain Continuous Compliance							
		Security Impact Analysis	Compliance Assessments	Safeguards and Compliance Artifacts	Security Testing	Vulnerability Scanning	Application Security Monitoring	Security Training and Background Check	Data Handling and Incident Management
Healthcare Insurance Portability and Accountability Act (HIPAA) privacy rules	✓	●	●	●	●	●	●	●	●
MARS-E Version 2.0 (and subsequent versions)*	✓	●	●	●	●	●	●	●	●
Internal Revenue Service (IRS) Publication 1075	✓	●	●	●	●	●	●	●	●
Federal Information Security Management Act (FISMA)	✓	●	●	●	●	●	●	●	●
Federal Information Processing Standards (FIPS)	✓	●	●	●	●	●	●	●	●
National Institute of Standards and Technology (NIST) privacy and security standards	✓	●	●	●	●	●	●	●	●
Policies and requirements in Contract Attachment B, Section 12	✓	●	●	●	●	●	●	●	●
FSSA Application Security Policies and Standards	✓	●	●	●	●	●	●	●	●
45 CFR § 155.260	✓	●	●	●	●	●	●	●	●
42 CFR § 433.112	✓	●	●	●	●	●	●	●	●
Medicaid Eligibility and Enrollment Toolkit (MEET) and Streamlined Modular Certification (SMC) Outcomes-Based Certification (OBC)	✓	●	●	●	●	●	●	●	●
Future FNS and CMS certification requirements, including CMS SMC Outcomes-Based Certification (OBC)*	✓	●	●	●	●	●	●	●	●
Social Security Administration (SSA) requirements	✓	●	●	●	●	●	●	●	●
Balanced Budget Act (BBA) of 1997 Subtitle H	✓			●					
Medicaid Managed Care rules, 42 CFR 438	✓	●	●	●	●	●	●	●	●
State of Indiana Code (IC) Title 4	✓	●	●	●	●	●	●	●	●
The Open Web Application Security Project (OWASP), including Application Security Verification Standard 3.0	✓				●	●			
FSSA Security Assessment Policy	✓		●	●					
IOT Policies, Procedures, and Standards including the IOT Information Security Framework	✓	●	●	●	●	●	●	●	●
State of Indiana security requirements found in IC 4-1-6	✓	●	●	●	●	●	●	●	●
SNAP information under 7 CFR §272.1(c)	✓	●	●	●	●	●	●	●	●
Food and Nutrition Service (FNS) handbook 901 (including Chapter 9, Systems Security)	✓	●	●	●	●	●	●	●	●
TANF information under 45 CFR §205.50	✓	●	●	●	●	●	●	●	●
TANF information under IC 12-14-1	✓		●	●	●	●			
Medicaid information under 42 CFR Subpart F	✓	●	●	●	●	●	●	●	●
Medicaid information under IC 12-15-27	✓		●	●	●	●			

Standards & Regulatory Requirements	Current and Continued Compliance Status	Ongoing M&O Security Activities to Maintain Continuous Compliance							
		Security Impact Analysis	Compliance Assessments	Safeguards and Compliance Artifacts	Security Testing	Vulnerability Scanning	Application Security Monitoring	Security Training and Background Check	Data Handling and Incident Management
Vocational rehabilitation information under 34 CFR §361.38	✓		●	●	●	●			
FSSA's security standards	✓	●	●	●	●	●	●		●
HHSS IT Access Control Standard requirements for Unique User Identification (UUI)	✓		●	●	●				
MARS-E 2.0 (and subsequent versions) requirements for UUI*	✓		●	●	●				
IOT's Information Resources Use Agreement (IRUA)	✓							●	
IOT standards regarding encryption of all communications (FIPS 140-2). Encrypt all data stores to the FIPS 140-2 standard	✓		●	●	●	●			
State's privacy guarantees as documented in Indiana Code 5-14-3	✓		●	●					
42 U.S. Code § 654a - automated data processing	✓		●	●	●		●	●	

Legend:

- ✓ M&O security activities complies with the agency policies, standards, and regulatory requirements
- Specific security activities performed to comply with agency policies, standards, and regulatory requirements

Table 11-2. Mapping Security and Privacy Activities to State Policies, Federal Standards, and Regulatory Requirements.

* We propose working with the State to develop a detailed impact analysis of new industry standards that may come into effect after submitting our proposal to this RFP. Following the processes outlined in *Section 4.e Change Management*, our team proposes to discuss changes to the system based on the impact analysis with the State, and formal approval is sought from the State to include it in the enhancements pool or part of standard M&O as appropriate.

11.c Verification of Compliance During the Contract

RFP Reference: Attachment F, 11. Compliance with Standards & Regulatory Requirements (Attachment C, Section 11)

c. Explain how above compliance can be verified during the Contract.

We leverage the artifacts aligned with each security and privacy activity during the contract term to verify compliance status.

Activity Name	Deliverables
Compliance Assessments	<ul style="list-style-type: none"> Annual self-assessment report Plan for remediation of gaps identified during assessment
Safeguards and Compliance Artifacts	<ul style="list-style-type: none"> Quarterly updates to POA&M and Bi-annual updates to CAP Annual updates to SSP, SSR, and ISRA
Vulnerability Scanning	<ul style="list-style-type: none"> Monthly SAST and DAST scanning reports for M&O; Quarterly SAST and DAST scanning reports for enhancements Monthly infrastructure scanning reports for M&O Plan for remediation of vulnerabilities identified during scanning
Application Security Monitoring	<ul style="list-style-type: none"> Weekly SIEM tool alert triage reports Weekly FTI user access report
Security Testing	<ul style="list-style-type: none"> Functional security testing report for each major release Plan for remediation of gaps identified during testing
Security Impact Analysis	<ul style="list-style-type: none"> Security impact analysis in change request with security impact
Security Training and Background Check	<ul style="list-style-type: none"> New hire IRUA training and security awareness training Annual refresher security awareness training Periodic reminders on security do's and don'ts and security guidelines

Activity Name	Deliverables
Data Handling and Incident Management	<ul style="list-style-type: none"> Notify State stakeholders within one (1) hour of when the potential security incident is discovered Monthly incident reports
Status Reporting	<ul style="list-style-type: none"> Weekly status reports

Table 11-3. Security and Privacy Deliverables.

Accessibility Requirements

IEDSS complies with the accessibility requirements from State laws (e.g., IC 4-13.1-3 Chapter 3. Accessibility Standards), federal standards, and regulatory requirements (including ADA, Section 508 of the Rehabilitation Act, and WCAG 2.1 [which outlines the Four Principles of Accessibility: Perceivable, Operable, Understandable, and Robust]). Deloitte coordinates with both IOT and DFR to prioritize and resolve identified gaps. The IEDSS worker portal system is currently compliant with the following accessibility requirements and will continue to be compliant during the M&O phase:

- Title II of the ADA
- 28 C.F.R. § 35.160
- 28 C.F.R. § 42.503
- Section 504 of the Rehabilitation Act
- Section 508 of the Rehabilitation Act
- HHS CMS MEET requirements for usability/accessibility
- FNS Handbook 901 requirements for usability/accessibility
- SNAP Guidance Best Practices for Online Applications
- Web Content Accessibility Guidelines 2.1 (WCAG 2.1)
- IC Title 4 (e.g., IC 4-13.1-3 Chapter 3. Accessibility Standards)



Deloitte has reviewed and complies with Website Accessibility per Title II of the Americans with Disabilities Act (ADA)* for both Enhancements & M&O

*Title II of the Americans with Disabilities Act (ADA), 28 C.F.R. § 35.160, 28 C.F.R. § 42.503, Section 504 of the Rehabilitation Act, Section 508 of the Rehabilitation Act, HHS CMS MEET requirements, FNS Handbook 901 requirements (as well as "SNAP Guidance Best Practices for Online Applications") and Web Content Accessibility Guidelines 2.1 (WCAG 2.1) for the ongoing Software Development Lifecycle (SDLC) requirements, design, testing, and defect resolution of the IEDSS solution Life Cycle.

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We confirm that our SDLC processes comply with the accessibility requirements from the in-scope federal standards and regulatory requirements. Compliance with accessibility requirements is verified during Unit Testing and Usability and Accessibility Testing. Please refer to *Section 5.e, Multi-Phased Testing Approach, sub-section a. Unit Testing, and sub-section h. Usability and Accessibility Testing* for Deloitte's approach to Usability and Accessibility Testing. Deloitte uses two tools to confirm compliance with Indiana's Accessibility Requirements:

- WAVE uses a suite of evaluation tools that helps make Web content more accessible to individuals with disabilities. WAVE can identify many accessibility and Web Content Accessibility Guideline (WCAG) errors and facilitate the human evaluation of Web content.
- JAWS, an assistive technology tool for ADA users, supports the users to perform actions in the IEDSS application by reading the screen elements.

When the JAWS version was upgraded to 2020, Deloitte successfully addressed each of the issues with the upgrade. This included JAWS not being able to read error messages, warnings, headers, and not being able to add new rows in tables. This experience and expertise will allow Deloitte to make the next JAWS upgrade easier with no hiccups. The following table outlines some of these improvements:

Principle	IEDSS Modifications for JAWS
Understandable	<ul style="list-style-type: none"> Left navigation and right navigation image hyperlinks are replaced with the text hyperlink for JAWS users. Now JAWS can read the text of the hyperlink to the users.
Operable	<ul style="list-style-type: none"> Making IEDSS Application UI session timeout in sync with server session timeout for JAWS users. JAWS could not read the PDFs opened in a Web browser. Changes were made to open the PDF using Acrobat Reader, which JAWS can read out for the user. Tab orders are corrected in the application, so ADA users can visit the Web page in sequence by pressing the Tab button.
Robust	<ul style="list-style-type: none"> Making JAWS read table headers in Dyna grid so it can read the field name of the cell where the user's cursor is placed.
Perceivable	<ul style="list-style-type: none"> Focusing the error messages on screen, so JAWS reads out the error messages for users to take the necessary action.

Table 11-4. Deloitte Has Configured IEDSS to be Compliant with Indiana's Accessibility Requirements.

Staffing

Section 12

As you have seen while working with us, we bring highly qualified, extensively skilled staff with program, policy, technology, and project management knowledge. It is the reason so many States select Deloitte to solve their most complex Eligibility and Enrollment problems. You have seen firsthand what our staff can do.

Our proposed team has led, designed, developed, tested, and supported the IEDSS project. We understand the State's work culture, business needs and mission statement. We do not show up each day only to do a job; we put our best effort forth with each task because your success is personal to us.

For example, in December 2021, the State experienced a problem with its Oracle database software. Our team worked with the State around the clock for 72 hours and helped triage and solve problems while managing other project requests.

Our staff knows that to continue to meet your goals and objectives, we must continue bringing innovative solutions to solve your greatest challenges, and we are eager to do so.

WHAT IT TAKES



A diverse and talented team that thoroughly understands Indiana, eligibility systems, and the numerous IEDSS technologies



Staff with a demonstrated record helping you to achieve reliable and stable system operations and meet your business objectives



The ability to adjust and scale the team to support your evolving business and technical needs.

WHY IT MATTERS

Because we bring resources you know and trust and are ready on Day One, the State realizes more effective coordination and cooperation between stakeholders. We anticipate your needs because we understand your work style and preferred methods of communication. This makes for effective use of your time.

In fewer than 80 days, our team implemented 30+ COVID-19 related system mitigations to provide immediate relief to the most vulnerable Hoosiers. We collaborated across agencies, coordinated across multiple vendors in a multi-stakeholder setting to implement quick, innovative, high-quality solutions in response to the pandemic to make sure eligible residents received the benefits as early as possible and to meet business outcomes.

Our network of Eligibility & Enrollment (E&E) specialists gives us unparalleled access to qualified candidates to leverage in the delivery of IEDSS. Our robust staffing pool allows our staff to exchange ideas, develop best practices, and implement lessons learned. Further, our combined experience from similar projects will help Indiana gain national insights of value to the project.

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

Our proposed team brings a combination of Indiana knowledge, nationwide HHS experience, and technical experience in the technologies that IEDSS uses. In fact, the individuals proposed have worked with HHS Eligibility and Enrollment systems in 14 states and have a combined 191 years of direct IEDSS experience. This blend of capabilities allows us to meet Indiana's needs now and into the future, providing efficient, low-risk M&O services that deliver ongoing stability to IEDSS end users.

Delivering a Hand-Picked Team

Our team was selected based on experience and the following five key attributes.



Figure 12-1. Staff Selection Metrics.

Continuity in Personnel. Our existing relationship with the State paves the way for effective and efficient M&O for IEDSS by continuing the work of the past nine years. For example, Technical Manager [REDACTED] brings more than 20 years of Indiana eligibility system experience and 23+ years of technology experience. Our proposed team is familiar with the technology, the business requirements, and the key stakeholders for this system. During the transition period, our team will focus on your forward-facing objectives and new optimizations, while other vendors would be focused on getting up to speed on basic operations and learning the solution.

Collaborative Working Style. We have taken time to understand your preferred working styles to deliver quality work in the most efficient way possible. Collaboration has been the driving factor in the team's success. To highlight an outcome of the team's continued commitment to collaborative work, we transitioned from a traditional co-located work style to a remote work model during the public health emergency. Deloitte and the State did not lose momentum. In fact, the team collaborated better than ever to meet deadlines and deliver solutions when faced with unexpected absences due to the COVID-19 pandemic.

Pride of Ownership. Having worked side by side with the State and each other for years, our team is proud of what we've accomplished together and looks forward to the opportunity to keep the momentum going forward. As a demonstration of their continued commitment to Deloitte's work on IEDSS, over 110 Deloitte employees and subcontractors working on our existing IEDSS contract have voluntarily signed a right to represent acknowledgment. It provides their acknowledgment and agreement that Deloitte has the exclusive right to represent them in all matters of and relating to work assignment and performance relating to the IEDSS System Maintenance and Operations RFP throughout the procurement process and for the term of any prime contract that may result from such procurement, including any extensions.

KEEPING THE MOMENTUM GOING FORWARD

- Our proposed team members have a 6-year average tenure with IEDSS.
- Many of our staff have spent a substantial portion of their careers supporting Indiana through their work at Deloitte, forming a personal connection with their peers, their State counterparts, and third-party agencies.

Transparency in Operation. Transparency at the project level can only be achieved with a team committed to transparency at the individual level. As we look forward to the transition to Hybrid Agile, Deloitte is committed to bringing the State along on each step of the process. Timely check-ins will provide a mechanism for the team to remain ahead of concerns and address any issues using the direction provided. Our staff's goal is to identify pain points and create solutions before they impact UAT and production. We are excited to continue to practice open communication and to strengthen relationships during the anticipated transition.

Commitment to Continuous Improvement. The team that we are delivering to the State has demonstrated a commitment to continuous improvement and a desire to enhance the overall experience for end users. As an example, as part of our SDLC process we have introduced demos to the state to help improve the quality of the deliverable and confirm the implementation is aligned with the business needs. Additionally, the Deloitte HHS and Labor Nerve Center is available to provide timely and relevant information to our teams on strategies and innovations, national best practices, and updates on any recent federal guidance that could impact their missions.

Supporting Indiana with a Leading National Government Practice

IEDSS is an advanced system that requires a deep knowledge of its technical framework, dependencies with other systems, and overall business processes. Deloitte has that knowledge, not only from our work in Indiana, but our active E&E work on similar systems in 26 states. IEDSS was built on Deloitte's NextGen solution, and as a result, Indiana benefits from our technical expertise pulled from across the nation. Our technical teams collaborate via a community-based model for technical design sharing and defect analysis, which expedites issue remediation and recovery process.

Deloitte has over 1,800 experienced E&E practitioners working with state and federal clients focusing on health, human services, and social services benefit programs such as SNAP, TANF, and Medicaid.

If a backfill is required for a vital or other staff member, Deloitte will identify a replacement who meets the requirements and requires minimal knowledge transfer based on their similar experiences. During this time of personnel shortages and uncertainty, Deloitte gives you the confidence of knowing that the state will continue to have an experienced team. By contrast, smaller firms do not have the capability to grow and retain specialized talent and scale projects up and down in the way that we do. The following figure depicts our team, and the deep bench of skilled practitioners Deloitte can pull from to support the State as additional needs arise.



In early 2021, the State's budgeted scope of work required Deloitte to roll off about 70 IEDSS team members. After subsequently prioritizing additional enhancements, Deloitte was asked to scale up IEDSS team to support. We were able to accommodate both requests to scale down and scale up the team due to the support Deloitte as a firm provides to project teams. The availability of other projects meant that our key team members had work during the scale down, and Deloitte's deep bench of resources aided in ramping the team back up to the required size.

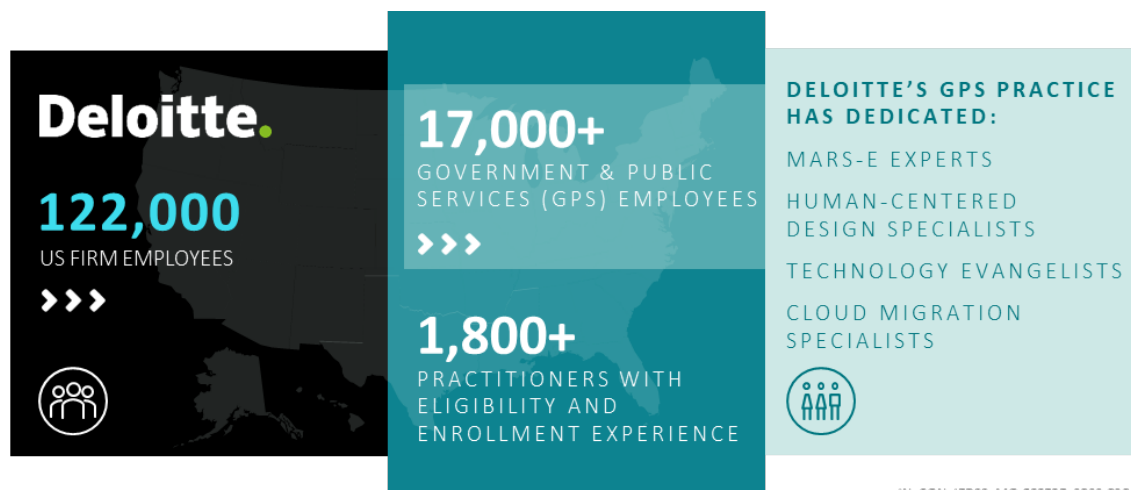


Figure 12-2. Deloitte's Resources.

Bringing the Required Level of Diverse Experience for Indiana

Deloitte develops and adheres to an approved staffing plan that includes the number, type, and categories of proposed staff and their qualifications (see *Appendix 11, Resumes*). Our approach to providing the right staffing expertise for IEDSS is based on four important qualifications: Indiana experience, Medicaid/SNAP/TANF experience, enhancement implementation experience, and M&O experience. These four factors differentiate our proposed team from other vendors and are highlighted in the following table.




The IEDSS Project Staff Named in Our Proposal Have:	
 191 YEARS combined experience committed to Indiana	Our team brings experience and specialties from years working with Indiana agencies leading, designing, developing, training, testing and/or supporting IEDSS. Through our experience and years with the State, the team has established a rapport with the State and its third-party vendors, learned and mastered Indiana's software systems (IEDSS), and gained practical and functional understanding of the tools used to implement these systems. These individuals have become a part of the Indiana work culture, assisting the State in meeting various business, system, policy, and procedure needs, and have worked alongside the State meeting the guidelines outlined in the mission statement.
 390 YEARS combined experience working on SNAP/TANF/Medicaid projects	<p>Our team brings extensive knowledge of Medicaid, SNAP, and/or TANF and the CMS, FNS, and ACF federal requirements for these policies and procedures. Having a deep understanding of the policy and procedures of Medicaid/SNAP/TANF programs allows the team to proactively anticipate risks to the program, provide mitigation strategies, understand the impacts due to legislative changes, and work alongside the State to confirm the system is meeting both business and policy needs. Additionally, Deloitte offers its staff opportunities to continue their policy education through online repositories of HHS policy and procedures curated by leaders in the field. Our proposed team provides a thoughtful and informed perspective to help you maintain compliance with federal and State requirements.</p> <p>Our team has the deep technical skills gained from practical experience and continuous training on tech trends and innovations to improve our systems. They are committed to leveraging their enhancement implementation experience to bring new ideas and infuse innovation into your business needs: creating efficiency, increasing automation, and driving improved cost controls. Our team, having built a relationship of trust and success with the State, is committed to working with you to identify and implement enhancements to continuously improve how IEDSS supports your business.</p>
 291 YEARS combined experience in M&O	Our team brings years of experience in large M&O systems with complex business rules and functions. Their M&O experience gives them expertise in transitioning/sharing system knowledge and procedures with their client counterparts. Additionally, they have experience with help desk support, processes, and efficiencies. They understand the critical mission of IEDSS and will operate against the M&O North Stars of uptime for your staff and issuing benefits on time and accurately for your customers.

Table 12-1. Our Team of Proposed Staff.

12.a Acceptance of Requirements in Attachment C Section 12

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- a. Confirm your acceptance of the requirements in Attachment C Section 12.

Deloitte confirms and accepts the requirements outlined in Attachment C, Section 12, and provides a brief response to each in the following table.

RFP Attachment C Section 12 Reference		Overview of How We Address the Requirements
12.1 General Staffing	Deloitte accepts the General Staffing requirements in Attachment C, Section 12.1, with our staffing approach further described in Section 12.b of this proposal, including how staff cover multiple M&O services and enhancement efforts; staffing plan development and adherence; and staff onboarding, retention, performance management, and offboarding.	
12.2 Vital Positions	Deloitte accepts the Vital Positions requirements. See Section 12.g, in which we describe how each staff member meets or, in many cases, exceeds the individual requirements. Resumes for each Vital Position are provided in Appendix 11. Deloitte has a highly qualified professional ready to step in, if the need arises, to backfill our vital team members.	

