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Prepared for:

State of North Carolina, Department of
Health, and Human Services

Workforce Registry and NC Pre-K and Regulatory System Replacement

Request for Proposals

RFP No. 30-23189

Due: August 17, 2023

STATE OF NORTH CAROLINA Department of Health and Human Services	REQUEST FOR PROPOSAL NO. 30-23189	
	Offers will be publicly opened:	
	Issue Date: June 27, 2023	
Refer <u>ALL</u> inquiries regarding this RFP to: Maureen Salman Contract Specialist Office of Procurements, Contracts and Grants maureen.salman@dhhs.nc.gov	Commodity Number: 811118	
	Description: DCDEE - Workforce Registry and NC Pre-K and Regulatory System Replacement	
	Purchasing Agency: Department of Health and Human Services (DHHS), Division of Child Development and Early Education (DCDEE)	
	Requisition No.: 	

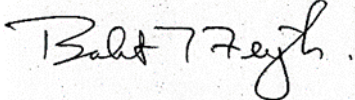
OFFER

The Purchasing Agency solicits offers for Services and/or goods described in this solicitation. All offers and responses received shall be treated as Offers to contract as defined in 9 NCAC 06A.0102(12).

EXECUTION

In compliance with this Request for Proposal, and subject to all the conditions herein, the undersigned offers and agrees to furnish any or all Services or goods upon which prices are offered, at the price(s) offered herein, within the time specified herein.

Failure to execute/sign offer prior to submittal shall render offer invalid. Late offers are not acceptable.

OFFEROR: The Consultants Consortium, Inc. (TCC)		
STREET ADDRESS: 720 E. 52nd Street, Ste. 7	P.O. BOX:	ZIP: 46205
CITY, STATE & ZIP: Indianapolis, IN 46205	TELEPHONE NUMBER: (317) 638-0173	TOLL FREE TEL. NO (866) 563-6767
PRINT NAME & TITLE OF PERSON SIGNING: Breht Feigh, Chief Executive Officer	FAX NUMBER: (877) 448-9989	
AUTHORIZED SIGNATURE: 	DATE: 8/7/2023	E-MAIL: Breht.Feigh@e-tcc.com

Offer valid for ninety (90) days from date of offer opening unless otherwise stated here: ____ days

ACCEPTANCE OF OFFER

If any or all parts of this offer are accepted, an authorized representative of DCDEE shall affix its signature hereto and any subsequent Request for Best and Final Offer, if issued. Acceptance shall create a contract having an order of precedence as follows: Best and Final Offers, if any, Special terms and conditions specific to this RFP, Specifications of the RFP, the Department of Information Technology Terms and Conditions, Department of Health and Human Services Terms and Conditions, and the agreed portion of the awarded Vendor's Offer. A copy of this acceptance will be forwarded to the awarded Vendor(s).

FOR PURCHASING AGENCY USE ONLY

Offer accepted and contract awarded this date _____, as indicated on attached certification, by
(Authorized representative of Purchasing Agency Name).

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Description of Vendor Submitting Offer Form

ATTACHMENT D: DESCRIPTION OF OFFEROR

Provide the information about the offeror.

Offeror's full name	The Consultants Consortium, Inc.
Offeror's address	740 E. 52 nd Street, Suite 7 Indianapolis, IN 46205
Offeror's telephone number	(317) 638-0173
Ownership	<input type="checkbox"/> Public <input type="checkbox"/> Partnership <input type="checkbox"/> Subsidiary <input checked="" type="checkbox"/> Other (specify) <u>S-Corp</u>
Date established	08/08/1996
If incorporated, State of incorporation.	State of Indiana
North Carolina Secretary of State Registration Number, if currently registered	1800680
Number of full-time employees on January 1 st for the last three years or for the duration that the Vendor has been in business, whichever is less.	January 1, 2023 – 157 employees January 1, 2022 – 169 employees January 1, 2021 – 160 employees
Offeror's Contact for Clarification of offer: Contact's name Title Email address and Telephone Number	Mike Boyle, VP of Sales Mike.Boyle@e-tcc.com (317) 625-2547
Offeror's Contact for Negotiation of offer: Contact's name Title Email address and Telephone Number	Mike Boyle, VP of Sales Mike.Boyle@e-tcc.com (317) 625-2547
If Contract is Awarded, Offeror's Contact for Contractual Issues: Contact's name	Lisa Yankey, Attorney Lisa.Yankey@e-tcc.com

Title Email address and Telephone Number	(317) 522-6276
If Contract is Awarded, Offeror's Contact for Technical Issues: Contact's name Title Email address and Telephone Number	Melanie Brizzi, Chief Operating Officer Melanie.Brizzi@e-tcc.com (317) 270-4235

HISTORICALLY UNDERUTILIZED BUSINESSES

Historically Underutilized Businesses (HUBs) consist of minority, women and disabled business firms that are at least fifty-one percent owned and operated by an individual(s) of the categories. Also included as HUBs are disabled business enterprises and non-profit work centers for the blind and severely disabled."

Pursuant to N.C.G.S. §§ 143B-1361(a), 143-48 and 143-128.4, the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. This includes utilizing subcontractors to perform the required functions in this RFP. Contact the North Carolina Agency of historically Underutilized Businesses at 919-807-2330 with questions concerning NC HUB certification.
<http://ncadmin.nc.gov/businesses/hub>

Respond to the questions below.

1. Is Vendor a Historically Underutilized Business? ☐ Yes ☒ No
2. Is Vendor Certified with North Carolina as a Historically Underutilized Business? ☐ Yes ☒ No

If so, state HUB classification:



Vendor Response to Specifications and Requirements

3.1 General Requirements and Specifications

3.1.1 Requirements

TCC has read and understands the general requirements of the RFP.

3.1.2 Specifications

TCC has read and understands the general specifications of the RFP.

3.1.3 Site and System Preparation

TCC has read and understands the Site and System Preparation requirements of the RFP.

3.1.4 Equivalent Items

TCC has read and understands the Equivalent Items requirements of the RFP.

3.1.5 Enterprise Licensing

- a) Identify components or products that are needed for your solution that may not be available with the State's existing license agreement.*

The following components/products are missing from the State's existing licensing agreement:

- a. OpenText Information Management Services (EDMS Solution)
- b. AT&T Cybersecurity USM Anywhere (SIEM Solution).

The license agreements for these products are included in the **Section Third-Party License Agreements, if any.**

- b) Identify and explain any components that are missing from the State's existing license agreement.*

TCC is not aware of any components that are missing from the State's existing license agreement.

- c) If the Vendor can provide a more cost-effective licensing agreement, please explain in detail the agreement and how it would benefit the State.*

TCC is not aware of a more cost-effective licensing agreement that can be offered to the State.



3.2 Security Requirements and Specifications

3.2.1 Solutions Hosted on State Infrastructure

TCC proposes hosting the solution within the State’s AWS Cloud environment as well as a small portion residing in the State’s Azure environment for the Azure Active Directory B2C, and Azure External Identities feature requirements. For this effort, a completed VRAR assessment document has been completed and attached. During the design and implementation phase TCC will work with State staff to ensure the needed resources are deployed, configured, and maintained going forward meeting all State security and regulatory requirements.

3.2.2 Solutions NOT Hosted on State Infrastructure

Not applicable.

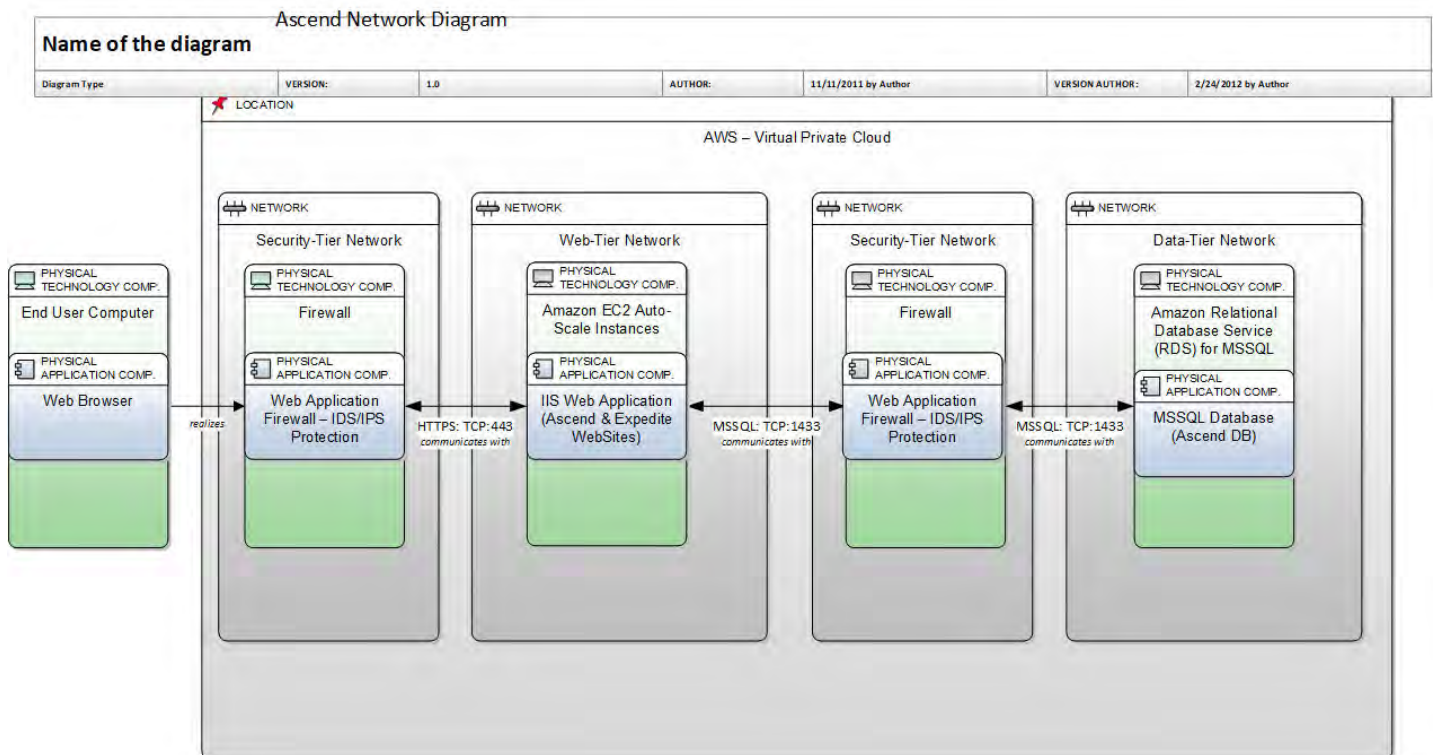
3.3 Enterprise Specifications

3.3.1 Enterprise Strategies, Services, and Standards

TCC has read and understand the Enterprise Strategies, Services, and Standards of this RFP.

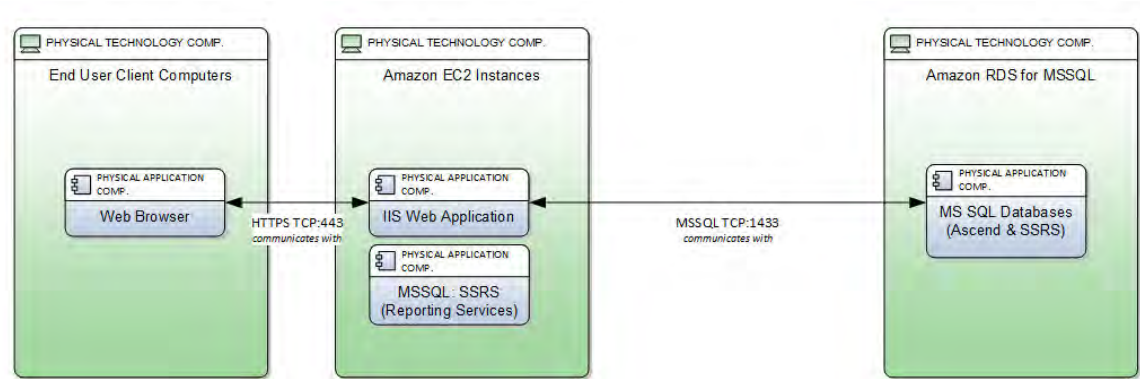
3.3.2 Architecture Diagram Defined

Ascend Network Architecture Diagram

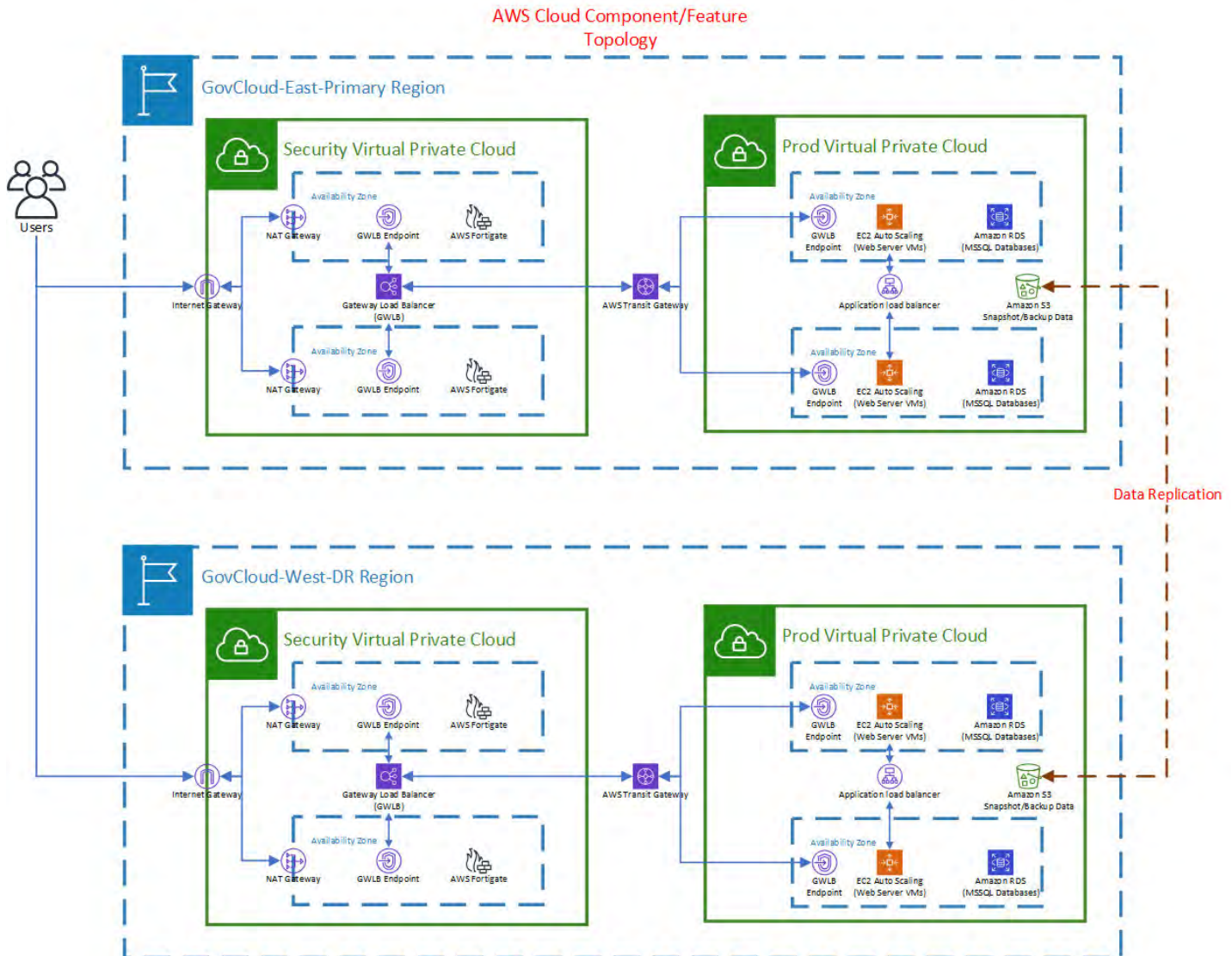


Ascend Technology Stack Diagram

Ascend Technology Stack						
Name of the diagram						
Diagram Type	VERSION:	1.0	AUTHOR:	11/11/2011 by Author	VERSION AUTHOR:	2/24/2012 by Author



Ascend AWS Component/Feature Topology Diagram



3.3.3 Virtualization

Though TCC's proposed solution is intended to operate within the State's AWS Cloud, it is fully supportable within a VMware virtualized environment with some caveats that would need to be addressed. Some of the features and services being leveraged from AWS fall into the managed Platform as a Service (PaaS) model. This includes features such as Amazon RDS for MSSQL. Under this model the management of the database clusters, failover, patching, and other related services are managed by AWS eliminating some of the administrative burden associated with managing those capabilities independently. If the desire to change over to a VMware virtualized environment happens as part of a future state, discussions around the migration planning and administrative efforts in order to cover the same functionality would need to take place. However, overall, the solution is 100% supportable in a virtualized environment.

3.3.4 Identity and Access Management (IAM)



TCC's proposed solution leverages Azure Active Directory B2C combined with Azure External Identities. These provide the foundation for all authentication, sign-up, and sign-in activities. By creating user flows, the solution can be configured to integrate with defined external identify sources such as NCID by passing tokens. These tokens can be based on standard authentication protocols such as OAuth 2.0, OpenID Connect, or SAML. The tokens will have defined user claims mappings that map user attributes from the NCID system to the solutions directory services (Azure AD B2C). This includes, but is not limited to, attributes like FirstName, LastName, EmailAddress, UserRole, and whether or not the MFA requirement has been satisfied.

3.4 Business and Technical Specifications

TCC has completed Attachments K through O with responses to all requirements. They are included at the end of this proposal response under the following titles:

- Attachment K – Regulatory Modernization Business Specifications
- Attachment L – Workforce Registry Business Specifications
- Attachment M – NC Pre-K Specifications
- Attachment N – Subsidy Provider Compliance Business Specifications
- Attachment O – Business and Technical Specifications

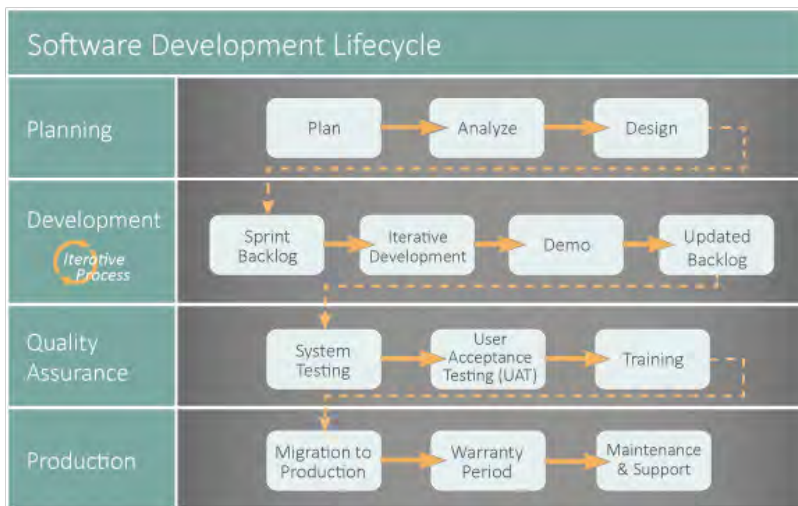
3.5 Management Specifications

3.5.1 Software Development Life Cycle (SDLC)

Software Development Lifecycle

TCC leverages and integrates the iterative processes of Agile into the SDLC. Below is a depiction of the four stages of the Software Development Lifecycle (SDLC). Combining Agile and SDLC methodologies ensures continuous and authentic client and stakeholder engagement.

TCC works closely with customers to identify and engage stakeholder groups in each step of the SDLC. Engagement does not stop after planning and requirements. TCC's processes ensure that stakeholders are involved throughout the entire SDLC approach, including development and testing.



3.5.2 Project Management

1. Vendor Project Management Approach

TCC Project Approach and Methodology

TCC has extensive experience in implementing complex data management systems using a successful combination of Project Management Institute (PMI) standards, Agile techniques, and Software Development Life Cycle (SDLC) principles.

PMI Standards

TCC applies principles of Project Management Institute (PMI) Standards and other proven methodologies to ensure successful project implementation. TCC understands the dynamics of complex public and private sector IT systems, and how the involvement of stakeholders can impact and support a project. To identify and mitigate risk to the project, TCC uses a results-driven approach and the utilization of PMI Standards and Methodology. Being knowledgeable in project and product life cycles, TCC project managers are responsible for the development and implementation of project plans including project charters and/or statements of work (SOWs); work breakdown structures; project schedules and significant milestones; resource planning; assumptions and constraint list and risk identification and mitigation strategies.



Project Management Tools

TCC utilizes the following project management tools:

1 – Microsoft Office Tools

- Word – Used for documentation deliverables.

- Excel – Used for project metrics, budgeting, and documentation deliverables.
- Project – Master project plan management.

2 – Microsoft Teams

- Video/Conference call solution.
- Document retention for deliverables.
- Communication solution for the project team.

3 – Azure Dev Ops

- Configuration Management solution
- Code Deployment solution
- User Story and Use Case Management system
- Product Backlog management
- Development task management
- Test script and plan retention
- Project metric tracking system

4 – TCC Project Management Office

- Project Management templates
- Organizational processes and procedures
- Training for project managers

Agile Techniques

Agile processes focus on the repetition of abbreviated work cycles, known as sprints, TCC remains adaptable and responsive to the needs of clients during every aspect of data system development. One of the benefits of utilizing the Agile development methodology is the significant involvement of client stakeholders who provide feedback during each sprint, resulting in a working increment of the product delivered according to customer specifications.

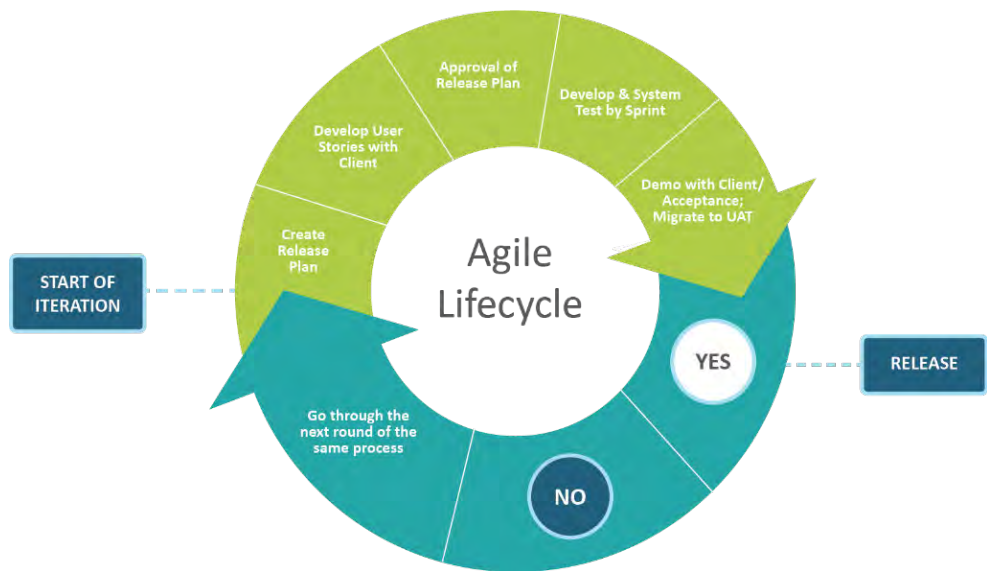
By using Agile techniques, TCC is confident that the following principles are adhered to during the development lifecycle of all projects, resulting in high levels of customer satisfaction:

Principles of Agile

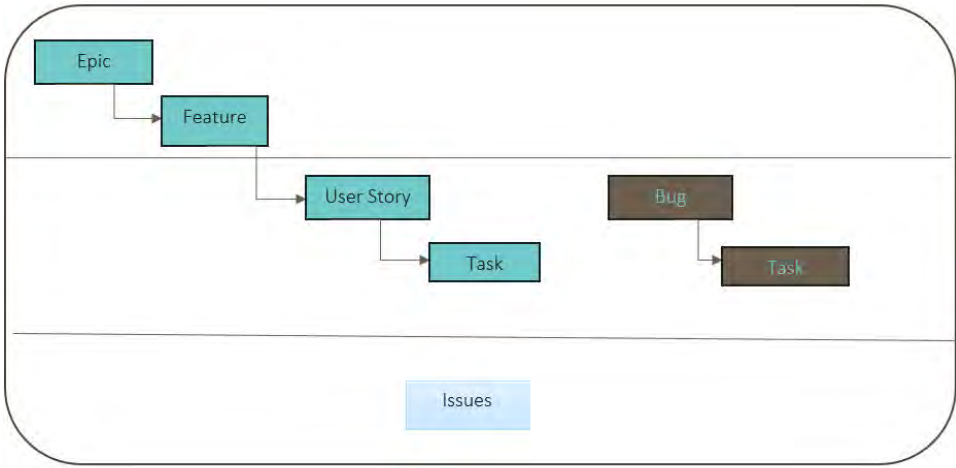
- Measurable progress during all phases of the lifecycle.
- Increased responsiveness to customer feedback.
- Self-organized teams.
- Effective cooperation between the customer and development team.



- Adaptability.



TCC’s process involves working with stakeholders to determine the necessary functionality of the system and organizing the activities which create this functionality. TCC works with stakeholders to breakdown the business requirements into smaller, manageable chunks that are defined in user stories, developed, and demonstrated to stakeholders in the iterative sprint cycle process, as described below.



Terminology	Description
Epic	An Epic is a high-level business requirement, defining a piece of functionality that the user needs. The functionality in an Epic is loosely defined because it

Terminology	Description
	can be broken into lower levels of functionality called Features. It does not contain the details that go into a user story. These details are defined in the user stories, which are part of each feature. An epic usually takes more than one iteration to complete.
Feature	A feature is a chunk of functionality that delivers business value, and either stands-alone or is contained within an Epic. A feature must contain at least two user stories as child work items. Features do not contain details for development; these are contained in the child user stories.
User Story	A user story is a tool used in Agile software development to capture a description of a software feature from an end-user perspective. The user story describes the type of user, what they want and why. A user story is a description of a requirement. A User Story is a well-defined work item that is specific, measurable, achievable, relevant, and time bound. A User story has well defined acceptance criteria that will be used by the developer for unit testing and the system tester for writing and passing test scripts.
Task	Sprint tasks are used by teams to decompose user stories or product backlog items (PBIs) at the sprint planning meeting to a more granular level. In scrum, planning and estimates become more detailed over time. At a high level, a project may start as epics or features, which are then broken down into user stories. Tasks are used to break down user stories even further. Tasks are the smallest unit used in scrum to track work. A task should be completed by one person on the team, though the team may choose to pair-up when doing the work.
Bug	A bug is introduced into the software as the result of an error. It is an anomaly in the software that may cause it to behave incorrectly, and not according to the User Story specification. A user story is not completed until all bugs are fixed.

Development Occurs in Iteration

The phase for the actual development activity is called an Iteration. An Iteration is a collection of sprints. Each project may have a different number of sprints that make up an iteration. This allows the team to have a broader vision of the project.

Iterations support these requirements:

- Define sprints Scrum teams use to plan and execute their sprints.



- Set up more complex multi-release and sprint cycles.
- Filter queries based on sprints, milestones, or cycle time for your project.
- Support future work that the customer is not ready to assign to a target release cycle.

Prior to beginning work, the project team meets for Iteration Planning, which typically lasts for two days. The capacity for the iteration is determined based on staff availability and time-off requests. User stories are prioritized for the iteration by the product owner. The team talks through all prioritized user stories and estimates story points based on complexity. The team also estimates the task hours for each user story to determine what can realistically be completed in each iteration based on capacity. Any user stories that cannot be completed in the current iteration will be placed into the backlog.

Once the project team completes Iteration Planning, stakeholders are informed of the next set of user stories for development and schedule a stakeholder sprint demo to review the development progress of those items. Each project will have multiple iterations until each user story is complete and fully functional.

Minimum Viable Product (MVP)

TCC utilizes the Minimum Viable Product (MVP) methodology in conjunction with the Agile approach. A minimum viable product is a product with just enough features to satisfy a subset of possible customers such as early adapters, and to provide feedback for future development. Gathering information from an MVP is often less expensive than developing a product with a full set of features, which increases costs and risk if the product fails due to incorrect assumptions.

Benefits of utilizing the MVP approach include:

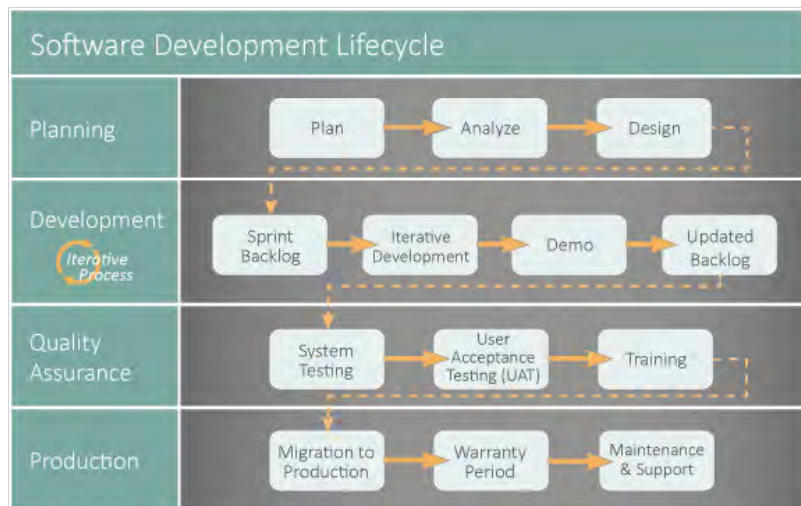
- Stakeholder involvement to prioritize product features and functionality.
- Ability to test a product with minimal resources.
- Accelerated learning on the part of developers.
- Reduce wasted development hours.
- Gets the product to early customers as quickly as possible.

Software Development Lifecycle

Below is a depiction of the four stages of Software Development Lifecycle (SDLC). TCC leverages and integrates some of the iterative processes into the SDLC. Combining Agile and SDLC methodologies ensures continuous and authentic client and stakeholder engagement.

TCC works closely with customers to identify and engage stakeholder groups in each step of the SDLC. Engagement does not stop after planning and requirements. TCC's processes ensure that stakeholders are involved throughout the entire SDLC approach, including development and testing.





2. Vendor Project and O&M Deliverables

TCC fully describes the approach to completing all project deliverables described below, in the Project Management Plan, the Draft Project Schedule, and discussed in multiple sections throughout the document.

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Kick-Off Meeting	Contributor	n/a
Project Kick-Off Meeting Report	Owner	n/a
Executed Escrow Agreement and Escrowed Solution Source Code (if COTS product(s) are included in the proposal)	Owner	n/a
Vendor Project Schedule	Owner	n/a
Vendor Project Management Plan	Owner	n/a
Vendor Project Staffing Plan	Owner	n/a
Project Communication Plan and Communications Matrix	Contributor	n/a

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Project Risk and Issues Management Plan, Project Risk Watch List Matrix, and Project Issues Log	Contributor	n/a
Vendor Software Quality Assurance Plan	Owner	Review and update every twelve (12) months or when impacted
Project Change Management Plan, Project Change Request Form, and Project Change Request Log	Contributor	n/a
Security Plan	Vendor-Hosted Solution: Owner ; or State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted
Technical Architecture Diagrams	Owner	Owner
Configuration and Release Management Plan	Owner	Review and update every twelve (12) months or when impacted
Training Plan	Owner	Review and update every twelve (12) months or when impacted
Test Plan (Technical Testing; see also dedicated Data Migration and Performance Test Plans below)	Owner	Review and update every twelve (12) months or when impacted
Deployment Plan	Owner	Review and update every twelve (12) months or when impacted



<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Gap Analysis Document	Owner	n/a
System Requirements Document	Owner	Update when impacted
Solution/Sprint Backlogs	Solution Backlog: Contributor Sprint Backlog: Owner	Contributor
Use Cases	Owner	Owner
User Stories	Contributor	Contributor
Requirements Traceability Matrix	Owner	Owner
Data Model	Owner	Update when impacted
Data Dictionary	Owner	Update when impacted
Detailed Design Specifications Document	Owner	Review and update when impacted
Infrastructure Requirements (State-Hosting Option only)	Owner	Update when impacted
Infrastructure Configuration Specifications (State-Hosting Option only)	Owner	Update when impacted
Vendor Recommendation for Technical Training for State IT Support Personnel	Owner	Update when impacted
Configured State Technical Environments (for State-Hosting Option)	Contributor	n/a
Technical Skills Transfer (State-Hosting Option only)	Owner	Update when impacted
Base Product and Base Product Installation Instructions (for COTS products with State-Hosting Option)	Owner	Owner for new product releases



<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Assist the State to install the Base Product(s) (for COTS products with State-Hosting Option)	Owner	Owner for new product releases
Design Review Sessions	Owner	Owner
Test Cases	Owner	Owner
Test Scripts	Owner	Owner
Prepare and Demonstrate All Test Environments	Vendor-Hosted Environments: Owner State-Hosted Testing Environments: Contributor	Vendor-Hosted Environments: Maintain testing environments as needed State-Hosted Testing Environments: Contributor
Unit Test Results Report	Owner	Owner
System Test Results Report	Owner	Owner
Regression Test Results Report	Owner	Owner
Integration Test Results Report	Owner	Owner
Accessibility Test Results Report	Owner	Owner
Demonstration of Tested System	Owner	Owner
General Backup and Recovery Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted
Disaster Recovery Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted



<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Performance Test Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Cases	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Scripts	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Readiness Report	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Results Report	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Agency Approval of Performance	Owner	Owner
Data Conversion and Migration Plan	Owner	n/a
Data Map	Owner	n/a
Data Conversion Test Cases/Scripts	Owner	n/a
Data Conversion and Migration Test Results Report	Owner	n/a
Agency Acceptance of the Converted and Migrated Data	Owner	n/a
User Acceptance Test Plan	Contributor	Contributor



<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
UAT Test Cases and Test Scripts	Contributor	Contributor
UAT Training Materials	Owner	Owner
UAT Training	Owner	Owner
UAT Results Report	Contributor	Contributor
Agency Acceptance of Tested Solution (for all releases or deployment phases)	Owner	Owner
User Guides, Quick Reference Guides, and Online Help Documentation	Owner	Owner
Technical and System Administration Documentation	Owner	Owner
Service Level Agreement(s)	Owner	Review and update every twelve (12) months or when impacted
Training Materials	Owner	Owner
Training Delivery	Owner	Owner
Operations and Maintenance Plan (State Hosting option only)	Owner	Review and update every twelve (12) months or when impacted
Release/Deployment Readiness Checklist	Contributor	Contributor
Completed Release/Deployment Readiness Checklist (For all releases or deployment phases)	Contributor	Contributor



<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Onsite Assistance during Release/Deployment Readiness (State-Hosted Solutions only)	Owner	Owner
Vendor Operations and Maintenance Staffing Plan	Owner	Update when impacted
Onsite Assistance during Release/Deployment (State-Hosted Solutions only)	Owner	Owner
Validation Test Results Report	Owner	Owner
Deployment UAT Results Report	Contributor	Contributor
Agency Acceptance of Deployment UAT Results (For all releases or all deployment phases)	Owner	Owner
Vendor Support during the Stabilization Period	Owner	n/a
Agency Acceptance of the Stabilized Solution	Owner	n/a
Lessons Learned	Contributor	n/a
Project Status Meetings	Contributor	n/a
Project Status Reports	Owner	n/a
Sprint Reports	Owner	Owner
Operations and Maintenance Status Reports	Owner	Owner
Transition Plan	Owner	Owner
Project Peer Review	Contributor	n/a



3. Vendor Project Staffing

TCC's Draft Project Schedule, which includes project staffing information in the detailed steps of how TCC will complete each deliverable is included in the Draft Project Schedule section of this document.

