

**Indiana Department of Child Services**

**Design, Development, and Implementation of a Comprehensive Child Welfare Information System (CCWIS)**

**Request for Proposal**

**Attachment C: Scope of Work**

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# Introduction

## High Level Scope Overview

In accordance with Indiana statute, including IC 5-22-9, the Indiana Department of Administration (IDOA), acting on behalf the Indiana Department of Child Services (DCS) requests the services of a qualified vendor (“the Contractor”) to design, develop, and implement (DDI) a Comprehensive Child Welfare Information System (CCWIS). Through the resultant contract, DCS plans to complete the replacement of the existing Statewide Automated Child Welfare Information System (SACWIS) and implement an integrated CCWIS system. The CCWIS system shall be compliant with Administration for Children and Families (ACF) CCWIS standards (see <https://www.law.cornell.edu/cfr/text/45/part-1355>, Part 1355.50 through 1355.59) including any federal requirements and certification guidelines that are released before the pilot implementation begins. Specifically, the CCWIS system must meet:

* 45 CFR 1355.52 (a) (see Section 5.3.1)
* 45 CFR 1355.52 (b) (see Section 5.3.2)
* 45 CFR 1355.52 (c) (see Section 4.13)
* 45 CFR 1355.52 (d) (see Section 5.3.3)
* 45 CFR 1355.52 (e) (see Section 5.3.4)
* 45 CFR 1355.52 (f) (see Section 5.3.4)
* 45 CFR 1355.52 (g) (see Section 5.3.5)
* 45 CFR 1355.52 (h) (see Section 5.3.5)
* 45 CFR 1355.53 (see Section 2.3 and Section 4)

The CCWIS system must also meet all federal and Indiana security, statutory, and regulatory requirements.

* Indiana’s SACWIS system, known as the “Management Gateway for Indiana’s Kids” (MaGIK), consists of two components - Casebook (case management) and KidTraks (provider management and payment system). Please see Exhibit 1: CCWIS Functions Phase Schedule (Attachment K) for a summary of the functionality in each system. Please note that the Phase Schedule listed in Exhibit 1 is an estimate that may change based on the work of the Organizational Design Contractor. The Contractor must work with the State to finalize the functionality breakdown of Phase 1 and Phase 2 during Planning.

Through Agile software development methodologies, the Contractor shall design and develop the new CCWIS for all the functionality within the two systems within a two-year period.

* + **Implementation Phase 1: Replace the case management functionality by the end of Year 1.** The majority of the functionality exists in Casebook, but some additional case management functionality can be found in KidTraks.
  + **Implementation Phase 2: Replace ancillary case management by the end of Year 2.** This includes all remaining KidTraks functionality. DCS has declared with ACF that KidTraks shall be a Transitional CCWIS while awaiting the implementation of the new CCWIS system. Note: DCS has completed integration between Casebook and KidTraks via MuleSoft and thus the new CCWIS system shall be able to access data from the Transitional CCWIS as needed.
* After Implementation Phase 1 is complete, the Contractor shall provide Maintenance and Operations (M&O) Stabilization services for Implementation Phase 1 components for one (1) year and six (6) months before transferring M&O responsibilities to the State. After Implementation Phase 2 is complete, the Contractor shall provide M&O services for six (6) months for the Implementation Phase 2 components. The State has the option to request continuing full time M&O Steady State support on a monthly basis for Phase 1 and 2, or if minimal support needed, on an ad hoc hourly basis.
* DCS shall provide embedded State staff to work in tandem with the Contractor’s staff on development and implementation activities. The Contractor must ensure that the embedded staff are provided with training and sufficiently involved in DDI activities to understand the system and enable a smooth transition for State takeover of M&O responsibilities after M&O Stabilization for each Implementation Phase.
* CCWIS Certification Support (Optional): The State shall have the option to utilize the Contractor for support for the CCWIS certification process, if ACF defines a certification process during the Contract term.

## High Level Technical Overview

* **The** **CCWIS system shall be a cloud-based solution on the Salesforce platform.** DCS has made an investment in the Salesforce platform and is currently building updated MaGIK functionalities and processes on that platform; as such, the future CCWIS system must be on the Salesforce platform to maximize the return on the State’s investment.
* **The CCWIS system shall be hosted on Amazon Web Services (AWS), Gov Cloud FedRamp Medium. Casebook data has been migrated to the AWS Relational Database Service (RDS) for PostgreSQL (most current version).**
* **The CCWIS system shall integrate MuleSoft as the single point of bidirectional data exchange**.
* **DDI shall be executed through Agile methodologies**. The State is willing to use the specific Agile methodology that the Contractor recommends, provided that the Contractor conducts sufficient training on the methodology and tools for the State staff working on the project.

# Background

## DCS Background

It is DCS’ focused vision that Indiana children live in safe, healthy and supportive families and communities. In working towards this vision, DCS partners with children and families to provide services in order to address issues that lead to Child Abuse and/or Neglect (CA/N) and ensure the safety, permanency, stability, and well-being of children. DCS also assesses allegations of (CA/N) and oversees licensing services for resource parents and child caring institutions. The DCS mission is to engage with families and collaborate with state, local, and community partners to protect children from abuse and neglect, and to provide child support services (please note that child support services is not a part of this RFP). DCS values and operates under the following principles: Respect, Safety, Stability, Permanency, Responsibility, Accountability, and Continuous Improvement and Prevention.

The direct delivery of child welfare services by DCS local offices under the administration or supervision of the Central Office of DCS is based upon federal and state laws, rules, and regulations. The foundation for public welfare is found in the 1935 federal Social Security Act, as amended. The Indiana Juvenile Code became effective October 1, 1979. In its “General Policy and Provisions,” Indiana Code 31-10-2-1 affirms that it is the policy of this state “to ensure that children within the juvenile justice system are treated as persons in need of care, protection, treatment and rehabilitation.” Further, the Code states that it is Indiana’s policy to “strengthen family life by assisting parents to fulfill their parental obligations;” and “to remove children from their families only when it is in the child’s best interest or in the best interest of public safety.” The Department of Child Services was established in January 2005 pursuant to an executive order of Governor Mitch Daniels. The Department was charged with providing more direct attention and oversight of child protection and child support enforcement. DCS protects children who are victims of abuse or neglect and strengthens families through services that focus on family support and preservation.

DCS Child Welfare has three facilities located in downtown Indianapolis. In addition, there are four regional Intake sites in South Bend, Evansville, Bedford, and Hartford City. There are approximately 256 policies governing DCS Child Welfare and its practices, located here: <https://www.in.gov/dcs/2351.htm>.

DCS Child Welfare is organized around the following business units:

1. **Field Operations**
   1. *Assessments and Case Management*—18 regions across the state supported by 8 regional managers, 18 division managers, 378 supervisors, 89 Local Office Directors (LODs), and 2,246 family case managers (FCMs).
   2. *Intake*—Child Abuse Hotline—5 regional call centers with 18 supervisors and 2 deputy directors managing 123 Intake specialists (50% of specialists work from home).
2. **Child Welfare Services**
   1. *Older Youth Initiatives*—manage services for older youth as they transition from foster care to adulthood and independent living, including the Collaborative Care, the extended foster care program.
   2. *Prevention*—manage child abuse and neglect prevention services and awareness programs across the state, including Healthy Families Indiana (HFI), Community Partners for Child Safety (CPCS), Youth Service Bureaus, and Prevent Child Abuse Indiana.
   3. *Child Welfare Services*—tasked with provider management, including managing community-based service provider contracts, provider compliance, and service referrals, such as drug screening, Child Mental Health Initiative (CMHI), and substance abuse treatment.
3. **Permanency and Practice Support**
   1. *Health Services*—team of clinicians across the state providing case management practice support, including placement and treatment plan reviews.
   2. *Permanency Programs*—manage the Permanency Roundtable (PRT), regional councils that meet to develop action plans to assist hard-to-place children in reaching a permanent placement.
   3. *Practice Support*—oversee the Special Needs Adoption Program and DCS policy management.
   4. *Nursing Services*—educate and support field FCMs in cases of “medical fragile” youths to assist in the identification of appropriate medical care and therapies.
   5. *Investigations*—team of former law enforcement officers engaged in locating parents, family members, or other relatives.
   6. *Education*—team of education liaisons that work with the schools and Department of Education to advocate for children in foster care.
   7. *International and Cultural Affairs*—team that supports international child welfare cases (non-U.S. citizen children in the U.S. or U.S. citizen children with no U.S. relatives).
   8. *Compliance Evaluation Team*—team of analysts and a supervisor responsible for writing policies and working with legislators on changes to laws governing DCS policy and practice.
4. **Placement Support and Compliance**
   1. *Foster Care Programs/Services*—manage licensing of foster family homes (almost 13,000 homes), licensed child placement agencies (approximately 3,200 LCPAs), child care institutions, group homes, and private secure facilities, along with contract compliance and revocations.
   2. *Residential Licensing*—team that manages licensing of residential child care facilities, institutions, and group homes, along with contract compliance and revocations.
   3. *Central Office Background Check Unit*—a team of staff and contractors responsible for fingerprinting and background check processing of anyone involved in the welfare, care, or service of children (over 90,000 requests per year).
   4. *Interstate Compact on the Placement of Children (ICPC) Unit*—process requests for the safe placement of children across state lines as part of a 50-state compact governing placement procedures.
5. **Juvenile Justice**
   1. *Probation Services*—provides placement and service referral processing to FCMs and over six hundred (600) juvenile probation officers for children placed on probation based on juvenile delinquency court adjudication results. Services include residential treatment services, foster care, and community-based services.
6. **DCS MaGIK Information Technology**—includes KidTraks software development and support, Casebook management and support, business systems consultation, and IT project management.
   1. IT Project Management Office
   2. Business Systems Consultants & Quality Assurance Testers
   3. IT Software Development
   4. Systems Support—Team of UI/UX and Helpdesk personnel
   5. Data Management Team
   6. Security Analyst
   7. Infrastructure Manager
   8. Systems Engineering
7. **Administrative Services**—Finance and Accounting services for DCS (interface with PeopleSoft accounting system), including:
   1. Controller—accounting services, including Invoicing/processing of service provider/vendor invoices.
   2. Financial Analysis.
   3. Central Eligibility Unit—responsible for Medicaid and Title IV-E eligibility determination and application processing.
   4. Rate Setting and Cost Allocation.
   5. Purchasing and Contracts.
8. **Strategic Solutions and Agency Transformation**
   1. *Continuous Quality Improvement*—responsible for improving the quality of services provided.
9. **Staff Development**—including practice management and staff training.
10. **Legal**—attorneys and legal staff responsible for filing and adjudicating child-related court cases, along with other legal matters.
11. **Communications**—manages external and internal DCS communications and publications.
12. **Human Resources**—manages DCS state employee hiring and human resource services.

### Case Volume

Historical assessments and case volume statistics are provided below for reference and have not materially fluctuated since the dates indicated:

|  |  |
| --- | --- |
| **Assessments** | **11,806**—Number of assessments as of May 1, 2018. |
| **Active CHINS Cases:** | **22,355**—Number of children with an open CHINS case as of April 30, 2018.  **16,460**—Number of children with an open CHINS case and are Out-of-Home Placement (Relative Homes, Non-Relative Foster Home, Residential Facility, or other) as of April 30, 2018. |
| **Active Informal Adjustments (IAs) Agreements:** | **3,804**—Number of children with an open IAs as of April 30, 2018. |
| **Active Collaborative Care (CC) Enrollees:** | **825**—Number of children enrolled in a CC Program as of April 30, 2018. |
| **Adoptions:** | **1,812**—Total DCS adoptions for 2017. |

### Call Volume

The intake hotline statistics as of June 2018 are provided below for reference:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | Total Number of Reports Handled During June\* | 16,398 | | Total Number of Calls Handled During June | 13,496 | | Average Number of Calls per Business Day | 539 | | Average Number of Calls per Weekend Day | 243 | | Average Speed of Answer for Law Enforcement with Access Code | 12 seconds | | Average Speed of Answer for non-Law Enforcement calls | 10 seconds | | Average Length of Time Callers Spent Speaking with an Intake Specialist | 12 minutes, 8 seconds | | **Total Number of Calls Received Year to Date** | **102,640** | |

*\* Total number of reports include calls, faxes, emails and mail-ins. Some calls received at the Hotline turn into more than one report per call. Screen in reports average. Current volume has not materially fluctuated since June 2018.*

### Program Improvement Studies

DCS began a formal Program Improvement Plan (“PIP”) development after receiving the Child and Family Service Review (“CFSR”) Final Report and accompanying onsite presentation from the Children’s Bureau in January 2017 (see Attachment K - Bidders Library, Exhibit 2). Also, the Child Welfare Policy and Practice Group conducted a review of the DCS system and the final report from CWG was provided on June 18, 2018 (see Attachment K- Bidders Library, Exhibit 3). The CCWIS system shall support the State in carrying out the accepted recommendations from these studies.

## CCWIS Oversight

In 2016, the Department of Health and Human Services (HHS), through the Administration for Children and Family (ACF), issued the Comprehensive Child Welfare Information System (CCWIS) Final Rule (81 FR 35449) to promote the modernization of aging child welfare information systems throughout the country. The CCWIS Final Rule is available in Attachment K – Bidder’s Library as Exhibit 4. The Final Rule includes new regulations to guide the use of technology in child welfare. The guidance provided promotes modularity and interoperability, leveraging technology for innovation and agility to address issues in child welfare services that can be shared between states. Previously, child welfare information systems were required to use a single comprehensive system. Due to this, it was difficult to take advantage of existing technology and changing welfare services practices. The Final Rule removes the requirement for a single comprehensive system and allows agencies to implement integrated solutions such as Commercial-Off-The-Shelf (COTS) products that can better support current child welfare practices. This new approach offers an array of possibilities for the child welfare business model and the solutions designed to support it. The CCWIS Final Rule allows DCS to use more effective technologies to quickly identify youth and family needs and link them to services.

## System Vision

The DCS MaGIK system currently consists of two components: Casebook and KidTraks. Casebook is the case management functionality of the system built by Case Commons, while KidTraks is the financial and provider platform built by DCS. The current Casebook and KidTraks systems do not provide the functionality that is required for a fully integrated case management system, compliant with CCWIS standards. In order to make the DCS system compliant with CCWIS standards and to improve operational and performance-related issues, DCS has determined that a new system is needed, as opposed to enhancements to the current systems. Accordingly, in July 2018, DCS declared a new Comprehensive Child Welfare Information System (CCWIS), and declared a Transitional CCWIS for the KidTraks components of MaGIK, the existing SACWIS with ACF.

The CCWIS system shall be designed to address the following:

* A modular solution (see: 45 CFR 1355.53 and Exhibit 7.3: Technical Bulletin - Modular Design and Review Guidance)
* System enhancement capability
* External interfaces for data accuracy and availability
* Homogenized technology
* Improved system configurability
* Effective organizational design
* Duplicate function elimination
* Management reporting
* Improved IT practices
* Title IV-E Eligibility calculations

The CCWIS system must support the efficient, economical, and effective administration of the Title IV-B and IV-E plans pursuant the federal requirements by:

(1) Improving program management and administration by maintaining all program data required by federal, state or tribal law or policy;

(2) Appropriately applying information technology;

(3) Not requiring duplicative application system development or software maintenance; and

(4) Ensuring costs are reasonable, appropriate, and beneficial.

The CCWIS system architecture, along with the automated functions identified, shall be designed to address current system deficiencies. The Contractor shall implement a system capable of providing and/or supporting the following:

|  |  |
| --- | --- |
| * Configuration Based Platform Design * Artificial Intelligence/Machine Learning * Business Rules Engine * Call Center Integration (Phone System) * Benefit History * API Integration * Matching Engine * Travel * Probation * Service Referrals * User Alerts and Notifications * Federal Reporting * Email, Text, and Mobile Capabilities * Guided Intake with Workflow Integration * Multi-Level Role Based Access * Case Management * Real-Time Mobile Platform * Integrated Service Plan | * Comprehensive Financial Management * Real Time Outcome Analytics Delivered to the Frontline Users * Data and Analytics Reports and Dashboards * Collaborative Communities * Collaborative Care * System Wide Data Entry Forms Validation * Fully Integrated Global Search * Workflow Engine * Data-Level Security * Self Service Community Environment * Post-Adoption/Guardianship Assistance * Integrated Assessment Engine * Permanency Round Table * Interactive Voice Response * Document Management * Foster Care services |

## Major CCWIS Project Vendors

The project approach for the CCWIS system involves four critical services that are being procured separately, but all service providers must work collaboratively throughout the project:

1. **System DDI Services (scope of this RFP)**
2. **Organizational Design Services**— The Organizational Design Vendor shall engage DCS business units in operational process redesign to align agency operations with practice model goals and to achieve uniformity across the agency. The Organizational Design Vendor shall ensure all business process are mapped, including gaps between current process and compliance to the Family First Preventative Services Act (FFPSA), Child Welfare Policy and Practice Group (CWG), and Child and Family Services Review Process Improvement Plan (CFSR PIP), available in Attachment K as Exhibits 5, 3, and 2, respectively. Compliant workflows and business rule validation shall be captured as requirements for the CCWIS system. An RFP for Organizational Design (RFP# 20-006) was released on May 29, 2019.
3. **Project Management Organization (PMO)** — The PMO vendor shall provide project management oversight of the project and its associated vendors to ensure stakeholders are effectively engaged and all project deliverables are completed within budget, scope, and schedule. The PMO vendor is expected to implement and measure Capability Maturity Model Integration (CMMI) level two maturity and shall manage the Independent Verification and Violation (IV&V) services. An RFP for PMO services shall be released in the near future.
4. **Independent Verification and Validation (IV&V)** – the IV&V vendor shall provide an independent appraisal of the development of the CCWIS project. A procurement for IV&V services shall be released in the near future.

## Overview of Salesforce Work To Date

DCS requires the vendor to use Salesforce as the CCWIS platform. To date, DCS has completed seven (7) Salesforce projects that have served as pilots for the technology and helped to establish a platform for the new CCWIS system.

1. The first Salesforce project started in September 2017 and was deployed February 2019 for the Healthy Families Indiana (HFI) application, Enlite, to replace a Datatude system. HFI is a voluntary, preventative services program that includes multi-faceted home visitation designed to promote healthy families and healthy children through services that include child development, access to health care, parent education, family incentives, staff training, and community coordination and education. This project was contracted through Brite Systems; and shall be transitioned to the Indiana Child Welfare IT team for maintenance and operations support prior to August 2020.
2. The next Salesforce project piloted was Salesforce Interstate Compact on the Placement of Children (ICPC) Phase 1 - Replace Access DB. This Salesforce project is a database solution to convert ICPC data from MS Access. The new Salesforce database collects the information needed for tracking, monitoring, and completing forms and reports for children placed across state lines. The second phase of this project included MuleSoft integration to the National Electronic Interstate Compact Enterprise (NEICE) clearinghouse.
3. The Salesforce Asset Management project served to create a Salesforce (SFDC) application to replace the existing spreadsheets used by Asset Management in order to gain efficiencies in tracking and reporting of DCS assets.
4. The Salesforce HR Survey project is part of the CWG and CFSR initiatives to have scientific surveys for employee onboarding and exit surveys. The initial project focused on building an employee exit survey and served as the template for building future surveys with OmniScript and DataRaptor which provide skip-logic to modify succeeding questions based on answers to previous questions. Additional surveys built include onboarding surveys to help the agency with employee retention goals.
5. Salesforce Marketing Cloud is being used by DCS Communications team to manage external communication, particularly to assist with foster parent and adoption recruitment.
6. The Salesforce Assessment Initiation project goal was to create a mobile-friendly form for assessment workers to track assessment initiation timing and obstacles or barriers while attempting to assess the child. This form replaces spreadsheets used by field workers. The Salesforce application brings in data from MaGIK using MuleSoft for integration and calculates the safety initiation by date and time. Users are required to enter information about linked report method of initiation, timely initiation, and extenuating circumstances that prevented timely initiation of the assessment. Reports and dashboards were also created within Salesforce to display compliance data to field staff at all levels from FCM, Supervisors, Local Office Directors, Regional Managers, to Executives. This has been developed on Salesforce/Vlocity and DCS Office of Data Management was included to update field reports.
7. The DCS Foster Care Portal went live in April 2019 to provide a single portal providing application management and acting as a source for potential foster parents to find information related to foster care or becoming a foster parent or a kinship or relative caregiver. The portal also allows foster parents and kinship or relative caregivers to view medical and case information using a one-way API. The Foster Care Portal is built on the Salesforce community portal platform technology. Additional technologies that integrate with and enhance Salesforce include MuleSoft, which integrates Salesforce with DCS legacy systems, retrieving data through an API network to present live data from external systems to foster parents. Software program Vlocity is used for creating forms and tables using OmniScript. Due to security and confidentiality policies, a valid foster parent login is required to see foster parent data that is in production. For convenience, foster parents access the new Foster Care Portal by logging in with their current usernames and passwords from the DCS legacy system. Login credentials are maintained using delegated authentication of current usernames and passwords from the DCS legacy system.