RFP Attachment C Section 12 Reference	Overview of How We Address the Requirements
12.3 Other Personnel Requirements	Deloitte accepts the Other Personnel requirements. We discuss our staffing approach for these roles further in Section 12.b. Additionally, we bring advisors with diverse, relevant experience who enhance the quality of our work, promote use of leading practices, and proactively identify and mitigate risk, all for the State's benefit. Details of these roles are in Appendix 11.
12.4 Subcontractors	Deloitte accepts the Subcontractors requirements and provides details on our subcontractors, our experience working with them, and their role on the project in Section 12. I.
12.5 Facilities and Parking	Deloitte has a facility in the Greater Indianapolis area which meets all the requirements defined in Attachment C, Section 12.5, of the RFP. Access to the facility is limited to appropriate and authorized personnel only. We meet the necessary security guidelines, including electronic security identification badges and electronic badge readers at all points of entry to control access for all authorized Deloitte employees and staff. Deloitte takes full responsibility for the cost of the facilities (including, but not limited to, leasing costs, parking fees, and utilities) and will not be reimbursed by the State.
12.6 Technology and Other Supplies	<p>Deloitte will provide the necessary hardware, software, accessories, and peripherals to our staff (including subcontractor employees) required to meet the necessary business, systems, and/or operational tasks and will not invoice the State. Deloitte is familiar with the State's rules and will continue to comply with applicable IOT, FSSA, and Indiana policies as well as meet MARS-E 2.0 (and subsequent versions) and all requirements. Deloitte's office has reliable and secure password-protected network connectivity, essential for State and Deloitte staff to perform day-to-day operations. All Deloitte team members, including subcontractors, have access to reliable and up-to-date equipment to perform their job responsibilities. This equipment will be able to connect to the State VPN, and Deloitte commits to managing the devices based on IOT and FSS policies.</p> <p>Deloitte provides all necessary office supplies to its staff, including subcontractors, required in meeting business, systems, and/or operational tasks and will not invoice the State.</p> <p>Deloitte understands that the State will provide one Multi-Functional Printer (MFP) for SDLC purposes to scan documents into non-production environments. Deloitte will work with the State to obtain written State approval if additional MFP devices are required. Deloitte will use the provided printer according to the requirements set by the State in this RFP.</p>
12.7 Background Check	Deloitte understands and will comply with the background check requirements described in Attachment C, Section 12.7. We would like to clarify that we have a duty to maintain confidentiality regarding the content of our personnel background checks. We will provide information about the results to the State sufficiently for the State to determine the suitability of our staff.

Table 12-2. Acceptance of Requirements in Attachment C, Section 12.

12.b Staffing Approach

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- b. Describe your overall staffing plan to fulfill the roles and responsibilities outlined in Section 12. List the positions you will staff on each of the following areas and explain and how they will be conducting the required support: Architecture, Program/Project Management, Business Analysis, Development, Testing, Technical, and Security.
 - i. For each proposed individual in a Vital and Non-Vital, please confirm that they will be working from the Greater Indianapolis area. If they are working from outside of the Greater Indianapolis area, please state the location from which they will work.

Deloitte's approach to staffing is based on our extensive experience maintaining and operating systems as we do in 26 states, including providing long-term M&O and enhancement services. We have a long history of avoiding "silos" in how we operate. Our organizational structure, communication channels, and the expectations we establish with our teams contribute to our successful retention of skilled, collaborative staff. We are nationally recognized for our approach to talent development and staff management. Deloitte's focus on the following key points allows us to retain high-quality staff throughout an engagement.

- We provide a consistent onboarding and training experience to our diverse team of resources so our practitioners can best meet our clients' needs.
- Our performance management model is designed to leverage our professionals' strengths to accelerate team growth, resulting in low rates of staff turnover on engagements.
- There are teams and processes in place to appropriately manage resources so there is enough capacity to successfully perform work when needed.

Our staffing life cycle focuses on promoting our own to maintain familiar faces and strengthen relationships with your staff.



Figure 12-3. Staffing Life Cycle.

Staffing Life Cycle	Description
Resource Identification	<p>We continue to prioritize using the team members actively supporting IEDSS. As vacancies arise, we consider the level of expertise and subject area specialization needed to meet or exceed the staffing requirements. We also proactively review our planned release calendar to identify new capabilities and skillsets needed, based on upcoming work to source, and onboard those resources before work begins.</p> <p>We recognize that the success of a project depends on the people working on it, and our understanding of your requirements gives us the ability to search for candidates that meet or exceed the role requirement for IEDSS. The Deloitte Project Management Team is responsible for resource staffing and works closely with dedicated Deloitte and subcontractor staffing managers.</p> <p>IEDSS requires a strong project team that is integrated across functional, application, and technical areas and has deep experience in providing the requested services. We provide project staff who are eminent in their respective positions with successful backgrounds and experience in other similar project environments.</p>
Resource Onboarding and Transition Approach	<p>Upon confirmation of a new team member, the Deloitte Project Management Team begins the onboarding process with the new resource. This process includes a variety of activities such as providing new team members with onboarding materials that explain the project scope and goals, facilitating team and staff overviews to give new team members an overview of the Deloitte and IEDSS project teams, facilitating a project process overview to explain project processes and standard cadence for activities, and facilitating a document repository overview of the Deloitte and IEDSS team's document repositories so that the individual can begin to search for, add, and edit documents as needed without additional support from the project team.</p>
Performance Management for Deloitte Employees and Subcontractors	<p>During engagements, we monitor the performance of our resources staffed on a project to identify possible performance issues. Practitioners conduct regular check-ins with their leads to report progress toward objectives and project goals. Additionally, project performance evaluations are conducted regularly for Deloitte employee project team members. Based on the goals set during project onboarding, the Project Manager and/or Team Leads evaluate the team member's performance during that period against their project goals and defined metrics. If project-related performance issues are identified for a project team member, the Deloitte Project Manager and/or Team Lead discuss and document an action plan to resolve the performance issue. Deloitte takes responsibility for the performance of our employees and subcontractors.</p>
Offboarding Team Members	<p>If the State determines that any Deloitte staff member is not performing satisfactorily and require the removal and replacement of that individual from IEDSS, Deloitte will develop a transition plan for the individual's replacement.</p>



Table 12-3. Staffing Life Cycle Details.

Our life cycle provides Indiana with qualified individuals; however, turnover is inevitable. We minimize the way this impacts you by having our staff document institutional knowledge in plans, procedures, checklists, and reports. Our repeatable and consistent processes reduce the consequences of normal turnover and successfully retain institutional knowledge. If an individual wishes to pursue other opportunities or leaves for other reasons, our deep bench of resources helps expedite the replacement, and we are prepared with a formal transition plan minimizing the turnover risk to the State.



Key Staff and Years of Experience

The following table provides a list of our key staff and highlights our staff's individual and combined years of experience.

Team/ Support Area	Position	Vital	Highlighted Resources	Years of Experience									
				HHS	Eligibility & Enrollment	Indiana IEDSS	Similar Technologies	SDLC	PM Tools	System M&O	DDI/Enhancements	Similar Position as Proposed	
COMBINED TOTAL YEARS OF EXPERIENCE				417	390	191	359	485	353	291	304	314	
Architecture	Application Architect	 		9	9	9	11	11	9	3	5	5	
	System Engineer/ Architect			3	3	3	6	7	3	5	5	4	
Program/ Project Management	Project Manger			20	20	4	20	20	20	18	20	14	
	Deputy Project Manger			11	9	7.5	17	18	11	6	18	6.5	
	Sr. Business Analyst (PMO Manager)			11	10	4.5	4.5	9	9	7	3	2	
	SDLC Coach			8	8	1	8	26	26	0	16	26	
	Transition Manager			5	3	3	3	14	6	1	14	5	
	Business Analysis			Sr. Business Analyst (Enhancement Manager)	11.5	11.5	6	11	10	11	6	5.5	3
Sr. Business Analyst				8	8	8	12	12	5	3	5	5	
				8.5	8.5	6	8.5	8.5	8.5	3	5.5	8.5	
Sr./Jr. Business Analyst				2.5	2.5	1	2.5	2.5	2.5	2.5	2.5	2.5	
Web/User Interface (UI) Architect				18	12	0	18	18	2	2	2	2	
Development	Sr./Jr. Programmers/ Developers				6	4	6	6	6	3	1	1	3
					8	8	8	8	8	8	3	3	0
			6.5	6.5	6.5	7	7	7	4	6.5	6.5		








Team/ Support Area	Position	Vital	Highlighted Resources	Years of Experience								
				HHS	Eligibility & Enrollment	Indiana IEDSS	Similar Technologies	SDLC	PM Tools	System M&O	DDI/Enhancements	Similar Position as Proposed
				5	5	5	8	5	7	8	5	5
				4	4	4	3	2	1	5	.5	6
Testing	Test Manager			22	22	7	22	26	4	18	4	4
	Sr. Tester – Business			9	9	5	9.5	9	5	4.5	7	9.5
				10.5	6.5	6.5	6.5	10.5	10.5	3	4	6
	Jr. Tester- Business			3	3	3	5	10	7	5	5	5
	Sr./Jr. Tester - Technical			7	7	7	12	12	12	5	7	7
				5.5	5.5	5.5	5.5	11	11	11	5.5	5.5
Technical	Application Manager			21	21	2	2	21	21	21	21	21
	Technical Manager			20	20	9	20	20	20	15	9	20
	Operations Manager			19	19	2	5	16	16	13	6	9
	Sr. Database Administrator (DBA)			4	4	4	12	12	1	10	10	12
	Jr. Database Administrator (DBA) (System Engineer)			7	7	0.5	8	7	7	3	0	6
	Sr. System Analyst (Scrum Master)			5	5	3.5	16	16	2	11	12	16
	Senior System Analyst (Release Manager)			30.5	30.5	7.5	7.5	31.5	20	20	25	5
	Sr. System Analyst (Incident)			7	7	7	7	11	3	3	8	3
	Jr. System Analyst (Deputy Scrum Master)			2.5	2.5	2.5	2.5	2.5	2.5	1.5	2.5	2.5
	Sr System Analyst (Batch/Data Fix Manager)			21.5	21.5	4	12.5	18.5	10.5	12.5	12.5	12.5
	Senior Busines Support Analyst			19	19	4	19	0	4	2	2	4
	Jr./Sr. System Analyst			25	25	8	8	27	25	20	8	27
				6	6	6	8	6	2	6	6	4
	Security	Security Officer			20	10	7.5	10	25	20	25	25
Security Architect				7	7	7	7	7	10	3	7	10.5
Security Analyst				1	1	0	1	2	1	1	0	1

Table 12-4. Our Proposed Team's Experience.

Staffing Plan

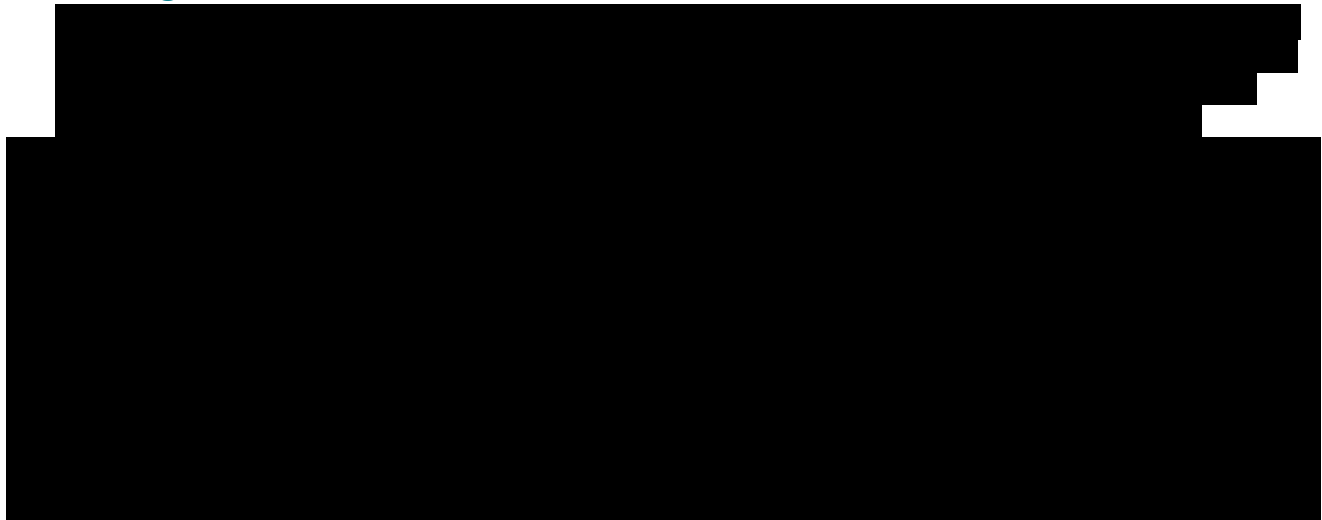
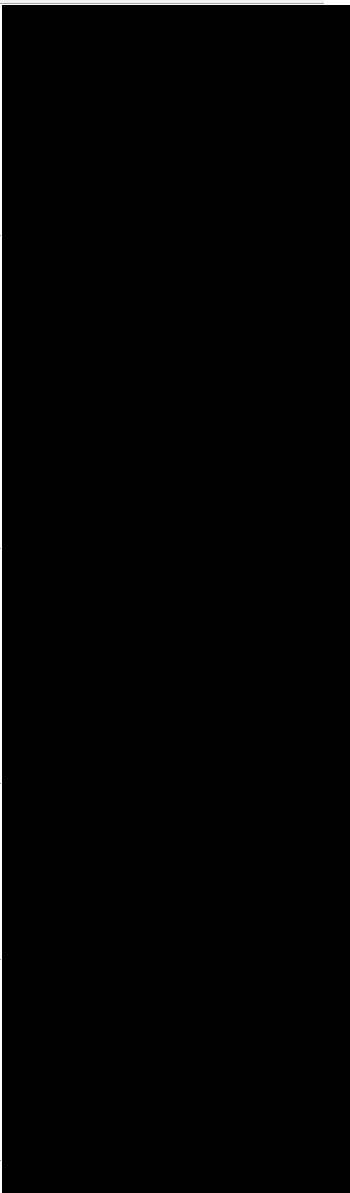





Figure 12-4. Proposed Staff for M&O and Enhancements.

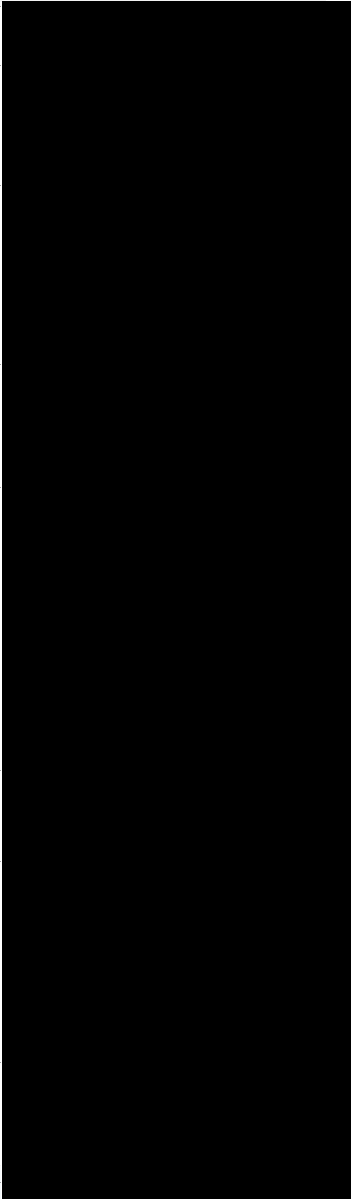




Team Positions and Support Areas


The following table describes the positions we staff in each of the specified areas and how they will be conducting the required support as requested in *RFP Attachment C, sections 3.1 and 12.b*. For each position, we have also identified one or more highlighted resources to represent the types of resources we will provide. We have included a resume for each highlighted resource in Appendix 11. We also indicate the location(s) from which they work. The Indianapolis icon represents located and working in the Greater Indianapolis area. The Indianapolis icon plus a two-letter State abbreviation represents a hybrid between availability in the Greater Indianapolis area and remote work in the specified state. Vital and Non-Vital positions will be available to the State during business hours for meetings and support regardless of location(s).



Team/ Support Area	Position	Vital Role	How They will Conduct Required Support	Highlighted Resources	Location
Architecture	Application Architect		<ul style="list-style-type: none"> • Work across teams to design software based on infrastructure made available • Leverage technical expertise in Java/J2EE-based enterprise applications and COTS products to provide direction in application design both in M&O and enhancements • Create solutions to optimize UI and UX while adhering to ADA Section 508 compliance for accessibility • Adhere to best practices to define and enforce coding standards, guidelines, and review strategies • Work with State counterparts to lead architectural changes, facilitate discussions on new technologies, and provide recommendations on performance enhancements. 		
	System Engineer/Architect		<ul style="list-style-type: none"> • Leverage technical expertise in designing, building, and maintaining large-scale J2EE applications to provide direction on application design and provide effective solutions • Build and maintain framework components for streamlining development activities • Provide design principles adhering to MITA architecture guidelines using technologies such as J2EE, Mule ESB, SOAP, and REST • Attend JAD sessions with State SMEs and Application leads to understand requirements and provide expertise on system design • Review and provide solutions on system design for enhancement activities and continue supporting the framework components during M&O • Work closely with the Application Architect on all new and existing system design and framework activities. 		
Program/ Project Management	Project Manager		<ul style="list-style-type: none"> • Leverage business, technical, and project management expertise to manage overall contract performance and compliance • Oversee performance of Deloitte and subcontractor resources • Enable quality and timely delivery of deliverables • Communicate regularly with State leadership to escalate and collaboratively resolve issues • Deliver full Deloitte corporate support by providing access to resources, ideas, solutions, and leading practices • Provide direct oversight of Deputy Project Manager and project leadership team. 		
	Deputy Project Manager		<ul style="list-style-type: none"> • Responsible for supporting the Project Manager in the day-to-day project management of the IEDSS project including overall performance and contract compliance • Able to leverage Deloitte's corporate support in the form of innovation, information, ideas, and best practices relevant to the IEDSS project's goals and challenges • Manage collaboration across teams to identify, communicate, and solve project execution problems • Communicate with State leadership for driving key decisions. 		
	Sr. Business Analyst (PMO Manager)		<ul style="list-style-type: none"> • Create and maintain a project plan, gather project progress data for active deliverables, and help in early identification of risks • Develop and distribute project's status reports • Responsible for quality assurance of deliverables, scheduling meetings for design sessions, and status reporting • Assist in conducting change control board (CCB) meetings and maintain effort data for enhancements 		

Team/ Support Area	Position	Vital Role	How They will Conduct Required Support	Highlighted Resources	Location
			<ul style="list-style-type: none"> Oversees administrative support. 		
	SDLC Coach		<ul style="list-style-type: none"> Assess training and new method adaptations Conducts team training throughout the transition adaptation process. 		
	Transition Manager		<ul style="list-style-type: none"> Manages work plan updates and works with project leadership on re-planning changes and reporting Monitors, reports, and tracks project action items, issues, risk, and changes. 		
Business Analyst	Sr. Business Analyst (Enhancement Manager)		<ul style="list-style-type: none"> Responsible for the delivery of enhancements in a major release, from inception and scope to post-implementation support Has a strong knowledge of overall IEDSS functionality Address and mitigate any questions or concerns from the State pertaining to the design of any enhancements in a timely manner Communicate with the State during retrospective sessions after major releases during the IEDSS Iterative Delivery SDLC methodology. Coordinates across scrum teams 		
	Sr. Business Analyst (Scrum Master)		<ul style="list-style-type: none"> Manage the day-to-day activity of the scrum team and remove any impediments the scrum team might have Manage the scrum ceremony meetings Coordinate between scrum teams and confirming there is transparency. 		
	Sr./Jr. Business Analyst		<ul style="list-style-type: none"> Leverage a strong understanding of business functionality such as policy changes, regulatory compliance, and operational processes to map them to technical requirements and design Conduct requirement gathering and detailed sessions to produce detailed designs and test scenarios Gather State requirements to develop processes that will work for the client team Apply garnered knowledge in resolving incidents that arise from the field and provide Level 1 support. 		
	Web/User Interface (UI) Architect		<ul style="list-style-type: none"> Support business analysis efforts for identifying UI/UX improvements under M&O and enhancement scope requirements Generate Human Centric Design (HCD) features that will reduce worker fatigue and ultimately improve productivity. 		
Development	Sr./Jr. Programmers/ Developers		<ul style="list-style-type: none"> Understand the system on a deep level based on knowledge gained from development contributions while building IEDSS Perform code fixes, code reviews, PMD/SONAR scan fixes, and thorough unit testing and lead testing Support in providing quick resolutions based on the severity of the issue at hand, run queries to evaluate data-integrity, and get a head start on issues so that they can be quickly resolved. 		
Testing	Test Manager		<ul style="list-style-type: none"> Develop and execute a comprehensive master test plan Formulate detailed test plans, scripts, and methodologies for each of the testing activities Oversee all testing activities across M&O and enhancements. 		
	Sr. Tester – Business		<ul style="list-style-type: none"> Provide functional expertise about enhancements and defects being fixed in the system 		

Team/ Support Area	Position	Vital Role	How They will Conduct Required Support	Highlighted Resources	Location
			<ul style="list-style-type: none"> • Provide test bed guidance to the team and coverage for regression. 		
	Sr./Jr. Tester - Business		<ul style="list-style-type: none"> • Oversee creation and execution of test scripts according to the test plan • Provide business support to the IEDSS Project • Review and analyze system specifications, prepare, and execute test cases, facilitate cross-team coordination, and document testing results. 		
	Sr./Jr. Tester - Technical		<ul style="list-style-type: none"> • Oversee creation and execution of test scripts according to the test plan and provide technical support to IEDSS • Deliver automation of test scenarios • Create web service test scenarios • Create database SQL queries • Monitor testing progress. 		
Technical	Application Manager		<ul style="list-style-type: none"> • Manage all IEDSS tracks and track leads • Manage system development and testing activities • Responsible for the preparation of all related status reports and deliverables • Make sure the team provides on-schedule delivery of change requests and system deficiency fixes. 		
	Technical Manager		<ul style="list-style-type: none"> • Facilitate technical changes and advancements through M&O and enhancements • Responsible for technology evaluation, product selection, scalability analysis, infrastructure sizing, capacity planning, data management, DevOps, and overall system and application architecture definition • Confirm that appropriate technical resources are available to IEDSS to expedite the discussion and resolution of all system and operations issues • Maintain technical artifacts, including work products, and modify them as needed during M&O and enhancements • Work with the state IT leadership to maintain a steady communication channel for escalations, discussions, and decision-making processes. 		
	Operations Manager		<ul style="list-style-type: none"> • Oversee contract services for the IEDSS solution and manage all associated project staff • Responsible for all IEDSS operations, including planning, development, batch processes, transaction processing, performance monitoring, and capacity planning/sizing. 		
	Sr. Database Administrator (DBA)		<ul style="list-style-type: none"> • Provide direct oversight to the DBA team and provide best practices and recommendations to the application, testing, performance, and architecture teams • Work with IOT DBAs and DFR in planning for patches, updates, instance-level DB issues, security, support for disaster recovery, and performance tuning • Coordinate with the State to create and maintain database instances that are sized appropriately to provide efficient operation • Manage archival and purge processes and anticipate data volume. 		
	Jr. Database Administrator (DBA) (System Engineer)		<ul style="list-style-type: none"> • Maintain and administer the IEDSS databases and monitor database server performance • Responsible for database configurations, customizations, and implementation of database environments • Work with the application, testing, and security teams for their database needs and implementation. 		

