



HUMAN SERVICES
DEPARTMENT

Needs Assessment Report

for the

**Child Support Enforcement
System Replacement Project**

Prepared for the

**State of New Mexico
Human Services Department
Child Support Services Division**

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1.0 Executive Summary

The New Mexico Child Support Services Division (CSSD) and Information Technology Division (ITD) within the Human Services Department (HSD) have completed Phase 1 of a two-phase child support system modernization effort originally begun in 2013. The modernization effort needs to address systemic problems to continue to effectively serve New Mexico families and integrate the new system into the Health and Human Services (HHS) 2020 shared services ecosystem as much as possible. This document summarizes the progress the program has made in completing the first phase of the modernization effort, details the functional and technical needs that remain after the first phase of improvements, proposes a conceptual system design to address those needs, and identifies the gaps between the existing system and program needs.

CSSD's current statewide system, the Child Support Enforcement System (CSES), originally implemented in 1998 and certified in May 2001, is approximately 25 years old. This program was built on a mainframe using COBOL-based code, a green-screen user-interface, and batch-driven processing to provide reports and move cases along to the next appropriate action. CSES met CSSD's needs initially, but over time technological developments outside of the program (cloud-based computing, Java code, etc.) required patches and updates to remain current. Similarly, younger workers are hired with little experience in green-screen, block-format user interfaces instead of a Graphical User Interface (GUI). These new workers increasingly find the system hard to use.

In 2013, CSSD began the process to modernize the system. To obtain federal funding, CSSD completed a feasibility study which proposed a single system modernization project to address all the program's needs. The Federal Office of Child Support Services (OCSS) rejected that proposal and requested changes in CSSD's plans. In reviewing the rejection and the necessary time frames for a complete system replacement, coupled with a State Department of Information Technology (DoIT) mandate to retire the mainframe, CSSD and ITD revised the single project modernization effort into a two-phased approach: Phase 1 would involve getting off the mainframe and Phase 2 would address the other-identified functional and technical needs.

In October of 2019, CSSD and ITD obtained approval for Phase 1 of this project. To complete Phase 1, CSSD and ITD contracted with a private vendor to convert the code from COBOL to Java and move the code base from the mainframe to a cloud environment; this was accomplished in 2021. Getting off the mainframe translated into an immediate benefit in terms of dollars saved; millions had been spent to remain on the mainframe. Some of those savings were used to hire a vendor to operate and maintain the system on the new platform. While CSSD and ITD successfully achieved Phase 1 goals, the Phase 2 goals remain undone. The functional needs were not addressed at all, and the underlying architecture remains aligned with a COBOL-coded mainframe system which is not optimized for a Java-language cloud-based platform.

Now that Phase 1 is complete, CSSD and ITD are focusing their attention to Phase 2. CSSD is conducting a new feasibility study to help obtain state and federal funding approval to address the outstanding issues already identified. An essential early step in the feasibility study process is to identify the current

needs the program is facing through a needs assessment process and how a new system will address those needs. CSSD and ITD staff met in September and October of 2023 to identify both the functional and technical needs to continue to serve New Mexico parents, guardians, children, and employers who rely on the child support program.

CSSD staff focused on the major functional needs, including the need for an easier-to-understand user interface, the need to interface with other systems effectively, and the need to eliminate off-system management reports. CSSD needs a new, easy-to-understand user interface to better assist with staffing issues the program is currently facing. A high turn-over rate coupled with an aging workforce soon to meet retirement age means that CSSD is staffing with new employees. An antiquated user interface can be a barrier in retaining staff; the workforce wants to work with newer technology they are used to in their everyday lives. Similarly, a modernized user interface will increase workers' productivity. Currently, progressing a case to the next appropriate action requires the user to navigate to the appropriate screen to take that action; a modernized system will have case flows built into a single screen allowing for efficient worker activities.

CSSD also needs to interface with other systems. The child support program not only relies on information from other divisions within HSD (Medicaid, Temporary Assistance for Needy Families (TANF), etc.), but also outside of HSD (child support agencies in another state or country, employees, federal government, courts, etc.). These interfaces help ensure programmatic efficiency for the state agencies serving New Mexicans who rely on various state assistance (including medical, nutrition, housing, and other assistance). CSES interfaces have not been able to keep up with the changes required by some of these entities, requiring manual workarounds to accurately complete key child support processes. A specific example of this is the YES.NM.GOV unified portal, a part of the HHS 2020 initiative. CSES does currently provide some information through the unified portal, but the system interfaces do not provide all the data a customer might need.

Another functional need is to have the system generate real-time management reports prompting workers to review for the next appropriate action on a case. At every month end, CSSD staff take several days to download a month end, point in time-current case information into a separate spreadsheet called the Case Prioritization Tool (CPT). While the CPT is a relatively new tool, management staff use it to assess case progress and assign work to office staff. Because this is a once-a-month download and the fact that it takes several days to create the reports within CPT, this process provides outdated information to field staff on delivery. Further, that information becomes steadily more outdated as the month progresses. A modernized system would have procedures/protocols in place to automatically advance a case process through the next appropriate action when that can be systemically determined, as well as having real-time dashboards for those activities that require worker determination. These are just some of the major functional needs that are not currently met by CSES.

On the technical side, some of the major problems identified include the COBOL-based architecture, the reliance on batch-mode architecture, data quality issues, and overall system security. In Phase 1, the primary goal was to remove the existing code from the mainframe, which did not leave time to optimize the code base for the Java language. This may lead to some training issues for new information

technology staff hired to work on the existing system; while written in Java, staff unfamiliar with COBOL architecture are unlikely to intuitively understand how various aspects of the program work. This will increase the learning curve for ITD staff as well as any contractors working on the system. Another barrier is the system's reliance on batch-mode processing. This makes it nearly impossible to implement workflows, rules-based logic, and data-driven decision-making.

Aside from these processing barriers, there are also data quality issues with the underlying system as well. These data quality issues are often a direct result of missing or partial interfaces with other programs. Further, HSD has begun the HHS 2020 Project, which will allow for effective interfaces between all HSD agencies and programs. In its current state, CSES is not properly configured to maximize the benefits that HHS 2020 offers. Finally, the existing code base does create some system security issues. Specifically, the code structure results in commingling of federal tax information (FTI), allowing un--authorized personnel to see FTI, which has been identified as an Internal Revenue Service (IRS) Office Safeguards finding that has been held in abeyance until October 1, 2024.

To most effectively address these needs that remain after the successful Phase 1 of the CSES modernization effort, CSSD and ITD need to complete Phase 2. Several major needs were identified above; these are only some of the pressing needs the program faces. These needs, if left unmet, will reduce child support disbursements to families who rely on child support collections as a vital source of income. Each need carries its own set of related risks to program benefits. One (1) or two (2) of these risks alone may not be critical, but the cumulative risk associated with all the functional and technical needs creates a very grim vision of the system and program's future.

After identifying the functional and technical needs, this document proposes a conceptual system design that will address the underlying technical issues identified, as well as the transitional needs to implement that design. The document also outlines the significant gaps between the needs identified here and the existing system's current inability to meet those needs. The document concludes by identifying CSSD's and ITD's objectives in building a modern system, and the appropriate next steps to achieve those objectives.

2.0 Introduction

The State of New Mexico Human Services Department is in the planning process for the replacement/modernization of CSES. The goal of the Child Support Enforcement System Replacement (CSESR) Project is to continue the modernization effort of the current outdated system which has supported New Mexico's Child Support Services Division since 1998 and replace it with a modernized system that will meet federal certification requirements. This new system will provide an improved working environment for the CSSD staff, will greatly improve CSSD's ability to train and retain new employees, and most importantly will increase and improve services provided to the New Mexico communities CSSD serves.

CSESR is part of the multi-year HHS 2020 plan. The plan aims to create an ecosystem for New Mexico Human Services Department Divisions to share infrastructure, services, and data.

New Mexico is conducting a feasibility study for the modernization of its child support system and has contracted with Maximus to assist. The feasibility study process includes a series of assessments and analyses that lead to identifying a preferred modernized system alternative to support the child support program. The series of assessments begins with identifying whether the program needs a modernized system and, if a modernized system is necessary, what business-related and technology-related features, capabilities, and functionalities the program needs in a modernized system. The results of the needs assessment lay the foundation for the feasibility study.

The Needs Assessment Report presents the documentation and analysis in the remaining sections of this document as follows:

- *Section 3, Overview of the Child Support Program*, provides an overview of the child support program and its partners. This section includes the current system environment and operations descriptions which provide information on the current state of the system and includes both system and interface diagrams.
- *Section 4, Methodology*, provides the details of the approaches the State took to document the functional and technical needs to arrive at the conclusions and recommendations in this report.
- *Section 5, Needs Assessment*, identifies the functional and technical needs of the program. The Functional Needs Assessment section includes cross-functional and management needs and presents functional needs by child support functional areas. The Technical Needs Assessment section provides justifications for the technology-related reasons for needing a modernized system and identifies technical needs.
- *Section 6, Conceptual System Architecture (To-Be)*, provides the architecture of the future modernized system that describes a modern platform that uses current-generation languages and widely available tools.
- *Section 7, Transitional Needs Assessment*, provides information on the needs as the program transitions from its current state to the future state of the program and system.
- *Section 8, Gap Analysis and Limitations Threatening the Child Support Program*, provides information on the child support program gap between the current system and the future system, including those limitations that threaten the child support program.
- *Section 9, Objectives*, contains information on the modernization project objectives, potential alternatives, and methods used.
- *Section 10, Conclusion and Next Steps*, outlines recommendations for next steps and provides the conclusion from the needs assessment.

3.0 Overview of the Child Support Program

The child support services program was created by the passage of Title IV-D of the Social Security Act in 1975. The child support services program is often referred to as the IV-D program or, in some contexts, simply IV-D because it is authorized by Title IV, Part D of the Social Security Act. All states and US territories are required to operate a child support services program. The program operates through the cooperative efforts of federal, state, and local government.

In 2004, the federal government established tribal child support programs under 45 CFR Part 309. Tribal agencies have the authority to establish a program funded directly through the federal government.

3.1 Current Child Support Program Organization

The New Mexico child support program is a division of the HSD, which serves nearly one (1) million New Mexicans through a variety of programs. HSD's programs are administered through four (4) divisions, Medical Assistance Division (MAD), Income Support Division (ISD), Behavioral Health Services Division (BHSD), and CSSD.

CSSD is a state administered program. While CSSD is state administered, field offices are located throughout the State to provide local access to customers. To help provide support to the state administered county offices, four (4) regions have been created. The managers of each region are Regional Operations Managers (ROM). Additionally, each field office has a county director (CD) to manage the office.

Two (2) of New Mexico's child support offices are administered by the Navajo Nation. While the Navajo Nation Child Support Program conducts business separate from CSSD, they use the same case management system, CSES, through a contract.

In addition to the regions and field offices, CSSD maintains a central office to perform centralized management and functions such as intergovernmental case registry, employer unit services, administrative enforcement actions, CSES Help Desk, and more.

While offices may be spread out, the New Mexico Child Support Program has a shared mission across the State. To put children first by encouraging both parents to assume responsibility for improving the economic and social well-being, health, and stability of their children through:

- Establishing parentage
- Establishing and modifying right-sized court ordered child and medical support
- Enforcing court ordered child support obligations
- Referrals for job development and job opportunities

3.1.1 Central Office and Performance Management Office Role

New Mexico's child support program is administered by CSSD within the HSD. The CSSD Central Office and Performance Management Office provides a variety of functions:

- Administers the Central Case Registry
- Administers the Employer Unit
- Administers the State Disbursement Unit (SDU) for processing child support collections and disbursements (through the Administrative Services Division (ASD))
- Coordinates with the shared HSD Consolidated Customer Service Center (CCSC) and routes inquiries to field offices accordingly

- Integrates the CSSD technical components with the shared HSD YES.NM.GOV unified portal and routes inquiries to field offices accordingly
- Creates reports for the field offices, including the development and maintenance of the CPT
- Supports the field offices by developing and providing both policy and procedures
- Supports the field offices by developing and providing training
- Provides periodic reports to the federal government, as required by federal regulations
- Coordinates federal and state audits of the child support program
- Operates the State Parent Locate Services (SPLS)
- Operates the State Central Registry for processing intergovernmental cases
- Coordinates with federal and state agencies as well as contractors

3.1.2 The Field Office Role

CSSD administers and manages the child support program, including 14 field offices serving 33 counties. Field offices in New Mexico are configured to assure access to all of New Mexico’s residents. Field offices vary in size and may be assigned part of a county, an entire county, or multiple counties. Each field office:

- Works directly with families and courts to provide the assistance necessary to locate parents, establish parentage, secure and enforce child financial and medical support, and provide most of the child support program’s core services
- Uses CSES for case management and financial recordkeeping; field offices are responsible for entering child support obligations and terms in CSES, maintaining adjustments to account balances, and updating financial orders
- Maintains the official case record

3.1.3 The Tribal Agency Role

Native American tribes have authority to develop and implement their own child support programs under 42 USC 655(f). 45 CFR 309 establishes regulations for operating tribal programs. Similar to state regulations, tribal agencies must develop Title IV-D child support plans and submit them to OCSS for approval. Tribal agencies and regional field offices must honor each other’s child support orders under federal requirements. They are required to follow the same federal requirements for continuing exclusive jurisdiction, controlling order, and registration for modification guidelines.

New Mexico has 23 federally recognized tribes including Taos Pueblo, Picuris Pueblo, Ohkay Owingeh Pueblo, Santa Clara Pueblo, Jicarilla Apache Nation, San Ildefonso Pueblo, Nambe Pueblo, Pojoaque Pueblo, Tesuque Pueblo, Cochiti Pueblo, Santo Domingo Pueblo, San Felipe Pueblo, Santa Ana Pueblo, Sandia Pueblo, Zia Pueblo, Jemez Pueblo, Isleta Pueblo, Acoma Pueblo, Laguna Pueblo, Zuni Pueblo, Mescalero Apache Tribe, Ft. Sill Apache Tribe, and Navajo Nation. Of these, only the Navajo Nation uses CSES for its New Mexico cases.

3.1.4 The HSD Information Technology Division (ITD) Role

HSD's ITD sets the technical direction and provides application development services for child support applications. ITD:

- Manages the operation of CSES and related applications
- Manages the operation of the network, hardware, and desktops
- Installs and maintains desktop software and configurations
- Migrates distributed code to production environments
- Provides security services to maintain user access, monitor system usage, and supports audit activities
- Collaborates with CSSD to gather requirements, design, develop, and implement system changes to child support applications
- Provides production support and on-call services for the child support application
- Provides production support for the Enterprise Web Infrastructure (eWi) and manages the interface to the YES.NM.GOV unified portal

3.2 Current System Environment and Operations

CSES, generically referred to as the current, "As-Is," legacy, or Status Quo system, has been operational since February of 2022 after the system was re-platformed/refactored in New Mexico's Refactoring Project. Before the re-platforming/refactoring, the CSES had been in operation as a mainframe application since it was transferred from Tennessee and received OCSS certification in May 2001. It will continue to be maintained and enhanced (as needed) until the CSESR system is completely rolled out. The CSES architecture diagram shown in **Error! Reference source not found.1** is based upon a multi-layered design where there is separation of online solutions from batch solutions, and deployment of different aspects of the solution and supporting software across separate servers.

The CSES contains approximately 53,000 active cases and processes over \$120,000,000 each year in collections. The CSES provides paternity, establishment, and enforcement services to over 79,000 dependents.