## Guidelines and Standards for Compliance

The Contractor must ensure the new CCWIS system and their day-to-day project execution is in compliance with the following guidelines and standards:

* 1. CCWIS Federal Requirements (45 CFR 1355.50 through 1355.59)
  2. 45 CFR 95.617
  3. 45 CFR 92.36 (i)
  4. CCWIS Final Rule Regulations
  5. CFSR Program Improvement Plan
  6. Family First Preventative Services Act
  7. Child Welfare Policy and Practice Group (CWG) Assessment
  8. ACF Regulation of Software Licensing
  9. Security Compliance Guidelines (see Section 5.4.2 - Security Requirements)

# Current System (MaGIK)

The current DCS child welfare information system, MaGIK, is comprised of Casebook, a case management solution built by Case Commons, and KidTraks, a DCS-built system. MaGIK is used across all 92 counties.

## Casebook

Casebook is a third party Ruby-on-Rails COTS product that is hosted, operated, and provided by Case Commons. It is a PostgreSQL database with approximately 1 billion records and 385 tables. The issues that DCS would like to address through the new CCWIS are summarized as follows:

* CCWIS Regulations
* CFSR Program Improvement Plan
* Family First Preventative Services Act
* Child Welfare Policy and Practice Group (CWG) Assessment
* System Enhancement Capability
* External Interfaces for Data Accuracy and Availability
* Homogenized Technology
* Improved System Configurability
* Effective Organizational Design
* Duplicate Function Elimination
* Management Reporting
* Improved IT Practices
* Title IV-E Calculations

Casebook shall be used until DCS can replace all functionality with the new CCWIS system via Implementation Phase 1. Casebook changes shall be limited to data changes, expungement requests, and any functions needed for business continuity and to keep the system secure. All project activity for Casebook stopped in June 2018, with the exception of the Postgres Server upgrade project.

The Casebook functionality has been replicated to an on-premise, state owned PostgreSQL database that is fully integrated using MuleSoft to KidTraks and Salesforce. This transition of Casebook shall reduce CCWIS development time and assist in decoupling Casebook from MaGIK.

### Casebook User Accounts

Provided below are the user counts for Casebook as of mid-2018. These counts have not fluctuated materially since that time.

| User Category | Count |
| --- | --- |
| Admin | 27 |
| Analytics\_Report | 5 |
| Central\_Office\_Fatality | 3 |
| Central\_Office\_Icpc | 3 |
| Central\_Office\_Licensing | 6 |
| Central\_Office\_Resource\_Unit | 3 |
| Ceu\_Supervisor | 15 |
| Ceu\_Worker | 46 |
| Collaborative\_Care\_Case\_Manager\_3cm | 56 |
| Division\_Manager | 20 |
| Executive | 23 |
| Foster\_Family\_Licensing | 129 |
| Foster\_Family\_Licensing\_Supervisor | 20 |
| Local\_Office\_Director | 89 |
| Read\_Only | 275 |
| Residential\_Resource\_Licensing | 7 |
| Residential\_Resource\_Licensing\_Supervisor | 6 |
| System Admin | 14 |
| Supervisor | 341 |
| Worker | 2,854 |
| Grand Total | 3,942 |

## KidTraks

KidTraks is an SQL Server database solution built by DCS to handle the financial and provider management functionality. It has approximately 1.2 billion records and 1,300 tables (which include security-related tables), and has a 1.48 TB stream database for storing approximately 7.3 million documents.

DCS plans to maintain KidTraks with limited updates until CCWIS is implemented. When the contract begins, enhancements to KidTraks functionality shall be restricted to legislative changes and any updates needed to ensure the integrity of data sharing between the CCWIS system and the Transitional CCWIS.

When Implementation Phase 1 is completed, Casebook shall no longer be used, but non-case management related functionality shall remain operational in the Transitional CCWIS. Through Implementation Phase 2, the Contractor shall incorporate all remaining KidTraks functionality into the new CCWIS system. The Transitional CCWIS system shall remain operational through the end of Implementation Phase 2, at which point the CCWIS system with the KidTraks functionality is operational and the Transitional CCWIS system shall be retired.

### KidTraks User Accounts

Provided below are the user counts for KidTraks as of mid-2018. These counts have not fluctuated materially since that time.

| User Category | Description | Count |
| --- | --- | --- |
| DCS Users | DCS Users within KidTraks include DCS employees and contractors, as well as Indiana State Board of Accounts Auditors. | 4,400 |
| Vendor Users (e.g., foster care parents, providers) | Vendor Users include Contracted Service Providers who deliver services to DCS families, Foster Care Parents, and Licensed Child Placement Agencies. | 5,500 |
| JD/JS (probation officers) | DCS Probation Officers provide juvenile services and placements that are ordered by the Court in a juvenile delinquency case, for which DCS has been ordered to pay. | 500 |
| NYTD Survey Users | NYTD Survey Users are persons currently or previously in foster care who are asked to complete a survey regarding six outcomes: financial self-sufficiency, experience with homelessness, educational attainment, and positive connections with adults, high-risk behavior, and access to health insurance. | 150/ yr. avg. |
| Proposal Vendors | Proposal Vendors are Service Providers who create a KidTraks system login in order to submit a response to a DCS issued RFP. If the bid submitted by the vendor is awarded a contract, then those vendors become Vendor Users. If the bid submitted is not awarded a contract, then those logins eventually expire. | 100-150/ yr. avg. |

## Additional Information

* **Functionality:** Details of Casebook vs. KidTraks functionality can be found in Exhibit 1: CCWIS Functions Phase Schedule of Attachment K – Bidder’s Library. Please note that the Phase Schedule listed in Exhibit 1 is an estimate that may change based on the work of the Organizational Design Contractor. The Contractor must work with the State to finalize the functionality breakdown of Phase 1 and Phase 2 during Planning.
* **Interfaces:** Information on Casebook’s and KidTraks’s interfaces (bi-directional data exchanges) required for compliance with CCWIS standards can be found in Exhibit 8: CCWIS Bi-directional Data Exchange Matrix of Attachment K - Bidders Library.
* **Additional Information:** Information on case management information flow (including intake and assessment processes) can be found in Exhibit 6: Further System Information of Attachment K – Bidders Library.

# High Level Functional Requirements

The high-level details of the CCWIS system modules and automated functions are described below. Indiana-specific forms, groups, and polices listed in this section can be found in the Indiana Child Welfare Policy Manual: <https://www.in.gov/dcs/files/Child_Welfare_Policy_Manual.pdf>.

The CCWIS system design shall follow a modular approach. Requirements related to design can be found at 45 CFR 1355.53 (see: <https://www.law.cornell.edu/cfr/text/45/part-1355>). Further information on CCWIS technical requirements can be found in Exhibits 7.1-7.6 Technical Bulletins in Attachment K-Bidders Library. The design requirements are intended to promote efficient and economical federal investments in child welfare systems. Unless otherwise exempted, CCWIS development activity must follow a modular design that separates the business rules from core programming, simplifies the language of system documentation, and adheres to a development standard. By building the system with severable components, it shall enable DCS to share and reuse core functional modules and develop affordable and adaptable systems. The modules and bulleted automated components, functions, and features listed in this section comply with the CCWIS design requirements defined at 1355.53 (a), unless exempt by 1355.53 (b). For further information on design requirements and guidance, please see Exhibit 7.3: Technical Bulletin - Modular Design and Review Guidance in Attachment K - Bidders Library.

The CCWIS system shall conform to the objectives listed in each subsection, comply with the CCWIS guidelines (specifically 1355.52 (a) - (h) and 1355.53), and shall be designed, developed, and implemented to ensure the efficient, economical, and effective administration of the following DCS programs:

1. Child protection assessment services
2. Family services provision for Probation cases
3. Family Services provision and case management for court involved child welfare cases
4. Foster care services
5. Adoption services
6. Independent living services
7. Statewide Hotline
8. Guardianship assistance services
9. Interstate Compact supervision and case management
10. Background checks for vendor users, employees, schools
11. Eligibility determination and participation in Title IV-E, including Probation

## Intake

The Intake module captures new reports of child abuse and neglect, along with other child welfare-related inquiries or requests and determine appropriate dispositions.

The module contains, but is not limited to, the following:

* Initial Intake Information
* Intake 310 (Preliminary Report of Alleged Child Abuse or Neglect) reports

The Intake module shall capture report information via multiple intake formats, including hotline calls, voice mail, electronic reports (email, fax, or via electronic portal submission), and reference any existing family/case history in order to evaluate and recommend the appropriate response and process workflow.

The objective of the module is to provide an Intake process that:

1. facilitates ease of allegation/incident data entrance and collection via a guided, step-by-step intake process
2. ensures completeness of information and data collection for case manager assessment
3. eliminates duplication of data
4. leverages a business rules engine and family/case history to accurately identify a recommended response—i.e., screen-in the report as credible and worthy of investigation, along with the required response time, or screen-out the report for no further action.

## Assessment & Investigation

The Assessment & Investigation module assists in the investigation of an allegation of neglect, abuse, or at-risk situation for the purposes of determining if allegation will be substantiated or unsubstantiated, as well as determining the case’s best course of action (i.e., what needs to be done next to best ensure the safety/well-being of the child(ren)). Part of the investigation/assessment process involves interviews with the focus child(ren) and associated parties/family members and observation of the home environment in order to gather critical information, assess risk, and identify Child & Adolescent Needs & Strengths (CANS)-related needs and strengths.

The module contains, but is not limited to, the following:

* CANS Assessments
* Risk Investigations/Initial Risk Assessments
* Safety Investigations/Initial Safety Assessments

Information gathered and recorded as part of this module is used by the Risk Management module to determine a recommended course of action based on best practice and key risk indicators. The types of information collected include:

* safety
* well-being (for example: physical health, mental health, learning and development, as well as self-identified issues surrounding sexual orientation and/or gender identity)
* domestic violence
* sexual abuse
* living conditions
* finances and employment
* education
* formal and informal supports available to caregivers
* resources available to the family
* interaction between caregivers and child(ren),
* academic or developmental level of the child(ren) and the parent, guardian, or custodian,
* relationship between adult caregivers and child(ren),
* recent losses,
* any apparent family physical or mental health issues,
* substance abuse challenges, and
* stability and transitions.

The objective of the module is to provide an investigation and assessment process that:

1. Uses an assessment engine to guide the Family Case Manager (FCM) through a logical question/data gathering process based on allegation and existing child/family information
2. Improves the efficiency of the information gathering, recording, and reporting process (including criminal history and past DCS history), using a real-time mobile platform
3. Eliminates duplication of data entry

## Risk Management

The Risk Management module is designed to identify, manage, and mitigate risk. This is to be conducted via a well-defined business rules engine and an Artificial Intelligence (AI)-driven, predictive and evidence-based decision-making engine that processes assessment, case, and services outcomes data to evaluate risk and recommend appropriate action. Please see Section 4.2 - Assessment & Investigation for examples of information that can be analyzed.

The module contains, but is not limited to, the following:

* Screen In/Out Wizard (currently Structured Decision-Making model (SDM®))
* AI Risk Assessments/Mitigation Decision Tool (currently SDM®)
* Human Trafficking Screening Tool
* Visitation Plans
* Safety Plans
* Reunification Assessments (currently SDM®)

The objective of this module is to provide a set of Risk Management tools that:

1. Drive appropriate and consistent decisions/courses of action across the agency—including out-of-home placement decisions
2. Better ensure that at-risk situations are brought to the attention of FCMs for priority of follow-up
3. Assist FCMs in the development of risk mitigation plans, such as Visitation and Safety Plans
4. Through AI-based machine learning, can improve decisions/courses of action, over time via analysis of outcomes data

## Case Management & Service Delivery

The Case Management & Service Delivery module is used to identify, plan, and manage the activities associated with a welfare case or Informal Adjustment (IA). This includes contacts, placements, services, goals, and plans, and information associated with the focus child(ren), such as demographic information, family networks, strengths/needs, medical history, and education.

The module contains, but is not limited to, the following:

* Contacts
* Site Visit Information
* Informal Adjustment (IA) Plans
* Caregiver Strength and Needs Assessments
* Case Plans
* Probation Information (including Plans for Corrective Action)
* Involvement Type (e.g. IA, Juvenile Delinquency (JD)/Juvenile Status (JS)) Information
* Collaborative Care Plans and Checklists

The objective of the module is to provide a Case Management process that:

1. facilitates the creation of a clear and effective case plan, leveraging the Risk Management module and case goals, that can be shared with the family
2. ensures the collection of case-related data needed to satisfy CCWIS reporting requirements
3. leverages a rules engine to identify and manage case-related activity workflow and status in order to help the FCMs better manage their caseloads and meet target dates
4. provides clear visibility to progress against desired outcome via integrated service plan and service provider outcomes data.

## Placement

The Placement module manages the resources (e.g., foster homes, facilities, or other residential-type resources) and the activities associated with the placement and monitoring of children removed from the home. This module also facilitates the reporting of missing and exploited children, as required by the National Center for Missing and Exploited Children (NCMEC)[[1]](#footnote-1), and the processing of Interstate Compact for Placement of Children (ICPC)[[2]](#footnote-2) referrals’ out of state placement.

The module contains, but is not limited to, the following:

* Placement Resources (including Foster Care and Residential Resources)
* NCMEC Screening Tool
* ICPC Information
* Residential Placement Information
* Facility Placement Information (including Juvenile Justice Facility Information)

The objective of the module is to provide a Placement process that:

1. facilitates the matching of children identified for placement outside of the home to the best out-of-home placement environment, depending on their location and needs
2. efficiently and completely collects the information needed for Adoption and Foster Care Analysis and Reporting System (AFCARS)[[3]](#footnote-3) reporting, as well as information needed by the Central Eligibility Unit for Title IV-E[[4]](#footnote-4) eligibility determinations
3. integrates with the Case Management, Referral Management, and Eligibility modules to ensure total visibility of information related to the focus child(ren) and elimination of duplicate data.

## Referral Management

The Referral Management module performs service mapping and initiates, approves, tracks, and manages the service referral process (including placement referrals). The Referral Management module contains a services catalog and uses a service/component mapping engine that aids the FCMs in identifying the types of services and components that shall best satisfy the needs/goals of a given case, individual, or family. The module then matches those services to providers who can best deliver those services, based on location and availability. Upon identification and approval of the recommended services, this module is used to manage the referral process, including creating the referral requests to the appropriate provider, tracking service completion against referrals and provider contracts, and reporting service outcomes against plan goals.

The module contains, but is not limited to, the following:

* Service Mapping
* Service Referrals
* Placement Referrals (including Behavioral Health and Individual Child Placement Referrals)
* Service Logs

The objective of the module is to provide a Referral Management module that:

1. incorporates a more robust and complete service mapping/selection engine
2. identifies gaps in service availability by identifying needs not being addressed in specific counties or insufficient capacity
3. reduces the turnaround of the referral/vendor user acceptance process
4. improves data quality via a rules-based data validation engine
5. fully integrates with the Assessment and Case Management modules for clear visibility to progress against goals/desired outcomes
6. incorporates a vendor portal for more efficient exchange of data, including referral request data to service providers and more timely and accurate reporting of service log data
7. integrates with the Finance Management Module for applicable unit of measure and billing rate information

## Provider Management

The Provider Management module maintains a list of available resources including foster families and service providers. It also manages the respective licensing and contract management processes and information. This module is integral to the Placement and Referral Management modules, since it maintains the critical information about resources and vendor users that are needed to assist in selecting the best match such as their location, capabilities, and capacity. Likewise, contract information is critical to the Finance Management module in order to reconcile invoices for services performed against contracted rates.

The module contains, but is not limited to, the following:

* Resource Management Information
* Service Provider Information (e.g., vendor users)
* Licensed Child Placing Agency Information
* Licensing Information
* Contract Management Information

The objective of the module is to provide a Provider Management module that:

1. manages and maintains accurate licensing information
2. integrates with the Placement and Referral Management modules to provide critical resource and vendor user information
3. integrates with the Finance Management module to reconcile invoices for services performed against contracted rates

## Eligibility

The Eligibility module obtains financial assistance for focus child(ren) based on federal eligibility guidelines and processes the appropriate eligibility applications, including Foster Care Assistance, Title IV-E, Emergency Assistance, Collaborative Care, and Adoption Assistance.

The module contains, but is not limited to, the following:

* Medicaid Information
* Title IV-E Eligibility Information
* Emergency Assistance Information
* Collaborative Care Information
* Adoption Assistance Eligibility Information

The objective of the module is to provide an Eligibility module that:

1. incorporates real-time access to benefits history
2. eliminates duplicate data creation through improved integration
3. via an integrated business rules engine, improves the accuracy and completeness of data needed to process eligibility applications.

## Permanency

The Permanency module facilitates activities and programs designed to achieve the permanency goals established in the Case Plan. It includes the referral of focus children to specific programs, such as the Permanency Roundtable for children DCS has had difficulty placing, and the creation of permanency plans and their associated workflows to drive activities toward successful permanent status for children.

The module contains, but is not limited to, the following:

* Adoption Information (including Pre-Adopt Plans)
* Permanency Roundtable Information
* Special Needs Adoption Program (SNAP)[[5]](#footnote-5) Information
* Reunification Plans
* Youth Connections Program (YCP)[[6]](#footnote-6) Information
* Permanency and Practice Support Information
* Another Planned Permanent Living Arrangement (APPLA)[[7]](#footnote-7) Information
* Assisted Guardianship Information
* Family Location Investigations

The objective of the module is to provide a Permanency module that:

1. leverages an AI engine to better identify difficult placement cases for referral to appropriate permanency programs/strategies
2. better ensures all children have the opportunity to achieve a safe, permanent home environment by tracking permanency outcomes, even after adoption, and improving placement strategies
3. facilitates the creation of customizable plans and work flows to better manage permanency-related activities

## External User Portal

The External User Portal module provides a secure environment for registered, authorized, external users to have controlled access to system tools, including input forms, and select system information (compliant with security and privacy laws). External users, such as service providers and foster families, can access select user and participant information and data. The portal environment also supports formats for data input or service requests via web forms that are routed to the appropriate DCS business unit for processing. This module serves the needs of a host of external users, including

1. schools for submitting/receiving information such as education data or abuse/neglect reports
2. service providers for referral-related information
3. foster families for medical history information

The module contains, but is not limited to, the following:

* Information for Licensed Child Placing Agencies, Residential Treatment Service Providers, Foster Families, Vendor Users, Older Youth, Schools
* Medical Passport Information
* Dynamic Documents and Forms for External Users
* Child Protection Index/Child Protective Services Portal
* Indiana University (Psychotropic Medications Program) Portal

The objective of the module is to provide an External User Portal that:

1. improves turnaround of data collection through enhanced external user interface
2. institutes strong bi-directional communication with staff and stakeholders
3. includes data validation to ensure the quality of the data provided

## Bi-Directional Data Exchanges

The Bi-Directional Data Exchanges module provides the framework, including the Application Programming Interface (API) layer, that supports the bi-directional exchange of data between the DCS system and others systems that interface with it. A MuleSoft Application Programing Interface (API) layer with pre-built connectors, business rules, maps, and transformation capabilities will facilitate bi-directional data exchanges between the new system and the CCWIS required data exchanges (as required under 45 CFR 1355.52 (e)). The goal of the bi-directional data exchange is to improve outcomes by sharing data required for purposes such as reporting, program administration, Title IV-E eligibility determinations, and audits. DCS shall be able to have data exchanges with the following:

* Financial system(s) (if external from the CCWIS system)
* Child Welfare Contributing Agency (CWCA) systems
* Title IV-E eligibility systems (if eligibility calculations are not in the CCWIS system)
* Systems external to the CCWIS system that are used to collect data for Title IV-E purposes
* Child abuse/neglect systems
* Temporary Assistance for Needy Family (TANF) systems
* Medicaid eligibility systems
* Medicaid Management Information Systems
* Child support systems
* Courts systems
* Education systems

For a Bi-Directional Data Exchanges Matrix, please see Exhibit 8: CCWIS Bi-directional Data Exchange Matrix in Attachment K, Bidder’s Library. Additionally, please refer to Section 5.5 - External and Internal Interfaces for further interface-related information.

The objective of the module is to provide a Bi-Directional Data Exchange module that:

1. ensures all systems that provide information to or need information from the DCS system have the appropriate APIs to support the bi-directional exchange of information
2. meets the CCWIS requirements for data exchanges
3. eliminates duplicate data creation
4. includes data validation to ensure the quality of the data provided

## Operational Management

The Operational Management module provides the tools and functionality designed to improve user efficiency and effectiveness.