Team/ Support Area	Position	Vital Role	How They will Conduct Required Support	Highlighted Resources	Location
			<ul style="list-style-type: none"> • Work on ongoing database change requests), data fixes, DB security maintenance, and DB connection troubleshooting • Identify long-running SQLs and other DB performance issues through AWR, ASH, ADDM, memory advisor, segment advisor, and SQL tuning advisor. 		
	Sr. System Analyst (Scrum Master)		<ul style="list-style-type: none"> • Manage the day-to-day activity of the scrum team and remove any impediments the scrum team might have • Manage the scrum ceremony meetings • Coordinate between scrum teams and confirming there is transparency. 		
	Sr. System Analyst (Incident)		<ul style="list-style-type: none"> • Complete the triage of incoming production issues • Provide a root cause and remediation plan for reported production issues • Work with the IEDSS incidence team to resolve issues and address concerns. 		
	Sr. System Analyst (Release Manager)		<ul style="list-style-type: none"> • Manage releases across teams • Oversees the overall success of software maintenance • Conducts environment management • Manage risks and resolve changes that impact release scope, quality, and schedules • Communicate release plans and schedules. 		
	Jr. System Analyst (Deputy Scrum Master)		<ul style="list-style-type: none"> • Assist the scrum master • Manage the day-to-day activity of the scrum team and remove any impediments the scrum team might have • Manage the scrum ceremony meetings • Coordinate between scrum teams and confirming there is transparency. 		
	Sr System Analyst (Batch/Data Fix Manager)		<ul style="list-style-type: none"> • Manage overall batch operations, including scheduling, changes, and execution • Coordinate key batch events like COLA/FPIL updates • Coordinate with the State and partners to facilitate smooth and timely execution of the batch cycle. 		
	Jr./Sr. System Analyst		<ul style="list-style-type: none"> • Perform detailed system analysis to mitigate any technical issues • Review the code developed for enhancements, create the data model for changes to the system, conduct peer review, regression analysis, and run data integrity validations • Provide quick technical solutions to business problems based on in-depth knowledge of both EDBC and interface exchanges • Apply the garnered knowledge in resolving incidents by doing detailed triage and come up with the proposed resolution. 		
	Senior Business Support Analyst		<ul style="list-style-type: none"> • Complete the triage of incoming production issues • Provide a root cause and remediation plan for reported production issues • Work with the IEDSS incidence team to resolve issues and address concerns. 		
Security	Security Officer		<ul style="list-style-type: none"> • Oversee security audits and reviews to monitor system compliance and collaborate with State to recommend remediation strategies • Attend weekly status meetings with State security and privacy stakeholders to escalate and collaboratively resolve issues 		


Team/ Support Area	Position	Vital Role	How They will Conduct Required Support	Highlighted Resources	Location
			<ul style="list-style-type: none"> Confirm that the security risk posture of the IEDSS worker portal system is maintained at a level acceptable to the State Collaborate with IEDSS application and technical teams to confirm that the IEDSS worker portal continues to comply with CMS, FNS, SSA, and IRS requirements. 		
	Security Architect		<ul style="list-style-type: none"> Interpret security requirements from state policies, federal standards, and regulatory sources Work with the IEDSS application and technical teams to implement security requirements across security domains Oversee development of application security scan reports (both Static and Dynamic), QRadar SIEM alert triage reports, security testing reports, and compliance artifacts to maintain the security risk posture of the IEDSS worker portal system at a level acceptable to the State Drive continuous improvement of all security processes to safeguard against evolving security threats Develop information security risk plans and risk mitigation strategies to remediate vulnerabilities and security gaps Collaborate with application teams, DFR, and IOT stakeholders for ongoing security audits and reviews. 		
	Security Analyst		<ul style="list-style-type: none"> Develop status reports for weekly meetings with State stakeholders Conduct security awareness and training of the project team Conduct security testing to confirm that security and privacy safeguards are implemented as designed and are functioning as expected Report to security officer the status of security and privacy activities within the scope of the IEDSS worker portal Work with the IEDSS technical teams for hardening and maintenance of COTS products Work with the IEDSS application teams for remediating application scanning vulnerabilities. 		

Table 12-5. Team Positions and Support Areas.

Project Advisors

We have carefully selected leaders with extensive expertise and a specific responsibility to serve as part-time advisors to IEDSS at no additional cost to the state. These advisors have established relationships with the named vital staff and will share their skills attained from Indiana and similar business/technology solutions with the project team to formulate a solution best tailored for Indiana. The advisors will bring their years of experience and lessons learned to set implementation quality above standards while delivering, improving efficiency, identifying, and mitigating potential risks, and bringing experiences from other states.

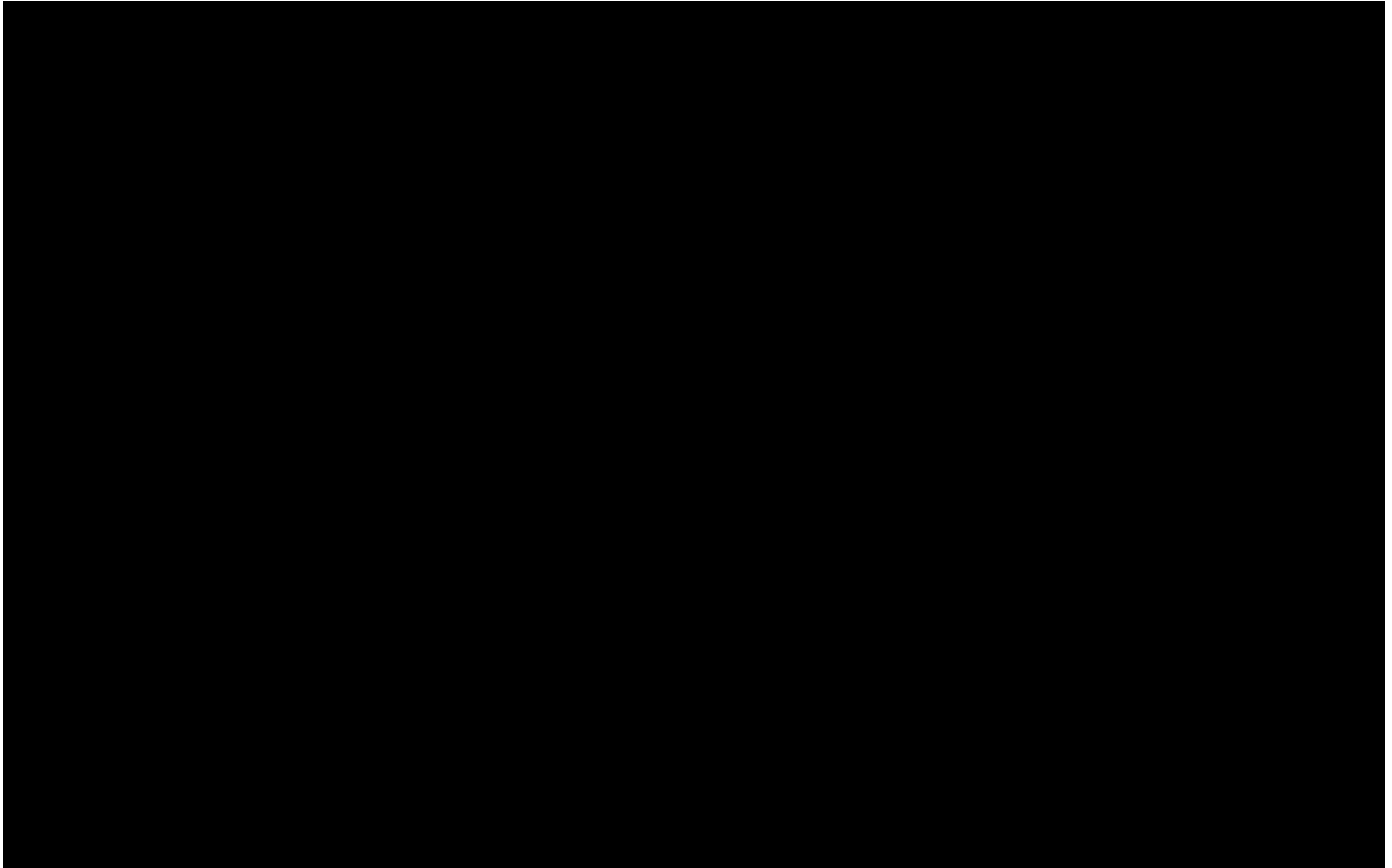
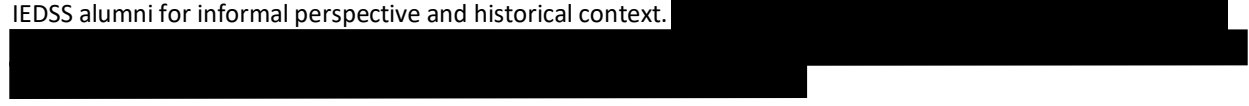


Table 12-6. Project Advisors.

In addition to the formal advisors, the State also benefits from Deloitte's ability to leverage the expertise of our IEDSS alumni for informal perspective and historical context.



12.c Organizational Chart

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- c. Include an organizational chart for the proposed project team, including the role of any subcontractors. Please include an organizational chart for the Initial Transition Period including indication of how it will change through those first six (6) months of the contract.

The following figure represents our proposed IEDSS organization chart. Deloitte provides the State with a highly skilled team they can trust to deliver quality, provide stability and guidance during uncertain times. We supply a staff consisting of Deloitte employees and subcontractors who supplement our teams with the best available talent.

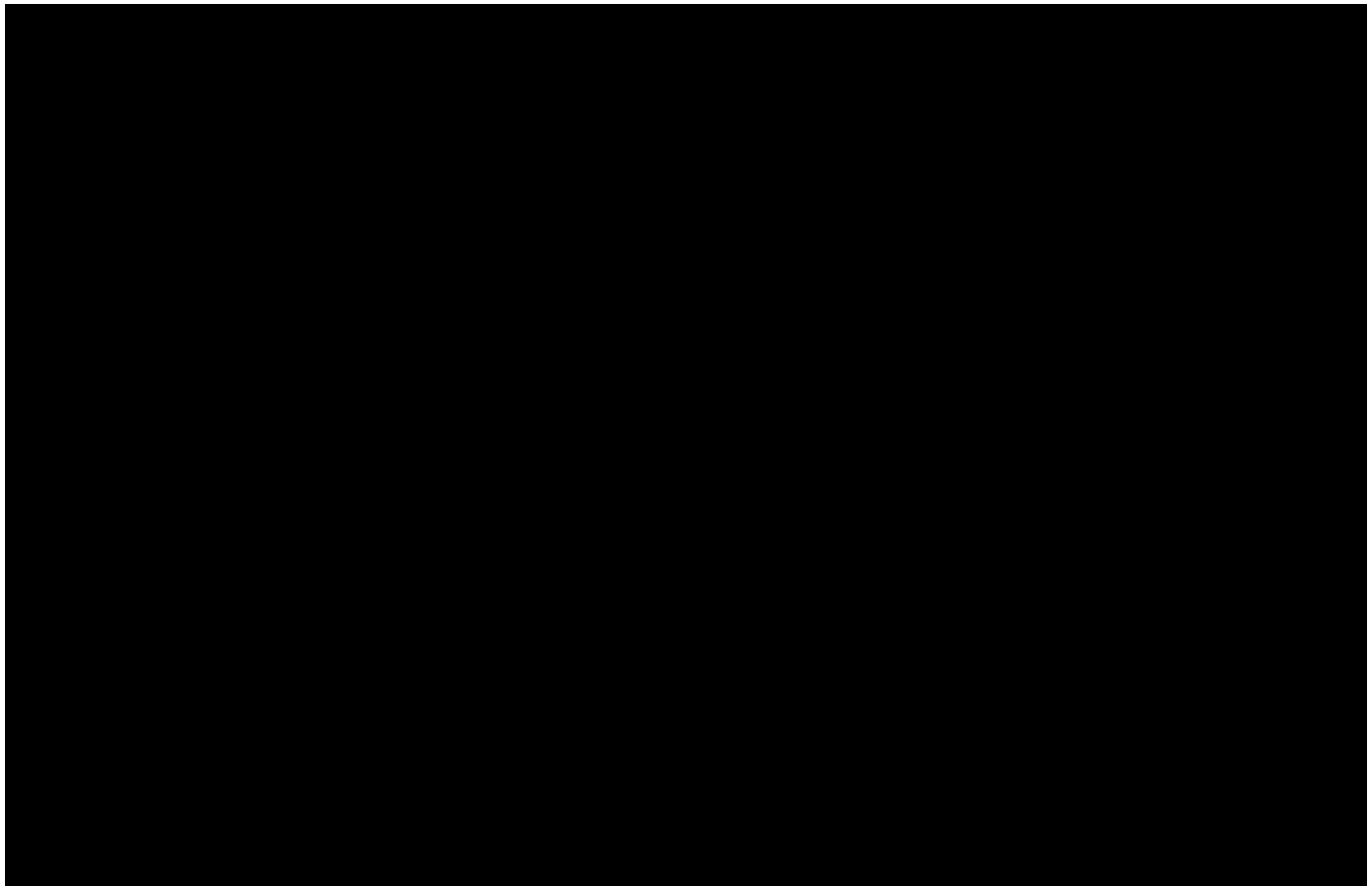


Figure 12-5. Organization Chart.

Our organization chart is optimized to support the State's goal to transition to a Hybrid Agile SDLC and break down silos. Below is a summary of the key features of this structure.

Key Feature	Description and Benefits
Leadership coordination	Our core leadership team consists of our Project Manager, Deputy Project Manager, Application Manager, Test Manager, Technology Manager, Security Officer, and PMO Manager. These resources provide coordination and support across all M&O and enhancement activities .
Dedicated enhancement team	In order to fully realize the benefits of Agile scrum teams, we've created a dedicated enhancement team. Our Enhancement Manager, [REDACTED], coordinates across three distinct scrum teams. This means production support activities don't divert the team from making continued progress on enhancements. It allows for a sprint-based capacity model towards delivery of enhancements and facilitates ramp ups and ramp downs for changing enhancement needs.
Dedicated operations team	Our dedicated Operations Team is focused on M&O activities, including batch, data fix, incident management, and ad hoc activities. We also have a dedicated production defect fix scrum team to work on prioritized production activities and defect fixes. Our Release Manager, [REDACTED], is responsible for overseeing a cross functional team of developers and testers who provide expertise and end-to-end support across all IEDSS functionality . [REDACTED] oversees a team to

Key Feature	Description and Benefits
	support batch operations, data fixes, and other ad hoc operational activities across all IEDSS functionality . [REDACTED] oversees incident triage and resolution activities across all IEDSS functionality . These teams consult with Deloitte SMEs across the project as needed. The tech operations team focus on routine maintenance and operations of IEDSS technology infrastructure, including software upgrades and patches.
Cross functional teams that bring collective system track expertise	Unlike the traditional track-based model, our teams are focused on the end-to-end delivery of your business priorities , like implementing an enhancement, resolving a production issue, or performing ongoing system operations. While our teams continue to provide extensive subject matter expertise in IEDSS functional tracks like Front Office, Back Office, Interfaces, EDBC, Correspondence, Support, and Reports, these divisions are no longer the primary way we organize ourselves. Since business needs don't neatly align to those track distinctions, our proposed organization structure is a natural evolution to be more aligned with how your business operates as opposed to how the system is architected. As we've helped clients migrate similar projects to this structure, we've identified this is a mindset shift that takes some getting used to, but ultimately delivers substantial improvements in overall agility, delivery quality, and accountability. Since our selected team leads already have strong cross functional expertise and specialized knowledge in areas such as EDBC, interfaces, and correspondence , our transition to this model brings the benefits of this structure while minimizing risk. We also thoughtfully align enhancements to scrum teams based on team member strengths and expertise. For example, [REDACTED] extensive EDBC expertise would make his scrum team a logical candidate for a significant program policy related enhancement.
Cross functional teams that integrate resource types	The use of cross functional teams is an essential component of hybrid agile delivery. This means that our scrum teams consist of various resource types such as developers, testers, technical architects, performance testers, security personnel, and project support. This approach breaks down silos and facilitates shared responsibility towards a specific outcome.
Cross functional testing collaboration	Rather than having a separate testing team, we integrate testers (both SIT and UAT) into our scrum teams. This is a standard agile practice that improves collaboration, communication, and accountability. Our Test Manager, [REDACTED] continues to play an important role in owning overall test strategy, test automation and innovation, coaching and developing testers, and coordination with the State's testing leaders .

Table 12-7. Key Features of Our Organizational Structure.

Team Structure During the Initial Transition Period

As the incumbent vendor, our organization consists primarily of the same individuals working on the incumbent contract. To minimize disruption to in progress M&O and enhancement services on the incumbent contract, we bring additional individuals to support the contract transition and hybrid agile SDLC transition activities that comprise our initial transition period. These individuals help prepare and upskill our existing team members and the State for the new contract.

Our initial transition team is focused on meeting the requirements and goals outlined in this RFP. The IEDSS M&O Team Organization for the Initial Transition Period is proposed below.

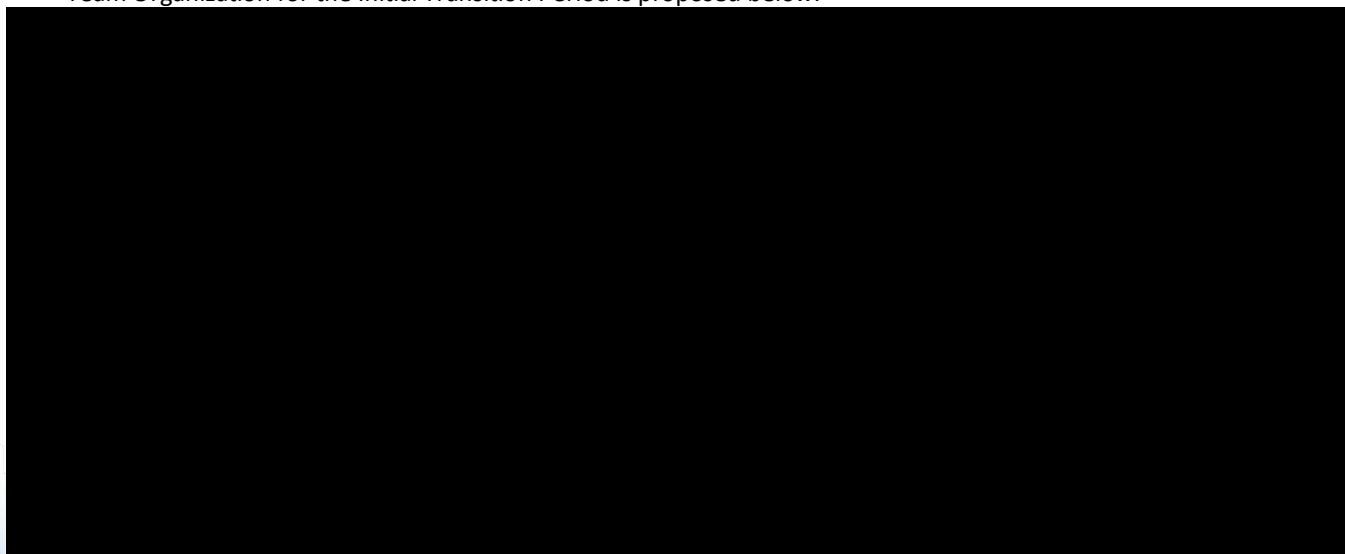


Figure 12-6. Transition Organization Chart.

Below is a summary of the roles and experience of our Initial Transition Period Staff:

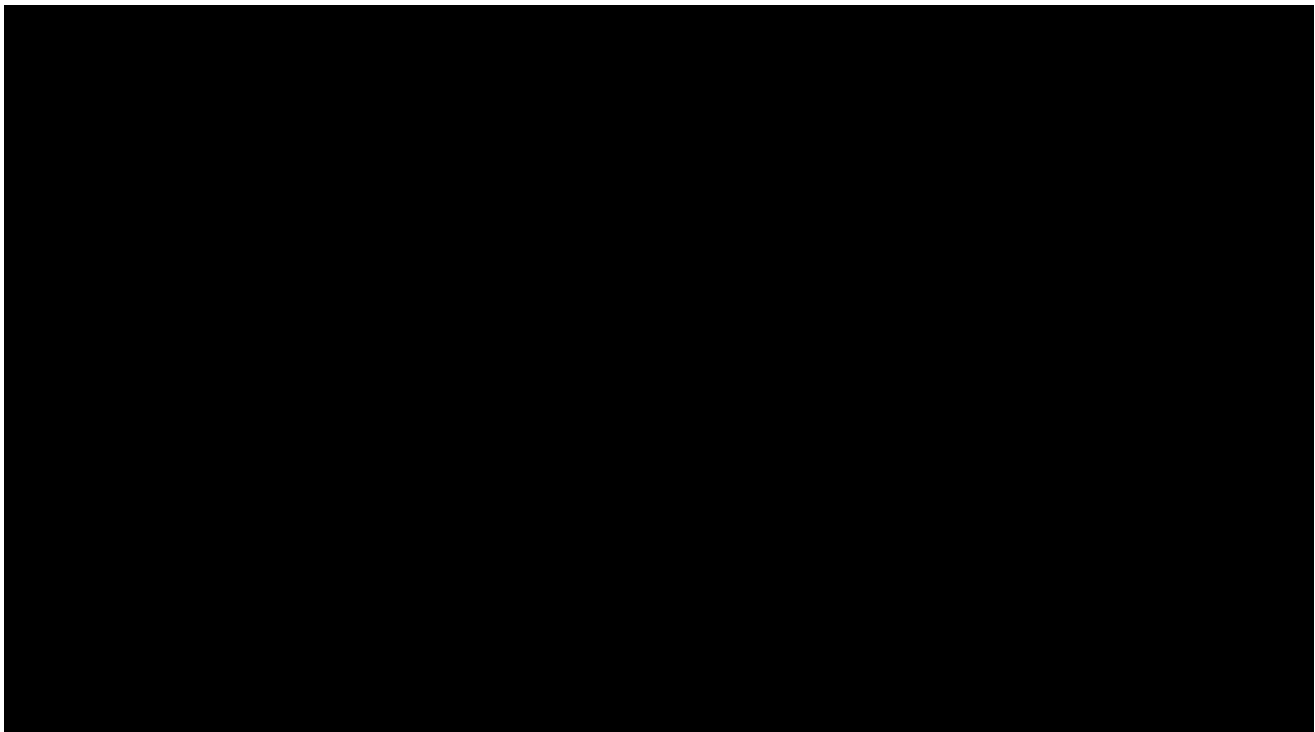


Table 12-8. Initial Transition Period Advisors.