The New Mexico CSES also has the following ancillary systems that support it:

Table 1: List of Ancillary Systems

System Name	System Description
Hyland OnBase	A document imaging and archiving system.
eCSE	This was the customer facing web portal for individuals to obtain child support information. This system now provides information to the YES.NM.GOV unified

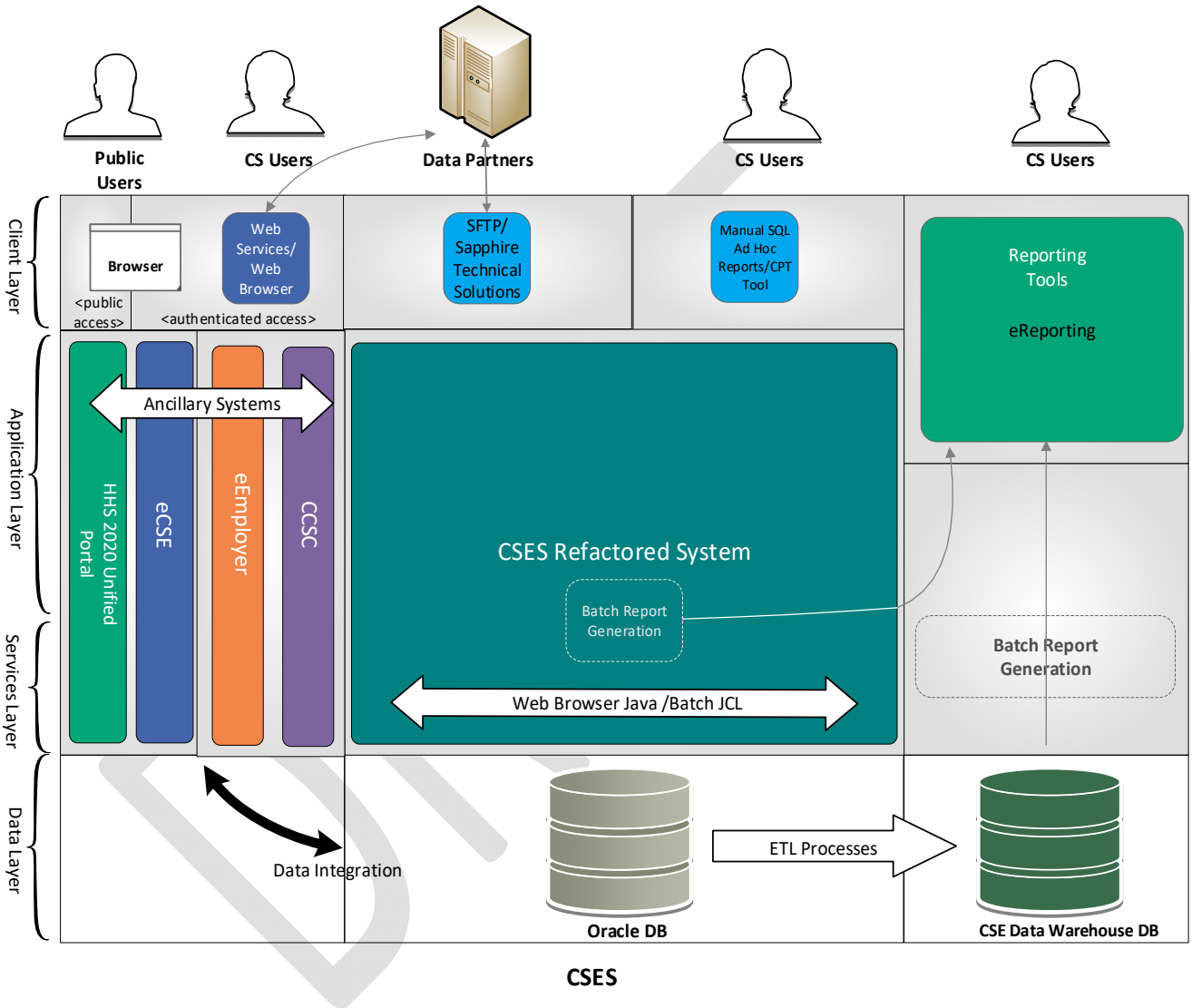
	portal system and is not directly accessed by customers or CSSD staff.
eReporting	This was the web application that provided caseload data geared towards federal reporting. This system now provides information to the YES.NM.GOV unified portal system and is not directly accessed by customers or CSSD staff.
eEmployer	This was the web portal for employers to provide contact information and maintain information on wage withholdings. This system now provides information to the YES.NM.GOV unified portal system and is not directly accessed by employers or CSSD staff.
eWI	The Enterprise Web Infrastructure middleware that houses applications such as eCSE, eReporting, and eEmployer, and provides the interface from these applications to the YES.NM.GOV unified portal system.
HSD Unified Portal, YES.NM.GOV	The customer facing web portal providing HSD services including child support case information for individuals.
Case Prioritization Tool (CPT)	A manually created spreadsheet from a series of database queries that allows staff to see a large range of case information in one (1) view; managers use this tool for case prioritization.
Atlassian JIRA	A Waterfall and Agile Project Management and Helpdesk Ticketing Log for managing enhancements, bugs, tasks, and maintenance activities.
JAMA	A requirements management software tool.

Query Interstate Cases for Kids (QUICK)	The OCSS-provided portal to allow state agencies to query other state’s child support provided data.
Consolidated Customer Service Center (CCSC)	A customer service module provided by the MMISR Project; this system provides phone, email, and chat services for child support customers as well as for other agencies of HSD.
Robotic Process Automation (RPA)	The software is used in the CCSC to generate automated chatbots to respond to customer inquiries.
State Services Portal (SSP)	An OCSS provided portal for states, tribes, employers, insurers, financial institutions, and other authorized child support users to send and receive vital information regarding child support cases.
Vital Records (Birth Query)	Software used for querying birth records for child support paternity and establishment business functions.
Secure File Transfer Protocol (SFTP) Server	A Secure File Transfer Protocol server used for sending and receiving data files securely to and from child support business partners.
TIBCO Managed File Transfer (MFT)	A managed file transfer software to securely transfer data files over the internet.
Sapphire Technical Solutions (STS)	A highly secure data exchange software between child support agencies and the Social Security Administration (SSA).
Odyssey	The New Mexico Judicial system used for e-filing with the courts.
Department of Workforce Solutions	The API for the Supporting, Training, and Employing Parents Up! (STEPUp!) referrals for job opportunities and job referrals.

3.2.1 Current System Architecture and Technology

The diagram in **Error! Reference source not found.1**, below, shows the current system architecture of the as-is legacy CSES system:

Figure 1: As-Is System Architecture



System Architecture Overview

The CSES system is deployed and hosted on the Amazon Web Services (AWS) cloud platform but also interacts and leverages tools and components on the New Mexico Data Center platform.

The figure shows the following key components:

Client Layer

The client layer includes the mechanisms, methods, and vehicles to expose data and provide connectivity to other entities and services. It is composed of a collection of technologies and services to

enable integration of systems and applications. This includes Application Programming Interfaces (API), External and Internal Web User Interfaces, and the integration of interfaces via FTP/SFTP, STS, and TIBCO MFT. End users access the CSES application through a Chrome web browser as a web-based solution.

Application Layer

As part of the refactoring process, the CA Gen front-end was migrated as Angular JS. The CSES business logic controls the application's functionality by performing detailed processing on the application server. As part of the re-platforming process, COBOL and CA Gen code were migrated to Java to support online and batch processing.

Services Layer

Part of the services provided that directly interface with the CSES system include eCSE, eEmployer, HSD YES.NM.GOV unified portal, CCSC, and QUICK among others.

Data Layer

The CSES system is supported by Oracle 19c DBMS. This leverages Oracle Data Guard in a high availability configuration and leverages Oracle Enterprise Manager to monitor and support the database.

Security Protocols

The security protocols of the current architecture design focus on the following principles:

- Role based access control: Provides appropriate access to individuals based upon the application/technical role they have been granted for the protected system (e.g., administrator or user).
- Protection of services: Secure and authorize communication to web applications using a combination of authentication and authorization methods, while providing auditability of access.
- Auditability: Provide tracking of the access and modifications to the system. This is supported through a database table which provides transaction details on user activity.

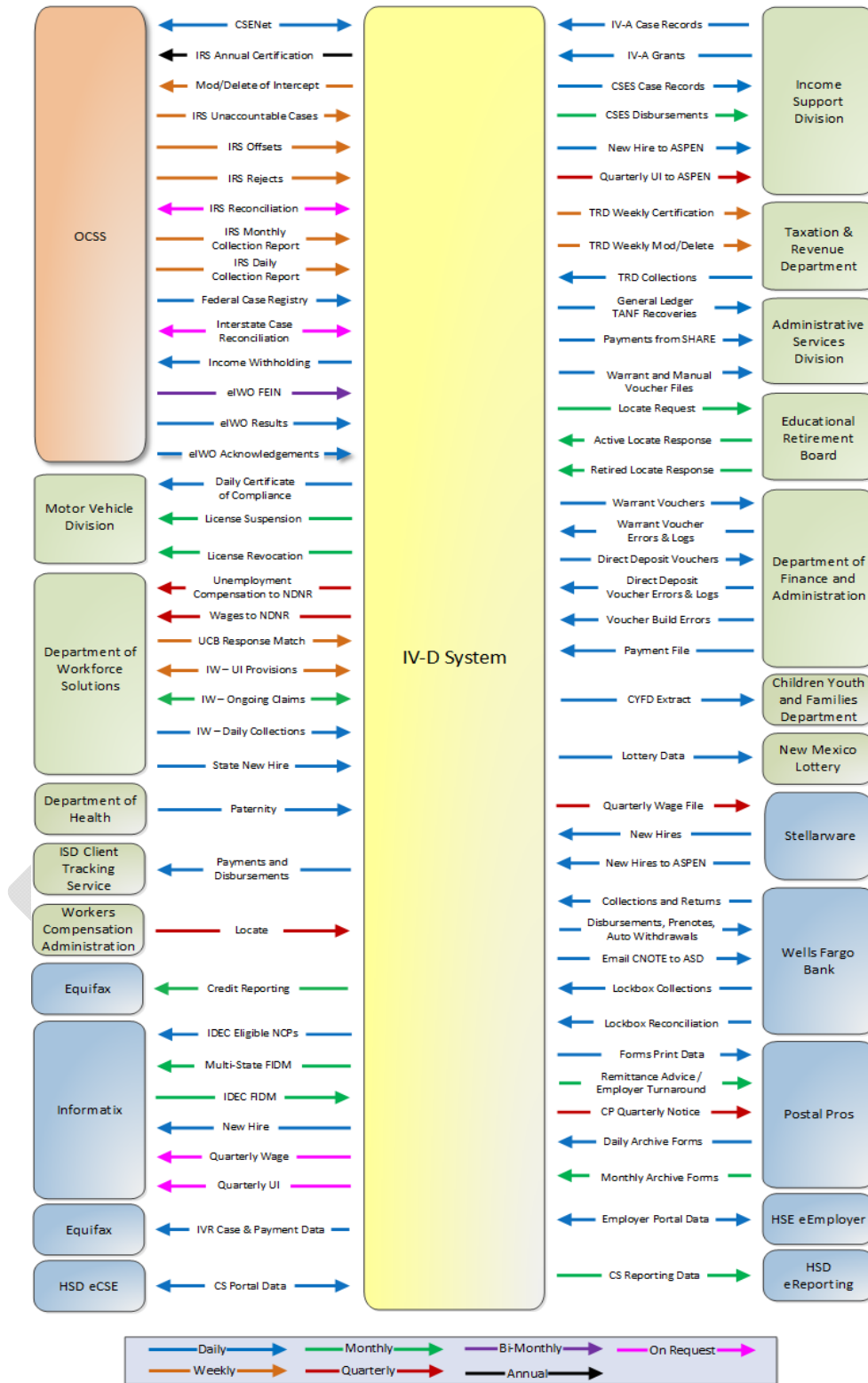
3.2.2 Current Data Flow and Interfaces

The diagram in Figure 2, illustrates the primary data exchanges between CSES and its data partners. The color-coding scheme for this diagram is:

- Orange: Federal agencies
- Olive: New Mexico state agencies
- Blue: Other data partners

The color of the arrows indicates the frequency of the data exchanges, while the arrows indicate whether the interface includes data incoming to the CSES system, outgoing data, or both. See the legend at the bottom of the diagram for details.

Figure 2: Legacy Interfaces



3.2.3 Operations and Maintenance (O&M)

Comprised of the re-platformed/refactored CSES as well as its ancillary (supporting) systems, the New Mexico child support system is maintained by both in-house personnel and contractors in ITD, and supported by personnel in the DoIT. Current O&M responsibilities are owned by the following organizational units:

- ITD maintains and updates application code (batch and online) as well as distributed-systems code for the ancillary systems that are part of CSES. Provides day-to-day production support and on-call services. Much of the CSES system support is provided by contract staff. ITD also migrates code to production for ancillary systems that use .NET and provides Commercial Off The Shelf (COTS) application configuration and maintenance support (e.g., server updates/upgrades and configuration for AWS, Structured Query Language (SQL) server)
- DoIT provides network and desktop support services to support CSES.

The CSES system is available for users Monday through Saturday from 6 AM to 7 PM and is normally unavailable on Sundays. During month-end, availability is sometimes shortened so month-end batch jobs can complete.

The CSES ancillary systems are available on a (nearly) 24-hour, seven (7) day a week basis, except for infrequent occasions when the database is taken down for maintenance activities.

4.0 Methodology

This section summarizes the methodology used to collect and analyze information for the needs assessment. The needs assessment was completed in two (2) parts, a historical documentation review and a needs assessment analysis. For the first step, Maximus performed a historical documentation review to better understand CSSD Program and the current system, CSES. This included a collection of the current documentation, including pre-planning and prior modernization work, current training materials, service requests, past wish lists, and more. Maximus then reviewed the materials and met with CSSD and ITD staff to better understand the content and collect additional historical information.

4.1 Needs Assessment Meetings

After the historical documentation review was complete, Maximus worked with CSSD and ITD staff to identify a cross section of participants to attend needs assessment meetings. These meetings were used to collect information about the current pain points, barriers, and system limitations navigated by the program. The groups also focused on modernization goals, and what they would need from a new system to meet those goals.

4.1.1 Meeting Participants

Maximus worked with the CSES Project team to identify the appropriate participants for the needs assessment meetings.

The functional meeting participants included:

- Case Creation Subject Matter Experts (SMEs) from different size offices. They brought hands on knowledge of what it takes to start a case, taking/entering applications, working incoming referrals.
- Establishment SMEs from different size offices. These SMEs have good knowledge about the variations in establishment across the State. This included Child Support Legal Assistants who are familiar with the judicial processes for establishment.
- Enforcement SMEs from different size offices. These SMEs have good knowledge about the variety of enforcement remedies and variance in which cases are enforced throughout the State. Options for these SMEs include office director, an attorney, or other worker.
- Locate SMEs from different size offices. These SMEs have good knowledge of the manual locate processes and a SME attended who is familiar with automated locate processes within the system.
- Case Management SMEs from different size offices. County directors were included in this group due to their intimate knowledge of challenges in organizing an office, especially for the caseload distribution. Seasoned case workers were included to help discuss how workers organize their daily tasks.
- Intergovernmental Case Workers. A SME from central registry and field workers who are familiar with intergovernmental cases after they are included in the office caseload were included in this group.
- Employer Unit (Central Office/Performance Management Office) SME. This SME provided insight to the role of the Employer Unit, which is located in the central office and the challenges faced by the unit.
- Customer Service SMEs from different size offices including a customer service staff manager from the Santa Fe office. SMEs who are familiar with current struggles in communicating with customers and may have already implemented innovative customer service techniques for their office, or they have some ideas for the future.
- Financial Management SMEs. SMEs who are familiar with child support financials and the current challenges.
- An SDU representative. To discuss the role of the state-run SDU.
- Reporting SMEs. SMEs who are familiar with child support reports and the current challenges.
- Navajo Nation SMEs. SMEs who are familiar with the Navajo Nation Child Support Program, their current use of CSES, and the challenges they face with the system.
- Core Group SMEs. Five (5) core SMEs participated in every meeting held and provided continuity across the different discussions.

The technical meeting participants included:

- O&M CSES staff, including the teams who currently perform O&M for CSES, including contractors and state staff.
- Members of the technical oversight team, including the Deputy Chief Information Officer and other technical team leads. These SMEs are familiar with the current system architecture and the current challenges and pain points.
- Security specialists, including both functional and technical specialists.
- Technical managers and supervisors. These SMEs bring knowledge of current staffing challenges.

4.1.2 Functional Meetings

The functional meetings were scheduled, and Maximus created agendas for the participants to review ahead of attending the meetings. The agendas asked the groups to consider:

- What are some current challenges faced by the SMEs?
- What future opportunities do they see for the program?
- What will they need from a new system in order to fully meet those future opportunities and reduce their challenges?

During the period of Sept. 11, 2023 through Sept. 26, 2023, 33 CSSD, ITD, and Navajo Nation SMEs participated in meetings. The meetings held were:

- Case Initiation and Establishment High-Level Analysis
- Enforcement and Locate High-Level Analysis Meeting
- Case Management High-Level Analysis
- Customer Service, Intergovernmental, and Employer High-Level Analysis Meeting
- Financial Management and Reporting High-Level Analysis Meeting
- Tribal IV-D Agency High-Level Analysis Meeting

The minutes from each of these meetings are available as attachments to this document. See attachments 11.1 through 11.5 and attachment 11.9.

The information collected during these meetings provided the basis to determine what the program needs in a modernized system from a business perspective. Identifying the business needs also provides a baseline for developing planning requirements for a modernized system. The analysis of the information collected is provided in the following sections of this document.

4.1.3 Technical Meetings

The technical meetings were scheduled, and Maximus created agendas for the participants to review ahead of attending the meetings. The participants were asked to prepare to discuss topics during the meetings including:

- User interface
- Online performance
- Batch process and performance
- Business rules engines and workflows
- Interfaces
- Data analytics
- Document generation and management
- Ancillary and workaround systems
- Security
- Architecture

- Technologies
- Hardware/software
- Technology roadmap
- Organization staffing and onboarding
- Current challenges and pain points

During the week of Oct. 16, 2023, through Oct. 20, 2023, eight (8) ITD SMEs participated in meetings. The meetings held were:

- Main Application Features
- System Architecture
- Technical Organization and Onboarding

The minutes from each of these meetings are available as attachments to this document. See attachments 11.6 through 11.8.

The information collected during these meetings provided the basis to determine the technical needs in a modernized system. Identifying the technical needs also provides a baseline for developing planning requirements for a modernized system. The analysis of the information collected is provided in the following sections of this document.

4.2 Business Analysis and Creating the Needs Assessment

After the conclusion of the needs assessment meetings, Maximus analyzed the data obtained to create the needs assessment and conducted a gap analysis between the current system and the desired future system. The results of this analysis are recorded in Section 5, Needs Assessment, Section 7, Transitional Needs Assessment, and Section 8, Gap Analysis and Limitations Threatening the Child Support Program.

As part of the needs assessment, Maximus also worked with ITD to construct a conceptual To-Be architecture. The approach to this effort is explained in Section 6.1, Approach to Constructing Conceptual System Design.

5.0 Needs Assessment

Having followed the methodology identified above and armed with the proper understanding of the child support program and CSES history in New Mexico, the attendees identified needs in two (2) broad categories: Functional and Technical. Functional needs focus on the business needs identified by staff who use the system daily to serve New Mexico's population. Technical needs focus on how the system is built.