The module contains, but is not limited to, the following:

* Dashboards
* Integration with Outlook (for notifications, appointments, etc.)
* Workflow Management/Approval Requirements
* Business Rules Engine
* User Model and Hierarchical Security Functions
* Alerts & Notifications
* Document Management (including Forms & Court Documents)

The objective of the module is to provide an Operational Management module that:

1. offers user customizable dashboards for quick access to critical information, such as prioritized tasks, alerts, and notifications
2. integrates with Microsoft Outlook for automated emails and appointments
3. incorporates process-specific workflow creation and management to ensure tasks are automatically assigned and completed in a timely manner, including approvals
4. imbeds a business/practice model rules engine that improves the decision-making processes, drives appropriate workflows, and increases data accuracy throughout the system
5. incorporates multi-level, role-based permissions and data level security to ensure compliance with security and privacy laws
6. facilitates automated alerts and notifications, driven by the business rules engine
7. includes document management for efficient access to case-related documents, such as child medical records and court documents, and dynamic forms creation/maintenance for collecting and reporting information

## Reporting and Analytics

The Reporting and Analytics module provides pre-configured reports, along with ad-hoc reporting capability.

The module contains, but is not limited to, the following:

* Standard Reports
* Ad-hoc Reports
* Quality Service Reviews
* Reflective Practice Surveys

MaGIK currently maintains and supports 167 forms (see Attachment K, Exhibit 10), as well as 233[[8]](#footnote-8) pre-configured reports. The below table outlines the number of reports supported by MaGIK, sorted by functionality/category. These figures are estimates and are subject to change prior to Contract start date.

|  |  |  |
| --- | --- | --- |
| **Functionality/Category** | **Number of Reports** | **Number of Forms** |
| Assessment | 16 | 36 |
| Case Management | 56 | 56 |
| Licensing | 23 | 19 |
| Performance and Quality Improvement | 10 |  |
| Adoption/Foster Care/AFCARS | 6 | 18 |
| Executive Summary | 49 |  |
| Administrative Services/Other | 12 | 8 |
| Informal Adjustment |  | 2 |
| ICPC |  | 1 |
| Person Management |  | 12 |
| Residential Resources |  | 1 |
| Collaborative Care | 19 |  |
| Corrective Action |  | 1 |
| CPO Reports | 1 |  |
| Visitation Plan |  | 1 |
| Permanency and Practice Support | 9 |  |
| Practice Indicator Reports All Regions (for web publishing use only) | 8 |  |
| Probation | 5 |  |
| Biennial Regional Services Strategic Plan | 10 |  |
| Hotline | 9 | 12 |
| NCANDS | 2 |  |

Of the 167 forms:

* 92 are data populated and 75 are blank forms
* 69 are low complexity forms, 44 are medium complexity, 44 are high complexity, and 10 are undefined complexity

Please see Exhibit 9: MaGIK Reports and Exhibit 10: DCS Forms in Attachment K - Bidders Library for a full list and descriptions of current DCS forms and reports supported by MaGIK.

The objective of the module is to provide a Reporting and Analytics module that:

1. supports current reports and forms, as well as related reporting functionalities
2. facilitates real-time access to critical information
3. improves ease of ad-hoc report creation
4. improves the communication of metrics data
5. empowers users to take action based on real-time information
6. ensures data extracts can be encrypted (as necessary)
7. ensures adherence to federal reporting requirements (see: 45 CFR 1355.52 (c))

## Finance Management

The Finance Management module integrates all the financial-related business processes and activities, including accounts payable and receivable, rate setting, electronic invoicing, and the creation and processing of proposal vendor Requests for Proposals (RFPs) for provider services.

The module contains, but is not limited to, the following:

* Accounts Payable Information
* Accounts Receivable Information
* Rate Information
* E-invoicing Information
* Post Adoption/Guardianship Information
* Funded Programs Information
* RFP Information

The objective of the module is to provide a Finance Management module that:

1. ensures timely and accurate processing of payables and receivables
2. ensures more accurate recording and tracking of child benefits history
3. reduces the need for manual data validation through a rules-based, data validation engine

## Person Management

The Person Management module manages person information, including demographic information, medical data, and family relationships. This module is integral to accessing person-related information across all system modules, including assessment and case information, service outcomes, financial benefits, and placement history.

The module contains, but is not limited to, the following:

* Person/Demographics History
* Family Household/Network Information (Genograms)
* Duplicate Person Management

The objective of the module is to provide a Person Management module that:

1. includes a family genogram tool for ease of family relationship creation and improved visibility to potential family risk indicators
2. improves search capabilities
3. reduces duplication of person records via a matching engine that returns more relevant existing person records during person creation

## Court Hearings, Adjudication & Outcomes

The Court Hearings, Adjudication & Outcomes module manages all court hearing requests and court-related documents, including court orders, correspondence, and exhibits.

The module contains, but is not limited to, the following:

* Court Hearings Information
* Court Outcomes/Directives
* Open Case/Quarterly Report to the Courts Information

The objective of the module is to provide a Court Hearings & Adjudication/Outcomes module that:

1. interfaces with current court systems for bi-directional data exchange
2. improves search and access capabilities for court-related documents
3. improves the efficiency of providing the assessment/case-related information needed by Legal to effectively adjudicate welfare-related cases.

## Healthy Families Indiana (HFI)

The HFI module manages a voluntary multi-faceted home visitation program locally designed to promote healthy families and healthy children through services that include child development, access to health care, parent education, family incentives, staff training, and community coordination and education.

The module contains, but is not limited to, the following:

* Preventative Services for Families

As mentioned in Section 2.5 - Overview of Salesforce Work To Date, Brite Systems was tasked with the development of the module and it was deployed in February 2019. However, the Contractor may have to update aspects of this module through the duration of this Contract.

# High Level Technical Requirements

The high-level technical requirements for the CCWIS system are described below. The CCWIS system shall conform to the technical requirements listed in each subsection and comply with the CCWIS guidelines. A summary of the technical requirements can be found in Section 1.2.

## Available DCS System Assets

The Contractor’s solution shall meet the needs outlined in the High Level Functional and Technical Requirements sections. The Contractor shall be aware that DCS has an inventory of current software assets that are available for use in the overall solution, and has a preference to utilize/reuse DCS assets. The table below reflects the current versions available now. If the Contractor’s solution includes this software, do not include these costs in the cost proposal. Licenses are available from the State for Contractor to use to implement the solution.

| Software | Version | Notes |
| --- | --- | --- |
| Modular Object-Oriented Dynamic Learning Environment (Moodle) | 3.1.10 | Open Source Learning Platform. On premise. Note: DCS has a GNU - General Public License. |
| Salesforce Lightning | Winter 2019 Release |  |
| Salesforce Vlocity | Winter 2019 Release |  |
| Salesforce Einstein Learning | Winter 2019 Release |  |
| Salesforce Einstein Analytics | Winter 2019 Release |  |
| Salesforce Shield | Winter 2019 Release |  |
| InRule | 5.1 |  |
| MuleSoft Anypoint Studio Platinum | 7.3 |  |
| Atlassian Jira | Data Center 8.4.2 | Additional applications will be purchased for a full IT Jira suite including, but not limited to, test management and release management. |
| Confluence | Data Center 8.4.2 |  |
| Bit Bucket | Data Center 8.4.2 |  |
| Structure | Data Center 8.4.2 |  |
| Links Hierarchy | Data Center 8.4.2 |  |
| Service Desk | Data Center 8.4.2 |  |
| Cardinality |  |  |

## System Architecture

DCS requires the Contractor to use Salesforce as the platform for the CCWIS system. DCS is in the midst of building and moving solutions on to the Salesforce platform.

The DCS system architecture defined for the CCWIS system is a highly configurable, CRM-based platform that uses a developer layer containing pre-built, case management-specific, mobile and cloud applications. The goal of this architecture is to enable DCS to build a system that promotes modularity, interoperability and reusability with 85% of functionality that is configurable versus custom developed. If the Contractor proposes a solution that is less than 85% configurable versus custom developed for any of the 17 modules described in Section 4, they must provide an explanation in their Technical Proposal for why it would be in the State’s best interest.

The DCS architecture shall include Infrastructure as a Service (IaaS), Platform as a Service (Paas), and Software as a Service (SaaS). The Infrastructure shall be built on the existing new Salesforce infrastructure to enhance operational workflow and speed development to users. The cloud-based system model shall be hosted on Amazon Web Service (AWS), Gov Cloud FedRamp Medium version.

The DCS architecture shall also have an Integration Platform as a Service (iPaaS) for its API

Management layer, specifically, a MuleSoft Application Programing Interface (API) layer with pre-built connectors, business rules, maps, and transformation capabilities to facilitate bi-directional data exchanges between the new system and the CCWIS required data exchanges (as required under 45 CFR 1355.52 (e)). This eliminates double-entry of data and promotes the sharing of critical information.

The CCWIS system shall be built on a service-oriented principle that is loosely coupled, has autonomous services, is model driven, and makes the capabilities available to other components of the CCWIS system and external stakeholders.

MuleSoft is a full lifecycle API management platform providing the following key features:

* Integration
* Routing messages between services
* Transforming message formats between service requester and service provider
* Converting transport protocols between service requester and service provider
* Handling business events from disparate sources
* Data mediation/transformation
* Data enrichment

Using this technology, DCS shall be able to develop APIs capable of handling automated data exchanges, as well as APIs that use extensible markup language (XML) with a web service that organizations can connect to automatically. DCS shall work with the Contractor to develop a single standard XML data exchange reference guide for CWCAs and external stakeholders to use.

Also, for organizations that don’t have that capability, they shall have the ability to provide DCS with an external extract that is dumped and picked up at a regular cadence. This offers the greatest flexibility for sharing data with outside agencies or organizations while maintaining compliance with CCWIS standards.

The Casebook functionality has been replicated to an on-premise, state owned PostgreSQL database that is fully integrated using MuleSoft to KidTraks and Salesforce. This transition of Casebook shall reduce CCWIS development time and assist in decoupling Casebook from MaGIK.

## Technical Requirements to Ensure Compliance with CCWIS Standards

The CCWIS system must comply with 45 CFR 1355.50 through 1355.59 (see: https://www.law.cornell.edu/cfr/text/45/part-1355). The following subsections lay out technical requirements the CCWIS system shall incorporate.

### Efficient, Economical, and Effective Requirements

To achieve the objectives of efficiency, effectiveness, and cost management, in accordance with 45 CFR 1355.52 (a), specifications for the CCWIS system include the following:

1. To ensure improved program management and administration of all required program data, the Contractor shall build a Master Data Model (MDM) for the entire CCWIS system, identifying all program data required by federal and state law, as well as DCS Policy and Practice, including data for on-going federal reports, data supporting federal expenditures, and Case management data needed for federal monitoring. The MDM shall maintain accurate and updated data, as well as comprehensive data traceability and quality documentation. This design requirement shall
   1. help ensure centralized access to and administration of all program data by reducing or eliminating duplicate data collection points and systems
   2. facilitate ease of generating real-time data analytics and ad-hoc reporting.
2. To ensure appropriate application of information technology, the Contractor shall need to use information technology capabilities to resolve current system and operational deficiencies, as well as improve data quality and case outcomes. Technology capabilities include:
   * + **Business Rules Engine**—provide an integrated business rules engine to drive operational consistency and conformance to business practice, such as business rules to trigger an event, like a task that must be performed (e.g., if DCS removes a child from a home, DCS must do an in-home visit within 30 days.)
     + **Data and Analytics Reports and Dashboards**—a key to improved operational efficiency and decision-making effectiveness is access to real-time data and analytics, along with ease of visibility to role-based tasks/action items and notifications.
     + **Guided Intake with Workflow integration**—integrate a step-by-step, Turbo-tax-like data entry capability to ensure all required data is collected/entered and to drive operational consistency and conformance to business practice.
     + **Artificial Intelligence/Machine Learning** —use an Artificial Intelligence engine to help improve the rules engine based on case factors and service outcomes/results analytics, along with Machine Learning to help better predict case outcomes and identify potential risk factors.
     + **Matching Engine/Logic**—incorporate logic to help identify and prevent potential duplicate records, (i.e., person, household, and service records, in order to improve data quality) using both standard and custom matching rules.
3. To ensure no duplicative application system development or software maintenance is needed, the CCWIS system shall allow configuration of pre-built objects/applications, as needed, and deliver the remaining customized functionality needed to achieve the new CCWIS functional and operational requirements. This DDI approach promotes interoperability and reusability through the development of small modules and reusable components (including applicable CCWIS interchange modules) that speed development and increase standardization. This design approach enables DCS to remain adaptable in its response to changes in federal and state laws, as well as policies to improve outcomes and permanency.
4. To ensure project costs are reasonable, appropriate, and beneficial, the Contractor shall need to leverage a CRM fabric that provides pre-built, case management functionality that is highly configurable (DCS desires that at least —85% of the solution meets or can be configured to meet DCS needs) to reduce cost and time to implement. The current MaGIK system requires 99% of the changes to be performed by IT and software development resources instead of configuration changes that could be made directly by the business owners. This requirement equates to double, and in some cases more than triple the cost in maintenance and support. A configuration-based platform solution versus custom development shall significantly reduce DDI costs and reduce time to delivery.

### Data Requirements

To achieve the data-related objectives, in accordance with 45 CFR 1355.52 (b), specifications for the CCWIS system include the following:

1. The Contractor shall ensure the CCWIS system incorporates a socio-technical enterprise approach that addresses the human, operational, and IT system interactions that impact data quality to ensure improvement and consistency. .
2. The Contractor shall implement a workflow engine that shall utilize forms validation to ensure comprehensive data collection and commitment in operational workflow. The workflow engine shall utilize machine learning and artificial intelligence (AI) in providing workflow automation.
3. The Contractor shall implement an Omnichannel API platform to standardize the data API integrations and manage synchronicity with all internal and external systems.
4. The Contractor shall implement and ensure the CCWIS system leverages the use of Artificial Intelligence (AI) and Machine Learning to standardize operational procedures across 4000 users, as well as track and manage any/all deviations from the standard operational procedures. The utilization of AI and Machine Learning management shall be the foundation for Enterprise Performance Management and Continuous Improvements across the entire Indiana DCS socio-technical enterprise.
5. The Contractor must ensure all relevant data from MaGIK is transferred/converted to the CCWIS system (for further information data conversion, see Section 6.7).

Data will be stored and reside on Amazon Web Services. It is important to note that some data conversion jobs will occur in real-time, while others will occur in batch.

### Data Quality Requirements

In order to ensure the CCWIS system adheres to the data quality requirements in 45 CFR 1355.52 (d), the Contractor shall ensure the CCWIS system:

1. Ensures certain data fields are required
2. Validates the format of data
3. Snapshots the data to maintain the entry date as a measure of timeliness, where appropriate for federal reporting and internal audit
4. Ensures validations are met for data directly entered into the CCWIS system and that those validations are enforced by validation or translation of data through integration points
5. Ensures security and encryption of Personal Identifiable Information (PII) between systems and appropriate security role profiles within the CCWIS system
6. Reinforces the DCS Practice Model, policy, and organizational objectives throughout the CCWIS system data collection and visualizations within the user interface while allowing historical tracking to manage practice, policy, and organizational changes over time
7. Ensures all fields are null by default, contain appropriate selection options, and are associated with the correct data structure organization without duplication
8. Tracks data fields required at each workflow event and the collection and entry of that data
9. Provides regular alerts and notifications about missing required data elements with escalation of notifications up the organizational hierarchy, and alerting improper data formatting at the time of entry
10. Sends periodic notifications to the assigned person responsible for that data and an escalation process for notifications that have not been satisfied beyond an appropriate timeframe
11. Ensures fields are related across objects and not captured as individual fields within those objects, as appropriate, while also enacting versioning for fields that carry over from one instance of an object to the next with minor updates
12. Creates real-time on-demand reports that inform missing fields that can be reported at individual user level and viewed at each hierarchical level of the organization from individual assignee to the system as a whole

The Contractor must ensure that the system enables specified DCS users to:

1. Ensure that data entered is complete, correct, and timely, stored in a manner appropriate to federal reporting requirements, and reviewed at regular intervals
2. Ensure that data integrations are maintained to allow for updates to fields, required data collection, and data validation as those updates occur and reviewed at regular intervals
3. Enact changes to remedy deficiencies uncovered by regular reviews of data exchanged across integration points
4. Review data quality and mitigation of deficiencies to inform updates to annual documents submitted to ACF
5. Review compliance with data quality standards and evidence of compliance in annual and supplemental documents submitted to ACF

The State, and likely the CCWIS PMO, will lead data quality monitoring and reporting efforts, including the development of the Data Quality Plan. The Contractor will have to collaborate with both the State and CCWIS PMO to ensure data quality can be monitored and reported, by ensuring data mapping, data conversion, and the Contractor’s MDM meet data quality standards and align with the State’s Data Quality Plan. A copy of the State’s most recent Data Quality Plan can be found in Attachment K - Bidders Library as Exhibit 11. Additionally, please see Attachment K - Bidders Library, Exhibit 7.6 Technical Bulletin - Data Quality Plan.

### Exchange Requirements

The Contractor shall ensure the CCWIS system shall facilitate bi-directional sharing of data for all Required Data Exchanges and comply with 45 CFR 1355.52 (e) and (f). DCS shall use MuleSoft as a single point of data exchange to the CCWIS system. The Contractor shall establish an Experience API layer to allow single APIs to be established and exposed for self-service reuse for CWCA’s and other agencies to exchange data.

The new CCWIS system must be able to export any MuleSoft API specifications or Packaged Mule Application (.jar) to other agencies, as specified by DCS.

The Contractor shall ensure the CCWIS system utilizes micro services at the Process API level to allow DCS to standardize common data elements and their formats. The goal is to allow DCS to be scalable, adaptable, and enable self-service that shall give DCS the composable enterprise necessary to cope with an ever-changing technical landscape.

### Eligibility and Software Requirements

The Contractor must ensure the CCWIS system complies with 45 CFR 1355.52 (g) and allow the same automated functions to be utilized for all Title IV-E eligibility determinations when building out the CCWIS system.

The Contractor must ensure the CCWIS system complies with 45 CFR 1355.52 (h) and 45 CFR 95.617. The Contractor shall ensure that DCS shall be able to provide all modular units for the CCWIS system to the designated federal repository upon request in either a Salesforce unmanaged or managed package, along with all associated documentation. The unmanaged package shall allow other states to edit the components while a managed package is not editable.

## Additional Technical Requirements

### General Requirements

The Contractor must ensure the CCWIS system allows for users to utilize the following search capabilities:

* Robust search functionalities, including the ability to search based on one or a set of user-specified values
* Search parameters that include exact matches and partial matches
* Search results that can be printed and emailed

The Contractor must ensure the CCWIS systems adheres to the following workflow and management specifications:

* A workflow management system that drives the State’s business processes
* A method to track key dates
* The ability to create and send notifications to both users and specified external parties
* The capability to provides default or pre-populated values for information where it is needed
* Customizable dashboards
* A clear outline of all tasks a user needs to complete
* Assignment and reassignment capabilities for specified users
* Approval capabilities for specified users
* Locking (of documents, forms, etc.) capabilities for specified users
* Ability to incorporate multi-tier approvals (if necessary)
* Restricted access to certain content

The Contractor must ensure the CCWIS system allows for users to utilize the following electronic documentation and printing capabilities:

* Upload capabilities for documents, files, videos, and photographs
* Acceptance of all common file types (including but not limited to: .JPEG, .PDF, TIF)
* Storage of all electronic documents
* Preview and print files in all file types

The Contractor must ensure the CCWIS system allows for the following audit functionalities:

* The ability to document instances when a user enters, alters, or deletes information from the CCWIS system
* The ability for authorized staff to conduct audits of system access
* Viewable and searchable audit logs of access to the system by user

The Contractor must ensure the CCWIS system has the following specialized functionalities:

* Auto-recovery capabilities
* The ability to capture and utilize an e-signature functionality
* Voice transcription capabilities
* Capabilities to ensure the CCWIS system is compliant with the Americans with Disabilities Act (ADA)

### Security Requirements

The Contactor must ensure the child welfare data within the CCWIS system is secure. The Contractor must adhere to the security guidelines and standards outlined in Section 2.6 - Guidelines and Standards for Compliance when building the CCWIS system. The Contractor shall establish a System Security Plan and ensure the CCWIS system supports compliance with the latest federal and State child welfare laws, regulations, and policies relevant to system security, privacy, confidentiality, and safeguarding of information as listed above. Where policies overlap, the system must comply with the more stringent policy. The most recent versions for standards and specification shall be applicable.

The Contractor shall provide a process for which modifications to the security controls are able to be addressed in future enhancements or maintenance of the CCWIS system by administrators to relax or strengthen controls based on policy changes.