4. Releases/Production Deployment and Support

TCC's Project Schedule has the initial Production Release for the Pilot starting on 7/19/2024, running the pilot for about a month. Updates will be made to the system during the Pilot with the schedules release for a State-wide rollout to Production starting on 9/25/2024. TCC will schedule another release within 2 weeks of the initial Production Migration and proposes subsequent releases approximately every 6 weeks thereafter in the Operations and Maintenance Phase.

TCC has Standard Operating Procedures for Production Deployments. In order to migrate to Production, the Production Readiness Form is completed by the TCC Project Manager and signed off by the Client Project Manager, Client Executive, and TCC Project Director. The form validates a wide variety of Categories and Criteria to ensure a successful migration. Below is an example of the Categories and Criteria from TCC's Production Readiness Form:

Category	Criteria
Functional and System Requirements	All approved functional and system requirements have been tested and pass User Acceptance Test. UAT Exit Criteria has been approved and signed-off by the end-user/stakeholders.
UAT Plan	UAT test scenarios and results were recorded and tracked.
Defects	All Urgent, High, and Medium defects must be resolved before the application is considered ready for Implementation. Program has agreed to accept the application if any Low defects and some agreed upon Medium defects are still outstanding with the understanding that they will be provided with a schedule of when the defects will be corrected.
Conversion	Conversion process has been executed in UAT environment, and the process has been tested and approved by UAT.
Interfaces	Interfaces will be ready for implementation and have been tested and approved by UAT.
Batch Processes	All batch processes have been tested and approved by UAT.
Security	Verify all security requirements are in place.
Work Stations	Verify the local department offices are properly configured and can access the <Project Name> application.
Production Environment	Verify the following are in place and operational: <ul style="list-style-type: none"> • Hosting environment • Infrastructure • Licenses and license agreements
Scope Control	All issues and defects identified during UAT were properly recorded and tracked.
Training	Training needs have been addressed.
Training Environment	The Training environment update has been scheduled.
Go/No-Go Decision	The Implementation Date has been set.
Production Migration Plan	The Migration Plan is complete with steps to complete the migration, communication plan and backup/rollback plans.

Prior to Migration, TCC also prepares a Production Migration Plan. The Production Migration Plan outlines the strategy and steps involved in transitioning an application from one environment to another, usually from a development or testing environment to a live or production environment. It ensures a smooth and controlled transfer to minimize disruptions and risks. TCC's standard Production Migration Plan includes the following items:

1. Communications Team – All contact information (email and phone numbers) for TCC Staff and Client Stakeholders.
2. Pre-Migration Checklist - Start and end dates, along with any key milestones, deadlines, and downtime windows.
3. Migration Steps – Includes roles and responsibilities for each staff member.
4. Validation Steps - Specifies the steps required to gain approval from stakeholders.
5. Jobs and Reports for Validation - Tasks that need to be completed after the migration, such as final data validation, performance tuning, and optimization.
6. Roll Back Plan - A plan to address unexpected scenarios, like system failures or data corruption, and how to recover.

TCC is committed to providing onsite support to assist the agency with deployment readiness activities prior to the migration, deployment tasks during the migration and additional support as needed after a deployment. TCC will be responsible for ensuring the state has a smooth transition to the new platform. On the day of the migration, TCC will provide communications to the state team every step of the way. A Microsoft Teams call will remain open during the migration, and for at least the following day, for issues to be reported immediately and handled by the TCC team.

During the stabilization period, TCC will be documenting any issues and ensuring they are cataloged in Azure Dev Ops for tracking and resolution. The Agency will be actively engaged in both the triaging of issues and determining when they are resolved to completion.

TCC successfully built and deployed the DCDEE WORKS application in the State Data Center in December of 2020. TCC was a new vendor and was able to work quickly and coordinate with the previous vendor, the DCDEE team, and DIT staff to complete the production deployment in less than two weeks. Since that time, TCC has deployed almost 30 production releases for DCDEE WORKS. TCC undergoes a similar process for each production release and provides the DCDEE WORKS team with a full implementation plan and release package that includes the scope of the release as well as any defect resolution activity and other pertinent information, for DCDEE.

3.5.3 Testing

Approach to Technical Quality Assurance Testing

Testing is a crucial part of the software development lifecycle that ensures the solution meets the required quality standards and performs as expected. TCC will implement a comprehensive testing strategy that includes the following phases and various levels of testing to ensure technical quality.

1. Requirements Analysis and Review:

TCC's approach to ensure effective testing starts at the beginning of each release when business requirements are being finalized. In this phase, the QA team collaborates with stakeholders and Business Analysts to understand the system requirements and objectives. They review the requirements documentation to ensure they are clear, complete, and feasible. This step helps prevent misunderstandings and discrepancies later in the development process.

2. Test Planning:

During this phase, a detailed testing strategy is formulated. The QA team defines testing objectives, scope, resource allocation, timelines, and the testing environment. Test planning also involves identifying the types of testing to be performed and the required testing tools and resources. TCC Test plan will align with the requirements included in Appendix J of the proposal.

3. Test Case and User Case Design:

In this phase, test scenarios and test cases are created based on the requirements and design specifications. Test cases outline the steps to be executed, expected outcomes, and any necessary test data. This step ensures comprehensive coverage of the solution's functionalities.

4. Test Environment Setup:

Setting up the testing environment involves configuring the necessary hardware, software, and infrastructure to replicate the production environment. This environment will mimic real-world conditions to ensure accurate testing results. Please see **Section 3.5.6.3 State Hosted Solution.** for TCC's proposed schedule for setting up the needed environments.

5. Test Execution:

During this phase, the actual testing takes place. Testers execute the designed test cases, record results, and identify defects. Different types of testing (unit testing, integration testing, system testing, etc.) are performed as appropriate based on the testing strategy.

6. Defect Reporting and Tracking:

When defects are identified during test execution, they are reported to the development team using Azure DevOps. This system allows developers to prioritize, address, and fix the reported defects. Testers also verify the fixes once they are implemented.

7. Regression Testing:



After defect fixes or new code changes, regression testing is performed to ensure that the modifications have not introduced new defects or adversely affected existing functionalities. It involves running previously executed test cases to validate system stability.

8. Test Reporting:

The QA team generates comprehensive test reports that include information about the tests executed, their outcomes, any defects found, and their severity. These reports provide insights into the quality of the software and help stakeholders make informed decisions.

9. User Acceptance Testing (UAT):

In this phase, the Agency validates the software's functionality against their requirements and expectations. UAT helps ensure that the software aligns with business needs and user needs before it is released to production.

10. Release and Deployment Testing:

Before software is released to production, a final round of testing is conducted to ensure that the deployment process works smoothly, and that the software behaves correctly in the production environment.

11. Post-Release Monitoring and Validation:

After deployment, the software is continuously monitored for performance, stability, and any unexpected behavior. Any issues that arise are addressed promptly to maintain a high level of quality.

TCC implements a continual quality improvement philosophy and process throughout the SDLC. This improvement in the quality assurance process is achieved by collecting and analyzing testing metrics to identify areas for improvement and conducting retrospective meetings to discuss effectiveness and identify issues. These findings, along with stakeholder feedback, are incorporated to refine the testing strategies.

System Test Plan

The System Test Plan is the formal deliverable that will outline each of these phases and the testing strategies the TCC team will use to verify that the application to be delivered is in compliance with the functional requirements and business requirements, as approved by the Agency, prior to release of the system. Draft and Final versions of the System Test Plan will be submitted to the Agency for approval. The overall objectives of the System Test Plan deliverable are as follows:

- The system meets or exceeds all functional requirements and specifications as approved by the Agency.
- The system captures all intended business functionality, as approved by the Agency.
- The system adheres to all software, hardware, and configuration standards, as approved by the Agency.
- The system satisfies all functional, interface, performance, network, regression, IVR and transition test cases, as approved by the Agency.



- The system satisfies the entrance criteria for User Acceptance Criteria.

The System Test Plan will also include the following:

- Test Team Roles and Responsibilities
- High-Level Testing Schedule and Key Testing Milestones
- Assumptions
- Identified Risks and Issues
- Stakeholder and Project Management Sign-off

The TCC system testing process emphasizes timely and accurate planning, monitoring, and the use of best practices in all activities related to testing. TCC uses a comprehensive test strategy that addresses the overall testing effort which includes functional, system acceptance, performance, network, regression, and transition testing. Documentation is integral throughout the process to ensure that testing is carried out successfully against the defined requirements.

Upon validation and final approval of the Requirements Specification Document the TCC Test Team, in collaboration with Project Management, will develop the Requirements Validation Matrix. This document will map each requirement to one or multiple test cases to ensure that during testing all functionality is being tested prior to release. Once the test cases are identified, one or multiple test cases are grouped into a user case scenario. These use case scenarios are intended to not only test the technical functionality, but ultimately the intended business functionality.

In addition to functional test cases the following types of test cases will also be mapped:

- Interface
- System Acceptance
- Performance (stress)
- Network Performance
- Regression
- 508 Compliance
- User Acceptance

Test Case and Use Case Design:

The System Test Plan will include the test cases and use case scenarios which will be performed during system testing. These documents will be stored in Azure DevOps for reference throughout the project. These documents will adhere to the following standards:

- Test cases will be documented within Azure DevOps.
- One or multiple test cases will be written to validate each requirement.
- One or multiple test cases will be compiled to develop one use case scenario.



- Test cases and use case scenarios will provide logical steps and describe the actions required to execute the test to produce the expected results.
- Test cases and use case scenarios will be ordered logically by related function together to promote ease of execution.
- Test cases and use case scenarios will be assigned a numeric ID which corresponds to the Requirements Traceability Matrix.
- Test cases will (at minimum) provide the following information to the person performing the test:
 - Requirements Traceability Matrix ID
 - Test Title
 - Test Description
 - PC Configurations
 - Test Data (if applicable)
 - Inputs
 - Outputs
 - Script (procedure/steps)
 - Expected Outcome

The Code Walk Through

Prior to executing test cases, a Code Walk Through is conducted. The Code Walk Through is a functional demonstration conducted by the Development Team to familiarize the Test Team and Project Management with the code which has been developed, its expected functionality and to review any outstanding issues. During this meeting, any defects found during unit testing are documented and assigned to a Test Team resource to verify resolution. The objective of this meeting is to provide a warm hand-off from the Development Team to the Test Team and to ensure the code developed is ready for system testing.

The Testing Environment

TCC uses Azure DevOps to log, track, and document all test cases during the testing process. Each requirement and corresponding test case(s), as documented in the Requirements Traceability Matrix, is uploaded to Azure DevOps. Test cases are assigned a resource from the Test Team who will conduct the test and is assigned to the developer responsible for the code being tested. As test cases are completed the assigned Test Team resource uses the Azure DevOps workflow capabilities to either assign a status of “completed,” if the test case is performed successfully, or if the test case fails can reassign the code associated to that test case back to the developer for investigation and code remediation if necessary.

Conducting the Tests

The TCC Test Team follows a repeatable, iterative process during the system testing phase. Each test case is conducted, and the result is evaluated. If the expected result is achieved the test is considered successful and closed in Azure DevOps. If the expected result is not realized, the Test Team member utilizes Azure DevOps workflow and assigns the test case back to the Development team for investigation. If the developer is not able to reproduce the defect, he or she reassigns the test case back to the Test Team for re-testing. If the developer



is able to recreate the defect, he or she begins the process of code remediation. Once code remediation is thought to be completed the test case is again assigned to the Test Team for verification. This process is repeated until both the Development Team and the Test team are confident that the defect has been resolved. At that point, the defect is closed in Azure DevOps. Throughout this process the Test Team manager documents the status of all outstanding defects, test cases completed, and test cases outstanding. Regular status meetings are held to update Project Management to discuss progress and potential risks and issues.

Defect Tracking & Reporting

Identified defects will be logged and tracked within Azure DevOps. All defects will be assigned with a Severity and a Priority level and assigned to a member of the Development Team. The Test Team Manager will conduct defect status meetings to track the status on reported defects. The Test Team Manager will also compile a Defect Summary Report which will be provided to the Project Manager.

TCC Test Team responsibilities include:

- Analyzing and verifying test results.
- Documenting test results including defects reported and the current status of reported defects.
- Documenting discrepancies between expected and actual results.
- Monitoring testing progress and reporting status to the Test Team Manager and Project Manager.
- Logging defects, retesting defects and closing defects within Azure DevOps.
- Working with the development team to determine root cause of defects.
- Running execution (percentage, pass/fail) reports within Azure DevOps.
- Running Defect Aging reports within Azure DevOps.
- Facilitating Testing Status meetings.
- Communicating testing issues and risks to the Project Manager.

Severity and Priority of Defects

The TCC Test Team assigns both a Severity level and a Priority level to each defect identified. This enables Project Management to make informed decisions on how best to proceed with testing. Using this method also enables Project Management to clearly present testing status to the State so that all parties are informed and aware of progress and of potential risks and issues. TCC measures and reports on defects using the following scales:

Severity

- **Level 1 (Critical):** The defect results in the failure of the complete software system, with no manual processing alternatives which will yield the desired result.
- **Level 2 (High):** The defect results in the failure of the complete software system, however, there are alternatives which will yield the desired result.
- **Level 3 (Medium):** The defect does not result in a failure, but causes the system to produce incorrect, incomplete, or inconsistent results, or the defect impairs the system's usability.

- **Level 4 (Low):** The defect does not cause a failure, does not impair usability, and the desired processing results are easily obtained by working around the defect.
- **Level 5 (Cosmetic):** The defect is related to the aesthetics of the system or is a request for an enhancement. Defects at this level may be deferred or even ignored, as approved by the State.

Priority

- **Resolve Immediately:** Further development and/or testing cannot occur until the defect has been repaired.
- **High Attention:** The defect must be resolved as soon as possible because it is impairing development/and or testing activities. System use will be severely affected until the defect is fixed.
- **Normal Attention:** The defect should be resolved in the normal course of development activities. It can wait until a new build or version is created.
- **Low Priority:** The defect is an irritant which should be repaired but which can be repaired after more serious defects have been fixed.
- **Defer:** The defect should be evaluated by Project Management and the State. It may be placed in the backlog for future enhancement list or not resolved at all.

Approach to UAT

TCC will develop a comprehensive UAT Test Plan that outlines the testing strategy for UAT of the solution and any requested solution changes. The plan will include details on preparation activities, test data requirements, testing activities and tasks including roles and responsibilities. TCC will provide a UAT schedule that includes expectations about stakeholder involvement and levels of effort. The UAT plan will define UAT entrance and exit criteria, procedures, and acceptance criteria. The TCC team will also include a plan that details the support that will be available during UAT, including role-based training (see **section 3.5.4 Training** for additional details about TCC's training methodology) and the establishment of a bridge line to provide support to testers during the process. TCC will also draft the final UAT Results Report.

Prior to beginning UAT, TCC will draft UAT test cases and test scripts for testers that include all the information needed to complete testing to ensure that the solution satisfies the Agency's requirements and works correctly. Each requirement will be mapped to one or more test cases.

TCC understands that UAT can sometimes be a confusing and time-consuming activity for Agency participants. To facilitate this process, TCC will provide comprehensive training to ensure that each tester has the appropriate skills and support to operate the solution during testing. Training approaches may include onsite or remote synchronous training, recorded training materials, user guides, reference manuals and one-on-one support during UAT. As will all TCC training, post-training surveys are utilized to ensure effectiveness and continual quality improvement.

At the conclusion of each instance of UAT, a results report will be provided, and agency acceptance obtained.



Data Conversion

TCC successfully corrected a data conversion and migration performed by a previous vendor for the DCDEE WORKS program and understands the impact of a poorly performed data conversion. TCC is confident in our ability to successfully convert and migrate data, including thorough testing after data conversion to ensure a complete and accurate transfer of data.

See **Section 3.5.5 Data Conversion and Migration** of this proposal for an in-depth description of TCC's data migration and conversion methodology.

TCC understands that testing data migration is crucial to ensure the accuracy, completeness, and integrity of data when transferring it from one system or database to another. TCC utilizes a comprehensive test process for data migration including the following steps:

1. Requirements Analysis:

TCC starts by ensuring full understanding of the source systems, the scope of data migration, data mapping, transformation rules, and any business rules that need to be applied during migration.

2. Data Profiling: TCC will analyze the source data to identify data quality issues, anomalies, and inconsistencies. This helps in planning data cleansing and transformation activities.

3. Test Data Preparation: TCC creates test data sets that represent real-world scenarios and include a variety of data types, formats, and edge cases. This data should cover all relevant data entities and relationships.

4. Data Cleansing and Transformation: TCC applies necessary data cleansing, validation, and transformation processes as defined in the migration plan. This step ensures that data is in the correct format and adheres to quality standards.

5. Unit Testing: TCC will perform unit testing on the data migration scripts and processes to ensure that each data migration script executes successfully and produces the expected output.

6. Integration Testing: Testers test the end-to-end data migration process, including data extraction, transformation, and loading into the target system and verify that data relationships are maintained correctly.

7. Data Validation Testing: Migrated data is validated against the source data to ensure accuracy and data is verified migration without loss or corruption.

8. Completeness Testing: Completeness testing ensures that all required data has been migrated. Verify that no critical data has been left behind during migration.

9. Data Consistency Testing: Testers confirm consistency between related data entities after migration to ensure that data relationships are maintained accurately.

10. User Acceptance Testing (UAT): Stakeholders conduct testing to validate the migrated data against their requirements and expectations.
11. Regression Testing: After data migration, TCC performs regression testing on the overall system to ensure that other functionalities are not affected by the migration process.
12. Validation of Post-Migration Data: After migration, TCC testers will validate data in the solution against the original source to ensure ongoing accuracy and integrity.
13. Documentation and Reporting: TCC provides a Data Migration Test Results Report to document test cases, test results, issues, and resolutions. This report provides clear documentation for future reference and audits.

TCC will obtain Agency approval of converted and migrated data to confirm that legacy data has been successfully converted and migrated to the new solution.

Performance Testing

With each release or deployment stress testing will be performed utilizing a portion or all prescribed scripts. When a saturation point is located, it will be documented compared to the written and approved acceptance criteria then presented for review by the customer and its designated resources. for final approval and eventual sign-off.

Testing Environment and Tools Used

TCC proposes using three environments to complete testing. The first is the Development (DEV) environment. This is the environment that Developers will use to conduct Unit Testing. Secondly, TCC proposed using the System Test (SYSTEST) environment for conducting system testing. Lastly, UAT participants will utilize the User Acceptance/ Training environment (UAT) to conduct user acceptance training. See **section 3.5.6.3 State Hosted Solution** of this proposal for additional details on setting up these environments.

The TCC test development life cycle (SDLC) employs the Nunit **testing** framework designed for the Microsoft suite. TCC has established over 100 automated testing scripts and stress testing packages within the TDLC to ensure the Ascend system is performing at its highest level and as expected. These scripts will use client approved data sets in the designated environment and will be run automatically after each deployment.

TCC leverages the automated test scripts to help establish the system **testing** acceptance criteria to identify existing automated test scripts that can be leveraged to assist in the ultimate objective of establishing a documented approach for final system acceptance. This approach will automate as many of the **testing** acceptance criteria as possible in order to facilitate acceptance.

Agency Approvals

TCC will provide test results reports, in a mutually agreed upon format, to the Agency for approval after each phase of testing. These reports will include an executive summary of test results, Executed Tests Cases, and detailed results of the executed Test Cases. TCC will obtain Agency acceptance for all releases and deployment

phases including but not limited to, moving to UAT, go-no go for pilot implementation and full statewide implementation.

Integration with State Systems

TCC's Azure DevOps instance can interface with auxiliary applications as needed through an API. If requested data from these auxiliary applications can be utilized and documents stored as well.

TCC will take the same approach to integrating with HP Quality Center/ALM, Jira, and Confluence as we do with an interface to any other system. System integration involves integrating existing (often disparate) subsystems and then creating unique and new values. The TCC Team has worked with numerous IT vendor partners to implement and integrate innovative technology solutions in the human services arena. TCC has successfully collaborated with the Agency to integrate with Jira for the DCDEE WORKS project.

The TCC Team utilizes a proven and systematic approach to the integration process. First the integration effort must be defined by each vendor participating in the process. Each element must be clearly defined so that the customer has full functionality from each vendor's product. Next, the business requirements must be clearly defined so that the functionality implemented meets the needs of the client. The software versions to be integrated must also be clearly defined. Vendors typically support multiple versions of their solution, and it is important that the team understand which version is currently integrated and what the vendor intends to implement. The next step is to clearly identify the hardware and software required from each vendor to support the solution. Next, the core setup is defined and customized to meet the business needs. Finally, data mapping is performed to design a solution that takes into account differences in data structures among all of the disparate systems.

TCC has extensive experience with interface design and deployment. Based on the needs of the Agency and its other vendors, a variety of methods can be utilized to develop interfaces. Developing the interface would require coordination between TCC, the Agency, and the entity that owns the data system with which the system will connect. TCC would rely on the Agency to initiate the request for permission to share data and sign data sharing agreements with the agency. Once TCC is permitted to interface, the project team will coordinate with the team that manages the system for each agency and utilize one of the methods below to share data at frequencies determined by the group.

The most efficient method TCC will use to integrate state systems into the solution will be using pre-existing API or WCF framework endpoints provided by system vendors to facilitate communication between the solution and the vendor's web servers. Entity Framework is used for the communication between the webserver and database server for SQL executions. SQL server integration services (SSIS) is used for data migrations. SSIS is utilized for scheduled maintenance tasks and interfaces. TCC utilizes Secure File Transfer Protocol (SFTP) for flat file interfaces. Some legacy State applications cannot utilize some of the newer technologies like web interfaces, and in those cases TCC will upload/download flat files and then parse out the data. SMTP is utilized for email. TCC utilizes Windows-based Internet Information Services (IIS) to host the websites and web services. Multiple .NET Frameworks and NuGet libraries are incorporated into our code baseline.

To mitigate risks with interfaces, TCC develops an interface control document that is used throughout the contract. Representatives from the systems being interfaced would agree on the contents of the document and

sign off. The document includes details of the interface, schedules, contact information for resolving issues, contingency plans for outages, etc.

TCC works carefully with representatives of the other state systems on the interface design and will conduct thorough testing according to the state approved Test Management Plan. Once the system is implemented, regression testing of all interfaces will occur with each release.

3.5.4 Training

High quality training and ongoing support services are vital to ensuring that all users are able to use the software solution to its full potential. TCC understands that the system will have a variety of users, including staff as well as providers. The training plan developed for the project will identify which user groups will be trained in-person, online, or via recorded training.

TCC is committed to ensuring that the necessary training resources required to facilitate a successful launch are made easily accessible and pertinent to the role of the user. Additionally, TCC's post-implementation training approach empowers users to self-manage as well as provides flexibility for on-demand assistance.

From the very beginning, Training staff are part of the core Project Team and will work closely with the Agency and its stakeholders to confirm TCC's understanding of Agency training audiences and their needs. TCC's Training staff become experts early during each client implementation. Trainers engage with TCC's internal system test sites to provide immediate feedback to developers about the user experience and to recommend features that will benefit end users. TCC will collaborate with the State to engage an appropriate group of stakeholders to gain consensus for a final Implementation Training Plan.

TCC provides a User Acceptance Testing environment that is a mirror image of the Production Environment using representative data. The User Acceptance Testing environment is used as the Training environment.

Training for User Acceptance Testing for Pilot Users and Statewide Users

Training software users before User Acceptance Testing (UAT) involves the following steps:

1. Identify User Roles: Determine the specific roles or personas that will be using the software. This could include end-users, administrators, managers, etc.
2. Create Training Materials: Develop comprehensive training materials, such as user manuals and guides tailored to each user role.
3. Schedule Training Sessions: Organize training sessions or workshops where users can learn about the software's features, functionalities, and how to perform tasks relevant to their roles.
4. Hands-On Practice: Provide users with hands-on practice using the software in a controlled environment, allowing them to become familiar with the interface and workflows.
5. Simulate Real Scenarios: Create scenarios that mimic real-world situations, so users can practice using the software in context and gain confidence in their abilities.



6. Q&A and Support: Offer opportunities for users to ask questions and address any concerns they might have during the training sessions.
7. Feedback Collection: Gather feedback from users during the training to identify areas that may need further clarification or improvement.
8. Refine Training Materials: Based on user feedback, refine and update training materials to ensure they are clear, effective, and address any common issues.
9. UAT Preparation: Ensure users are comfortable with the software's features and functionalities, so they can confidently participate in UAT and provide meaningful feedback.
10. Ongoing Support: Provide ongoing support and resources after the training, so users can continue to learn and troubleshoot as they use the software in real-world scenarios.

The goal of pre-UAT training is to equip users with the knowledge and skills they need to effectively test the software during UAT and provide valuable insights for improvement.

After User Acceptance Testing is completed for Pilot Users, TCC will prepare for the Pilot Implementation. TCC will have daily meetings with the Pilot User Group to address any issues found in the Pilot. After the Pilot is completed, Statewide UAT will begin.

Implementation Training and Resources

- Training matrix that identifies the preferred training methods for each audience, such as in-classroom, live remote and recorded webinars.
- Train-the-Trainer opportunities to drive a sustainable training approach as well as to provide local partners as a trusted and knowledgeable resource for family users.
- Accommodations needed to ensure an equitable training approach and access across all audiences.
- Types of preferred materials and resources needed during implementation training for various audiences.
- Post-training effectiveness survey to measure satisfaction and promote continuous quality improvement of future training and support for users.

Post Implementation Training and Support

A Help page menu is available to customize by the Agency. Important phone numbers and emails are included. Additionally, the Help page can display user training materials and videos.






TCC provides live Help Desk support by phone and by email to State Users during designated hours as well as refresher webinars during the 60-day post implementation period.

TCC offers a wide variety of resources to support end users after initial implementation, including:

- In-system user Help menu at the top of the system navigation menu that includes resources such as:
 - Online tip sheets
 - Online How-To videos
 - Online electronic user guides
 - FAQ's
- In-system icons to provide users with quick accessibility to assistance with fields on each screen.

Information – When the Information button  is clicked, it shows the information pertaining to that item.

TCC provides training for each subsequent release of new functionality during the Maintenance and Operations phase.

3.5.5 Data Conversion and Migration

TCC successfully corrected a data conversion and migration performed by a previous vendor for the DCDEE WORKS program and has an understanding of the impact of a poorly performed data conversion. The TCC team is confident in our ability to successfully convert and migrate data. TCC has also performed numerous code changes to resolve data integrity issues that will alleviate risks associated with data conversion and migration. In addition, TCC has been able to automate an interface for DCDEE WORKS, so data is more current and accurate.

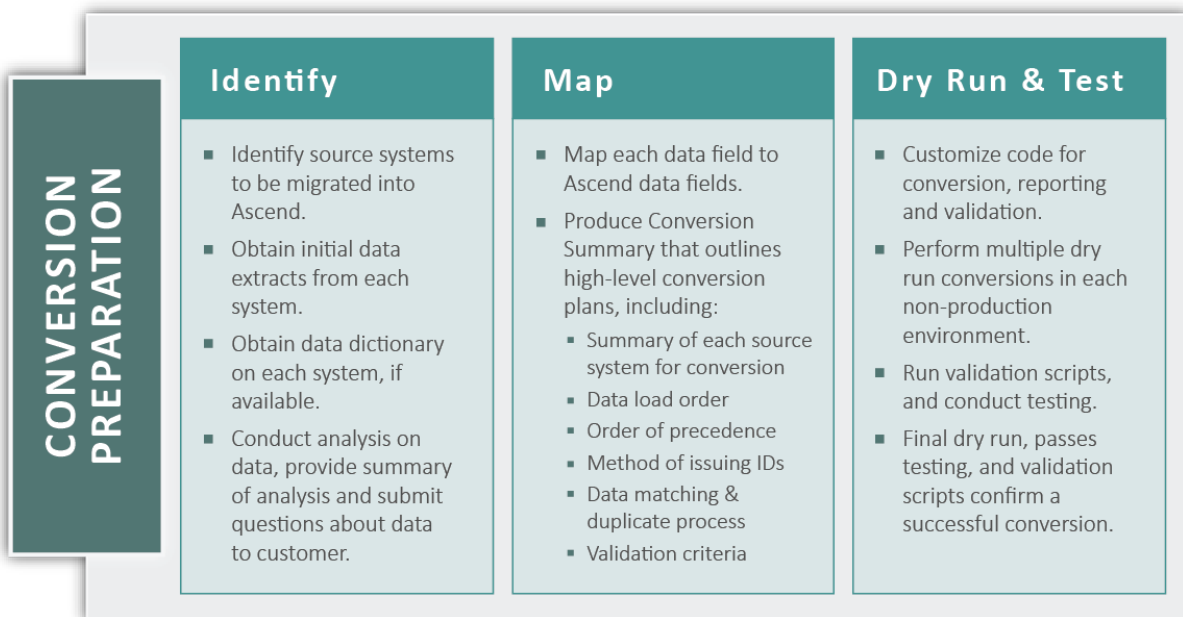
The TCC team has been working with the agency's data for almost three years and understands the fields and uses for the data used for the DCDEE WORKS application, as well as how it interacts with other areas, including Regulatory. This experience will be very beneficial to the agency by removing some of the learning curve for the team.

Outside of TCC's direct experience with data conversion for DCDEE, TCC's extensive experience performing data migrations from legacy applications ensures this process is completed efficiently and with the least number of errors.

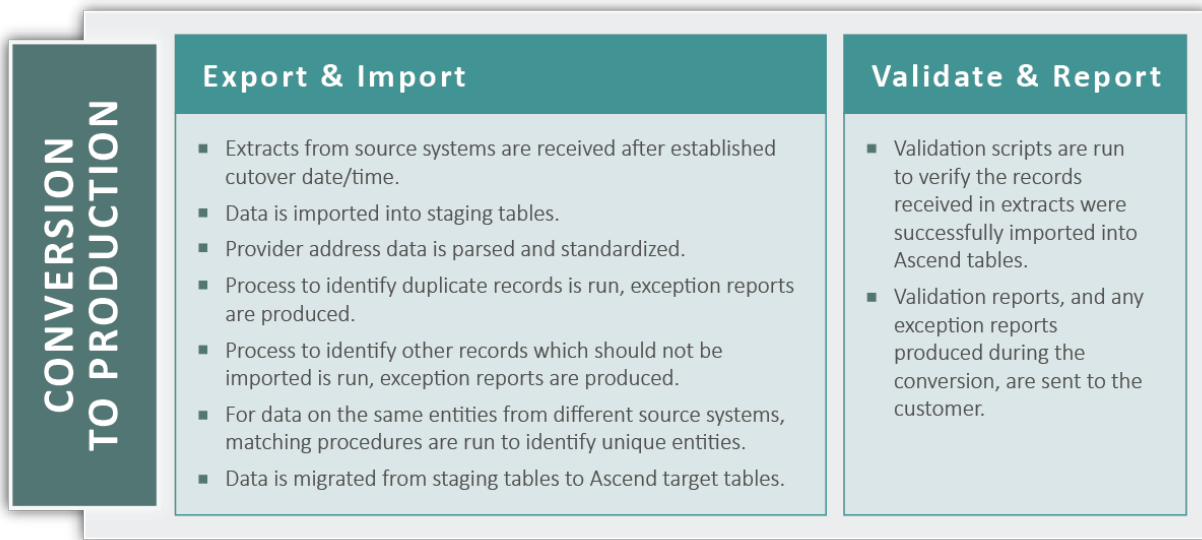
The success and timeliness of the application is dependent on the successful migration of data from the current system into the new system. TCC uses experience and the lessons learned from migrating ninety-two county-based databases for the State of Indiana, to a single integrated database. TCC mitigates data risk by avoiding these common errors:

- Data is not migrated correctly.
- Incomplete data migration.
- No balancing or reconciliation is in place to verify all data is migrated correctly.

TCC has in-depth experience in working with a variety of databases, both relational and hierarchical. TCC's process for preparing the systems and data for conversion is detailed below.



Once the preparation process is complete, the conversion to production process begins, as illustrated below.



TCC is typically able to complete a conversion using Linqpad, SQL Server and Visual Studio when the data is available via extracts, APIs, or standard database platforms. There may be a need for additional tools if the data is in some non-standard or proprietary database.

Agency resources are needed for the following:

- To review and approve conversion approach and data mapping documentation.
- To provide definitions on data fields and answer questions about data and data sources.
- To provide access to data or extract data from data sources for conversion.
- To conduct UAT validation following one or more conversion dry runs.

Data Validation

As described above, TCC assures the success of the data migration by balancing and reconciling all migrated data, verifying the results of each data field in the existing systems and the new system, and actively seeking the involvement and guidance of agency employees, particularly regarding any data anomalies that occur during the migration.

Common Issues in Data Conversion:

1. ***Inconsistent use of a data field.*** Legacy data may contain certain fields, like “Client Name,” where users have in some instances listed the client as “John Smith” and other times as “Smith, John.”
2. ***Invalid use of a data field.*** Does the legacy system have proper data validation edits? A Date field might have non-date data, a “numeric” field might contain text, a required field might be empty, etc.
3. ***Different Data Types for Similar Columns.*** Vendor or Agency expertise may be required to handle reconciliation of dissimilar data types.



4. **Poorly designed data structure.** Existing databases may contain some “date” fields which are actually “text” fields in which users may have entered dates in a variety of formats (e.g., November 19, 2017, Nov. 19th, 2017, or 11/19/17).
5. **One field holds multiple data elements.** For example, there may be an address field where the various elements (e.g., line 1, line 2, city, state, or ZIP) are not clearly and consistently entered or separated, making it more difficult to convert the data. Or, multiple pieces of data stored in single note fields (such as a phone log), which should be broken out as separate entries in the new system.
6. **Multiple data sources.** More than one source may have been used, for example two different databases, to track different data related to the same clients or matters. In the conversion, combining data from the two sources to create or maintain relationships between that information, is needed, and there is no unique identifier which consistently links data from the different systems.
7. **No Referential Integrity.** The legacy system may have “orphan” records. How do these get resolved?
8. **Field Mapping.** Are there required fields in the new system that do not exist in the legacy system? Vice versa, are there fields in the legacy system that are not needed in the new system? What is done with these fields?