5.1 Functional Needs Assessment

This section provides an overview of the functional needs gathered during the high-level analysis meetings and includes information on each functional area. The overall/cross-functional section covers the features and capabilities that span all functional areas.

5.1.1 Overall/Cross-Functional

The purpose of the Overall/Cross-functional area is to describe the needs in the present system, integrating all business process functions inside the boundaries of the State and managing those applications to outside stakeholders.

This section highlights the overall needs identified during the High-Level Analysis Meetings. Because Tribal IV-D agency needs for the system are cross-functional in nature, the minutes from the Tribal Agency High-Level Analysis Meeting are provided in Attachment 11.9, Tribal IV-D Agency High Level Analysis Meeting Minutes 20230926.

The key needs fall under the following categories:

- **Lack of Automation:** Needs relevant to system automation
- **Overnight Processing:** Needs relevant to increased processing efficiency
- **Dependence on Manual Activities and Ancillary Systems:** Needs relevant to reengineering these activities into a statewide system
- **External Provided Data:** Needs relevant to receiving data from stakeholders
- **Document Management:** Needs related to document management, including both documents generated and documents received
- **Communication:** Needs relevant to communication methods for customers and employers

5.1.1.1 Lack of Automation

To address the lack of automation, the system needs to:

- **Provide automated workflow that directs workers to the right information to take actions.** Currently, workers' duties are informed by the CPT. The CPT is developed with end of month data, so some data is a full month old when the report is developed. The CPT is a compilation of over forty separate reports which takes up to a week to complete, making the data more aged before it is sent to the offices. The office manager then must separate out the information contained in the CPT for referral to the worker. Additionally, workers set themselves reminders (ticklers) to track their work. Work comes to the worker in a barrage of ways, including email, morning mail, CPT, ticklers, an array of spreadsheets, phone calls, walk-ins, and OnBase. While the mechanisms put in place to manage the lack of automation have served a purpose, they in no way meet the needs of the New Mexico CSSD program, and do not include a report of attorney actions needed.
- **Move cases along with limited manual intervention.** Currently, the CSES system does not automatically move a case throughout the life of the case. This puts further burden on workers and attorneys to perform manual steps to track and move cases forward.
- **Allow for and support easy manual engagement when automated processes are unable to be completely executed, or for manual overrides of a system selection based on role.** Currently, manual engagements are frequently maintained and monitored in spreadsheets outside of CSES.
- **Provide customers case-specific information in real-time.** Customers expect service providers to provide personalized information in real-time, enabling the customer to provide the caseworker with relevant information to take the next appropriate action.

5.1.1.2 Overnight Processing

To address issues related to overnight processing, the system needs to:

- **Provide real-time communication and processing.** Communication and processing in CSES are completed through overnight batch processing. Phone call referrals from the call center are not delivered until the next business day, leaving the appearance to the customer of poor response. Sanctions cannot be released immediately. A customer whose question requires the call center to refer to a worker cannot get a response in the same day without escalating separately through email. A worker accepting and creating a new case from an Electronic Document Exchange (EDE) referral cannot verify the case was created correctly the same day. Similarly, customer interactions via the customer service portal also display non-current information.

5.1.1.3 Dependence on Manual Activities and Ancillary Systems

To address the dependence on Manual activities and ancillary systems, the system needs to:

- **Move from manual processing to an automated, intuitive workflow managed by the worker.** Currently work is manually directed by multiple means, many of which require the time and resources of a worker or multiple workers.
- **Integrate ancillary systems to meet all child support federal requirements.** Currently workers must sign into multiple applications and in many instances maintain a Microsoft Excel spreadsheet to track their work.

5.1.1.4 External-Provided Data

To address issues related to externally provided data, the system needs to:

- **Provide case data to the worker.** As an example, a requirement for states to maintain Born Out of Wedlock Information (BOWI) results in every Acknowledgement of Paternity (AOP) being sent from Vital Records as a file. No matching exists to perform this task, and no filtering is done to receive information pertinent to existing cases. A unit exists for the purpose of handling AOPs. If a case opens in the future, a worker must manually review their existing information to see if they have an AOP already.
- **Provide real-time, case-specific data to the customer.** Today's customers expect service agencies to provide real-time, case-specific information. Armed with current information regarding case status, customers can contact their designated caseworker and provide relevant information about the child, other parent, or income information necessary to complete a review and modification request.
- **Bridge new, modern data exchanges to seek opportunities outside the child support program to promote economic stability through human services for case participants.** Currently, workers often must exchange data and record exchanges and relevant information, manually.

5.1.1.5 Document Management

To address issues related to document management (including both Customer Communication Management (CCM) and electronic document management), the system needs to:

- **Provide a document management system which includes document generation and image retention.** The document generation system contained in CSES does not allow for document updates. As documents have been updated since the system implementation in 1998, workers have been generating documents outside the system. While there is a statewide imaging solution, OnBase, documents are not printed with identifying information that would allow for automated imaging. Recording document generation and receipt in CSES is done manually.
- **Efficiently store and maintain documents generated.** While there is a statewide imaging solution, OnBase, CSES-generated documents are not printed with identifying information that would allow for automated imaging. Recording document generation and receipt in CSES is done manually. Further, the solution needs to be integrated and moved to all counties and fully integrated with the YES.NM.GOV unified portal to eliminate some manual processes.

5.1.1.6 Communication

To address issues related to communication, the system needs to:

- **Provide modern communication methods for customers and employers to allow for the exchange of information, data, and notices.** While there are automated text messages being sent, the current ETL with CSES does not provide the level of detail to automate text messages. Workers can text case participants, but the process involves developing the text in a spreadsheet, sending it for development, getting it approved for generation, and relies on external technology to complete. This process lacks the expediency generally associated with texting.

5.1.2 Case Initiation

5.1.2.1 Purpose

The purpose of the case initiation function is for the child support program to receive and process applications and referrals to create new IV-D case records or update existing cases. New cases are then generally moved to the locate, establishment of parentage and/or support order (including medical), or enforcement functional areas.

The case initiation system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

Below highlights the Case Initiation needs identified during the Case Initiation and Establishment High-Level Analysis Meeting. Minutes from that meeting are provided in Attachment 11.2, CI and EST High Level Analysis Meeting Minutes 20230911.

5.1.2.2 Case Initiation Business Needs

To address the needs related to the case initiation process, the system needs to:

- **Automate, accept, maintain, and process IV-A/IV-E and appropriate Medicaid referrals, adjusting case status and sub-status as needed.** Currently the system interface creates duplications of participants and/or cases in CSES. Workers need to research the referrals through the Automated

System Program and Eligibility Network (ASPEN) to determine if there is a valid case for acceptance. Help Desk tickets are submitted to resolve the duplication. The system needs to reduce the number of duplicate cases and participants, automate real-time case status changes, and display case statuses in a readily identifiable manner.

- **Accept, maintain, and process information for IV-D services.** An online application currently exists, but the process for the worker is still largely manual as the online application does not automatically import into CSES and matching criteria fails to correct minor discrepancies, resulting in the creation of duplicate participants and/or cases. The lack of real-time case creation and processing results in shrinking the federal time frame for case opening and evaluation. The lack of appropriate matching criteria also results in duplicate cases being created when an intergovernmental referral is received through the Electronic Data Exchange (EDE). The system needs to reduce the number of duplicate cases and participants, automate real-time case status changes, and display case statuses in a readily identifiable manner.
- **Accept, maintain, and process information for Intergovernmental IV-D services.** The system must be able to receive and send information to other governmental agencies, including other states and other countries.
- **Maintain accurate case types.** The current lack of an effective interface with the ISD, combined with next day batch processing, results in case types being incorrect. The downstream effects of these inaccuracies, include, to name a few, manual corrections being necessary for payment distribution and arrears calculation, the potential that incorrect steps are taken for actions (mandatory versus elective depending on case type), and compromised data integrity.
- **Accommodate a modern family dynamic (e.g., cases with two (2) fathers or two (2) mothers, nonbinary participants).** Currently, CSES does not provide for this type of case composition. CSES does not provide for updated terminology in referencing case participants either.
- **Support multiple cases for the same participants when appropriate.** A limitation in CSES makes it impossible to have multiple intergovernmental responding cases. At times, a payor may owe multiple states money. To account for this, workers add a literal, physical, pom-pom to the case file so they know to re-activate another jurisdiction's case when the active case closes.

5.1.3 Locate

5.1.3.1 Purpose

The purpose of the locate function is to determine the identity and whereabouts of the Non-Custodial Parent (NCP), Custodial Parent (CP), and both their respective assets and employers.

The locate system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

Below highlights the Locate needs identified during the Enforcement and Locate High-Level Analysis Meeting. Minutes from that meeting are provided in Attachment 11.4, ENF and LOC High Level Analysis Meeting Minutes 20230911.

5.1.3.2 Locate Business Needs

To address the locate functionality business needs, the system needs to:

- **Initiate automated locate activities and to provide reliable verification of the addresses provided.** Workers across functional areas identified locate activities as problematic currently. Tracking manual locate efforts is a manual process involving setting repeated ticklers until a response is received. Response information, if returned, is often dated. Lack of reliable locate data results in delayed actions, lost opportunities, and lower collections. Workers must search multiple databases for locate information.
- **Interface in a meaningful way with sources of information.** Some of these sources of information are the following:
 - An interface exists for Vital Records, but deceased participant information is not part of the exchange.
 - Identifying incarcerated participants is done manually.
 - Consolidate Lead Evaluation and Reporting (CLEAR) which is used for locate purposes is not automated.
 - While the contractor used for batch mailing does hit against the National Change of Address Registry, that information does not feed back into CSES.
 - The existing Financial Institution Data Math (FIDM) interface does not include address information.
- **Store all locate information.** CSES lacks the ability to support international addresses and phone numbers, email addresses, and alternate addresses for both customers and employers.
- **Provide an address source hierarchy.** Presently good information is frequently overwritten by incorrect information.

5.1.4 Establishment

5.1.4.1 Purpose

The purpose of the establishment function is to determine the parentage of children and establish an order of child financial and medical support for children.

The establishment system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

The Establishment needs identified during the Case Initiation and Establishment High-Level Analysis Meeting are also highlighted. Minutes from that meeting are provided in Attachment 11.2, CI and EST High Level Analysis Meeting Minutes 20230911.

5.1.4.2 Establishment Business Needs

To address the establishment functionality business needs, the system needs to:

- **Provide automated tracking to ensure timely completion of tasks.** CSES does not track steps and actions necessary for the completion of establishment tasks. Workers track tasks manually, resulting in reporting challenges when assessing performance measures.
- **Automate order entry and provide acceptance and management of all order information.** In CSES, orders are manually entered and much coding is used for things like medical support and interest. Judgements that exceed \$99,999.99 cannot be entered, resulting in incorrect interest accrual and automated action inaccuracies.

5.1.5 Case Management

5.1.5.1 Purpose

The purpose of the case management function is to monitor the status of each IV-D case and direct the cases to the next appropriate activity given the status.

The case management system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

In addition, the Case Management needs identified during the Case Management High-Level Analysis Meeting are also highlighted. Minutes from that meeting are provided in Attachment 11.1, Case Management High Level Analysis Meeting Minutes 20230912.

5.1.5.2 Case Management Business Needs

To address the Case Management business needs, the system needs to:

- **Automatically move the case to the next appropriate case activity.** This will provide informative worker prompts that direct the worker to tasks that need completion, provide knowledge area information, and guide the worker in prioritizing and completing tasks. Currently, workers are required to have extensive child support knowledge and CSES knowledge to become proficient in their job. The lack of system driven tasks results in delayed case activity.
- **Provide a robust, easily updatable, document generation repository.** This will provide for the generation of forms and packages, and electronic signatures where appropriate. Forms in CSES are outdated and not updatable, resulting in workers spending countless hours manually creating the forms needed to conduct business.
- **Support coordination of cross-office activities,** such as review and adjustment. Workers currently need to manually identify and coordinate these activities.
- **Create a process for case stratification.** This will allow for a holistic approach to case management. In CSES, cases can only be assigned by alphabetical split within a geographical area and that split is limited to the first three (3) letters of a name. Attempts at caseload reconciliation require a time-consuming manual assessment, overnight implementation, and manual re-review for equity. In addition to case assignment flexibility, there needs to be an automated process for managers to forecast the impact of changes made to case assignments.
- **Consolidate information in an easily searchable, filterable, manner.** Presently, workers enter service of process information in five (5) separate locations. Case record review requires workers to scroll through multiple pages to find specific information.

- **Contain a dashboard or similar display.** This display will include real-time information and key performance indicators and next steps, such as case events, case delinquency history, and action task statuses and next steps. In CSES workers must access multiple screens to find case events and must track the status of tasks by either manually entering a tickler or using Outlook reminders.
- **Process and track all intergovernmental cases.** Currently there is no automated process for accepting and tracking the referrals and no automated support for including required documents when initiating an intergovernmental case. CSES generated CSENet communications are severely outdated: CSES often sends erroneous information to such a degree that one (1) jurisdiction shut down the ability for New Mexico to communicate through this means. Manual generation of CSENet communications is not intuitive and for most workers, not frequently used, resulting in time spent researching the 'how' prior to composing a communication. Inbound CSENet communication does not automatically come into CSES. Information from another jurisdiction, such as a notice to credit an account, can be missed. A spreadsheet is maintained outside the system to accomplish the tracking. The required time frames for intergovernmental referral acceptance and acknowledgement are strict. The lack of real-time case creation results in new referrals being manually tracked to ensure a case is created; a process that can take a few days.

5.1.6 Enforcement

5.1.6.1 Purpose

The purpose of the enforcement function is to ensure the court ordered terms, including for financial support and medical coverage, are adhered to.

The enforcement system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

The Enforcement needs identified during the Enforcement and Locate High-Level Analysis Meeting are summarized below. Minutes from that meeting are provided in Attachment 11.4, ENF and LOC High Level Analysis Meeting Minutes 20230911.

5.1.6.2 Enforcement Business Needs

To address the Enforcement business needs, the system needs to:

- **Process income withholding orders (IWOs) automatically to valid employers by the method they have elected (paper or electronically via e-IWO).** Currently the system does not automatically generate income withholding notices, but a worker must approve them for distribution.
- **Assess the NCP's ability to pay.** CSES does not identify cases where the paying participant is incarcerated, recently unemployed, is pending social security disability, or has multiple obligations.
- **Display administrative enforcement actions and events in a readily identifiable manner.** Currently workers struggle to respond to customer questions regarding administrative enforcement actions. Responding to a question or concern involves reviewing multiple sources of information to identify actions taken.
- **Capture and report the effectiveness of enforcement actions.** Workers are presently unable to identify which enforcement remedy is most appropriate to likely yield the highest value. Having this

information will enable workers to make the most informed action decision to ensure ordered obligations are met.

5.1.7 Financial Management

5.1.7.1 Purpose

The purpose of the financial management function is to process child support payments, distribute them to the appropriate accounts, and disburse the payments to the appropriate payee. This function also maintains the financial record of each case and adjusts the financial record when warranted.

The financial management system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

Below highlights the Financial Management needs identified during the Financial Management and Reporting High-Level Analysis Meeting. Minutes from that meeting are provided in Attachment 11.5, FM and REP High Level Analysis Meeting Minutes 20230913.

5.1.7.2 Financial Management Business Needs

To address the financial management business needs, the system needs to:

- **Support the allocation and distribution of child support collections, including current support and arrears across multiple cases, in accordance with the federal distribution hierarchy.** Currently, if money from an employer is entered inadvertently as a payment from the NCP it is not applied correctly.
- **Provide workers and customers with a simple and clear view of current and historic financial transaction activity.** Currently, it is challenging to understand recoupments, refunds, held funds, and future collections. Due to CSES limitations, workers in one (1) office cannot generate a system audit for a participant whose case is handled by another office. Additionally, CSES cannot pull data for an audit history if the data is more than twelve years old, resulting in workers having to manually create an audit for prior periods. CSES also cannot provide the financial audit data efficiently to the customer portal.
- **Support manual account adjustment and provide a real-time display of the outcome if the adjustment is made.** Workers currently have no way to identify the downstream impacts of an account adjustment, resulting in extensive research ahead of the adjustment and potentially additional adjustments being necessary after the overnight processing of the adjustment is complete.
- **Include intuitive financial management processes and provide access to reference materials to support financial management.** Workers need to know many different processes and steps to properly manage payments and accounts. No internal reference material is contained in CSES to assist.
- **Properly manage FTI.** Currently inadequate precautions exist and the process to track the handling of FTI is manual. The system does not help manage FTI effectively. Better technology to manage FTI is needed.

- **Be able to refund receipts.** Currently workers must do a work-around to refund payments to the NCP when the CP is deceased by entering the child support office address for the CP, notifying the SDU to pull the payments and place them in suspense, then the worker must manually refund the payments to the NCP.
- **Automate online payment processing.** Currently there is a lag of up to four (4) days between when the payment is made and when it gets into CSES. This results in delayed payments to families.
- **Include tracking of all financial activities.** Workers are presently maintaining spreadsheets for disbursement holds, returned payments, and lockbox reconciliation. Lockbox reconciliation must be done daily, and on the first of the month there are approximately 5,000 lines of entry, taking two (2) to three (3) hours.
- **Include payment images and/or details.** In CSES, a payment made by an employer may be identified, but not include which employer. Check images are currently maintained by the Lockbox contractor, but viewing payment images requires workers to access a source outside of CSES.

5.1.8 Reporting

5.1.8.1 Purpose

The purpose of the reporting function is to extract statistical and management data from the child support system to meet federal reporting mandates, support management needs, support data-driven decision-making, and maintain accountability for the child support program's results.