The CCWIS system will need to be built in compliance with the following security guidelines, acts, and standards:

* Health Insurance Portability and Accountability Act (HIPAA)
* Service Organization Control (SOC) 1/2/3
* National Institute of Standards and Technology (NIST)
* Federal Information Security Management Act of 2002 (FISMA)
* International Organization for Standardization (ISO) 27001 and ISO 9001
* Federal Information Processing Standard (FIPS) 140-2
* Cloud Security Alliance (CSA)
* Federal Risk and Authorization Management Program (FedRAMP)
* Internal Revenue Service Publication 1075 (IRS Pub 1075)
* Social Security Administration (SSA)

The Contractor shall ensure the security protocols for the CCWIS system, at a minimum:

* Operate properly in hardened cloud environments based on the IRS Safeguard Computer Security Evaluation Matrix (SCSEM)
* Have application created using secure coding practices, security vulnerability testing, and final testing before deployment
* Have data sensitive rules-driven security warning banners, headers, and footers that are prominently displayed on relevant screens and reports and be readily customizable by DCS support staff
* Adhere to the DCS policies regarding the retrieval, maintenance, and control of the application software and program data.
* Create user profiles and the ability to cross reference profiles to case information, so as to provide a warning banner to the user and a notice to DCS under certain access instances, based on configurable business rules
* Provide customizable security levels for access (e.g., screens, fields, records, and files) and utilize automatic sign-off techniques
* Provide the ability to warn user about accessing sensitive data and allow them to confirm and proceed with such actions

The Contractor must provide an Identity and Access Management (IAAM) tool. The IAAM tool must have the following features, at a minimum:

* Initiation
* Capturing
* Recording
* Administration and Management
* Directory Services
* Provisioning, Account Setup, and Non-repudiation
* Access Rights
* Reporting

The IAAM tool must be architected to meet the following security needs at a minimum:

* Performs the necessary authentication and authorization verifications based on the user profile maintained in the IAAM solution before granting access to the CCWIS system.
* Automatically prevents disclosure of confidential data on persons based on configurable business rules.
* Supports both Role Based Access Control (RBAC) and Attribute Based Access Control (ABAC).
* Supports authentication level 3 (multi-factor authentication) as described in the NIST SP 800-53 Moderate-Impact Baseline and NIST SP 800-63.
* Allows fine-grained access controls. Fine-grained access control refers to the ability to implement the principle of least privilege where a user’s access is limited to only the areas and data that are needed to perform assigned job responsibilities.
* Provides/utilizes a DCS approved reduced sign-on capability for unique users.
* Delegates and maintains the password system is limited to a select number of people.
* System, workstation, and password identifications are controlled and randomly selected.
* Automatically requires the system user to change passwords periodically as configured by DCS. The passwords should expire on a staggered schedule.

The Contractor shall perform and ensure that the CCWIS system passes application security and vulnerability tests in order to demonstrate the use of secure coding practices.

The Contractor must ensure that the CCWIS system:

* Provides the capability for presentation on omnichannel devices (e.g., smartphones and tablets) in a manner that protects access to confidential data and information.
* Supports both Role Based Access Control (RBAC) and Attribute Based Access Control (ABAC).
* Protects confidential information by using, at a minimum, the same security controls on mobile devices that are used on desktop and laptop devices.
* Mobile applications shall follow practices in NIST SP 800-163 – Vetting the Security of Mobile Applications.

The Contractor must provide database security that includes the following features:

* Capability for designating, maintaining, and reporting data at multiple levels (e.g., case, participant) as restricted data
* Accepts encryption capabilities that are compatible with FIPS 140-2. Encryption must protect data at rest and in transit
* Captures, maintains, scrubs, and disposes of data in accordance with applicable federal and State standards and policies to protect the privacy of DCS stakeholders and the integrity of the information on the system
* Supports the data classification structure defined by DCS, which shall include identification of FTI and PII data elements (e.g., secure tags, identifiers and metadata)
* Establishes or restricts access privileges at the file/table, record/row, and field/attribute to specific users and/or groups of users with common access rights as specified by DCS
* Ensures a secure file/data store for information provided by the interface partners

The Contractor shall ensure the CCWIS system can accommodate these risk management needs at a minimum:

* Capability to monitor, log, and report access to confidential data in the cloud.
* Maintains information on changes to confidential records and/or data fields (e.g., SSN, Name), including identification of the responsible system user and date and time of the change.
* Capability to log user (application and administration operations) access to restricted data, events and associated data and make them available for correlation, analysis, and reporting.
* Automatic timeout and logoff of users based on minutes of inactivity as specified by DCS.

### Mobile Requirements

The Contractor must ensure the CCWIS system has sufficient mobile capabilities, as defined in this subsection. DCS would like to provide this valuable customer service feature to Secondary Users via portable devices. This shall engage participants and help to achieve better business outcomes.

The Contractor shall develop two types of mobile applications for the CCWIS system:

* **Mobile Web Applications (MWAs):** These applications, also known as Mobile Thin Client Applications, execute within the confines of a mobile device browser.
* **Resident Mobile Applications (RMAs):** These applications, also known as Mobile Apps or Mobile Thick Client Applications, live on the device and are accessed through icons on the device home screen. These apps are installed through an application store, such as Google Play or Apple’s App Store. Apps are developed specifically for one platform, and can take full advantage of all the device features.

The Contractor shall build rich front-ends (for both web and mobile apps) from a single model that supports reuse and responsive design. This flexible framework shall help to create a single portal that serves components to multiple web-capable devices seamlessly and simultaneously. When a device accesses portal, the portal detects the device type and automatically serves the content with responsive design.

For MWAs, the Contractor shall ensure the MWA works in most widely used smartphone and tablet browsers, and has the capability to alter formatting based on the device. The MWA shall meet the following criteria

* Changes made to the portal can be reflected on the web app with minimal effort
* Secure access
* Sensitive or confidential data lives only on the CCWIS system server
* Secure and tested for vulnerabilities (e.g., Attackers cannot present versions of the address bar)
* Performs both over high speed wireless networks and bandwidth-limited mobile networks; and can establish limits on the amount of data transmitted from server to device
* Tracks performance and behavior analytics
* Easy to maintain and allows for flexibility in future deployments

### Database Requirements

The Contractor must ensure that the CCWIS system has well-structured, relational data models that align with the business requirements. The Contractor shall ensure the physical data model is mappable to a fully normalized logical model. A logical data model shall be created as the blueprint for the design followed by the physical data model. If any deviation from the logical data model is deemed necessary, DCS must agree before implementing physical database structures.

The Contractor shall also establish traceability of the data model to the business requirements and create the data dictionary as part of the database design and maintains it throughout the project in the central repository.

The Contractor shall ensure that the database fully supports configurable, non-disruptive, rules-based data archival and subsequent near real-time retrieval, as well as automated, non-disruptive, rules-based data purge. The purge process shall not require downtime or unavailability.

## External and Internal Interfaces

There are systems, databases, applications, and partners (collectively known as “Interfaces”) that shall need to communicate with the CCWIS system to receive and send critical information. The following subsections outline the External and Internal Interfaces that KidTraks and Casebook currently interface with. Note that the below lists are anticipated External and Internal Interfaces, based on current system functionalities, however, this list may change before the CCWIS system is fully implemented.

### External Interfaces

The following is a list and short description of Casebook’s and Kid Traks’ current External Interfaces.

1. **Data Assessment Registry Mental Health & Addiction (DARMHA)** - to provide the specifications and guidelines for the Import and Export functionality of the DARMHA system, which uses assessment information to inform intensity of care decisions. The Import functionality provides a method for DARMHA users to submit data to the DARMHA system through the use of comma delimited text files containing predefined layout information. The Export functionality provides a method for DARMHA users to export data from DARMHA.
2. **INvest** - to provide INvest (the State’s Statewide Automated Child Support System) with a daily list of Title IV-E referrals. The list shall be generated, from database tables daily and shall provide a snapshot which shall include any child in placement, as per the criteria defined in this document.
3. **Indiana Eligibility Determination Services System (IEDSS)/Indiana Client Eligibility System (ICES)** - to provide the removal information for the children (for open cases) placed in the system along with the worker detail to the State’s eligibility system. The list is to be generated, from database tables daily and sent to the IEDSS/ICES system.
4. **Department of Education (DOE)** - to provide the DOE with a monthly list of children who are in foster care. The list shall be generated, from database tables, at the end of each month and shall provide a snapshot which shall include any child in placement, as per the criteria defined by DCS. DOE shall be able to utilize this list in order to provide direct certification to schools for this program.
5. **Adobe Livecycle** - to populate forms chosen by system users. It is a service-oriented architecture software product that interfaces and pulls data back from Casebook and then populates and displays the forms to the user. Existing/new forms are developed inside the Adobe LiveCycle product.
6. **Redwood** -to pass and receive a series of flat files and PDFs to and from Redwood’s (a drug and alcohol testing laboratory) SFTP server. On an hourly basis the following occurs:
7. Any drug screen referrals that has been approved or modified in the past 72 hours are sent. Redwood imports these into their referral system and scheduling system.
8. System users look at Redwood’s drug screen results (as XML and PDF files). The filename of each contain is the drug screen accession number, which is Redwoods identifier. If both matching XML and PDF files are found the XML is processed and the PDF is downloaded to the system.
9. Systems users then look at Redwoods compliance XML and PDF files. DCS looks for matching filenames which contain their client id (also known as: person id), processing the XML and downloading the PDF.
10. **Indiana University (IU) Psychotropic Medications Program** - to populate records chosen by the system user. The IU Psychotropic Medications Program is dedicated to provide oversight, monitoring, education and consultation regarding psychotropic mediation utilization for youth in DCS care. It interfaces and pulls data back from Casebook and then populates and displays the record to the system user. Additionally, its purpose is to provide secure electronic data share between IU and DCS for cases involving youth who are prescribed 4 or more psychotropic medications or meet other red flag indicators.
11. **Social Security Benefits through BMO Harris Bank**–many children in DCS care are eligible to claim Supplemental Security Income (SSI).  The Social Security Administration sends the majority of payments electronically on the first of the month via Automated Clearing House (ACH). A lump sum is deposited in a secure BMO Harris bank account. Accompanying the ACH transaction is a statement itemized by child indicating the amount deposited with DCS on behalf of a child in its care. BMO takes the accompanying text formatted file and converts it into a .csv formatted file. KidTraks uses a job to retrieve the file and upload it into KidTraks Accounts Receivable Quick Deposit page. The file populates approximately 1,000 transactions with primary information concerning the parent and specific amount per child. DCS staff then manually associate each transaction line to a specific “DCS Person ID” and “DCS Case ID.” Small files may come in throughout the month. These are processed in the same manner. In addition, paper SSA checks are received on behalf of DCS children.  These are manually entered and do not involve BMO.

1. **List of Chase Transactions** - to provide extract in order to import all of the Chase transaction performed by State Employees (e.g., FCMs) and import that to the system so that DCS has a record of all the purchases made by the FCM and can generate invoices with correct Referral information.
2. **PeopleSoft** – The State of Indiana utilizes the Oracle PeopleSoft (PS) Financials application as the book of record for the accounting of State and Federal funds.  All Indiana State Agencies must submit payment vouchers through the application allowing the Indiana Auditor of State (AOS) to review and approve each yielding Electronic Fund Transfers (EFTs) to pre-authorized Vendors and DCS clientele (benefits).

While PS Financials records and creates payments, it does not provide record of services provided at the child level. Therefore, the DCS KidTraks (KT) application is used to collect detailed data pertaining to each transaction. KT provides a “Vendor Portal” for the electronic submission of invoices specifying the eligible child and good or service rendered. These invoices are converted into KT Vouchers. DCS staff review the submitted invoices relative to the eligibility of the child and then approve the voucher within KT for transmittal via PS for payment by the Auditor of the State. KT’s Voucher Build process runs Monday through Friday at 7:15 AM. KT vouchers are batched in groups of up to 75 vouchers. PS Financials provides the functionality to manually upload this file, create PS vouchers for payment, and track each transaction through a multiple layer approval process. These Vouchers are then paid by the Electronic Funds Transfer (EFT) to each payee.

Note: Initially, a group of State Agency representatives managed the implementation of the PS application for the State of Indiana. This group was referred to as “ENCOMPASS.”  This group no longer functions and references to “ENCOMPASS” are now being replaced with “PS.”

The Indiana State Personnel Department (SPD) maintains a separate Oracle PeopleSoft (PS) database for Human Resources. This PS database manages all aspects of HR for the State of Indiana.  Flat files are extracted and uploaded into KT nightly.  This data is utilized by Active Directory for Security purposes. Additionally, it provides an updated organization structure for all State Agencies. DCS uses this in various workflows and approval processes through KT.

1. **Juvenile Probation Department** - to permit the Juvenile Probation Department to log into KidTraks through a single sign-on (SSO) and enter all probation information into KidTraks manually. A job runs nightly that moves that data from KidTraks to the Children’s Bureau.
2. **Quest Case Management System and Judicial Technology and Automation Committee (JTAC)** - for probation officers to have an SSO into KidTraks (accessible by a link within the systems). Probation officers use a different system, depending on their county.
3. **Odyssey Case Management System** - to interface with the State of Indiana’s judicial case and financial management system.
4. **Indiana Judicial Center** - for court reports, which are generated two ways. The first is using the Quest Case Management System, which pulls data directly from Casebook. This is used by 11 counties. The other uses a Rich Text Format (RTF) repository. FCMs download a template, fill it out, and deliver it to the court.
5. **National Youth in Transition Database (NYTD)** - to allow for the collection of information on youth in foster care, including sex, race, ethnicity, date of birth, and foster care status, as well as information about the outcomes of those youth who have aged out of foster care.
6. **Adoption and Foster Care Analysis and Reporting System (AFCARS)** - to allow for the collection of case-level information from state and tribal Title IV-E agencies on all children in foster care and those who have been adopted with Title IV-E agency involvement. Title IV-E agencies are required to submit AFCARS data twice a year. The Office of Data Management (ODM) manages the majority of this process currently, with the exception of some data quality forms.
7. **National Child Abuse and Neglect Data System (NCANDS)** - to allow for the collection and analysis of data on child abuse and neglect known to child protective services (CPS) agencies in the United States.
8. **Medicaid Reimbursement Option (MRO) Matching Process** - to export selected attributes of children who meet specified parameters (e.g., Indiana Child Welfare Information System (ICWIS, also known as: MaGIK) referrals to Community Mental Health Centers, children in placement, Child Mental Health Initiative cases, and all children who have any referrals to cross care in the past three years) to the Family and Social Services Administration (FSSA) including but not limited to:

* Medicaid RID numbers
* Person IDs
* Social Security Numbers
* First Names
* Last Names
* Dates of Birth
* Begin Dates
* End Dates

1. **Penetration Reports** - to calculate a Penetration Rate, which is a percentage and also known as the Penetration Ratio formula. The ICWIS Penetration Rate Report is a report which lists (and counts) the children which are in out-of-home care with regard to a specified date (a snapshot in time) and what their Title IV-E/Foster Care status is at that specified point in time.
2. **State Board of Accounts Extracts** - for ad-hoc data extract requests. Queries are modified or rebuilt upon request
3. **Eckerd Kids/Mindshare** - to run queries against DCS databases to pull information for analysis. The CCWIS system shall result in Eckerd Kids/Mindshare needing to build new queries and have new tables and structures.
4. **National Survey of Child and Adolescent Well-Being (NSCAW)** - to collect data samples from cases. The NSCAW sample shall consist of two types of child protective services (CPS) cases:

* Children with a closed maltreatment investigation or assessment
* Children who have been removed without an investigation or assessment and who are in state or county legal custody. This group might include, for example, children who entered the child welfare system via the juvenile justice system.

All children with a maltreatment investigation or assessment are eligible for sampling regardless of whether the allegations of child abuse or neglect were substantiated.

1. **National Center for Missing and Exploited Children (NCMEC)** - to interface with a corporation that assists with the tracking and recovery of missing children. Currently, there is no automated interface so data is currently emailed. However, DCS is working on an interface and it shall be established by the end of 2019.
2. **National Electronic Interstate Compact Enterprise (NEICE)** - to interface with a system that exchanges data required by the ICPC to place children across state lines. Data is integrated via MuleSoft.
3. **Indiana Commission for Higher Education (CHE)** – to interface with a system that exchanges data to allow auto enrollment for children that qualify for the Indiana Twenty First Century Scholarship for college.

### Internal Interfaces

Since in Phase 2 KidTraks shall be a Transitional CCWIS while modules of the new CCWIS system shall be functional, the two shall need to exchange data. DCS has completed integration between Casebook and KidTraks via MuleSoft.

The following describes current data exchanges between Casebook and KidTraks. As the system functions currently, this is facilitated through Biztalk. An XML is created and placed in a folder where it is picked up and processed. It is processed on a periodic basic, which varies depending on how close to real-time speed is necessary. This is not a direct interface. Once data is picked up, procedures within the receiving system take care of parsing and distributing the data across the system into the right fields within databases’ tables and fields.

**Outbound Actions:**

* resource\_action (resource.xsd) – sent for foster families with no previous mapping to Casebook.
* case\_action (case.xsd) – sent for all JD/JS cases.
* cans\_action (cans\_result.xsd) – sent for all CANS assessments done through DARMHA
* placement\_group\_action (placement.xsd) – sent for all JD/JS placements.
* court\_action (court\_action.xsd) – sent for all JD/JS court hearings.
* afcars\_action (afcars.xsd) – sent for the first JD/JS placement in each case.

**Inbound Actions:**

* person\_action (Person.xsd) – sent for all person demographic changes.
* placement\_action (placement.xsd) – sent for all placement changes.
* eligibility\_action (eligibility.xsd) – sent for all eligibility changes.
* court\_action (court\_action.xsd) – sent in response to JD/JS court actions to map system identifiers.
* case\_action (case.xsd) – sent for all case changes.
* id\_mapping\_notification (identifier.xsd) – used to map system identifiers.
* event\_exception (event\_exception.xsd) - used to convey errors that occur when sending JD/JS data to Casebook.
* assessment\_action (assessment.xsd) – sent for all assessment changes.
* resource\_action (resource.xsd) – sent for all resource changes.
* afcars\_action (afcars.xsd) - sent in response to JD/JS AFCARS actions to map systemidentifiers.

# Design, Development, and Implementation (DDI)

## SDLC Approach and Deliverables

The Contractor shall utilize an Agile approach to System Development Lifecycle (SDLC) process to design, development, and implement the CCWIS system as well as to implement any fixes and enhancements. The Contractor’s approach must incorporate iterative methods for development and testing of software. This Agile methodology shall break the project into smaller work efforts to realize the following goals:

* Development and deployment of a functioning component(s) at the end of every iteration that build upon each other
* Enabling frequent demonstrations of completed components
* Building stakeholder support for the CCWIS system throughout the life of the project, including through regular UAT efforts
* Detecting dependencies, risks, and/or issues as early as possible to make course corrections.
* Early detection of missing, incomplete, or inaccurate requirements
* Early detection of flaws and vulnerabilities
* Meet approved project schedule deadlines
* Creating an environment that lends itself to responsive design to provide a seamless user experience regardless of device
* Facilitating on-going project team learning and continuous process improvement
* Independent module level testing and cross module testing
* Scheduled and on-demand demos
* Flexible number of iterations to accommodate all the prioritized requirements within a module

The Contractor’s Agile approach shall be based on known requirements realized and implemented using short cycles of analysis, design, development, and testing, enabling the system to evolve. An iteration is to be a distinct sequence of tasks focused on a desired goal within a time box, or simply multiple mini-projects that are part of a project phase.

The Contractor must create and lead an architecture-driven, iterative process that begins by prioritizing high-risk/high-payoff use cases within each module that have well-defined objectives and produce functionality ready for production release. DCS is expecting Agile development to occur on multiple modules simultaneously. The Contractor shall propose for the State’s approval which module iteration to start first and the number of iteration cycles needed within each module. Each successive iteration must build on the work of the Contractor’s previous iterations to evolve and refine the system. The iterations can be released based on the Contractor’s project schedule.

Even though the functional modules shall be developed using an Agile methodology at different time intervals, functional implementations shall begin after all User Acceptance Testing and QA testing has been completed and approved by DCS for that release. However, Implementation Phase 1 must be complete by the end of Contract Year 1 and Implementation Phase 2 must be complete by the end of Contract Year 2.

## SDLC Deliverables

The table below contains the required minimum deliverables for each implementation (Implementation Phase 1, Implementation Phase 2, enhancements, fixes) by SDLC activity, unless otherwise approved by DCS. Deliverable documents must be kept updated throughout the Contract term and the Contractor is responsible for organizing and maintaining these artifacts within Atlassian Jira.