TCC uses the following steps to address the common issues found in data conversion for successful data conversion:

1. **Define Scope**— Scope must be clearly defined up front. What is being converted and what is not? How much history is being converted? What can be done manually rather than automated? It may not be possible to convert “everything.” Scope is critical and the project’s success will be dependent on having this clearly decided upon.
2. **Identify data sources**— Where is the data coming from? If there are multiple systems or data sources, each data source must be clearly identified.
3. **Identify data destinations (APIs)**— Where is the data going? The source systems or databases must be identified, as well as the appropriate APIs to get the data in there.
4. **Define requirements/mappings**— This is a most critical step. Detailed requirements must be defined for each data element within each conversion; what data mapping is required? What business rules must be applied? What data transformations need to occur? Every data element must be documented.
5. **Define Estimates**— Assign appropriate estimate of effort to the development of each conversion.
6. **Define Scope of Test**— Scope of the testing must be defined. It may not be viable to convert all data as a test or it might be done in several steps – sample, small dataset, and then larger or full dataset. All of this must be defined and included in the plan.
7. **Who and how to validate**— How is this all going to be validated? What results are expected and who in the organization is going to validate the results? Key users/sponsors must validate and be confident with results.



8. ***Establish a proper cutoff Date/Time*** – Take system off-line before final conversion.
9. ***Balancing and reconciling*** – Balance the converted data against the legacy system to verify all data is migrated correctly.
10. ***Develop Project Plan/Assign Resources*** – Lastly, build the project plan for all development, testing and validating tasks; identify the sequence and dependencies of all tasks; identify and assign the appropriate resources to each task on the plan.

3.5.6 Operations and Maintenance

Vendor Approach to Operations and Maintenance

After the technical solution is deployed and the State has documented Agency Acceptance of the Stabilized Solution, TCC will provide operations and maintenance (O&M) support.

This O&M phase includes phase key objectives:

- Ensure uninterrupted availability and performance of the solution.
- Maintain data security, privacy, and compliance with relevant regulations.
- Facilitate timely troubleshooting and issue resolution.
- Plan for system updates, upgrades, and enhancements.
- Document processes and procedures for consistent operation.

Effective communication is essential, not just during Implementation, but throughout the O&M phase as well. TCC is committed to continuity in staffing- a new team will not be put in place when the project enters O&M. This will ensure well-informed, responsive team members who can best support the Agency in ongoing operations and any needed and approved changes. TCC will provide a variety of communications to ensure that the Agency is informed about the status of the system and any upcoming or in progress releases including a detailed, written Sprint Plan and Master List, including defect resolution and status of requested changes, generated from Azure DevOps, in a format approved by the Agency. TCC will also provide updates during biweekly (or as needed) status calls and monthly O&M Status Reports that will include the deliverables outlined in **Attachment J of this RFP** such as any changes in the TCC organization chart, updates to the communication plan, Help Desk statistics such as number of tickets submitted and resolution status, metrics on system uptime, risk tracking and mitigation plans, updates on work-in-flight and future planned sprints, and scheduling updates including dates for upcoming trainings and UAT sessions.

TCC proposes the following staffing for the O&M phase utilizing the TCC staff that has been in place throughout Implementation:

Role	Responsibilities
IT Operations Project Manager	Oversee the overall execution of the plan, manage resources, and ensure alignment with organizational goals.

IT Support Team (Call Center/Help Desk)	Provide frontline support, assist users, resolve technical issues.
System Administrator	Monitor and enforce security measures, conduct regular audits, and address vulnerabilities.
Application Developers	Maintain, update, and enhance the software application.
Change Management Team	Coordinate and manage changes to the solution while minimizing disruptions (Includes BA, QA testers, trainers).

TCC will provide an O&M Plan that will serve as a roadmap to ensure the new IT solution remains reliable, secure, and efficient while providing consistent support and value to users and the organization. This plan will outline the strategies, procedures, and responsibilities for the ongoing management, support, and upkeep of the new solution. The O&M plan ensures the solution's reliable operation, security, and performance throughout its lifecycle, and outlines our change management approach.

Change Management

TCC staff are early childhood experts. This team will include support from four past CCDF State Administrators including the Project Director, Project Manager and Subject Matter Expert, who understand the evolving nature of the early childhood landscape. TCC understands that rapid changes to the system are required to respond to changes in the environment. Public policies should never be limited by the functionality of data systems. Should the Agency identify changes to deploy after the system is in production, TCC will be ready to respond. Requested changes can be made directly to the Project Manager or Project Director or submitted through a dedicated work request email. TCC uses Azure DevOps, at no cost to the Agency, to accurately track and report on change requests. Requested changes will be discussed with the Agency to determine the level of effort, potential impact, and priority. Once a change order is approved, TCC will assign the work to a sprint(s) and begin our software development lifecycle as defined in section **3.5.2 Project Management** of this proposal, starting with thorough documentation of the business requirements into approved user stories to robust testing, including UAT regression testing and updating of any documentation as needed. TCC maintains a Change Log to provide the Agency with detailed information about requested changes.

As essential part of change management is ensuring that users impacted by changes to the system, including staff who will be conducting UAT. TCC will update the Training Plan and provide training in the most appropriate format as needed for each release throughout the O&M phase. TCC Call Center and Help Desk staff will also always be trained on any changes to the system and will be prepared to support users with any questions related to the changes made.

TCC is committed to the same high quality of delivery during O&M that will be executed throughout the Implementation phase. TCC will ensure that all changes deployed during O&M are thoroughly tested using the same procedures used during the Implementation phase and outlined in **Section 3.5.2.2 Testing**. This includes unit, system, integration, performance, and regression testing. TCC will provide the required test results reports including on regression testing and will be available to assist the Agency with UAT. Testing will include

troubleshooting browser issues that may develop with new releases. TCC will obtain agency acceptance prior to any release to production.

Monitoring and Incident Management:

TCC will implement monitoring tools, such as Dynatrace, to track system performance, resource utilization, and user experience. If the event of an incident, TCC will follow established protocols for incident identification, reporting, and classification. See the **Help Desk Support** section of this proposal for more information on reporting, tracking, and resolving incidents.

Training and User Support:

In addition to providing training prior to any UAT or deployment, TCC will also provide ongoing training as needed in an appropriate format including user guides, tip sheets, online help features, and asynchronous and synchronous trainings, to users to familiarize them with the solution's features and functionality. TCC's IT support team (call center and help desk staff) will be ready to support users by addressing queries, issues, and assistance requests.

Security and Compliance:

The TCC team will include System Administrator responsible for ensuring the ongoing security of the solution including the following responsibilities:

- Regularly assess and update security measures to protect against evolving threats.
- Conduct periodic security audits and vulnerability assessments.
- Enforce access controls and authentication mechanisms.
- Keep software components, frameworks, and libraries up to date with security patches.
- Ensure compliance with industry regulations (e.g., GDPR, HIPAA) and internal security policies.

Backup and Disaster Recovery:

Another critical task during O&M is to ensure regular system backups disaster recovery procedures and testing. TCC will establish regular backup schedules for critical data and system configurations and will routinely test and verify the effectiveness of backup and restoration processes. Additionally, a comprehensive disaster recovery plan will be developed and maintained, including data recovery procedures and off-site backups.

Software Updates and Patch Management:

TCC regularly reviews for needed software updates and patches and will maintain a schedule for reviewing, testing, and deploying needed patches. Critical updates are always prioritized to address security vulnerabilities.

Performance Optimization:

Throughout O&M TCC will regularly review system performance metrics to identify bottlenecks and areas for optimization, including conducting load testing to ensure the solution can handle increased usage. Regular optimization of database queries, network configurations, and resource allocation will occur.

Documentation:

TCC will regularly review and update documentation for system architecture, configurations, procedures, and troubleshooting guides as required in Attachment J of the RFP, including but not limited to, documents such as User Guides, Test Plan, Data Dictionary, and the Detailed Design Specifications document.

TCC utilizes Azure DevOps to document known issues and solutions to expedite problem resolution and will provide regular reports and updates to ensure that the Agency stays well informed throughout O&M.

Continual Quality Improvement:

TCC regularly reviews and assesses the effectiveness of the O&M plan to incorporate feedback from users, incidents, and performance metrics to make improvements. The plan will be adapted to accommodate changing technological trends and organizational needs.

Vendor Hosting

TCC proposes a State hosted solution, therefore this section is not applicable.

State Hosting

1. PROD – Production Application Environment, will be available no later than June 1, 2024.
2. UAT/TRAINING - User Acceptance Testing/Training Environment, will be available no later than May 1, 2024.
3. SYSTEST – System Test Environment will be available no later than March 1, 2024.
4. DEV – Development Environment, will be available no later than January 1, 2024.

These environments will be designated as the “Primary Region” for the purposes of this proposal within the State’s AWS GovCloud agreement. As noted in the diagram provided, *AWS Component-Feature Topology diagram*, logical/physical separation will occur through the use of separate Virtual Private Clouds (VPCs).

Amazon Web Services (AWS) Virtual Private Clouds (VPCs) offer both logical and physical separation to ensure isolation and security for resources deployed within the AWS cloud environment. This separation helps organizations create isolated network environments and control communication between their resources.

- **Logical Separation:** AWS VPCs provide logical separation through the following mechanisms.
 - **Subnets:** Subnets within a VPC allow the ability to segment resources based on different availability zones. Each subnet is associated with a specific availability zone, and resources in different subnets are logically isolated from each other within the same VPC.
 - **Route Tables:** Route tables define how traffic is directed within the VPC. By configuring route tables, the flow of traffic can be controlled between subnets, internet gateways, virtual private gateways (for VPN connections), and other networking components.
 - **Network Access Control Lists (NACLs):** NACLs are stateless packet filtering mechanisms that act as a firewall at the subnet level. They control inbound and outbound traffic based on the defined rules. NACLs allow traffic to be permitted or denied between subnets or from external sources.

- **Security Groups:** Security groups are stateful firewalls that control traffic at the instance level. They define inbound and outbound rules for instances, allowing the ability to control which resources can communicate with each other.
- **Private and Public Subnets:** By designating some subnets as private and others as public, there is control over which resources are exposed to the internet and which remain isolated within the internal network.
- **Physical Separation:** AWS VPCs also provide physical separation through the following mechanisms:
 - **Isolation of Hardware:** AWS ensures that the underlying physical infrastructure supporting different VPCs is isolated. This prevents cross-communication between resources belonging to different VPCs, providing a high level of security.
 - **Virtualization Technology:** AWS uses virtualization technology to create isolated instances (Virtual Machines or EC2 instances) within the same physical server. This ensures that resources from different customers or VPCs are securely isolated, even when they share the same physical hardware.
 - **Dedicated Hardware Options:** AWS offers dedicated instances and dedicated hosts. Dedicated instances run on hardware that is exclusively allocated to a single AWS account, providing an additional layer of isolation. Dedicated hosts provide physical servers that are fully dedicated to a specific AWS account, offering even more control over physical separation.

Using the following VPCs will provide the necessary separation of environments along with allowing authorized communication and data flow to occur for approved activities:

- Security VPC – This VPC will house security devices such as firewalls which provide boundary protection for the entire solution and offer the only entry point for all traffic to any environment. NAT and Internet gateways will exist within this VPC.
- Prod VPC – Will house the AWS features and components necessary to provide the solution production environment. This VPC will send all traffic through an AWS Transit Gateway and some associated Gateway Load Balancers to route traffic out through the security VPC.
- Non-Prod VPC – Will house all the non-production environments (UAT/Training, ST, and DEV). Similar to the Prod VPC, traffic will route out through a Transit Gateway and ultimately go in and out of the environment through the Security VPC.

TCC's eXpedite solution, which will reside on this infrastructure, supports offline access and data entry.

The final environment designation would be the Disaster Recovery (DR) environment "DR Region." To achieve the RPO and RTO needs of the State's requirements, TCC will recommend making use of another AWS Region within the State's GovCloud agreement. The topology, from a network and data flow perspective, will match the above-mentioned solution. However, the data will be replicated from the "Primary Region" over to the "DR Region" using AWS native replication technologies which will ensure all backup data and configurations will be available in the DR Region to achieve successful DR tests and operations.

Metrics and Performance

Dynatrace is a comprehensive performance monitoring and management platform that plays a crucial role in ensuring the success of the proposed solution. By seamlessly integrating with TCC's infrastructure, Dynatrace continuously monitors server capacities, bandwidth utilization, and response times in real-time. It provides deep insights into resource utilization patterns, enabling proactive identification of potential bottlenecks and capacity issues. With its powerful AI-driven analytics, Dynatrace not only detects anomalies and deviations but also offers intelligent recommendations for optimization. Through this holistic approach, Dynatrace empowers TCC to maintain optimal server space, bandwidth allocation, and responsive performance, thereby guaranteeing a seamless and efficient user experience for the solution.

Vendor Service Level Agreement (SLA)

Availability and Uptime:

- The solution will maintain a minimum uptime of 99.9%, for all calendar days, with the exception of state-approved scheduled downtime.
- Scheduled maintenance will be communicated to the customer at least 48 hours in advance and will typically occur during off-peak hours.
- TCC shall monitor availability and uptime of the system using a variety of tools.

Response and Resolution Times:

- Category 1- Major Problems will be responded to within 1 hour of initial voice notification, with a goal to resolve them within 24 hours. Major problems are defined as an outage that results in the unavailability of the solution or the solutions hosting environment or a Severity Level 2 issues that has persisted for more than 48 hours.
- Category 2- Critical Problem will be responded to within two (2) standard business hours of initial voice notification, with a resolution within 48 hours.
- Category 3- Minor Problem will be responded to within one (1) standard business days and resolved within five (5) business days.
- Category 4- Requested changes to the solution will be responded to within three (3) business days and a level of effort determined within five (5) business days.
- Category 5- General questions or informal contacts will be responded to within three (3) business days and resolved within two (2) business weeks.

Issue Resolution and Critical Fixes

- TCC shall provide Help Desk support for the resolution of issues.
- Issues can be reported 24 hours a day/seven days a week through the Help Desk email.
- Help Desk staff shall be available from 7:00 am to 6:00 pm Eastern Time, Monday-Friday, and responses to help desk inquiries will be provided within four (4) business hours.



- TCC Call Center staff will be available by phone and email for public users including providers, workforce members and families, Monday-Friday, 8:00 am-5:00 pm.
- Reported issues shall be tracked with TCC's ticketing system.
- Resolution times for reported issues are defined above in number 2.
- Status updates on reported issues according to the assigned criticality, and updates will be provided to the State during biweekly project status calls and monthly written report.
- A Master List report of all work items including reported issues and change requests will be provided biweekly.

Help Desk and Call Center Organization

TCC shall provide 3 tiers of help desk support.

- Tier 1 – Basic level of customer support. Tier 1 support assist with how to questions, account set up, eXpedite install, and general questions. Items that cannot be solved in Tier 1 are then escalated to Tier 2 support.
- Tier 2 – Support at the Tier 2 level engages the customer with Subject Matter Experts, and potentially technical resources to research the case. Cases at the Tier 2 level that cannot be solved are then escalated to Tier 3.
- Tier 3 – Support at the Tier 3 level engages the customer with technical resources and potentially project management if the case turns out to be a critical issue.
- TCC shall categorize help desk tickets based on the severity level of the request.
 - Critical – User can no longer work; issue is widespread and/or significant. Issues like this are escalated to the project management team to facilitate communication and resolution.
 - High – User can no longer perform primary work functions; issue is significant or moderate. Issues of this nature are escalated to the technical lead for visibility and root cause analysis.
 - Medium – User work functions are impaired; issue is moderate or minor. Issues of this nature are logged into the product backlog for client prioritization.
 - Low – User work functions are minimally impacted; issue is moderate or minor. Issues of this nature are logged into the product backlog for client prioritization.

System Updates and Patches

- TCC shall provide periodic system updates and patches as needed at no additional cost to the Agency.

System Enhancements and Change Requests

- Post-production new work requests will be submitted via email to a dedicated email in box and tracked in Azure DevOps.
- A master list report of all issues and change requests will be provided weekly.
- A response to all new work requests will be provided within three business days.



- Change request hours will be estimated after the State has finalized requirements and approved user stories.
- Time spent on approved changes will be tracked in Azure DevOps and reported to the Agency in Sprint Status Reports.
- Changes will be thoroughly tested and released into production on an Agency approved sprint schedule.

Account Management and Status Reporting

- TCC shall provide project status updates on biweekly project status calls that include TCC status on deliverables, accomplishments, problems encountered and proposed/actual resolutions, work plan updates, uses and risks to be addressed, status of change requests/enhancements, status of release management and strategic planning. reported issues, change requests and sprint updates.
- TCC shall provide weekly project reports that include status updates on deliverables, accomplishments, problems encountered and proposed/actual resolutions, work plan updates, uses and risks to be addressed, status of change requests/enhancements and status of release management for the reported timeframe.
- TCC shall provide additional reports as outlined below in item 10.
- TCC shall produce ad hoc requests, data queries and file extraction as requested and prioritized by the client. These requests will be tracked in the TCC ticketing system for status.
- During the Stabilization period, TCC shall provide defect resolution and tracking. regression testing and will assist the Agency with the UAT of remediated defects.

System Response Times

- TCC shall ensure a minimum load capacity of 690 concurrent users up to 1380 concurrent users with minimal performance degradation.
- TCC shall ensure a consistent response time for all users directly interacting with the production environment with:
 - o Ninety (90) percent of responses to occur in two (2) seconds or less.
 - o Ninety-five (95) percent of responses to occur in three (3) seconds or less.
 - o Ninety-seven (97) percent of responses to occur in four (4) seconds or less.
 - o Ninety-nine (99) percent of responses to occur in five (5) seconds or less.

Testing Support

- TCC shall enter into UAT with a handoff meeting, detailing the requirements, bugs found and the traceability matrix.
- TCC shall provide use case and test cases with every requirement mapping to at least one test case.
- TCC shall provide role based UAT training to UAT testers.
- TCC shall provide enhanced support during UAT including a bridge line in case testers have questions or issues.



- TCC shall provide UAT Result Reports at the conclusion of UAT and will obtain Agency acceptance prior to deployment.

Defect Response, Diagnostic and Resolution Timeframes

TCC shall meet the following response, diagnostic and resolution timeframes for reported defects:

- Total System Failure occurs when the System is not functioning and there is no workaround, such as a Central Server is down or when the workflow of an entire section is not functioning. A telephone conference will be scheduled within one (1) hour of initial voice notification and the issue will be resolved within 24 hours of initial voice notification.
- Critical Failure occurs when a crucial element in the System is not functioning, and there is no suitable work-around, but it does not prohibit continuance of basic operations. A telephone conference will be scheduled within two (2) standard business hours of initial voice notification and the issue will be resolved within three (3) standard business days of initial voice notification.
- Non-Critical Issue occurs when a System component is not functioning, but the System is still useable for its intended purpose, or there is a reasonable workaround. The Agency will be updated with status updates provided weekly. The issue will be resolved based on the level of effort, release schedule, and prioritization of the issue by the Agency.

Reporting

- The solution shall provide the 15 canned reports detailed in Attachment P of the RFP in a format provided by the Agency.
- TCC shall provide Ad Hoc reports within three (3) business days of a finalized request.
- TCC shall provide the following project management reports in a format approved by the Agency:
 - o Kick off Meeting Report (within three (3) business days of the meeting).
 - o Issue (problem log) status report (weekly).
 - o Master List of all issues and change requests (weekly).
 - o Project Status Report (monthly), includes reporting on performance, including metrics related to SLAs, status of change requests and issue resolution, updates on work in flight, Help Desk metrics including closure percentages, staffing updates, risk mitigation log and any changes in schedules.
 - o Testing Results Reports (Unit, System, Regression, Integration, Performance, User Acceptance) (within two (2) business days of the conclusion of each phase of testing for each release).
 - o Release Status Report (within one (1) business day of the conclusion of each release.)
 - o Release Notes (within two (2) business days of the conclusion of each release).
 - o Operations and Maintenance Status Report (monthly, within ten (10) business days of the end of the previous month).



SLA Miscellaneous

- This SLA will be finalized by mutual agreement prior to the Contract award.
- TCC will review and update the SLA at least every twelve months, and each time the SLA is impacted by a request from the Agency to revise service level commitments.
- TCC shall monitor penalties associated with SLAs using the help desk ticket tracking system and monitoring tools which calculate the uptime of the system.

Help Desk Support

TCC's Call Center and Help Desk is available for resolution a variety of issues, from "how to" support and account set up support to researching and resolving category 1,2, or 3, problems including persistent product instability and unavailable audit data and escalated application errors.

TCC has extensive experience and the capacity to provide live call center and help desk support to all user types based on a three-tiered or category approach.

Tier/Category	Audience	Responsible TCC Team	Contact Method	Example
Call Center	Public users including providers, workforce, and families.	Call Center	Phone and email 8:00 am-5:00 pm ET Monday-Friday	Password reset, navigation questions, assistance with updating registry profile.
Tier I Help Desk	Agency users and public users whose issues were not resolved by the Call Center.	Help Desk	Phone and email from 7:00 am - 6:00 pm ET Monday-Friday	General Agency user support, how to support.
Tier II Help Desk	Agency users and public users whose issues were not resolved by Tier I intervention.	Help Desk, application developers, network operations group	Phone and email from 7:00 am - 6:00 pm ET Monday-Friday	Application Configuration Changes, Feature Functionality Failures.
Tier III Help Desk	Escalated issues not resolved at Tier II.	Help Desk, application developers, network	Phone and email (24/7 afterhours telephone contacts provided)	Total or partial system outage, persistent system instability.



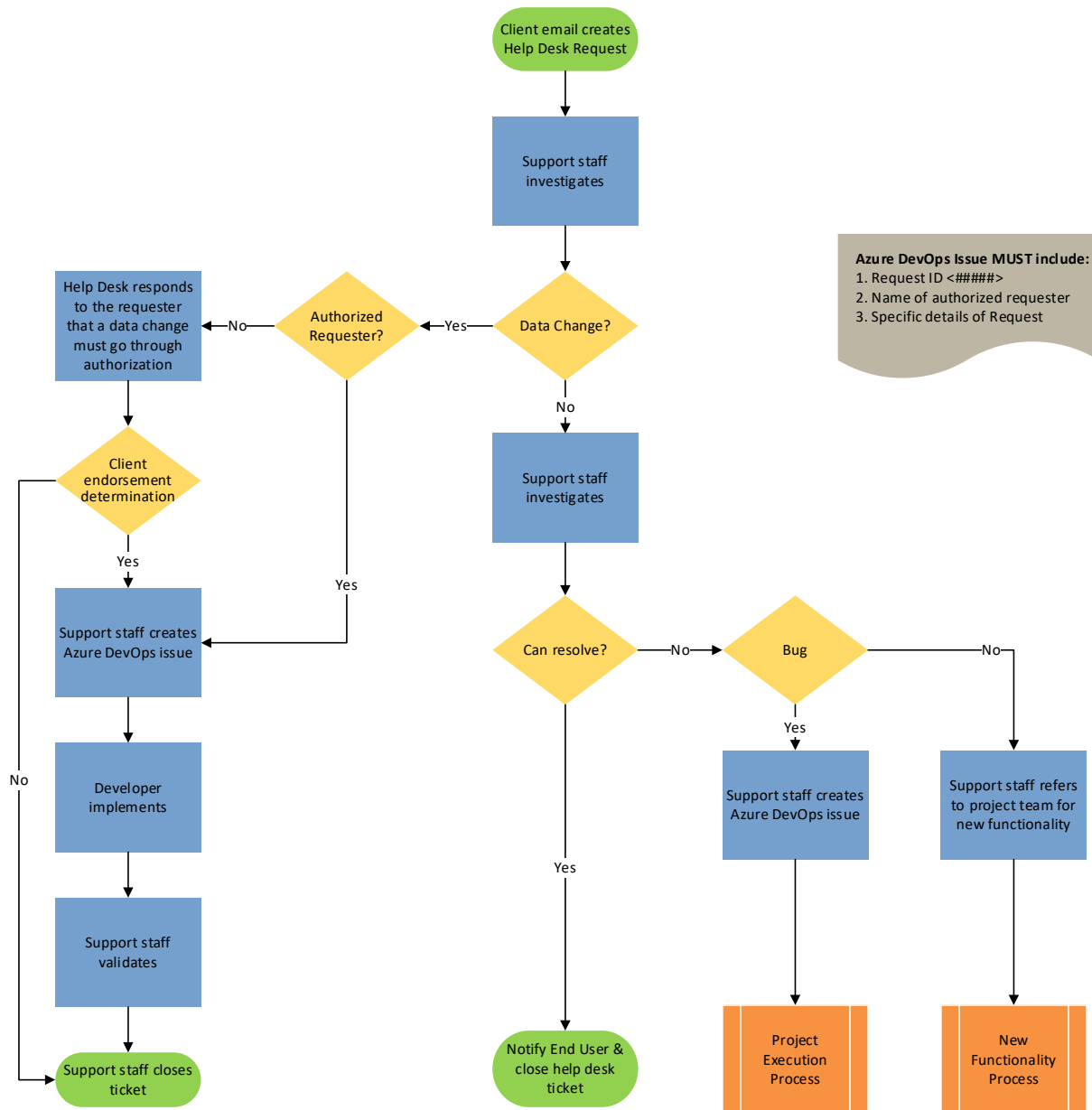
		operations, and project leadership		
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Call Center Support: TCC utilizes a call center to support providers, the workforce, families, and other public users with their support requests. The TCC Call Center staff including bilingual staff to support Spanish speaking providers is available Monday-Friday from 8:00 am- 5:00 pm ET to provide one-on-one assistance to general users with issues such as password reset and questions about updating a profile or completing an online application. These Tier I support requests are most often resolved quickly and users often appreciate having a person available to call for quick assistance. However, TCC also understands that users most often want to quickly find answers to their questions on their own, within the system. TCC's solution includes "How To" tipsheets, user guides and built in Information Icons throughout the system to assist users. With new releases, additional "How-To" assistance documentation will be created and stored in the knowledge repository.

If users call with issues that cannot be resolved, the issue is escalated to the TCC Help Desk Staff.

Help Desk Support: All Agency users are supported through the TCC Help Desk. TCC Help Desk staff are available to state users Monday through Friday from 7:00 am to 6:00 pm ET. Support requests that are submitted to the Help Desk after 6:00pm will be reviewed the following business day. TCC understands that state users often have questions immediately after the release of new functionality. TCC offers a call-in support bridge for internal users on the business day following new module releases to support change management and a seamless implementation of the new functionality.

The TCC Help Desk problem resolution process is illustrated in the following diagram.



TCC incorporates an escalation approach that defines both functional and non-technical items. Most functional escalations relate to and will be specified within the agreed Incident and Problem Management processes. These follow a pre-determined path, as noted in each contract, based on ticket severity within our ticketing system. Escalations dealing with items of a non-technical nature will follow an established 3-tier escalation process with roles and response times identified within the Communication Plan for each contract.

TCC offers the following Tiers of support:

Support Tiers	
Tier 1 Support	All support Incidents begin in Tier 1, where the initial trouble ticket is created, the issue is identified and clearly documented, and basic hardware/software troubleshooting is initiated.
Tier 2 Support	All support incidents that cannot be resolved with Tier 1 Support are escalated to Tier 2, where more complex support on hardware/software issues can be provided by more experienced technical resources. Escalation may collaborate with 3rd party support engineers to resolve more complex issues.
Tier 3 Support	Support Incidents that cannot be resolved by Tier 2 Support are escalated to Tier 3, where support is provided by the most qualified and experienced support engineers who may engage 3rd party support engineers to resolve the most complex issues.

TCC works closely with clients to refine and assess operational goals and exceed service level expectations throughout the life cycle of managed service delivery. The following are TCC's definitions of response and resolutions, which may be tailored during contract negotiations to meet the State's specific requirements.

Service Levels

The Service Levels provided are based on the Severity Levels as defined herein. Each Severity Level defines the actions that will be taken by Contractor for Response Time, Time for Diagnosis and Target Resolution Time for reported errors. Because of the urgency involved, Response Times for Severity Levels 1 and 2 are based upon voice contact by State, as opposed to email. TCC and the State will collectively agree on the Severity Level assigned to each ticket.

Severity Level	Definition	Response Time	Diagnosis Time	Target Resolution Time
1	Major Problem- an outage that results in unavailability of the solution or the solution's hosting environment or a defect that has persisted at the Severity 2 level for more than 48 hours.	Telephone conference within 1 hour of initial voice notification.	Diagnosis within 1 hour of initial voice notification.	Resolve within 24 hours of initial voice notification.
2	Critical Problem- an outage where the solution or the solution's hosting environment is available but one or	Telephone conference within 2 Standard	Diagnosis within 24 hours.	Resolve within 48 hours of initial

Severity Level	Definition	Response Time	Diagnosis Time	Target Resolution Time
	more of the critical functions is not operational and a workaround does not exist or a Severity 3 problem that has persisted for more than five (5) business days.	Business Hours of initial voice notification.		voice of notification.
3	Minor Problem- degradation of non-critical system functions that has persisted for more than eight (8) business hours.	Telephone conference within 1 business day of initial notification.	Diagnosis within three (3) days.	Resolve within five (5) business days.
4	Changes- request for changes to the solution.	Response within three (3) business days of initial request.	Determine level of effort within five (5) business days.	N/A
5	General Requests or informal contacts.	Response within three (3) business days.	Research and determine appropriate answers within five (5) business days	Provide answers and needed follow-up within two (2) business weeks.

Methods for Troubleshooting

Troubleshooting with an End User over the phone can sometimes be a cumbersome process, based on the type of issue the end user is having. Sometimes, to reproduce the issue for the Help Desk staff, Screen Sharing is the best way to show the issue to the Support team.

- For the Ascend system, TCC's support team uses the Microsoft Teams platform. TCC's support staff schedule sessions with end users for screenshare as needed.
- For the eXpedite solution, some clients have remote software installed to allow TCC access to the user's device – i.e., Teamviewer preferred platform. Some clients do not provide/allow TCC to have remote access to devices. In those cases, Teams is utilized for screenshare to support the app then utilize the client's IT contact when actions requiring admin permissions are needed.

How to Reach the Call Center and Help Desk

A Help page menu is available to be customized by the State to include important phone numbers and emails, including the contact information for the Call Center and Help Desk. Additionally, the Help page can display user training materials and videos that will help some users quickly and easily find answers to their questions.



Acquisition, Licensing, and Product Overview

Product Licensing

TCC has provided the End User Licensing Agreements for the proprietary Ascend and eXpedite solutions in the **Section Vendor's License and Maintenance Agreements**. TCC's licensing module for Ascend is based on modules, not the number of users. TCC's eXpedite mobile inspection software licensing fee is based on the number of field-based users. TCC intends to utilize the State Enterprise Licensing Agreements as outlined in the **Section Vendor's License and Maintenance Agreements**. Any additional 3rd Party Software Licensing needs are addressed in the **Section Third Party License Agreements**.

Product Roadmap

TCC's solution starts with the existing product functionality within Ascend that is then tailored for each customer during implementation. The product roadmap after implementation will be determined by TCC in collaboration with the Agency. TCC understands the frequent changes in legislation, regulations, and reporting requirements. TCC's team works with each client to document and prioritize enhancements to the system that can be provided utilizing standard change management processes. Each client has its own release schedule based on the agreed upon sprint cadence for Maintenance and Operations. TCC issues short surveys to clients for feedback and to ensure customer satisfaction is being met. TCC does not currently offer a customer user group, but we do update functionality of the base products based on client requirements. Updated base product functionality can be offered to all clients.

Ascend is built on Angular, .Net, and SQL Server technologies. TCC keeps current on the latest patches and newest technologies available. The existing components used in Ascend are kept up to date with the latest technology enhancements and will be upgraded for the State as well.

With TCC, the Agency is not investing in a one-size-fits-all solution, such as a generic CRM or other commodity tool, but rather in a software solution meticulously designed to address the nuances of child care operations.

TCC does not currently outsource the implementation of our products, and implementations are delivered by our subject matter experts. TCC does not push releases out to clients with core functionality changes that might disrupt normal business operations. Instead, each release is carefully planned and executed with client sign off. Training and updated documentation are a part of each release.

Ascend and eXpedite Customers.

State of Indiana Child Care Licensing Management, Mobile Licensing Inspections and Subsidy System

TCC and OECOSL have partnered for over 20 years to implement a wide variety of solutions to support Indiana's early childhood system, including family, children, providers, workforce, and state/partner staff. TCC modernized the technology stack as best in class solutions as federal and state regulations changed over time. The result is a large scale, integrated early childhood system known as AIS/CCIS (Automated Intake System/Child Care Information System). It includes electronic licensing inspections, licensing case management, background checks, Quality Rating, and Improvement management, and CCDF/PreK eligibility and case management. The AIS/CCIS system supports over 4,000 providers and 50,000 children.

State of New Jersey Child Care Licensing Management, Mobile Licensing Inspections, Professional Development and Training Registry, QIS, and Grants Management

Since 2017, TCC has partnered with the State of New Jersey to implement, expand, and support the New Jersey Child Care Information System (NJCCIS) utilizing TCC's integrated early childhood solution Ascend. NJCCIS includes the following Ascend modules: eXpedite (Ascends mobile inspection solution), Licensing/Registration Management, Professional Development and Training Registry, Quality Improvement System (QIS), LMS, Grants Management, Power BI Reporting, Hosting and API services.

Over the past two years, TCC expanded their work with New Jersey to include management of various grants including the ARP Stabilization and Hiring and Retention Bonus grants. For further details on the scope of work for these grants, see the response to Relevant Experience item #2.

NJCCIS currently supports over 60,000 registered users, including providers, workforce, trainers, state staff and state partner staff, such as TA Coaches, Infant Toddler Specialists and other Child Care Resource and Referral (CCRR) staff. All user types may access NJCCIS through a common portal through which providers and the early childhood workforce can perform various licensing, technical assistance, and professional development activities. The system guides state staff and their partners with configurable workflows, task alerts, and reports to perform their daily job responsibilities efficiently.

State of Oklahoma Child Care Licensing Management, Mobile Licensing Inspections and QRIS

TCC developed and implemented the OKDHS childcare licensing management system (known as CCMASS). OKDHS uses CCMASS to manage the licensing, administrative and reporting processes for approximately 3,700 licensed childcare facilities. TCC updated the system to utilize eXpedite, providing a modern look and feel that allows users to steer through the application effortlessly on a tablet and provides all the capabilities of tablet

software including tap-to-swipe, swipe-to-scroll and navigate, and pinch to zoom. OKDHS licensing inspectors use the eXpedite mobile forms tool to collect onsite inspection data and sync to ccMASS through any internet connection. TCC completes system enhancements as directly by OKDHS. TCC also performs system hosting, maintenance and help desk support and training. TCC recently modernized ccMASS to our Ascend product and is also in the process of building out OKDHS' QRIS Module.

State of Illinois Child Care Mobile Licensing Inspections

TCC contracted with the Illinois Department of Children and Family Services to provide an electronic forms and data retention solution for their statewide childcare licensing inspection process, including differential monitoring. TCC implemented eXpedite, the proven mobile inspection solution to give licensing inspectors the ability to collect, transmit, and store childcare inspection data. With eXpedite, inspection data can be collected in the field offline, then synchronized to the backend web-based repository once an internet connection is available. TCC implemented and hosts our Ascend Child Care Lite Licensing System, which allows DCFS to view available provider and inspection data and to view and export canned reports TCC created.

State of Maryland Child Care Mobile Licensing Inspections

TCC contracted with the Maryland State Department of Education to implement and support an electronic licensing inspection system that maintains and stores licensing inspection data. TCC provided field-based licensing staff with Wireless Webforms (WW) to collect data and complete electronic forms with child care providers while at their site, and a lite version of the Child Care Information System (CCIS) for maintaining and storing inspection data.