Deloitte uses our knowledge of Hybrid Agile processes and methodologies to upskill our existing IEDSS Deloitte practitioners responsible for leading SDLC activities at no cost to the State. We train our team in the Hybrid Agile methodology specific to the practices we plan to implement in Indiana. We also provide training opportunities through the Scrum Alliance to become a **Certified Scrum Master** (19 members of our proposed team are already certified) and well as **Scaled Hybrid Agile Framework (SAFe)** certification.

12.d Staff to Meet Minimum Requirements

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

d. Add confirmation that you will only use staff who meet the minimum requirements in Attachment K.

We confirm we will only use staff who meet the minimum requirements for the specified roles in Attachment K. All proposed staff meet or exceed the specified minimum requirements. Given that project needs may evolve, and future candidates may bring value in differentiated ways, we would discuss any proposed updates from these requirements with the State.

12.e Staff Retention

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

e. Explain how you will maximize retention of staff, including any subcontractor staff.

Our methodology for retaining a well-trained, highly qualified workforce is to focus on investing in a meaningful career for our practitioners. As a result, Deloitte is a recognized leader where individuals want to work and grow. Our approach minimizes turnover and ultimately leads to long-term continuity of resources on our engagements even during this new transition in the market where professionals frequently change careers. On IEDSS, our named Vital Position employees have been with Deloitte for over 16 years on average. Here are just a few of our accolades to reflect this.



DELOITTE AWARDS & RECOGNITION



Deloitte has been named one of the most community-minded companies in the nation by Points of Light-Civic 50.



2021 marks Deloitte's 22nd year on FORTUNE Magazine's list of the "100 Best Companies to Work For"



Deloitte ranks 3rd on FORTUNE's Best Workplaces In Consulting & Professional Services



Deloitte is ranked 13th in Universum's list for "Most Attractive Employers" for business and commerce for 2021



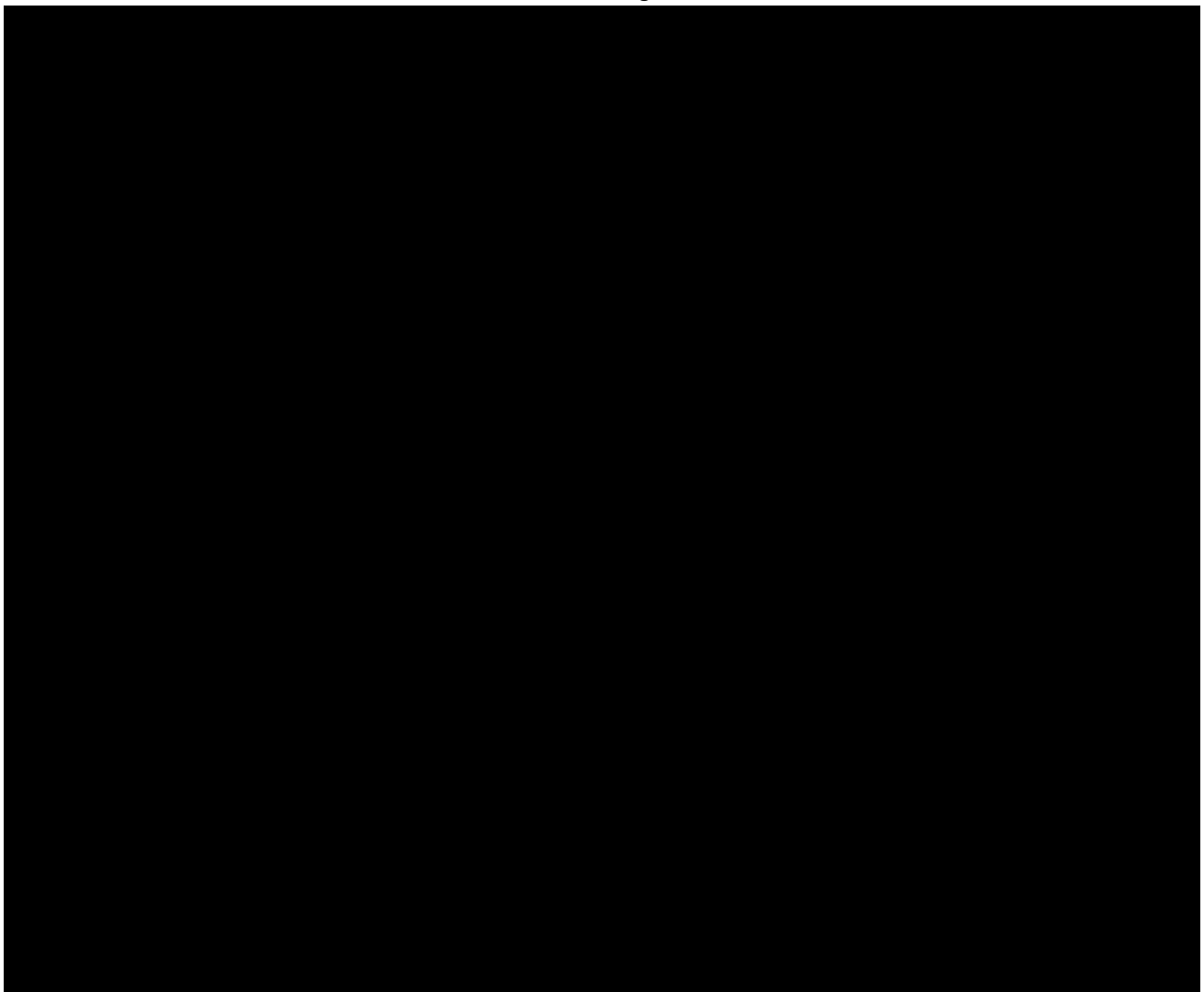
Deloitte ranks 7th in the 2021 LinkedIn Top US Companies list
The list is based on interest in the organization, engagement with the organization's employees, job demand and employee retention.



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Figure 12-7. Deloitte Awards and Recognition.

Due to the breadth of our services, we have an extensive and long-term investment in our practitioners. Our staff stay with Deloitte long-term because we invest in their training, reward them for high performance, provide them with a sense of community, offer competitive benefits, support wellness and lifestyle flexibility, and expose them to a diverse set of clients. Below are some of the main strategies Deloitte uses to increase retention.





12.f Resumes

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- f. Provide resumes for all Vital Positions identified in Attachment K.

To demonstrate Deloitte's capability to provide the State a full team on Day One, we have provided 30 resumes of staff who will fill the non-vital positions in addition to our nine proposed vital staff. We provide resumes for all vital positions, as well as a subset of non-vital positions in *Appendix 11, Resumes* to illustrate the highly experienced team members we propose to staff the IEDSS project.

12.g Vital Position Requirements

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- g. For each Vital Position, explain how the individual proposed by the Respondent meets the requirements for in Attachment K. Clearly indicate by which company each proposed individual is employed (Respondent or subcontractor; if it is a subcontractor, please name the subcontractor).

Our team has deep IEDSS experience, already fulfilling each of the vital roles required by Indiana. This team is therefore qualified to continue carrying out these responsibilities by building off experience and success from day one. Many of these individuals have worked with each other for years, and their collaboration and chemistry with each other and the State have grown immensely. Our staff will continue to be available for meetings during Indiana business hours, Monday through Friday, and attend meetings from 8:00 AM to 5:00 PM when requested by the State.




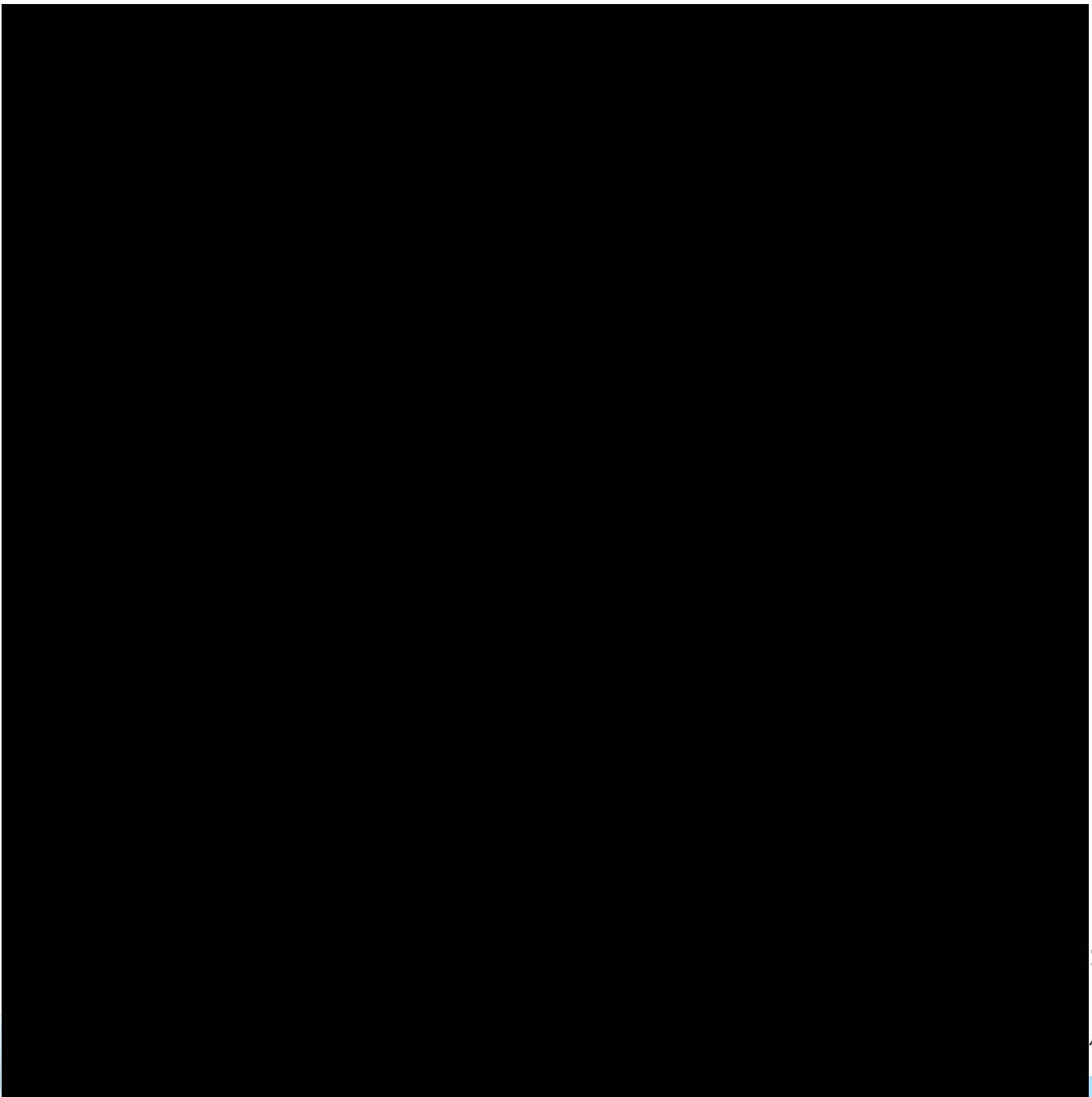
Figure 12-8. Vital Staff.

Our Vital Staff Exceed Requirements

Our proposed vital staff meet or exceed the requirements for their positions. In addition to exceeding the recommended years of experience for each role by several years, each proposed team member is currently staffed on IEDSS and several years of Indiana-specific experience. Our team members have advanced training in their areas of expertise that will allow them to provide unmatched support to project needs. Additionally, each of our proposed individuals is at the forefront of Deloitte's GPS practice with access to the extensive knowledge base of our similarly situated projects in other states. This combination of on-the-ground experience, training, and access to a supportive network have given our experienced practitioners a depth of knowledge regarding the needs of complex eligibility systems and projects that far exceed the base requirements for their roles.

The following tables explain how each proposed individual meets (✓) or exceeds (+) each of the requirements.

Project Manager – Exceeds Requirements



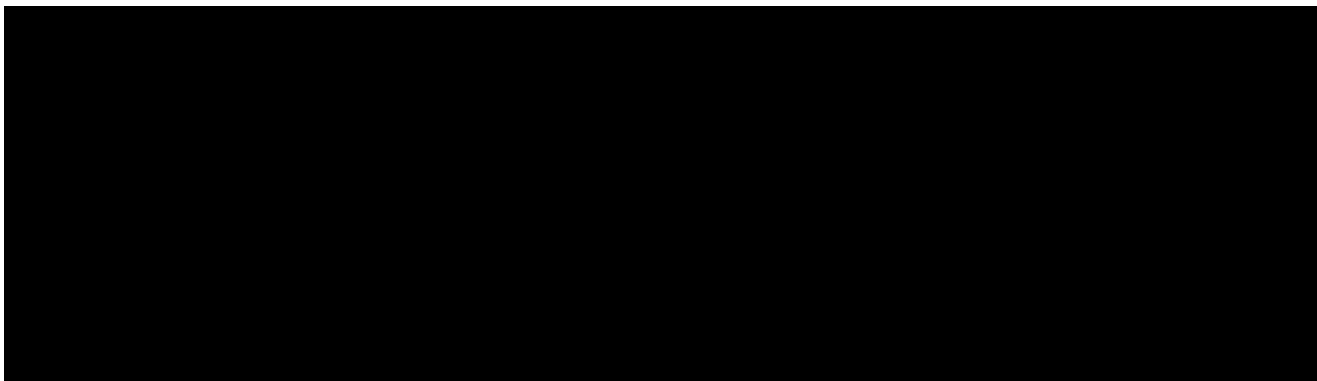
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Table 12-10. Project Manager – Exceeds Requirements.

Deputy Project Manager – Exceeds Requirements

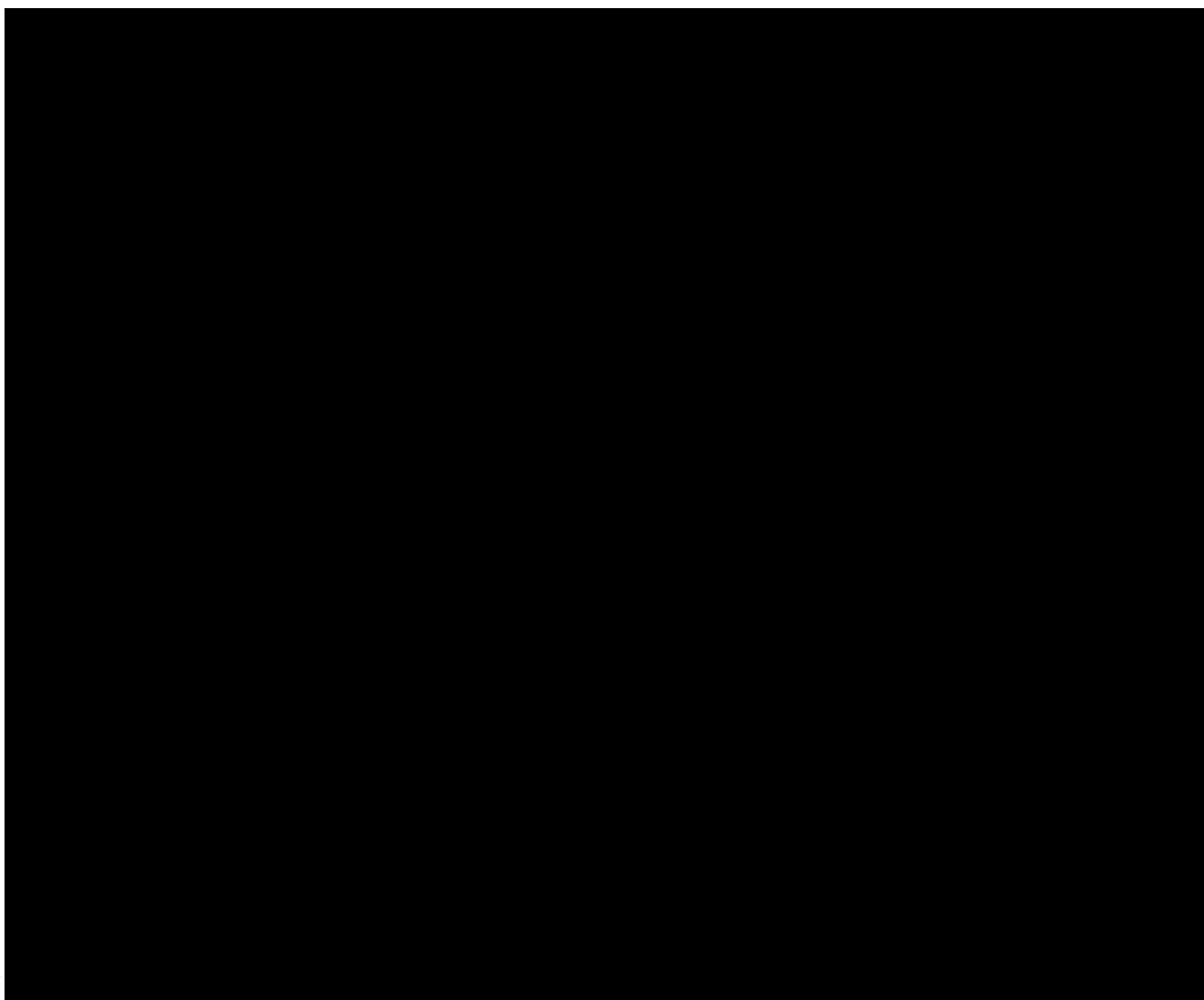
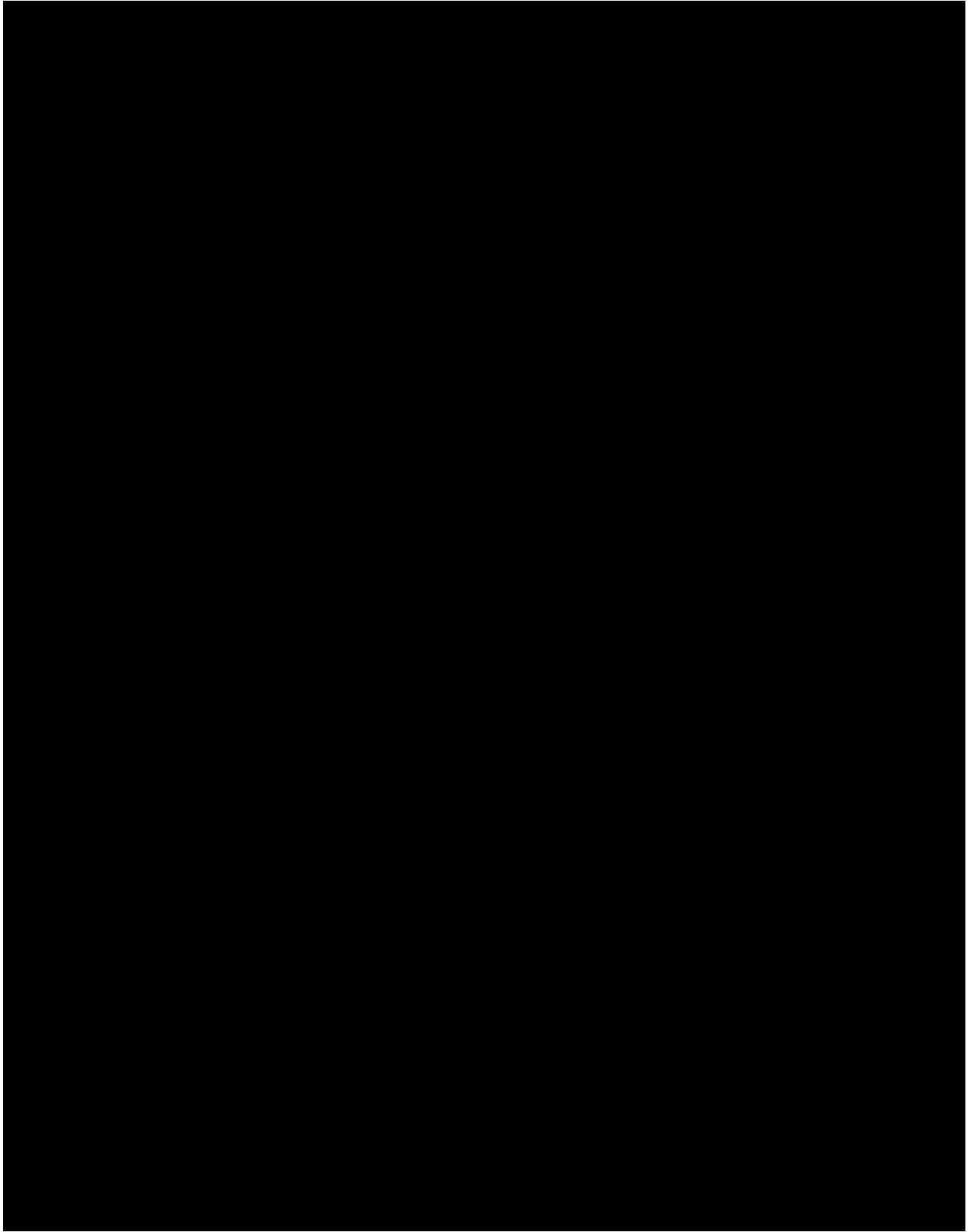
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Table 12-11. Deputy Project Manager – Exceeds Requirements.