Payments to the Contractor will be triggered by the completion of three milestones: Discovery, Design, and Implementation. Discovery and Design milestones will be paid on a per module completion basis, while Implementation milestones will be paid on a per Phase completion basis. The table below outlines which deliverables are required to complete each milestone. Given the Agile SDLC approach, the Contractor shall continue to keep each deliverable updated even after deliverable acceptance to reflect the latest progress in the project. As part of the Implementation milestone for each Phase, the Contractor must submit an updated version of all Discovery and Design deliverables with an asterisk (\*) next to it for State review and acceptance at the end of Implementation (e.g., the Requirements Traceability Matrix must reflect the most updated information at the end of Implementation.)

| **Activity** | **Deliverables** | **Milestone** |
| --- | --- | --- |
| 1. **Planning** | Project Schedule **\*** | Discovery |
| Requirements Confirmation Document | Discovery |
| 1. **Requirements Management** | Requirements Document(s) **\*** | Discovery |
| Requirements Traceability Plan and Matrix (RTM) **\*** | Discovery |
| 1. **Design and Development** | Architectural Vision | Discovery |
| Atlassian Jira System Traceability Model | Discovery |
| Design and Development Plan | Discovery |
| Conceptual Design | Design |
| High Level Design (HLD) | Design |
| Solution Detailed Design (SDD) | Design |
| Solution Architecture Design (SAD) | Design |
| Functional and Technical Design Documents **\*** | Design |
| Configuration Management Plan | Discovery |
| Business Use Case(s) **\*** | Design |
| Business Rules Documentation **\*** | Design |
| User Interface Specification(s) | Discovery |
| System Security Plan **\*** | Design |
| Reports and Forms Design Documents **\*** | Design |
| Process Flow Document(s) **\*** | Design |
| Glossary of Terms and Acronyms **\*** | Design |
| **4. Testing** | Master Test Plan | Discovery |
| Draft Automated Testing Scripts | Design |
| Final Automated Testing Scripts | Implementation |
| Test plans for each testing phase | Discovery |
| Draft Test cases | Design |
| Final Test cases | Implementation |
| Completion of all applicable testing cycles | Implementation |
| Draft Security Test Plan Report | Design |
| Final Security Test Plan Report | Implementation |
| UAT Report and Results | Implementation |
| Draft System Integration Test Readiness Checklist | Design |
| Final System Integration Test Readiness Checklist | Implementation |
| 1. **Data Conversion and Migration** | Data Conversion and Migration Plan | Discovery |
| Data dictionary, data models, data flow models \* | Design |
| Draft Conversion and Migration Results reports | Design |
| Final Conversion and Migration Results reports | Implementation |
| 1. **Implementation** | Phase Implementation Plans | Discovery |
| Organizational Change Management Plan | Discovery |
| Training Plan | Discovery |
| Knowledge Transfer Plan | Discovery |
| Completed training and training materials | Implementation |
| Training logs to track users’ training progress | Implementation |
| Completed pilot implementation(s) | Implementation |
| Completed statewide implementation | Implementation |
| Formal System Acceptance Report | Implementation |
| 1. **Post-Implementation Support** | Defects log | Implementation |
| Final, updated deliverable documents and supporting work product documentation posted in Atlassian Jira. | Implementation |
| Source/object codes for all software components | Implementation |

## Planning

**Requirements Confirmation Sessions.** To ensure that the high level functional requirements are accurate, the Contractor shall conduct the following requirements confirmation steps at the start of the contract:

* There will be a dedicated timeframe for the Contractor and DCS to meet with the Organizational Design vendor to review business process diagrams and user stories developed by Organizational Design vendor and high level requirements for CCWIS. The Contractor shall update the high level requirements to reflect the Organizational Design vendor’s input. In these sessions, all parties shall review the expected features and build a common understanding of requirements with the Contractor’s design team. This shall also give the Contractor an opportunity to validate the sequencing of their proposed schedule.
* The Contractor, DCS, and Organizational Design vendor shall meet with Child Welfare program staff to review the high level requirements and user stories. The Contractor shall update the high level requirements to reflect the feedback from these sessions.

The Requirements Confirmation Sessions shall last no more than three weeks, depending on the length of time needed for discussion, but DCS shall expedite the sessions when appropriate. The Contractor must include time for the sessions in the project schedule. The end result of the Requirements Confirmation Sessions is a Requirements Confirmation Report that can be leveraged during subsequent sprints.

Prior to design beginning for any implementation and release, the Contractor shall complete the following planning documents based on their experience, proposed approach, and DCS input:

* Project Schedule
* Requirements Confirmation document

## Requirements Management

Requirements management shall be key to ensuring the CCWIS system is implemented with all the approved functional and technical requirements, and meets all State and federal requirements. High level functional and technical requirements are provided in Section 4 and 5 of this scope of work. The Contractor shall provide and implement application lifecycle management processes to manage requirements through the entire application lifecycle. The Contractor shall meet with all relevant stakeholders to understand business processes and workflows, understand all federal and State requirements, and develop functional and technical requirements. The Contractor shall build detailed functional and technical requirements with relevant stakeholders through each sprint.

**Traceability.** The Contractor shall provide a Requirements Traceability Plan and Matrix that also includes a methodology for starting and maintaining federal system certification traceability from the start of the project through to implementation. Included in the plan must be relationships between business rules, policy, design, testing, reporting, and platform rules. Throughout the project, the Contractor must trace each functional and technical requirement from its origin through statewide implementation via Atlassian Jira, DCS’ Application Lifecycle Management (ALM) tool. The Contractor must track and maintain a record of changes to requirements and/or development artifacts for the historical record and certification traceability. The Contractor must provide a vision and methodology for documenting and maintaining traceability throughout the Agile software development lifecycle, and back to source requirements. The Contractor shall be responsible for incorporating approved changes to the requirements and completing all traceability activities throughout the project.

**Deliverables.** The Contractor shall develop and keep updated the necessary requirements artifacts to successfully design, develop, and implement the CCWIS system. These deliverables include, but are not limited to, the following:

* Requirements Document(s)
* Requirements Traceability Plan and Matrix (RTM)

## Design and Development

**Design and Development Plan.** The Contractor shall create and execute a Design and Development Plan aligned with the selected Agile methodology prior to initiating any design or development activities. The plan shall include but is not limited to the following:

* Purpose and Scope
  + Relationship to other plans
  + Resources - Roles and Responsibilities
  + Design and Development Approach
  + Assumptions and Constraints
  + Methodology Tools and Techniques
* Design
  + Agile Software Design Process and Standards – frameworks, future growth, User Interface (UI) design standards, interface standards.
  + User Considerations - characteristics, problem statement, objective, workstation.
  + Design Tradeoffs
  + Handling of Critical Requirements
  + Safety and Security Assurance
  + Detailed Design
  + Reusable Software Products - incorporating and developing reusable software products, procured software
  + Risk Management
* Development
  + Agile Software Development Process – Sprint process overview, Sprint work package/software reviews, technical documentation, deliverables, deployment process.
  + Establishing Software Development Environment - developer workstation, software development library/files, and relationship to Software Configuration Management Plan.
  + Application Development Coding Standards - automatic code generation, code reuse, link/reference to external coding standards documentation.
  + Unit Testing - approach, use of testing frameworks and automation, peer reviews, metrics and measurements.
* Application Integration - revision and retesting, work package/system integration, work package/software release/implementation planning.

**Conceptual Design.** It is critical that all project releases are thoroughly planned and executed well. Prior to beginning design activities, the Contractor shall complete the Conceptual Design that verifies infrastructure components can be installed and integrated successfully.

**Configuration Management Plan.** The Contractor shall create and execute an Agile Configuration Management Plan. The plan shall include but is not limited to the following:

* Purpose and Scope
  + Relationship to other plans
    - Application Design and Development Plan
    - Data Management Plan
    - Hardware and Software Plan
    - Master Test Plan
    - Security Plan
    - Service Governance Plan
  + Resources - Roles and Responsibilities
  + Benefits
  + Audience
* Configuration Management Areas:
  + Database – Organizing structural configuration and metadata settings
  + Hardware – Ensuring performance and functionality settings
  + Network – Coordinating multi-vendor device compliance
  + Security – Enforcing the hardening and compliance standards
  + Software – Managing code promotion / releases and auditing
* Software Configuration Management (SCM) Procedures
  + Configuration Identification - Software Product Classification, Test, Release, Build, Baseline, Source File, Document, Change Request
  + SCM, and Project Repositories
  + Configuration/Change Control – change tracking, change record definition and types, change request attributes
  + Status Accounting and Reporting
  + Configuration Audit/Verification – audits, build audits, test readiness review (TRR)
  + Release Administration and code promotion
  + Archive, Storage, Backup and Restore
* Development Environment
  + Product Control with Software Configuration Management Tools
  + Development Builds
  + Formal Builds
  + Implementation
* Documentation Repository Development Tools

**Design and Development Execution.** In executing the Design and Development Plan, the Contractor shall be responsible for the leading all design, development, and configuration activities, including but not limited to the following activities:

* Lead architecture, design, development, and configuration discussions.
* Organize and conduct design sessions with subject matter experts.
* Develop the technical environment specifications for the CCWIS system.
* Apply consistent development standards including coding, database, and field naming conventions, in alignment with industry standards.
* Perform necessary configuration, development, and testing required to implement the functional and technical design. See Section 6.7] for additional information on Data Conversion and Migration.
* Provide DCS with access to both source/object codes for software components and documentation. Note: All new software functionality built on top of any COTS software shall be owned by the State.
* Produce updated system documentation.

**Deliverables.** The Contractor shall develop and keep updated the necessary requirements and design artifacts to successfully develop and implement the CCWIS system. These deliverables include, but are not limited to, the following:

* Architectural Vision
* Atlassian Jira System Traceability Model
* Design and Development Plan
* Process Flow Document(s)
* High Level Design (HLD)
* Solution Detailed Design (SDD)
* Solution Architecture Design (SAD)
* Functional and Technical Design Documents
* Configuration Management Plan
* Business Use Case(s)
* Business Rules Documentation
* User Interface Specification(s)
* Interface Design Documents
* System Security Plan, including security specifications
* Reports and Forms Design Documents
* Process Flow Document(s)
* Glossary of Terms and Acronyms

## Testing

The Contractor shall create the Master Test Plan with DCS input, and shall receive DCS approval before finalizing the plan. At a minimum the plan shall include the following information:

* Agile Testing Methodology and Automation Approach for the following types of testing expected for CCWIS:
  + Unit
  + Functional (API/Services)
  + Integration
  + System (includes Web Services, Regression, Security, Browser/Operating System Compatibility and Mobile)
  + Performance
  + Federal Certification
* Relationship to other plans
* Resources - Roles and Responsibilities
* Risks, Assumptions, and Dependencies
* Tools and Test Equipment – including API Testing, Test Management, Automation and Performance and any additional hardware/software
* Test Environment(s) Management - including approach to mocking and service virtualization
* Test Data Management
* UAT Support Approach
* Defect Recording and Resolution
* Test Status/Metric Reporting (e.g., Burndown charts, Velocity, Cumulative Flow, etc.)

DCS will own the Master Test Plan after it is approved. The Contractor shall support all testing activities and execute testing activities assigned to them. This includes but is not limited to the following activities. (Note: Types of testing shall depend on the features in the iteration.)

* Manage test cycles, tracking progress and producing progress and quality reports.
* Conduct the following tests at a minimum before each Phase Implementation: security test, system end-to-end test, conversion test, Operational Readiness Review (ORR), pilot implementation test, and implementation test.
* Develop test scripts in collaboration with DCS. Assist DCS in developing UAT test scripts when requested.
* Support the testing environment including, but not limited to, creating the test datasets, creating de-identified test data sets, and resetting the test data to support the re-running of test scripts.
* Provide defect management tool(s) and procedures for tracking, managing, and reporting system defects during testing.
* Automate testing where possible. Utilize automated testing tools to increase test execution speed and accuracy within the testing phases.
* Train State staff involved in testing on the system and test procedures.
* Run validation and testing software against external facing Internet applications to help identify potential security issues and repair any deficiencies found during this testing.
* Support User Acceptance Testing (UAT) when requested. This may include at a minimum:
  + Provide system training to UAT participants.
  + Deploy the relevant iteration functions in the UAT environment.
  + Provide assistance to develop test data and test scenarios.
  + Provide and support the UAT participants’ user IDs and passwords.
  + Assist in populating the data in the UAT environment.
* Refine, update, and make available all test documents, procedures, and scripts throughout development and through full system acceptance to reflect the current requirements.

**Deliverables.** The Contractor shall develop for following testing-related deliverables at a minimum:

* Master Test Plan
* Draft Automated Testing Scripts
* Final Automated Testing Scripts
* Test plans for each testing phase
* Draft Test cases
* Final Test cases
* Completion of all applicable testing cycles
* Draft Security Test Plan report
* Final Security Test Plan report
* UAT Report and Results
* Draft System Integration Test Readiness Checklist
* Final System Integration Test Readiness Checklist

## Data Conversion and Migration

Data conversion and migration shall focus on the transformation of data from Casebook and KidTraks to CCWIS. Planning for the conversion shall include all the necessary procedures for cleansing, transferring, validating, and synchronizing the data throughout the entire process. The Contractor shall implement proper staging of data during conversion and migration to ensure data integrity and to support data quality operations.

**Information on MaGIK Database**

MaGIK data comprises of hotline, assessment, case management, resources, vendors, services, referrals and payments. Among this hotline, assessment, case management and resource data is stored in PostgreSQL database captured through Casebook application. Whereas probation case info, vendors, services, referrals, and payment information are stored in MS SQL Server database captured through KidTraks. Daily data sync of people and probation case information happens between Casebook and KidTraks through BizTalk integration. The current size of the MaGIK Production database is provided below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Production Application Database** | **No of Tables** | **Current Size** | **Approximate Growth Rate** |
| MaGIK Casebook – PostgreSQL | 1,215 | 620 GB | 5% |
| MaGIK (File Store) – MS SQL Server | N/A | 1,790 GB | 10% |
| MaGIK (Financial Systems) – MS SQL Server | 2,016 | 576 GB | 5% |

To support reporting needs, all production data is replicated into separate database servers. These replication database server are accessed through Linked Servers and dblink queries from the reporting database to fetch production data.

|  |  |  |
| --- | --- | --- |
| **Production Data Replication Servers** | **Current Size** | **Approximate Growth Rate** |
| Casebook – PostgreSQL – (Vendor Cloud) | 620 GB | 5% |
| Casebook – PostgreSQL – (On premises) | 620 GB | 5% |
| KidTraks – MS SQL Server | 576 GB | 5% |

Live data is pulled into reporting server for transformation and further analysis trough the Linked Servers in MS SQL servers or dblink queries in PostgreSQL servers.

|  |  |  |  |
| --- | --- | --- | --- |
| **Reporting Servers** | **Current Size** | **No of Tables** | **Approximate Growth Rate** |
| PostgreSQL – Snapshot Data related to MaGIK Casebook Application; | 10 GB | 433 | 5% |
| MaGIK Reporting Primary Server – MS SQL Server | 410 GB | 1126 | 10% |
| MaGIK Reporting Secondary Server – MS SQL Server | 422 GB | 2687 | 10% |

**Data Conversion and Migration Plan**

The Contractor shall create a Data Conversion and Migration Plan, including:

* Manual and automated cleanup efforts to prepare for data conversion
* Data conversion and migration approach
* Conversion/migration and synchronization strategy
* Archival strategy
* Resource management – staffing, training of State staff, facilities
* Interfaces
* Data quality assurance and control
* Conversion and migration risk factors
* Contingency Plan
* Conversion and migration tasks
* Conversion and Migration Schedule (Mock and Go-Live)
* Data security
* Conversion and migration support (hardware, software, tools needed)
* Training of conversion and migration staff

In terms of archival, the Contractor shall convert and migrate all Casebook and KidTraks data to CCWIS. DCS plans to store CCWIS records in two locations:

* AWS will contain all unstructured data (e.g., attachments, photos) and all older data
* Salesforce will contain all other data

During project planning, DCS will determine the number of years of data that is retained in Salesforce (i.e., define what is “older data”). Once a year, older data will be moved out of Salesforce and into AWS. During the M&O period under this Contract, the Contractor shall be responsible for this annual move as part of their M&O responsibilities.

**Data Conversion and Migration Activities**

During conversion and migration, the Contractor shall:

* Ensure converted data is available in non-production environments (e.g., development, UAT, etc.) for testing and verification per security and data quality policies. The Contractor shall ensure that the conversion process accounts for duplicate records that currently exists in Casebook and KidTraks.
* Complete the mapping of data elements between Casebook and KidTraks and the CCWIS databases as well as define the transformation rules for all Casebook and KidTraks data elements. The data mapping and transformation rules shall eventually become input for designing the conversion module.
* Populate data fields in the CCWIS system with mutually agreed upon default values through conversion modules where Casebook and KidTraks data field(s) cannot be mapped.
* Provide report program(s) to report data mapping, translation rules, and exceptions, and a means for collaboration with stakeholders to review how data shall be translated between the MaGIK and CCWIS data models. DCS would ideally like a user interface to perform the functionality described above.
* Recommend and execute procedures for handling exceptions and errors identified during mock conversion/migration. The exceptions shall be handled through data cleanup or modifications to the conversion programs based on DCS approval.
* Produce data exception reports with predefined, mutually agreed upon severity levels for data fields during each iteration of mock run. Severity levels shall allow focused efforts to prioritize data cleanup activities.
* Ensure system data conversion and migration routines must:
  + Automatically maintain data integrity for all converted data
  + Identify which records have been converted and which shall need to be re-run
  + Capture system errors (e.g., loss of network and database connectivity, time outs)
  + Include retry logic to resume conversion at a defined point prior to the error
  + Ignore certain participant records based on the exclusion criteria provided by the business rules
* Ensure system data conversion routines must not:
  + Allow a record to be converted if the record violates the data integrity of the MaGIK data model
  + Allow a record to be converted if the data values are out of defined range such as invalid dates or alphanumeric values in numeric data fields
* Develop functionality to execute as well as test multiple cycles of mock conversion. DCS shall work with the Contractor to determine the data refresh cycle.
* Ensure CCWIS is capable of performing file processing during synchronization (e.g., sort, merge, split, filter, remove duplicates) both before and after running the batch process

**Deliverables.** The Contractor shall develop for following data conversion and migration-related deliverables at a minimum:

* Data Conversion and Migration Plan
* Data dictionary, data models, data flow models
* Draft Conversion and Migration Results reports
* Final Conversion and Migration Results reports

## Implementation

System implementation is an effort that coordinates the deployment of software into production, training of users, and readies a support mechanism to address any challenges. The transition from Casebook and KidTraks to CCWIS shall be a significant change for users. The Contractor must demonstrate an awareness of the relationships impacted by this change (see Section 3.1.1 and Section 3.2.1 for more information about the users of each system). DCS expects each implementation effort to be a positive experience that ensures users achieve a high level of knowledge, and competence with CCWIS. As such, all Contractor staff shall engage in positive and professional interactions with each user group, focused on customer service.

* Implementation Team: The Contractor is expected to plan and execute all aspects of pilots and implementations utilizing an Implementation Team comprised of Contractor and DCS staff. While the Contractor shall have ultimate responsibility, DCS desires a collaborative approach to the effort. The Contractor shall work closely with DCS and the PMO vendor to ensure communications, training, and on-site support activities are appropriate and in keeping with the tone and vision of the CCWIS Project. The Contractor shall assess the preparations for the implementations and work towards a seamless transition with all users. See Section 7 of this document for specific details on training and on-site support.
* Pilot: DCS desires a pilot implementation for each Implementation Phase based on the agreed upon project schedule. DCS defines a pilot as a contained assessment, beginning after the training of pilot users, used to validate the systems usability and support processes. The pilots shall be administered by the Contractor. The final selection of pilot users shall be determined by DCS.
* Organizational Readiness: Before implementation commences, the PMO vendor shall perform an Organizational Readiness (OR) assessment reviewing the Contractor’s Conversion Plan, OCM Plan, Implementation Plan and Training and On-site Support Plan. DCS’s executive management team shall utilize the OR Assessment, any CCWIS PMO and DCS OR recommendations, and Contractor input to make decisions for both pilot and implementation go/no-go decisions. If DCS chooses to designate an Organizational Readiness (OR) Team to provide guidance and feedback to the Contractor in regards to implementation, the Contractor shall also work closely with the OR Team during implementation.

### Implementation Plans

The Contractor shall develop an Implementation Plan for each implementation. The Implementation Plans shall be based on best practices, experience with child welfare implementation projects, knowledge of the CCWIS technology, and user and stakeholder needs. Each Implementation Plan shall include, but is not limited to, the following items:

* Implementation Strategy including pilots
* Plan references
* Relationship to other plans
* Implementation resources – roles and responsibilities
* Implementation communications
* Pilot schedule
* Statewide implementation schedule
* Go/no go success criteria
* Technical migration/implementation methods
* Technology, infrastructure, support considerations
* Help desk approach
* Triage/issue escalation processes
* Rollback processes
* Interface contingency plan

### Pre-Implementation Activities

The following key activities, as applicable to the functionality being implemented, must be completed and approved prior to initiating each Implementation Phase:

* System Testing/User Acceptance Testing executed (all defects with severity of blocker, critical and high must be fixed)
  + **Blocker**: An item or action that prevents further testing and no work around is possible, is considered a blocking defect.
  + **Critical**: A major functional piece is broken, or issue that affects several areas is considered a critical defect.
  + **High**: A defect that does not function as expected/designed or causes other functionalities to fail to meet the requirements is considered a high defect.
* Mock Conversions (100% successful/zero defects or agreement to address defects either later in implementation or in following implementation)
* Rollback process fully tested
* Disaster Recovery drill executed
* Help Desk support in place
* Training of Implementation Team and affected users executed

### Implementation Reporting

The Contractor shall monitor and report the following objectives at a minimum in the Weekly Status Report, as appropriate for each project phase:

* Usability among different stakeholders
* Effectiveness of training
* Unanticipated legacy/document data conditions
* Data conversion
* Post conversion synchronization process
* Planned schedule for implementation
* Organizational readiness
* Stakeholder communication messages
* Technical readiness of implementation location
* Software quality
* No security incidents
* Service disruption and/or system downtime
* Successful interfacing
* Issue escalation process
* Help desk/triage procedures
* User account management
* Participant feedback

Accomplishing these goals successfully helps reduce potential risks and issues prior to statewide implementation. The Implementation Team shall measure the above key objectives and report them to the CCWIS PMO for review.