In the 2014 contract, TCC updated the system to utilize eXpedite, the updated version of WW, providing a modern look and feel that allows users to steer through the application effortlessly on a tablet and provides all the capabilities of tablet software including tap-to-swipe, swipe-to-scroll and navigate, and pinch to zoom. Using Windows 8 features, eXpedite is an on-the-go solution that allows users to work offline, minimizes keystrokes in the field, captures data more accurately and makes business processes more efficient.

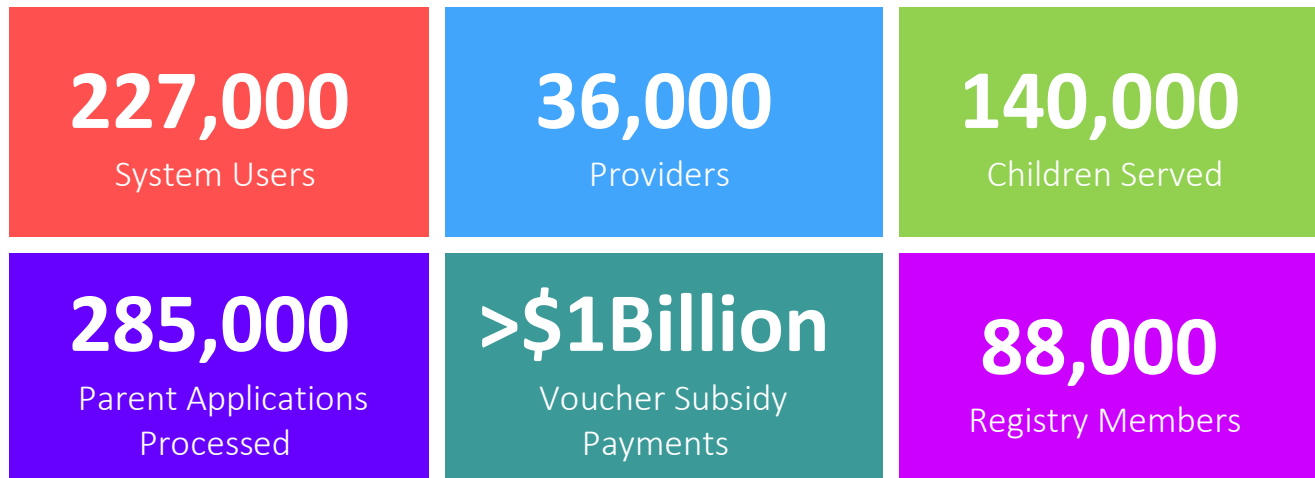
Mecklenburg County, North Carolina Pre-K Data System

TCC is implementing Ascend to provide an early childhood data management and budgeting system that tracks all stakeholder information and enables financial tracking and processing of payments. This includes, but is not limited to, tracking enrollment and attendance of children, family information, child development, transportation, child care subsidy receipt, teacher credentials and related information, professional development, coaching visits, and technical assistance provided, and easy to query reporting capabilities at multiple levels of access.

The system allows for the upload of documentation (e.g., paystubs, birth certificate, transcripts, invoices, and other information related to supporting the administration of MECK Pre-K from external and internal sources (e.g., parents, providers, employees).

TCC Child Care Solutions by the Numbers

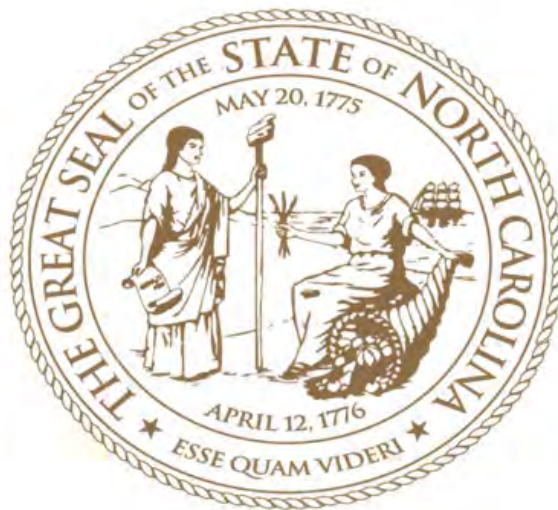
TCC's number of years of experience implementing and maintaining early childhood data systems is referenced in several sections of this proposal. This experience is what makes TCC unique. However, rather than quantifying this experience simply as years in the industry, TCC provides the metrics below to provide more context for the impact that TCC's body of work has had in the child care industry.



Security Vendor Readiness Assessment Report (VRAR)

TCC has included a security Vendor Readiness Assessment Report (VRAR) for solutions hosted on State Hosted Solutions.

ENTERPRISE SECURITY & RISK MANAGEMENT OFFICE (ESRMO)



Vendor Readiness Assessment Report (VRAR) for Solutions Hosted on State Infrastructure





Executive Summary

The State of NC requires all systems that are connected to the State network or that process State data meet an acceptable level of security compliance. The State of NC has adopted the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53 as the foundation for identifying and implementing information technology security controls. These controls are described in the State of NC Statewide Information Security Manual (SISM).

The following is a high-level view of specific security requirements for a solution that is hosted on the State network to meet compliance. The control references (e.g., AC-2) refer to the specific NIST 800-53 control as listed in the SISM, which may be found at the following link: <https://it.nc.gov/statewide-information-security-policies>.

Note: There may be additional requirements depending on the sensitivity of the data, other Federal and State mandates, or agency specific requirements.

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1. Introduction

1.1. Purpose

This report and its underlying assessment are intended to enable State agencies to reach a state-ready decision for a specific solution that will be hosted on the State network based on organizational processes and the security capabilities of the Moderate/low-impact information system.

1.2. Outcomes

Submission of this report by the Vendor does not guarantee a state-ready designation, nor does it guarantee that the State will procure products/services from the vendor.

1.3. State Approach and Use of This Document

The VRAR identifies clear and objective security capability requirements, where possible, while also allowing for the presentation of more subjective information. The clear and objective requirements enable the Vendor to concisely identify whether an application or vendor is achieving the most important State Moderate or low baseline requirements. The combination of objective requirements and subjective information enables the State to render a readiness decision based on a more complete understanding of the vendor's security capabilities.

Section 3, Capability Readiness, is organized into three sections:

- **Section 3.1, State Mandates**, identifies a small set of the state mandates a vendor must satisfy. The State **will not** waive any of these requirements.
- **Section 3.2, State Requirements**, identifies an excerpt of the most compelling requirements from the National Institute of Science and Technology (NIST) Special Publication (SP) 800 document series and State guidance. A VENDOR is unlikely to achieve approval if any of these requirements are not met.
- **Section 3.3, Additional Capability Information**, identifies additional information that is not tied to specific requirements, yet has typically reflected strongly on a VENDOR's ability to achieve approval.



2. VENDOR System Information

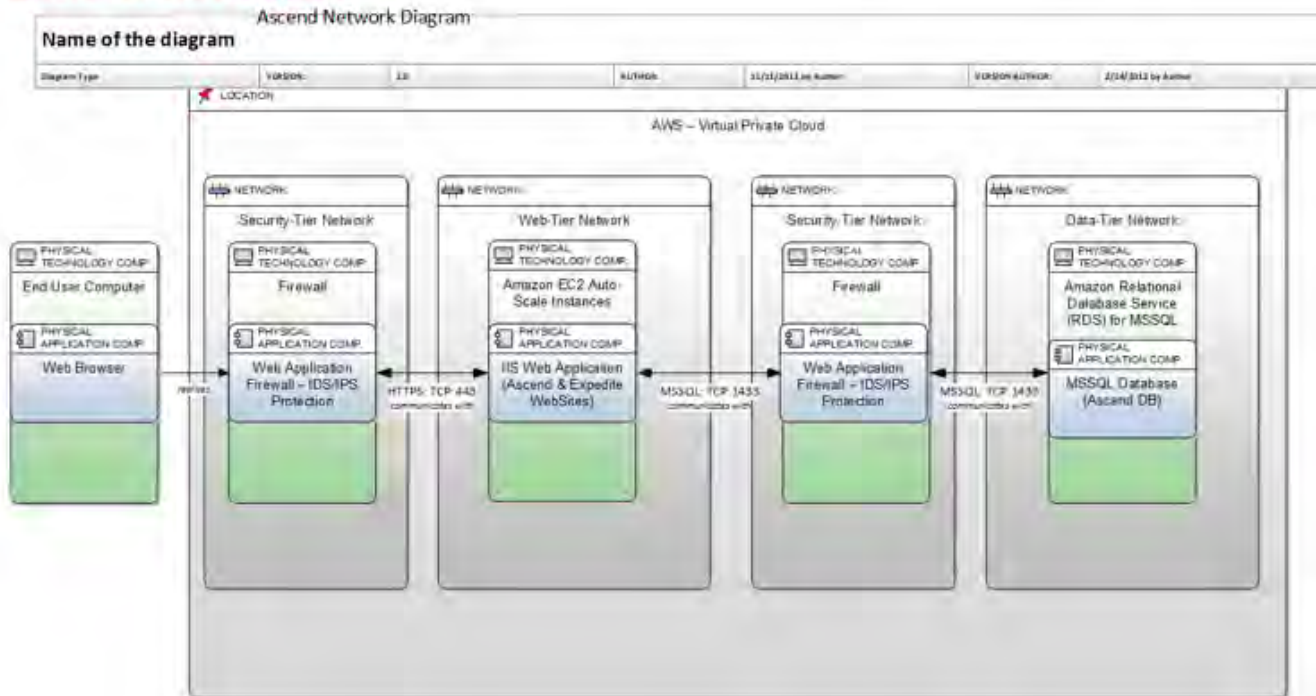
Provide and validate the information below. The VRAR template is intended for systems categorized at the Moderate security impact level, in accordance with the FIPS Publication 199 Security Categorization.

Table 2-1. System Information

VENDOR Name: TCC Software Solutions
Solution/System Name: Workforce Registry and PreK and Regulatory System Solution
FIPS PUB 199 System Security Level: Moderate
Fully Operational/Available as of: 9/30/24
Number of Customers (State/Others): 1 – State of North Carolina
System Functionality: Ascend is an early childhood data system that allows agencies, providers, families, and educator workforce to conduct all their early childhood business – in one place.

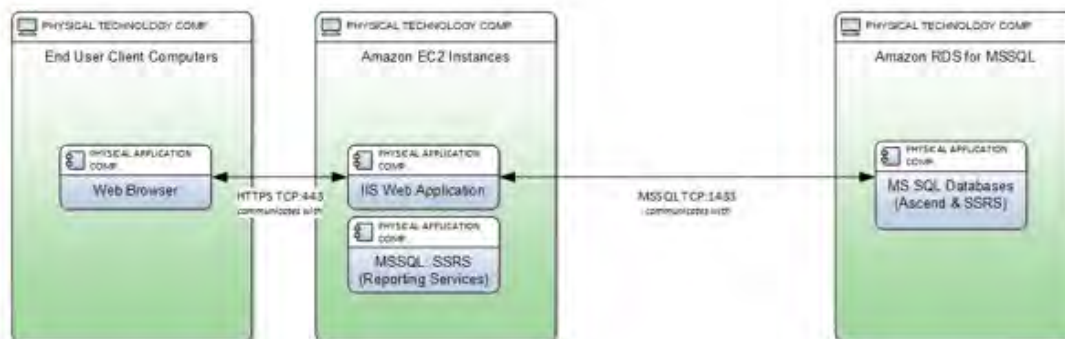
2.1. Data Flow Diagrams

Ascend Network Diagram



Ascend Technology Stack Diagram

Ascend Technology Stack						
Name of the diagram						
Diagram Type	VERSION	LD	AUTHOR	11/11/2013 by Author	VERSION AUTHOR	2/24/2013 by Author

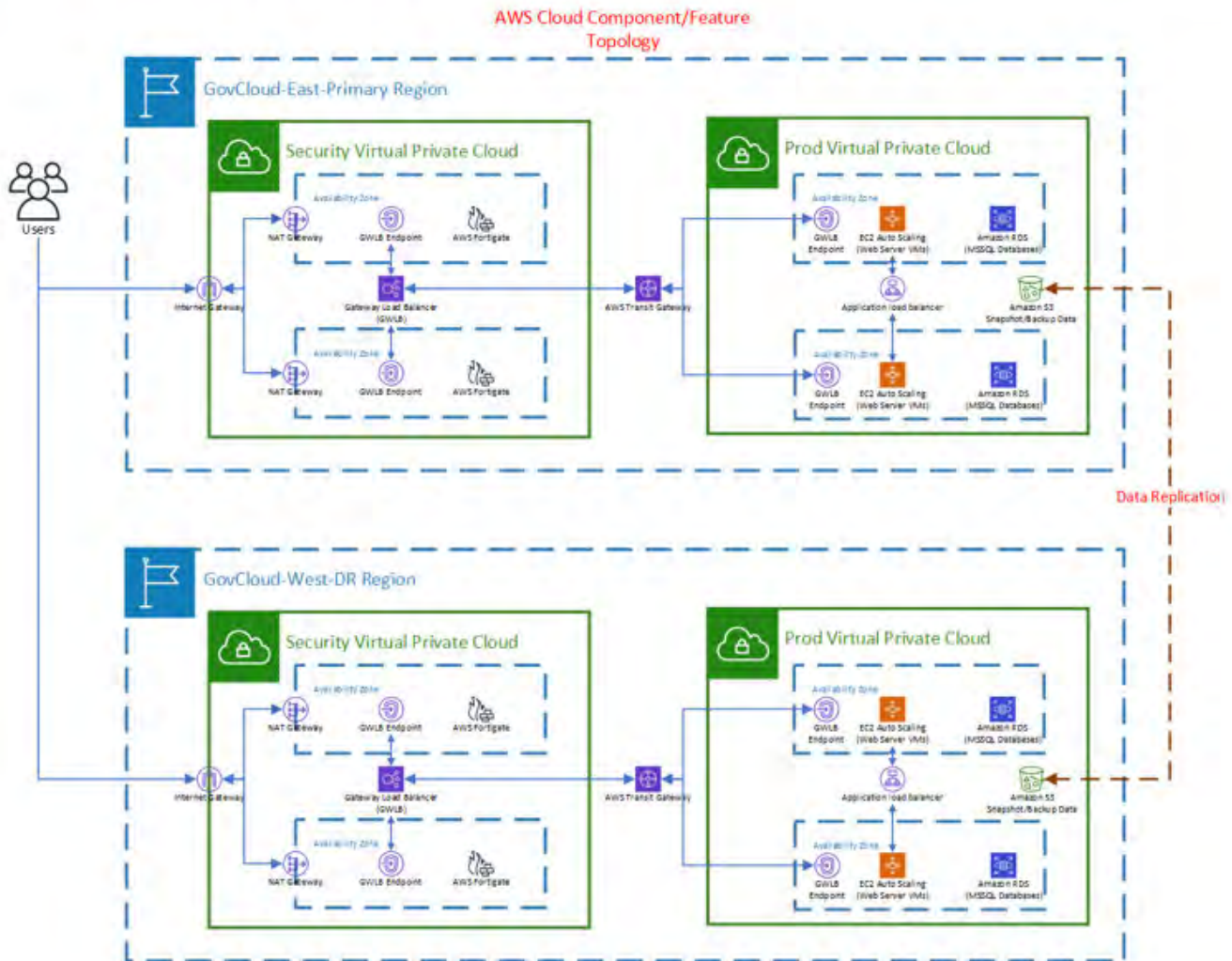


AWS Cloud Component/Feature Topology Diagram

(Note: Non-prod Virtual Private Cloud not shown, however it connects to the AWS Transit Gateway in the same manner as Prod in each region)

AWS Cloud Component/Feature Topology Diagram

(Note: Non-prod Virtual Private Cloud not shown, however it connects to the AWS Transit Gateway in the same manner as Prod in each region)



2.2. Separation Measures [AC-4, SC-2, SC-7]

TCC's Ascend platform web application operating within an AWS Virtual Private Cloud (VPC) uses several inherent physical and logical separation measures that contribute to the segmentation and isolation of system components and functions, ensuring secure user-to-system, admin-to-system, and system-to-system relationships. Additionally, specific configurations will be implemented to enhance the overall strength of these measures.

AWS VPC and Security Groups:

The AWS VPC itself provides a strong foundation for logical separation. Within the VPC, TCC will define subnets to isolate different components of the application. Security Groups, acting as virtual firewalls, control inbound and outbound traffic to and from instances, allowing specifications for what traffic can access particular resources.

Network Access Control Lists (NACLs):

NACLs are another layer of defense in the AWS VPC that operate at the subnet level. They allow TCC to control traffic based on source/destination IP addresses and ports, further enforcing network segmentation.

IAM (Identity and Access Management):

AWS IAM provides control over user-to-system and admin-to-system relationships. It enables fine-grained access control, allowing TCC to define user roles, permissions, and access policies, minimizing the risk of unauthorized access and privilege escalation.

Multi-tier Architecture:

A well-designed multi-tier architecture, separating presentation, application, and database layers, adds logical segregation. This design approach helps prevent direct communication between systems that should not interact, reducing the attack surface.

Database Access Controls:

In the SQL database, access controls can be implemented to restrict users' access to specific tables or fields, ensuring that only authorized users can access sensitive data.

Encryption:

Implementing encryption mechanisms for data at rest and data in transit adds another layer of protection to user-to-system and system-to-system relationships. AWS provides services like AWS Key Management Service (KMS) for managing encryption keys.

Bastion Hosts and Jump Boxes:

To access critical components, such as databases or admin interfaces, through a bastion host or jump box, you create an additional layer of security. This minimizes direct access to these components and reduces the risk of unauthorized access.

Web Application Firewall (WAF):

Fortigate WAF will be employed to protect the web application from common web exploits and attacks, such as SQL injection and cross-site scripting (XSS), enhancing user-to-system security.

Logging and Monitoring:



Comprehensive logging and monitoring, including AWS CloudTrail and CloudWatch, provide visibility into user and system activities, enabling quick detection and response to potential security incidents. These logs will be sent to the AlienVault USM Anywhere SIEM Solution for event correlation.

Regular Security Audits and Penetration Testing:

Performing regular security audits and penetration testing helps identify potential vulnerabilities and weaknesses in the system, allowing the TCC team to address them proactively.

Separation of Duties:

Separation of duties is a critical security principle that plays a significant part in enhancing the security and integrity of the Ascend platform web application within an AWS VPC. It involves dividing tasks and permissions among different individuals or roles to prevent any single entity from having complete control over a critical process. By implementing separation of duties, you reduce the risk of intentional or accidental misuse of privileges, insider threats, and potential security breaches. This will be achieved through the following:

1. **User Access Control:** Within the application, separation of duties will be enforced by controlling user access rights based on their roles and responsibilities. For example, regular users may have limited access to basic functionalities, while administrators or super-users have broader access for system management and configuration. By differentiating roles, potential harm or unauthorized actions caused by regular users are mitigated.
2. **Database Management:** In the multi-tier architecture, separation of duties will be applied to limit access to the database. The database administrator (DBA) role may handle schema design, performance optimization, and backup, while application developers have access only to the application's specific tables. This way, developers cannot directly manipulate sensitive data, and the risk of unauthorized data access is reduced.
3. **System Administration:** In an AWS environment, separation of duties can be applied to IAM roles and policies. For example, the person responsible for managing the infrastructure should have a separate IAM role from the one handling application deployment. This separation ensures that a single compromise cannot lead to total control over both infrastructure and application components.
4. **Code Deployment and Review:** Separation of duties will be employed during the software development lifecycle. Developers write the code, while a separate team is responsible for reviewing and approving the code changes before deployment. This practice reduces the chances of introducing malicious code or vulnerabilities without proper oversight.
5. **Access to Sensitive Data:** In systems that process sensitive information, such as personally identifiable information (PII) or financial data, separation of duties will be implemented to ensure that access to such data is strictly controlled and limited only to authorized personnel, based on their roles and responsibilities.
6. **Audit and Monitoring:** The responsibility for auditing and monitoring system activities will be assigned to a separate team. This separation prevents any single entity from tampering with logs and covers any potential attempts to conceal unauthorized actions.
7. **Emergency Access:** In cases where emergency access to critical systems is needed, such as during system failures, a secure process will be established that requires approval from multiple

parties. This ensures that emergency access is only granted when absolutely necessary and with proper authorization.

By incorporating separation of duties into the application's design and operational processes, TCC can mitigate the risk of data breaches, insider threats, and unauthorized access. It is essential to regularly review and update these access controls to align with changes in roles or responsibilities and to maintain a robust security posture.

3. Capability Readiness

3.1. State Mandates

This section identifies State requirements applicable to all State approved systems. All requirements in this section **must be met**. Some of these topics are also covered in greater detail in Section 3.2, *State Requirements*, below.

Only answer "Yes" if the requirement is fully and strictly met. The Vendor must answer "No" if an alternative implementation is in place.

Table 3-1. State Mandates

#	Compliance Topic	Fully Compliant?	
		Yes	No
1	Data at Rest, Authentication: Are FIPS 140-2/-3 Validated or National Security Agency (NSA)-Approved cryptographic modules only used where cryptography is required?	Yes	
2	Transmission, Remote Access: Are FIPS 140-2/-3 Validated or National Security Agency (NSA)-Approved cryptographic modules consistently used where cryptography is required?	Yes	
3	Does the <u>VENDOR have the ability to</u> consistently remediate High vulnerabilities within 30 days and Moderate vulnerabilities within 90 days?	Yes	
4	All operating systems (OS) <u>AND</u> major application software components (e.g., Microsoft SQL, Apache Tomcat, Oracle <u>Weblogic</u> , etc.), must NOT be past N-1. Applications which are not operating on the most recent platform MUST have a roadmap to upgrade with a State approved timeline. Does the application support the N-1 requirement?	Yes	

3.2. State Requirements

This section identifies additional State Readiness requirements. All requirements in this section **must be met**; however, alternative implementations and non-applicability justifications may be considered on a limited basis.



3.2.1. Approved Cryptographic Modules [SC-13]

The Vendor must ensure FIPS 140-2, or 140-3 where available, **Validated** or NSA-Approved algorithms are used for all encryption modules. FIPS 140-2 **Compliant** is **not** sufficient. The Vendor may add rows to the table if appropriate, but must not remove the original rows. The Vendor must identify all non-compliant cryptographic modules in use.

Table 3-2a. Data at Rest & Authentication

	Cryptographic Module Type	FIPS 140-2 Validated?		NSA Approved?		Describe Any Alternative Implementations (if applicable)	Describe Missing Elements or N/A Justification
		Yes	No	Yes	No		
1	Data at Rest [SC-28]	X					
2	Authentication [IA-5, IA-7]	X					

3.2.2. Transport Layer Security [NIST SP 800-52, Revision 2]

The Vendor must ensure FIPS 140-2, or 140-3 where available, Validated or NSA-Approved algorithms are used for all encryption modules relating to block ciphers, digital signatures and hash functions. Full FIPS mode is not required unless other regulatory requirements must be met. The Vendor may add rows to the table if appropriate but must not remove the original rows. The Vendor must identify all non-compliant cryptographic modules in use.

Table 3-2b. Transport Encryption

	Cryptographic Module Type	FIPS 140-2 Validated?		NSA Approved?		Describe Any Alternative Implementations (if applicable)	Describe Missing Elements or N/A Justification
		Yes	No	Yes	No		
1	Transmission [SC-8 (1), SC-12, SC-12 (2, 3)]	X					
2	Remote Access [AC-17 (2)]	X					

Table 3-3. Transport Protocol

#	The Cryptographic Module Type	Protocol in Use?		If "yes," please describe use for both internal and external communications
		Yes	No	
1	SSL (Non-Compliant)		X	
2	TLS 1.0 (Non-Compliant)		X	
3	TLS 1.1 (Non-Compliant)		X	
4	TLS 1.2 (Compliant)	X		Used for all web application communications including IIS, SQL, and access to AWS services and features.
5	TLS 1.3 (Compliant)	X		Used for all web application communications including IIS, SQL, and access to AWS services and features.

3.2.3. Identification and Authentication, Authorization, and Access Control

Only answer “yes” if the answer is consistently “yes.” For partially implemented areas, answer “no” and describe what is missing to achieve a “yes” answer. If inherited, please indicate partial or full inheritance in the “Describe Capability” column. Any non-inherited capabilities must be described.

Table 3-4. Identification and Authentication, Authorization, and Access Control

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the system uniquely identify and authorize organizational users (or processes acting on behalf of organizational users) in a manner that cannot be repudiated, and which sufficiently reduces the risk of impersonation? [IA-2, IA-4]	X		All infrastructure for the solution uses Microsoft Active Directory storing unique identifiers for user accounts, service accounts, and objects within the directory service. Access to the Ascend application is front ended by Azure Active Directory B2C ensuring the application user directory service is separate from the administrative directory service. Access to the AWS console is controlled through the AWS Identity Access Management service/feature. All IAM solutions have the capability to be integrated with the State’s NCID system.
2	Does the system allow for multi-factor authentication (MFA) for administrative accounts and functions? [IA-2, IA-2 (1), IA-2 (2)]	X		As mentioned above all IAM needs can be integrated with the State’s NCID system providing centralized control along with enforcement of MFA policies either through NCID or using the solution’s native services.
3	Is role-based access used, managed and monitored? [IA-4, IA-5]	X		All IAM services use RBAC which is strictly managed using the principle of “least privilege”. These services are all monitored through audit logs configured and sent to a SIEM.
4	Does the system restrict non-authorized personnel’s access to resources? [AC-6, AC-6 (1), AC-6 (2)]	X		The entire solution is built using “block by default and allow by exception” principles. Non-authorized access is not permitted, and all attempts are audit logged and flagged for review.
5	Does the system restrict non-privileged users from performing privileged function? [AC-6, AC-6 (1), AC-6 (2), AC-6 (10)]	X		All IAM services use RBAC which is strictly managed using the principle of “least privilege”. These services are all monitored through audit logs configured and sent to a SIEM.
6	Does the system restrict access of administrative personnel in a way that limits the capability of individuals to compromise the security of the information system? [AC-2]	X		<i>The capability description is not required here, but must be included in Section 2.2, Separation Measures.</i>

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
7	Does the solution enforce the State's password policy? State requires minimum 14-character complex passwords (Upper, Lower, Special Character and Numerical), including minimum password life? [IA-5]	X		All systems and services are hardened following guidelines provided in CIS Benchmarks and DISA STIGs. These hardening procedures ensure accounts within the system have a minimum 14-character complex password following the State's requirements.
8	Does the solution require a non-user service account to function? [IA-5]	X		Some service accounts are required within the solution to function properly. However, through our strict hardening procedures, service accounts are documented, rotated, configured to disallow interactive logons. Service accounts are tightly controlled through audit logs and monitoring. These accounts strictly follow the principle of least privilege.
9	Does the solution obscure feedback of authentication information? [IA-6]	X		All authentication processes obscure the feedback of entered data to prevent the visibility of that information.
10	Does the solution limit unsuccessful login attempts? [AC-7]	X		All services within the solution support limiting unsuccessful login attempts that is configurable. Typically, the number of attempts is set to either 3 or 5 depending on the use case.
11	Does the solution support a fail-safe function to deny access if the system is not functioning properly? [AC-17]	X		The entire solution operates on a default deny principle using a fail-safe function for access control. The limit is not configurable and is set to automatically fail to allow access or pass data through devices such as firewalls if any part of this process breaks down or fails to operate properly.
12	Does the solution store and forward passwords in encrypted form? [SC-8]	X		All passwords for the system are stored using non-reversible encryption.

3.2.4. Audit, Alerting, Malware, and Incident Response

Only answer “yes” if the answer is consistently “yes.” For partially implemented areas, answer “no” and describe what is missing to achieve a “yes” answer. If inherited, please indicate partial or full inheritance in the “Describe Capability” column. Any non-inherited capabilities must be described.

Table 3-5. Audit, Alerting, Malware, and Incident Response

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the system store audit data in a tamper-resistant manner which meets chain of custody and any e-discovery requirements? [AU-4, AU-9]	X		All audit data collected is configured to be sent to a SIEM which access is highly restricted. This audit data cannot be modified and meets the requirements of this control.
2	Does the solution log and monitor access to it? [SI-4]	X		All audit data collected is configured to be sent to a SIEM which access is highly restricted. This audit data cannot be modified and meets the requirements of this control.
3	Does the VENDOR have a plan and capability to perform security code analysis and assess code for security flaws, as well as identify, track, and remediate security flaws? [SA-11]	X		TCC’s development and security processes include the capabilities to review web code for security flaws and remediate those flaws as part of the SDLC. Within Azure DevOps, Pipelines use Azure Defender for DevOps to perform automated security code analysis through all stages of the build process. Additionally, routine OWASP scans are performed to add a layered approach to this process as well as automated external vulnerability scans of public IP address performed by CISA. Results of all these processes are reviewed and used for remediation efforts to ensure secure code is maintained.
4	Does the VENDOR have the capability to retain online audit records for at least 90 days to provide support for after-the-fact investigations of security incidents and offline for at least one year to meet regulatory and organizational information retention requirements? [AU-11]	X		All audit data within the SIEM is configured to retain online data for 90 days and offline data which can be read back into the system for a minimum of 1 year.



3.2.5. Configuration and Risk Management

Only answer “yes” if the answer is consistently “yes.” For partially implemented areas, answer “no” and describe what is missing to achieve a “yes” answer. If inherited, please indicate partial or full inheritance in the “Describe Capability” column. Any non-inherited capabilities must be described.

Table 3-6. Configuration and Risk Management

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the VENDOR follow a formal change control process that includes a security impact assessment? [CM-3, CM-4, CM-4 (2)]	X		TCC adheres to a strict Change Management process which follows a weekly schedule. Our Change management charter and processes include a formal Change Approval/Control Board (CAB/CCB) which includes security impact analysis for any changes being made to the system. All changes are tracked and recorded within our ticketing system along with implementation and rollback plans.
2	Does the solution support the ability to prevent unauthorized changes to the system? [CM-5]	X		Privileged access to the system with the rights necessary to make changes being highly restricted. Additionally, audit log monitoring is setup and configured to send data to the SIEM where event correlation and alerts are configured to immediately notify of system changes. Any changes outside of change control are monitored to ensure compliance with the requirement can be met. Separation of duties prevents development resources administrative access to production systems during normal business operations. Scheduled changes follow a strict release management process.
3	Does the VENDOR support configuration settings for products employed that reflect the most restrictive mode consistent with operational requirements? [CM-6, CM-7]	X		All configuration settings of the system follow a combination of hardening settings out of the CIS Benchmarks and DISA STIG libraries. All systems and services are configured following the principle of least functionality and least privilege. Settings within the AWS Cloud are continually monitored using services such as AWS Config to monitor for compliance to the security baselines established.



#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
4	Does the VENDOR demonstrate the capability to remediate High vulnerabilities within 30 days and Moderate vulnerabilities within 90 days? [RA-5]	X		TCC's Vulnerability and Patch Management process defined under our Risk Management Policy ensure routine continuous vulnerability scanning and remediation of flaws/vulnerabilities within this time frame. This includes processes utilized to review external threat exchanges and informational services to provide details on zero-day exploits for critical vulnerabilities which allow for out of band patching cycles that require patches to be implemented quicker than the normal monthly patch cycle.
5	When a High vulnerability is identified as part of continuous monitoring activities, does the VENDOR consistently check audit logs for evidence of exploitation? [RA-5]	X		Our SIEM solution ties directly into our continuous vulnerability scanning of the system. Alerts are configured and reviewed as part of routine processes to ensure we are monitoring for evidence of exploitation.

3.3. Additional Capability Information

State will evaluate the responses in this section on a case-by-case basis relative to a State-Ready designation decision.

3.3.1. Change Management Maturity

While the following change management capabilities are not required, they indicate a more mature change management capability and may influence a State Readiness decision, especially for larger systems.

The Vendor must answer the questions below.

Table 3-7. Change Management

#	Question	Yes	No	If "no", please describe how this is accomplished.
1	Does the VENDOR's change management capability include a fully functioning Change Control Board (CCB)?	X		
2	Does the VENDOR have and use development and/or test environments to verify changes before implementing them in the production environment?	X		

3.3.2. Vendor Dependencies and Agreements

The Vendor must answer the questions below.

Table 3-8. Vendor Dependencies and Agreements

#	Question	Yes	No	Instructions
1	Does the system have any dependencies on other vendors such as a leveraged service offering, hypervisor and operating system patches, physical security and/or software and hardware support?	X		If "yes," please complete Table 3-9. Vendor Dependencies below.
2	Within the system, are all products still actively supported by their respective vendors?	X		If any are not supported, answer, "No."
3	Does the VENDOR have a formal agreement with a vendor, such as for maintenance of a leveraged service offering?	X		If "yes," please complete Table 3-10. Formal Agreements Details below.

If there are vendor dependencies, please list each in the table below, using one row per dependency. For example, if using another vendor's operating system, list the operating system, version, and vendor name in the first column, briefly indicate the VENDOR's reliance on that vendor for patches, and indicate whether the vendor still develops and issues patches for that product. If there are no vendor dependencies, please type "None" in the first row.

Table 3-9. Vendor Dependency Details

#	Product and Vendor Name	Nature of Dependency	Still Supported?	
			Yes	No
1	Windows Server 2019/2022, Microsoft	Operating systems for EC2 instances. Patches released and obtained directly from Microsoft	X	
2	AWS Cloud Features and Services	Various features and services within the AWS Cloud. Support and patches for platform and infrastructure services are inherited as part of the AWS Cloud usage agreements.	X	
3	AlienVault USM Anywhere, AT&T Cybersecurity	SIEM and continuous vulnerability scanning solution for the environment. Patches included as part of service offering.	X	
4	MSSQL Server 2022, Microsoft and AWS	Database engine for the solution as part of the Amazon RDS for MSSQL. Patches are managed and maintained as part of inheritance from the AWS Cloud Offering and Microsoft.	X	
5	Sentinel ONE	Endpoint protection with XDR capabilities for the solution. Patches received directly from Sentinel ONE as part of State's Enterprise Agreement.	X	

#	Product and Vendor Name	Nature of Dependency	Still Supported?	
			Yes	No
6	Application Performance Monitoring, Dynatrace	Full-Stack application performance monitoring for solution. Platform fully managed and patched as part of service agreement with Dynatrace.	X	
7	OpenText Information Management Services, OpenText	EDMS for the Solution. Patches are included as part of the service agreement.	X	
8	Fortigate NGFW, Fortinet	Firewall/Boundary protection for solution. Patches received and maintained from support agreement directly with Fortinet as part of the AWS Marketplace offering or directly as part of State's licensing agreement.	X	

If there are formal vendor agreements in place, please list each in the table below, using one row per agreement. If there are no formal agreements, please type "None" in the first row.

Table 3-10. Formal Agreements Details

#	Organization Name	Nature of Agreement
1	AWS	AWS Partner Program
2	Microsoft	Microsoft Partner Program
3	AT&T Cybersecurity	AT&T Cybersecurity MSSP Agreement
4	Dynatrace	Dynatrace platform customer agreement

Organization's Security Representative or designee

Chad Hughes
PLEASE PRINT NAME

Chad Hughes
SIGNATURE

8/15/2023
Date

Architecture Diagrams

TCC has included the following diagrams for review in **Section 3.3.2 Architecture Diagram Defined** section of this proposal:

1. Ascend Network Architecture Diagram.
2. Ascend Technology Stack Diagram.
3. Ascend AWS Component-Feature Topology Diagram.