The reporting system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

Below highlights the Reporting needs identified during the Financial Management and Reporting High-Level Analysis Meeting. Minutes from that meeting are provided in Attachment 11.5, FM and REP High Level Analysis Meeting Minutes 20230913.

5.1.8.2 Reporting Business Needs

To address the business needs related to reporting, the system needs to:

- **Maintain information required to prepare mandated federal reports and automatically generate the associated reports.** In CSES, there is no data mapping to tie tables together. Preparing federal reports, including the OCSS-157, OCSS-34, OCSS-396, and the Self-Assessment Report, is entirely manual, leaving the potential for human error.
- **Automate how the data is gathered for review of the Self-Assessment.** Currently, the system does not aid the process. Staff manually review each case to prepare reports. Automatically gathering data for the Self-Assessment report helps ensure no human data gathering errors are introduced.
- **Provide the ability for users and supervisors to run simple queries through embedded business intelligence capability from within the system.** Currently, the system has limited capabilities to provide reports.
- **Provide an automated dashboard and related processes for daily monitoring activities.** Currently, there are reports that are generated as workarounds for tasks that a modernized system would be

able to process. The CPT, as discussed earlier, is an example. The system needs to enable the State to analyze such things as the effectiveness of different types of enforcement actions.

5.1.9 Customer Service

5.1.9.1 Purpose

The purpose of the customer service function is to provide customers with prompt attention, access to their case information, and reliable data that meets their needs and expectations.

The customer service system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

Below highlights the Customer Service needs identified during the Customer Service, Intergovernmental, and Employer High-Level Analysis Meeting. Minutes from that meeting are provided in Attachment 11.3, CS-INTG-EMPLOYER High Level Analysis Meeting Minutes 20230912. Intergovernmental and Employer related needs are included throughout the functional sections.

5.1.9.2 Customer Service Business Needs

To address the customer service needs, the system needs to:

- **Be transparent to customers.** This includes effectively communicating the status of the case, upcoming court hearings or scheduled appointments, and the current financial status of the account. Currently, workers must toggle between multiple screens, re-entering the case number each time, to access basic case information when resolving a customer issue.
- **Have a modern mode of communication that includes unified portal integration, online chat, and image upload.** Currently, the system does not support this modern mode of communication and presents a limitation for interactions between workers and customers. Customers expect service providers to meet them where they are and in their preferred channel of communication with data that matters based on their step in the journey. The current system does not include enough data points to do a real journey mapping for customers. The modern mode of communication must also be in other languages, such as Spanish, to meet the needs of the customer and limited English proficiency requirements.
- **Integrate the phone system.** This will allow for bi-directional communication with case participants and stakeholders, as well as email and texting, which are recorded in the case record. Currently phone communication and email communication are not generated in, or automatically recorded by, the system. Texting is not in real-time and is done outside of CSES.
- **Provide unified portal integration for the employer community.** This will allow employers to interact with the program for activities such as receiving remittance documents, submitting federal employer identification numbers (FEINs), updating participant insurance information, providing employment termination information, and submitting addresses of payment processors. Currently, the employer unit manages these activities manually.

5.2 Technical Needs Assessment

This section provides an overview of the technical needs gathered during the high-level analysis meetings and includes information on each functional area.

5.2.1 Notable Needs

The technical environment in which the legacy system exists has profound implications for the child support program and its ability to deliver the services its customers require, as well as the efficiency the program and its stakeholders demand. The State identified some notable needs during the needs assessment, including the following items:

- Modern Interface
- Improved Automation and addition of Workflows, and Business Rules Engines
- Improved Data Interfaces

The following sections expand on each of the notable technical needs listed above.

5.2.1.1 Need: Modern Interface

The core of the CSES system was originally based primarily on CICS COBOL code and 80-character-by-24-line “greenscreen” user screens (“block mode”) before it was re-platformed/refactored in Java code in the AWS cloud. When the system was re-platformed it did not change the overall look and feel or the functionality, it simply put the system in the cloud in a more commonly used programming language. The system functions in block mode as it did before but now instead of functioning in a mainframe window, it functions in a web-based browser. This still represents a severe limitation that has impacted the program’s ability to deliver required and desired functionality upgrades and improvements. The current platform gives rise to a number of deficiencies, including:

- Resources with Java and Oracle skillsets are becoming increasingly expensive to obtain, in particular technical staff able to maintain and enhance converted Java code logic that was once CA Gen COBOL logic is very difficult. This affects both delivery of new functionality as well as “lights on” operation. These skillsets will become scarcer as time goes on, meaning the problem is likely to grow more acute over time.
- The batch driven architecture makes it nearly impossible to deliver modern functionality like workflows, rules-driven logic, data-driven decision making, and real-time updates.
- Mainframe-style block mode screens with monospace fonts (e.g., *Courier*) introduce severe usability constraints. Even though the system now uses the Java language and can be accessed via a web browser, it still performs as a mainframe-style interface.
 - It is very difficult to present information to users in a way that highlights important information. It requires users to navigate through multiple screens to obtain relevant information (such as “drill-down” details behind a summary screen).
 - New users accustomed to web-based GUI technologies require significant time and effort to learn the mainframe multi-layered terminal screens, F-key navigation, and field codes.

Staff who use and support CSES have lived with these constraints for decades. Nearly all the technical people interviewed during the assessment articulated the need for a better interface for the child support system.

5.2.1.2 Need: Improved Automation and Addition of User Workflows and Business Rules Engines

While the CSES system was re-platformed it was not redesigned. As such the functionality of the CSES system remains as it did when it was first PRWORA-certified in May, 2001. Most of the business workflows are antiquated and no business rules engine currently exists to help staff perform case work quicker and more efficiently. The system has a number of deficiencies that need to be resolved:

- A batch-mode architecture makes it nearly impossible to deliver modern functionality like workflows, rules-driven logic, and data-driven decision-making.
- It is very difficult to present information to users in a way that highlights important information and it takes multiple screens to obtain that information which requires complex user navigation.
- Much system work is done in batch, meaning that real-time updates are difficult to deliver, and existing business workflow processes take an inordinate amount of time to complete.
- CSES currently contains no external workflow or business rules engines; any workflow logic is hard-coded in the application. This makes the system unwieldy for changing and maintaining specific child support business processes and functions.

5.2.1.3 Improved Data Interfaces

Data interchange across systems is necessary for the proper functioning of system-to-system interfaces, as well as for the Business Intelligence (BI)/Data Warehouse to properly match individuals to give a cross-system view of information. Currently, the CSES does not use an agreed-upon shared client index (an arrangement where multiple computer systems agree to use a common identifier to identify individuals who are likely to have records in multiple systems such as the child support, IV-A, and IV-E systems). The HHS 2020 initiative has a Master Data Management plan that CSES cannot fully interface with.

The current data interchange mechanisms have several deficiencies, including:

- Data interfaces with external systems are less reliable because there is no agreed-upon identifier for a person across systems.
- Individuals and employers are unnecessarily duplicated in CSES.
- Business intelligence is less effective than it could be because non-child support data cannot always be reliably matched to child support case participants.
- Workers must spend time to identify and remedy duplications.

5.2.2 Information and System Architecture

5.2.2.1 Purpose

The information and system architecture are the primary technologies and major structural components making up the legacy system, both at the macro level and at lower levels, including the internal design of the system.

The information and system architecture pain points and system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.2.2 Information and Architecture Needs

There were several needs identified in this area, which are broken down into the following categories:

- Flexibility
- Internal Architecture

Flexibility

The system needs to be more flexible and easier to modify to implement program changes. The current system requires nearly every functionality change to be programmed in the refactored Java code, which is not a highly productive development platform since the code is unwieldy and convoluted. Instead, ITD needs a faster-to-adapt system that allows the program to move with all possible speed to implement federally mandated changes, legislatively mandated changes, or changes that are driven by policy or pragmatic needs to improve the program.

ITD needs a system that supports relocating certain functionality, as appropriate, from the code layer into different layers of the system architecture, for instance into a workflow engine or a rules engine. Doing so will produce two (2) benefits:

- **Allow system changes to be made faster.** This is because they are typically based on configuration and less on coding.
- **Allow the CSSD user community to participate more directly in understanding and implementing such changes.** This is facilitated by such tools' "declarative" nature, wherein the configuration of the desired workflow is expressed as a series of rules or other declarative statements that are not code. Such artifacts are usually designed to be more accessible to end-users who can understand the intent of the rules better than they could an equivalent stretch of code. Some products even go so far as to offer end-user-modifiable rules, which might let CSSD users alter the system's functionality more directly. Some examples of products/technologies that fit this definition include:
 - **Workflow engines.** Workflow engines allow a child support process to be built into a workflow that is defined by a set of rules in the workflow engine, meaning that changing the workflow is done by adjusting the workflow rules, not by coding.
 - **Rules engines.** Similarly, rules engines work by taking a complex process like child support financials and, again, express the logic that must be applied to accomplish the process as a set of rules rather than traditional coded logic.

- **Document Generation tools.** Document generation tools remove the complex coding involved with programming the layout and content for a form or notice and allow it to be done in a more approachable, user-friendly way by developing templates and light pieces of logic in an editing environment that is familiar like a word processor-like tool. This can directly put CSSD staff in control of making modifications to document templates or even creating entirely new ones.

These characteristics that allow for more flexibility and adaptability will also result in more efficiency in the development and implementation of changes, significantly reducing the time required to keep the system in step with changing program needs.

Internal Architecture

Case structure needs to be better aligned with real-world needs. The current data structures for holding the primary case data objects is poorly aligned with the real-world “views” of a case. These misalignments mean that much translation must be done in the programming in several areas, including:

- **Interfaces.** External entities view cases differently, and the interfaces must make translations back and forth to the “outside” view of a case, complicating interface programming significantly.
- **BI Reporting.** BI reporting is also made more complex because translations from the internal data structures to the report view must be made.
- **Federal reporting.** The federal OCSS-157 performance report programming is also highly complicated by the need to translate the internal data structures to the “federal” definition of a case.
- **Financial distribution.** Financial distribution is significantly more complex than it needs to be because the distribution logic must translate from the internal data structures to logical data structures more optimized to allow distribution to happen reliably.
- **Normalizing the database.** While the current CSES database is largely relational in its structure, there is a key aspect that makes it non-relational: the data relationships are not managed and enforced at the database layer but are managed in the application code. This has negative effects, including:
 - It is more error prone. New and modified code may disregard the proper relational structure because the database does not enforce it. This can lead to data integrity errors.
 - It is more time consuming for developers. Because each piece of code that interacts with the database must do the work of managing the data relationships, any given piece of new or modified code is harder to build than it could be.

5.2.3 Hardware and Software

5.2.3.1 Purpose

The system hardware and software are the most basic underpinnings of the legacy system and define many of the capabilities available throughout the remaining portions of the system. In the CSES system, hardware and operating systems are provisioned by ITD and DoIT.

The hardware and software pain points and system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.3.2 Hardware and Software Needs

Database Tools

There are issues in the current environment's database tooling that create challenges in working with the databases:

- The system needs a robust reporting database. A data architecture is needed that includes a "reporting database" or other similar mechanism where a second mirrored database is available that is always up-to-date with production, or is guaranteed to be nearly up to date (e.g., < 30 minute lag), is available for most reporting tasks, as well as an up-to-date store of data available for ETL (Extract, transform, load) process into the CSES data warehouse system.
- The system needs data de-identifying tools. The system needs obfuscation/de-identifying tools that allow "live" data from production to be de-identified so they can be used in a test database or in a training/demo environment without risk of accidental disclosure.

5.2.4 Data Exchange and Data Flow

5.2.4.1 Purpose

The data exchange and data flow topic is concerned with the data moving into and out of the legacy system, including batch movement of large data sets between data partners such as IV-A or OCS. Data interfaces are a crucial part of any child support system.

The data exchange and data flow pain points and system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.4.2 Data Exchange and Data Flow Needs

Data exchange and data flow needs fall into the following categories:

- Real-time data
- Expand Data Interfaces
- Automate Data Validation

Real-time data

Interface data must be available as real-time as possible so case workers are able to rely on the most up-to-date information to accomplish their work, including work on intergovernmental cases. Currently, interfaces are part of periodic batch processes (e.g., daily, weekly, monthly). This means the data may be days or weeks old when provided to the worker. ITD needs a system that is architected in a manner that relies more on real-time APIs especially when the most current data is needed for efficient case work and processing.

Expand Data Interfaces

Additional interfaces are needed. It was noted that, to truly transform the system and supply information to users “exactly when they need it,” it will likely be necessary to add data fields to some existing interfaces, or even to create new interfaces to bring in data that is not already available. This needs to be done to address the program’s need for expanded data interfaces, as well as to address current challenges having to do with fixed or inflexible data formats with some data partners. This review will seek to accomplish several things, including:

- Validate business user’s right to use the data in conducting child support services
- Expand the availability of data where appropriate
- Renegotiate formats and timing of data feeds where necessary

Automate Data Validation

Data validation must be automated to the greatest extent possible. Data validation, including those checks that are applied to files that come in via a system-to-system interface, must occur automatically according to pre-defined rules. These validations safeguard the data integrity of the CSES database, particularly when data from an incoming interface are destined to overwrite data already present in the database. Rules for pre-ingestion checking of data coming from an interface must include:

- Check for a correct file type. Files are often expected to be in a certain format or encoding, which will be checked prior to subsequent checks. Check for a well-formed interface file. Ensure the expected record types are present and record lengths are within expected parameters.
- Check internal consistency of files. Many file formats allow for internal consistency checks, for instance checking that the number of records in the “detail” segment matches the expected number of records according to the header/trailer record(s).

5.2.5 Data Storage, Retrieval, Back-up, and Recovery

5.2.5.1 Purpose

Data storage, retrieval, back-up, and recovery provides for the long-term storage of data, as well as protecting the system by ensuring mechanisms to back-up data and restore it into the system at a different point in time.

The data storage, retrieval, back-up, recovery pain points, and system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.5.2 Data Storage, Retrieval, Backup, and Recovery Needs

In the current CSES system, the Oracle Database uses Data Guard hardware and software, which provides a comprehensive set of services that create, maintain, manage, and monitor one (1) or more standby databases to enable production Oracle databases to survive disasters and data corruptions.

Data storage, retrieval, backup, and recovery needs include the following:

- The system needs data purge and archive mechanisms built into the system. In child support, case data has a very long lifetime and cannot be purged aggressively. The inability to purge old, duplicate, or incorrect case data is not sustainable in the long term, as it unnecessarily increases data storage costs, bandwidth costs, and degrades system performance. Unnecessary legacy data also make future conversions of data more complex and costly. Any future modernized system must have data archiving and purging mechanisms built into the system. These tools and mechanisms will provide:
 - The ability to archive cases to secondary storage based on a single case ID or lists of case IDs. All secondary data records that are “owned” by the case must be archived, as well as other data segments such as images stored in content management systems or other secondary case-related artifacts.
 - The ability to recall cases from secondary storage to primary storage by case ID or lists of case IDs. All archived data, including secondary artifacts, must be restored.
 - The ability to manage secondary storage to permanently purge data based on case ID or lists of case IDs, as well as by case characteristics.

5.2.6 Inputs and Outputs

5.2.6.1 Purpose

The system inputs and outputs are the primary communication points between the system and its users.

The pain points from system inputs and outputs along with other system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.6.2 Input and Output Needs

Input and output needs fall into the following categories:

- Efficient User Interface
- Real-time data reports
- Efficient and user-friendly document generation process

Efficient User Interface

The current user interface is still based on green screen technology from the mainframe and re-platforming the system added no new functionality to the existing child support functions, nor did it change how data is accessed in the CSES.

The current user interface provides no real-time workflows for users. A user interface that provides smoother screen workflows, dropdown fields, and more data input is needed to allow for an easier and more efficient user experience. Newer child support systems have workflow based tasks, reminders, visual cues, worker queues, or indications as to where cases are in the child support business process.

Real-time data reports

The system must offer real-time data for operational reports. While the current CSES Data Warehouse system has been able to help deliver reports to workers that were impractical to develop inside of the

system, many of those reports are based on snapshot data that can be days old at the time users are accessing it. The new system must offer reports based on real-time data that are guaranteed to be up-to-date at all times and accessible from directly within the system.

Efficient and user-friendly document generation process

Currently the document creation and printing process in CSES is over 25 years old and does not allow the user to do the following:

- Save and resume documents being generated
- Generate documents in other languages
- Efficiently create document templates
- Pre-populate certain data fields in the document which causes staff to have to manually input data
- Interface with the State's HHS 2020 Enterprise Content Management solution to store, retrieve, or archive generated documents from CSES

Batch forms processing in CSES is currently completed by creating a file of data to be populated on the forms. This file is given to a contractor to input and process batch forms. Batch forms processing needs to be handled internally by the system in order to be more efficient and reduce contractor costs.

A new document generation process is needed in the modernized system that will allow for real-time and efficient document generation and ECM archiving as well as a batch process that does not rely on contractor participation for completion.

5.2.7 Validation and Internal Controls

5.2.7.1 Purpose

The validation and internal controls provide the mechanisms by which the system validates data before it is accepted into the system, as well as safeguarding the quality of data in the system.

The pain points from validation and internal controls along with other system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.7.2 Validation and Internal Control Needs

Validation and internal control needs fall into the following categories:

- Data field validation
- Master data management tools

Data field validation

The system must offer strong and comprehensive data validations on user-input data fields, which are currently lacking in CSES. CSES data validations are known to be loose in some areas where they don't validate existing fields properly resulting in data pollution. This occurs often when free form text fields are used to capture data that should be more restricted, e.g., an email address, phone number. The

system must offer field-appropriate data fields (e.g., e-mail address) with appropriate validation masks and edits (e.g., must have an “@” symbol; must have a period as the fourth-to-last character), helping to ensure that fields are not misused in the future.