Application Manager – Exceeds Requirements



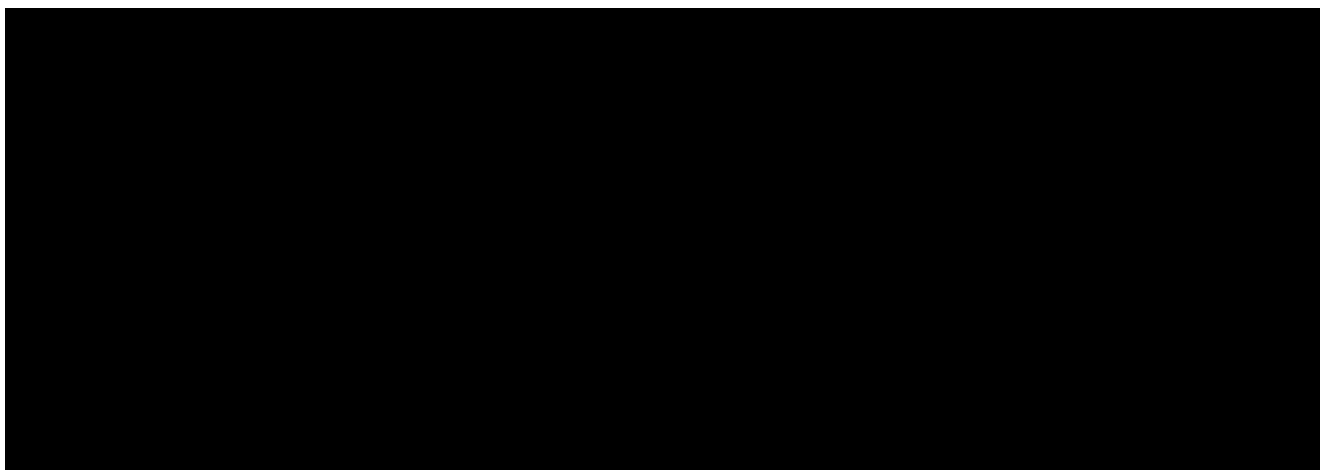
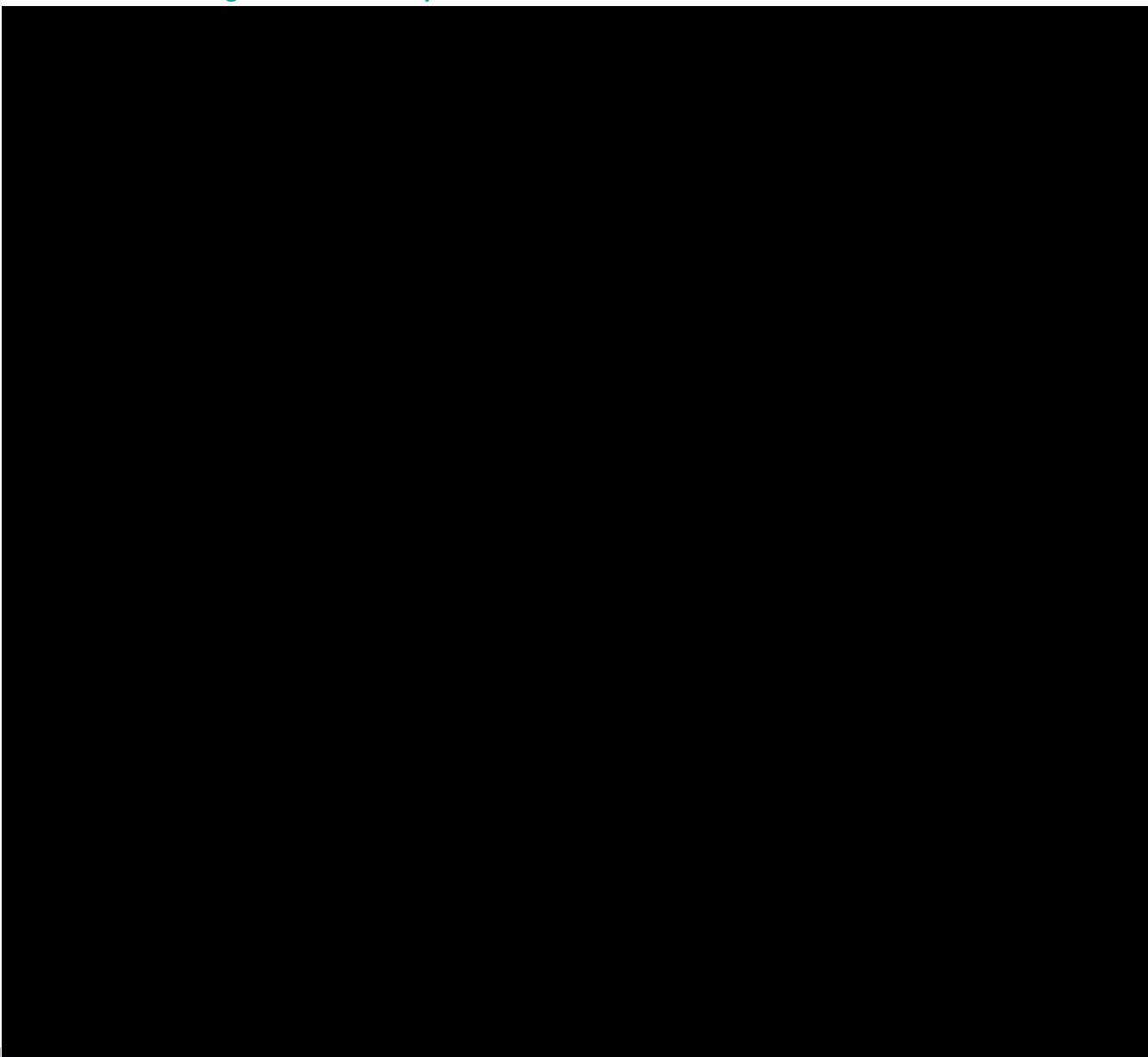


Table 12-12. Application Manager – Exceeds Requirements.

Technical Manager – Exceeds Requirements



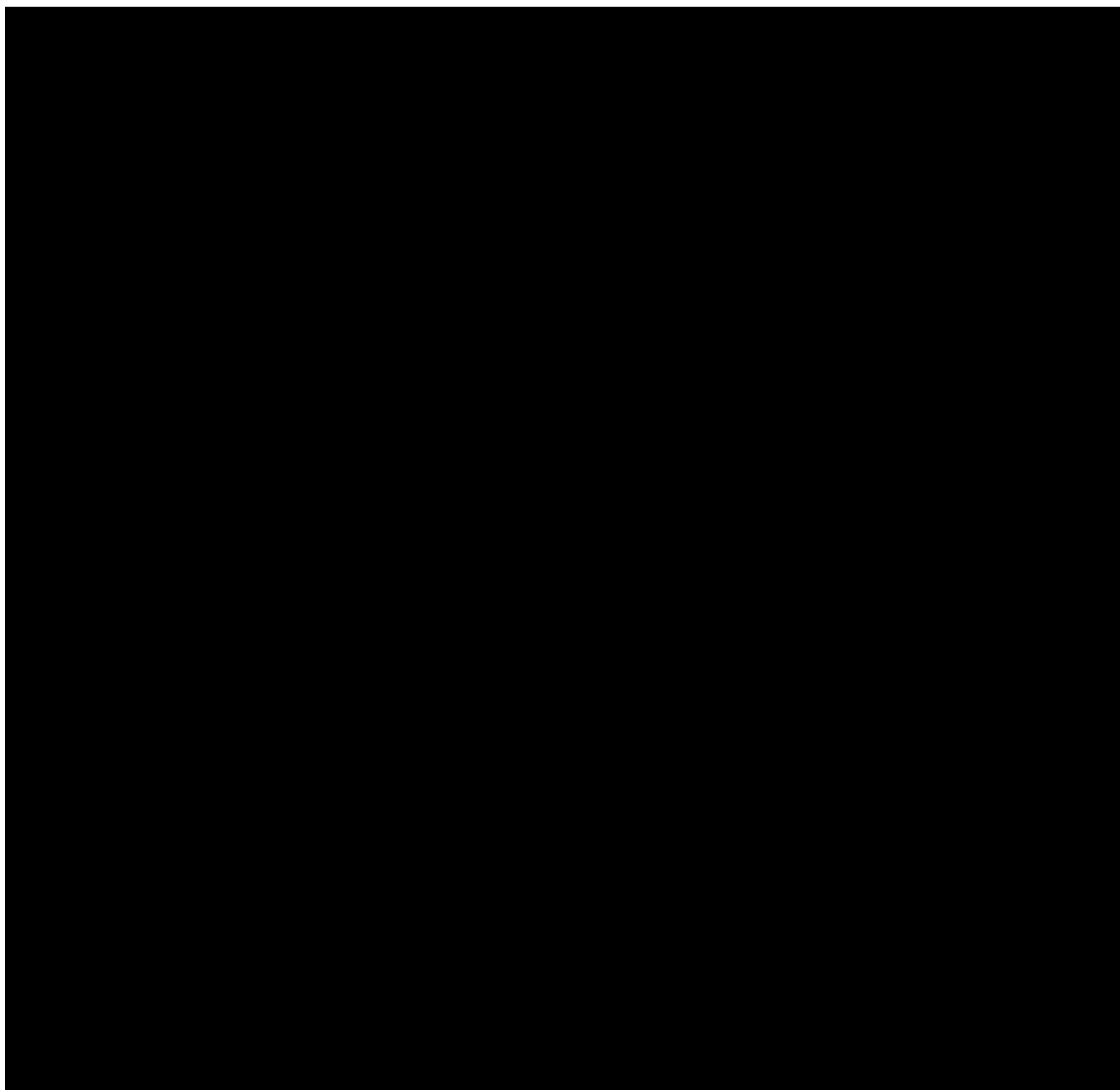
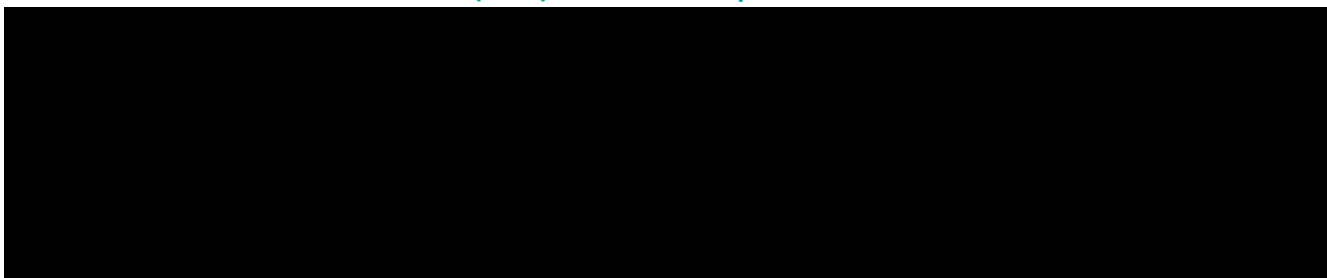


Table 12-13. Technical Manager – Exceeds Requirements.

Senior Database Administrator (DBA) – Exceeds Requirements



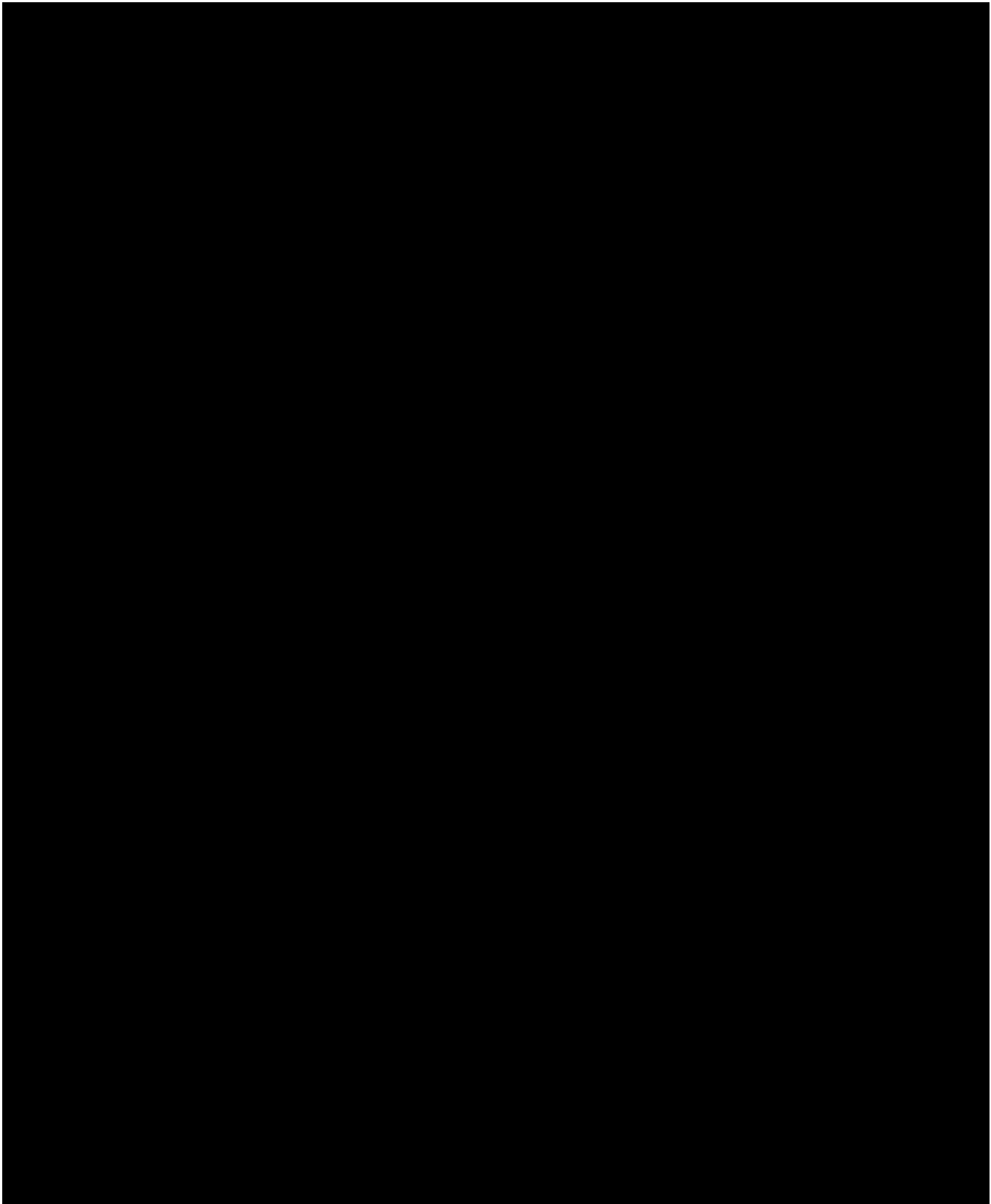


Table 12-14. Senior Database Administrator (DBA) – Exceeds Requirements.

Operations Manager – Exceeds Requirements

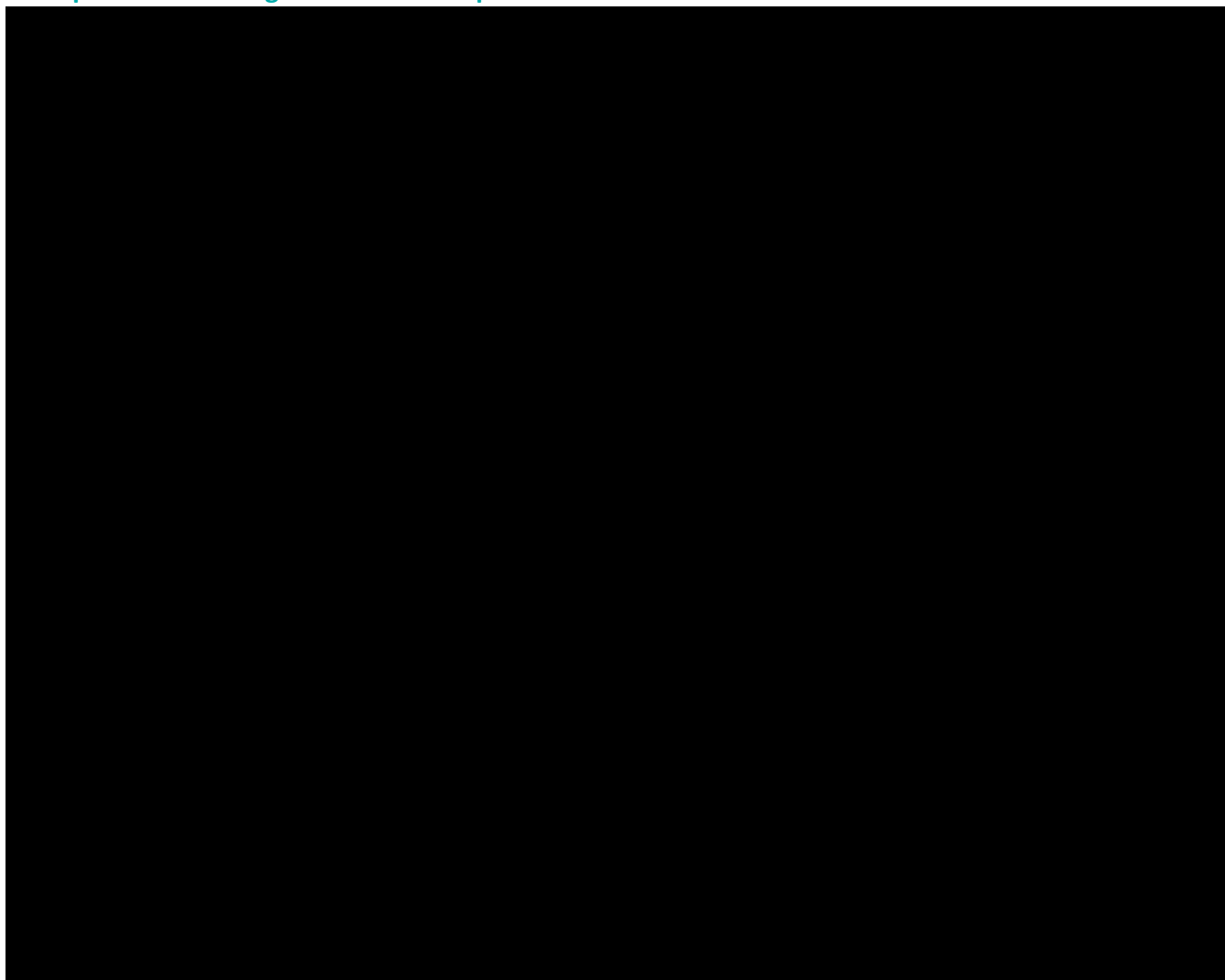


Table 12-15. Operations Manager – Exceeds Requirements.

Security Officer – Exceeds Requirements

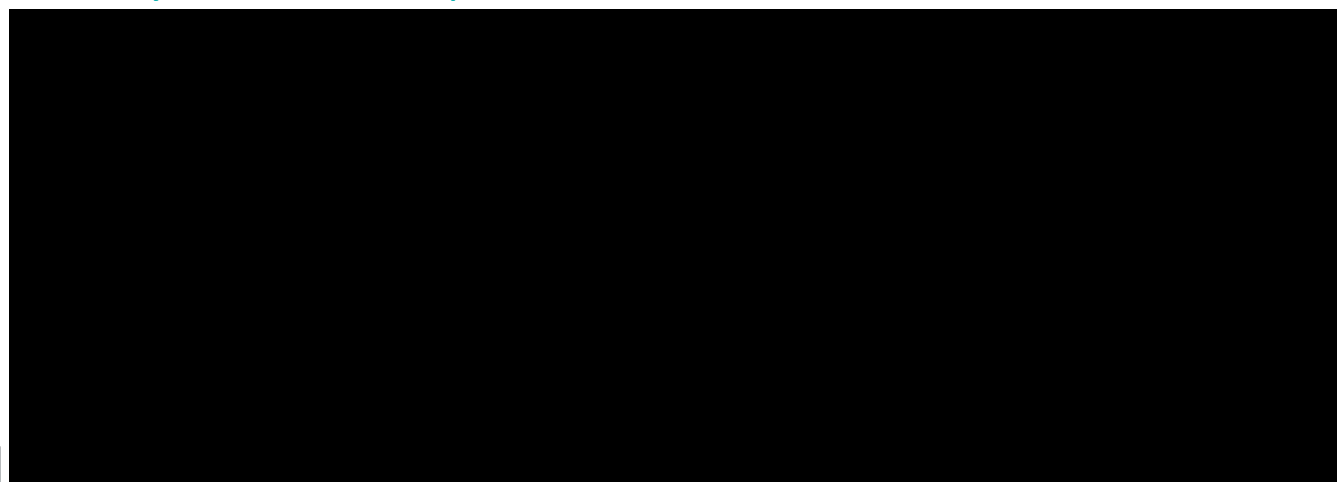
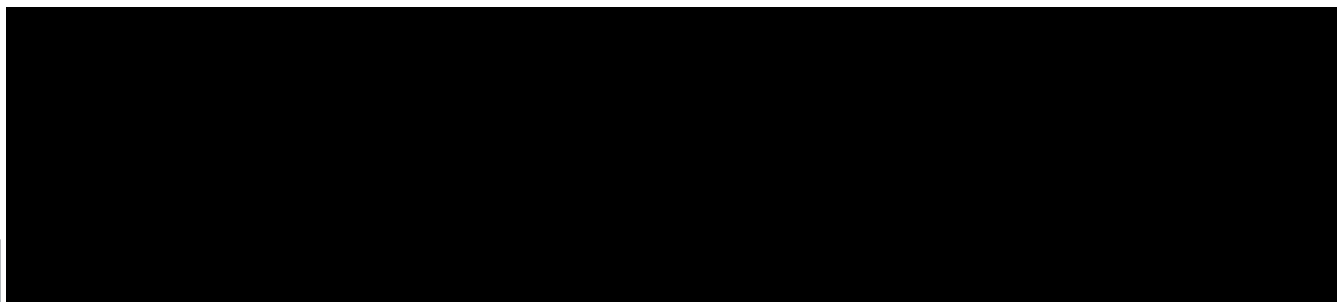
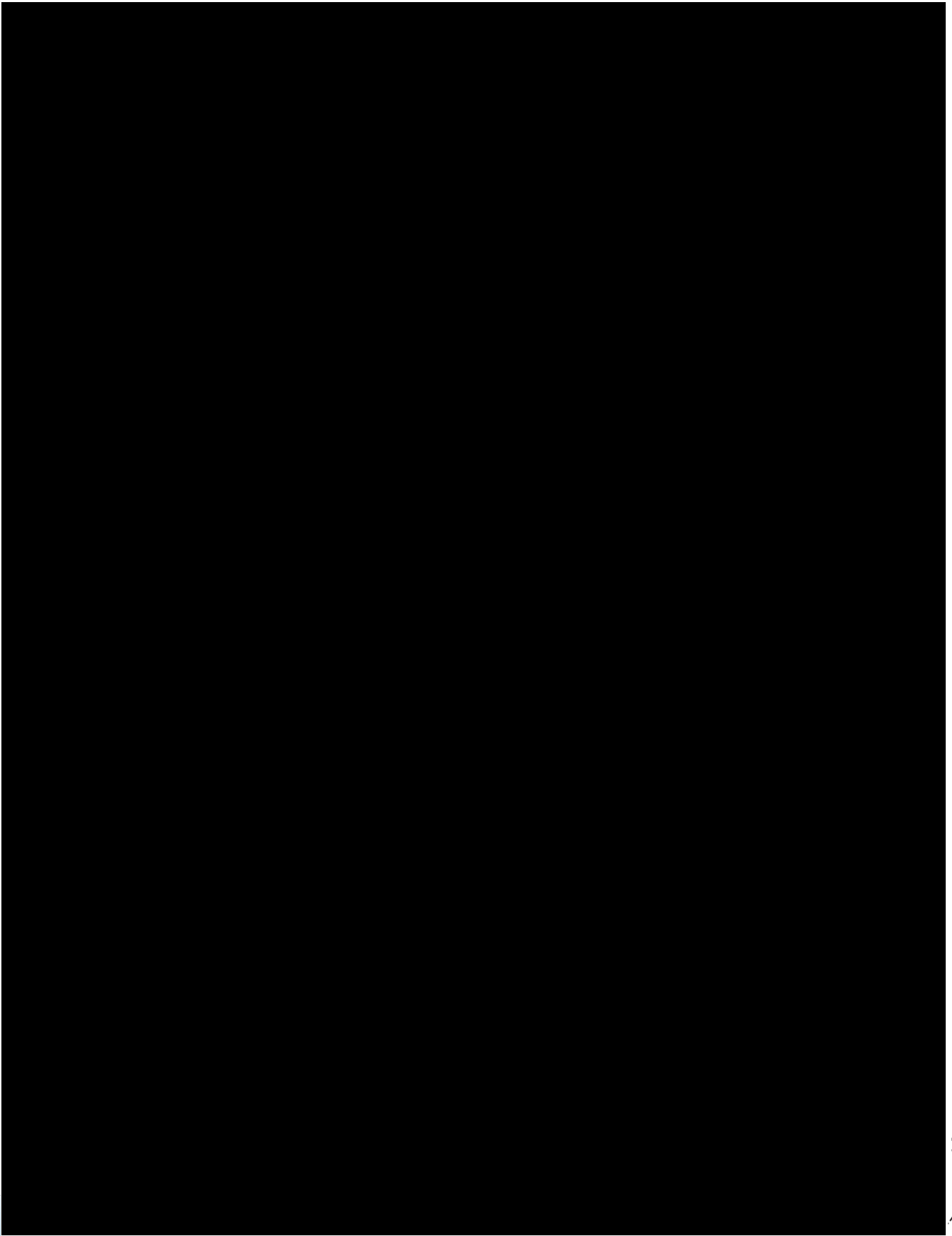




Table 12-16. Security Officer – Exceeds Requirements.