Schedule of Offered Solution

TCC's Draft Project Schedule is below.

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
1	North Carolina Registry & Pre-K	11002 hrs	Wed 11/1/23	Tue 2/20/29		
2	Implementation Phase	1838 hrs	Wed 11/1/23	Mon 9/30/24		
3	Project Initiation and Analysis & Design	1040 hrs	Wed 11/1/23	Wed 5/8/24		
4	Project Initiation	1032 hrs	Wed 11/1/23	Tue 5/7/24		
5	Receive Notification of Contract Execution	2 hrs	Wed 11/1/23	Wed 11/1/23		PM,DCDEE
6	Identify Main DCDEE Contact	2 hrs	Wed 11/1/23	Wed 11/1/23	5	PM
7	Communicate with DCDEE Contact about Kick-Off Meeting Dates	4 hrs	Wed 11/1/23	Wed 11/1/23	6	PM,DCDEE
8	Finalize SLA	4 hrs	Wed 11/1/23	Wed 11/1/23	6	PM,DCDEE
9						
10	Prepare for Kick-Off Meeting	28 hrs	Thu 11/2/23	Tue 11/7/23		
11	Identify DCDEE Resources to Attend Meeting & Their Roles	2 hrs	Thu 11/2/23	Thu 11/2/23	7	PM,DCDEE
12	Send DCDEE Request for Information Required Prior to Meeting	4 hrs	Thu 11/2/23	Thu 11/2/23	11	PM,BA 1,TL 1,SME
13	Schedule the Meeting	2 hrs	Thu 11/2/23	Thu 11/2/23	12	PM,DCDEE
14	Review Requested Information sent by DCDEE	8 hrs	Fri 11/3/23	Fri 11/3/23	13	BA 1,TL 1,PM,SME
15	Prepare Agenda and Meeting Information Package	8 hrs	Mon 11/6/23	Mon 11/6/23	14	PM,BA 1,TL 1,SME
16	Identify Equipment Needed for the Meeting	2 hrs	Tue 11/7/23	Tue 11/7/23	15	PM,TL 1
17	Make Travel Arrangements	2 hrs	Tue 11/7/23	Tue 11/7/23	16	PM
18						
19	Conduct Kick-Off Meeting	62 hrs	Tue 11/7/23	Fri 11/17/23		
20	Identify Resources & Responsibilities	2 hrs	Tue 11/7/23	Tue 11/7/23	17	PM,BA 1,TL 1,SME,DCDEE
21	Define Scope of Project	6 hrs	Tue 11/7/23	Wed 11/8/23	20	PM,BA 1,TL 1,SME,DCDEE
22	Define Project Goals	2 hrs	Wed 11/8/23	Wed 11/8/23	21	PM,BA 1,TL 1,SME,DCDEE
23	Define Requirements	32 hrs	Wed 11/8/23	Tue 11/14/23	22	PM,BA 1,TL 1,SME,DCDEE
24	Define Project Constraints	2 hrs	Tue 11/14/23	Tue 11/14/23	23	PM,BA 1,TL 1,SME,DCDEE
25	Define Project Assumptions	2 hrs	Wed 11/15/23	Wed 11/15/23	24	PM,BA 1,TL 1,SME,DCDEE
26	Define Project Risks	2 hrs	Wed 11/15/23	Wed 11/15/23	25	PM,BA 1,TL 1,SME,DCDEE
27	Define Interfaces	4 hrs	Wed 11/15/23	Wed 11/15/23	26	PM,BA 1,TL 1,SME,DCDEE
28	Define Data to be Converted	4 hrs	Thu 11/16/23	Thu 11/16/23	27	PM,BA 1,TL 1,SME,DCDEE
29	Define Project Status Reports & Frequency	2 hrs	Thu 11/16/23	Thu 11/16/23	28	PM,BA 1,TL 1,SME,DCDEE
30	Review	2 hrs	Thu 11/16/23	Thu 11/16/23	29	PM,BA 1,TL 1,SME,DCDEE
31	Travel	2 hrs	Fri 11/17/23	Fri 11/17/23	30	PM,BA 1,TL 1,SME
32						
33	Kick-Off Meeting Deliverables	28 hrs	Fri 11/17/23	Wed 11/22/23		
34	Notes from the Kick-Off Meeting	16 hrs	Fri 11/17/23	Tue 11/21/23	31	BA 1,PM,SME
35	Provide Draft Project Schedule	8 hrs	Tue 11/21/23	Wed 11/22/23	34	PM
36	Send to DCDEE for Approval	2 hrs	Wed 11/22/23	Wed 11/22/23	35	PM,DCDEE
37	Obtain Sign-off From DCDEE To Proceed	2 hrs	Wed 11/22/23	Wed 11/22/23	36	PM,DCDEE
38						
39	Establish Project Governance	164 hrs	Wed 11/1/23	Fri 12/1/23		
40	Security Plan	80 hrs	Wed 11/1/23	Wed 11/15/23	6	NOG

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
41	Communication Plan	6 hrs	Wed 11/22/23	Mon 11/27/23	37	PM
42	Risk Management Plan	6 hrs	Mon 11/27/23	Tue 11/28/23	41	PM
43	Change Management Plan	6 hrs	Tue 11/28/23	Tue 11/28/23	42	PM
44	Issue Management Plan	6 hrs	Wed 11/29/23	Wed 11/29/23	43	PM
45	Quality Assurance Plan	6 hrs	Wed 11/29/23	Thu 11/30/23	44	PM
46	Configuration and Release Management Plan	6 hrs	Thu 11/30/23	Fri 12/1/23	45	PM
47	Provide Final Project Schedule	6 hrs	Fri 12/1/23	Fri 12/1/23	46	PM
48	Provide Escrow Agreement	6 hrs	Wed 11/29/23	Thu 11/30/23	44	PM
49	End Project Initiation	0 hrs	Fri 12/1/23	Fri 12/1/23	47	
50						
51	Establish Infrastructure & Technical Specifications	948 hrs	Wed 11/15/23	Tue 5/7/24		
52	Define Infrastructure Requirements	16 hrs	Wed 11/15/23	Fri 11/17/23	40	NOG
53	Define Infrastructure Configuration Requirements	16 hrs	Fri 11/17/23	Tue 11/21/23	52	NOG
54	Identify Configured State Technical Requirements	16 hrs	Tue 11/21/23	Mon 11/27/23	53	NOG
55	Create Technical Architecture Diagrams (TAD)	40 hrs	Mon 11/27/23	Mon 12/4/23	54	NOG
56	Create General Backup & Recovery Plan	40 hrs	Mon 12/4/23	Mon 12/11/23	55	NOG
57	Create Disaster Recovery Plan	40 hrs	Mon 12/11/23	Mon 12/18/23	56	NOG
58	Update Disaster Recovery Plan After 6 Months	40 hrs	Wed 5/1/24	Tue 5/7/24		NOG
59						
60	Analysis & Design	872 hrs	Mon 12/4/23	Wed 5/8/24		
61	System Analysis	872 hrs	Mon 12/4/23	Wed 5/8/24		
62	Document DCDEE Business Rules	40 hrs	Mon 12/4/23	Fri 12/8/23	49	BA 1,DCDEE
63	Document and Verify the Business Requirements	40 hrs	Mon 12/11/23	Fri 12/15/23	62	BA 1,DCDEE
64	Create Gap Analysis	40 hrs	Mon 12/18/23	Tue 12/26/23	63	BA 1
65	Create the Solution Requirements Document	40 hrs	Wed 12/27/23	Wed 1/3/24	64	BA 1
66	Document the Use Cases	40 hrs	Thu 1/4/24	Wed 1/10/24	65	BA 1
67	Create the Requirements Traceability Matrix	40 hrs	Thu 1/11/24	Thu 1/18/24	66	BA 1
68	Obtain Customer Sign-off	2 hrs	Fri 1/19/24	Fri 1/19/24	67	PM,DCDEE
69	Update Gap Analysis after 6 Months	40 hrs	Thu 5/2/24	Wed 5/8/24		BA 1
70						
71	System Design	122 hrs	Fri 1/19/24	Fri 2/9/24		
72	Create Functional Design	40 hrs	Fri 1/19/24	Fri 1/26/24	68	PM,TL 1,BA 1,SME
73	Update Data Model	40 hrs	Fri 1/26/24	Fri 2/2/24	72	DBA
74	Update Data Dictionary	40 hrs	Fri 2/2/24	Fri 2/9/24	73	DBA
75	Design the Reports	40 hrs	Fri 1/26/24	Fri 2/2/24	72	BA 1
76	Design the Interfaces	40 hrs	Fri 1/26/24	Fri 2/2/24	72	TL 2
77	Create the Detailed Design Specification Document	40 hrs	Fri 2/2/24	Fri 2/9/24	76	TL 2
78	Obtain Customer Sign-off	2 hrs	Fri 2/9/24	Fri 2/9/24	77	PM,DCDEE
79						
80	Quality Assurance	138 hrs	Fri 1/19/24	Tue 2/13/24		
81	Create Test Plan Strategy for the Entire Project	120 hrs	Fri 1/19/24	Fri 2/9/24	68	QAM
82	Prepare & Demonstrate All Test Environments	16 hrs	Fri 2/9/24	Tue 2/13/24	81	QAM,NOG

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
83	Obtain Customer Sign-off	2 hrs	Tue 2/13/24	Tue 2/13/24	82	QAM,DCDEE
84						
85	Regulatory Modernization	658 hrs	Thu 1/11/24	Tue 5/7/24		
86	Regulatory Modernization Software Construction & Testing	658 hrs	Thu 1/11/24	Tue 5/7/24		
87	Ensure Non-Prod Regions are Operational	8 hrs	Fri 1/19/24	Mon 1/22/24	68	NE
88						
89	License & Compliance Construction	266 hrs	Thu 1/11/24	Wed 2/28/24		
90	Create User Stories	64 hrs	Thu 1/11/24	Tue 1/23/24	66	BA 1
91	Update the Requirements Traceability Matrix	8 hrs	Wed 1/24/24	Wed 1/24/24	90	BA 1
92	Review Functional Requirements	4 hrs	Fri 2/9/24	Fri 2/9/24	77	PM,TL 1
93	Assign Functions to Development Staff	4 hrs	Fri 2/9/24	Mon 2/12/24	92	PM,TL 1
94	Build/Modify Software Components	64 hrs	Mon 2/12/24	Thu 2/22/24	93	SE 1
95	Build/Modify SQL Components	16 hrs	Thu 2/22/24	Mon 2/26/24	94	SE 1
96	Unit Test the Software & SQL Components	16 hrs	Mon 2/26/24	Wed 2/28/24	95	SE 1
97						
98	License & Compliance System Testing	330 hrs	Fri 2/9/24	Mon 4/8/24		
99	Review Test Plan	8 hrs	Fri 2/9/24	Mon 2/12/24	92	QA 1
100	Identify Resources	2 hrs	Mon 2/12/24	Mon 2/12/24	99	QA 1
101	Identify Functions to be Tested	4 hrs	Tue 2/13/24	Tue 2/13/24	100	PM,QA 1
102	Create Test Scripts	16 hrs	Tue 2/13/24	Thu 2/15/24	101	QA 1
103	Perform System Testing	24 hrs	Wed 2/28/24	Mon 3/4/24	96,102	QA 1
104	Modify Software Components	8 hrs	Mon 3/4/24	Tue 3/5/24	103	SE 1
105	Modify SQL Components	4 hrs	Tue 3/5/24	Tue 3/5/24	104	SE 1
106	Unit Test the Software Components	4 hrs	Tue 3/5/24	Wed 3/6/24	105	SE 1
107	Perform System & Regression Testing	8 hrs	Wed 3/6/24	Thu 3/7/24	106	QA 1
108	Create System Test Results Report	8 hrs	Thu 3/7/24	Fri 3/8/24	107	QAM
109	Create Regression Test Reports	8 hrs	Fri 3/8/24	Mon 3/11/24	108	QAM
110	Deploy to User Acceptance Testing Environment	2 hrs	Fri 4/5/24	Fri 4/5/24	107	SE 1
111	Product Demonstration of Tested System to DCDEE	4 hrs	Fri 4/5/24	Fri 4/5/24	110	PM,TL 1,BA 1
112	Add Feedback to Solution Backlog	8 hrs	Mon 4/8/24	Mon 4/8/24	111	PM
113						
114	Provider Portal & Complaints Construction	410 hrs	Wed 1/24/24	Thu 4/4/24		
115	Create User Stories	64 hrs	Wed 1/24/24	Fri 2/2/24	90	BA 1
116	Update the Requirements Traceability Matrix	8 hrs	Mon 2/5/24	Mon 2/5/24	115	BA 1
117	Review Functional Requirements	4 hrs	Wed 3/6/24	Wed 3/6/24	106	TL 1
118	Assign Functions to Development Staff	4 hrs	Wed 3/6/24	Thu 3/7/24	117	TL 1
119	Build/Modify Software Components	64 hrs	Wed 3/13/24	Mon 3/25/24	118	SE 1
120	Build/Modify SQL Components	16 hrs	Wed 3/27/24	Fri 3/29/24	119	SE 1
121	Unit Test the Software & SQL Components	16 hrs	Tue 4/2/24	Thu 4/4/24	120	SE 1
122						
123	Provider Portal & Complaints System Testing	94 hrs	Thu 4/4/24	Fri 4/19/24		
124	Review Test Plan	8 hrs	Thu 4/4/24	Fri 4/5/24	121,166	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
125	Identify Resources	2 hrs	Fri 4/5/24	Fri 4/5/24	124	QA 1
126	Identify Functions to be Tested	4 hrs	Fri 4/5/24	Fri 4/5/24	125	QA 1
127	Create Test Scripts	16 hrs	Mon 4/8/24	Tue 4/9/24	126	QA 1
128	Perform System Testing	24 hrs	Wed 4/10/24	Fri 4/12/24	121,127,166	QA 1
129	Modify Software Components	8 hrs	Mon 4/15/24	Mon 4/15/24	128	SE 1
130	Modify SQL Components	4 hrs	Tue 4/16/24	Tue 4/16/24	129	SE 1
131	Unit Test the Software Components	4 hrs	Tue 4/16/24	Tue 4/16/24	130	SE 1
132	Perform System Testing	8 hrs	Wed 4/17/24	Wed 4/17/24	131	QA 1
133	Create System Test Results Report	8 hrs	Thu 4/18/24	Thu 4/18/24	132	QAM
134	Create Regression Test Reports	8 hrs	Fri 4/19/24	Fri 4/19/24	133	QAM
135	Deploy to User Acceptance Testing Environment	2 hrs	Thu 4/18/24	Thu 4/18/24	132	SE 1
136	Product Demonstration of Tested System to DCDEE	4 hrs	Thu 4/18/24	Thu 4/18/24	135	PM,TL 1,BA 1
137	Add Feedback to Solution Backlog	8 hrs	Thu 4/18/24	Fri 4/19/24	136	PM
138						
139	Regulatory Modernization Interfaces	392 hrs	Wed 2/28/24	Tue 5/7/24		
140	Identify Data to Interface and Direction	8 hrs	Wed 2/28/24	Thu 2/29/24	96	SE 2,TL 2
141	Identify Frequency	2 hrs	Thu 2/29/24	Thu 2/29/24	140	SE 2,TL 2
142	Identify Method of Data Transfer	2 hrs	Thu 2/29/24	Thu 2/29/24	141	SE 2,TL 2
143	Build & Unit Test the Interface Program(s)	380 hrs	Thu 2/29/24	Tue 5/7/24		
144	Integration with CSDW	40 hrs	Thu 2/29/24	Thu 3/7/24	142	SE 2
145	Integration with NCRLAP	40 hrs	Thu 3/7/24	Thu 3/14/24	144	SE 2
146	Integration with ABCMS	40 hrs	Thu 3/14/24	Thu 3/21/24	145	SE 2
147	Integration with NCFAS	40 hrs	Thu 3/21/24	Thu 3/28/24	146	SE 2
148	Integration with CCSA	40 hrs	Thu 3/28/24	Thu 4/4/24	147	SE 2
149	Integration with Secretary of State (SOS)	40 hrs	Thu 4/4/24	Thu 4/11/24	148	SE 2
150	Integration with Registration & Payment Platforms	80 hrs	Thu 4/11/24	Mon 4/29/24	149	SE 2
151	Correct Defects	20 hrs	Mon 4/29/24	Wed 5/1/24	150	SE 2
152	Final System Test of Interface Program(s)	4 hrs	Wed 5/1/24	Thu 5/2/24	151	SE 2
153	Create System Test Results Report	8 hrs	Thu 5/2/24	Fri 5/3/24	152	QAM
154	Create Integration Test Results Report	16 hrs	Fri 5/3/24	Tue 5/7/24	153	QAM
155	End Regulatory Modernization Construction & Testing	0 hrs	Thu 5/2/24	Thu 5/2/24	152	
156						
157	Workforce Registry	886 hrs	Wed 1/24/24	Thu 6/27/24		
158	Workforce Registry Software Construction & Testing	886 hrs	Wed 1/24/24	Thu 6/27/24		
159	Workforce Registration & Workflow Construction	394 hrs	Wed 1/24/24	Tue 4/2/24		
160	Create User Stories	64 hrs	Wed 1/24/24	Fri 2/2/24	90	BA 2
161	Update the Requirements Traceability Matrix	8 hrs	Mon 2/5/24	Mon 2/5/24	160	BA 2
162	Review Functional Requirements	4 hrs	Fri 2/9/24	Fri 2/9/24	78	PM,TL 2
163	Assign Functions to Development Staff	4 hrs	Mon 2/12/24	Mon 2/12/24	162	PM,TL 2
164	Build/Modify Software Components	64 hrs	Wed 2/28/24	Wed 3/13/24	163	SE 1
165	Build/Modify SQL Components	16 hrs	Mon 3/25/24	Wed 3/27/24	164	SE 1
166	Unit Test the Software & SQL Components	16 hrs	Fri 3/29/24	Tue 4/2/24	165	SE 1

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
167						
168	Workforce Registration & Workflow Testing	112 hrs	Tue 4/2/24	Mon 4/22/24		
169	Review Test Plan	8 hrs	Tue 4/2/24	Wed 4/3/24	166	QA 2
170	Identify Resources	2 hrs	Fri 4/5/24	Fri 4/5/24	169	QA 2
171	Identify Functions to be Tested	4 hrs	Fri 4/5/24	Fri 4/5/24	170	PM,QA 2
172	Create Test Scripts	16 hrs	Mon 4/8/24	Tue 4/9/24	171	QA 2
173	Perform System Testing	24 hrs	Wed 4/10/24	Fri 4/12/24	172	QA 2
174	Modify Software Components	8 hrs	Mon 4/15/24	Mon 4/15/24	173	SE 3
175	Modify SQL Components	4 hrs	Tue 4/16/24	Tue 4/16/24	174	SE 3
176	Unit Test the Software Components	4 hrs	Tue 4/16/24	Tue 4/16/24	175	SE 3
177	Perform System Testing	8 hrs	Wed 4/17/24	Wed 4/17/24	176	QA 2
178	Create System Test Results Report	8 hrs	Thu 4/18/24	Thu 4/18/24	177	QAM
179	Create Regression Test Reports	8 hrs	Fri 4/19/24	Fri 4/19/24	178	QAM
180	Deploy to User Acceptance Testing Environment	2 hrs	Thu 4/18/24	Thu 4/18/24	177	SE 3
181	Product Demonstration of Tested System to DCDEE	8 hrs	Thu 4/18/24	Fri 4/19/24	180	PM,BA 2,TL 2,DCDEE
182	Add Feedback to Solution Backlog	8 hrs	Fri 4/19/24	Mon 4/22/24	181	PM
183						
184	Data Management, Reporting, etc. Construction	472 hrs	Mon 2/5/24	Thu 4/25/24		
185	Create User Stories	64 hrs	Mon 2/5/24	Wed 2/14/24	160	BA 2
186	Update the Requirements Traceability Matrix	8 hrs	Thu 2/15/24	Thu 2/15/24	185	BA 2
187	Review Functional Requirements	4 hrs	Mon 3/4/24	Mon 3/4/24	78,185,259,309,317	PM,TL 2
188	Assign Functions to Development Staff	4 hrs	Mon 3/4/24	Mon 3/4/24	187	PM,TL 2
189	Build/Modify Software Components	64 hrs	Tue 3/5/24	Thu 3/14/24	188	SE 4
190	Build/Modify Software Components	64 hrs	Fri 3/15/24	Tue 3/26/24	189	SE 4
191	Build/Modify Software Components	64 hrs	Wed 3/27/24	Fri 4/5/24	190	SE 4
192	Build/Modify Software Components	64 hrs	Mon 4/8/24	Wed 4/17/24	191	SE 4
193	Build/Modify SQL Components	24 hrs	Thu 4/18/24	Mon 4/22/24	189,192,190	SE 4
194	Unit Test the Software & SQL Components	24 hrs	Tue 4/23/24	Thu 4/25/24	193	SE 4
195						
196	Data Management, Reporting, etc. Testing	492 hrs	Mon 3/4/24	Wed 5/29/24		
197	Review Test Plan	8 hrs	Mon 3/4/24	Tue 3/5/24	187	QA 2
198	Identify Resources	2 hrs	Tue 3/5/24	Tue 3/5/24	197	QA 2
199	Identify Functions to be Tested	4 hrs	Tue 3/5/24	Wed 3/6/24	198	PM,QA 2
200	Create Test Scripts	16 hrs	Wed 3/6/24	Fri 3/8/24	199	QA 2
201	Perform System Testing	80 hrs	Mon 5/6/24	Tue 5/21/24	194,200	QA 2
202	Modify Software Components	8 hrs	Wed 5/22/24	Wed 5/22/24	201	SE 4
203	Modify SQL Components	4 hrs	Thu 5/23/24	Thu 5/23/24	202	SE 4
204	Unit Test the Software Components	4 hrs	Thu 5/23/24	Thu 5/23/24	203	SE 4
205	Perform System Testing	8 hrs	Fri 5/24/24	Fri 5/24/24	204	QA 2
206	Create System Test Results Report	8 hrs	Tue 5/28/24	Tue 5/28/24	205	QAM
207	Create Regression Test Reports	8 hrs	Wed 5/29/24	Wed 5/29/24	206	QAM
208	Deploy to User Acceptance Testing Environment	2 hrs	Tue 5/28/24	Tue 5/28/24	205	SE 4
209	Product Demonstration of Tested System to DCDEE	4 hrs	Tue 5/28/24	Tue 5/28/24	208	PM,BA 2,TL 2

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
210	Add Feedback to Solution Backlog	8 hrs	Tue 5/28/24	Wed 5/29/24	209	PM
211						
212	Workforce Registry Interfaces	636 hrs	Thu 3/7/24	Thu 6/27/24		
213	Identify Data to Interface and Direction	8 hrs	Thu 3/7/24	Fri 3/8/24	118,163	TL 2,SE 3
214	Identify Frequency	2 hrs	Fri 3/8/24	Fri 3/8/24	213	TL 2,SE 3
215	Identify Method of Data Transfer	2 hrs	Fri 3/8/24	Fri 3/8/24	214	TL 2,SE 3
216	Build & Unit Test the Interface Program(s)	320 hrs	Thu 4/18/24	Fri 6/14/24		
217	Integration with Department of Public Instruction Online Licensure System	40 hrs	Thu 4/18/24	Thu 4/25/24	215,180	SE 3
218	Integration with Department of Public Instruction Human Resource Management System	40 hrs	Thu 4/25/24	Thu 5/2/24	217	SE 3
219	Integration with Child Maltreatment Registry	40 hrs	Thu 5/2/24	Thu 5/9/24	218	SE 3
220	Integration with Training platforms	40 hrs	Thu 5/9/24	Thu 5/16/24	219	SE 3
221	Integration with North Carolina Institute for CDP	40 hrs	Thu 5/16/24	Thu 5/23/24	220	SE 3
222	Integration with Health and Safety trainers' information	40 hrs	Thu 5/23/24	Fri 5/31/24	221	SE 3
223	Integration with Vital Records application	40 hrs	Fri 5/31/24	Fri 6/7/24	222	SE 3
224	Integration with Official Transcripts	40 hrs	Fri 6/7/24	Fri 6/14/24	223	SE 3
225	System Test the Interface Program(s)	8 hrs	Fri 6/14/24	Mon 6/17/24	224	SE 3
226	Correct Defects	40 hrs	Mon 6/17/24	Mon 6/24/24	225	SE 3
227	Final System Test of Interface Program(s)	4 hrs	Mon 6/24/24	Mon 6/24/24	226	SE 3
228	Create System Test Results Report	8 hrs	Mon 6/24/24	Tue 6/25/24	227	QAM
229	Create Integration Test Results Report	16 hrs	Tue 6/25/24	Thu 6/27/24	228	QAM
230	End Workforce Registry Construction & Testing	0 hrs	Mon 6/24/24	Mon 6/24/24	227	
231						
232	Pre-K	1396 hrs	Wed 11/1/23	Fri 7/12/24		
233	Registration, Child Application & Workflow Construction	530 hrs	Mon 2/5/24	Tue 5/7/24		
234	Create User Stories	64 hrs	Mon 2/5/24	Wed 2/14/24	115	BA 1
235	Update the Requirements Traceability Matrix	8 hrs	Thu 2/15/24	Thu 2/15/24	234	BA 1
236	Review Functional Requirements	4 hrs	Thu 4/18/24	Thu 4/18/24	90,135	PM,TL 2
237	Assign Functions to Development Staff	4 hrs	Thu 4/18/24	Fri 4/19/24	236	PM,TL 2
238	Build/Modify Software Components	64 hrs	Fri 4/19/24	Wed 5/1/24	237	SE 1
239	Build/Modify SQL Components	16 hrs	Wed 5/1/24	Fri 5/3/24	238	SE 1
240	Unit Test the Software & SQL Components	16 hrs	Fri 5/3/24	Tue 5/7/24	239	SE 1
241						
242	Registration, Child Application & Workflow Testing	1146 hrs	Wed 11/1/23	Wed 5/29/24		
243	Review Test Plan	8 hrs	Wed 11/1/23	Wed 11/1/23		QA 1
244	Identify Resources	2 hrs	Thu 11/2/23	Thu 11/2/23	243	QA 1
245	Identify Functions to be Tested	4 hrs	Thu 11/2/23	Thu 11/2/23	244	PM,QA 1
246	Create Test Scripts	16 hrs	Thu 11/2/23	Mon 11/6/23	245	QA 1
247	Perform System Testing	80 hrs	Tue 5/7/24	Tue 5/21/24	240	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
248	Modify Software Components	8 hrs	Tue 5/21/24	Wed 5/22/24	247	SE 1
249	Modify SQL Components	4 hrs	Wed 5/22/24	Wed 5/22/24	248	SE 1
250	Unit Test the Software Components	4 hrs	Wed 5/22/24	Thu 5/23/24	249	SE 1
251	Perform System Testing	8 hrs	Thu 5/23/24	Fri 5/24/24	250	QA 1
252	Create System Test Results Report	8 hrs	Fri 5/24/24	Tue 5/28/24	251	QAM
253	Create Regression Test Reports	8 hrs	Tue 5/28/24	Wed 5/29/24	252	QAM
254	Deploy to User Acceptance Testing Environment	2 hrs	Fri 5/24/24	Fri 5/24/24	251	SE 1
255	Product Demonstration of Tested System to DCDEE	4 hrs	Fri 5/24/24	Fri 5/24/24	254	PM,BA 1,TL 2
256	Add Feedback to Solution Backlog	8 hrs	Tue 5/28/24	Tue 5/28/24	255	PM
257						
258	Reporting, Document & Data Management etc. Construction	602 hrs	Thu 2/15/24	Fri 5/31/24		
259	Create User Stories	64 hrs	Thu 2/15/24	Mon 2/26/24	234	BA 1
260	Update the Requirements Traceability Matrix	8 hrs	Tue 2/27/24	Tue 2/27/24	259	BA 1
261	Review Functional Requirements	4 hrs	Tue 5/7/24	Tue 5/7/24	240	PM,TL 2
262	Assign Functions to Development Staff	4 hrs	Tue 5/7/24	Wed 5/8/24	261	PM,TL 2
263	Build/Modify Software Components	64 hrs	Wed 5/8/24	Mon 5/20/24	262,152	SE 2
264	Build/Modify SQL Components	24 hrs	Mon 5/20/24	Thu 5/23/24	263	SE 2
265	Unit Test the Software & SQL Components	40 hrs	Thu 5/23/24	Fri 5/31/24	264	SE 2
266						
267	Reporting, Document & Data Management etc. Testing	140 hrs	Fri 5/24/24	Wed 6/19/24		
268	Review Test Plan	8 hrs	Fri 5/24/24	Tue 5/28/24	261,251	QA 1
269	Identify Resources	2 hrs	Tue 5/28/24	Tue 5/28/24	268	QA 1
270	Identify Functions to be Tested	4 hrs	Tue 5/28/24	Tue 5/28/24	269	QA 1
271	Create Test Scripts	16 hrs	Wed 5/29/24	Thu 5/30/24	270	QA 1
272	Perform System Testing	64 hrs	Fri 5/31/24	Tue 6/11/24	271	QA 1
273	Modify Software Components	8 hrs	Wed 6/12/24	Wed 6/12/24	272	SE 2
274	Modify SQL Components	4 hrs	Thu 6/13/24	Thu 6/13/24	273	SE 2
275	Unit Test the Software Components	4 hrs	Thu 6/13/24	Thu 6/13/24	274	SE 2
276	Perform System Testing	8 hrs	Fri 6/14/24	Fri 6/14/24	275	QA 1
277	Create System Test Results Report	8 hrs	Mon 6/17/24	Mon 6/17/24	276	QAM
278	Create Regression Test Reports	8 hrs	Tue 6/18/24	Tue 6/18/24	277	QAM
279	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/17/24	Mon 6/17/24	276	SE 2
280	Product Demonstration of Tested System to DCDEE	8 hrs	Mon 6/17/24	Tue 6/18/24	279	PM,BA 1,TL 2
281	Add Feedback to Solution Backlog	8 hrs	Tue 6/18/24	Wed 6/19/24	280	PM
282						
283	Pre-K Interfaces	1396 hrs	Wed 11/1/23	Fri 7/12/24		
284	Identify Data to Interface and Direction	8 hrs	Wed 11/1/23	Wed 11/1/23		SE 2
285	Identify Frequency	2 hrs	Thu 11/2/23	Thu 11/2/23	284	SE 2
286	Identify Method of Data Transfer	2 hrs	Thu 11/2/23	Thu 11/2/23	285	SE 2
287	Build & Unit Test the Interface Program(s)	120 hrs	Tue 5/7/24	Wed 5/29/24		
288	Integration with NCID	40 hrs	Tue 5/7/24	Tue 5/14/24	286,240	SE 2
289	Integration with PowerSchool	40 hrs	Tue 5/14/24	Tue 5/21/24	288	SE 2
290	Integration with Microsoft Outlook	40 hrs	Tue 5/21/24	Wed 5/29/24	289	SE 2

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
291	System Test the Interface Program(s)	8 hrs	Wed 5/29/24	Thu 5/30/24	290	SE 6
292	Correct Defects	20 hrs	Thu 6/27/24	Mon 7/1/24	291	SE 2
293	Final System Test of Interface Program(s)	4 hrs	Tue 7/9/24	Tue 7/9/24	292	SE 2
294	Create System Test Results Report	8 hrs	Tue 7/9/24	Wed 7/10/24	293	QAM
295	Create Integration Test Results Report	16 hrs	Wed 7/10/24	Fri 7/12/24	294	QAM
296	End Pre-K Construction & Testing	0 hrs	Tue 7/9/24	Tue 7/9/24	293	
297						
298	Subsidy Provider Compliance	1188 hrs	Wed 11/1/23	Wed 6/5/24		
299	Checklist & Documentation Log Construction	998 hrs	Wed 11/1/23	Wed 5/1/24		
300	Create User Stories	16 hrs	Thu 2/15/24	Fri 2/16/24	185	BA 2
301	Review Functional Requirements	4 hrs	Thu 4/18/24	Thu 4/18/24	180	SE 3
302	Assign Functions to Development Staff	4 hrs	Thu 4/18/24	Fri 4/19/24	301	SE 3
303	Assign Functions to Development Staff	4 hrs	Fri 4/19/24	Fri 4/19/24	302	SE 3
304	Build/Modify Components	64 hrs	Fri 4/19/24	Wed 5/1/24	303	SE 3
305	Build/Modify SQL Components	24 hrs	Wed 11/1/23	Fri 11/3/23		SE 3
306	Unit Test the Software & SQL Components	40 hrs	Mon 11/6/23	Fri 11/10/23	305	SE 3
307						
308	Investigations Findings Report & Investigations Letters Construction	216 hrs	Mon 2/19/24	Tue 3/26/24		
309	Create User Stories	16 hrs	Mon 2/19/24	Tue 2/20/24	300	BA 2
310	Review Functional Requirements	4 hrs	Mon 3/4/24	Mon 3/4/24	309,317,300	SE 3
311	Assign Functions to Development Staff	4 hrs	Mon 3/4/24	Mon 3/4/24	310	SE 3
312	Build/Modify Components	64 hrs	Tue 3/5/24	Thu 3/14/24	311	SE 3
313	Build/Modify SQL Components	24 hrs	Fri 3/15/24	Tue 3/19/24	312	SE 3
314	Unit Test the Software & SQL Components	40 hrs	Wed 3/20/24	Tue 3/26/24	313	SE 3
315						
316	Document Repository Construction	336 hrs	Wed 2/21/24	Thu 4/18/24		
317	Create User Stories	64 hrs	Wed 2/21/24	Fri 3/1/24	309	BA 2
318	Update the Requirements Traceability Matrix	8 hrs	Mon 3/4/24	Mon 3/4/24	317	BA 2
319	Review Functional Requirements	4 hrs	Wed 3/27/24	Wed 3/27/24	314	SE 3
320	Assign Functions to Development Staff	4 hrs	Wed 3/27/24	Wed 3/27/24	319	SE 3
321	Build/Modify Components	64 hrs	Thu 3/28/24	Mon 4/8/24	320	SE 3
322	Build/Modify SQL Components	24 hrs	Tue 4/9/24	Thu 4/11/24	321	SE 3
323	Unit Test the Software & SQL Components	40 hrs	Fri 4/12/24	Thu 4/18/24	322	SE 3
324						
325	Subsidy Provider Compliance Testing	656 hrs	Fri 2/9/24	Wed 6/5/24		
326	Review Test Plan	8 hrs	Fri 2/9/24	Thu 3/21/24	78	QA 2
327	Identify Resources	2 hrs	Fri 3/22/24	Fri 3/22/24	326	QA 2
328	Identify Functions to be Tested	4 hrs	Fri 3/22/24	Fri 3/22/24	327	QA 2
329	Create Test Scripts	16 hrs	Fri 3/22/24	Tue 3/26/24	328	QA 2
330	Perform System Testing for Checklist & Documentation Log	80 hrs	Fri 4/19/24	Thu 5/2/24	329,323	QA 2