### Implementation Activities

The Contractor shall be responsible for the following tasks, at a minimum:

* Build into the Project Schedule an appropriate amount of time after the pilot concludes and before statewide implementation for adjustments/corrections to software, plans, training, etc.
* Inform DCS of any technical preparation needed for CCWIS implementation (which may include networking, hardware, or software needs) with adequate advance notice
* Develop all necessary SOPs and Checklists (e.g., Solution Monitoring, and Source Code Migration)
* Conduct a walkthrough of pilot/statewide implementation activities with the Implementation Team
* Conduct a walk-through of pilot/statewide activities that shall occur and review any Standard Operating Procedures (SOP), checklists, etc. that shall be utilized
* Execute the approved activities in the Implementation Plans
* Address system issues during pilot and statewide implementation following the published Governance Manual triage process. This includes any system, training, or support issues that arise through all communication channels back to the project. All members of the Implementation Team are to be trained on the triage process.
* After the pilot implementation, review with the Implementation Team the success of the pilot objectives, lessons learned, user readiness, and operational readiness and determine whether to move forward with statewide implementation.
* Deliver a Formal System Acceptance Report
* Hold weekly implementation status meetings with DCS that review the weekly reports and address, at a minimum:
  + Pilot/statewide implementation status
  + Software defects
  + Communications/OR Team activity integration
  + Training/on-site support process
  + Help desk process
  + Solution monitoring/performance
* Provide DCS with frequent status updates
* Provide system support and address any corrective actions needed throughout each implementation. This shall occur through a frequent triage process facilitated by the CCWIS PMO that shall track, prioritize, and address the issues found during implementation. The Contractor shall also ensure all applicable CCWIS environments and artifacts are kept current and in sync throughout implementation.
* Submit all deliverables required to complete the Phase 1 and Phase 2 Implementation milestones. Additionally, at the conclusion of Implementation for each Phase, the Contractor must submit an updated version of all Discovery and Design deliverables denoted with an asterisk (\*) next to it in the table in Section 6.2.

Post-implementation, the Contractor shall deliver a defects log to DCS. The Contractor shall maintain the defects log throughout the Contract term.

# Organizational Change Management (OCM) and Training

## Organizational Change Management Requirement

The Organizational Design Vendor and the Contractor shall develop and execute an organizational change management plan that includes education and communication components to effectively prepare the State and all stakeholders for system design-related process changes and to mitigate any risks related to the CCWIS implementation. This shall be known as the Systems Process Change Management Plan (Systems CMP) and will require close collaboration with DCS and the Organizational Design Vendor. The Systems CMP shall address both the internal and external effects of the system changes and contain the following:

* Education Component: The education component of the Systems CMP shall cover each business area, identify any key risks and role changes, and recommend actions to ensure seamless transitions.
* Implementation Component/Schedule: The implementation component shall document details regarding the implementation approach for the approved system design, as well as how necessary process changes resulting from those system changes for each business unit/area shall be prepared and conducted. The implementation component shall detail how changes shall be communicated to DCS Child Welfare, key DCS stakeholders, and external stakeholders (e.g., other State agencies, advocacy groups, NGOs, parent groups). The Systems CMP shall include an implementation schedule by business unit/area, a list of key team members to be involved, a plan for communications during implementation, and a training plan. It shall include a schedule and list of internal and external audiences to be included in each communication. DCS may require the Contractor to create the contents for these communications, however, any material used for communications shall first be approved by DCS before it is released to any external audiences. DCS shall be responsible for facilitating the release of these communications to external audiences. In addition, the Contractor may be required to prepare written communications for public audiences. DCS shall be responsible for facilitating the release of these communications to the public.

## Training

The CCWIS training effort is a vital piece to the successful implementation and acceptance of the new system. The Contractor shall provide a high-quality training experience for all end users to ensure a smooth transition from MaGIK to CCWIS. The Contractor will be responsible for creating content, using varying media (live, on-line, recorded, webinars, etc.) that best suits each type of user internal and external to DCS. The Contractor shall deliver end user training up until 90 days after each major rollout phase. The Contractor shall also deliver a comprehensive Train-the-Trainer and Super User course(s) to designated embedded DCS staff from the DCS Unit to enable on-going training resources after the CCWIS implementation and completion of the required Contractor-led end user training.

The Contractor must provide a sufficient number of staff to successfully accomplish all of the requirements of the Training Plan. The Contractor training group must have proven experience in the development and delivery of comprehensive training to support organizational transformation as it relates to a transition to a new system. The training group must have robust experience training end users and rolling out new systems, leveraging train-the-trainer and end user training scenarios. Additionally, the training group must understand child welfare systems and processes and maintain a high level of professionalism in all interactions with DCS, stakeholders, and CCWIS Project Team members. The Contractor shall provide a lead resource (DDI Training Lead) to lead the Contractor’s efforts to develop and execute the Training Plan and serve in a peer management role to the DCS Unit Manager.

The DCS Lead shall provide oversight of the Contractor-led training effort as well as supervising the DCS team. DCS and/or vendor will provide insight, experience, and scheduling/logistic support to the DDI Contractor. They shall also be responsible for review and approval of DCS stakeholder communications and DCS stakeholder engagement. The Contractor shall engage designated DCS staff and staff development early in the process so that the DCS staff can gain expertise in the CCWIS system’s workflow and functionality. The Contractor shall be expected to assist and collaborate with the DCS team and the Organizational Design Vendor on these key tasks at integral points and intersections with the training support effort.

Further details of the Contractor’s training responsibilities are provided below.

### Contractor Training Plan

The Contractor shall plan and develop a robust training program for all pilot and statewide implementations in collaboration with the Organizational Design Vendor, PMO vendor, and the State team. The DDI Contractor shall create and maintain a detailed Training Plan that must include at a minimum: scope, objectives, schedule, training tools, roles and responsibilities, training environments, approach and methodology, training types, materials, evaluation approach, knowledge transfer approach, and approval criteria.

External users of CCWIS will predominantly be Vendor Users (foster care parents, licensed child placement agencies, contracted service providers who deliver services to DCS families) and can be trained using webinars or computer-based training. The external users who need classroom training are probation officers. Note: foster families already being trained on Salesforce and that familiarity is expected to be very useful preparation for the Contractor’s CCWIS training.

### Materials Development

The Contractor shall be responsible for the curriculum development and materials development for all training courses, and incorporate feedback from the DCS unit and the Organizational Design Vendor. After training is complete, all materials must be handed over to the State in a format that would allow the State to make edits (e.g., in Word or PowerPoint format rather than secured PDF. Training materials includes the following, at a minimum:

* Training content for all trainings, including supplementary documents such as quick tips and exercises to test knowledge retention
* Content for State trainers who go through the Train-the-Trainer courses (from the DCS team)
* Leave behind materials
* Materials for a variety of training delivery methods, including classroom training, computer-based training, and recorded trainings to accommodate end user schedules and limitations
* A comprehensive User Manual

### Training Delivery

The Contractor shall deliver trainings according to the approved Training Plan. The Contractor will be responsible for regional just-in-time end user training as the CCWIS system rolls out. Regional map and reference to the number of regions is available as Exhibit 12: DCS Service Regions in Attachment K – Bidder’s Library. There may need to be more than 1 training in each region to cover all the end users in each region. The Contractor shall provide computer-based training and leverage technology to record on-site training to be reused on demand. The Contractor will be responsible for comprehensive training efforts that must:

* Sufficiently train all DCS users (approximately 4,000 users)
* Instill a high level of knowledge about CCWIS as well as with all materials and exercises
* Ensure consistency among all training staff in delivery of content
* Incorporate exercises for the training and sandbox environments
* Provide instructional directions and tips
* Include an issue-escalation process
* Provide various scheduling and/or virtual training options as necessary
* Include recording of trainings for future reference and virtual trainings

After the initial training efforts led by the Contractor, the Contractor must work with DCS staff in facilitating an ongoing knowledge transfer to enable a smooth transition, ensuring DCS is capable of taking over all aspects of CCWIS training. At project closeout, all aspects of the CCWIS training shall be turned over to DCS.

### CCWIS Train-the-Trainer/Super User

The Contractor shall conduct the Train-the-Trainer and Super User training according to the approved Training Plan. As part of this, the Contractor shall create a comprehensive Train-the-Trainer and Super User curriculum and training materials that shall prepare the DCS staff to conduct end user training. The Train-the-Trainer preparation must instill a Super User-level of knowledge about CCWIS as well as with all training materials and exercises that might be used during any classroom trainings. It must ensure consistency among all trainers in presentation and content, incorporate exercises for the training and sandbox environment, provide instructional directions and tips for the trainers, and include practice delivery sessions.

### Standalone CCWIS System Overview Module

The DDI Contractor must provide CCWIS System Overview training module that effectively demonstrates CCWIS features on a high-level and provide CCWIS users context for all subsequent training. Additionally, the CCWIS System Overview shall be designed to be used as a stand-alone course for select stakeholders who may be non-CCWIS users. The CCWIS System Overview training module will need to be recorded and all content and documents must be available for on-going and future use by DCS use after the system is complete.

### Project Training Tools, Technical Environments

The Contractor shall develop separate types of technical environments specifically for training support. This includes training and sandbox environments. The training and sandbox environments are to be available and used by training staff for preparation of any training materials (e.g., screenshots for guides) as well as for instructional use (e.g., classroom training, end user training).

The training environments shall be utilized by the Contractor and DCS staff for CCWIS classroom training. One of the training environments shall be used by the Contractor for classroom training and another by DCS in preparing and updating training materials and may be used as an added resource for classroom training. During classroom training, the training environments shall be used to facilitate demonstrations of CCWIS as well as allow trainees to explore CCWIS functionality through hands-on exercises. The training environments shall allow multiple training sessions to be conducted concurrently (e.g., four different locations are utilized for classroom training simultaneously during pilot training).

The sandbox environment must be available for trainers to prepare formal training materials and products. It must be available to all users throughout the training effort (as well as post-implementation), allowing users to independently explore all CCWIS functionality. To facilitate learning, the Contractor shall provide a list of cases available with defined characteristics (e.g., Case #12345 Foster Care, Case #11111 Adoption) for trainees to practice through hands-on exercises, which use common scenarios simulating workflow. Additionally, the staff providing on-site support shall utilize the sandbox environment. The sandbox environment shall allow numerous CCWIS users to access it simultaneously from multiple locations.

The Contractor shall be required to provide sets of data for the training and sandbox environments. The Contractor is required to provide sufficient data and cases to simulate all steps of the varying types of child welfare cases and functionality. The Contractor shall be required to work with the DCS and the Organizational Design Vendor in the review, selection, and acceptance of sets of data. The Contractor shall be required to develop and follow a process to maintain and update the data in the applicable environments. The Contractor shall be required to develop a schedule and process to maintain the environments as modifications and updates are made to the CCWIS system.

# Post Implementation

## Knowledge Transfer

A key task that occurs throughout the project is the transfer of system knowledge to DCS staff. This includes hands-on, on-site, face-to-face training. Any COTS or customized software utilized where DCS staff shall be making process, rule, role, or security changes shall also require a final transition of knowledge and training (e.g., BPM, rules engine, IAAM). The Contractor shall ensure that DCS-embedded staff are trained during implementation on how to navigate and complete work in CCWIS. The Contractor shall have utilized DCS-embedded staff for non-critical path tasks during the CCWIS Project. Any documentation, such as Standard Operating Procedures (SOPs), Job Aids, checklists, and training materials developed by the Contractor shall be delivered to DCS.

The Contractor shall provide training to DCS staff that shall maintain CCWIS after transition from the Contractor. This training shall address the following items, at a minimum:

* Database, software, and hardware maintenance
* Application development/batch support
* Architecture design and maintenance
* Security maintenance
* Testing specifications
* User training tools, methods, and materials
* System administration
* Help desk
* Rules engine
* Any SaaS, Commercial Off-The-Shelf (COTS), or customized software utilized where DCS staff shall be making process, rule, role, or security changes (e.g., BPM, rules engine, IAAM).

The last four weeks of the M&O period shall consist of the Contractor staff shadowing DCS staff. DCS defines shadowing as DCS staff taking the lead on performing tasks with Contractor staff watching over the DCS staff to ensure tasks are completed correctly. The Contractor shall be available to DCS staff for questions.

The Contractor shall create a Knowledge Transfer Plan that includes but is not limited to the following:

* Objectives
* Relationship to other plans
* Schedule
* Approach and methods of knowledge transfer
* Resources
* Knowledge Transfer Risks
* Curriculum, Materials, Set-up
* Relevant communications
* Monitoring, metrics, and evaluation criteria
* Any third party vendor involvement
* Location of all SOPs, operations manuals for hardware and software products, checklists, etc. that have been written throughout the project.

The Contractor shall update the plan throughout the CCWIS project.

## Warranty

The Contractor will warranty the CCWIS system against any defects for a period of 12 months from Phase 2 statewide implementation acceptance. The warranty period will be at no cost to DCS. The warranty period will be extended until all defects identified prior to or during the warranty periods are remedied by the Contractor.

The Contractor will perform at a minimum, but not limited to, the following high-level warranty activities:

* Immediate notification to DCS Management Team on blocker, critical, or high category defect identification that has substantial stakeholder impacts
* Timely defect research, analysis, and solutions
* Assist in defect prioritization
* Manage and fix prioritized CCWIS warranty defects
* Update the ALM tool to reflect changes to CCWIS
* Update all documentation (architectural, training, user guides, etc.) to reflect changes to CCWIS
* Triage facilitation
* Create weekly warranty reports as addendum to status reports

Determination of defects after statewide implementation will be reviewed by DCS’s Functional Manager and Technical Manager during the defect triage meetings. Review will consist of analyzing the system issue with the ALM tool to determine if the cause is a true defect. If the system issue is not a defect, determination will be made in triage to either address as a change control effort during MO or put on hold. Any resulting work effort to fix a defect or make changes to CCWIS will follow the Governance Manual processes.

# Maintenance and Operation (M&O) Services

M&O entails supporting the processes of the CCWIS infrastructure to ensure availability to stakeholders. The Contractor shall manage and complete the M&O activities associated with CCWIS beginning after the pilot implementation of Phase 1 and ending six (6) months after the implementation of Phase 2. The Contractor shall detail the support efforts in a Maintenance and Operations Plan. During the warranty and M&O periods, support must be available 24/7 in order to timely address any system issues or processes that impact stakeholders.

## M&O Activities

The Contractor shall perform at a minimum, but not limited to, the following high-level M&O activities:

1. **System Maintenance.** The Contractor supports the State in ensuring that DCS maintains licensure agreements with applicable parties. The Contractor must plan and execute tasks required to ensure CCWIS solution components stay relevant and useable. This support includes resolution of functional issues, application of patches, preventative maintenance, planning/execution of upgrades, and regular performance monitoring and performance reporting. At least on an annual basis, the Contractor shall communicate to the State any available information on the product roadmap, planned upgrades, and enhancements, and seek State input when necessary.
2. **System Performance Monitoring and Reporting.** The Contractor must monitor and troubleshoot all CCWIS solution components to ensure that they are available per State requirements and in alignment with meeting and exceeding applicable service levels. The Contractor shall communicate scheduled maintenance or emergency maintenance in a timely manner.
3. **Risk and Issue Management**
   * Conducting risk and issue management activities is crucial in a project of this size. The Contractor is responsible for identifying, monitoring, and reporting risks, as well as facilitating the resolution of issues. The CCWIS Governance Manual will detail the overall approach for risk and issue management. Risks and issues identified throughout the project will be maintained in a Risk and Issue Matrix by the Contractor.
   * The Contractor shall develop and maintain a Risk and Issue Management Plan as part of its project management plan. The Contractor’s plan should explain how the Contractor will identify, monitor, report, and resolve any issues. The plan must be based on the CCWIS Governance Manual approach to risks and issues. The Contractor may also propose risk and issue management practices that complement or enhance the existing CCWIS Governance Manual risk and issue approach.
   * The Contractor must immediately and verbally report to the DCS any discovery of issues, new risks, or previously known risks that are now categorized as moderate, significant, and severe (See Governance Manual, section Risk and Issue Management).
   * The Contractor shall submit a Risk Notification Report within three business days following any such disclosure as listed in the requirement
   * The Contractor shall conduct M&O issue research, root cause analysis, and change in cost and schedule estimations. The Contractor shall submit Root Cause Analysis forms for issues resulting from M&O activities as requested by DCS. These processes will assist in determining reasons for software or hardware failures and any potential continual improvement efforts needed.
4. **Release Management.** Manage and complete prioritized changes in scheduled releases.
5. **Security Management.** Perform required security activities such as contingency planning, testing, monitoring, and audits. Perform routine backup and recovery procedures.
6. **Documentation/Artifact Management.** Update all documentation (architectural, training, user guides, etc.) to reflect changes to CCWIS. Update the ALM tool to reflect changes to CCWIS. Maintain existing SDLC and M&O artifacts through the ALM tool and the project repository.
7. **Reporting.** Create monthly M&O Status Report detailing status of system M&O activities, including all performance standards, status of defects found or worked on during the report period, help desk incidents logged or worked on during the report period, and security status for all CCWIS solution components.
8. **Defect Resolution.** The Contractor shall be responsible for defect resolution. Determination of defects after implementation will be reviewed by DCS during the triage meetings. Review will consist of analyzing the system issue with the ALM tool to determine if the cause is a true defect. If the system issue is not a defect, determination will be made in triage to either address as a change control effort during M&O or put on hold. Any resulting work effort to fix a defect or make changes to CCWIS will follow the Governance Manual processes.
9. **Incident Management.** The Contractor shall properly plan and conduct services to minimize the occurrence of incidents and/or problems with the CCWIS solution components and service delivery. If incidents and/or problems arise, the Contractor shall work with the State to resolve issues in a timely manner based on the severity/priority levels of the State.
10. **Access Management.** The Contractor shall assist in the definition of user roles and security configurations, specifically the creation of new roles and monitoring of user access rights in relation to internal requirements. The Contractor shall manage credentials for non-production environments and security profiles for users authorized by the State, including other contractors, to have access to CCWIS solution components and service operations. The Contractor shall support the creation of role-based security for production environments.
11. **Privacy and Security of Data.** The Contractor shall conduct security monitoring activities to ensure full compliance with State and federal requirements. A Security Monitoring Plan must be developed that includes, but is not limited to:
    * Mechanisms for the implementation, monitoring, and maintaining of security controls
    * Logging of all security events
    * Mechanisms for taking corrective action for security violations
    * Periodic testing of security plans
    * Reporting on security violations/deviations from the plan
12. **Business Continuity and Disaster Recovery (DR).** Business Continuity maintains business functions after a disruptive event. DR is the process of regaining access to the data, hardware, and software necessary to resume critical business operations after a natural or human-induced disaster. The Contractor is responsible for Business Continuity and Disaster Recovery for CCWIS. The Contractor is required to create and execute a Business Continuity/Disaster Recovery Plan specific to CCWIS solution. The Contractor will successfully exercise this Business Continuity/Disaster Recovery Plan to secure the agency’s information system assets in the event of a disaster. The plan will be consistent with NIST SP 800-34 and SP 800-53r5. The plan will include but is not limited to the following:
    * Purpose and Scope
      + Development, test and all non-production environments also included, not just production
      + Relationship to other plans
      + Define the recovery team organization, identify key individuals, contact details, and provide training, policy, and procedures.
    * Business Continuity
      + Determine Business Impact Analysis (BIA) and define how organizations will “recover and restore partially or completely interrupted critical (urgent) functions within a predetermined time after a disaster or extended disruption”.
      + Maintenance, scheduled reviews of BC/DR plan to identify potential sources of change such as new compliance requirements, changes to critical Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO) levels.
      + Risk assessment methodology, threat identification and analysis, potential damage the events could cause, impact scenarios.
    * Disaster Recovery
      + Maintenance, scheduled reviews of BC/DR plan to identify potential sources of change such as new compliance requirements, changes to critical RTO/RPO levels.
      + Contingency plan testing with regular intervals (e.g., half-yearly or yearly) that enables plan deficiencies to be identified and addressed to make sure the DR plan remains effective. IRS Pub 1075 states that a DR drill is required at least annually.
    * BC/DR Drill Plan
      + Communications during a system disaster and recovery.
      + Identify measures and controls, establishing business and technical recovery requirements.