Master data management tools

The system must integrate with the HHS 2020 master data management tools and key data structures. In the current CSES system, there is a known problem with “data pollution” in certain database structures, notably the employer table. The table is known to contain many duplicates and out-of-date records, which impede users’ ability to use the data.

Technical staff also noted that there is an issue in CSES that duplicate members are created due to poor member management screening processes and invalid data validation logic.

5.2.8 System Security and Privacy

5.2.8.1 Purpose

The system security and privacy controls provide the system’s ability to protect data and ensure only users with the correct access permissions are able to access any given screen, record, or field. The legacy system contains sensitive data, including Personally Identifiable Information (PII), Protected Health Information (PHI), and FTI.

The pain points about system security and privacy along with other system deficiencies identified during the historical documentation review and high-level analysis meetings are listed in the following section.

5.2.8.2 System Security and Privacy Needs

To meet the system security and privacy needs, the system must comply with:

- **IRS publication 1075.** The FTI category has the most stringent requirements for safeguarding information and restricting how users use the information. CSSD and ITD must ensure that its systems meet the IRS Publication 1075 requirements and standards.
- **ITD’s and New Mexico DoIT’s cybersecurity strategy and system security requirements.**
- **The Health Insurance Portability and Accountability Act (HIPAA).**
- **The Minimum Acceptable Risk Safeguards for Exchanges (MARS-E).** This is not typically a child support requirement, but is required in New Mexico because of the tight integration with the HHS 2020 shared services.

6.0 Conceptual System Architecture (To-Be)

The functional and technical needs identified in section 5.0 need to be resolved. One potential solution to address these needs is to redesign the underlying system architecture. Modifying the underlying system architecture is the most efficient way to address the identified technical needs, and the functional needs can be addressed at the same time as the underlying code is adapted to the new architecture.

6.1 Approach to Constructing Conceptual System Design

The conceptual system design is the transition point in the needs assessment task from understanding ITD's technical needs relative to the current system to understanding these needs relative to a modernized system. Given that ITD assumes the new system will exist on a modern, multi-tier system architecture, the technical SMEs started with a platform based on current technologies and architectural styles. The team then used the following assumptions to further develop the conceptual system design:

- Include toolsets and components that help address most or all of the needs articulated in this report
- Describe a modern platform that uses current-generation languages and widely available tools
- Describe a standard architecture or platform that is commonly known among IT professionals (in other words, not a proprietary, custom-built language or database)
- Describe an architecture that can be hosted at the DoIT data center, in a regulatory cloud environment such as AWS or Azure, or a hybrid model that includes a combination of both DoIT data center and cloud

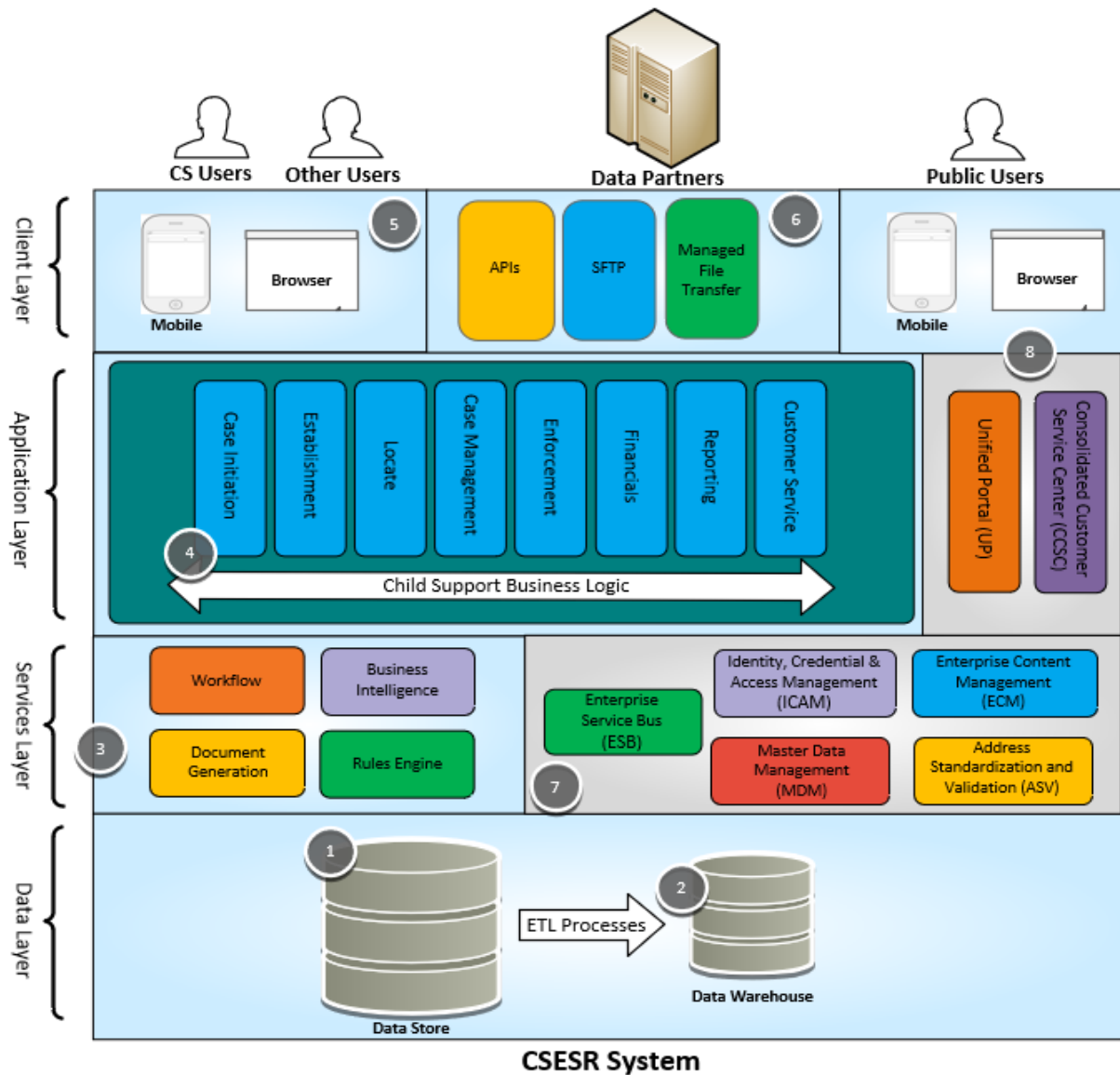
The program's goal is to identify the best way to modernize the legacy CSES system, and to develop plans that support successful modernization. Several viable paths exist to modernize the existing system, running the gamut from staying on the current system and modernizing in place, to a ground-up rewrite using a set of current technologies.

Some of the potential alternatives (e.g., COTS-based, certain transfers, modernize-in-place) might yield a modernized system that looks somewhat different than the conceptual systems architecture presented in this section. This architecture does not attempt to cover all possible alternatives. To do so would result in abstract and potentially uninformative architecture to describe nearly all possible systems. Instead, the project team developed the conceptual system architecture assuming the new architecture would:

- Include toolsets and components that help address the variety of needs articulated in this report,
- Describe a modern platform that uses widely adopted and easily maintainable current-generation languages and widely available tools,
- Support Software Development Life Cycle (SDLC) Management,
- Provide hosting environments that can support concurrent development projects,
- Avoid proprietary technologies,
- Describe an architecture that is secured and can be hosted at the DoIT data center, in a regulatory cloud environment such as AWS, or a hybrid model that includes a combination of both DoIT data center and cloud, and
- Incorporate the applications and services provided by the HHS 2020.

Figure 3 shows the conceptual systems architecture of the To-Be modernized system. (Compare this diagram to the existing system architecture in section 4.3.1.)

Figure 3: Conceptual System Architecture of Future System



- At the base of the CESR system is an enterprise-grade relational database containing all the data that will be converted from the existing CSES system. The data will be converted from the existing refactored Oracle database supporting the CSES system. This data may need further refactoring to meet the expected normalized database design standards for modern relational databases.
- ETL processes will propagate the CESR system data into a dedicated child support data warehouse that will support reporting and business intelligence needs for the child support program.
- The future modernized system will include a new services layer. The services layer will include components and tools that expand, enhance, and support overall system functionality and

capabilities. Certain services are either required to be provided, or may be provided optionally, via the State's HHS 2020 enterprise initiative (see #7), while others will be provided solely under the auspices of the future CSESR system. The current list of services to be provisioned under the CSESR system includes the following:

- **Document Generation.** A document generation service or component to aid in the design, deployment, and generation of system forms and documents. Note that this may optionally be provided under the State's HHS 2020 System Services offering.
 - **Workflow.** A workflow engine allows the steps in a structured business process to be externalized from the system's application source code and managed in a more configurable manner.
 - **Business Rules Engine.** A rules engine often works in concert with a workflow engine. It also allows the business rules logic and data parameters to be externalized from the system's application source code. Suitable for use with certain processes such as setting thresholds for enforcement actions or some aspects of financial distribution logic.
 - **Business Intelligence.** A business intelligence/reporting tool to support the child support program's data analytics and operational reporting needs. Note that additional HHS cross-program data analytics is expected to be provided via the State's Data Services (DS) module under the HHS 2020 initiative.
- The application layer holds the primary business logic of the child support system. It is presumed that the core logic of the system will be based on a current-generation software development language like Microsoft .NET or Java, with some additional use of SQL at the database layer. All child support functionality will be hosted in this layer, including functional areas like Case Initiation, Establishment, Locate, etc.
 - The client layer is the primary interaction point between the system and its users, which for most users this will primarily be a web browser. It is expected that some users may need or prefer to use mobile devices for certain functions of the system. Note that public users, such as case participants and employers, will access the system through the YES.NM.GOV unified portal module under the HHS 2020 System Services initiative. Child support workers and other authorized users will access the CSESR system web application directly.
 - Data partners will access the CSESR system via a specific area of the client layer. The primary modes of interaction will be:
 - **APIs.** A dynamic method of exchanging data over HTTP/HTTPS, either on-demand or via scheduled batch routines. Often implemented as REST or SOAP-based web services, APIs are common for use cases where on-demand data exchange is needed or preferred.
 - **SFTP.** A very common and traditional method for exchanging data with data partners, typically via a scheduled batch routine. The unencrypted FTP method has been largely phased out but may be required in limited situations.
 - **MFT.** A data exchange platform that is generally more reliable and secure than SFTP and is often used with federal data partners.

- The State’s HHS 2020 initiative is an IT enterprise effort aimed at providing a single platform of services and modules for all the New Mexico health and human services agencies. These services are expected to be available for use by the modernized system. They will be exposed integration points (e.g., APIs) that provide key Child Support system functionality, while remaining external to the Child Support system itself. The CSESR system will be required to utilize certain HHS 2020 services, while others will be available for optional use. The current list of services that the CSESR system is expected to utilize includes the following:
 - **Enterprise Service Bus (ESB).** A communication platform that supports data exchanges and a service-oriented architecture. The HHS 2020 initiative will use an ESB to manage and monitor access to the system services and modules.
 - **Identity, Credential, and Access Management (ICAM).** A framework of processes and technologies to manage user identities and access to system resources. The HHS 2020 ICAM module will serve as the primary conduit for user access through the State’s Active Directory domain services.
 - **Master Data Management (MDM).** A tool and set of processes for creating and managing a single master record for key entities such as persons and employers.
 - **Enterprise Content Management (ECM).** A document management software component for storing and retrieving electronic document files and images (currently implemented using Hyland OnBase).
 - **Address Standardization and Validation (ASV).** A service to help verify, correct, and standardize the formats for address data. The HHS 2020 ASV module will be implemented using PostGrid software.
- The State’s HHS 2020 initiative will also provide the user portal (YES.NM.GOV unified portal) for New Mexico’s citizens and employers to access public-facing child support system features and data.

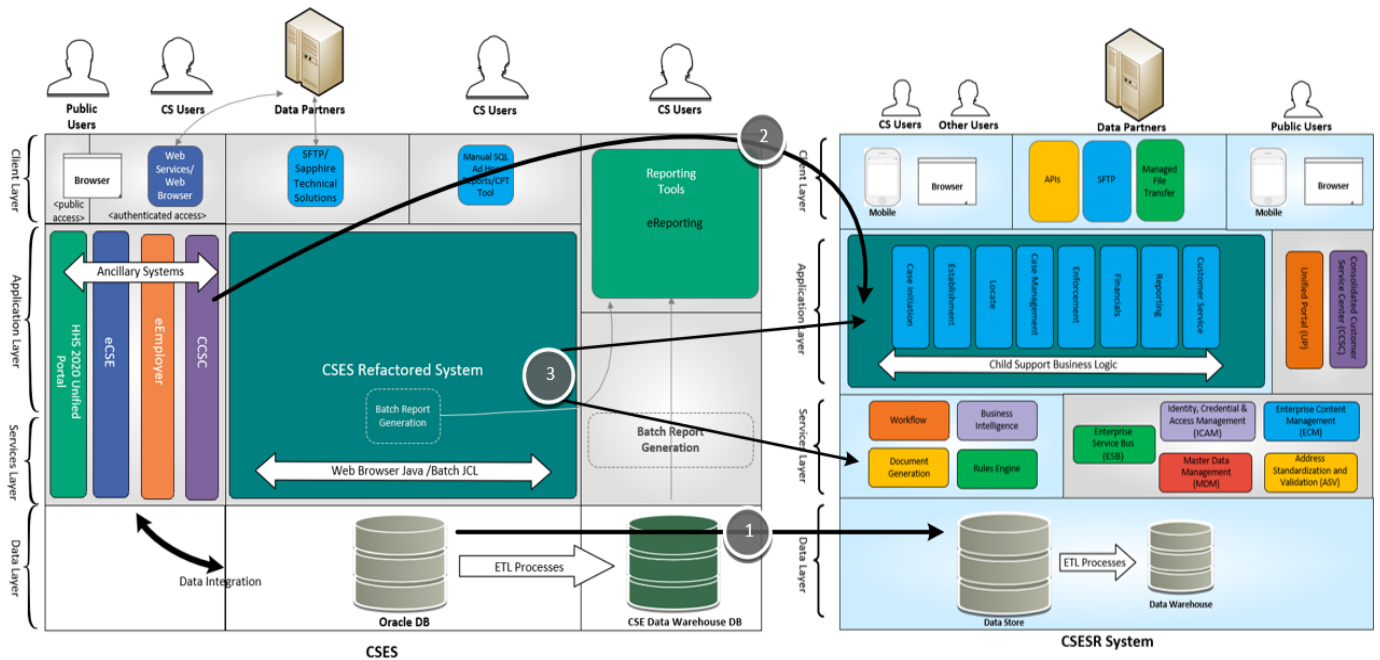
7.0 Transitional Needs Assessment

The migration to a new platform is a singularly large undertaking for any organization. Until the State identifies a target system, the details of how the State and modernization project team execute the transition lacks certainty. Using general terms and imagining a target system that looks like the conceptual system architecture presented earlier in this document provides insights into transitional activities, as described in this section.

7.1 Migrating Current Functionality to a New Platform

System migration requires migration of both data and system functionality from the legacy system to the modernized one. Figure 4 shows the most likely scenario based on current information.

Figure 4: Migration of Legacy Data and Functionality to New System



This figure shows the current system on the left (the As-Is) and the target system on the right (the To-Be). The diagram shows how the data and functionality supported by the current CSES system is likely to make its way into the modernized system. The numbered badges show three (3) main migrations:

- The CSES database is converted/translated to the target system’s database format. Some notes about this conversion:
 - The amount that the database changes will depend on which modernization approach is decided upon. A scratch-build might see virtually no structural changes to the database but adopting a transfer system will usually mean the database layout from the transferred-in system is used, and the data have to be restructured to conform to the target system’s schema.
 - To the extent that there are data that are only in the CSES Data Warehouse system that are needed for upgraded operational reporting, it is presumed that those data sources will be replicated or relocated to the primary system’s database.
- It is expected that many of the ancillary systems will be phased out and their functions either taken over by the new primary CSESR system or integrated with the CSESR system. The current set of ancillary systems includes:
 - **SSP.** Provides access to OCSS SSP applications.
 - **QUICK Web Services.** Supports queries by other states CS agencies related to interstate cases.

- **Hyland OnBase, or a similar record management system.** Document Imaging and Archiving System used to store child support case documents. This will be integrated with the document generation process.
- **eReporting.** Facilitates the generation of reports by CSES. This ancillary system is an external web application that currently stores static reports which capture aggregate caseload data geared towards federal reporting. Federal, State, and Tribal reporting elements are scheduled (monthly, quarterly, and yearly) and are automatically written to dedicated tables within the CSES database. Federal reports are produced from the tables and manually transmitted to OCS. Currently the information provided by this application is fed into the YES.NM.GOV unified portal application and is not accessed directly by users.
- **eCSE Web User Interface for CSES.** Allows access to a subset of CSES functionality via a Web-based interface, principally document generation and an electronic-filing interface with the State's court system. Currently the information provided by this application is fed into the YES.NM.GOV unified portal application and is not accessed directly by users and customers.
- **eEmployer.** This was the web portal for employers to provide contact information and maintain information on wage withholdings. This system now provides information to the YES.NM.GOV unified portal system and is not directly accessed by employers or CSSD staff.
- **Case Prioritization Tool (CPT).** Manually created spreadsheet from a series of database queries that allows staff to see a large range of case information in one view; managers use this tool for case prioritization.
- **HHS 2020 Unified Portal.** Provides child support case participants the ability to access information related to their cases. This application will be integrated into the new CSES system via the HHS 2020 system services enterprise bus.
- CSES business logic, currently housed in Java code and Java/Oracle batch jobs, is expected to be migrated to one (1) of the following layers of the modernized system:
 - **Services Layer.** Specifically, some current-system functionality will be refactored so that the new system can manage user workflows or manage some aspect of the system's functioning through rules in the rules engine. Additionally, some current logic may also migrate to the Enterprise Service Bus (transformation and processing of data-handling jobs, for instance).
 - **Application Layer.** Any business logic that is not factored out as described above will be migrated to code housed in the Services layer of the new system.