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
331	Perform System Testing for Investigations Findings Report & Investigations Letters	64 hrs	Fri 5/3/24	Wed 5/15/24	330	QA 2
332	Perform System Testing for Document Repository	40 hrs	Thu 5/16/24	Thu 5/23/24	331	QA 2
333	Modify Software Components	8 hrs	Fri 5/24/24	Tue 5/28/24	331,332	QA 2
334	Modify SQL Components	4 hrs	Thu 5/30/24	Thu 5/30/24	333	QA 2
335	Unit Test the Software Components	4 hrs	Fri 5/31/24	Fri 5/31/24	334	QA 2
336	Perform System Testing	8 hrs	Fri 5/31/24	Mon 6/3/24	335	QA 2
337	Create System Test Results Report	8 hrs	Mon 6/3/24	Tue 6/4/24	336	QAM
338	Create Regression Test Reports	8 hrs	Tue 6/4/24	Wed 6/5/24	337	QAM
339	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/3/24	Mon 6/3/24	336	QA 2
340	Product Demonstration of Tested System to DCDEE	4 hrs	Mon 6/3/24	Tue 6/4/24	339	QA 2
341	Add Feedback to Solution Backlog	8 hrs	Tue 6/4/24	Wed 6/5/24	340	QA 2
342	End Subsidy Provider Compliance Construction & Testing	0 hrs	Wed 6/5/24	Wed 6/5/24	341	
343						
344	Mobile Software Sprint	820 hrs	Fri 2/9/24	Wed 7/3/24		
345	eXpedite Forms	154 hrs	Fri 2/9/24	Thu 3/7/24		
346	Get Agreement from Management& Field Workers on the forms being used	8 hrs	Fri 2/9/24	Mon 2/12/24	78	BA 2
347	Get Agreement from Management& Field Workers on correct version of each form being used	8 hrs	Mon 2/12/24	Tue 2/13/24	346	BA 2
348	Define Business Rules for each form	16 hrs	Tue 2/13/24	Thu 2/15/24	347	BA 2
349	Define History Forms and Data for Each Form	16 hrs	Thu 2/15/24	Mon 2/19/24	348	BA 2
350	Define Field Edits on Each Form	16 hrs	Mon 2/19/24	Wed 2/21/24	349	BA 2
351	Define Relationships& Process Flows Between Forms	16 hrs	Wed 2/21/24	Fri 2/23/24	350	BA 2
352	Define the custom coding required for each form	16 hrs	Fri 2/23/24	Tue 2/27/24	351	BA 2,TL 3
353	Identify What Departments the Forms are assigned to	8 hrs	Tue 2/27/24	Wed 2/28/24	352	BA 2
354	Identify all members or users	4 hrs	Wed 2/28/24	Wed 2/28/24	353	BA 2
355	Identify Which Department each Member belongs to	4 hrs	Thu 2/29/24	Thu 2/29/24	354	BA 2
356	Define Interface to Licensing System	40 hrs	Thu 2/29/24	Thu 3/7/24	355	BA 2,TL 3
357	Obtain Agreement from DCDEE on the Design	2 hrs	Thu 3/7/24	Thu 3/7/24	356	PM
358						
359	eXpedite Data	80 hrs	Thu 3/7/24	Thu 3/21/24		
360	Define Search Fields and Data for Each Form	16 hrs	Thu 3/7/24	Mon 3/11/24	357	BA 2
361	Define Search Data for pop-up Forms	16 hrs	Mon 3/11/24	Wed 3/13/24	360	BA 2
362	Define Data for Combo Boxes	16 hrs	Wed 3/13/24	Fri 3/15/24	361	BA 2
363	Define Status' for each Form	16 hrs	Fri 3/15/24	Tue 3/19/24	362	BA 2
364	Define 'Custom Columns' for each Form	16 hrs	Tue 3/19/24	Thu 3/21/24	363	BA 2
365						
366	Build Forms& Custom Code	282 hrs	Thu 3/21/24	Thu 5/9/24		
367	Review Functional Requirements	4 hrs	Thu 3/21/24	Fri 3/22/24	364	BA 2,TL 3,SE 6
368	Assign Functions to Development Staff	2 hrs	Fri 3/22/24	Fri 3/22/24	367	SE 6,TL 3
369	Build the 1st set of Forms in eXpedite Manager	64 hrs	Fri 3/22/24	Wed 4/3/24	368	BA 2

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ID	Task Name	Duration	Start	Finish	Preds	Res Init
370	Build the 2nd set of Forms in eXpedite Manager	64 hrs	Wed 4/3/24	Mon 4/15/24	369	BA 2
371	Construct the Custom Code for 1st set of Forms	64 hrs	Tue 4/16/24	Thu 4/25/24	369,370	SE 6
372	Construct the Custom Code for 2nd set of Forms	64 hrs	Fri 4/26/24	Tue 5/7/24	371	SE 6
373	Load initial Search Data	8 hrs	Wed 5/8/24	Wed 5/8/24	371,372	SE 6
374	Unit Test	8 hrs	Thu 5/9/24	Thu 5/9/24	373	SE 6
375						
376	eXpedite Interfaces	72 hrs	Fri 5/10/24	Wed 5/22/24		
377	Determine which forms will interface with back-end system	8 hrs	Fri 5/10/24	Fri 5/10/24	374	TL 3
378	Determine the direction of the interface for each form	4 hrs	Mon 5/13/24	Mon 5/13/24	377	TL 3
379	Determine the frequency of the interface by form	4 hrs	Mon 5/13/24	Mon 5/13/24	378	TL 3
380	Determine data sent to eXpedite from back-end system for each form	8 hrs	Tue 5/14/24	Tue 5/14/24	379	TL 3
381	Determine data sent to back-end system from eXpedite for each form	8 hrs	Wed 5/15/24	Wed 5/15/24	380	TL 3
382	Build the Interface to the Licensing System	40 hrs	Thu 5/16/24	Wed 5/22/24	373,381	TL 3
383						
384	Integration& System Testing	232 hrs	Thu 5/23/24	Wed 7/3/24		
385	Review Test Plan	8 hrs	Thu 5/23/24	Thu 5/23/24	382	QA 2
386	Identify Resources	2 hrs	Fri 5/24/24	Fri 5/24/24	385	PM
387	Identify Functions to be Tested	4 hrs	Fri 5/24/24	Fri 5/24/24	386	QA 2
388	Create Test Scripts	24 hrs	Fri 5/24/24	Fri 5/31/24	387	QA 2
389	Perform System Testing	24 hrs	Fri 5/31/24	Wed 6/5/24	388	QA 2
390	Build/Modify .eXpedite Forms/Custom Code	16 hrs	Wed 6/5/24	Fri 6/7/24	389	SE 6
391	Unit Test the eXpedite Modifications	4 hrs	Mon 6/10/24	Mon 6/10/24	390	SE 6
392	Perform System Testing	8 hrs	Mon 7/1/24	Mon 7/1/24	391	QA 2
393	Create System Test Results Report	8 hrs	Tue 7/2/24	Tue 7/2/24	392	QAM
394	Create Integration Test Results Report	8 hrs	Wed 7/3/24	Wed 7/3/24	393	QAM
395	Deploy to User Acceptance Testing Environment	4 hrs	Tue 7/2/24	Tue 7/2/24	392	SE 6
396	Add Feedback to Solution Backlog	2 hrs	Wed 7/3/24	Wed 7/3/24	395	PM
397	End Mobile System Construction& Testing	0 hrs	Wed 7/3/24	Wed 7/3/24	396	
398						
399	Data Migration	832 hrs	Fri 2/9/24	Mon 7/8/24		
400	Create the Data Conversion and Migration Plan	40 hrs	Fri 2/9/24	Fri 2/16/24	78	TL 3
401						
402	Regulatory Data	392 hrs	Fri 2/16/24	Thu 4/25/24		
403	Determine Data Source	8 hrs	Fri 2/16/24	Mon 2/19/24	400	SE 6
404	Data Map the Elements to Convert	24 hrs	Thu 3/21/24	Mon 3/25/24	403	SE 6
405	Determine File Transfer Method	4 hrs	Tue 3/26/24	Tue 3/26/24	404	SE 6
406	Design Data Conversion & Migration Scripts	8 hrs	Tue 3/26/24	Wed 3/27/24	405	SE 6
407	Determine How to Handle Rejects or Errors	8 hrs	Wed 3/27/24	Thu 3/28/24	406	SE 6
408	Build The Conversion Program	80 hrs	Thu 3/28/24	Thu 4/11/24	407	SE 6

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ID	Task Name	Duration	Start	Finish	Preds	Res Init
409	Unit Test The Conversion Program	16 hrs	Thu 4/11/24	Mon 4/15/24	408	SE 6
410	System Test the Conversion Program	16 hrs	Mon 4/15/24	Wed 4/17/24	409	SE 6
411	Correct Defects	16 hrs	Wed 4/17/24	Fri 4/19/24	410	SE 6
412	Final System Test of the Conversion Program	16 hrs	Fri 4/19/24	Tue 4/23/24	411	SE 6
413	Create Data Conversion & Migration Test Results Report	8 hrs	Tue 4/23/24	Wed 4/24/24	412	SE 6
414	Create System Test Results Report	8 hrs	Wed 4/24/24	Thu 4/25/24	413	QAM
415	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Wed 4/24/24	Wed 4/24/24	413	DCDEE
416						
417	Pre-K Data	228 hrs	Tue 4/23/24	Mon 6/3/24		
418	Determine Data Source	8 hrs	Tue 4/23/24	Wed 4/24/24	412	SE 5
419	Data Map the Elements to Convert	24 hrs	Wed 4/24/24	Mon 4/29/24	418	SE 5
420	Determine File Transfer Method	4 hrs	Mon 4/29/24	Mon 4/29/24	419	SE 5
421	Design Data Conversion & Migration Scripts	8 hrs	Tue 4/30/24	Tue 4/30/24	420	SE 5
422	Determine How to Handle Rejects or Errors	8 hrs	Wed 5/1/24	Wed 5/1/24	421	SE 5
423	Build The Conversion Program	80 hrs	Thu 5/2/24	Wed 5/15/24	422	SE 5
424	Unit Test The Conversion Program	16 hrs	Thu 5/16/24	Fri 5/17/24	423	SE 5
425	System Test the Conversion Program	24 hrs	Mon 5/20/24	Wed 5/22/24	424	SE 5
426	Correct Defects	24 hrs	Thu 5/23/24	Tue 5/28/24	425	SE 5
427	Final System Test of the Conversion Program	16 hrs	Wed 5/29/24	Thu 5/30/24	426	SE 5
428	Create Data Conversion & Migration Test Results Report	8 hrs	Fri 5/31/24	Fri 5/31/24	427	SE 5
429	Create System Test Results Report	8 hrs	Mon 6/3/24	Mon 6/3/24	428	QAM
430	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Mon 6/3/24	Mon 6/3/24	428	DCDEE
431						
432	WORKS Data	204 hrs	Fri 5/31/24	Mon 7/8/24		
433	Determine Data Source	8 hrs	Fri 5/31/24	Fri 5/31/24	427	SE 5
434	Data Map the Elements to Convert	24 hrs	Mon 6/3/24	Wed 6/5/24	433	SE 5
435	Determine File Transfer Method	4 hrs	Thu 6/6/24	Thu 6/6/24	434	SE 5
436	Design Data Conversion & Migration Scripts	8 hrs	Mon 6/10/24	Tue 6/11/24	435	SE 5
437	Determine How to Handle Rejects or Errors	8 hrs	Wed 6/12/24	Thu 6/13/24	436	SE 5
438	Build The Conversion Program	40 hrs	Mon 6/17/24	Mon 6/24/24	437	SE 5
439	Unit Test The Conversion Program	16 hrs	Mon 6/24/24	Wed 6/26/24	438	SE 5
440	System Test the Conversion Program	16 hrs	Wed 6/26/24	Fri 6/28/24	439	SE 5
441	Correct Defects	16 hrs	Fri 6/28/24	Tue 7/2/24	440	SE 5
442	Final System Test of the Conversion Program	8 hrs	Tue 7/2/24	Wed 7/3/24	441	SE 5
443	Create Data Conversion & Migration Test Results Report	8 hrs	Wed 7/3/24	Fri 7/5/24	442	SE 5
444	Create System Test Results Report	8 hrs	Fri 7/5/24	Mon 7/8/24	443	QAM
445	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Fri 7/5/24	Fri 7/5/24	443	DCDEE
446	End Data Conversion	0 hrs	Wed 7/3/24	Wed 7/3/24	412,427,442	

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ID	Task Name	Duration	Start	Finish	Preds	Res Init
447						
448	Demonstration Of Tested System	26 hrs	Tue 9/3/24	Fri 9/6/24		
449	Install the Software Build	4 hrs	Tue 9/3/24	Tue 9/3/24		
450	Convert Static Data	4 hrs	Tue 9/3/24	Tue 9/3/24	449	SE 5
451	Convert Dynamic Data	4 hrs	Wed 9/4/24	Wed 9/4/24	450	SE 5
452	Evaluate Results of Conversion	2 hrs	Wed 9/4/24	Wed 9/4/24	451	SE 5
453	Perform Production Tests Including Interfaces	4 hrs	Wed 9/4/24	Thu 9/5/24	452	QA 1
454	Demonstrate System to DCDEE	8 hrs	Thu 9/5/24	Fri 9/6/24	453	DCDEE
455						
456	Training & Documentation	918 hrs	Fri 2/9/24	Tue 7/23/24		
457	Identify the Training Program Required	16 hrs	Fri 2/9/24	Tue 2/13/24	78	TR
458	Create the Training Plan	80 hrs	Tue 2/13/24	Tue 2/27/24	457	TR
459	Recommend Technical Training for State IT Support Personnel	8 hrs	Tue 2/27/24	Wed 2/28/24	458	TR,NOG
460	Obtain Customer Sign-off of Training Plan	4 hrs	Wed 2/28/24	Wed 2/28/24	459	TR,DCDEE
461	Create Finalized User Guides, Quick Reference Guides & Online Help Documentation	40 hrs	Wed 7/3/24	Thu 7/11/24	397	TR
462	Create Finalized Training Material	40 hrs	Thu 7/11/24	Thu 7/18/24	461	TR
463	Create Finalized Technical and System Administration Documentation	80 hrs	Wed 7/3/24	Thu 7/18/24	397	NOG
464	Conduct the Training for UAT Pilot	24 hrs	Thu 7/18/24	Tue 7/23/24	462	TR,DCDEE
465	End Training & Documentation	0 hrs	Tue 7/23/24	Tue 7/23/24	464	TR
466						
467	Performance Testing	66 hrs	Fri 9/6/24	Wed 9/18/24		
468	Create Performance Test Plan	8 hrs	Fri 9/6/24	Mon 9/9/24	454	TL 3
469	Create Performance Test Cases	8 hrs	Mon 9/9/24	Fri 9/13/24	468	TL 3
470	Create Performance Test Scripts	8 hrs	Fri 9/13/24	Mon 9/16/24	469	TL 3
471	Create Performance Test Readiness Report	8 hrs	Mon 9/16/24	Tue 9/17/24	470	TL 3
472	Create Performance Test Report	8 hrs	Tue 9/17/24	Wed 9/18/24	471	TL 3
473	Gain Agency Approval of Performance	2 hrs	Wed 9/18/24	Wed 9/18/24	472	TL 3
474						
475	Pilot Implementation	310 hrs	Wed 7/3/24	Tue 8/27/24		
476	Planning	60 hrs	Wed 7/3/24	Mon 7/15/24		
477	Establish the Pilot's Objectives	4 hrs	Wed 7/3/24	Wed 7/3/24	397	PM,DCDEE
478	Establish the Pilot's Scope	6 hrs	Wed 7/3/24	Fri 7/5/24	477	PM,DCDEE
479	Determine the Requirements for the Pilot	6 hrs	Fri 7/5/24	Mon 7/8/24	478	PM,DCDEE
480	Establish the Key Performance Metrics & Measures of Success	4 hrs	Mon 7/8/24	Mon 7/8/24	479	PM,DCDEE
481	Determine How to Measure User Satisfaction	4 hrs	Mon 7/8/24	Tue 7/9/24	480	PM,DCDEE
482	Decide on the Length of Time to Run the Pilot	4 hrs	Tue 7/9/24	Tue 7/9/24	481	PM,DCDEE
483	Choose the Group to Run the Pilot	4 hrs	Tue 7/9/24	Wed 7/10/24	482	PM,DCDEE
484	Create Pilot Implementation Document	24 hrs	Wed 7/10/24	Mon 7/15/24	483	PM,DCDEE
485	Obtain Sign-off From DCDEE To Proceed	4 hrs	Mon 7/15/24	Mon 7/15/24	484	DCDEE
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ID	Task Name	Duration	Start	Finish	Preds	Res Init
486						
487	User Acceptance Testing	100 hrs	Thu 7/11/24	Mon 7/29/24	461	
488	Plan UAT Process with DCDEE For Pilot	4 hrs	Thu 7/11/24	Thu 7/11/24	397	DCDEE,PM,QA 2
489	Create UAT Plan For Pilot	8 hrs	Thu 7/11/24	Fri 7/12/24	488	QAM
490	Create UAT Test Cases & Test Scripts For Pilot	8 hrs	Fri 7/12/24	Mon 7/15/24	489	QAM
491	Perform UAT For Pilot	40 hrs	Mon 7/15/24	Mon 7/22/24	490	DCDEE
492	Update Product Backlog	8 hrs	Mon 7/22/24	Tue 7/23/24	491	PM
493	Resolve Defects	24 hrs	Tue 7/23/24	Fri 7/26/24	492	TL 3,TL 2,TL 1
494	Create UAT Results Report For Pilot	4 hrs	Fri 7/26/24	Mon 7/29/24	493	QAM
495	Create Accessibility Test Report For Pilot	4 hrs	Mon 7/29/24	Mon 7/29/24	494	QAM
496	Agency Acceptance of UAT Pilot & Sign Off	2 hrs	Mon 7/29/24	Mon 7/29/24	494	DCDEE,PM
497	End User Acceptance Testing For Pilot	0 hrs	Mon 7/29/24	Mon 7/29/24	496	
498						
499	Pilot Implementation Preparation	28 hrs	Mon 7/15/24	Fri 7/19/24		
500	Create Deployment Plan	8 hrs	Mon 7/15/24	Tue 7/16/24	485	PM
501	Create Production Test Scripts	8 hrs	Tue 7/16/24	Wed 7/17/24	500	QAM
502	Ensure Production Infrastructure is Operational	8 hrs	Wed 7/17/24	Thu 7/18/24	501	NOG
503	Establish Support Environment	4 hrs	Thu 7/18/24	Fri 7/19/24	502	NOG
504						
505	Pilot Installation	30 hrs	Fri 7/19/24	Wed 7/24/24		
506	Install the Production Build	8 hrs	Fri 7/19/24	Mon 7/22/24	503	TL 1
507	Convert Static Data	4 hrs	Mon 7/22/24	Mon 7/22/24	506	SE 5
508	Convert Dynamic Data	8 hrs	Mon 7/22/24	Tue 7/23/24	507	SE 5
509	Evaluate Results of Conversion	4 hrs	Tue 7/23/24	Wed 7/24/24	508	SE 5
510	Perform Production Tests Including Interfaces	4 hrs	Wed 7/24/24	Wed 7/24/24	509	QA 1
511	Cut Over to the Pilot System	2 hrs	Wed 7/24/24	Wed 7/24/24	510	TL 1
512						
513	Pilot Monitoring	192 hrs	Thu 7/25/24	Tue 8/27/24		
514	Daily Meetings with the Pilot User Groups	160 hrs	Thu 7/25/24	Wed 8/21/24	511	DCDEE,SME,PM
515	Address Issues	160 hrs	Thu 7/25/24	Wed 8/21/24	511	DCDEE,SME,PM
516	Correct Software Defects	160 hrs	Thu 7/25/24	Mon 8/26/24	511	TL 1
517	Add Requests to the Backlog	160 hrs	Thu 7/25/24	Wed 8/21/24	511	BA 1
518	Create Pilot Results Document	16 hrs	Thu 8/22/24	Fri 8/23/24	517	SME
519	Obtain Sign-off From DCDEE to Roll-out to Remaining Users	16 hrs	Mon 8/26/24	Tue 8/27/24	518	DCDEE
520	End of Pilot	0 hrs	Tue 8/27/24	Tue 8/27/24	519	
521						
522	Prepare for Statewide Rollout	110 hrs	Mon 8/26/24	Fri 9/13/24		
523	Conduct the Training for UAT	40 hrs	Mon 8/26/24	Fri 8/30/24	518	TR
524	Create UAT Plan	12 hrs	Mon 8/26/24	Tue 8/27/24	518	QAM
525	Create UAT Test Cases & Test Scripts	16 hrs	Tue 8/27/24	Thu 8/29/24	524	QAM
526	Perform UAT	40 hrs	Thu 8/29/24	Fri 9/6/24	525	DCDEE
527	Update Product Backlog	8 hrs	Fri 9/6/24	Mon 9/9/24	526	PM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
528	Resolve Defects	24 hrs	Mon 9/9/24	Thu 9/12/24	527	TL 3,TL 2,TL 1
529	Create UAT Results Report	4 hrs	Thu 9/12/24	Thu 9/12/24	528	QAM
530	Create Accessibility Test Report	4 hrs	Fri 9/13/24	Fri 9/13/24	529	QAM
531	Agency Acceptance of UAT & Sign Off	2 hrs	Fri 9/13/24	Fri 9/13/24	530	DCDEE,PM
532	End User Acceptance Testing	0 hrs	Fri 9/13/24	Fri 9/13/24	531	
533						
534	Implementation	88 hrs	Fri 9/13/24	Mon 9/30/24		
535	Implementation Preparation	80 hrs	Fri 9/13/24	Fri 9/27/24		
536	Create Release/Deployment Readiness Checklist	40 hrs	Fri 9/13/24	Fri 9/20/24	532	TL 1
537	Provide Onsite Assistance during Deployment Readiness	40 hrs	Fri 9/20/24	Fri 9/27/24	536	NOG
538	Create Production Test Scripts	8 hrs	Fri 9/20/24	Mon 9/23/24	536	QA 2
539	Ensure Production Infrastructure is Operational	8 hrs	Mon 9/23/24	Tue 9/24/24	538	NOG
540	Provide Technical Skills Transfer	8 hrs	Tue 9/24/24	Wed 9/25/24	539	NOG
541	Establish Support Environment	4 hrs	Tue 9/24/24	Wed 9/25/24	539	PM
542						
543	Installation	28 hrs	Wed 9/25/24	Mon 9/30/24		
544	Install the Production Build	4 hrs	Wed 9/25/24	Wed 9/25/24	541	TL 1
545	Convert Static Data	4 hrs	Wed 9/25/24	Thu 9/26/24	544	SE 5
546	Convert Dynamic Data	4 hrs	Thu 9/26/24	Thu 9/26/24	545	SE 5
547	Evaluate Results of Conversion	2 hrs	Thu 9/26/24	Thu 9/26/24	546	SE 5
548	Perform Production Tests Including Interfaces	4 hrs	Fri 9/27/24	Fri 9/27/24	547	QA 1
549	Create Validation Test Report	4 hrs	Fri 9/27/24	Fri 9/27/24	548	QAM
550	Cut Over to the New Systems	2 hrs	Fri 9/27/24	Fri 9/27/24	548	TL 1
551	Create Deployment UAT Results Report	4 hrs	Fri 9/27/24	Mon 9/30/24	550	PM
552	Create Agency Acceptance of Deployment UAT Results Report	4 hrs	Mon 9/30/24	Mon 9/30/24	551	PM
553	End Implementation	0 hrs	Mon 9/30/24	Mon 9/30/24	551	
554						
555	Post-Implementation	748 hrs	Fri 9/27/24	Thu 2/6/25		
556	Documentation Updates	48 hrs	Fri 9/27/24	Mon 10/7/24		
557	Update Gap Analysis	16 hrs	Fri 9/27/24	Tue 10/1/24	550	BA 1
558	Update Data Model	16 hrs	Fri 9/27/24	Tue 10/1/24	550	DBA
559	Update Data Dictionary	16 hrs	Tue 10/1/24	Thu 10/3/24	558	DBA
560	Update Detailed Design Specifications Document	16 hrs	Tue 10/1/24	Thu 10/3/24	557	BA 1
561	Update Solution Requirements Document	16 hrs	Thu 10/3/24	Mon 10/7/24	560	BA 1
562						
563	Stabilization	748 hrs	Fri 9/27/24	Thu 2/6/25		
564	Vendor Support During Stabilization	720 hrs	Fri 9/27/24	Fri 1/31/25	550	BA 1,NOG,PM,QA,SE 1,SE
565	Agency Acceptance of the Stabilized Solution	4 hrs	Fri 1/31/25	Mon 2/3/25	564	DCDEE
566	Lessons Learned	24 hrs	Mon 2/3/25	Thu 2/6/25	565	PM,DCDEE O&M
567						

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
568	Operation & Maintenance Phase - Years 2-5	2780 hrs	Tue 10/1/24	Thu 1/29/26		
569	Create Operations & Maintenance Plan	40 hrs	Thu 2/6/25	Thu 2/13/25	566	PM
570						
571	Documentation Updates	32 hrs	Thu 2/6/25	Wed 2/12/25		
572	Technical Architecture Diagrams (TAD)	16 hrs	Thu 2/6/25	Mon 2/10/25	566	NOG
573	Configuration & Release Management Plan	6 hrs	Thu 2/6/25	Thu 2/6/25	566	PM
574	Training Plan	16 hrs	Thu 2/6/25	Mon 2/10/25	566	TR
575	Test Plan	16 hrs	Thu 2/6/25	Mon 2/10/25	566	QAM
576	Solution Requirements Document	16 hrs	Thu 2/6/25	Mon 2/10/25	566	BA 1
577	Requirements Traceability Matrix	16 hrs	Mon 2/10/25	Wed 2/12/25	576	BA 1
578						
579	Sprint 1	72 hrs	Thu 2/13/25	Wed 2/26/25		
580	Sprint Planning	8 hrs	Fri 2/13/25	Fri 2/14/25	569	PM,BA 1
581	Detailed Design Specifications Document Revisions	8 hrs	Fri 2/14/25	Mon 2/17/25	580	BA 1
582	Create/Update Use Cases	16 hrs	Mon 2/17/25	Wed 2/19/25	581	BA 1
583	Create User Stories	40 hrs	Wed 2/19/25	Wed 2/26/25	582	BA 1
584						
585	Sprint	424 hrs	Wed 2/26/25	Mon 5/12/25		
586	Planning, Construction & Unit Testing	162 hrs	Wed 2/26/25	Wed 3/26/25		
587	Assign Functions to Development Staff	2 hrs	Wed 2/26/25	Wed 2/26/25	583	PM
588	Data Model Revisions	8 hrs	Wed 2/26/25	Thu 2/27/25	587	DBA
589	Data Dictionary Revisions	8 hrs	Thu 2/27/25	Fri 2/28/25	588	DBA
590	Build/Modify Software Components	136 hrs	Wed 2/26/25	Fri 3/21/25	587	SE1,SE2,TL 1
591	Build/Modify SQL Components	16 hrs	Fri 3/21/25	Tue 3/25/25	590	SE1,SE2,TL 1
592	Unit Test the Software & SQL Components	8 hrs	Tue 3/25/25	Wed 3/26/25	591	SE1,SE2,TL 1
593						
594	Provider Portal & Complaints System Testing	238 hrs	Wed 2/26/25	Tue 4/8/25		
595	Review Test Plan	2 hrs	Wed 2/26/25	Wed 2/26/25	583	QAM
596	Identify Functions to be Tested	2 hrs	Wed 2/26/25	Wed 2/26/25	595	QAM
597	Create Test Scripts	16 hrs	Wed 2/26/25	Fri 2/28/25	596	QA 1
598	Perform System Testing	40 hrs	Wed 3/26/25	Wed 4/2/25	592,597	QA 1
599	Modify Software Components	8 hrs	Wed 4/2/25	Thu 4/3/25	598	SE1,SE2,TL 1
600	Modify SQL Components	4 hrs	Thu 4/3/25	Thu 4/3/25	599	SE1,SE2,TL 1
601	Unit Test the Software Components	4 hrs	Fri 4/4/25	Fri 4/4/25	600	SE1,SE2,TL 1
602	Perform System Testing	4 hrs	Fri 4/4/25	Fri 4/4/25	601	QA 1
603	Create System Test Results Report	4 hrs	Mon 4/7/25	Mon 4/7/25	602	QAM
604	Create Regression Test Reports	4 hrs	Mon 4/7/25	Mon 4/7/25	603	QAM
605	Update Training Materials	16 hrs	Fri 4/4/25	Tue 4/8/25	601	TR
606	Deploy to User Acceptance Testing Environment	2 hrs	Tue 4/8/25	Tue 4/8/25	604	SE1,SE2,TL 1
607	Product Demonstration of Tested System to DCDEE	2 hrs	Tue 4/8/25	Tue 4/8/25	606	PM,TL 1,DCDEE O&M
608	Add to the Solution/Sprint Backlog	4 hrs	Tue 4/8/25	Tue 4/8/25	607	PM,BA 1
609						

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
610	Sprint Implementation	190 hrs	Tue 4/8/25	Mon 5/12/25		
611	Implementation Preparation	176 hrs	Tue 4/8/25	Thu 5/8/25		
612	Create Release/Deployment Readiness Checklist	8 hrs	Tue 4/8/25	Wed 5/7/25	606	TL 1
613	Provide Onsite Assistance during Deployment Readiness	4 hrs	Wed 5/7/25	Wed 5/7/25	612	NOG
614	Create Production Test Scripts	4 hrs	Thu 5/8/25	Thu 5/8/25	613	QAM
615						
616	Installation	14 hrs	Thu 5/8/25	Mon 5/12/25		
617	Install the Production Build	4 hrs	Thu 5/8/25	Thu 5/8/25	614	TL 1
618	Perform Production Tests	2 hrs	Fri 5/9/25	Fri 5/9/25	617	QA 1
619	Create Validation Test Report	2 hrs	Fri 5/9/25	Fri 5/9/25	618	QAM
620	Cut Over to the Updated System	2 hrs	Fri 5/9/25	Fri 5/9/25	619	TL 1
621	Create Deployment UAT Results Report	2 hrs	Fri 5/9/25	Fri 5/9/25	620	QAM
622	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Mon 5/12/25	Mon 5/12/25	621	QAM
623						
624	Sprint Planning	72 hrs	Wed 2/26/25	Tue 3/11/25		
625	Sprint Planning	8 hrs	Wed 2/26/25	Thu 2/27/25	583	PM,BA 1
626	Detailed Design Specifications Document Revisions	8 hrs	Thu 2/27/25	Fri 2/28/25	625	BA 1
627	Create/Update Use Cases	16 hrs	Fri 2/28/25	Tue 3/4/25	626	BA 1
628	Create User Stories	40 hrs	Tue 3/4/25	Tue 3/11/25	627	BA 1
629						
630	Sprint	424 hrs	Wed 4/9/25	Fri 6/20/25		
631	Planning, Construction & Unit Testing	162 hrs	Wed 4/9/25	Wed 5/7/25		
632	Assign Functions to Development Staff	2 hrs	Wed 4/9/25	Wed 4/9/25	608,628	PM
633	Data Model Revisions	8 hrs	Wed 4/9/25	Thu 4/10/25	632	DBA
634	Data Dictionary Revisions	8 hrs	Thu 4/10/25	Fri 4/11/25	633	DBA
635	Build/Modify Software Components	136 hrs	Wed 4/9/25	Fri 5/2/25	632	SE1,SE2,TL 1
636	Build/Modify SQL Components	16 hrs	Fri 5/2/25	Tue 5/6/25	635	SE1,SE2,TL 1
637	Unit Test the Software & SQL Components	8 hrs	Tue 5/6/25	Wed 5/7/25	636	SE1,SE2,TL 1
638						
639	Provider Portal & Complaints System Testing	100 hrs	Fri 5/2/25	Tue 5/20/25		
640	Review Test Plan	2 hrs	Fri 5/2/25	Fri 5/2/25	635	QAM
641	Identify Functions to be Tested	2 hrs	Fri 5/2/25	Fri 5/2/25	640	QAM
642	Create Test Scripts	16 hrs	Fri 5/2/25	Tue 5/6/25	641	QA 1
643	Perform System Testing	40 hrs	Wed 5/7/25	Wed 5/14/25	637,642	QA 1
644	Modify Software Components	8 hrs	Wed 5/14/25	Thu 5/15/25	643	SE1,SE2,TL 1
645	Modify SQL Components	4 hrs	Thu 5/15/25	Thu 5/15/25	644	SE1,SE2,TL 1
646	Unit Test the Software Components	4 hrs	Thu 5/15/25	Fri 5/16/25	645	SE1,SE2,TL 1
647	Perform System Testing	4 hrs	Fri 5/16/25	Fri 5/16/25	646	QA 1
648	Create System Test Results Report	4 hrs	Fri 5/16/25	Mon 5/19/25	647	QAM
649	Create Regression Test Reports	4 hrs	Mon 5/19/25	Mon 5/19/25	648	QAM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
650	Update Training Materials	16 hrs	Fri 5/16/25	Tue 5/20/25	646	TR
651	Deploy to User Acceptance Testing Environment	2 hrs	Mon 5/19/25	Mon 5/19/25	649	SE1,SE2,TL 1
652	Product Demonstration of Tested System to DCDEE	2 hrs	Tue 5/20/25	Tue 5/20/25	651	PM,TL 1,DCDEE O&M
653	Add to the Solution/Sprint Backlog	4 hrs	Tue 5/20/25	Tue 5/20/25	652	PM,BA 1
654						
655	Sprint Implementation	190 hrs	Tue 5/20/25	Fri 6/20/25		
656	Implementation Preparation	176 hrs	Tue 5/20/25	Thu 6/19/25		
657	Create Release/Deployment Readiness Checklist	8 hrs	Tue 5/20/25	Wed 6/18/25	651	TL 1
658	Provide Onsite Assistance during Deployment Readiness	4 hrs	Wed 6/18/25	Wed 6/18/25	657	NOG
659	Create Production Test Scripts	4 hrs	Wed 6/18/25	Thu 6/19/25	658	QAM
660						
661	Installation	14 hrs	Thu 6/19/25	Fri 6/20/25		
662	Install the Production Build	4 hrs	Thu 6/19/25	Thu 6/19/25	659	TL 1
663	Perform Production Tests	2 hrs	Thu 6/19/25	Thu 6/19/25	662	QA 1
664	Create Validation Test Report	2 hrs	Fri 6/20/25	Fri 6/20/25	663	QAM
665	Cut Over to the Updated System	2 hrs	Fri 6/20/25	Fri 6/20/25	664	TL 1
666	Create Deployment UAT Results Report	2 hrs	Fri 6/20/25	Fri 6/20/25	665	QAM
667	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Fri 6/20/25	Fri 6/20/25	666	QAM
668						
669	Sprint Planning	72 hrs	Tue 3/11/25	Mon 3/24/25		
670	Sprint Planning	8 hrs	Tue 3/11/25	Wed 3/12/25	628	PM,BA 1
671	Detailed Design Specifications Document Revisions	8 hrs	Wed 3/12/25	Thu 3/13/25	670	BA 1
672	Create/Update Use Cases	16 hrs	Thu 3/13/25	Mon 3/17/25	671	BA 1
673	Create User Stories	40 hrs	Mon 3/17/25	Mon 3/24/25	672	BA 1
674						
675	Sprint	414 hrs	Tue 5/20/25	Thu 7/31/25		
676	Planning, Construction & Unit Testing	162 hrs	Tue 5/20/25	Tue 6/17/25		
677	Assign Functions to Development Staff	2 hrs	Tue 5/20/25	Tue 5/20/25	673,653	PM
678	Data Model Revisions	8 hrs	Wed 5/21/25	Wed 5/21/25	677	DBA
679	Data Dictionary Revisions	8 hrs	Thu 5/22/25	Thu 5/22/25	678	DBA
680	Build/Modify Software Components	136 hrs	Wed 5/21/25	Thu 6/12/25	677	SE1,SE2,TL 1
681	Build/Modify SQL Components	16 hrs	Fri 6/13/25	Mon 6/16/25	680	SE1,SE2,TL 1
682	Unit Test the Software & SQL Components	8 hrs	Tue 6/17/25	Tue 6/17/25	681	SE1,SE2,TL 1
683						
684	Provider Portal & Complaints System Testing	100 hrs	Fri 6/13/25	Tue 7/1/25		
685	Review Test Plan	2 hrs	Fri 6/13/25	Fri 6/13/25	680	QAM
686	Identify Functions to be Tested	2 hrs	Fri 6/13/25	Fri 6/13/25	685	QAM
687	Create Test Scripts	16 hrs	Fri 6/13/25	Tue 6/17/25	686	QA 1
688	Perform System Testing	40 hrs	Wed 6/18/25	Tue 6/24/25	682,687	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
689	Modify Software Components	8 hrs	Wed 6/25/25	Wed 6/25/25	688	SE1,SE2,TL 1
690	Modify SQL Components	4 hrs	Thu 6/26/25	Thu 6/26/25	689	SE1,SE2,TL 1
691	Unit Test the Software Components	4 hrs	Thu 6/26/25	Thu 6/26/25	690	SE1,SE2,TL 1
692	Perform System Testing	4 hrs	Fri 6/27/25	Fri 6/27/25	691	QA 1
693	Create System Test Results Report	4 hrs	Fri 6/27/25	Fri 6/27/25	692	QAM
694	Create Regression Test Reports	4 hrs	Mon 6/30/25	Mon 6/30/25	693	QAM
695	Update Training Materials	16 hrs	Fri 6/27/25	Mon 6/30/25	691	TR
696	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/30/25	Mon 6/30/25	694	SE1,SE2,TL 1
697	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 6/30/25	Mon 6/30/25	696	PM,TL 1,DCDEE O&M
698	Add to the Solution/Sprint Backlog	4 hrs	Tue 7/1/25	Tue 7/1/25	697	PM,BA 1
699						
700	Sprint Implementation	182 hrs	Mon 6/30/25	Thu 7/31/25		
701	Implementation Preparation	16 hrs	Mon 6/30/25	Wed 7/2/25		
702	Create Release/Deployment Readiness Checklist	8 hrs	Mon 6/30/25	Tue 7/1/25	696	TL 1
703	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 7/1/25	Wed 7/2/25	702	NOG
704	Create Production Test Scripts	4 hrs	Wed 7/2/25	Wed 7/2/25	703	QAM
705						
706	Installation	14 hrs	Tue 7/29/25	Thu 7/31/25		
707	Install the Production Build	4 hrs	Tue 7/29/25	Wed 7/30/25	704	TL 1
708	Perform Production Tests	2 hrs	Wed 7/30/25	Wed 7/30/25	707	QA 1
709	Create Validation Test Report	2 hrs	Wed 7/30/25	Wed 7/30/25	708	QAM
710	Cut Over to the Updated System	2 hrs	Wed 7/30/25	Wed 7/30/25	709	TL 1
711	Create Deployment UAT Results Report	2 hrs	Thu 7/31/25	Thu 7/31/25	710	QAM
712	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 7/31/25	Thu 7/31/25	711	QAM
713						
714	Performance Testing	42 hrs	Mon 7/7/25	Mon 7/14/25		
715	Create Performance Test Plan	8 hrs	Mon 7/7/25	Mon 7/7/25		TL 2
716	Create Performance Test Cases	8 hrs	Tue 7/8/25	Tue 7/8/25	715	TL 2
717	Create Performance Test Scripts	8 hrs	Wed 7/9/25	Wed 7/9/25	716	TL 2
718	Create Performance Test Readiness Report	8 hrs	Thu 7/10/25	Thu 7/10/25	717	TL 2
719	Create Performance Test Report	8 hrs	Fri 7/11/25	Fri 7/11/25	718	TL 2
720	Gain Agency Approval of Performance	2 hrs	Mon 7/14/25	Mon 7/14/25	719	TL 2
721						
722	Sprint Planning	72 hrs	Mon 3/24/25	Fri 4/4/25		
723	Sprint Planning	8 hrs	Mon 3/24/25	Tue 3/25/25	673	PM,BA 1
724	Detailed Design Specifications Document Revisions	8 hrs	Tue 3/25/25	Wed 3/26/25	723	BA 1
725	Create/Update Use Cases	16 hrs	Wed 3/26/25	Fri 3/28/25	724	BA 1
726	Create User Stories	40 hrs	Fri 3/28/25	Fri 4/4/25	725	BA 1
727						