Backup and failover processes for all IT assets based on RTO and RPO as determined and mutually agreed upon by the Contractor and DCS during DR planning.

The CCWIS system must be recoverable within 6 hours. Specified performance standards surrounding DR/BC timeframes will be solidified during the project planning stage.

During the CCWIS Project, if an event occurs that disrupts the DDI work, the Contractor must have a plan to recover. DCS expects the Contractor to work with AWS and any other teams to keep the project on schedule. After Phase 1 is rolled out, the application must be recovered quickly in the event of a disaster. The Contractor will ensure all environments can be recovered in the event of a disaster in a timely manner that complies with the Business Continuity/Disaster Recovery Plan.

The Contractor will complete one Business Continuity drill during development. The DDI vendor will also complete three DR drills to demonstrate CCWIS’ recoverability using the BC/DR Plan. This includes the following project phases: Pre-Pilot, Implementation, and Maintenance and Operations.

The Contractor shall work in conjunction with DCS to identify BC changes needed for DCS prior to the Phase 1 pilot. The Contractor will work in conjunction with DCS and IOT if a DR event occurs during the life of the CCWIS Project.

1. **Help Desk**

System users will need access to a technical help desk that provides answers to system questions and addresses system issues that arise. The Help Desk will route policy or training questions and issues to the OR unit. The Contractor is required to use Atlassian Jira as Help Desk software.

The Contractor shall lead and staff the CCWIS Help Desk team and include embedded staff from DCS. The CCWIS Help Desk will be operational when the first Pilot (Phase 1) goes live. Once CCWIS Phase 2 is in M&O Steady State (six months after rollout), the Contractor shall transition the CCWIS Help Desk, including all processes and procedures, over to the current DCS Help Desk Manager.

The CCWIS Help Desk is envisioned to provide the same customer service levels and have the ability to respond quickly and effectively to resolve user issues. Help desk procedures and checklists should guide staff on how to answer or research user calls or emails. The Contractor shall create Standard Operating Procedures (SOPs) and Checklists to be used by the CCWIS Help Desk. The SOPs and Checklists will be reviewed and approved by DCS.

The CCWIS Help Desk team shall create help desk tickets for Tier 1, 2, and 3 level issues. (Note: The current MaGIK Help Desk since January 2018 averages 2,095 inquiries monthly, with a minimum of 1,104 inquiries and a maximum of 3,036 inquiries.) The Help Desk staff works in conjunction with the Development and Operations teams to resolve complex technical issues. The diagram below shows the types of tickets created for the three tiers.

Help Desk Tier Classifications

The CCWIS Help Desk is required to be available during the hours of 7:00 a.m. to 5:00 p.m. (ET) Monday through Friday on State business days. During pilots and implementations involving counties in the central time zone, this will have to be extended until 6:00 p.m. (ET). DCS anticipates utilizing the current tools supporting the processes (e.g., 1-800 number, Rational Change and Configuration Management (CCM) – ticket tracking, ININ Interaction Client– Automated Call Distribution (ACD), SharePoint Online – document repository and communication, and Microsoft Outlook); however, the Contractor can propose other tools.

The CCWIS Help Desk must be able to resolve issues at a timely rate. A specific resolution timeframe requirement for each Tier will be solidified during the project planning stage.

The Contractor shall provide training for the CCWIS Help Desk prior to each project phase pilot/implementation. The training must be timely to ensure successful support of the pilot/implementation.

## Maintenance and Operations Plan

The Contractor shall create a Maintenance and Operations Plan. The plan will include but is not limited to the following:

* Purpose and Scope
* Relationship to other plans
* Maintenance and Operations Approach
* Maintenance and Operations Objectives
* Maintenance and Operations Resources
* Maintenance and Operations Security
* Maintenance policy, procedures and checklists
* Maintenance planning and schedule three years past the end of the warranty period so that DCS is aware of all necessary upgrades, etc.
* CCWIS maintenance schedule
* Third party hardware/software maintenance schedule
* Communication messages/schedule
* Maintenance and Operations Feedback and reporting
* Maintenance and Operations Transition to DCS Plan
* Third Party software/hardware procured by the Contractor

# Project Management

## State Project Governance and Management

DCS’s Project Management approach includes the organizational structure, processes, and tools established to ensure projects are completed in a consistent manner.

The DCS CIO or CIO’s designee will provide the overall project management oversight for CCWIS. The Contractor must collaborate and take direction from DCS via the CCWIS PMO. The CCWIS project will be a coordinated project management effort amongst the Contractor, the PMO vendor, the Organizational Design vendor, and the DCS CCWIS team (collectively referred to as the CCWIS Project Team in this Contract).

The CCWIS Project will be managed through the DCS CIO or CIO’s designee who has overall daily management authority and will be supported by the CCWIS PMO, and the business and technical managers. This project management team structure defines roles and responsibilities that will aid the CIO or CIO’s designee to actively monitor the planning, execution, and quality of the project. DCS CCWIS team members will monitor and participate in contractor activities, and review and approve project deliverables along with team staff.

DCS will have a Change Control Board consisting of the CIO or CIO’s designee and members of the user experience team that will lead the review of all change requests. For more information, please see Section 10.6.

Given the magnitude of the project, different DCS stakeholders will be involved at different stages of the project. During the project planning stage, a specific CCWIS Governance Manual will be created by the State and Contractor to detail roles, responsibilities, processes, tools, and templates that will be used to execute the project. The CCWIS Governance Manual will outline which DCS stakeholders will play active roles in helping the Contractor complete milestones. The Indiana Verification Enforcement of Support (INVest) Governance Manual is included in Attachment K as Exhibit 13. This is intended to be a guiding document for the CCWIS Governance Manual.

### PMO Project Governance and Management

It is imperative that the entire CCWIS Project Team works to ensure a high level of quality across the board, from work packages to deliverables. The CCWIS PMO will create objectives, standards, practices, and responsibilities for performing project quality management. The CCWIS PMO will also establish the tools (e.g., checklists) and templates (e.g., delivery expectation document) to conduct quality assessments. The CCWIS PMO will be responsible for communicating the quality standards and results to the CCWIS Project Team, CIO or CIO’s designee.

The CCWIS PMO will work with all CCWIS Project Team project leads to help facilitate schedule, cost, and quality efforts to ensure a successful outcome. The CCWIS PMO will maintain the master Project Management Plan for the CCWIS Project, including a Master Schedule and Risk and Issues and Communications matrices. The CCWIS PMO will be responsible for the day-to-day management and monitoring of the CCWIS Project and will monitor that the project processes and tools are being utilized appropriately.

## Overview of Contractor’s Project Management Responsibilities

The Contractor is required to follow the CCWIS Project Governance Structure once the Project Governance Plan is approved and utilize the Atlassian Jira tools selected for the project. The Contractor’s overall project management responsibilities include the following:

* Adhere to all project quality objectives, standards, and practices.
* Lead and manage the DDI portion of the CCWIS Project using project management practices that will successfully deliver a system that meets DCS’ expectations, on time, and within the contract costs.
* Work closely with the CCWIS Project Team to complete the deliverables and milestones throughout the life of the project.
* Ensure its activities are coordinated and completed according to approved schedules and plans, messages are appropriately given to teams and stakeholders, and DDI risks and issues are escalated and resolved. Communication will be crucial between parties.
* Ensure appropriate fiscal stewardship through effective project management practices and communication, so that all parties can adhere to the various plans and schedules, in order to minimize change control and cost overruns.
* Assist in making work performance measure recommendations that will gauge the CCWIS Project’s health. If contractual work performance measures identify that continual improvement is needed, the Contractor shall assist in the effort to improve performance.
* Keep the staff resources at appropriate levels during the CCWIS Project. A resource calendar will need to be created as a part of the Project Management Plan and updated throughout the life of the project.

### Self-Assessment Tools

The Contractor will be called upon to assist in the development of self-assessment tools. It is likely that the State and the CCWIS PMO will lead these development efforts. CCWIS self-assessment tools assist DCS staff with documenting progress towards compliance with CCWIS standards as features are planned, developed and deployed. The tools may be utilized to assist agencies when evaluating any features that are needed to support federal and State child welfare program needs, as well as documenting ongoing CCWIS requirements progress. DCS must document progress in a comprehensive format that enables ACF to assess and document full system compliance with the content included in the self-assessment tool. ACF may utilize information from self-assessment tools to compile information for a final compliance review report. Self-assessment tools must cover the modules of the CCWIS system.

ACF has not finalized the specific goals and requirements of the CCWIS self-assessment tools yet. Further information about the CCWIS self-assessment tools will be released as it becomes available during the Contract term.

## Project Management Plan

The Contractor shall develop and implement a DDI Project Management Plan (DDI PMP) in alignment with DCS’s project management approach and incorporating best practices from previous large IT systems projects. The Contractor will generate and execute a Project Management Plan (DDI PMP) that clearly explains how the DDI scope of activities will be managed. The Contractor must collaborate with the CCWIS Project Team in the creation of the required DDI PMP components. The DDI PMP will follow the deliverable review and acceptance process as defined in Section 10.5. The Contractor will be expected to respond to any issues or findings identified by the CCWIS PMO, and will be responsible for regularly submitting and updating individual the DDI PMP and Project Schedule to the CCWIS PMO.

The DDI PMP should contain (or link to), at a minimum, the following sections:

1. Project Overview
2. Project Structure
3. Project Deliverables
   * Work Breakdown Structure
   * Milestones
   * Baseline Schedule
4. Resource Management
5. Vendor Management
6. Deliverables Management
7. Requirements Management
8. Schedule Management
9. Cost Management
10. Quality Management
11. Stakeholder Management
12. Communications Plan
13. Progress Monitoring and Reporting
14. Risk and Issue Management
15. Project Change Control
16. Project Closure

As part of the DDI PMP, the Contractor will be required to create a Quality Management Plan detailing an internal quality review process that must describe the Contractor’s approach to quality and how the Contractor staff will meet the quality requirements for CCWIS. This plan will be submitted to the CCWIS PMO for review and approval.

## Project Schedule

The Project Schedule is a key component to project management. The Contractor must use the experience gained on other IT systems projects to propose a Project Schedule that is reasonable and attainable based on the requirements. The Project Schedule must reflect implementation of a system that addresses all requirements within a two-year timeframe. Once planning commences, the Project Schedule will be refined and baselined and the Contractor will be held accountable to the agreed upon schedule. The schedule will be reviewed consistently to ensure the Contractor is completing the activities, deliverables, and milestones according to plan. The Contractor will keep the DDI Project Schedule accurate, updated daily, and available to the CCWIS PMO for importing into the Master Schedule.

The DDI Project Schedule will include:

* Fully implemented statewide schedule within a two-year timeframe.
* Work Breakdown Structure (WBS) organized by milestones for all work packages,
* Identified milestones, tasks, task duration, deliverables, dependencies, predecessors, resources (both State and Contractor), resource allocation, and start/end dates.
* Clearly identified iteration and release points.
* Clearly identified DCS deliverable review cycles, walk-throughs, demos, etc.

The Project Schedule must be submitted within thirty (30) days of the Contract start date.

## Deliverable Review and Acceptance

The CCWIS Project requires a concerted planning effort to successfully reach the project goals. The Contractor must submit and receive approval for a Deliverable Expectations Document (DED). Prior to developing any planned deliverables, the, the Contractor must receive State approval of any deliverable’s outline, expected content, and format.

The Contractor is expected to ensure all deliverables are submitted complete, error-free, and meet the requirements for the defined deliverable. Any rejected deliverables will require attentive correction. The Contractor should include the following deliverable review times in the proposed Project Schedule unless an alternative review timeline is agreed to in writing.

| **DDI Deliverable Volume/Length** | **Deliverable Review and Acceptance Process (State Business Days)** | | |
| --- | --- | --- | --- |
| **DCS Initial Review** | **DCS Review / Apply Feedback** | **DCS Final Review** |
| Pages and/or Artifact Size 1-100 Pages/Small | 5 | 5 | 5 |
| Pages and/or Artifact Size 101-250 Pages/Medium | 10 | 5 | 5 |
| Pages and/or Artifact Size 251+ Pages/Large | 15 | 5 | 5 |

Deliverable drafts may require additional drafts prior to the review cycle to ensure content is meeting DCS needs. The Contractor should consider past project experiences when creating the schedule for larger deliverables.

If the DCS CIO or CIO’s designee does not accept a deliverable, the Contractor must revise the deliverable and re-submit it for approval. Payment to the Contractor for completion of a deliverable shall not occur until the deliverable is approved by the CIO or a designated approver (See Section 13.4 for more details). In addition, the Contractor is subject to reduced payments for deliverables that are not submitted by the respective deliverable’s deadline. Please see Section 13 for more information on timeliness performance.

## Change Management

Integrated Change Management is the process of reviewing all change requests and approving and managing changes to evaluate the impact to time, cost, and quality. DCS will have a Change Control Board consisting of the CIO or CIO’s designee and members of the user experience team. The following change management process shall be followed:

* A request for a system change shall be initiated by a party of the CCWIS Project Team.
* DCS shall issue a request for a Change Impact Analysis to the Contractor for a proposed change.
* The Contractor shall analyze, size, and provide proposal / cost estimates via the Change Impact Analysis within fifteen (15) days (or such longer period as the Contractor and DCS may mutually agree) following receipt of the request. The Change Impact Analysis will include description and justification of the change, cost impact, schedule impact, staffing impact, expected deliverables, and system security impact.
* The Contractor shall present the Change Impact Analysis to the CCWIS Project Team and the Change Control Board.
* Once the Change Impact Analysis has been approved for implementation by DCS (including any modifications made during the review process), the Change Impact Analysis shall be deemed an approved Change Request.
* DCS shall clarify priority and impact on existing enhancements and other change requests.
* The Contractor shall implement the change and update impacted project documents.
* The CCWIS Project Team shall monitor outcomes.

## Meeting and Reports Requirements

**Kick Off Meeting.** Within ten (10) business days after Contract execution, the Contractor shall schedule an in-person kickoff meeting with key DCS Child Welfare stakeholders, including all members of the CCWIS Project Team. During this meeting, the Contractor shall discuss their overall approach to the project and the CCWIS Project Team will determine timeframes for deliverables that do not yet have a specified deadline, as well as any other outstanding details.

**Project Status Reports and Weekly Status Meetings.** The Contractor shall provide to the CCWIS PMO a weekly Project Status Report which, at a minimum, includes updates on tasks (including actual work performed and estimates to complete future work), critical certification challenges, risks, and issues at a glance for executives. The reports must have adequate details throughout the report for the CCWIS Project Team to understand any actions needed. During the life of the project, the Contractor will meet weekly with the CCWIS Project Team to review the Project Status Report.

**Monthly Executive Report.** The Contractor will provide a Monthly Executive Report to DCS’s CIO or CIO’s designee, CCWIS PMO, and Executive Sponsor. This report should be uploaded to the ALM Tool and sent to the CIO or CIO’s designee. This will include agreed upon key project metrics such as:

* Project performance standards
* System performance standards
* Work performance standards
* Cost variances
* Schedule variances
* Schedule performance index
* Planned value
* Cost performance index
* Earned value
* Resource allocation

**Meeting Attendance.** The Contractor shall be available for on-site meetings throughout the duration of the contract. Such meetings may revolve around the overall progress of the project or a specific deliverable. The Contractor staff must further be available for in-person meetings or remote calls within two (2) business days of request.

## Communications

Throughout the CCWIS Project, communication will be key to ensuring the CCWIS Project Teams and all affected stakeholders understand the goals of the project, the project status, and expectations for engagement in the project. The Contractor will be required to participate in and provide input for overall project communications. The DDI PMP shall contain a Communications Plan that address how the Contractor’s project team will communicate internally, with the CCWIS Project Team members, and beyond to external audiences throughout the life of the project. The Communications Plan shall include, but will not be limited to the following:

* Daily/weekly/monthly communications expectations
* Project Meetings
* Project Escalation
* Project Reporting
* Stakeholder Communications Plan

To ensure all parties are able to fully collaborate, the Contractor must respond to all communication and provide information and assistance within one (1) business day of the State’s request, unless another timeline is agreed upon in writing.

The Contractor will be responsible for ensuring timely updates to the CCWIS PMO for communications to DCS Executives about the project, and for assisting DCS with communications to ACF and other stakeholders.

### Stakeholder Communications

The successful implementation of CCWIS is dependent on how well all affected stakeholders are equipped to adopt and adapt to the new environment. Consistent, accurate, timely, and tailored communications is a key component of a successful transition. DCS and the CCWIS PMO will develop a CCWIS Stakeholders Communications Matrix that describes roles for overseeing the development and executing all CCWIS stakeholder communications. Any external DCS communications to DCS vendors need to be approved by the DCS CIO or the CIO’s designee.

The Contractor will create the Stakeholder Communications Plan with the CCWIS Stakeholders Communications Team’s input. The objective of the plan is to keep all identified external stakeholders informed of project goals, progress, developments, and general project information. As the project proceeds, the Stakeholder Communications Plan will be updated as needed to meet the changing needs of the project. Execution of the Stakeholder Communications Plan will be coordinated and tracked throughout the life of the project by the Contractor and the CCWIS PMO.

# Staffing

## Staffing

The Contractor shall designate qualified staff members with experience in health and human services and system design, development, and implementation to this Contract. It is preferred that the Contractor’s staff have background and experience working with government agencies, specifically in the field of child welfare. Additionally, it is preferred that the Contractor’s staff has experience working with Salesforce, MuleSoft, and Amazon Web Services (where applicable).

The Contractor is responsible for appropriately managing staff and staff resource levels throughout the duration of the Contract. Based on best practices and experience with projects in similar size and scope, the Contractor is to propose an organizational structure and staff that are able to achieve all of the requirements set forth in this Contract.

The CCWIS Project team will be housed in Indianapolis, Indiana. Contractor staff in Vital Positions (see Section 11.2 below) who are assigned to the project for at least 24 hours in any given week will need to be co-located, on-site full time, and fully dedicated to the project, at the DCS-provided location. The State further reserves the right to request that other staff be made available on-site within one week’s notice unless otherwise approved by the State. There will be space provided at this location for a contractually agreed upon number of additional Contractor staff.

The state reserves the right to remove any Contractor or subcontractor staff member who is deemed unfit. If the State deems a staff member unfit, the Contractor shall replace the staff member with another staff member who meets the State’s approval within ten (10) business days.

The Contractor shall provide a Project Manager who will be responsible for all aspects of the Contract and ensure it progresses in a timely and efficient manner. The Project Manager will also be responsible for all deliverables. The Project Manager shall be the main point of contact for the State and ensure that the Contractor upholds all terms set forth in the Contract.