Security Architect – Exceeds Requirements





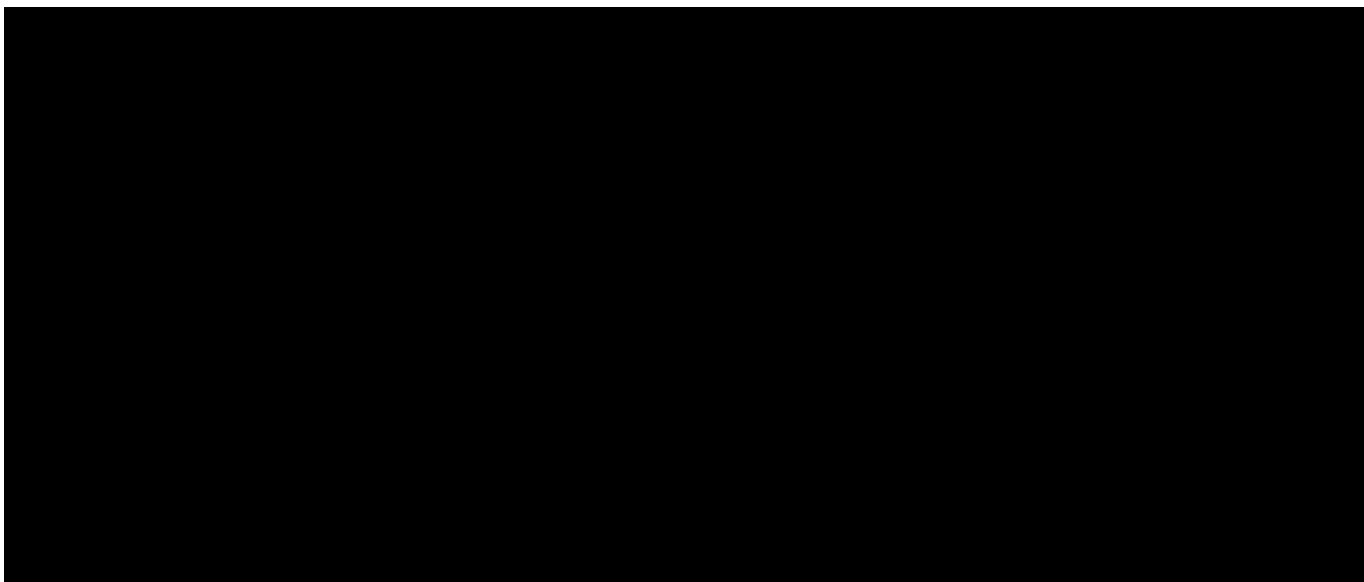


Table 12-17. Security Architect – Exceeds Requirements.

Test Manager – Exceed Requirements



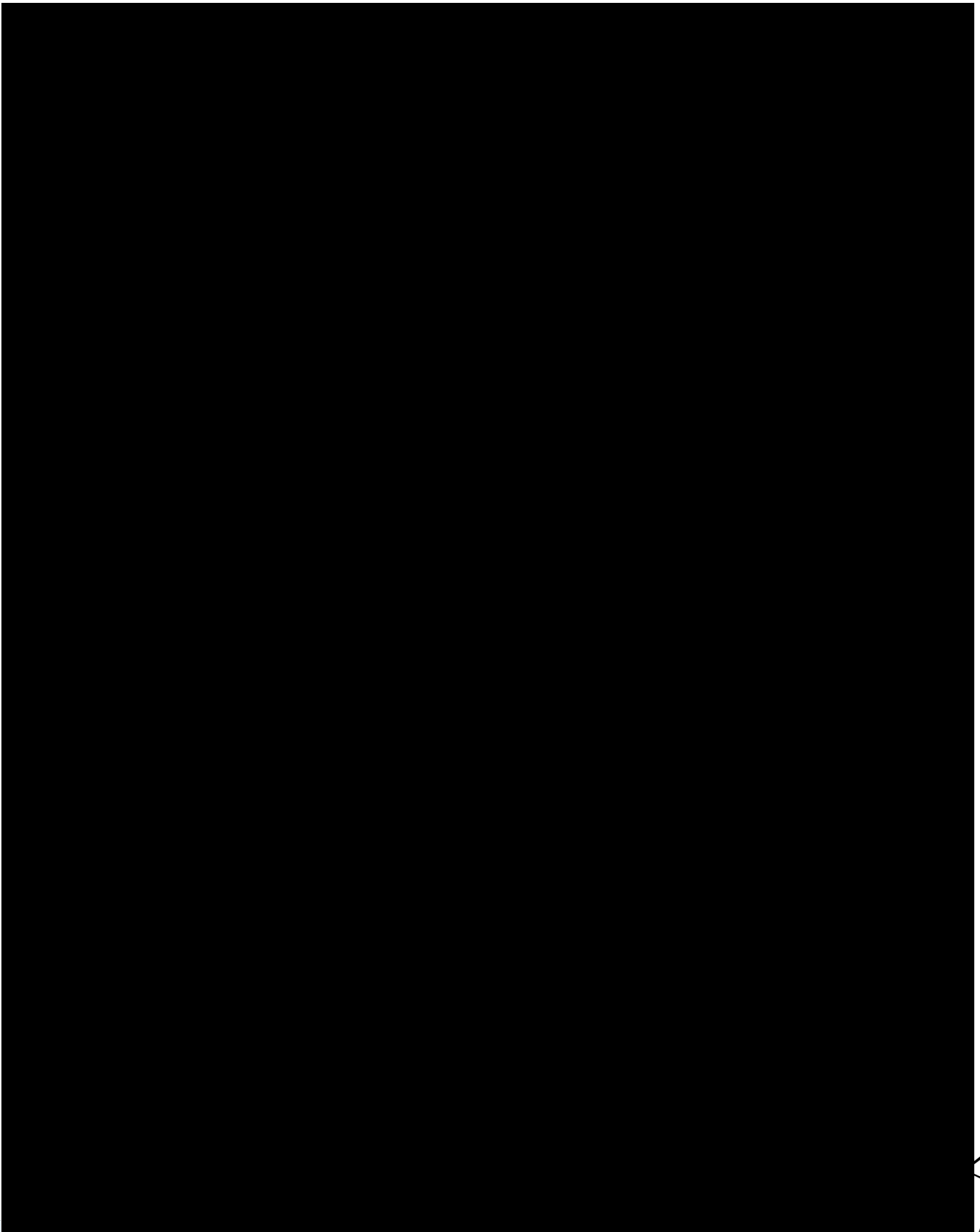


Table 12-18. Test Manager – Exceeds Requirements.

12.h Staff Assigned to Enhancements

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

h. Are you consistently assigning the same set of individuals to work on Enhancements?

We assign most individuals working on enhancements to consistently work on enhancements at a given point in time. As part of our Hybrid Agile SDLC, we assign dedicated sprint teams focused on enhancements. Our approach allows developers to make consistent and predictable progress towards the sprint goal and achieves the Agile principles of sustainable development, flexibility, and collaboration.

We do, however, have a small number of individuals who focus on both M&O and enhancement activities. This includes members of our leadership team that oversee both teams to provide functional consistency and avoid work occurring in silos. This approach facilitates visibility, coordination, and knowledge sharing across M&O and enhancement activities. It also maintains quality of service (including SLAs) and optimizes cost-effectiveness for the State because it leverages efficiencies in staffing. We record actual hours worked to allocate time between M&O and enhancement activities.

The State is not required to use all enhancement pool hours or dollars and the number of enhancement resources will fluctuate over time. Our staffing approach allows us to effectively react to such fluctuations by scaling our sprint teams while maintaining critical knowledge with the project team. We continue to work with the State to plan for those fluctuations.

12.i Enhancement Team Staffing Levels

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

i. Please confirm that the Enhancements team staffing levels will be ramped up or down based on actual State enhancements needs and that the enhancement staff FTEs are not being billed full time if they are not part of an approved enhancement CR

Deloitte confirms that the Enhancements team staffing levels will be ramped up or down based on actual State enhancements needs and that the enhancement staff FTEs are not being billed full time if they are not part of an approved enhancement CR. We discuss our approach to managing the Enhancement Pool in section 12.j below.

12.j Enhancement Resource Needs

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

j. Please explain how you plan to handle Enhancements resource needs as they surge and shrink throughout the Contract term.

Our approach to managing resource needs as they surge and shrink throughout the contract term includes the following steps:

- **Planning.** We collaborate with the State to proactively plan enhancements and associated resource needs. A key component of our Hybrid Agile SDLC methodology involves product backlog refinement. This means we regularly work with you to review and schedule your list of prioritized CRs. Based on the volume prioritized for upcoming sprints, we define the appropriate number of concurrent sprint teams to work through your prioritized product backlog. The most efficient and mutually beneficial way to manage the enhancement scope is to evenly distribute your product backlog over upcoming sprints based on your available budget. Keeping staffing levels consistent in the Hybrid Agile model is beneficial because this promotes relationship building within the Agile teams and creates efficient, empowered, and productive teams built to deliver the results for the State.
- **Resource surge.** We work with you to proactively plan as enhancement needs increase so we can add additional sprint teams. Deloitte leverages our resource acquisition approach to deploy resources from our deep bench, subcontracting vendors, and other recruiting channels. We follow our resource onboarding process and strategically mix resource skillsets to maximize productivity and quality. When the State's enhancement needs for IEDSS surged in late 2021, Deloitte added 60 additional resources during second half of the year.
- **Resource shrink.** If the State's product backlog or budget indicates the need to shrink our sprint team capacity, we confirm the changes with the State and roll off the identified resource after they've completed their assigned work and performed a knowledge transfer. When this situation occurs, we work to redeploy our IEDSS

staff to our other client projects. For example, when IEDSS team was reduced in early 2021, we effectively redeployed 25 Deloitte and 31 subcontractor resources to other projects within the Deloitte client portfolio.

12.k Attachment K

RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

k. Complete Attachment K and submit it with your proposal.

Deloitte submits Attachment K as *Appendix 12, Staff Position Descriptions and Qualifications (Attachment K)*.

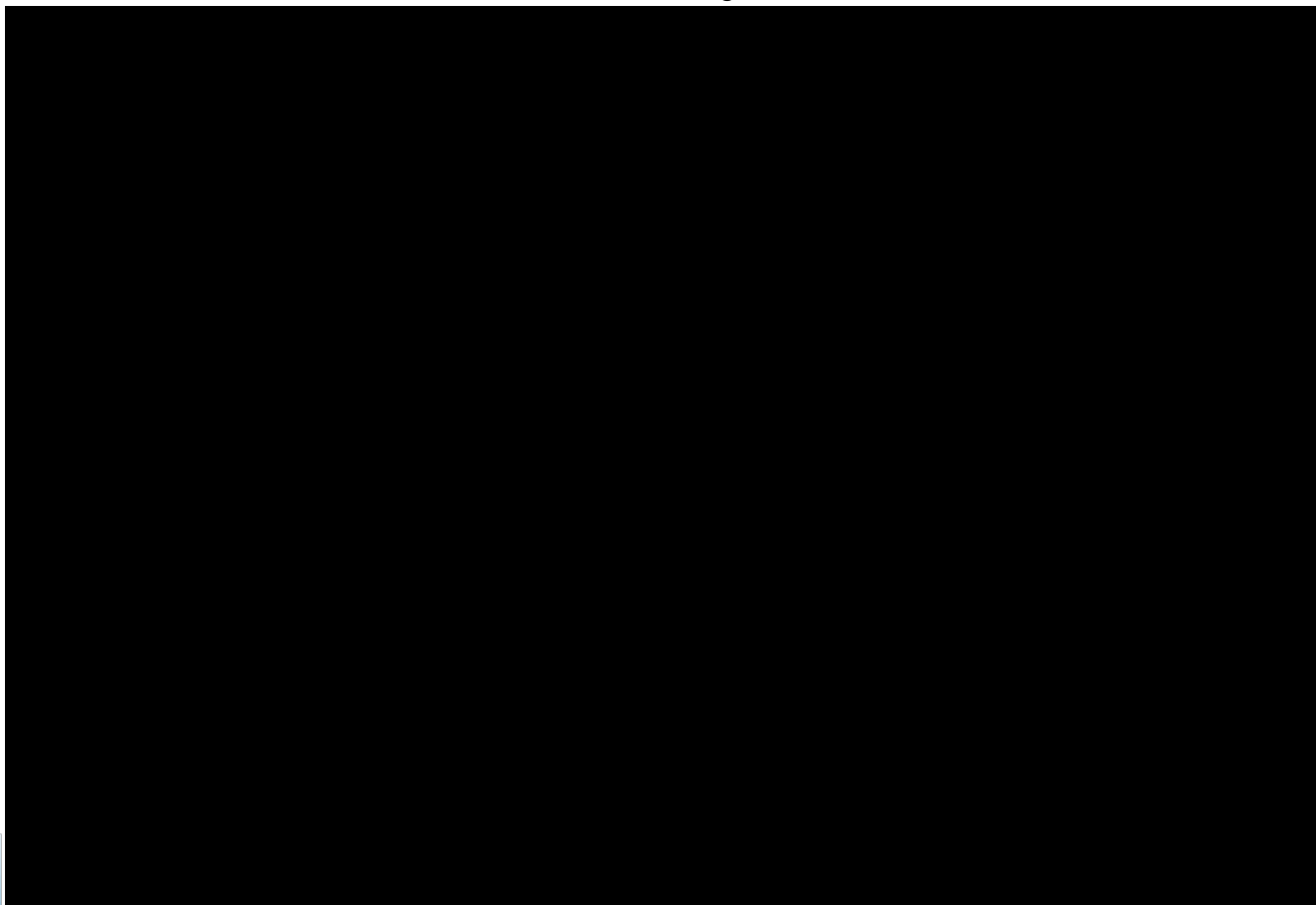
12.l Subcontractors

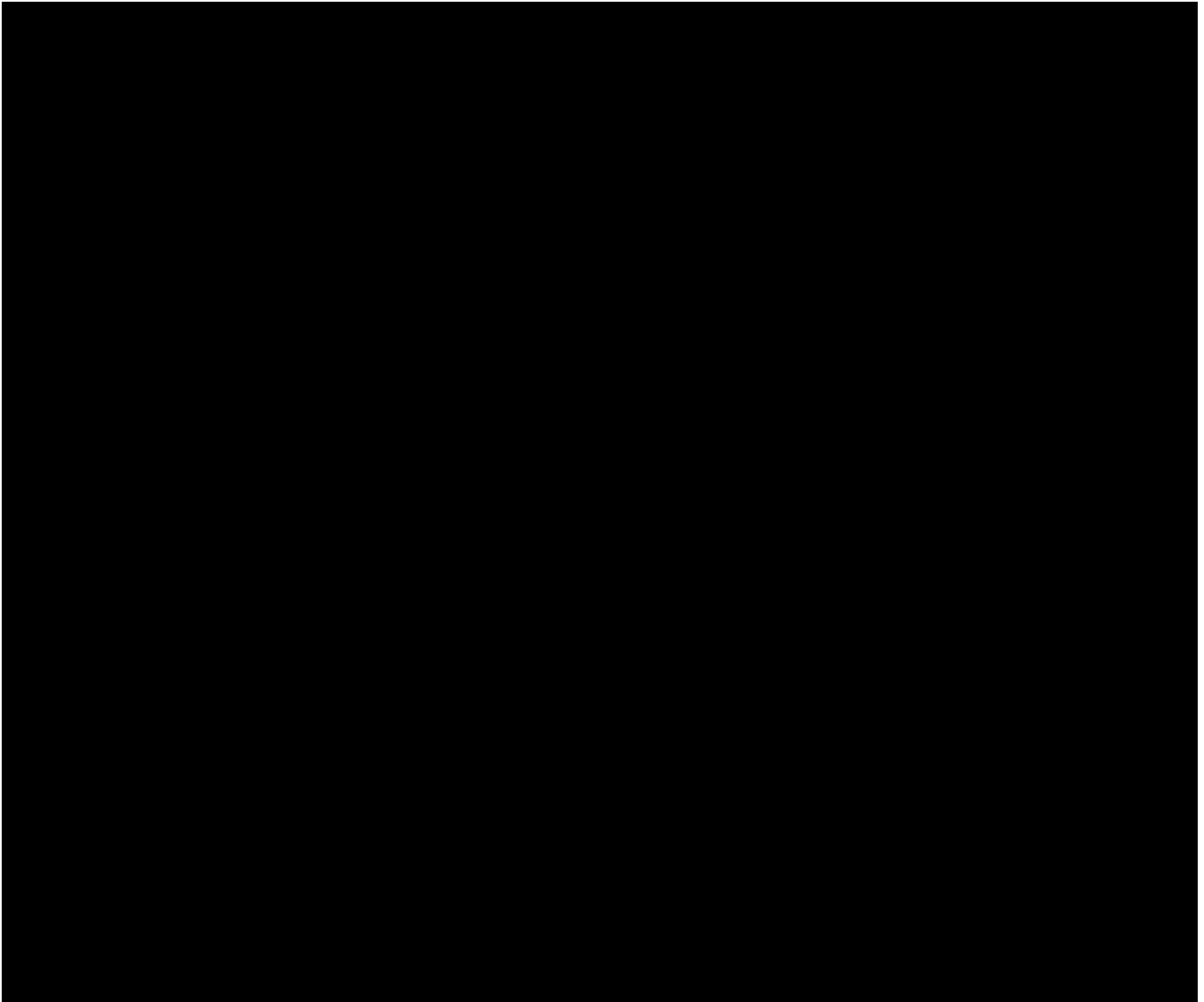
RFP Reference: Attachment F, 12. Staffing (Attachment C, Section 12)

- l. Subcontractors
- o Describe the role of any subcontractors you will utilize for this Contract.
 - o Provide the percentage of staff supplied by the Prime Contractor and each subcontractor for delivery of M&O activities. Similarly, the percentage of staff supplied by the Prime Contractor and each subcontractor for delivery of enhancement services. (For example, "For M&O services, we will provide X% of the staff, Subcontractor A will provide Y% of the staff, and Subcontractor B will provide Z% of the staff".)
 - o Indicate your prior experience with each subcontractor.
 - o Describe their experience and expertise as it relates to supporting the Contract scope.

Deloitte takes pride in working as "one team" alongside the State of Indiana. This includes integrating the use of subcontractors which provide necessary staff augmentation for development, testing, and operational staff. The subcontractors listed below have resources who are actively supporting Deloitte on the IEDSS project, promoting continuity of staffing, and emphasizing the integrated nature of our teams. Our team, Deloitte, and subcontractors alike, brings extensive expertise and institutional knowledge that is valuable to the State. Additionally, they are all certified Minority Business Enterprise (MBE) or Women Business Enterprise (WBE) vendors. Deloitte's subcontracting partners go through a rigorous vetting process. Deloitte is responsible for maintaining contractor's compliance with all contract requirements.

Outlined below are the subcontractors Deloitte will be utilizing for this contract.





Service Level Agreements

Section 13

We know the State has high expectations for its IEDSS vendor and, given what is at stake, we understand why. The State depends on IEDSS to maintain federal compliance, maintain staff productivity, and meet project timelines and budgets. Your customers, interface partners, and staff all depend on underlying service levels being achieved.