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
728	Sprint	414 hrs	Tue 7/1/25	Thu 9/11/25		
729	Planning, Construction & Unit Testing	162 hrs	Tue 7/1/25	Tue 7/29/25		
730	Assign Functions to Development Staff	2 hrs	Tue 7/1/25	Tue 7/1/25	726,698	PM
731	Data Model Revisions	8 hrs	Tue 7/1/25	Wed 7/2/25	730	DBA
732	Data Dictionary Revisions	8 hrs	Wed 7/2/25	Thu 7/3/25	731	DBA
733	Build/Modify Software Components	136 hrs	Tue 7/1/25	Thu 7/24/25	730	SE1,SE2,TL 1
734	Build/Modify SQL Components	16 hrs	Thu 7/24/25	Mon 7/28/25	733	SE1,SE2,TL 1
735	Unit Test the Software & SQL Components	8 hrs	Mon 7/28/25	Tue 7/29/25	734	SE1,SE2,TL 1
736						
737	Provider Portal & Complaints System Testing	100 hrs	Thu 7/24/25	Tue 8/12/25		
738	Review Test Plan	2 hrs	Thu 7/24/25	Thu 7/24/25	733	QAM
739	Identify Functions to be Tested	2 hrs	Fri 7/25/25	Fri 7/25/25	738	QAM
740	Create Test Scripts	16 hrs	Fri 7/25/25	Tue 7/29/25	739	QA 1
741	Perform System Testing	40 hrs	Tue 7/29/25	Tue 8/5/25	735,740	QA 1
742	Modify Software Components	8 hrs	Tue 8/5/25	Wed 8/6/25	741	SE1,SE2,TL 1
743	Modify SQL Components	4 hrs	Wed 8/6/25	Thu 8/7/25	742	SE1,SE2,TL 1
744	Unit Test the Software Components	4 hrs	Thu 8/7/25	Thu 8/7/25	743	SE1,SE2,TL 1
745	Perform System Testing	4 hrs	Thu 8/7/25	Fri 8/8/25	744	QA 1
746	Create System Test Results Report	4 hrs	Fri 8/8/25	Fri 8/8/25	745	QAM
747	Create Regression Test Reports	4 hrs	Fri 8/8/25	Mon 8/11/25	746	QAM
748	Update Training Materials	16 hrs	Thu 8/7/25	Mon 8/11/25	744	TR
749	Deploy to User Acceptance Testing Environment	2 hrs	Mon 8/11/25	Mon 8/11/25	747	SE1,SE2,TL 1
750	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 8/11/25	Mon 8/11/25	749	PM,TL 1,DCDEE O&M
751	Add to the Solution/Sprint Backlog	4 hrs	Mon 8/11/25	Tue 8/12/25	750	PM,BA 1
752						
753	Sprint Implementation	182 hrs	Mon 8/11/25	Thu 9/11/25		
754	Implementation Preparation	16 hrs	Mon 8/11/25	Wed 8/13/25		
755	Create Release/Deployment Readiness Checklist	8 hrs	Mon 8/11/25	Tue 8/12/25	749	TL 1
756	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 8/12/25	Tue 8/12/25	755	NOG
757	Create Production Test Scripts	4 hrs	Wed 8/13/25	Wed 8/13/25	756	QAM
758						
759	Installation	14 hrs	Tue 9/9/25	Thu 9/11/25		
760	Install the Production Build	4 hrs	Tue 9/9/25	Tue 9/9/25	757	TL 1
761	Perform Production Tests	2 hrs	Wed 9/10/25	Wed 9/10/25	760	QA 1
762	Create Validation Test Report	2 hrs	Wed 9/10/25	Wed 9/10/25	761	QAM
763	Cut Over to the Updated System	2 hrs	Wed 9/10/25	Wed 9/10/25	762	TL 1
764	Create Deployment UAT Results Report	2 hrs	Wed 9/10/25	Wed 9/10/25	763	QAM
765	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 9/11/25	Thu 9/11/25	764	QAM
766						
767	Sprint Planning	72 hrs	Fri 4/4/25	Thu 4/17/25		

State North Carolina DHHS DCDEE
Workforce Registry, Pre-K and Regulatory System Replacement
Request for Proposal No. 30-23189



North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
768	Sprint Planning	8 hrs	Fri 4/4/25	Mon 4/7/25	726	PM,BA 1
769	Detailed Design Specifications Document Revisions	8 hrs	Mon 4/7/25	Tue 4/8/25	768	BA 1
770	Create/Update Use Cases	16 hrs	Tue 4/8/25	Thu 4/10/25	769	BA 1
771	Create User Stories	40 hrs	Thu 4/10/25	Thu 4/17/25	770	BA 1
772						
773	Sprint	416 hrs	Tue 8/12/25	Thu 10/23/25		
774	Planning, Construction & Unit Testing	162 hrs	Tue 8/12/25	Tue 9/9/25		
775	Assign Functions to Development Staff	2 hrs	Tue 8/12/25	Tue 8/12/25	771,751	PM
776	Data Model Revisions	8 hrs	Tue 8/12/25	Wed 8/13/25	775	DBA
777	Data Dictionary Revisions	8 hrs	Wed 8/13/25	Thu 8/14/25	776	DBA
778	Build/Modify Software Components	136 hrs	Tue 8/12/25	Thu 9/4/25	775	SE1,SE2,TL 1
779	Build/Modify SQL Components	16 hrs	Thu 9/4/25	Mon 9/8/25	778	SE1,SE2,TL 1
780	Unit Test the Software & SQL Components	8 hrs	Mon 9/8/25	Tue 9/9/25	779	SE1,SE2,TL 1
781						
782	Provider Portal & Complaints System Testing	100 hrs	Thu 9/4/25	Mon 9/22/25		
783	Review Test Plan	2 hrs	Thu 9/4/25	Thu 9/4/25	778	QAM
784	Identify Functions to be Tested	2 hrs	Thu 9/4/25	Thu 9/4/25	783	QAM
785	Create Test Scripts	16 hrs	Fri 9/5/25	Mon 9/8/25	784	QA 1
786	Perform System Testing	40 hrs	Tue 9/9/25	Tue 9/16/25	780,785	QA 1
787	Modify Software Components	8 hrs	Tue 9/16/25	Wed 9/17/25	786	SE1,SE2,TL 1
788	Modify SQL Components	4 hrs	Wed 9/17/25	Wed 9/17/25	787	SE1,SE2,TL 1
789	Unit Test the Software Components	4 hrs	Thu 9/18/25	Thu 9/18/25	788	SE1,SE2,TL 1
790	Perform System Testing	4 hrs	Thu 9/18/25	Thu 9/18/25	789	QA 1
791	Create System Test Results Report	4 hrs	Fri 9/19/25	Fri 9/19/25	790	QAM
792	Create Regression Test Reports	4 hrs	Fri 9/19/25	Fri 9/19/25	791	QAM
793	Update Training Materials	16 hrs	Thu 9/18/25	Mon 9/22/25	789	TR
794	Deploy to User Acceptance Testing Environment	2 hrs	Mon 9/22/25	Mon 9/22/25	792	SE1,SE2,TL 1
795	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 9/22/25	Mon 9/22/25	794	PM,TL 1,DCDEE O&M
796	Add to the Solution/Sprint Backlog	4 hrs	Mon 9/22/25	Mon 9/22/25	795	PM,BA 1
797						
798	Sprint Implementation	182 hrs	Mon 9/22/25	Thu 10/23/25		
799	Implementation Preparation	168 hrs	Mon 9/22/25	Tue 10/21/25		
800	Create Release/Deployment Readiness Checklist	8 hrs	Mon 9/22/25	Mon 10/20/25	794	TL 1
801	Provide Onsite Assistance during Deployment Readiness	4 hrs	Mon 10/20/25	Mon 10/20/25	800	NOG
802	Create Production Test Scripts	4 hrs	Tue 10/21/25	Tue 10/21/25	801	QAM
803						
804	Installation	14 hrs	Tue 10/21/25	Thu 10/23/25		
805	Install the Production Build	4 hrs	Tue 10/21/25	Tue 10/21/25	802	TL 1
806	Perform Production Tests	2 hrs	Wed 10/22/25	Wed 10/22/25	805	QA 1
807	Create Validation Test Report	2 hrs	Wed 10/22/25	Wed 10/22/25	806	QAM
808	Cut Over to the Updated System	2 hrs	Wed 10/22/25	Wed 10/22/25	807	TL 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
809	Create Deployment UAT Results Report	2 hrs	Wed 10/22/25	Wed 10/22/25	808	QAM
810	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 10/23/25	Thu 10/23/25	809	QAM
811						
812	Sprint Planning	72 hrs	Thu 4/17/25	Wed 4/30/25		
813	Sprint Planning	8 hrs	Thu 4/17/25	Fri 4/18/25	771	PM,BA 1
814	Detailed Design Specifications Document Revisions	8 hrs	Fri 4/18/25	Mon 4/21/25	813	BA 1
815	Create/Update Use Cases	16 hrs	Mon 4/21/25	Wed 4/23/25	814	BA 1
816	Create User Stories	40 hrs	Wed 4/23/25	Wed 4/30/25	815	BA 1
817						
818	Sprint	426 hrs	Tue 9/23/25	Fri 12/5/25		
819	Planning, Construction & Unit Testing	164 hrs	Tue 9/23/25	Tue 10/21/25		
820	Assign Functions to Development Staff	2 hrs	Tue 9/23/25	Tue 9/23/25	816,796	PM
821	Data Model Revisions	8 hrs	Tue 9/23/25	Wed 9/24/25	820	DBA
822	Data Dictionary Revisions	8 hrs	Wed 9/24/25	Thu 9/25/25	821	DBA
823	Build/Modify Software Components	136 hrs	Tue 9/23/25	Thu 10/16/25	820	SE1,SE2,TL 1
824	Build/Modify SQL Components	16 hrs	Thu 10/16/25	Mon 10/20/25	823	SE1,SE2,TL 1
825	Unit Test the Software & SQL Components	10 hrs	Mon 10/20/25	Tue 10/21/25	824	SE1,SE2,TL 1
826						
827	Provider Portal & Complaints System Testing	102 hrs	Thu 10/16/25	Mon 11/3/25		
828	Review Test Plan	2 hrs	Thu 10/16/25	Thu 10/16/25	823	QAM
829	Identify Functions to be Tested	2 hrs	Thu 10/16/25	Thu 10/16/25	828	QAM
830	Create Test Scripts	16 hrs	Thu 10/16/25	Mon 10/20/25	829	QA 1
831	Perform System Testing	40 hrs	Tue 10/21/25	Tue 10/28/25	825,830	QA 1
832	Modify Software Components	8 hrs	Tue 10/28/25	Wed 10/29/25	831	SE1,SE2,TL 1
833	Modify SQL Components	4 hrs	Wed 10/29/25	Wed 10/29/25	832	SE1,SE2,TL 1
834	Unit Test the Software Components	4 hrs	Thu 10/30/25	Thu 10/30/25	833	SE1,SE2,TL 1
835	Perform System Testing	4 hrs	Thu 10/30/25	Thu 10/30/25	834	QA 1
836	Create System Test Results Report	4 hrs	Fri 10/31/25	Fri 10/31/25	835	QAM
837	Create Regression Test Reports	4 hrs	Fri 10/31/25	Fri 10/31/25	836	QAM
838	Update Training Materials	16 hrs	Thu 10/30/25	Mon 11/3/25	834	TR
839	Deploy to User Acceptance Testing Environment	2 hrs	Mon 11/3/25	Mon 11/3/25	837	SE1,SE2,TL 1
840	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 11/3/25	Mon 11/3/25	839	PM,TL 1,DCDEE O&M
841	Add to the Solution/Sprint Backlog	4 hrs	Mon 11/3/25	Mon 11/3/25	840	PM,BA 1
842						
843	Sprint Implementation	190 hrs	Mon 11/3/25	Fri 12/5/25		
844	Implementation Preparation	176 hrs	Mon 11/3/25	Wed 12/3/25		
845	Create Release/Deployment Readiness Checklist	8 hrs	Mon 11/3/25	Tue 12/2/25	839	TL 1
846	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 12/2/25	Tue 12/2/25	845	NOG
847	Create Production Test Scripts	4 hrs	Wed 12/3/25	Wed 12/3/25	846	QAM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
848						
849	Installation	14 hrs	Wed 12/3/25	Fri 12/5/25		
850	Install the Production Build	4 hrs	Wed 12/3/25	Wed 12/3/25	847	TL 1
851	Perform Production Tests	2 hrs	Thu 12/4/25	Thu 12/4/25	850	QA 1
852	Create Validation Test Report	2 hrs	Thu 12/4/25	Thu 12/4/25	851	QAM
853	Cut Over to the Updated System	2 hrs	Thu 12/4/25	Thu 12/4/25	852	TL 1
854	Create Deployment UAT Results Report	2 hrs	Thu 12/4/25	Thu 12/4/25	853	QAM
855	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Fri 12/5/25	Fri 12/5/25	854	QAM
856						
857	Sprint Planning	72 hrs	Tue 10/21/25	Mon 11/3/25		
858	Sprint Planning	8 hrs	Tue 10/21/25	Wed 10/22/25	802	PM,BA 1
859	Detailed Design Specifications Document Revisions	8 hrs	Wed 10/22/25	Thu 10/23/25	858	BA 1
860	Create/Update Use Cases	16 hrs	Thu 10/23/25	Mon 10/27/25	859	BA 1
861	Create User Stories	40 hrs	Mon 10/27/25	Mon 11/3/25	860	BA 1
862						
863	Sprint	424 hrs	Tue 11/4/25	Thu 1/15/26		
864	Planning, Construction & Unit Testing	162 hrs	Tue 11/4/25	Tue 12/2/25		
865	Assign Functions to Development Staff	2 hrs	Tue 11/4/25	Tue 11/4/25	861,841	PM
866	Data Model Revisions	8 hrs	Tue 11/4/25	Wed 11/5/25	865	DBA
867	Data Dictionary Revisions	8 hrs	Wed 11/5/25	Thu 11/6/25	866	DBA
868	Build/Modify Software Components	136 hrs	Tue 11/4/25	Thu 11/27/25	865	SE1,SE2,TL 1
869	Build/Modify SQL Components	16 hrs	Thu 11/27/25	Mon 12/1/25	868	SE1,SE2,TL 1
870	Unit Test the Software & SQL Components	8 hrs	Mon 12/1/25	Tue 12/2/25	869	SE1,SE2,TL 1
871						
872	Provider Portal & Complaints System Testing	100 hrs	Thu 11/27/25	Mon 12/15/25		
873	Review Test Plan	2 hrs	Thu 11/27/25	Thu 11/27/25	868	QAM
874	Identify Functions to be Tested	2 hrs	Thu 11/27/25	Thu 11/27/25	873	QAM
875	Create Test Scripts	16 hrs	Thu 11/27/25	Mon 12/1/25	874	QA 1
876	Perform System Testing	40 hrs	Tue 12/2/25	Tue 12/9/25	870,875	QA 1
877	Modify Software Components	8 hrs	Tue 12/9/25	Wed 12/10/25	876	SE1,SE2,TL 1
878	Modify SQL Components	4 hrs	Wed 12/10/25	Wed 12/10/25	877	SE1,SE2,TL 1
879	Unit Test the Software Components	4 hrs	Wed 12/10/25	Thu 12/11/25	878	SE1,SE2,TL 1
880	Perform System Testing	4 hrs	Thu 12/11/25	Thu 12/11/25	879	QA 1
881	Create System Test Results Report	4 hrs	Thu 12/11/25	Fri 12/12/25	880	QAM
882	Create Regression Test Reports	4 hrs	Fri 12/12/25	Fri 12/12/25	881	QAM
883	Update Training Materials	16 hrs	Thu 12/11/25	Mon 12/15/25	879	TR
884	Deploy to User Acceptance Testing Environment	2 hrs	Fri 12/12/25	Fri 12/12/25	882	SE1,SE2,TL 1
885	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 12/15/25	Mon 12/15/25	884	PM,TL 1,DCDEE O&M
886	Add to the Solution/Sprint Backlog	4 hrs	Mon 12/15/25	Mon 12/15/25	885	PM,BA 1
887						
888	Sprint Implementation	190 hrs	Mon 12/15/25	Thu 1/15/26		

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
889	Implementation Preparation	176 hrs	Mon 12/15/25	Wed 1/14/26		
890	Create Release/Deployment Readiness Checklist	8 hrs	Mon 12/15/25	Tue 1/13/26	884	TL 1
891	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 1/13/26	Tue 1/13/26	890	NOG
892	Create Production Test Scripts	4 hrs	Tue 1/13/26	Wed 1/14/26	891	QAM
893						
894	Installation	14 hrs	Wed 1/14/26	Thu 1/15/26		
895	Install the Production Build	4 hrs	Wed 1/14/26	Wed 1/14/26	892	TL 1
896	Perform Production Tests	2 hrs	Wed 1/14/26	Wed 1/14/26	895	QA 1
897	Create Validation Test Report	2 hrs	Thu 1/15/26	Thu 1/15/26	896	QAM
898	Cut Over to the Updated System	2 hrs	Thu 1/15/26	Thu 1/15/26	897	TL 1
899	Create Deployment UAT Results Report	2 hrs	Thu 1/15/26	Thu 1/15/26	898	QAM
900	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 1/15/26	Thu 1/15/26	899	QAM
901						
902	Sprint Planning	504 hrs	Mon 11/3/25	Thu 1/29/26		
903	Sprint Planning	8 hrs	Mon 11/3/25	Tue 11/4/25	861	PM,BA 1
904	Detailed Design Specifications Document Revisions	8 hrs	Tue 11/4/25	Wed 11/5/25	903	BA 1
905	Create/Update Use Cases	16 hrs	Wed 11/5/25	Fri 11/7/25	904	BA 1
906	Create User Stories	40 hrs	Fri 11/7/25	Fri 11/14/25	905	BA 1
907						
908	Sprint	262 hrs	Mon 12/15/25	Thu 1/29/26		
909	Planning, Construction & Unit Testing	162 hrs	Mon 12/15/25	Mon 1/12/26		
910	Assign Functions to Development Staff	2 hrs	Mon 12/15/25	Mon 12/15/25	906,886	PM
911	Data Model Revisions	8 hrs	Tue 12/16/25	Tue 12/16/25	910	DBA
912	Data Dictionary Revisions	8 hrs	Wed 12/17/25	Wed 12/17/25	911	DBA
913	Build/Modify Software Components	136 hrs	Tue 12/16/25	Wed 1/7/26	910	SE1,SE2,TL 1
914	Build/Modify SQL Components	16 hrs	Thu 1/8/26	Fri 1/9/26	913	SE1,SE2,TL 1
915	Unit Test the Software & SQL Components	8 hrs	Mon 1/12/26	Mon 1/12/26	914	SE1,SE2,TL 1
916						
917	Provider Portal & Complaints System Testing	100 hrs	Thu 1/8/26	Mon 1/26/26		
918	Review Test Plan	2 hrs	Thu 1/8/26	Thu 1/8/26	913	QAM
919	Identify Functions to be Tested	2 hrs	Thu 1/8/26	Thu 1/8/26	918	QAM
920	Create Test Scripts	16 hrs	Thu 1/8/26	Mon 1/12/26	919	QA 1
921	Perform System Testing	40 hrs	Tue 1/13/26	Mon 1/19/26	915,920	QA 1
922	Modify Software Components	8 hrs	Tue 1/20/26	Tue 1/20/26	921	SE1,SE2,TL 1
923	Modify SQL Components	4 hrs	Wed 1/21/26	Wed 1/21/26	922	SE1,SE2,TL 1
924	Unit Test the Software Components	4 hrs	Wed 1/21/26	Wed 1/21/26	923	SE1,SE2,TL 1
925	Perform System Testing	4 hrs	Thu 1/22/26	Thu 1/22/26	924	QA 1
926	Create System Test Results Report	4 hrs	Thu 1/22/26	Thu 1/22/26	925	QAM
927	Create Regression Test Reports	4 hrs	Fri 1/23/26	Fri 1/23/26	926	QAM
928	Update Training Materials	16 hrs	Thu 1/22/26	Fri 1/23/26	924	TR

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
929	Deploy to User Acceptance Testing Environment	2 hrs	Fri 1/23/26	Fri 1/23/26	927	SE1,SE2,TL 1
930	Product Demonstration of Tested System to DCDEE	2 hrs	Fri 1/23/26	Fri 1/23/26	929	PM,TL 1,DCDEE O&M
931	Add to the Solution/Sprint Backlog	4 hrs	Mon 1/26/26	Mon 1/26/26	930	PM,BA 1
932						
933	Sprint Implementation	30 hrs	Fri 1/23/26	Thu 1/29/26		
934	Implementation Preparation	16 hrs	Fri 1/23/26	Tue 1/27/26		
935	Create Release/Deployment Readiness Checklist	8 hrs	Fri 1/23/26	Mon 1/26/26	929	TL 1
936	Provide Onsite Assistance during Deployment Readiness	4 hrs	Mon 1/26/26	Tue 1/27/26	935	NOG
937	Create Production Test Scripts	4 hrs	Tue 1/27/26	Tue 1/27/26	936	QAM
938						
939	Installation	14 hrs	Tue 1/27/26	Thu 1/29/26		
940	Install the Production Build	4 hrs	Tue 1/27/26	Wed 1/28/26	937	TL 1
941	Perform Production Tests	2 hrs	Wed 1/28/26	Wed 1/28/26	940	QA 1
942	Create Validation Test Report	2 hrs	Wed 1/28/26	Wed 1/28/26	941	QAM
943	Cut Over to the Updated System	2 hrs	Wed 1/28/26	Wed 1/28/26	942	TL 1
944	Create Deployment UAT Results Report	2 hrs	Thu 1/29/26	Thu 1/29/26	943	QAM
945	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 1/29/26	Thu 1/29/26	944	TL 2
946						
947	Establish Infrastructure & Technical Specifications	96 hrs	Tue 10/1/24	Wed 10/16/24		
948	Update Infrastructure Requirements	16 hrs	Tue 10/1/24	Wed 10/2/24		NOG
949	Create General Backup & Recovery Plan	40 hrs	Thu 10/3/24	Wed 10/9/24	948	NOG
950	Create Disaster Recovery Plan	40 hrs	Thu 10/10/24	Wed 10/16/24	949	
951						
952	Transition	250 hrs	Mon 1/8/29	Tue 2/20/29		
953	Receive notification of Transition	2 hrs	Mon 1/8/29	Mon 1/8/29		PM
954	Create Transition Plan	40 hrs	Mon 1/8/29	Mon 1/15/29	953	PM
955	DCDEE Reviews Transition Plan	40 hrs	Mon 1/15/29	Mon 1/22/29	954	DCDEE O&M
956	Revisions to the Transition Plan	8 hrs	Mon 1/22/29	Tue 1/23/29	955	PM
957	Begin Transition	160 hrs	Tue 1/23/29	Tue 2/20/29	956	
958	End Transition	0 hrs	Tue 2/20/29	Tue 2/20/29	957	

Signed Vendor Certification Form

ATTACHMENT F: VENDOR CERTIFICATION FORM

1) ELIGIBLE VENDOR

The Vendor certifies that in accordance with N.C.G.S. §143-59.1(b), Vendor is not an ineligible vendor as set forth in N.C.G.S. §143-59.1 (a).

The Vendor acknowledges that, to the extent the awarded contract involves the creation, research, investigation or generation of a future RFP or other solicitation; the Vendor will be precluded from bidding on the subsequent RFP or other solicitation and from serving as a subcontractor to an awarded vendor.

The State reserves the right to disqualify any bidder if the State determines that the bidder has used its position (whether as an incumbent Vendor, or as a subcontractor hired to assist with the RFP development, or as a Vendor offering free assistance) to gain a competitive advantage on the RFP or other solicitation.

2) CONFLICT OF INTEREST

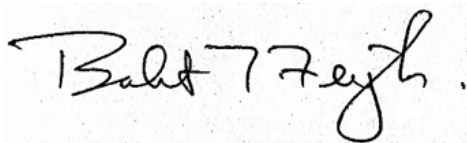
Applicable standards may include: N.C.G.S. §§143B-1352 and 143B-1353, 14-234, and 133-32. The Vendor shall not knowingly employ, during the period of the Agreement, nor in the preparation of any response to this solicitation, any personnel who are, or have been, employed by a Vendor also in the employ of the State and who are providing Services involving, or similar to, the scope and nature of this solicitation or the resulting contract.

3) E-VERIFY

Pursuant to N.C.G.S. § 143B-1350(k), the State shall not enter into a contract unless the awarded Vendor and each of its subcontractors comply with the E-Verify requirements of N.C.G.S. Chapter 64, Article 2. Vendors are directed to review the foregoing laws. Vendors claiming exceptions or exclusions under Chapter 64 must identify the legal basis for such claims and certify compliance with federal law regarding registration of aliens including 8 USC 1373 and 8 USC 1324a. Any awarded Vendor must submit a certification of compliance with E-Verify to the awarding agency, and on a periodic basis thereafter as may be required by the State.

4) CERTIFICATE TO TRANSACT BUSINESS IN NORTH CAROLINA

As a condition of contract award, awarded Vendor shall have registered its business with the North Carolina Secretary of State and shall maintain such registration throughout the term of the Contract.



Signature: _____

Date: 8/7/2023

Printed Name: Breht Feigh

Title: CEO



Location of Workers Utilized by Vendor Form

ATTACHMENT G: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with N.C.G.S. §143B-1361(b), Vendor must identify how it intends to utilize resources or workers located outside the U.S., and the countries or cities where such are located. The State will evaluate additional risks, costs, and other factors associated with the Vendor's utilization of resources or workers prior to making an award for any such Vendor's offer. The Vendor shall provide the following:

- 1) The location of work to be performed by the Vendor's employees, subcontractors, or other persons, and whether any work will be performed outside the United States. The Vendor shall provide notice of any changes in such work locations if the changes result in performing work outside of the United States.
- 2) Any Vendor or subcontractor providing support or maintenance Services for software, call or contact center Services shall disclose the location from which the call or contact center Services are being provided upon request.

Will Vendor perform any work outside of the United States?

☐ YES ☒ NO X



References

ATTACHMENT H: REFERENCES

REFERENCES:

Reference #1	
Customer Name	State of New Jersey Department of Human Services, Division of Family Development
Customer Address	<div>██████████</div> <div>██████████</div> <div>██████████████████</div>
Telephone Number of a Customer Employee	██████████████████████████████
Email Address	██████████████████████████
Time Period Each Offered Solution Implementation was Completed	The Ascend Workforce Registry Module was implemented in 2017. The Ascend Licensing and Ascend QRIS Modules along with eXpedite were implemented in 2019. TCC added the Paradiso LMS in 2021 and the Salesforce Grants Management for ARPA in 2021 as well.
Brief Summary of Offered Solution Implementation	<p>Since 2017, TCC has partnered with the State of New Jersey to implement, expand, and support the New Jersey Child Care Information System (NJCCIS). NJCCIS is a large scale, integrated early childhood solution that includes licensing inspections, licensing management, professional registry/training registration, Quality Improvement System (QIS), grants management and a learning management system (LMS).</p> <p>NJCCIS currently supports over 80,000 registered users, including providers, workforce, trainers, state staff and state partner staff, such as TA Coaches, Infant Toddler Specialists and other Child Care Resource and Referral (CCRR) staff.</p> <p>All user types access the system through a common portal through which providers and the early childhood workforce can perform various licensing, technical assistance, and professional development activities. The system guides state staff and their partners with configurable workflows, task alerts, and reports to perform their daily job responsibilities efficiently.</p>

Reference #1

	State licensing and CCRR staff use TCC's electronic forms solution to inspect and monitor licensed and registered center and home providers. Coaching staff use the electronic forms solution to record and track technical assistance activities and quality improvement progress. The solution includes an off-line data collection option. Additionally, state quality partners, including CCRR staff, use eXpedite to capture data related to technical assistance visits and continuous quality improvement plans. Provider profile, inspection, and quality data is sent to the consumer education website through a secure API.
List of Offered Solution Products Installed and Operational	Ascend eXpedite Salesforce Paradiso
Number of Staff Supporting, Maintaining and Managing Offered Solution	Currently there are approximately 17 FTE's for Maintenance and Operations.
Number of End Users Supported	Over 80,000
Number of Sites Supported	www.njccis.com https://www.childcarenj.gov/Search

Reference #2

Customer Name	Oklahoma Department of Human Services
Customer Address	[REDACTED] [REDACTED]
Telephone Number	[REDACTED]
Email Address	[REDACTED]
Time Period Each Offered Solution Implementation was Completed	TCC converted CCMASS to the Ascend Licensing Module implemented in 2021. The Ascend QRIS Module was implemented in 2023.
Brief Summary of Offered Solution Implementation	TCC and OKDHS have been partners for over 10 years. TCC implemented and continues to support and enhance a large-scale, childcare licensing management and QRIS solution known as CCMASS (Child Care Management and Safety System) that supports over 3,000 providers. CCMASS records data on multiple child care provider types

Reference #2	
	<p>and child welfare license types, including foster care, group homes, residential facilities, and child placement agencies.</p> <p>CCMASS guides agency staff with workflows to efficiently perform their daily job responsibilities. State licensing consultants use TCC's electronic inspection solution to inspect provider regulation compliance and capture data needed to rate the quality level of childcare programs. TCC's electronic inspection solution provides full functionality while offline and transmits data to the system when connectivity is restored. CCMASS is integrated with the OK consumer education website and sends program information and inspection/complaint information through an API to be viewed by families searching for childcare.</p> <p>TCC migrated CCMASS (2021) to our Ascend product platform. CCMASS now includes a provider portal that offers online applications to providers who wish to participate in the OK Quality Rating and Improvement System (QRIS). As part of the modernization, TCC also expanded the portal so that providers may apply online for a license, update, and manage other information about their program. Additional expansion is anticipated to add other user types and functionality.</p>
List of Offered Solution Products Installed and Operational	Ascend eXpedite
Number of Staff Supporting, Maintaining and Managing Offered Solution	Currently there are approximately 6 FTE's for Maintenance and Operations.
Number of End Users Supported	3100
Number of Sites Supported	https://ccmass.dhs.ok.gov/ascend

Reference #3	
Customer Name	Mecklenburg County, Department of Social Services
Customer Address	[REDACTED]
Telephone Number	[REDACTED] [REDACTED] [REDACTED]

Reference #3	
Email Address	[REDACTED]
Time Period Each Offered Solution Implementation was Completed	August 2021
Brief Summary of Offered Solution Implementation	<p>TCC is implementing Ascend to provide an early childhood data management and budgeting system that tracks all stakeholder information and enables financial tracking and processing of payments. This includes, but is not limited to, tracking enrollment and attendance of children, family information, child development, transportation, child care subsidy receipt, teacher credentials and related information, professional development, coaching visits, and technical assistance provided, and easy to query reporting capabilities at multiple levels of access.</p> <p>The system allows for the upload of documentation (e.g., paystubs, birth certificate, transcripts, invoices, and other information related to supporting the administration of MECK Pre-K from external and internal sources (e.g., parents, providers, employees).</p>
List of Offered Solution Products Installed and Operational	Ascend
Number of Staff Supporting, Maintaining and Managing Offered Solution	Currently there are approximately 5 FTE's for Maintenance and Operations.
Number of End Users Supported	15,411
Number of Sites Supported	https://ascend.meckprek.com/ecds/home

Financial Statements

ATTACHMENT I: FINANCIAL REVIEW FORM

Vendor shall review the Financial Review Form, provide responses in the gray-shaded boxes, and submit the completed Form as an Excel file with its offer. Vendor shall not add or delete rows or columns in the Form or change the order of the rows or column in the file.