## Vital Positions

The Contractor must provide the Vital Positions described in the following table for this Contract.

| **Role** | **Responsibility** | **Experience** |
| --- | --- | --- |
| **Project Executive/ Director** | Directs project oversight, liaises with DCS and various other State stakeholders, and addresses escalated issues. | * 5+ years of experience in IT project management of large-scale HHS system implementation projects |
| **Project Manager** | Provides daily oversight of the project. Works with the CCWIS Project Team to ensure successful project outcomes. Ensures Contractor project team staff performance using an Agile software development methodology. Develops and manages the DDI PMP. | * 10+ years of experience in IT project management of large-scale system implementation projects. * Experience with agile development methodologies. * PMP required. * Child welfare experience preferred. |
| **Functional Lead** | Participates in Requirements Confirmation and ensures the Contractor’s staff comprehends functional requirements. Ensures traceability of all functional requirements for the CCWIS system throughout the life of the project. | * 5+ years of experience managing functional teams in HHS   **OR**   * 3+ years of experience managing functional teams for large-scale system implementation projects. |
| **Technical Lead** | Participates in Requirements Confirmation and ensures the Contractor’s staff comprehends technical requirements. Develops and tracks the Design and Development Plan and Configuration Management Plan, including development, unit test, and integration of the software build. Utilizes a user experience approach to design. Ensures timely delivery of development and unit testing activities. | * 5+ years of increasing/progressive levels of experience managing technical teams for large-scale system implementation projects using agile development methodologies. * Experience with HHS system implementation projects or industry-leading certification preferred. * Versed in continuous integration (CI) and continuous delivery (CD) methods. |
| **Infrastructure Lead** | Develops and tracks Business Continuity and Disaster Recovery Plan, and Maintenance & Operations Plan. Administers and documents the lifecycle of equipment including deployment, maintenance, and scheduled upgrades. Enforces the established hardware and software standards. | * 5+ years of experience managing infrastructure teams for large-scale system implementation projects. |
| **Implementation Lead** | Develops and tracks the Phase Implementation Plans and oversees the implementation timelines, OCM Plan, Training Plan, Knowledge Transfer Plan, and all implementation activities and deliverables for the CCWIS system. Creates a help desk team to help address CCWIS user questions or issues. | * 5+ years of experience managing functional teams in HHS * 3+ years of experience managing functional teams for large-scale system implementation projects. |
| **Training/On-site Support Lead** | Develops the initial train-the-trainer and super user training. Leads training of all end users. Acts as a consultant to the State for all ongoing training and on-site support efforts. | * 3+ years of experience managing training and on-site support efforts for HHS systems, as well as large scale system implementation projects. |
| **Organizational Change Management Lead** | Develops the OCM Plan. Works with DCS to assist in the execution of the OCM Plan and the transformation of the organization via the CCWIS system. | * 3+ years of experience leading OCM efforts in large scale system implementation projects. |
| **Data and Conversion Lead** | Develops and tracks the Data Conversion and Migration Plan and the Conversion and the Conversion and Migration Results reports. Manages the data dictionary, data models, and data flow models. Leads and performs all data conversion, migration, synchronization, and cleanup related duties associated with the CCWIS system. Works with the State to develop the archival strategy. | * 5+ years of experience in design, development, and administration of complex databases as well as lead roles in multiple complex database conversions. * Extensive experience with advanced SQL scripting, and proficiency with LINUX command line and shell scripting required. |
| **Testing Lead** | Develops and tracks the Master Test Plan including support for UAT. Manages ongoing testing activities. Collaborates with leads to implement an effective testing process including creating test infrastructure that supports continuous integration and automated testing. | * 3+ years of experience in HHS * 3+ years of experience in system testing and defect management for large-scale system implementation projects, preferably using an agile approach. * Versed in continuous integration (CI) and continuous delivery (CD) methods. |
| **Integration/ Interoperability Lead** | Ensures all integration points within the CCWIS system are managed and perform successfully. Works with the State and the Contractor’s staff to investigate any inconsistences of integration or inoperability as it pertains to the overall platform, including the legacy system. Establishes and satisfies information assurance and security requirements based upon the analysis of user, policy, regulatory, and resource demands. Understands interoperability standards, defines security requirements, identifies technical problems, and provides engineering and technical support in solving these problems. Provides support at the highest levels in the development and implementation of doctrine and policies. Ensures that all information system components are functional and secure. | * 5+ years of increasing/progressive levels of responsibility leading integration and interoperability development in large-scale system implementation projects. * Experience with HHS system implementation projects and/or industry leading certification preferred. |
| **Chief Architect** | Develops and tracks the Architectural Vision and Solution Architecture Design. Establishes Enterprise Architecture (EA) standards and processes, and ensures the delivery of the target architecture. | * 5+ years of increasing/progressive levels of responsibility architecting large scale system implementation projects. * Experience with HHS system implementation projects and/or industry leading certification preferred. |
| **Security Lead** | Ensures the Contractor’s staff comprehends security requirements. Develops and tracks the System Security Plan. Contributes to the Business Continuity and Disaster Recovery Plan, the Design and Development Plan, the Data Conversion and Migration Plan, and the Master Test Plan. The Security Lead must ensure the following:  Compliance with federal requirements, policies, and procedures regarding privacy  Protection of confidential data and information  Security testing during development and resolution of any findings  Security is architected directly into the application and features | * 5+ years of experience in integrating security standards and features within complex systems containing confidential information. * Experience with System Assessment and Authorization (SA&A) or CISSP, CISM, or equivalent certification preferred. |

The Contractor must provide the State with written notification of anticipated vacancies of Vital Positions within two (2) business days of receiving the individual’s resignation notice, the Contractor’s notice to terminate an individual, or the position otherwise becoming vacant. **Vacated Vital Positions must be refilled within 30 days of notice (of the vacancy) with a person who has the same or higher** **qualifications and experience.**

Prior to the hiring or re-assigning of any Contractor or subcontractor staff member to a Vital Position, the Contractor must provide the State with the job description of the particular Vital Position and the employee’s background, biography, and qualifications to justify the employee’s hiring or reassignment and to allow the State an opportunity to provide its thoughts, concerns, and/or suggestions for Contractor’s consideration. Replacements for Vital Positions shall have qualifications that meet or exceed those specified in the above table.

## Additional Staffing Requirements

* The Contractor is responsible for keeping the staff resources at appropriate levels throughout the duration of the Contract. A resource calendar will need to be created as a part of the DDI PMP and updated throughout the life of the project.
* In addition to the Vital Positions listed above, the Contractor must also provide additional staff members to assist the team in providing quality service to the State. The Contractor staff can work on-site, depending on DCS’ space availability. These staff positions shall be proposed by the Contractor and approved by the State. The resources assigned to these roles must have the skills and experience required to build and implement a system of this scope and meet the needs outlined in the Contract.
* Co-locating and embedding DCS staff with Contractor staff is critical to the knowledge transfer process. However, DCS recognizes that there may be resources or components of the CCWIS project that are conducive to off-site work. DCS also recognizes that some highly qualified Contractor staff, who are important to the success of the project, may not be able to be on-site, or may need travel schedule adjustments. If approved by the State, specific meetings may be conducted via telephone or video call.
* DCS will provide office furnishings and limited supplies, computer connections, copy machines, and network access and direct internet access as may be required for the Contractor to perform its work. All other items necessary for the use of on-site employees will be the responsibility of the Contractor.
* The Contractor’s staff will be required to adhere to professionalism expectations in all interactions with the State. The Contractor’s staff must comply with all written DCS policies, including those related to confidentiality and security. The Contractor will be required to complete all necessary background checks according to federal policies and guidelines (e.g., IRS Publication 1075) and the State of Indiana’s policies and guidelines. On-site Contractor staff may use DCS facilities, furnishings, and supplies only for work to be performed for the CCWIS Project.
* The Contractor must identify, report, and resolve performance issues for its entire staff, including but not limited to the Contractor’s staff members and subcontractors staff members.

# End of Contract Turnover

## Disengagement and Turnover to the State

The State seeks to ensure that system end users experience no adverse impact from the transfer of scope to the DCS staff. In addition to the requirements in Attachment B, Contract Clause 14 (Continuity of Services), the following end of Contract turnover requirements apply:

* The Contractor must conduct knowledge transfer and training of DCS staff according to the approved Knowledge Transfer and Training Plan.
* At the start of the Phase 2 M&O Stabilization Period, beginning six (6) months prior to the end of the base Contract period, the Contractor must develop and implement a State-approved Turnover Plan covering the turnover of the CCWIS system to DCS. The Turnover Plan must be a comprehensive document detailing the proposed schedule and activities associated with the turnover tasks. The plan shall describe the Contractor's approach and schedule for transfer of all SDLC deliverables and documentation created, maintained, and updated throughout the Contract term on the State SharePoint site and/or ALM. The information must be supplied on media specified by the State and according to the schedule approved by the State. Turnover task requirements and approximate timeframes are provided in the sections below. The dates and data requirements in the following sections are illustrative only and do not limit or restrict the State's ability to require additional information from the Contractor or modify the turnover schedule as necessary.
* One (1) month prior to the end of the base Contract period, or any extension thereof, the Contractor must transfer the following information to DCS on a medium acceptable to the State:
  + A copy of non-proprietary solution components or database(s) used. Please see the Attachment B Contract Section 37 (Ownership of Documents and Materials) for requirements regarding ownership of work products;
  + Internal logs and balancing procedures used during the contract to ensure compliance with operational requirements; and
  + Other documentation including, but not limited to, user, provider, and operations manuals, and documentation of any interfaces developed to support business activities.
  + Updates to these materials must be transferred to the State at the end of contract turnover.
* The Contractor shall not reduce operational staffing levels during the turnover period without prior approval by DCS. The Contractor shall not in any way restrict or prevent Contractor staff from accepting employment with DCS or any successor contractor. DCS will work with the Contractor on the timing of any transition of Contractor staff. The Contractor shall provide to DCS reference files, scripts, and all other documentation and records as required by DCS.
* If the optional Contract terms are exercised during turnover activities, these turnover activities shall shift to the next year. All turnover costs must be included in M&O fees as included in the Cost Proposal.

## Project Close-out Report

Before the scheduled end of the scope of work, shall submit a completed report indicating that all activities have been approved/accepted. The purpose of this report is to ensure all project activities and the migration to M&O are complete, all known functionalities have been implemented, and the appropriate legacy application(s) have been retired. This checklist will include, at a minimum:

* Proof that all deliverables are up-to-date and approved, including certification and/or approval from ACF (if applicable)
* Control of all system and training documentation has been transferred to the appropriate teams
* Tactical activities are complete (e.g., removing individuals’ systems access, if applicable)
* Ensuring hand-off of source code and DCS ownership of all source code and configurations
* All system issues identified during implementation have been remediated or addressed to DCS satisfaction
* All regression test scripts have been completed and are ready to support future regression testing

# Performance Measures

## Performance Standards

DCS must ensure the stakeholders receive a quality solution based on project goals and requirements. The Contractor will be paid utilizing federal and State taxpayer dollars and as stewards of the funds, DCS will monitor and measure the Contractor’s performance throughout the project. Each performance item has a standard to achieve. These performance standards will assist in managing project expectations and milestone delivery. The Contract’s performance standards are categorized as:

1) Project performance standards

2) System performance standards

3) Work performance standards

The Contractor shall provide Project, System, and Work performance standard metrics in the Monthly Executive Report. Some performance standard metrics may also be reported in the Weekly Status Report.

## Project and System Performance Standards

The Project and System performance standards measured for the project and system are critical to DCS and its stakeholders to ensure the business objectives and scope are met by the Contractor. These measurements are focused on key deliverables, cost, quality, and schedule and will help evaluate if expected outcomes are achieved.

Project and System performance standards have associated liquidated damages for failure to meet the standards. Imposition of liquidated damages is discretionary. DCS will discuss and give the Contractor the opportunity to respond to performance standard issues, and may waive or reduce the liquidated damage based on circumstances of a particular performance standard failure. Liquidated damages will be capped at 10% of the total contract price.

### Project Performance Standards

The following table details this Contract’s project performance standards, the associated measures, and the resulting liquidated damages for not meeting the standards.

| **Performance Item** | **Performance Standard** | **Performance Measure** | **Liquidated Damage** |
| --- | --- | --- | --- |
| **Milestone Timeliness**  (DCS will select a certain set of project milestones to measure) | Acceptance date of the milestone is before or on due date in the approved Project Schedule | Acceptance date of the milestone minus due date in the approved Project Schedule | $1,000 per business day for the first twenty (20) days. After 20 business days, the amount will increase to $2,500 per business day |
| **UAT Defect Rate**  (DCS will select a certain set of project milestones to measure) | Overall milestone UAT Defect Rate is < 5% for Blocker, Critical, and High Defects (excludes Normal and Minor defects) | The sum of Blocker, Critical, and High defects per milestone divided by UAT scenarios tested per milestone | $10,000 |
| **Cost of Changes**  (DCS will select a certain set of project milestones to measure) | Total costs of changes approved through the change control process for the milestone is <= 20% of the contracted cost of that milestone, unless otherwise approved by the State | Total cost of changes per milestone as a percentage of contracted milestone cost  *(Change controls approved as a result of external factors (e.g., Indiana statutory changes) or completely new functionality requested by the State are not assessed against the Contractor)* | Half (50%) of total change control costs for the milestone  For example, if Milestone X has a contracted cost of $1 million, then any approved changes over $200k would trigger the liquidated damage |
| **Defect Resolution Timeliness for Code in Production Environment** - starts with pilot(s) | Blocker - 24 hours to fix and migrate to UAT environment (less than 5% error rate in UAT) | Timing in the ALM tool for each defect from discovery to migration | $1000 per business day until migrated to UAT environment |
| Critical - 3 business days to fix and migrate to UAT environment (less than 5% error rate in UAT) | $1000 per business day until migrated to UAT environment |
| High – 6 business days to fix and migrate to UAT environment (less than 5% error rate in UAT) | $750 per business day until migrated to UAT environment |
| Normal – 15 business days to fix and migrate to UAT environment | $500 per day until migrated to UAT environment |
| Minor – 25 business days to fix and migrate to UAT environment | $100 per day until migrated to UAT environment |
| **Vital Positions** | Vacated Vital Position filled within 30 days of notice with individuals of same or higher qualifications and experience | Date qualified substitute found has started minus day of notice | $1000 per business day after 30-day notice is given and no qualified substitute found has started. |
| **Data Conversion** | 100% of the identified MaGIK data has been converted with zero Blocker, Critical, and High defects by due date in the approved Project Schedule | Discovery of data not already agreed upon by DCS for exclusion that is missed or incorrectly converted by the Contractor after the due date in the approved Project Schedule | $1000 per business day until data is corrected |

### System Performance Standards

The following table details the significant system performance standards, the associated measures, and the resulting liquidated damages for not meeting the standards.

| **Performance Item** | **Performance Standard** | **Performance Measure** | **Liquidated Damage** |
| --- | --- | --- | --- |
| **CCWIS Production Environment Availability** | 99% availability 24/7, except during scheduled maintenance | Solution Monitoring starting 30 calendar days after each functional implementation(s). Failure is defined as the sole fault of the Contractor or its sub-contractors | $500 per working hour, or any part of a working hour, if the CCWIS system is not available. Total liquidated damages for CCWIS System Availability will not exceed, per outage incident:  $20,000 in week 1  $50,000 in week 2  $75,000 per week thereafter |
| **CCWIS On-line Response Times in Production Environment - Starts post pilot(s)** | 90% of response times are less than 2 seconds. 98% less than 10 seconds.  Excludes complex reports (e.g., ad hoc) | Solution Monitoring results for response times | $5,000 each month average is not met |
| **Architecture Design Impacts**:   * Throughput (Bandwidth) * Capacity * Scalability * Latency | Based on Contractor’s Solution Architect Design and related deliverables | Solution Monitoring | Ranging from $100 to $1000 per business day (depending on defect level, see Section 13.2.1 ~~12.1.1~~ for appropriate liquidated damages for each defect level) until migrated to UAT environment |
| **Security Incidents Reporting Timeliness** | Any security incident must be communicated to appropriate DCS staff within one hour of discovery | Time elapsed from security incident discovery to notification to appropriate DCS staff | $2500 each business day not corrected |

## Work Performance Standards

Work performance standards will be measurements to assess project health. These items that will be agreed upon between DCS and the Contractor and will not be subject to liquidated damages. Solidifying these standards will be a joint effort between DCS and the Contractor during the planning stage. The list started below are the anticipated measures DCS believes are necessary to obtain how well the project is performing.

### Work Performance Standards

The following table details each significant work performance standard and measure or source. These work performance items will be solidified during the project planning stage and must be reported on a regular basis.

| Performance Item | Performance Standard | Performance Measure / Source |
| --- | --- | --- |
| Conversion Time | Once the data conversion date(s) are established and approved by the State, the Contractor must complete data conversion as scheduled with a 99.5% accuracy rate | The Contractor must provide a report or other verifiable proof of meeting this requirement no later than one week after conversion |
| Business Continuity and Disaster Recovery Time | System recoverable within 6 hours | Solution Monitoring Reports |
| Code Defects | 99% of inspected code meets specified standards | Code Reviews |
| Help Desk | * Availability - Phones are answered from 7:00 a.m. – 6:00 p.m. (Eastern Time) * Answer rate * Hold time * Abandonment rate * Customer service ratings * Resolution timeframe | ACD Phone Reports, Surveys |
| Training/Rollout Feedback | 95% positive feedback on training/rollout forms | Evaluation Forms |
| Deliverable Review Cycle | DCS approves 100% of deliverables within one review cycle | Number of reviews per deliverable |

## Corrective Action and Payment Withholds

It is the State’s primary goal to ensure that the Contractor is accountable for delivering services as defined and agreed to in the Contract. This includes, but is not limited to, performing all items described in the Scope of Work, completing all deliverables in a timely manner described in the Scope of Work, and generally performing to the satisfaction of the State. Failure to perform in a satisfactory manner may result in corrective actions and withholds described below.

It is the intent of the State to remedy any non-performance through specific remedies and a payment withholding protocol. If the Contractor fails to meet requirements set forth in the Contract, the State will provide the Contractor with a written notice of non-compliance and may require any of the corrective actions or remedies discussed below. The State will provide written notice of non-compliance to the Contractor within thirty (30) calendar days of DCS’ discovery of such non-compliance.

### Corrective Actions

If the State determines that the Contractor is not performing to the satisfaction of the State, has not completed any deliverable in a satisfactory or timely manner, or upon written request by the State for any reason, the Contractor shall submit, within ten (10) business days of the occurrence or State request, a Corrective Action Plan (CAP). The nature of the corrective action(s) will depend upon the nature, severity, and duration of the deficiency and repeated nature. Severity shall be determined by the State, in its sole discretion.

At a minimum, the CAP shall address the causes of the deficiency, the impacts and the measures being taken and/or recommended to remedy the deficiency, and whether the solution is permanent or temporary. It must also include a schedule showing when the deficiency will be remedied, and when the permanent solution will be implemented, if appropriate.

### Payment Withholds

Beginning the month in which a CAP is required per the Corrective Actions paragraph above, the State may withhold 10% of the following invoice and all subsequent billing until the CAP is implemented. When the CAP is completed and the proposed remedy is implemented, all monies withheld shall be returned to the Contractor within 30 days.

Should the CAP not be submitted as required or should the remedy not be implemented within the timeframe specified by the CAP, the monies will continue to be withheld until the ability to perform in a satisfactory manner is demonstrated to the sole discretion of the State. In addition, the State reserves the right to pursue appropriate legal recourse for damages it sustains because of this failure to perform.

The Contractor and the State shall schedule monthly meetings to discuss the Contractor’s performance in accordance with the CAP. The Contractor is required to show satisfactory progress towards milestones and otherwise provide information that can be used to show that performance is satisfactory. Scheduling of review meetings shall be agreed upon mutually between Contractor and the State.

# 14 Exhibits from Bidders Library

The following documents are available for reference in Attachment K: Bidder’s Library.

|  |  |
| --- | --- |
| **Exhibit** | **Title** |
| Exhibit 1 | CCWIS Functions Phase Schedule |
| Exhibit 2 | The 2018 Child and Family Services Review (CFSR) Program Improvement Plan (PIP) |
| Exhibit 3 | The Child Welfare Policy and Practice Group (CWG) Review |
| Exhibit 4 | CCWIS Final Rule |
| Exhibit 5 | Indiana Implementation of the Family First Prevention Services Act (FFPSA) 2019-2021 |
| Exhibit 6 | Further System Information |
| Exhibit 7.1 | Technical Bulletin: Identifying and Reporting CCWIS Automated Functions |
| Exhibit 7.2 | Technical Bulletin: Data Sharing between CCWIS and Child Welfare Contributing Agencies |
| Exhibit 7.3 | Technical Bulletin: Modular Design and Review Guidance |
| Exhibit 7.4 | Technical Bulletin: Advance Planning Document Guidance for Agile Projects |
| Exhibit 7.5 | Technical Bulletin: Cost Allocation |
| Exhibit 7.6 | Technical Bulletin: Data Quality Plan |
| Exhibit 8 | CCWIS Bi-directional Data Exchange Matrix |
| Exhibit 9 | MaGIK Reports |
| Exhibit 10 | DCS Forms |
| Exhibit 11 | Draft CCWIS Data Quality Plan |
| Exhibit 12 | DCS Service Regional Map |
| Exhibit 13 | INVest Governance Manual |
| Exhibit 14 | CCWIS Acronyms Listing |

1. NCMEC is a private corporation that assists with the tracking and recovery of missing children. When a child involved in an open DCS case or assessment runs away or is missing, DCS reports the child’s missing status and any relevant details to NCMEC. [↑](#footnote-ref-1)
2. ICPC is an agreement between all states that governs the movement of children in need of placement across state lines. Requests to place a child out-of-state are submitted to the Central Office ICPC. [↑](#footnote-ref-2)
3. AFCARS collects case-level information on children in foster care and children adopted with Title IV-E agency involvement. Title IV-E agencies must submit AFCARS data semi-annually to the Children's Bureau. [↑](#footnote-ref-3)
4. Title IV-E allows agencies to claim federal reimbursements for providing foster care, adoption assistance, and kinship guardianship assistance to children who meet certain eligibility criteria. [↑](#footnote-ref-4)
5. SNAP is a specialized Indiana DCS adoption program for children who are in out-of-home care, with a case plan goal of adoption, and meet criteria per the Indiana DCS Child Welfare Manual. [↑](#footnote-ref-5)
6. The YCP is a program dedicated to working with youth who would like to have permanent connections with caring adults. The program best serves foster youth 14 years and older, who have had 2 or more family case managers, and express that they no longer desire to be adopted.  [↑](#footnote-ref-6)
7. APPLA is an established permanency option for children under the Adoption and Safe Families Act. In these situations, DCS maintains care and custody responsibilities for the youth, but DCS places the youth in a setting in which the child is expected to remain until adulthood. [↑](#footnote-ref-7)
8. An additional 10-15 reports will be supported by MaGIK by the end of 2019. [↑](#footnote-ref-8)