We understand your desire for service levels to align on expectations, monitor performance, and establish accountability. We have a solid track record of meeting established Service-Level Agreements (SLAs) in Indiana and across the nation. We have the experience, processes, and tools to meet or exceed each SLA.

Should any failure to achieve a service level occur, we have an established process to identify, prioritize, communicate, and resolve the issue. Most importantly, we seek to identify root cause(s) and mitigate future occurrences. Our Hybrid Agile methodology's retrospective process looks at processes, controls, teamwork, and communication to facilitate continual improvement.

WHAT IT TAKES



Extensive system knowledge



Proactive monitoring and tracking



Strong communication channels and procedures

WHY IT MATTERS

Our team meets and often exceeds performance expectations. For example, we have improved our architectural services to consistently support very high online system uptime and on-time batch processing. We successfully maintained critical SLAs even with a surge in Medicaid enrollment during the PHE.

Our tools and processes, including Splunk and Oracle Enterprise Manager (OEM), allow us to monitor our SLAs proactively. Acting early prevents disruption to your users.

We have strong well-established procedures, experienced resources, and training mechanisms for our staff, so everyone on our team understands expectations and how to meet them.

The State benefits from a contractor that has the demonstrated capability to meet established SLAs and to implement proactive improvements that mitigate future risk. We are committed to providing a smooth continuation of IEDSS maintenance, operations, and enhancements, while focusing on continual improvement. We bring to the table our experienced team, matured processes, and proven tools to meet or exceed the SLA requirements Day One.

What sets us apart from our competition is our strong project management, Maintenance and Operations (M&O), and innovative engineering teams that are continuously identifying opportunities for improving system performance and fine-tuning operational procedures. Below are a few examples of our successful efforts in IEDSS, where we have had positive impacts on the service levels identified in the RFP:

- We have continuously improved our architectural services by implementing **high availability** for both online and batch transactions. We have configured Splunk Enterprise and OEM tools to improve our proactive **application monitoring** capabilities. Through these enhancements, we have been able to achieve a near **100 percent uptime** for our online and batch systems.
- We have optimized our batch jobs and operational procedures to **reduce overall batch cycle time by 15 percent** to allow over six million monthly batch transactions to be completed in the scheduled window and avoid disruption to your end users.
- We have replaced QRadar with the Splunk Enterprise Security (ES) suite as a **cost-effective and feature-rich security monitoring solution**. This has led to better tracking and a reduction of security incidents.
- We have scaled up our **document upload capacity** to reduce incidents when workers tried to attach larger documents.
- We are continuously improving our incident management and helpdesk support through **automation of recurring data fixes** to remove operational holds and adding Splunk alerts to inspect and report incidents that are related to network, database outages. We have also used automation to improve the system's **self-healing capabilities** for situations such as hung threads, CPU starvation, timeouts, etc.
- We are also continuously looking at automated solutions to identify patterns of data that can cause system disruptions or lead to incorrect benefit calculations and issuance. This approach helps **avoid help desk incidents** from occurring. It has allowed us to issue \$1.7 billion of SNAP and TANF benefits accurately without delay in transfer of EBT funds.

Our innovative engineering team never stops at proactively identifying these system patterns. We have always worked collaboratively with our State counterparts to discuss the benefits of these optimizations, prioritize them, and implement them to bring incremental improvement to our performance. We have done this in the past and will continue to do so in the new contract.

While other vendors may struggle to meet service levels as they transition, our team will continue the momentum of innovation and optimization to enhance our service delivery and take it to the next level. Our understanding of your systems, platforms, and processes coupled with a deep understanding of the IEDSS business and operations requirements enables our team to increase the speed and quality of delivery and resolve issues faster.

KEEPING THE MOMENTUM GOING FORWARD

- Matured and Indiana-proven SLA tracking system informed by our SLA tracking experience in 32 states and across projects similar in size and scale to IEDSS
- All SLAs in the current calendar year are successfully met
- Proactive monitoring and tracking through exhaustive tools and systematic processes
- Continuous automation through Splunk and ALM tools to identify patterns of disruptive incidents and implementing system changes to prevent them from happening

13.a Acceptance of the Requirements in Attachment C Section 13.1

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- a. Confirm your acceptance of the requirements in Attachment C Section 13.1 as written.

We acknowledge, understand, and accept the requirements that are listed in Attachment C, Section 13.1. We have structured our project staffing and processes to align with these performance expectations. In addition, our team will work together with the State and OV&V contractor to create a shared understanding of the SLAs by clarifying, aligning, and refining the measurement and reporting to optimize value consistent with the SLA outcome objectives.

13.b Process to Address Failure to Maintain Service Levels

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- b. Describe your process for identifying, prioritizing, and communicating problems that are contributing to a failure to maintain Service Levels.

Overview of Deloitte's Service-Level Management Process

We view Service-Level Management (SLM) as a process that promotes consistent quality while providing insight into the quality, efficiency, and timeliness of the overall service delivery. Our SLM methodology is consistent with the Information Technology Infrastructure Library (ITIL) service management disciplines, which provide the guidelines to identify, monitor, and review the services provided. Its foundation is within Deloitte's SLA management processes (Monitor, Measure & Report, Manage, Resolve, Review & Feedback) and is tailored to meet or exceed the thresholds for compliance defined in the RFP, or as otherwise mutually agreed upon. Our SLM process is not new; it is an extension of the current Service Level Management process that is in use at IEDSS today. Our experienced staff, using Deloitte's SLM methodology, is ready to go on Day One, helping us meet or exceed the stated service levels mentioned in this RFP. The 28 service levels in this RFP span across various M&O and SDLC services areas. The following figure depicts how our SLM methodology traverses all these service areas.



Figure 13-1. SLM Methodology

Service Level Monitoring, Measuring and Reporting

Deloitte seeks to maintain, operate, and enhance IEDSS with optimal performance that meets or exceeds the State's operational requirements.

We monitor service levels using tools such as Splunk, customized software assets and ALM tools (e.g., JIRA, IBM RTC/Jazz) that allow us to collect appropriate real time and batch data related to the Service Level measurements. This collected data is then aggregated to generate our monthly SLA dashboard/summary report that is shown in Figure 13-2. We collaborate with the State to document the formula for calculating these metrics and document in the Project Management Plan and Incident Management Plan. The SLA summary and detailed reports are presented to State management monthly. In the current IEDSS contract, Deloitte has worked with the State to define and document the SLA reporting formula and format. We will expand current reports to cover the SLAs for this contract.

Below is an example of a sample SLA summary report, which we submit to the State on a monthly basis.

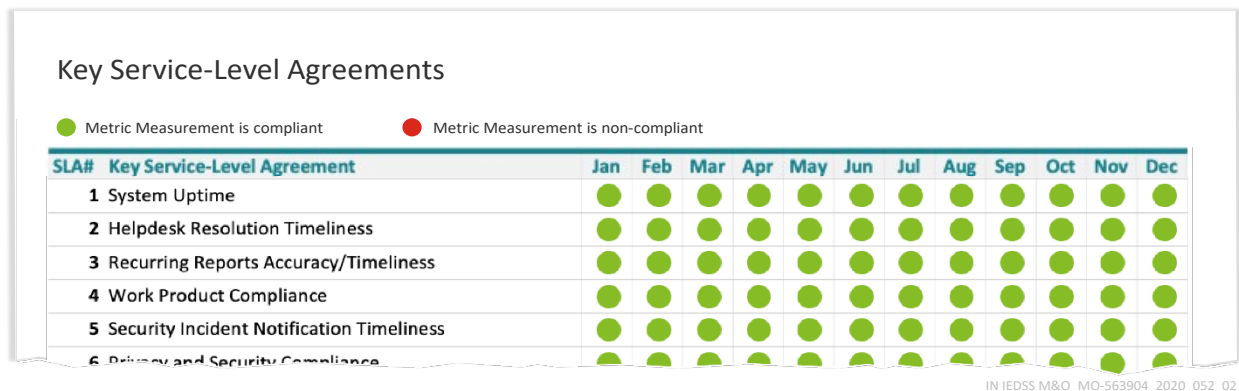


Figure 13-2. Sample Maintenance and Operations SLA Report.

The details of each of the SLAs are also included in the monthly SLA report. The following image is a snapshot of details of the System Uptime SLA.

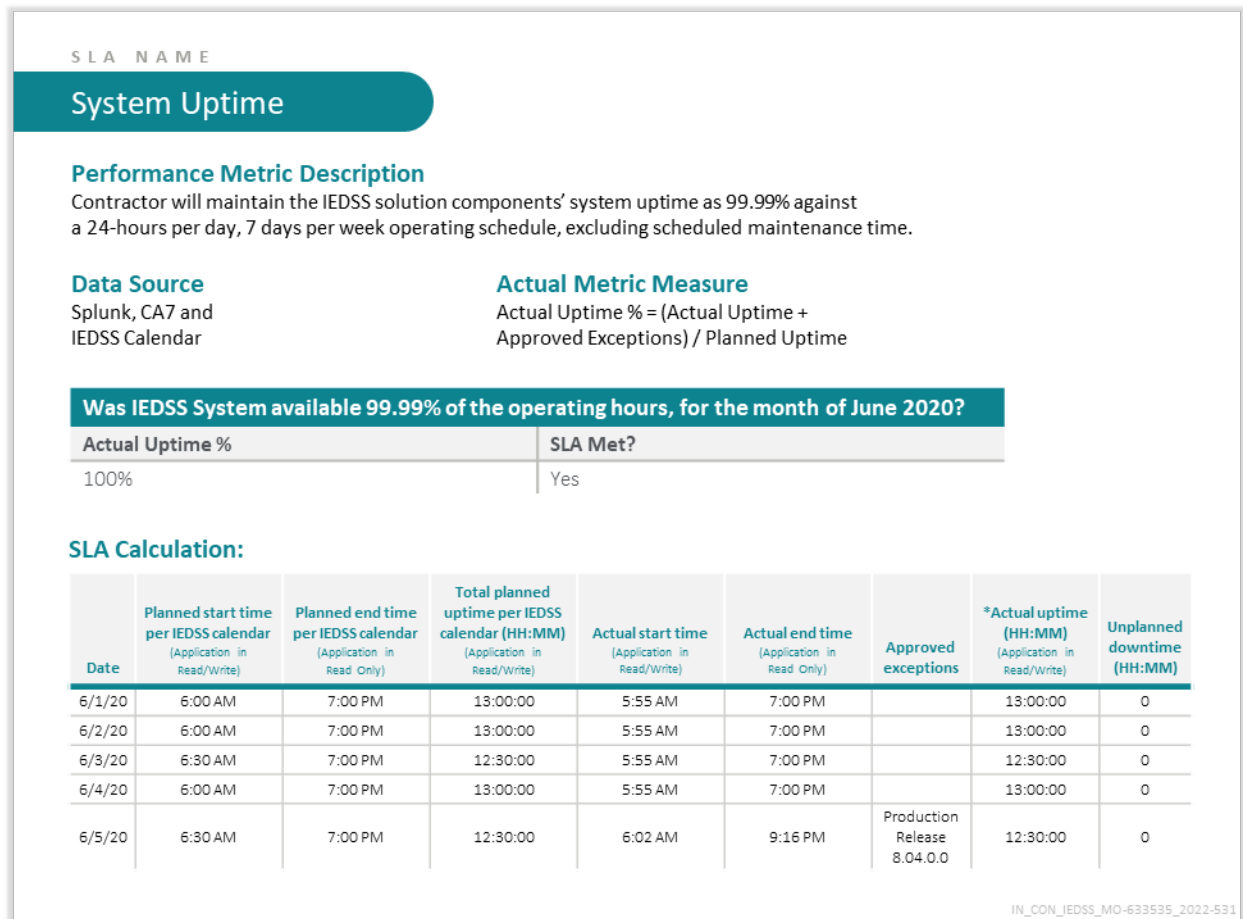







Figure 13-3. System Uptime SLA.

We have built automated “early warning” alerts that help our staff monitor those service levels that are at risk of not being met due to foreseen or unforeseen circumstances. We have implemented real-time, application and security monitoring dashboards using tools such as Splunk Enterprise, OEM, Java Virtual Machine (JVM) monitoring to trigger alerts in case of potential infrastructure outage, high response time and performance degradation. For example, we leverage the OEM tool to give us continuous feedback on resource intensive SQLs and jobs. Our DBAs use this information to proactively tune these before any significant performance degradation happens to the system. Our production support team is promptly notified of any abnormalities and they carry out immediate Root Cause Analysis (RCA) and taking appropriate remediation actions. This helps avoid any system disruptions for citizens and workers and impacts to SLAs.

Resolving Incidents that Impact Service Levels

We have established a process to prioritize, communicate and address any failures to maintain Service Levels. Any time an SLA does not meet the established threshold in a month, a resolution process is implemented. This process involves documenting and assessing the impact of the incident and communicating with the State. We conduct a Root Cause Analysis (RCA) and create output explaining in detail what the issue is, how it is impacting performance standards, and what the remediation plan is. We work with the State to obtain approval of the plan, implement it, and monitor that it has had the expected results. We identify and implement processes to avoid similar issues from reoccurring.

The following figure defines how our SLM process guides us in monitoring, measuring, and reporting, managing, and resolving incidents that are contributing to a failure to maintain service levels.

Deloitte SLM Phase	Detailed Activities	Productivity Tools
 Monitor	<ul style="list-style-type: none"> Proactively Monitor IEDSS components to identify incidents Communicate to appropriate State and OV&V stakeholders based on approved Project Management and Incident Management Plan guidelines 	<ul style="list-style-type: none"> Splunk Enterprise OEM
 Measure and Report	<ul style="list-style-type: none"> Analyze and document incidents Analyze root cause and its effect on IEDSS operations Create an Action Plan to resolve the incident and submit to State for approval 	<ul style="list-style-type: none"> JIRA ALM
 Manage	<ul style="list-style-type: none"> Proactively review SLA metrics on a daily basis Proactively review incidents and trigger resolutions 	<ul style="list-style-type: none"> JIRA ALM MS Office MS Project
 Resolve	<ul style="list-style-type: none"> Upon State Approval, execute remediation plan, assess results and confirm with State that the incident is resolved Record impact of incident to SLA for future reporting 	<ul style="list-style-type: none"> JIRA ALM MS Office
 Review and Feedback	<ul style="list-style-type: none"> Implement processes, system changes and monitoring tool changes to identify similar incidences and prevent them for re-occurring 	<ul style="list-style-type: none"> Splunk Enterprise configuration changes OEM configuration changes

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Figure 13-4. SLA Resolution Process.

We believe our diligence in performance, the RCA process, as well as our collaboration with the State will mitigate the risk of circumstances for which an Action Plans may be required. However, if we are not complying with any of these service levels as mutually agreed based on *RFP Attachment C Section 13.2.3*, at the State's request, we will perform an Action Plan.

13.c Acceptance of M&O Thresholds for Compliance

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- c. Confirm your acceptance of the M&O performance-based withhold requirements in Section 13.2 as written.

Deloitte in general accepts the M&O performance-based withhold requirements in Section 13.2. as may be further clarified during contract negotiations.

13.d Approach to Meeting the M&O Thresholds for Compliance

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- d. Describe your approach to meeting the Service Level compliance thresholds listed in Section 13.2 as written.

Our M&O processes, which are aligned with ITIL, emphasize being preventative rather than corrective, as detailed in our response in *Section 6, M&O Services*.

We understand the 25 service-level compliance thresholds defined by the State in *RFP Attachment C, Sections 13.2.1 and 13.2.3* and plan to meet them, as may be further clarified during contract negotiations and in the SLA Management Plan. We provide the State with the reports you need to determine compliance with the performance targets. We provide a Monthly M&O Status Report, as requested in RFP Section 4.7.1 and are currently collaborating with the State to provide reports like the one requested as part of the agreed-upon Service-Level thresholds—giving you confidence that transitioning to this new report will be seamless and meet your expectations.

We create our report using a combination of information from a variety of sources, such as the system database tables, ALM tools, manually tracked files, and system monitoring logs that are output of Splunk and custom audit data. We also share with the State our analysis of the root cause of any incidents that result in an unmet SLA. Based on this root cause analysis, we may adjust measurement of the SLAs if the incident root cause points to situations that are outside Deloitte's control (e.g., an outage in IOT managed infrastructure). We maintain transparency in the process of how we arrive at our performance report metrics. We will continue to share this information with the State and/or the OV&V vendor to maintain our spirit of transparency. The information for each performance target will be presented in the agreed-upon format. If a performance target is not met, additional commentary is provided on the report, detailing which target was not met and how often this occurred.

Our approach for meeting each performance target is detailed in *Section 13.e, Data Collection and Reporting for M&O Service Levels* and *Section 13.h, Data Collection and Reporting for SDLC Service Levels*.



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13.e Data Collection and Reporting for M&O Service Levels

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- e. For each enumerated service level agreement in Section 13.2.1, explain how the data for the service level will be collected and reported (i.e., data sources and process) and how you propose to meet or exceed the thresholds for compliance. Include a snapshot of a similar report from a past project, if available, to demonstrate your reporting experience and capabilities for each service level. Sensitive information can be redacted.

The following table lists the SLA expectations contained in the RFP, our suggested methods of measurement, and the frequency of reporting, along with the plans Deloitte has to meet or exceed the thresholds for compliance. As required, we will report on performance against compliance thresholds on a monthly basis. We will begin measuring compliance immediately following the initial Transition period, covering activities that begin or are assigned to Deloitte from that commencement date forward.

A snapshot of available and applicable SLA reports from the State of Indiana and other projects is provided in *Appendix 13, Sample SLA Reports*.

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
1	System Uptime	<p>Data Source: Splunk, CA-7, IEDSS Maintenance and Release Calendar.</p> <p>Process: System uptime compliance is calculated by combining actual system uptime (gathered by the monitoring tools) and State-approved downtime (downtime due to scheduled maintenance, network, or infrastructure disruptions) and comparing it against total planned uptime.</p>	<p>Deloitte is currently exceeding similar SLAs for IEDSS. Since IEDSS go-live, we have constantly monitored the scheduled downtime for the various major, minor, and expedited releases to confirm that productions build are completed in a timely manner.</p> <p>We continue to monitor and strive for meeting this service level. Similarly, the batch schedule is planned and executed so it can be completed successfully within the State-approved timeframes. If issues are identified that could impact uptime, the State designees are notified promptly with the RCA and mitigation steps.</p> <p>We also continue to leverage Splunk to proactively monitor the application, associated services, and batch operations for any real-time issues, using the results to escalate issues to resolve in near real time. Issues noticed are then escalated with the State and vendor partners to be able to keep the system available for the State's end users to continue to meet or exceed the defined SLA.</p>
2	Help Desk Resolution Timeliness	<p>Data Source: ALM.</p> <p>Process: The Help Desk Resolution Timeliness report includes details of the total incidents resolved during the reporting period and a breakdown of adherence to the timeliness threshold identified based on the priority level of the incident. In addition, the report also identifies incidents that haven't been resolved in the 60-calendar day timeframe listed in the RFP.</p> <p>Resolution time is calculated as elapsed business days between Deloitte's receipt and resolution time less any external party (e.g., State, IOT, other vendors) process time as defined in the IEDSS incident management plan.</p>	<p>Deloitte is committed to meet the established SLAs for incident resolution timeliness to support the State's operational needs.</p> <p>Our approach involves organizing our team into discrete triage and resolution teams, analyzing trends to prioritize resolutions, and surge capacity when inflow increases, such as after a major release. The State's timely escalation of issues after they occur and reasonable due diligence to confirm the issues require tier 2/3 assistance are important steps to achieve the State's desired level of service.</p> <p>We have structured our teams with specific focus on triaging followed by analysis and resolution. We work closely with the State to review proposed resolutions and cancellations to confirm alignment with the policy and operational needs of the State. If incidents are identified as defects, we follow the defect management process.</p> <p>Ongoing tracking of incident lifecycle progress using the ALM tool dashboards and internal checkpoints support timely resolution of tickets.</p>
3	Recurring Reports Accuracy/Timeliness	<p>Data Source: State SharePoint and Emails.</p> <p>Process: Monthly Report to show compliance with work product submissions, by manually tracking the dates on which the submissions were completed compared to the planned submission date.</p> <p>Submissions of recurring reports via emails to the State for review and/or approval are also uploaded to the State SharePoint simultaneously to maintain and track a central repository.</p>	<p>Deloitte proposes continuation of the established process (SharePoint submission, email communication) utilized to submit weekly and monthly reports to the State to meet the SLA requirements. Deloitte proposes to collaboratively work with the State to review the definition of accuracy and timeliness criteria and document in the Project Management Plan (PMP).</p>
4	Work Product Compliance	<p>Data Source: State SharePoint and Emails.</p> <p>Process: Monthly Report to show compliance with work product submissions. Submissions of work products submitted via emails to the State for review and approval are also uploaded to the State SharePoint simultaneously to maintain and track a central repository. We will also measure if there are any deviations for the work product standards that have not been corrected within 10 calendar days and will report them in our monthly SLA report.</p>	<p>Deloitte will analyze and create/update work products in support of M&O incident resolution. All Project Management (PM), SDLC artifacts, and M&O/Enhancement deliverables—including system user documentation, requirements, design, test artifacts, system coding, and platform configurations—are submitted to the State after being reviewed against a QA checklist to verify compliance to the standards identified in the contract.</p> <p>Deloitte agrees to rectify any deviations to these standards within 10 calendar days, once identified.</p>