7.2 Transitional Needs

The project team identified the following categories of transitional needs:

- Data Conversion
- System Deployment

- Organizational Change Management (OCM), including Training

7.2.1 Data Conversion

- **Automate conversion to the greatest extent possible.** Use automated conversion techniques to the maximum extent possible.
- **Use iterative and metrics-driven conversion tactics.** Implement conversion so the conversion team can run an entire conversion cycle repeatedly, with each run producing metrics that describe the health of the conversion by identifying numbers of records converted automatically, numbers of records with exceptions, data-matching percentages, etc.
- **Incorporate manual data cleanup into automated conversion.** Automated conversion sometimes results in some data that require human-assisted cleanup. Automated conversion needs to integrate any manual cleanup initiatives by the following methods:
 - Keep metrics on records that require manual cleanup.
 - Offer cleanup helper tools to make required cleanup as time-efficient as possible.
 - Track user activity on cleanup activities and/or health statistics that identify the amount of manual cleanup that successfully corrected data to make records convert-able.

7.2.2 System Deployment

- **Pilot the modernized system.** Pilot the modernized system prior to full production rollout. Perform the Pilot “live” (through use of actual casework performed by state and local child support staff).
- **Deploy the system in a phased manner.** To manage risk, structure deployment of the modernized system to deploy by phase and roll out the modernized system to specific offices or regions but not to others.
- **Keep the legacy system and newly developed system in sync during rollout.** Provide guidance and assistance in conversion to the modernized system to state, local, and contracted agencies. Create mechanisms to keep the legacy system and the modernized system in sync during pilot and/or phased rollout. This may involve preventing the legacy system from modifying records involved in the pilot, but essential activities such as federal reporting and self-assessments continue without disruption or incident by the pilot strategy.
- **Make hardware rollout and other site-readiness activities a formal part of rollout.** To the extent sites prepare to receive the modernized system by accepting new hardware, network upgrades, or software installation, track and coordinate these activities as part of a larger, coordinated roll-out plan and schedule of activities.

7.2.3 Organizational Change Management (OCM) including Training and User Support

- **Implement a comprehensive OCM plan.** OCM focuses on the people-side of change, making sure the staff are ready and able to use the new system. CSSD intends to follow the Prosci® ADKAR® process, which helps staff develop an Awareness of the need for change, a Desire for that change, the Knowledge about the change itself, the Ability to use the new system post-change, and Reinforcement of that change. This process includes not only training and end-user support, but advanced information provided while the system is still being developed. This information can be provided through newsletters, video updates, meetings, planned/potential screenshots, etc.

- **Coordinate training rollout and system rollout.** Coordinate the rollout of training and the modernized system to enable a just-in-time training approach. Deliver training no more than 10 days prior to the date when workers must start using the modernized system.
- **Training may include synchronous or asynchronous delivery methods.** Train workers on general concepts and basic skills using self-directed training offerings such as recorded webcasts or computer-based training (CBT) modules. Use instructor-led training for more complex case management and financial management tasks.
- **Training will include user guides and job aids** that will help the learners transfer what they learn to the work environment.
- **Provide technical support** on-site and/or remotely with minimal wait time during pilot and system rollout.
- **Train technical staff** in the support and maintenance of the new system.
- **Train SDU staff** in the functions of the system used to perform contractual SDU responsibilities.

8.0 Gap Analysis and Limitations Threatening the Child Support Program

The gap analysis assessed the current state of the child support program and system compared to the desired state. The technical and functional limitations of the current child support system negatively affect the program's ability to provide the best services possible. The system places the program at risk of declining performance and potentially negative outcomes such as failing to meet federally mandated standards. Limitations have been broken down into the following categories:

- **People:** The existing outdated system limits the program's ability to meet critical needs; hire, train, and retain staff. The existing outdated system is frustrating for child support workers who must learn and use outdated technology. Countless hours of productivity are lost doing tasks a modern system should perform. The inability to use modern communication methods results in decreased customer satisfaction and creates the risk of disengagement with participants and partners. The downstream impact of these challenges results in customers waiting longer for their cases to be managed, encountering outdated information in the portal, and receiving inconsistent messaging when interacting with CSSD.
- **Capabilities:** The existing outdated system lacks the functionality that CSSD and its partners need to efficiently deliver services. Workers spend countless hours performing manual workarounds, manually tracking case statuses and tasks outside of the system, and both creating and populating forms instead of proactively working cases and serving customers.
- **Program:** The existing outdated system limits the program's ability to meet critical needs; efficiently run field offices; and adjust to changing situations. The requirement for some business processes to wait for overnight system batch processes, sometimes taking multiple days, severely limits the program's ability to conduct business efficiently.
- **Architecture:** The CSES architecture was originally established prior to the 2001 system certification and was based on COBOL requirements. The refactor/re-platform to Java rewrote the existing code without rearchitecting the system to make use of modern design (e.g., using configuration rather than hard-coding parameters into lines of code). This makes the codebase hard to work with.

Creating new or enhancing existing functionality requires research, building, and substantial testing that could occur more efficiently with a modernized architecture.

- **Data:** The existing outdated system lacks reliable, consistent data. So much work is being performed outside the system due to the system limitations and the data contained in the system is incomplete and therefore unreliable at times. Without reliable data, reporting is complicated, discovering trends is challenging, good customer service is compromised, and cost effectiveness of the program is lost.

The following sections expand upon each category of limitations listed above.

8.1 People

This section focuses on the limitations that affect the people involved with the child support program, including its customers and workers.

During the needs assessment, many stakeholder groups were identified. The needs assessment participants identified stakeholders as people who are currently impacted by the limitations of the current child support system, people who will use the new system, people who may be affected by the modernized system, people who have an interest in the new system development and maintenance, and people who may be responsible for system funding.

The State identified the following stakeholder groups, not all of whom participated in the needs assessment directly:

- **Constituents**, including case participants and employers.
- **HSD Project Team**, including HSD leadership and the CSESR Executive Steering Committee
- **Business Functional Field Office Team**, including functional SMEs from all field office functional areas. This team includes representatives from large, medium, and small offices.
- **Business Functional Central Office Team**, including functional SMEs bringing perspectives for Central Office functional areas.
- **Navajo Nation**, including staff who use CSES.
- **Technical SMEs**, including representatives from across the ITD agency who understand the technology that supports the child support program and the program's vision.
- **Enterprise Project Management Office (EPMO)**, including those who spearhead the HHS 2020 initiative.
- .
- **Contractors**, including those working on the CSESR Project and other HHS 2020 initiative iterations and current CSES contractors working on O&M.
- **The Federal OCSS**, including those whose support funds the federal portion of the CSESR Project.

8.1.1 A Hard to Learn and Difficult to Use System

Since CSES is difficult to learn and outdated technology, CSSD has difficulty retaining staff as they leave for jobs that utilize more modern technology. This problem is enhanced by the difficulty for current workers to use CSES and the difficulty in training users to use CSES. CSES is not user friendly. New

employees face challenges learning to use the system. Field office representatives estimated it takes a new employee over a year (about 13 months) before they reach a point where they only need CSES assistance one (1) to two (2) times a week. This costs the program dearly in their ability to effectively train and retain employees. Child support is already a complicated program to learn as a new employee, by adding outdated functionality and a hard to use system, it is no wonder CSSD has difficulty retaining new staff. Additionally, nearly 20% of CSSD staff will reach retirement eligibility within the next three (3) years, making this an immediate need to fix with a potentially extraordinary impact to the program.

The burden on current staff to navigate the variety of difficulties in system functionality requires time and patience. Current field staff representatives estimated they spend 57% of their day navigating the various system limitations identified in the needs assessment. This time could be greatly reduced with a modernized system which provides an easy to navigate system, directs work to workers, and houses all necessary tracking.

8.1.1.1 Deficiencies and Challenges

The deficiencies and challenges related to a non-user-friendly interface include a lack of:

- **Intuitive system features.** This led to CSSD and ITD creating the multitude of workaround ancillary tools used increases the time required to train new employees. It currently takes over a year for a new worker to learn how to use CSES proficiently.
- **An intuitive system which directs appropriate work to the appropriate worker.** This causes CSSD difficulty in finding and retaining employees. As more workers near retirement age there will be an increased demand for staff. Younger workers are more familiar with modern interfaces that the outdated system does not provide. Workers become frustrated with the difficult to learn system and many leave before reaching a year employment. An effective system should direct tasks to workers, with clear instructions on how to complete the task, rather than requiring the worker to coordinate their own work through a variety of worklists and reports.
- **Help features within the system.** The lack of this feature in the current CSES, causes seasoned workers to be required to offer continued assistance to coworkers as they learn how to use CSES. This continually pulls workers away from their daily activities to assist new workers, interrupting their casework.
- **Intuitive navigation.** This causes current workers to be required to traverse a system with a complicated flow. Even seasoned employees are limited by their need to go to multiple screens in order to complete an action, to wait for overnight batch processing, and to use work arounds to track time frames and data which the system does not automatically track. This impacts workers ability to complete all desired daily tasks and provide as much direct service to customers as they would like. When a worker is required to work at the speed dictated by CSES, they are not able to provide the level of service they could if they were given the proper tools.

8.1.1.2 Risks

The risks associated related to a non-user-friendly interface:

- Training time equates to collections/funds lost and delays in meeting objectives. The excessive training times for CSES result in reduced customer service and program achievement. Time spent learning is time away from providing service to the citizens of New Mexico.
- The program runs because of its workers. Finding and retaining employees is vital to the success of the program and the hard to use system severely impacts the program's ability to retain workers and there is a risk that this struggle will impact CSSD's ability to provide quality services to the communities they serve.

8.1.1.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to a non-user-friendly interface:

- More automated processes for simpler tasks allow workers more time to concentrate on complex tasks.
- Reduced training times for new employees will result in workers being able to serve their customers better and faster. This will increase customer satisfaction with the program.
- Recruiting and maintaining workers will be easier. All workers desire an environment where they can feel confident in their tasks and supported in their work. Having a system that is intuitive and user friendly will provide an environment that builds confidence in employees.
- Service to customers will be improved by allowing workers to direct time needed to outreach communication, customer interactions, and informed decision making they will be able to better serve the communities of New Mexico.

8.1.2 Inadequate Case Management Tools

Case Management is the foundation of a child support program. Knowing what needs to be done and when it needs to be done ensures equity across the State and improves customer relations. CSES does not offer necessary case management tools, which results in lost productivity. In fact, the deficiency is so impactful that CSSD created an outside case management tool called the CPT to help assist field staff in tracking and assigning work. This tool takes the CSSD central office an estimated 54 work hours to generate, distribute, and maintain each month.

In addition to the difficulties in assigning work in the current environment, CSSD is severely limited by CSES when it comes to case assignment and tracking. This often requires managers and supervisors to resort to using outside tools in order to provide a workaround CSES limitations.

8.1.2.1 Deficiencies and Challenges

The deficiencies and challenges identified related to inadequate case management tools include a lack of:

- **Internal CSES form generation.** Countless worker hours are spent preparing documents to send to customers. This is due in part to the fact that the forms templates cannot be modified to incorporate changes that have become necessary over time.

- **Incomplete record management.** Workers are required to manually add images of documents to the OnBase imaging solution in order to ensure a generated document recorded.
- **An effective virtual case file.** Part of the reason CSES is so hard to learn is because case information can be spread out on the system. Some tasks must be recorded in multiple screens in CSES, and retrieval of information from case records requires scrolling through multiple pages of information as there is no searchability of the records.
- **System tracking.** CSES limitations in tracking require workers spend time and effort implementing and using a variety of workarounds including compiling reports, setting manual reminders, and maintaining spreadsheets outside the system. These workarounds can vary across the State in what is implemented and how they are used. This can result in inconsistent service to customers depending on where they live.
- **Functionality available to fully integrate the benefits of the HHS 2020 initiative.** HSD, through the HHS 2020 initiative, has made available the opportunity to use a set of new technologies and shared services including YES.NM.GOV unified portal, OnBase, and a shared contact center. The nature of CSES does not support the receiving of all available customer input from the portal and requires workers to go outside the system in order to gather that information. CSES does not support the automatic receipt of document images into the system and requires workers to do a manual upload workaround, and Workers cannot take full advantage of communication methods available through the Contact I center including an inability to utilize all contact channels because the two (2) systems do not have enough data exchange.
- **Appropriate validation rules resulting in poor inbound data quality from interfaces.** This results in erroneous information making its way into CSES, requiring manual fixes. Other interfaces are implemented non-optimally resulting in manual processes and non-electronic storage of information, such as Acknowledgement of Paternity information from the Department of Health, which is sent by file transfer. The documents are saved and staff manually search for the participants in CSES. If a case is found, the Acknowledgements are loaded to OnBase. If not, they are maintained or placed in a file storage location to search in the future if a case opens with the participants.
- **Lack of caseload management assistance through CSES.** To assess caseload equity managers must request a report, manually break it down, make a best guess at the outcome, and wait for batch processing to make the change so they can review anew.
- **Lack of data analytics.** Identifying trends supports improved customer satisfaction, helps workers prepare for rise and fall in activities, and informs the program where to focus resources. The present reporting capabilities in CSES do not support proactive case management, leaving workers in reactive mode.

8.1.2.2 Risks

The risks associated with inadequate case management tools include:

- Manual document generation, retention, and recording in CSES consumes time and allows for error. A worker may prepare the form or document and send it, but if it is not loaded into OnBase, there is no digital trail, and if it is not noted in CSES, there is no case record. Sending something as simple as a form to a participant includes at least three (3) manual steps and may create inconsistent information delivered to customers.

- Manually tracking case activities results in lost productivity and increases the likelihood of error. Spreadsheet data can easily be inadvertently changed. Covering for another worker during an absence is challenging due to the various methods by which information is provided to workers. Identifying cases for action is done using already aged data.
- While CSSD and ITD has re-platformed/refactored CSES as Phase I of CSES modernization, the logic contained within has not changed. The manual nature of processing online applications results in multiple manual steps, worker time and effort, and leaves open the potential for error.
- Workers need basic information to perform their duties. Interfaces have the potential to provide much of the information workers need automatically. The HHS 2020 initiative seeks to provide a “one stop shop” for citizens, but due to limitations in CSES, exchanging information, even among other HSD divisions, is challenging. Without system replacement, CSSD will not be able to do their part in seeing through the vision of the HHS 2020 initiative.
- Caseload equity determinations require exhaustive assessment, and the results cannot be validated until the following day. With the demands placed on CSSD resources, this task may be delayed or omitted.
- Without informative data analytics the program is left reacting to, then catching up with, activities and actions necessary to the success of the program. Worker and customer satisfaction are compromised.

8.1.2.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to inadequate case management tools:

- A modernized system containing a document generation component that allows workers to customize pre-populated forms and documents, that provides an effective records management system, and records when documents are generated and sent, would reduce both the likelihood of errors and countless worker hours, allowing workers to focus on more customer-centric service. Additionally, this will reduce the likelihood of inconsistent information provided to customers.
- Automated tracking and workflow in a modernized system would allow for early intervention in cases, increase performance measures, reduce hours spent on manual activities, and increase both productivity and worker satisfaction.
- A modernized system will provide greater data validation and allow for the online application process to be largely automated. Increased matching criteria would reduce duplication and result in faster processing with fewer errors. There are many components available through the YES.NM.GOV unified portal that could be supported in a modernized system, resulting in better customer service and increased productivity.
- Improved, enhanced, and additional interfaces will provide faster access to information and reduce manual steps.
- Caseload equity determination and implementation will be immediate.
- Data analytics capabilities available in modernized systems allow the program to anticipate trends and act early to direct efforts accordingly.

8.1.3 Customer: Batch Jobs Delay Response Time

Critical system functions require overnight processing which delays case activities.

8.1.3.1 Deficiencies and Challenges

The deficiencies and challenges identified due to overnight batch processing and lack of real time processing cause delays in:

- **Customers using the YES.NM.GOV unified portal.** Any child support information customers currently access through the unified portal is out-of-date due to the overnight batch processing.
- **Responding to customers.** Customers who contact the CCSC with questions that require a worker response are delayed. Customers with complaints often expect a near immediate response which cannot be achieved using CSES. While this deficiency could be solved with changes to the existing process and CCSC, modernizing the system to provide this information into the existing format is an efficient way to address this deficiency without organizational or process changes.
- **Case Creation.** Cases cannot be created in real-time due to dependency on batch processing. Overnight batch processing creates challenges to federally required time frames, which are particularly tight in intergovernmental cases, and customers are not immediately provided service when they request it. Customers should reasonably expect that they can schedule an appointment, apply for services, and complete any required forms and documentation necessary to take action on their case in one (1) meeting.
- **Updating Cooperation Status.** Updating cooperation status with the child support program is not updated immediately, delaying a release of a Family sanction for the TANF. The nature of CSES results in overnight processing delays in restoring TANF benefits to families.

8.1.3.2 Risks

The risks associated with overnight batch processing delays include:

- A negative customer experience with the child support program
- A negative customer perception of their worker and the organization due to process delays
- Potentially reduced program funding, which is partially contingent on performance measures, which have potential to not being met due to delays in processes due to waiting for batch processes to run

8.1.3.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations described above:

- Improved customer satisfaction due to faster, real-time processes, and the ability for customer service representatives to provide real-time information because of the real-time processing.
- Expedited case creation due to real-time processing.
- Timely restoration of TANF benefits to newly compliant families, rather than waiting for a batch process delay.

8.2 Capabilities

This section focuses on the lack of capabilities the current system provides to support the State, including lack of automation, lack of a program-wide document generation component, and inability to customize for tribal needs.

8.2.1 Lack of Automation

Tasks are not directed to workers by CSES. Forms automatically generated by the system are outdated and cannot be updated, which results in workers manually creating individual documentation for a case. This limitation has resulted in decreased functionality from when CSES was put in place.

CSES does not provide enough automation to support workers. This includes lack of automated workflow. In addition to the CSES worklist, workers must review reports and other lists provided by supervisors and managers in order to identify their daily work tasks. This often results in workers needing to revisit a case repeatedly just to find that no action is needed, just because it is repeatedly landing on a routinely run list. The need to slog through multiple lists of cases which may need worker attention, requires additional CSSD staff effort to progress through the required child support functions. A strong theme in the discussions about case work and specific functional activities was that increased automation was needed from the system. “Automation, automation, automation!” was a repeated chant during the needs assessment meetings. The groups discussed the need to standardize processes in order to achieve increased automation, and this was viewed as another desired benefit.

The participants expressed a need for a modernized system to direct tasks through automation without worker intervention. This would allow workers to focus on tasks that require worker decision making to proceed.

8.2.1.1 Deficiencies and Challenges

The deficiencies and challenges related to a lack of automation include a lack of the ability to:

- **CCSC does not receive the data needed for proactive text messaging or automating services for customers.** Currently, many other HSD programs receive real-time information in a format that allows CCSC to communicate case-specific information directly to customers about their programs; CSES cannot provide that same data to CCSC.
- **Process income withholding orders automatically to valid employers by the method they have elected (paper or electronically via e-IWO).** Workers are required to look at each income withholding before it is sent which this causes a bottleneck for the process.
- **Move cases along with limited manual intervention.** The constant requirement for workers to move a case along manually puts time burdens on workers and causes potential delays in customers receiving quality services.
- **Automatically accept and process online application information.** Workers are required to manually retrieve application information and enter it into the system. This potentially delays services, including document uploads to the system and making appropriate changes to a customer’s case.

- **Automatically identify cases which need attention and direct the appropriate task to the appropriate worker at the appropriate time.** This requires workers to manage their daily tasks through a variety of worklists and reports, rather than having work directed towards them for action.
- **Automatically generate needed reports and direct the reports to the appropriate recipients.** This limitation requires manual report generation and routing, which costs resources time and opens CSSD to the risk of a manual error.
- **Generate coherent CSENet messages without jumbled content.** This has become such an issue that a staff member in the focus group mentioned that another state actually turned off receipt of CSSD's messages.
- **Properly interface with partners, which fails to provide workers with necessary case information.** This causes workers to rely on their knowledge of other systems, and access to those systems or helpful CSSD partners in order to retrieve important case information through going into systems outside of CSES or asking for information through phone/email requests.

8.2.1.2 Risks

The risks related to a lack of automation include:

- **Decreased collections.** Income withholding is a vital tool for the collection of support. The nature of requiring worker approval to send the notice delays the process, as well as leaves open the possibility a notice could be missed.
- **Delayed or prevented actions on intergovernmental cases.** Intergovernmental case communication is key to successful handling. Having another state discontinue receiving CSENet messages means communication must come in another form and a worker must ensure that happens.
- **Lost time to verify information.** Having all information necessary to proceed with a case is vital. Without interface resources, information must be obtained and verified by a worker.
- **Losing the Navajo Nation's use of CSES to Arizona.** Navajo Nation pays for the use of CSES for its New Mexico cases. With the modernization of the Arizona Child Support system, Navajo Nation has a potentially better option for their program. They may choose to discontinue their business relationship and use the currently more-automated Arizona system.

8.2.1.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to a lack of automation include:

- **Customer experience.** Customer inquiries during the application process may be answered in a timely manner without additional research by the worker.
- **Increased child support collections faster.** A modern, automated workflow would allow the right information to flow to the correct person at the appropriate time to support case progression into enforcement and a paying status.
- **Improved performance measures and more efficient use of worker time.** In a modernized child support system, federal performance deadlines can be monitored by workers and management to ensure time frames are met in accordance with the federal requirements.

- **Efficient, effective, automated, intergovernmental communication.**
- **Ensuring appropriate requirements are met prior to filing actions in court.**
- **More time for workers to devote to casework that benefits the families, instead of reviewing lists and manually moving cases to the next step in the process.**

8.2.2 Lack of a Usable Document Generation Solution

HSD lacks a modern, statewide, document generation solution. Most documents created by the program are manually generated by workers from their desktop computers. The images of the documents generated are not stored anywhere for workers to view after they are generated, so unless the customer brings the letter into the office, there is no way for a worker providing customer service to see exactly what was sent to the customer. This may lead to inconsistent information provided to customers.

The abilities of CSES to generate documents is limited by the existing document templates. It is difficult to update the templates and system logic for when to generate the documents within the system, so any changes are cumbersome and take significant time and resources to achieve.

8.2.2.1 Deficiencies and Challenges

The deficiencies and challenges related to document generation include the lack of the system ability to:

- **Automatically generate documents to customers.** This requires workers to spend time manually creating forms and documents and results in no stored image of what was sent to the customer.
- **Automatically record what documents have been generated.** This requires workers to manually record all document information in CSES.
- **Integrate CSES and a record management system.** This requires workers to manually add images of generated documents to the OnBase solution.

8.2.2.2 Risks

The risks related to document generation include:

- Customer confusion when one (1) worker generates something different from another worker for various reasons (training, knowledge, office-specific protocols, etc.).
- Manual document generation always leaves open the risk of error because it requires double entry of information.
- Maintaining an accurate case history is challenged by the manual nature of documenting document generation. In a modern system an image of the generated document would be available so all CSSD staff would be able to see what was sent. When documents are sent outside of the system, worker know the template of the document that was sent, but they will not be able to see the exact document.
- Already scarce time and resources are required to ensure document retention due to workers needing to scan and upload images of their generated documents into OnBase if they want to maintain a history of what was sent to the client.

8.2.2.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to document generation include:

- Reduced customer confusion when all system-generated forms are current, and customer service representatives can find copies of forms as generated by the system.
- Forms, documents, and packages contained in and generated from the system will reduce worker time and increase accuracy.
- Documents generated in the system will be automatically noted in the case record, reducing worker effort.
- Documents generated in the system will be automatically saved to the document management system allowing all users to see what was sent to the customer. This will assist workers in responding to customer questions and will allow for a more accurate virtual case file.

8.2.3 Lack of Modern Communication Methods Within the System

Effective communication increases customer satisfaction and compliance. CSES's inability to provide functionality to communicate directly with customers and record the interactions directly within the case record is a limitation to the program. Increased communication with customers in the customer's preferred method of communication can help the program to create a trusted relationship where customers are continuously informed of what is going on with their case, what they are responsible for doing, and how CSSD is helping.

8.2.3.1 Deficiencies and Challenges

The deficiencies and challenges related to a lack of modern communication methods include the lack of ability to:

- **Communicate with customers using their preferred communication methods.** The child support customer base's methods to communicate have changed through the years, more and more of the customer base prefers to communicate through text messaging and email. CSES does not allow for sending texts or emails through the system, so workers must use outside-the-system tools to do that. When that happens, the communication is not documented in the system unless a worker enters it in a free form field.
- **Provide or receive document images through YES.NM.GOV.** Currently, documents can be uploaded to the YES.NM.GOV unified portal but cannot be exchanged with CSES due to integration issues and also because document images are not recorded in CSES. Currently, documents such as applications are printed from the YES.NM.GOV unified portal site and forwarded to field offices, and there is a day delay, which limits CSSD's ability to effectively communicate with their customers.
- **Communicate automatic reminders to customers through their preferred communication methods.** This causes a barrier in worker's attempts to best provide messaging to their customers.

8.2.3.2 Risks

The risks related to a lack of modern communication methods include:

- Customers receive information that is both inconsistent in terms of what is communicated (manually generated communications will vary from worker to worker) and how it is communicated (some offices may text, others modify a form, others await a customer call, etc.).
- Workers are not able to take full advantage of customer preferred communication methods. This reduces worker’s ability to effectively communicate with customers.
- Workers may introduce errors when documenting off-the-system communications. The process of having to repeat communications (once to the customer directly, again to manually document it in the system) delays the access to the communication information.
- When a document is mailed to a recipient it risks being lost either through the mail, or by the recipient.
- Modern communication often includes reminder texts. Appointments and court dates may be missed if individuals do not receive a reminder.

8.2.3.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to a lack of modern communication methods include:

- Customers will receive real-time information in the method they prefer, consistently across the caseload in terms of both what and how that information is communicated.
- Real-time recorded messaging will enable workers to communicate effectively and efficiently, increasing communication with customers and improving customer relations.
- Documents supplied through the portal will ensure receipt, timely processing, and customer access to their documents.
- Reminders will improve customer attendance at court appearances, CSSD meetings, and possibly payments, which are all currently being done outside of CSES.

8.3 Program

This section focuses on the limitations that affect the program and the State’s ability to meet the critical needs of the program, including implementing new mandates or adjusting to changing situations.

8.3.1 Challenges Meeting the Program’s Needs

CSES lacks the ability to rapidly adjust to significant events, including cultural and law changes. The complicated nature of the system functionality makes it difficult to identify what a process is actually doing in the background. The difficulty in changing the code of the system, coupled with a 40% vacancy rate in the technology team, makes it near impossible to effectively address future rule or regulation changes. If a required state or federal change must be implemented in a timely manner, CSSD and ITD are poised to fail to meet those requirements and will possibly face penalties.

The extensive system limitations severely limit CSSD’s ability to perform child support tasks. CSSD risks the eventuality of falling far behind other states and losing out on potential shared federal funds. They also risk missing out on the advantages of the State’s larger modernization effort as part of HHS 2020.

Because of the system limitations, it makes it hard to innovate on how to serve our customers better; the program is prevented from implementing new innovations in customer service.

8.3.1.1 Deficiencies and Challenges

The deficiencies and challenges related to the inability to modify the system easily to reflect cultural and legal changes include a lack of:

- **Service-oriented information/direction provided by CSES.** Child support programs have shifted from an enforcement culture to a service-oriented culture. New Mexico has programs, such as STEPUp! to assist with job training and assessment, but CSES does not provide support for referral and tracking of alternative programs.
- **Flexibility in family composition within CSES.** Modern family composition has changed. CSES does not support family composition other than one (1) mother, one (1) father, and child(ren).
- **Flexibility in making changes to the system to adjust for potential future federal and state changes.** Laws and rules change; as they do, documents and system processes must also change. Limitations in CSES make document changes difficult, resulting in manual document creation. Additionally, CSES code is currently written in Java, but retains structure and formatting from the old COBOL language used by the mainframe. It requires someone who is familiar in both to complete changes to system processes effectively; CSSD currently has access to individuals with this talent, however this is a fading skill in the workforce and may not always be supported.

8.3.1.2 Risks

The risks associated related to the inability to modify the system easily to reflect cultural and legal changes include:

- As child support adjusts focus from recouping state funds to a more service-oriented program, it is important to maintain information from other state service programs within the child support case management system. This information is crucial to the shift to a higher priority and focus on customers holistically trying to do what is best for New Mexico families. For workers to make the most informed decisions on cases it is crucial to have this information available to them. The STEPUp! program is referred through an API to the Department of Workforce Solutions, but the success of the referral is not monitored in CSES. There is no way to easily retrieve data related to referrals.
- Documents created by CSES may identify a second mother as a father, or a second father as a mother. If not corrected, this will create confusion, potential inaccuracies, and discontent in the community the program serves.
- Manual document generation increases the likelihood of error, and the reliance on a skill quickly fading from the workforce puts CSSD at risk of difficulties in implementing future rules/law changes.

8.3.1.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to the inability to modify the system easily to reflect cultural and legal changes:

- Recording and monitoring program referrals inside the system will allow CSSD to determine the effectiveness of programs, identify areas for improvement, reduce worker time tracking and monitoring the referral, and improve access to information for enforcement purposes.
- A system that supports modern family structures will improve customer experience and relationships.
- A system that allows for easily updated documents and templates will ensure law and policy changes impacting documents can be readily implemented so workers will not need to continue to manually prepare documents offline.

8.3.2 Challenges in Delivering Vital Services

Program challenges exist in delivering vital services to residents.

8.3.2.1 Deficiencies and Challenges

The deficiencies and challenges related to delivering vital services include a lack of:

- **Automated system tracking.** This limitation results in the system not alerting workers to conduct a review and adjustment at all appropriate times, such as when a participant is incarcerated or released from incarceration.
- **Effective system real-time processing.** This limitation results in sanction placement and release not being relayed to the IV-A agency in real-time .
- **Business intelligence.** This limitation means that necessary enforcement actions are not identified timely.

8.3.2.2 Risks

The risks related to delivering vital services include:

- Paying participants are more likely to comply with the terms of their obligation when right-sized orders are in place. Failing to both identify and act when a review is appropriate results in lower performance measures and increased difficulty obtaining compliance.
- Failing to report cooperation and release sanctions timely leaves needy families without.
- Delays in identifying cases needing enforcement action decreases overall program performance and results in missed opportunities for early intervention.

8.3.2.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to delivering vital services:

- Identifying cases meeting review criteria will assist in ensuring proper sized orders are achieved.
- Real-time cooperation status with the IV-A system will streamline sanction releases and ensure families much needed funds are reinstated as soon as possible.
- Identifying cases needing enforcement activity will allow for early intervention and increase overall program performance.

8.3.3 Challenges in Meeting Program Performance Objectives

Meeting and reporting performance objectives are challenged in the current environment due to the lack of data.

8.3.3.1 Deficiencies and Challenges

The deficiencies and challenges in meeting program performance objectives include a lack of the ability to:

- **Automatically move the case to the next appropriate case activity.** This would provide informative worker prompts that direct the worker to tasks that need completion, provide knowledge area information, and guide the worker in prioritizing and completing tasks. This creates barriers to workers in their day-to-day tasks.
- **Track various case activities within the system.** This requires many functions to be recorded and tracked offline, resulting in related data being unavailable in a readily usable manner.
- **Appropriately assign cases.** Currently caseload assignment does not allow for multiple workers/units to be assigned to a case, which limits CSSD's offices from directing appropriate tasks to appropriate workers automatically. For example, if the system receives financial information on a case which is usually reviewed for action by a financial worker, the task should be directed directly to that worker. Instead, tasks go to an assigned case worker, who is then responsible for routing and tracking the task outside of the system.
- **Flexibility in caseload assignment.** Best practices in child support include the ability to assign cases based on your individual office structure. CSES is currently limited to an alpha split assignment model.
- **Automatically create federal reports.** Federal reports are not compiled by the system and need to be manually created.
- **Track federal performance measures and make that information readily available to CSSD staff.** CSSD directors, managers, supervisors, and staff are required to implement their own tracking system to make sure they are within their federal performance goals.

8.3.3.2 Risks

The risks related to meeting program performance objectives include:

- Being unable to identify trends which limits the program to being reactive instead of proactive.
- Manual report compilation is timely and subject to error.
- Federal funding tied to performance measures may be compromised.

8.3.3.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to meeting program performance objectives include:

- Data analytics will be used to identify trends and assist in resource assignment.
- Automated federal reports will save time and improve accuracy.

- Increased program performance may result in increased federal funds.

8.4 Architecture

This section focuses on the limitations associated with the current system's architecture, including the lack of a modern business processes and workflows, efficient interfaces, and data analytics tools.

8.4.1 Lack of Modern Business Processes and Workflows

While the current platform of Windows Java on AWS is modern, the refactored COBOL code to Java did not provide any new functionality or business process workflows the program requires. In addition to the system's COBOL roots and its age, the system lacks modularity, making any given programming challenge more complex than it would be with more modern business process and workflow engines. These challenges represent a primary driver behind ITD's modernization project, as it is extremely difficult to solve the range of challenges that the current code brings with it while remaining on the modern platform.

8.4.1.1 Deficiencies and Challenges

The deficiencies and challenges related to a lack of modern business process and workflows include:

- **Worker availability.** The COBOL-based Java code requires a specific and unique skillset for accurate and efficient coding and testing. Workers with these skillsets are hard to find and becoming increasingly expensive to obtain. This affects both delivery of new functionality as well as "lights on" operation. These skillsets will become scarcer as time goes on, meaning the problem is likely to grow more acute over time.
- **User Interface Constraints.** The screens are still block-mode 24x80 (24 lines of 80 characters each) screens with monospace fonts (e.g., `courier`) that introduce severe usability constraints. It is very difficult to present information to users in a way that highlights important information. It takes multiple screens (requiring time-consuming user navigation) to present information that the user needs to access.
- **Not having a modular architecture.** The system's internal architecture is not modular and has few facilities for code reuse.
- **Requiring batch processing.** Much system work is done in batch, meaning that real-time updates are difficult to deliver.
- **Lack of adequate reporting.** The data warehouse structure is antiquated and does not provide adequate reporting capabilities for staff and management.