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
5	Security Incident Notification Timeliness	<p>Data Source: Emails.</p> <p>Process: Monthly Report will list security incidents that occurred during the month, the date and time the incident was discovered, and the date and time the incident was reported to the State along with any other required information related to a security incident.</p>	<p>Once Deloitte's security team is notified of, or discovers, a security incident, the incident is analyzed by the team to perform due diligence and confirm it meets the criteria of reporting to the State to avoid creating false alarms. Upon confirmation, the incident is reported to the State according to the process and timeframes specified in the contract. Deloitte's security team follows up and submits to the State a detailed analysis and next steps with a resolution plan as required, working with the State to resolve the incident. Deloitte assisted the State in establishing Splunk ES Security Information and Event Management (SIEM) tool for compliance with MARS-E 2.2 requirements and provide near real time insights from a high volume of application audit logs. We have worked for nine years with the State to establish a structured approach to minimize the security and privacy risk exposure, while demonstrating compliance with relevant federal standards and regulatory requirements (e.g., CMS MARS-E 2.2, IRS Pub 1075 Rev. 11-2021).</p>
6	Privacy and Security Compliance	<p>Data Source: Compliance Assessments, Security Monitoring using Splunk ES, Security Testing, Security Scanning using tools such as Microfocus WebInspect, Microfocus Fortify etc. Please refer to <i>Section 11, Compliance with Standards & Regulatory Requirements</i> for full list of data sources</p> <p>Process: Monthly Report to show compliance with Privacy and Security regulations in RFP Section 12 Attachment B. In the Monthly Summary Report, Deloitte documents the results of the security activities due that month based on the agreed-upon schedule of compliance activities.</p> <p>We will report any incident of non-compliance with the date of cure. The report will also highlight any failures to cure an incident within 30 calendar days unless otherwise approved by the State.</p>	<p>Deloitte will perform multiple security and privacy activities to maintain compliance with State policies, federal standards, and regulatory requirements as defined in the Contract. Please refer to <i>Section 11, Compliance with Standards & Regulatory Requirements</i> for Deloitte's plan to comply to the federal standards and regulatory requirements. Deloitte continues to work with the State and report on the outcome of the various activities performed to maintain IEDSS solution compliance with the key federal and State regulations. Given the different frequencies at which these activities are performed, the monthly summary documents the results of the activities performed in the reporting period. For example, Security Testing is currently performed for every major release implemented in production. As this activity does not occur every month, it is reported prior to production implementation.</p> <p>Deloitte is committed to working with the State to address any incidents of non-compliance discovered by or reported to the State within 30-calendar days.</p>
7	Tracking and Resolution of nightly batch procedure failures that occur during any scheduled production	<p>Data Source: Post batch summary emails sent from the batch team mailbox and ALM.</p> <p>Process: Monthly Report will show compliance with batch summary notification timeliness.</p> <p>The PMO mailbox is copied on the post batch summary sent after the batch processes are completed for the business day. SLA threshold compliance is measured by tracking the time sent on the batch summary email compared to the 8:00 a.m. Eastern Standard Time.</p>	<p>Deloitte submits the post batch summary every day right after the batch processes are completed.</p> <p>The batch summary is emailed to the State designees daily with details of the overall run time and batches expected to run, along with a breakdown of batches that completed successfully and batches that were terminated. Details of the file transfers linked to critical batches and top exceptions are included in the summary as well.</p>
8	Tracking and Resolution of online system or scheduled batch procedure failures that occur during the normal business day	<p>Data Source: Emails and RTC.</p> <p>Process: We generate a monthly report to show compliance related to notification timeliness for daytime online system and batch incidents.</p> <p>The PMO mailbox is notified of the issues reported to State. SLA threshold compliance will be measured by tracking the time the initial notification occurred and when the</p>	<p>Deloitte's active monitoring of IEDSS infrastructure and application components, both online and batch, allows our team to proactively identify any issues that could impact the system availability or batch environment to support the State during regular business hours. Initial discovery of the issue could be identified through application monitoring in Splunk, tickets reported from the help desk, batch team reporting errors, or emails sent by vendor partners. These issues will continue to be tracked in ALM as incidents to track progress and resolution.</p>

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
		<p>plan for correcting the issue was sent to the State.</p> <p>Deloitte documents the tracking and timely reporting process of online and batch incidents with approval from State designee in the Project Management and Incident Management plans. Our process is aligned with notifying the State of any Priority 1 incidents within one (1) business hour of its occurrence.</p>	<p>Once such a failure is identified, Deloitte will inform the State designees within one hour of discovery and follow up with the action plan taken to resolve the issue within four hours from initial discovery to meet the SLA, for issues that can be resolved.</p>
9	Help Desk Ticket Cancellation Processing Accuracy	<p>Data Source: ALM and OV&V report of sampled tickets.</p> <p>Process: Monthly Report to show compliance with accuracy of cancelled help desk tickets.</p> <p>We generate a summary of all tickets cancelled within the reporting period. In this report, we also flag any ticket that was cancelled by Deloitte but subsequently reopened by the OV&V vendor with a mutually agreed reason.</p>	<p>Deloitte understands that incorrectly cancelling helpdesk tickets negatively impacts caseworker efficiency and we are committed to meeting the SLA. Deloitte's triage team follows a process of reaching out to the reporter of the incident to better understand the issue when clarification is needed. Our process also involves working with State SMEs to seek clarifications on incidents where policy or operational decisions are required. Deloitte will work with the State to review the definition of ticket cancellation and the process via which the proposed cancellation is approved by the State. We will update our Project Management and Incident Management plans and then enforce the process in IEDSS.</p>
10	Legacy System Components Availability	<p>Data Source: Notification and reporting process setup within Azure Cloud.</p> <p>Process: Monthly Report to show legacy system components availability with information about root cause for any unavailability.</p> <p>The legacy system components are hosted within Azure Cloud provisioned by IOT. We work with IOT to enable Azure native monitoring tools to collect health check statistics of the application and underlying platform services that host it. This Azure native monitoring report is leveraged to report compliance with the SLA threshold as part of the Monthly Summary Report.</p>	<p>The legacy system components are hosted within Azure Cloud, provisioned by IOT. Azure Cloud for business-critical and premium tiers has an availability guarantee of at least 99.99%, allowing for the SLA threshold to be met.</p> <p>In addition, Deloitte works with IOT to set up a notification process whereby the team is made aware of any issues with the availability of the service. This helps the team to resolve the application availability issues as soon as possible to meet and exceed this SLA.</p>
11	Online Response Time	<p>Data Source: Splunk-IEDSS System Response Time dashboard, and IEDSS Cognos Report.</p> <p>Process: Monthly Report to show compliance with system response time for online transactions.</p> <p>Response time KPIs are measured each month by averaging the daily transaction data. Online response time in IEDSS is measured as the time elapsed between the web request being generated and receiving the response on the Web (Apache) server.</p>	<p>Deloitte is currently exceeding the same SLA threshold after the Statewide rollout of IEDSS. Of the more than 32 million transactions, 99.87% were completed in less than 5 seconds.</p> <p>Deloitte performs extensive performance testing prior to the implementation of a major release in production and shares the results of these tests with the State, enabling consistently high KPIs for system response times.</p> <p>We also employ performance-tuning methods to continuously improve system response times, based on outcomes of performance testing or issues identified through monitoring Splunk dashboards. As an issue is identified, it is prioritized for a release based on impact to the production system.</p>
12	Incident Initial Triage Timeliness	<p>Data Source: ALM</p> <p>Process: Monthly Report to show compliance with Initial Triage Timeliness for incidents.</p> <p>The report includes details of the total incidents logged during the reporting period of how many incidents met the threshold identified based on the priority level of the incident. The elapsed time is calculated as the business hours between the incident's</p>	<p>Deloitte is committed to meeting the SLA thresholds for Initial Triage Timeliness to support the State's operational needs. We have a robust incident triage approach as defined in <i>Section 6.d—Incident Management and Helpdesk Support</i> of this proposal. This approach is based on ITIL standards. We have a dedicated incident management team who have been addressing IEDSS incidents since go-live, thereby gaining considerable knowledge in the incident data patterns and other known IEDSS system or user problems that allows us to quickly triage the incoming incident and get to a resolution to restore services. We also retain our documentation for resolved incidents in the ALM tool which</p>

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
		assignment to Deloitte and triage status update in ALM.	allows our incident management team to quickly search and refer to all similar previous incidents for triage effectiveness. After initial triage, our team continues to perform analysis and as more information becomes available, we adjust our approach as appropriate. This includes appropriately routing incidents to the responsible party.
13	Code Retention Procedures	<p>Data Source: ALM tool, ERWIN, SharePoint, and e-mails notification.</p> <p>Process: Monthly Report to list State requests and compliance with submission within five (5) business days.</p> <p>The State makes their request to the PMO mailbox. The PMO team records the request date and the completion date to evaluate compliance with the SLA threshold.</p>	<p>Deloitte follows established procedures to capture and store up-to-date base source code and configuration, executable modules, and database models. At the request of the State, Deloitte provides the location of the source code repository in the ALM tool. For database data models, as requested by the State, Deloitte has provided up-to-date models using the Erwin tool.</p> <p>We continue to follow approved procedures to retain accurate and up-to-date information so it can be retrieved and submitted to the State in a timely manner upon request.</p>

Table 13-1. Maintenance and Operations Service Levels Compliance and Reporting.

The following table lists the Other Service Level expectations identified in RFP *Appendix C, Section 13.2.3*, our suggested methods of measurement, and the frequency of measuring.

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
14	Forward Communications Received	<p>Data Source: State emails.</p> <p>Process: PMO mailbox is added in these emails. Our PMP has a communication section that outlines communication methods and escalation process across all stakeholders. This communication plan provides guidelines how the communication should be handled for State stakeholders, federal stakeholders and internal project and interface partner staff.</p> <p>We will use the date/timestamp of the forwarded emails to measure this SLA</p>	We have and will continue to forward all communications received that should be handled by State or interface partner staff within one (1) business day of receipt. This will be in accordance with the processes documented in our PMP.
15	Notify Sender	<p>Data Source: State emails.</p> <p>Process: Our PMP has a communication section that outlines communication methods and escalation process across all stakeholders. This communication plan provides guidelines how the communication should be handled for State stakeholders, Federal stakeholders, internal project, and interface partner staff. The PMO mailbox will be added in these emails. We will use the date/timestamp of the email notification to measure this SLA</p>	In accordance with our PMP guidelines, we will notify the sender that communications have been forwarded to the State or interface partner staff within one (1) business day or receipt.
16	Propose replacement of key staff within thirty (30) days	<p>Data Source: We closely monitor the roll-off dates of key staff. In the event of a key staff member rolling off before the scheduled date, we update this information through email and the weekly status meeting material.</p> <p>Process: We report on the date we propose the key staff replacement minus the key staff vacancy date to calculate the number of days.</p>	<p>In circumstances where a roll-off is anticipated, we plan for transitions well in advance, managing staff transitions without impacting delivery.</p> <p>In situations where a roll-off is sudden or unanticipated, we find a replacement with comparable qualification.</p> <p>Should there be a vacancy, Deloitte proposes the replacement of key staff no later than 30 days after the vacancy.</p>
17	Provide monthly management reports within ten (10) calendar days of the end of the	<p>Data Source: SharePoint and email communication.</p> <p>Process: We monitor the timely delivery of the management report by having periodic time checks with the PMO team who delivers the report. We maintain an internal SLA compliance tracker where we have documented on which day of the month a</p>	Monthly management report is provided by email and SharePoint within ten (10) calendar days of the end of the month being reported.

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
	month being reported	management report is due. Our PMO reporting team works closely with our M&O and SDLC teams to generate these reports on a timely basis.	
18	Submit status meeting agenda at least one (1) business day prior to meeting	Data Source: SharePoint and email communication. Process: We continue to monitor the timely delivery of the weekly status meeting agenda by emailing the content and sharing via SharePoint one business day prior to the status meetings. Our internal SLA compliance tracker provides appropriate guardrails for this SLA.	Weekly status meeting agenda is submitted at least one (1) business day prior to the meeting.
19	Provide status meeting minutes in specified format within ten (10) business days of the meeting	Data Source: SharePoint and email communication. Process: We monitor the delivery of the weekly status meeting minutes to be distributed within 10 business days after the meeting via email to all attendees of the meeting and uploaded on SharePoint.	Meeting minutes of the weekly status meeting are captured and provided in the format specified by the State within ten (10) business days of the meeting.
20	Provide Service Level Agreement status reports in specified format at least one (1) business day prior to each meeting	Data Source: State email and SharePoint. Process: We monitor the delivery of the SLA status report in specified format to be distributed by email and uploaded to SharePoint one business day before the meeting.	SLA status reports are provided in the specified format by email and SharePoint within one (1) business day prior to each meeting.
21	Provide annual summary reports in specified format	Data Source: State email and SharePoint. Process: Key metrics about the project along with a monthly overview of the 28 SLAs are shared in a report format that is distributed by email and SharePoint with the key Stakeholders.	The annual summary reports in the specified format are distributed through email and SharePoint.
22	Produce accurate documentation within ten (10) days of required change	Data Source: State email and SharePoint. Process: We will maintain a record of requests to change documentation either based on system or operational changes within the reporting month and when that request was addressed. We will also maintain any exceptions to this process in our internal SLA tracker and will report it on a monthly basis.	Deloitte continues to produce accurate documentation once the changes are discussed in accordance with the Change Management process that is outlined in our PMP. The documentation is updated to accurately reflect the system changes within 10 days of the required change. For major changes discussed in JADs, we continue to deliver the design documentation; for minor changes, we continue to update the documentation in real time in ALM during DTMs.
23	Notify the State of any issues with any user or system interface within one (1) hour of detection of the issue	Data Source: Email and phone communication. Process: If there is a critical issue, we inform the State within one (1) hour. Anytime an issue is reported, it gets recorded as an incident. We follow Incident review guidelines with the State within the stipulated timeframe.	If there is a critical issue, we inform the State within one (1) hour. Anytime an issue is reported, it gets recorded as an incident. We follow Incident review guidelines with the State within the stipulated timeframe.
24	Code Retention Procedures	Data Source: ALM tool, Erwin, SharePoint, and emails notification. Process: Monthly Report to list State requests and compliance with submission within five (5) business days. The State makes their request to the PMO mailbox. The PMO team records the request date and the completion date to evaluate compliance with the SLA threshold.	Deloitte follows established procedures to capture and store up-to-date base source code and configuration, executable modules, and database models. At the request of the State, Deloitte's Configuration management team can provide the location of the source code repository in the ALM tool. For database data models, as requested by State, Deloitte has provided up-to-date models using the Erwin tool. We will submit this information within five (5) business days of the request. We continue to follow approved procedures to retain accurate and up-to-date information so it can be retrieved and submitted to the State in a timely manner upon request.

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
25	Availability of emergency on-call technical staff	Data Source: RTC. Process: Emergencies are tracked as incidents in ALM. Compliance will be tracked accordingly to procedures outlined in the PMP.	We create an emergency support calendar that is published ahead of time, so all parties know who needs to be called in case of emergency. We also create a call tree and establish primary and secondary staff members to provide support (as needed).

Table 13-2. Other Service Levels Compliance and Reporting.

13.f Acceptance of SDLC Thresholds for Compliance

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

f. Confirm your acceptance of the SDLC performance-based withhold requirements in Section 13.3 as written.

Deloitte in general confirms its acceptance of the SDLC performance-based withhold requirements in Section 13.3 as may be further clarified during contract negotiations.

13.g Approach to Meeting the SDLC Thresholds for Compliance

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

g. Describe your approach to meeting the Service Level compliance thresholds listed in Section 13.3 as written.

SDLC for enhancements is an integral part of our overall delivery and is described in detail in our response, as requested in RFP *Section 5, Software Development Life Cycle (SDLC) Approach*. Our approach to managing SDLC thresholds for compliance follows a structured, PMBOK-aligned process to evaluate, track, and report on each SDLC phase from inception to implementation and post-production support. We have incorporated your feedback into our SDLC process over the years and strengthened our SDLC process to meet the unique challenges of IEDSS. Deloitte is ready for the evolution of our SDLC process and have proposed to transition to a Hybrid Agile SDLC which will bring in more transparency and client engagement throughout the lifecycle of development. We have discussed this transition in detail in *Section 5, Software Development Life Cycle (SDLC) Approach*. Through this migration, we will be better equipped to meet the three (3) SLAs for SDLC namely, Enhancement Estimates Timeliness, Enhancement Completion Timeliness, and Defect Correction timeliness.

Table 13-3 below describes the benefits we derive from this transition for the three (3) SDLC SLAs.

SLA Title	Benefits Derived from Hybrid Agile Implementation for this SLA
Enhancement Estimates Timeliness	<ul style="list-style-type: none"> Since in Hybrid Agile the entire scope is decomposed into smaller units (features and user stories) of work, estimation is quicker and more accurate. Since estimation and planning is done in iterations in the Agile SDLC, there is a way to incorporate the feedback of previous iterations to adjust the team velocity and story point estimates of a future sprint. This estimation model is better suited for the IEDSS where we have frequent legislative and other regulatory changes.
Enhancement Completion Timeliness	<ul style="list-style-type: none"> By using time-boxed, fixed schedules of four-week sprints, new features can be delivered quickly and frequently, with a high level of predictability. The process also enforces a stronger collaboration between the development team and the stakeholders, thus providing regular feedback on progress through scrum calls, continuous system demonstrations, and Agile retrospective sessions. These improve transparency of project execution and mitigates the risks for schedule variance.
Defect Correction Timeliness	<ul style="list-style-type: none"> One of the key advantages of Agile is that it improves software quality. Testing is an integral part of project execution. In contrast to Waterfall SDLC, Agile testing is done within sprint instead of at the end of all development efforts. This will allow us to have better quality product in UAT. It will also improve the UAT defect correction timeliness.

Table 13-3. Benefits of Hybrid Agile on SDLC SLAs.

Our approach for meeting each SDLC SLA threshold is detailed in *Section 13.h, Data Collection and Reporting for SDLC Service Levels*.

13.h Data Collection and Reporting for SDLC Service Levels

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- h. For each enumerated service level agreement in Section 13.3.1, explain how the data for the service level will be collected and reported (i.e., data sources and process) and how you propose to meet or exceed the thresholds for compliance. Include a snapshot of a similar report from a past project, if available, to demonstrate your reporting experience and capabilities for each service level. Sensitive information can be redacted.

The following table lists the SLA expectations contained in the RFP, our suggested methods of measurement, and the frequency of reporting, along with the plans Deloitte has to meet or exceed the thresholds for compliance. As required, we will report on performance against compliance thresholds on a monthly basis. We will begin measuring compliance immediately following the Initial Transition period, covering activities that begin or are assigned to Deloitte from that commencement date forward.

A snapshot of available and applicable SLAs from the State of Indiana and other projects is provided in *Appendix 13, Sample SLA Reports*.

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
26	Enhancement Estimate Timeliness	<p>Data Source: ALM</p> <p>Process: After the system CRs are submitted, we provide the estimated hours for the design, development, and testing efforts within a central repository such as ALM and the cost estimates based on these hours through an email to the State project management team. There are situations where our team is dependent on requiring additional information and clarification from the State. Once all the needed information is received, the cost and time estimates are reported within one week from the time of receiving the clarifications.</p> <p>We generate the enhancement estimate timeliness report from ALM based on the elapsed time between the date the estimates were entered and when the CR was filed. If we needed additional clarifications from the State for the CR, the waiting time is deducted from the elapsed time.</p>	<p>Deloitte has worked with the State to estimate over 400 enhancements.</p> <p>Our SDLC team is knowledgeable in the IEDSS system which helps us to quickly ascertain the system impacts of a CR and the effort needed to design and implement those changes.</p> <p>We also maintain a repository of actual implementation time for all our prior implemented CRs. This gives us a higher-level confidence in estimating new CRs with similar system impacts.</p> <p>Deloitte agrees to provide estimates for enhancements within one week to meet the SLA threshold.</p>
27	Enhancement Completion Timeliness	<p>Data Source: ALM</p> <p>Process: After the completion of each CR, we update the CR with actual date of implementation.</p> <p>We generate the enhancement completion timeliness report from ALM based on the difference between the approved completion timeline and the actual completion timeline.</p>	<p>Deloitte is committed to help the State meet its operational schedule by scheduling and maintaining 100% compliance with the release schedule. Deloitte proposes to transition to Hybrid Agile in this contract. Pursuant to Agile best practices, we will create a detailed sprint plan for all CRs leading up to the releases.</p> <p>Some of the inherent benefits of using Agile for SDLC work is to decompose the scope of the CR into smaller pieces of effort that can be delivered in a pre-determined timeframe referred to as sprint cycles.</p> <p>The primary output of these sprint cycles is to deliver a tangible piece of development work addressing meaningful business requirements of the CR.</p> <p>By migrating to the Hybrid Agile SDLC life cycle, we will be able to provide more transparency to our development life cycle as well as demonstrate our progress iteratively throughout the lifecycle of the CR. This improves our project's progress tracking capabilities.</p> <p>Our strong SDLC methodology, project management principles and in-depth knowledge of the IEDSS system will allow us to meet this critical SDLC SLA.</p>
28	Defect Correction Timeliness	<p>Data Source: ALM</p> <p>Process: All defects will be tracked in ALM during the UAT phase of the CR. We will associate Severity Level for each defect that are triaged and logged. During UAT, we will generate</p>	<p>In the Hybrid Agile SDLC methodology, the UAT phase will start after the Sprint based iterative development cycle. In our experience of using Hybrid Agile approach, we have delivered more robust software changes to UAT, thereby reducing the number of UAT defects significantly. This is possible as there is continuous QA cycle</p>

SLA#	SLA Title	Data Sources and Process (How Is the Data for the SLA Collected and Reported?)	Approach to Meet or Exceed the Threshold for Compliance
		<p>periodic reports to show the UAT defects with their status and severity level. We work with the State to prioritize defect resolutions.</p> <p>We will also generate a monthly UAT defect timeliness report that will comprise of CRs worked on in that reporting timeframe. In this report, we present the resolve defects compared to the planned resolution data.</p>	<p>within each sprint and demonstration to our end user. This helps in early detection of software defects.</p> <p>We have plan to use automated test scripts (leveraging SonarQube and Selenium) in IEDSS which has a high coverage for the application functionality. We will execute our automated test scripts during our hardening sprint cycles which further enhances the quality of development.</p> <p>These improvements further enable meeting the UAT defect correction timeliness SLA.</p>

Table 13-3. SDLC Service Levels Compliance and Reporting.

13.i Acceptance of User Requests/Defects/Incidents Reporting

RFP Reference: Attachment F, 13. Service Level Agreements (Attachment C, Section 13)

- i. Confirm your acceptance of the reporting requirements in Section 13.4.

Deloitte confirms its acceptance of the reporting requirements in Section 13.4. Examples of these reports can be found in *Appendix 13, Sample SLA Reports*.

Drivers for Annual Cost Adjustments

Section 14

RFP Reference: Attachment F, 14. Drivers for Annual Cost Adjustments (If Applicable)

The Cost Proposal template provides the option for the Respondent to increase or decrease their annual M&O fee from year to year. If you proposed a change in fees in any year in your Cost Proposal, please clearly describe in the response to this question the drivers for the change in detail for each affected year. For example, if your fee was reduced from Year 1 to Year 2 due to an anticipated staffing adjustment, please explain the change to staffing levels mix and/or FTE count. Do not include your monthly or annual fees in the response to this question; only percentages of each change described are allowed.

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