8.4.1.2 Risks

The risks related to a lack of modern business process and workflows include:

- **Lack of IT staff.** Due to the specialized skillset of modifying COBOL-based Java code, ITD could find it difficult to adequately staff IT needs in the future. This will affect its ability to add new functionality to the system, meet modified federal and state mandates, or even hamper its ability to conduct simple lights-on operations.
- **Longer development time.** Developing and deploying code in the current environment will continue to take longer than necessary, constraining the features and enhancements that ITD can make.
- **Hampering leaders' decision-making.** Real-time reporting and decision-making will continue to be hampered by the system's fundamentally batch-oriented nature.

8.4.1.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to a lack of modern business process and workflows include:

- Easier access to necessary skillsets and an improved stance to compete for technical talent.
- Access to up-to-date user interface/user experience models, making for an easier to train and easier to use modernized system.
- Better access to add-on tools and technologies such as rules engines and workflow engines so as to reduce hard coding of complex logic.
- Master data management tools which will enhance data quality.
- More efficient and real-time data to be used in reporting and decision making.

8.4.2 Lack of Efficient Interfaces

The CSES system must have the ability to interface with various other agencies. Currently, CSES supports over 120 interfaces with 27 external partners. However, several CSES's interfaces with state, federal, and private systems are either not functional or only partially functional.

Changes over time have impacted CSES interfaces, requiring workarounds and manual corrections to correctly update the records. Also, there are instances where the flow of information or data is not two-way; i.e., there may be outgoing data but no incoming data and vice versa.

8.4.2.1 Deficiencies and Challenges

The deficiencies and challenges related to a lack of efficient interfaces primarily include data quality issues:

- Up-to-date information is not available for program customers.
- Not all the necessary data is received or transmitted with the data partner.
- There are data inaccuracies due to incorrect file mapping and interface logic.

8.4.2.2 Risks

The risks related to a lack of efficient interfaces include:

- Not receiving data from efficient and accurate interfaces could result in work backlogs.
- Inaccurate data received or sent from the system could result in manual cleanups and incorrect work being done.
- Data not being correctly sent to other states could result in slow work time frames or casework stoppages.
- Inefficient or non-existent web interfaces could result in public facing applications not providing quality data to the public.

8.4.2.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the interface challenges and limitations related to a lack of efficient interfaces include the improved quality and quantity of data being :

- **Provided to the public via web interfaces and portals.** This will result in better communication and customer service.
- **Received to the system.** This will result in more efficient and timely work being done by staff.
- **Sent to other out of state child support agencies.** This will result in better communication and data flow.

8.4.3 Lack of Efficient and Effective Data Analytics Tools

The current system does not provide efficient data quality processes or tools for child support data analytics and reporting. Currently data is provided to a data warehouse feature called “eReporting” for some reporting for federal reports but most of the data analytics and data reporting are done by manual queries to the system by technical staff.

8.4.3.1 Deficiencies and Challenges

The deficiencies and challenges related to data analytics tools include a lack of:

- **Automated reporting.** Most data reports are created manually by users. This is time consuming for technical staff.
- **Robust reporting data library.** The eReporting data only produces information for the federal reports such as the OCSS-157 and OCSS-34 reports. It does not provide other child support data to support management and staff requests.
- **Staff to keep eReporting and other tools updated.** Currently there is little support for the eReporting database and data warehouse software.

- **Dashboards and other reporting tools.** Currently, CSES lacks a highly functioning management business dashboard and does not provide adequate reporting tools for management and staff.
- **Predictive analytics in casework.** Currently, the CSES system lacks in any known predictive analytics logic that will allow for efficient and cost-effective casework.

8.4.3.2 Risks

The risks related to data analytics tools include:

- Not having quality data reporting to management can result in poor customer relations, inaccurate reporting to legislative bodies, and an overall lack of distrust of the data which can, in turn, hamper decision-making processes.
- Not enough data quantity or quality can result in flawed business analysis and thus could cause incorrect business decisions to be made.
- Not enough data quantity or quality could result in lost productivity for staff.
- Outdated data being used vs real-time data analytics can result in work backlogs and poor casework decisions being made.

8.4.3.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to data analytics tools include:

- Improve management decision-making for child support work efficiencies, public policy and overall service delivery.
- Allow staff to see real-time data analytics, resulting in improved work processes.
- Improve operations by minimizing worker and system errors.
- By using predictive analytics to analyze child support data trends and patterns, management can develop proactive strategies and policies to address emerging issues before they can become critical.

8.5 Data

This section focuses on the limitations associated with data, including data interchanges and the inability to make data-driven decisions.

8.5.1 Inability to Maintain Necessary Data in the System

CSES limitations necessitate that many functions and actions are maintained offline. The result of maintaining processes and data offline means that data is not available within the system.

8.5.1.1 Deficiencies and Challenges

The deficiencies and challenges related to the inability to maintain necessary data in the system include a lack of:

- **Ability to efficiently maintain employer records within CSES.** This requires records to be maintained in a spreadsheet outside of the system.
- **Data fields within the system.** This causes workers to repurpose fields to store information in commandeered locations. Additionally, sometimes there is a place to store the data, but the data that needs to be entered does not fit in the available field, i.e., international phone numbers or addresses so it is entered in a repurposed field.
- **Space to record all case information.** This includes important case facts which should be stored within the system in easy to access and understand structure, but instead the information is maintained outside of the system or in notes. This makes it difficult to find and track this information.
- **Ability to most effectively manage FTI data.** CSES does not have the technical functionality to allow the system to record and apply FTI, while also implementing strict restrictive access to users.
- **Compatibility with partner systems.** CSES misses out on information that could be received via interface due to CSES inflexibility when it comes to making changes to existing interfaces or creating space within the system to store that information.

8.5.1.2 Risks

The risks related to the inability to maintain necessary data in the system include:

- All records maintained in spreadsheets are subject to inadvertent changes.
- Necessary contact information that cannot be stored in a readily identifiable location hampers communication.
- The case diary is not filterable in any meaningful way. Important information, such as custody arrangements for review and adjustment, is difficult and time consuming to locate.
- Releasing FTI inappropriately may result in penalties.
- Not enough data being collected or sent will result in poor and inefficient casework both for CSSD and any outside agencies receiving CSES data.

8.5.1.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to the inability to maintain necessary data in the system include:

- Clean and clear in-system employer records that contain all necessary information.
- Easily accessible contact information for case participants and other agencies.
- Consolidated, easy to find, case information workers need to make informed decisions and take appropriate actions.

- System support for protecting FTI appropriately will significantly reduce manual measures spent recording FTI related activity and reduce the risk of inadvertent, inappropriate, disclosure of information as well as resulting findings by the IRS Office of Safeguards.
- Improved data and increased efficiency for internal and external agencies.

8.5.2 Inability to Make Data-Driven Decisions

Due to CSES limitations a multitude of information is maintained in ancillary locations, resulting in data not being readily available to support data-driven decisions, to run reports, or to use for audit purposes.

8.5.2.1 Deficiencies and Challenges

The deficiencies and challenges related to the inability to make data-driven decisions include a lack of ability to:

- **Identify trends in case activity.** CSES does not currently use modern data analytics logic to track and identify certain trends in child support case activity. This requires workers to create reports outside of the system and maintain them manually. Additionally, these reports are created using data that was obtained by batch process and can be a few weeks old before being used in the field offices.
- **Track office performance within CSES.** This makes tracking and assessing individual and office performance challenging.

8.5.2.2 Risks

The risks related to the inability to make data-driven decisions include:

- Resources cannot be allocated where most needed. This causes issues in allocating child support workloads effectively and assessing data points to show where business processes are lacking.
- Office performance impacts program performance. If staff are not able to perform their jobs effectively due to poor data driven business processes, it will affect how the child support program performs in all business areas.

8.5.2.3 Anticipated Benefits

The State could expect to see the following benefits by addressing the challenges and limitations related to the inability to make data-driven decisions:

- Resources can be aligned where most needed allowing CSSD to implement enhancements as they come and allow the program to move out of a “lights on only” environment.
- Overall program performance can improve when issues are identified early through system tracking.

9.0 Objectives

The program’s strategic objective to transform from a child support enforcement program to a child support services program and to improve performance is severely constrained by the limitations of the

existing CSES. The next section specifies modernization objectives identified during the needs assessment.

9.1 CSESR Objectives

CSSD and ITD want the new CSESR to address all the child support program needs identified in this needs assessment report. To meet these needs, CSSD, ITD, and the Navajo Nation have identified various objectives for the CSESR Project, classified into five (5) separate modernization objective groups: overall, business, functional, technical, and approach.

9.1.1 Overall Modernization Objectives

The overall modernization objectives provide the highest-level set of objectives for the modernization effort. These objectives will be supporting the vision for the CSESR Project. Modernization will:

- Align with the multi-year, evolutionary initiative of HHS 2020 to reduce the impact of poverty on people living in New Mexico by creating an ecosystem where all New Mexico Human Services Department Divisions can share infrastructure, services, and data
- Provide managers, workers, and attorneys with the information they need, in the format they need it, at the time they need it, so they can make informed decisions and perform business functions without having to leave the system to gather information from other sources
- Increase customer relations through the significant increase in automation, allowing workers to focus on a more holistic approach to providing service
- Improve program performance for the benefit of families
- Reduce training time for new employees
- Implement a modern solution which addresses all functional and technical limitations/needs no later than December 31, 2028

9.1.2 Business Modernization Objectives

The business modernization objectives identify objectives to meet overall business needs. Modernization will:

- Implement a federally certifiable solution that incorporates national best practices
- Increase customer engagement, satisfaction, and compliance by enabling customer interaction in the manner customers are accustomed to in the second decade of the 21st Century
- Provide increased worker efficiency and satisfaction, as well as reduce training time
- Reduce the number of ancillary systems and home-grown workarounds the program depends on to provide vital services through incorporation into the modernized system
- Improve data access to workers by supporting real-time data exchanges
- Provide a modernized system and operational capabilities to accommodate law and rule changes more easily
- Provide time for workers to better understand the needs of their customers

9.1.3 Functional Modernization Objectives

The functional modernization objectives address the major functional needs. Modernization will:

- Reduce the technology limitations and workarounds which drain worker time and prevent them from efficiently performing vital child support work and customer relations
- Improve the ability for customers to communicate directly with the program and their worker through methods they are familiar with
- Automate task direction to ensure timely performance
- Increase the information available to workers and provide the information they need to know, when they need to know it, in a consumable format so they can be proactive in case management
- Enable workers to share information with counterparts across the State with ease and efficiency
- Support tribal agency use of the system

9.1.4 Technical Modernization Objectives

The technical modernization objectives identify objectives for the Project specific to technical needs. Modernization will:

- Create an environment which allows for quicker, easier, less risky, and less costly system modifications and deployments
- Provide a modern platform using up-to-date and widely available technologies, toolsets, and skillsets (staff)
- Embody a modular, layered architecture that segregates different kinds of system logic (business logic, presentation logic, workflow logic, etc.) to produce cleaner, easier-to-modify code, and promote greater code reuse
- Utilize BI embedded directly with the modernized system to allow for a unified data analytics experience driven by real-time data to allow for data-informed decision-making within the case management life cycle
- Promote efficient and automated data interchanges between systems within HSD and throughout the State and federal government
- Leverage framework code/products to reduce the amount of application coding required (e.g., object-relational mapping, logging, messaging). Framework-based coding will allow applications to be built using a template-based structure which will allow developers to build upon code to existing software frameworks. This will result in less coding and allow developers to spend more time developing a high end application.
- Employ technical capabilities that reduce the amount of application coding necessary, including workflow engines and rules engines
- Support automated workflow with customizable features
- Include standard system-wide components and allow for the ability to plug into HHS 2020 enterprise-wide components for critical capabilities such as document management, ICAM (single sign-on), end-user portals, and master data management
- Be hosted in a FedRAMP-certified cloud environment such as AWS or Azure

- Comply with IRS safeguard and SSA security requirements as outlined in IRS Publication 1075

9.1.5 Modernization Approach Objectives (Transitional Objectives)

The transitional modernization objectives identify objectives for the project specific to transitional needs. Modernization will:

- Limit the amount of disruption to services during the project transitional phase
- Mitigate the potential loss of collections or delay in disbursement, due to system downtime during transition between the current and new systems by maintaining collection processing while in transition
- Limit errors by implementing strict data clean-up and conversion rules prior to a project transition phase
- Empower workers by providing effective training on new technologies immediately prior to a project transition phase

10.0 Conclusion and Next Steps

A decade ago, CSSD and ITD realized the need for a modernized child support system to support the staff working to provide child support services to New Mexico Families. The original vision of a single modernization effort changed to a two-phased approach: first get off the mainframe, and then modify the system to meet all the functional and technical needs that were driving the modernization need. The program is experiencing the benefits from completing the first phase of this project when it implemented the refactored system. Among other things, by getting off the mainframe, HSD saves millions of dollars annually in O&M costs; by updating the language from COBOL to Java, ITD need not look for staff with specific COBOL knowledge to create changes to the system. However, despite the successes of the first phase critical needs are still not being met.

On the functional side, CSSD staff identified major deficiencies that remain in the refactored system. Major barriers to successful case operations across all child support functions include a green-screen, block-mode user interface that is difficult to learn and navigate, the reliance on overnight batch processing to move cases along, and an antiquated document management system that staff cannot efficiently use to generate forms. Necessary activities within each functionality cannot be attained by the system either: Case Initiation workers are frustrated that CSES cannot support multiple cases for the same participants; Intergovernmental workers struggle to meet federally mandated timelines to complete certain activities; and Enforcement workers must manually approve IWO generation which delays one of the most effective ways of collecting support. These are just some of the functional problems documented.

On the technical side, one of the major technological deficiencies identified was the fact that the CSES refactoring from COBOL language on a mainframe to Java language on the cloud did not take full advantage of the benefits Java offers. The architecture underlying CSES remains a COBOL-based architecture, which does not optimize the technological efficiencies available in Java. An example of this repeats a functional observation: the batch-driven architecture. This architectural design makes it nearly

impossible to implement some basic technological advances like workflows, rules-based logic, and data-driven decision making. Further, CSES's current architecture and workflow will be very difficult to fully integrate into the HHS 2020 Project. If CSES cannot fully integrate into the HHS 2020 Project, then the shared services that HSD has been developing will be underutilized by CSSD and ITD staff.

CSSD and ITD staff are meeting the needs identified as best they can without a modernized system and have developed some innovative workarounds to help serve the families who rely on child support collections. The CPT is a great example of such a workaround. The system is incapable of providing real-time management reports to field offices, so CSSD developed a data extract that takes several days to organize the output for field offices. Supervisors can and do use this tool to manage their caseload more effectively than CSES allows, but it still has its limitations. CSSD staff spend more than 40 work hours per month creating the CPT, and the date the CPT is distributed to the field varies. Thus, the data is stale-dated on receipt, and becomes even outdated as the field offices use it until the next month's stale data is delivered. Modernizing the system would mean that case prioritization reports can be generated quickly in the system, thus not only saving CSSD staff time but also providing supervisors and caseworkers access to real-time reports enabling them to quickly and efficiently take appropriate case action.

Both the functional and technical needs outlined in this report can be addressed through a modernized system. A conceptual system design summarizes how a modernized system would meet the technical needs, and CSSD and ITD staff discussed transitional requirements and gaps that exist between the current system and the desired state. When CSSD and ITD obtain approval for a new modernized system, the technical needs can be met with the new system design and the functional needs can be addressed simultaneously. Addressing both the technical and functional needs through a modernization effort is the most effective way to support the child support program.

CSSD and ITD will use the work performed and information acquired through the needs assessment. Specifically, these next steps include:

- Identifying requirements of a modernized system which will address all of the functional, technical and transitional needs included in this document.
- Conducting a feasibility study to determine the preferred system alternative which will meet the needs identified during the needs assessment. The feasibility study will include an alternative analysis (transfer, new build, COTS, Government Off The Shelf (GOTS), rewrite), cost benefit analysis, estimation of tangible and intangible benefits, and a risk assessment.
- Conducting a focused business process reengineering (BPR) project. The BPR will identify key business processes which have the highest impact on the program and conduct a BPR analysis on those processes to examine the As-Is process, the anticipated To-Be business processes and evaluate if this identifies additional needs and requirements from the modernized system.
- Beginning OCM activities, including an assessment of current environment and openness to change, and planning for future project OCM activities to address the people side of change.

11.0 List of Attachments

The following attachments can be found in the *New Mexico Needs Assessment Report* folder in the CSESR Document Repository in SharePoint under *Documents->Streamlined Feasibility Study* folder.

11.1 Case Management High Level Analysis Meeting 20230912

11.2 CI and EST High Level Analysis Meeting Minutes 20230911

11.3 CS – INTG – EMPLOYER High Level Analysis Meeting Minutes 20230912

11.4 ENF and LOC High Level Analysis Meeting Minutes 20230911

11.5 FM and REP High Level Analysis Meeting Minutes 20230913

11.6 HSD-CSESR-Project Agenda.Minutes Main Application Features HLA Meeting Minutes 20231026

11.7 HSD-CSESR-Project Agenda.Minutes System Architecture HLA Meeting Minutes 20231025

11.8 HSD-CSESR-Project Agenda.Minutes Technical Organization Staffing and Onboarding HLA Meeting Minutes 20231018

11.9 Tribal IV-D Agency High Level Analysis Meeting Minutes 20230926