1. Vendor Name: The Consultants Consortium, Inc.
2. Company structure for tax purposes (C Corp, S Corp, LLC, LLP, etc.): S corporation
3. Have you been in business for more than three years? ☒ Yes ☐ No
4. Have you filed for bankruptcy in the past three years? ☐ Yes ☒ No
5. In the past three years, has your auditor issued any notification letters addressing significant issues? If yes, please explain and provide a copy of the notification letters. ☐ Yes ☒ No
6. Are the financial figures below based on audited financial statements? ☒ Yes ☐ No
7. Start Date of financial statements: 1/1
End Date of financial statements: 12/31
8. Provide a link to annual reports with financial statements and management discussion for the past three complete fiscal years: Two copies of TCC's financial statements are enclosed in Appendix X and Appendix X.
9. Provide the following information for the past three complete fiscal years:

One Copy of TCC Financials



SUPPLEMENTARY INFORMATION



Second Copy of TCC Financials



SUPPLEMENTARY INFORMATION



Errata and Exceptions if any

TCC does not have any exceptions to Requirements and Specifications.



Vendor's License and Maintenance Agreements, if any

The Consultants Consortium, Inc. End-User License Agreement Ascend Software Package

THIS END-USER- LICENSE AGREEMENT (“EULA”) is a legal agreement between the North Carolina (“STATE”) and The Consultants Consortium, Inc. (TCC) for the Ascend Software product line, which includes computer software and may include associated media, printed materials, “online” or electronic documentation, and Internet-based service (“Licensed Software”). As used herein, the word “you” is a reference to the entity, that has purchased the Licensed Software. You agree to be bound by the terms of this EULA, and of all amendments or addendums signed by both you and TCC and approved as required by applicable law.

This EULA is entered into in conjunction with TCC’s implementation and maintenance and operations of the Licensing System pursuant to the Contract to which this is attached. The Licensed Software is a component of the System that TCC will implement and deliver under the Contract. In the event of a conflict between the terms of this EULA and the terms of the Contract, the terms of the Contract shall prevail.

1. GRANT OF LICENSE

TCC grants you a subscription based, non-exclusive, non-transferable and non-sub licensable license (“License”) to use the Licensed Software, in object code or other machine executable format, and according to the terms and conditions set forth in this EULA. Your rights may be greater upon a triggering event of source code escrow agreement.

2. LICENSING RESTRICTIONS

YOU MAY NOT: (i) modify, translate, reverse engineer, decompile, disassemble (except to the extent applicable laws specifically prohibit such restriction and provided that you have first requested from TCC the tools necessary to create interoperable programs), or create derivative works based on the Licensed Software, (ii) copy the Licensed Software (except as specified herein), (iii) export, directly or indirectly, the Licensed Software to any person or entity outside the United States in violation of applicable U.S. export laws, (iv) sell, rent, lease, or otherwise transfer rights to the Licensed Software to other devices, (v) remove any proprietary notices or labels on the Licensed Software.

3. MANDATORY ACTIVATION

The license rights granted under this EULA will become effective as of the TCC’s delivery of the Licensed Software according to the terms of the Contract. You may only activate the Licensed Software by contacting TCC.

4. UPGRADES AND UPDATES

The term “Upgrade” shall mean the release of a version of the Licensed Software containing major changes to the structure thereof where important new features may be added. The change to an Upgrade will be recognized by an increase in value of the primary version number (e.g. Ascend 3.x to be replaced by Ascend 4.x). The term “Update” shall mean the release of a version of the Licensed Software containing improvements and adjustments to the Licensed Software, however not including major structural changes and/or new important features. The change to an Update will be recognized by an increase in value of the secondary version number (e.g. Ascend 3.0 to be replaced by Ascend 3.1).

The Terms and Conditions of this License Agreement shall apply to the initial copy of the Licensed Software as well as to any Upgrade or Update to the Licensed Software subsequently delivered to you. Provided that you have paid currently due maintenance fees, TCC will deliver to you for no additional charges any Upgrades and Updates to the Licensed Software. You must destroy all previous copies of the Licensed Software, however duplicated or archived, within thirty (30) days of installation of the Upgrade or Update. To use Licensed Software identified as an Upgrade, you must first be licensed for the product identified by TCC as eligible for the Upgrade.

5. ADDITIONAL SOFTWARE SERVICES

This EULA applies to Upgrades, Updates, supplements, and add on components, or Internet-based service components, of the Licensed Software that TCC may provide to you or make available to you after the date you obtain your initial copy of the Licensed Software TCC reserves the right to discontinue any Internet-based services provided to you or made available to you through the use of this Licensed Software if you do not pay maintenance fees in accordance with the Contract.

6. LIMITATIONS ON REVERSE ENGINEERING, DECOMPILE, AND DISASSEMBLY

You may not reverse engineer, decompile, or disassemble the Licensed Software, except and only to the extent that it is expressly permitted by applicable law notwithstanding this limitation. The program(s) to which this license applies integrates one or more software programs developed by others. You are not permitted to distribute these other programs pursuant to this Section as either standalone Licensed Software, or as a part of any other product. Nor shall you, in respect of the Licensed Software, and the other programs, disassemble or attempt to disassemble the code, or attempt in any manner to reconstruct, discover, reuse, or modify any source code or underlying algorithms thereof. Similarly, you shall not use the Licensed Software, or any portion or portions thereof for software development or application development purposes.

7. TERMINATION

Without prejudice to any other rights, TCC may terminate this EULA if you commit any material breach or default of any covenant, warranty, or obligation under this EULA and you fail to cure such failure within thirty (30) Business Days after delivery of TCC’s notice or such longer period as TCC may specify in such notice. TCC must notify you in writing with a detailed description of the default or breach in order qualify an event or action as default for which TCC may terminate this EULA pursuant to this Section. Following termination pursuant to this Section you must destroy all copies of the Licensed Software and all of its component parts.



8. PRODUCT CHARGES.

This License is a perpetual grant. After the first year, TCC, upon receipt of the annual maintenance fee pursuant to the Contract, shall distribute updates, upgrades, versions, and patches to the Licensed Software.

9. EXPORT RESTRICTIONS

You acknowledge that the Licensed Software is of U.S. origin and is subject to U.S. export jurisdiction. You agree to comply with all applicable international and national laws that apply to the Licensed Software, including the U.S. Export Administration Regulations, as well as end-user, end-use, and destination restrictions issued by U.S. and other governments.

10. LIMITED WARRANTY FOR LICENSED SOFTWARE.

TCC warrants that the Licensed Software will perform and operate as set forth in the Contract. If an implied warranty or condition is created by your state /jurisdiction and federal or state/provincial law prohibits disclaimer of it, you also have an implied warranty or condition, but only as to defects discovered during the period of this limited warranty (ninety days). There is no warranty or condition of any kind other than any additional warranties set forth in the Contract. Some states/jurisdictions do not allow limitations on how long an implied warranty or condition lasts, so the above limitation may not apply to you.

11. DISCLAIMER OF WARRANTIES.

THE LICENSED SOFTWARE IS PROVIDED “AS IS,” WITHOUT WARRANTY OF ANY KIND, EXCEPT AS STATED IN SECTION 12, HEREINABOVE, AND IN THE CONTRACT. THE ENTIRE RISK AS TO THE RESULT AND PERFORMANCE OF THE LICENSED SOFTWARE IS ASSUMED BY CUSTOMER. EXCEPT AS STATED IN SECTION 12, AND IN THE CONTRACT, TCC AND ITS RESELLERS, LICENSORS AND SUPPLIERS MAKE NO WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, WITH RESPECT TO THE LICENSED SOFTWARE OR THE USE OR OPERATION THEREOF AND SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

12. LIMITATION ON REMEDIES

Your remedies for any breach of the Limited Warranty are set forth in the Contract.

13. ENTIRE AGREEMENT

This EULA (including any addendum or amendment to this EULA which is included with the Licensed Software) and the Contract are the only agreements between you and TCC, relating to the Licensed Software and the support services (if any) and they supersede all prior or contemporaneous oral or written communications, proposals, and representations with respect to the Licensed Software or any other subject matter covered by the EULA. In the event of any inconsistency between the statements made in the EULA and the Contract, the following order of precedence governs: (a) first, the Contract; and (b) second, the EULA.

14. NOTICES PROVIDED FOR IN THIS EULA



When used herein, the phrase “written notice” shall mean that, with regard to any written notice required of you herein, or which you are given the option of providing TCC, such notice shall be provided as set forth in the Contract.

21. DISPUTE RESOLUTION. The provisions of the Contract related to the resolution of disputes, including provisions related to venue, jurisdiction, and governing law are incorporate herein, and set forth in their entirety the parties’ agreement with respect to those matters.

State

By: _____

Printed Name:

Title:

Date:

**The Consultants Consortium, Inc.
End-User License Agreement
eXpedite Software Package**

THIS END-USER- LICENSE AGREEMENT (“EULA”) is a legal agreement between the the State of North Caolina (“STATE”) and The Consultants Consortium, Inc. (TCC) for the eXpedite Software product line, which includes computer software and may include associated media, printed materials, “online” or electronic documentation, and Internet-based service (‘Licensed Software’). As used herein, the word “you” is a reference to the entity, that has purchased the Licensed Software. You agree to be bound by the terms of this EULA, and of all amendments or addendums signed by both you and TCC and approved as required by applicable law.

This EULA is entered into in conjunction with TCC’s implementation and maintenance and operations of the System pursuant to the Contract to which this is attached. The Licensed Software is a component of the System that TCC will implement and deliver under the Contract. In the event of a conflict between the terms of this EULA and the terms of the Contract, the terms of the Contract shall prevail.

15. GRANT OF LICENSE

TCC grants you a subscription based, non-exclusive, non-transferable and non-sub licensable license (“License”) to use the Licensed Software, in object code or other machine executable format, and according to the terms and conditions set forth in this EULA. Your rights may be greater upon a triggering event of source code escrow agreement.

16. LICENSING RESTRICTIONS

YOU MAY NOT: (i) modify, translate, reverse engineer, decompile, disassemble (except to the extent applicable laws specifically prohibit such restriction and provided that you have first requested from TCC the tools necessary to create interoperable programs), or create derivative works based on the Licensed Software, (ii) copy the Licensed Software (except as specified herein), (iii) export, directly or indirectly, the Licensed Software to any person or entity outside the United States in violation of applicable U.S. export laws, (iv) sell, rent, lease, or otherwise transfer rights to the Licensed Software to other devices, (v) remove any proprietary notices or labels on the Licensed Software.

17. MANDATORY ACTIVATION

The license rights granted under this EULA will become effective as of the TCC's delivery of the Licensed Software according to the terms of the Contract. You may only activate the Licensed Software by contacting TCC.

18. UPGRADES AND UPDATES

The term "Upgrade" shall mean the release of a version of the Licensed Software containing major changes to the structure thereof where important new features may be added. The change to an Upgrade will be recognized by an increase in value of the primary version number (e.g. eXpedite 3.x to be replaced by eXpedite 4.x). The term "Update" shall mean the release of a version of the Licensed Software containing improvements and adjustments to the Licensed Software, however not including major structural changes and/or new important features. The change to an Update will be recognized by an increase in value of the secondary version number (e.g. eXpedite 3.0 to be replaced by eXpedite 3.1).

The Terms and Conditions of this License Agreement shall apply to the initial copy of the Licensed Software as well as to any Upgrade or Update to the Licensed Software subsequently delivered to you. Provided that you have paid currently due maintenance fees, TCC will deliver to you for no additional charges any Upgrades and Updates to the Licensed Software. You must destroy all previous copies of the Licensed Software, however duplicated or archived, within thirty (30) days of installation of the Upgrade or Update. To use Licensed Software identified as an Upgrade, you must first be licensed for the product identified by TCC as eligible for the Upgrade.

19. ADDITIONAL SOFTWARE SERVICES

This EULA applies to Upgrades, Updates, supplements, and add on components, or Internet-based service components, of the Licensed Software that TCC may provide to you or make available to you after the date you obtain your initial copy of the Licensed Software TCC reserves the right to discontinue any Internet-based services provided to you or made available to you through the use of this Licensed Software if you do not pay maintenance fees in accordance with the Contract.

20. LIMITATIONS ON REVERSE ENGINEERING, DECOMPIlation, AND DISASSEMBLY

You may not reverse engineer, decompile, or disassemble the Licensed Software, except and only to the extent that it is expressly permitted by applicable law notwithstanding this limitation. The program(s) to which this license applies integrates one or more software programs developed by others. You are not

permitted to distribute these other programs pursuant to this Section as either a standalone Licensed Software, or as a part of any other product. Nor shall you, in respect of the Licensed Software, and the other programs, disassemble or attempt to disassemble the code, or attempt in any manner to reconstruct, discover, reuse, or modify any source code or underlying algorithms thereof. Similarly, you shall not use the Licensed Software, or any portion or portions thereof for software development or application development purposes.

21. TERMINATION

Without prejudice to any other rights, TCC may terminate this EULA if you commit any material breach or default of any covenant, warranty, or obligation under this EULA and you fail to cure such failure within thirty (30) Business Days after delivery of TCC's notice or such longer period as TCC may specify in such notice. TCC must notify you in writing with a detailed description of the default or breach in order to qualify an event or action as default for which TCC may terminate this EULA pursuant to this Section. Following termination pursuant to this Section you must destroy all copies of the Licensed Software and all of its component parts.

22. PRODUCT CHARGES.

This License is a perpetual grant. After the first year, TCC, upon receipt of the annual maintenance fee pursuant to the Contract, shall distribute updates, upgrades, versions, and patches to the Licensed Software.

23. EXPORT RESTRICTIONS

You acknowledge that the Licensed Software is of U.S. origin and is subject to U.S. export jurisdiction. You agree to comply with all applicable international and national laws that apply to the Licensed Software, including the U.S. Export Administration Regulations, as well as end-user, end-use, and destination restrictions issued by U.S. and other governments.

24. LIMITED WARRANTY FOR LICENSED SOFTWARE.

TCC warrants that the Licensed Software will perform and operate as set forth in the Contract. If an implied warranty or condition is created by your state /jurisdiction and federal or state/provincial law prohibits disclaimer of it, you also have an implied warranty or condition, but only as to defects discovered during the period of this limited warranty (ninety days). There is no warranty or condition of any kind other than any additional warranties set forth in the Contract. Some states/jurisdictions do not allow limitations on how long an implied warranty or condition lasts, so the above limitation, may not apply to you.

25. DISCLAIMER OF WARRANTIES.

THE LICENSED SOFTWARE IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EXCEPT AS STATED IN SECTION 12, HEREINABOVE, AND IN THE CONTRACT. THE ENTIRE RISK AS TO THE RESULT AND PERFORMANCE OF THE LICENSED SOFTWARE IS ASSUMED BY CUSTOMER. EXCEPT AS STATED IN SECTION 12, AND IN THE CONTRACT, TCC AND ITS RESELLERS, LICENSORS AND SUPPLIERS MAKE NO WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, WITH RESPECT TO THE LICENSED SOFTWARE OR THE USE OR OPERATION THEREOF AND

SPECIFICALLY DISCLAIM THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

26. LIMITATION ON REMEDIES

Your remedies for any breach of the Limited Warranty are set forth in the Contract.

27. ENTIRE AGREEMENT

This EULA (including any addendum or amendment to this EULA which is included with the Licensed Software) and the Contract are the only agreements between you and TCC, relating to the Licensed Software and the support services (if any) and they supersede all prior or contemporaneous oral or written communications, proposals, and representations with respect to the Licensed Software or any other subject matter covered by the EULA. In the event of any inconsistency between the statements made in the EULA and the Contract, the following order of precedence governs: (a) first, the Contract; and (b) second, the EULA.

28. NOTICES PROVIDED FOR IN THIS EULA

When used herein, the phrase “written notice” shall mean that, with regard to any written notice required of you herein, or which you are given the option of providing TCC, such notice shall be provided as set forth in the Contract.

21. DISPUTE RESOLUTION. The provisions of the Contract related to the resolution of disputes, including provisions related to venue, jurisdiction, and governing law are incorporate herein, and set forth in their entirety the parties’ agreement with respect to those matters.

State of North Carolina

By: _____

Printed Name:

Title:

Date:



Third Party License Agreements, if any

TCC has the following third-party licensing agreements in place as part of partnerships with the associated vendors:

AT&T Cybersecurity USM Anywhere (SIEM Solution).

MSSP Master Agreement
Version / Date: 01 August 2021

This MSSP Master Agreement (“MA”), effective as of the Effective Date, is entered into and between AlienVault, Inc. (“AlienVault”) and The Consultants Consortium, Inc. DBA TCC Software Solutions (“Customer” or “MSSP”), a managed security service provider. This MA, together with the Sales Order(s), and any schedules or exhibits attached thereto (collectively the “Agreement”), sets forth the terms and conditions under which AlienVault will make available certain products and services to MSSP. This MA is effective as of the date set forth in the Sales Order or, if no effective date is specified, the date of MSSP’s signature on Sales Order Q-80956 (“Effective Date”). In the event of a conflict between the terms a Sales Order and the terms of this MA, the terms of the MA shall control.

1. DEFINITIONS

“Affiliate” of a party means any entity that controls, is controlled by, or is under common control with such party.

“AlienVault OSSIM” means the AlienVault security information and event management (SIEM) software distributed to the public under an open source license (GPL Version 3.0, available at <http://www.gnu.org/licenses/gpl.html>), including Updates and new releases or versions thereof.

“AV-USM” means the object code copy of the AlienVault Unified Security Management® software developed by AlienVault to integrate with AlienVault OSSIM, including Updates thereof.

“Application” is also referred to as “USM AnywhereSM” and means the cloud-based SaaS solution and associated components, including but not limited to sensors and all third party software that AlienVault may have purchased or licensed from third parties and delivered as a part of the Application, as well as any Updates thereto.

“Documentation” means the user manuals and any other materials, including updates thereto, in any form or medium made generally available by AlienVault, regarding the proper installation and use of the Products.

“End Users” means anyone who uses, accesses, or benefits from the Products through MSSP’s Managed Services.

“End User Data” means the data sent through the Products for analysis and storage from an End User’s environment.

“Hardware” means computer hardware devices purchased by MSSP under a valid Sales Order and installed with the Software on behalf of End Users, providing security information management functionalities.

“License” means a license to use the Software granted to MSSP, that allows MSSP or End User, as applicable, to use the Software in accordance with this Agreement and the Documentation.

“Managed Services” means the delivery, deployment, management, support, and use of the Products by MSSP on behalf of or for the benefit of End Users.

“Products” means the Application, Software, and any associated Hardware.

“Sales Order” means the ordering document authorized or approved by AlienVault for purchases of Products hereunder, including addenda thereto, that are entered into between MSSP and AlienVault from time to time.

“Software” means the on-premises solution, also referred to as “USM Appliance”, which consists of AV-USM, AlienVault OSSIM, and associated components, including but not limited to sensors, servers, and loggers, and all third-party software that AlienVault may have purchased or licensed from third parties and delivered to MSSP as part of the Software, as well as any future Updates.

“Subscription” means: (i) for each Application, the right to use such Application and associated Documentation as purchased through the applicable Sales Order; and (ii) for the Software, a License to such Software and associated Documentation as purchased through the applicable Sales Order.

“Subscription Term” means: (i) for each Application, the period that MSSP has the right to use such Application and associated Documentation as set forth in the applicable Sales Order; and (ii) for the Software, the period that MSSP is provided a License to such Software and associated Documentation as set forth in the applicable Sales Order.

“Support and Maintenance Services” means collectively the maintenance services and technical support services AlienVault shall provide to the supported Product.

“Taxes” means all income withholding taxes, levies, imposts, duties, fines, or other charges of whatsoever nature however imposed by any country or any subdivision or authority thereof in any way connected with this Agreement or any instrument or agreement required hereunder, and all interest, penalties, or similar liabilities with respect thereto, except such taxes as are imposed on or measured by a party’s net income or property.

“Updates” means modifications, revisions, or enhancements to the Products, other than new releases and new versions of the Products.

2. MSSP TECHNOLOGY PROGRAM BENEFITS AND REQUIREMENTS

2.1. Benefits.

- (A) Appointment. Subject to MSSP’s continued compliance with the requirements and restrictions contained in this Agreement, AlienVault hereby appoints MSSP as a managed security service provider of the Products (the “MSSP Technology Program”).
- (B) USM Central. MSSP has access to USM Central in connection with the MSSP Technology Program. USM Central is a dashboard that enables MSSP to centrally monitor multiple Application and Software Subscriptions. USM Central is for the exclusive use of MSSP and cannot be transferred, assigned, sold, or otherwise made deployable, in whole or in part, to any third party, including any End User.
- (C) Federation Server. Except as otherwise stated in this Agreement, MSSP has the option to purchase a Federation Server in connection with the MSSP Technology Program. The Federation Server is a dashboard that enables MSSP to centrally monitor multiple Software Subscriptions. The Federation Server is for the exclusive use of MSSP and cannot be transferred, assigned, sold, or otherwise made deployable, in whole or in part, to any third party, including any End User.
- (D) Product Pricing. The prices listed in the Sales Order, through which MSSP purchased the MSSP Technology Program, are stabilized until the end of Term (as defined in Section 11.1).

2.2. Minimum Requirements.

- (A) MSSP Technology Program Subscription. MSSP must purchase a subscription for the MSSP Technology Program, which must be continuously maintained for the duration of any Subscription Term.
If a Subscription Term extends beyond the term of the MSSP Technology Program purchased through a Sales Order, AlienVault may, upon notice but without necessity of a signed Sales Order, extend the term of the MSSP Technology Program for the duration of such Subscription Term, and MSSP will be responsible for paying all associated fees in accordance with this Agreement.
- (B) MSSP Technology Program, Support Subscription. MSSP must purchase a subscription for Support and Maintenance Services, which must be maintained for the duration of the MSSP Technology Program.
- (C) End User Subscription. MSSP must purchase at least one Subscription for an End User. MSSP may not renew participation in the MSSP Technology Program without at least one active Subscription. NFR Products (see Section 2.4) do not satisfy these Minimum Requirements.

2.3. End User Products

- (A) MSSP must purchase a separate Subscription for each End User upon initial deployment of MSSP’s Managed Services for that End User. MSSP shall not (and shall not permit third parties to) provide Managed Services incorporating the Products to more End Users than the Subscription quantity for which Fees have been paid to AlienVault.
- (B) Products may be purchased at any time during the Term for a minimum term length of 12 months.

2.4. Not-for-Resale (“NFR”) Products.

MSSP can purchase Products that are not intended for resale at any time during the Term. Unless otherwise stated on the Sales Order, all NFR purchases are subject to AlienVault’s then current standard (a) Master Services Agreement located at <https://www.alienvault.com/docs/terms/MSAcurrent> for USM Anywhere, or (b) End User Software License and Services Agreement located at <https://www.alienvault.com/docs/terms/EULAcurrent.pdf> for USM Appliance, which is incorporated herein by reference.

3. GRANT AND RESTRICTIONS

3.1. **Grant.** Subject to the terms and conditions of this Agreement and solely in connection with Managed Services, AlienVault hereby grants to MSSP a limited, non-exclusive, revocable, non-transferable, non-assignable right to (a) market the Products to prospective customers and conduct demonstrations; and (b) with regards to the Application, deliver, deploy, manage, support, and use the Application on behalf of or for the benefit of End Users and allow End Users to access and use the Application and Documentation in accordance with this Agreement. With regards to the Software, subject to the terms and conditions of this Agreement and solely in connection with Managed Services, AlienVault hereby grants to MSSP a limited, non-exclusive, revocable, non-transferable, non-assignable License to deliver, deploy, manage, support, and use the Software on behalf of or for the benefit of End Users and allow End Users to access and use the Software and Documentation in accordance with this Agreement. MSSP may not sell or distribute the Products on a stand-alone or re-sale basis.

MSSP may also appoint resellers and third-party distributors to distribute Managed Services incorporating the Products.

3.2. USM Appliance Restrictions for New MSSPs. Notwithstanding anything contained in this Agreement to the contrary, unless such right is expressly granted to a New MSSP in the Sales Order, a New MSSP may not (a) distribute or license USM Appliance, or (b) purchase a Federation Server. "New MSSP" means a customer, a managed security service provider, who has not been permitted to license or distribute USM Appliance prior to the Effective Date.

3.3. MSSP Obligations and Restrictions. MSSP may only distribute the Products pursuant to a valid written agreement that governs the End Users right to use or access the Products ("End User Agreement"). Such End User Agreement shall include (at a minimum) substantially the same restrictions as are contained in AlienVault's then current standard (a) Master Services Agreement currently located at <https://www.alienvault.com/docs/terms/MSAcurrent> (excluding all exhibits attached thereto), for USM Anywhere Subscriptions, or (b) End User Software License and Service Agreement currently located at <https://www.alienvault.com/docs/terms/EULAcurrent.pdf> (excluding all exhibits or addendums attached thereto), for USM Appliance Subscriptions. MSSP is responsible for ensuring (i) that each End User enters into the End User Agreement and complies with the Acceptable Use Policy located at <https://cybersecurity.att.com/docs/terms/AVAUP>; and (ii) the End User Agreement is legally binding upon the End User. MSSP shall not allow access and use of the Products by any End User which AlienVault reasonably considers to be a competitor.

MSSP controls the End User Data, including volume and type, sent through the Products for analysis and storage from an End User's environment. MSSP shall be exclusively responsible for any data maintained or stored by MSSP on behalf of an End User, including ensuring the security and confidentiality of all such data, or for any loss of data that occurs due to improper or unauthorized use of the Products. MSSP is responsible for giving notice to its End Users regarding MSSP's and AlienVault's collection and use of End User Data in connection with the Application. MSSP will only make accessible or provide End User Data to AlienVault when it has the legal authority to do so. MSSP hereby grants to AlienVault (including Affiliates and subcontractors), throughout each Subscription Term and after each Subscription Term as necessary for any of AlienVault's post-termination obligations, the necessary rights or license to use End User Data as necessary to perform obligations related to the Application. MSSP will not provide to AlienVault, or store as part of its use of the Application, End User Data that includes Payment Card Industry ("PCI") data or Protected Health Information ("PHI") data. MSSP grants to AlienVault (including Affiliates and subcontractors) a sublicenseable and royalty free license to use such End User Data in order to provide the Application to MSSP and End Users and as necessary to access the Application to monitor and diagnose issues related to the Application. Following expiration of a Subscription Term, End User Data will be deleted, unless legally prohibited. This deletion may occur at any time during the thirty (30) calendar days following expiration of the Subscription Term.

The License granted herein is subject to the specific restrictions and limitations set forth in this Agreement, as well as the following: (a) the terms of the open source licenses governing the components included in the Software, and/or any additional licensing restrictions and limitations specified in the Documentation, or by notification and/or policy change posted at www.alienvault.com; and (b) the Software must reside on MSSP's or End User's own servers, if any. For avoidance of doubt and for quality control purposes, MSSP must not market, sell, or distribute AlienVault OSSIM as USM Appliance or anything other than AlienVault OSSIM.

MSSP shall comply with all policies and procedures made available to MSSP by AlienVault through its partner portal at <https://www.alienvault.com/partners/partner-portal>, and as updated from time to time.

3.4. Restrictions on Use. Except as expressly authorized by this Agreement, and subject to the terms of the open source licenses governing the open source components referred to in Section 13.2 (Open Source Components), MSSP shall not and will not permit or authorize third parties, including End Users, to (a) attempt to modify, create derivative works from, frame, mirror, republish, download, display, transmit, distribute, reverse compile, disassemble, reverse engineer, or otherwise reduce to human-perceivable form all or any portion of the Products, in any form or media or by any means; (b) carry out any action to the detriment of AlienVault's intellectual property rights or those of its suppliers; (c) make copies, execute, publish, or reproduce the Products or any Documentation (and all copies must maintain AlienVault's copyright notices); (d) make available, reveal, disclose, offer, or allow the use of the Products (or any components thereof) by third parties; (e) alter or modify the Products; (f) reject, avoid, elude, remove, deactivate, or evade, in any way, any protection mechanism of the Products, including without limitation any mechanism used to restrict or control Product functions; (g) disclose to any third party any benchmarking or comparative study involving the Products; (h) use the Products or Documentation in any manner not authorized by AlienVault; (i) attempt to gain unauthorized access to the Products or their related networks or another user account; or (j) access or use the Products or Documentation in order to build a competitive product or service, in whole or in part.

4. ORDERS, PAYMENT TERMS, AND TAXES

4.1. Orders. MSSP may place an order by submitting a Sales Order to AlienVault. AlienVault reserves the right to reject any orders that do not comply with the terms of this Agreement.

4.2. Payment Terms. Fees must be paid in the currency stated in the Sales Order. Unless otherwise specified in the applicable Sales Order, MSSP will make payment within thirty (30) days of the date of the invoice. Payments made by MSSP are non-refundable.

4.3. Late Payments. Late payments will incur monthly interest charges of 1.5% per month, or the maximum interest rate permitted by law, whichever is less. MSSP will reimburse any costs or expenses (including, but not limited to, collection agency fees, reasonable attorneys' fees, and court costs) incurred by AlienVault to collect any amount that is not paid when due. In the event of default in the payment of any undisputed invoices, installments, or interest for a period in excess of sixty (60) days past their due date, AlienVault may, without notice or demand, declare the entire principal sum payable under all outstanding Sales Orders, immediately due and payable.

4.4. Reinstatement Fees. MSSP may request to renew a Subscription Term or participation in the MSSP Technology Program after the expiration thereof; provided, however, if a lapse in time has occurred between the expiration and renewal thereof, MSSP shall be responsible for payment of all back fees. Nothing in this Section is intended to or should be construed to require AlienVault to permit a renewal of a Subscription Term or MSSP's participation in the MSSP Technology Program after expiration thereof.

4.5. Taxes. All payments under this Agreement shall be made free and clear and without deduction for any and all present and future Taxes. Payments due to AlienVault under this Agreement shall be increased so that amounts received by AlienVault, after provisions for Taxes and all Taxes on such increase, will be equal to the amounts required under this Agreement if no Taxes were due on such payments. MSSP shall indemnify AlienVault for the full amount of Taxes attributable to the provision of Products under this Agreement, and any liabilities (including penalties, interest, and expenses) arising from such Taxes, within thirty (30) days from any written demand by AlienVault party. MSSP shall provide evidence that all applicable Taxes have been paid to the appropriate taxing authority by delivering to AlienVault receipts or notarized copies thereof within thirty (30) days after the due date for such tax payments. Without prejudice to the survival of any other Agreement of MSSP hereunder, the obligations of MSSP contained in this section shall survive the payment in full of all payments hereunder.

5. SUPPORT AND MAINTENANCE

AlienVault will provide Support and Maintenance Services in accordance with (a) AlienVault's standard terms and conditions located at <https://www.alienvault.com/docs/terms/SLA-MSSP-current> for USM Anywhere and (b) AlienVault's standard terms and conditions of the Support and Maintenance Services Addendum located at <https://www.alienvault.com/docs/terms/EULAcurrent.pdf> for USM Appliance. AlienVault may amend the terms and conditions for Support and Maintenance Services by posting notices on AlienVault's web site or, for material changes, by emailing customers of such changes.

6. INFORMATION, REPORTING AND AUDITS

6.1. Information. MSSP will keep and maintain commercially reasonable written records and accounts regarding MSSP's use of Products for at least two (2) years after expiration of the applicable Subscription Term. Upon AlienVault's request, MSSP shall provide a written report to AlienVault indicating the number of Managed Services incorporating the Products distributed during such term.

6.2. Audits. AlienVault, or a certified public accountant designated by AlienVault, shall have the right, upon ten (10) days written notice to MSSP, to conduct an inspection and audit of all relevant facilities and records of MSSP relating to this Agreement including but not limited to the usage of the Products, the accounting of devices, and current End User assigned to each. Such audit shall be conducted during regular business hours and in such manner so as not to unreasonably interfere with MSSP's normal business activities. In no event shall audits be conducted more frequently than once every six (6) months. The audit shall be conducted at AlienVault's expense; provided, however, if the audit reveals MSSP has failed to comply with any material term of this Agreement, MSSP shall pay all reasonable costs and expenses incurred by AlienVault in conducting the audit, and any applicable unpaid fees.

7. WARRANTY AND WARRANTY DISCLAIMERS

7.1. AlienVault Warranty. AlienVault warrants, for a period of ninety (90) days from the original delivery date, that the Software will be free from defects in materials and workmanship and substantially conform to the specifications set forth in the Documentation. Actual performance may be affected by network connections, software and Hardware configuration and Hardware specifications. This limited warranty does not apply to third-party open source software. AlienVault's entire liability and MSSP's exclusive remedy in case of a breach of the foregoing warranty shall be correction of the error or, at AlienVault's option, replacement of the Software. This limited warranty is void if the defect has resulted from accident, abuse, negligence, misapplication, or where the Software has not been properly installed or used in accordance with the Documentation.

7.2. MSSP Warranty. MSSP warrants that it will not (i) falsely disparage or make any false or misleading statements or descriptions about the Products or AlienVault or (ii) hold itself out as the creator or developer of the Products.

7.3. Disclaimer.

- (A) The Products were not designed, manufactured, or intended for use in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems, direct life-support machines, or any other application in which the failure of the Product could lead directly to death, personal injury, or severe physical or property or environmental

damage (collectively, "High Risk Activities"). AlienVault and its suppliers expressly disclaim any express or implied warranty with respect to any High Risk Activities.

- (B) AlienVault may provide links to other websites or resources as part of Documentation or while providing Support and Maintenance Services. AlienVault does not warrant and is not responsible for any data, software, or other content available from such websites or resources. MSSP acknowledges and agrees that AlienVault will not be liable, directly or indirectly, for any damage or loss relating to the use of or reliance on such data, software, or other content.
- (C) EXCEPT AS SPECIFICALLY SET FORTH IN THE AGREEMENT, THE PRODUCTS, ACCESS THERETO, THE DOCUMENTATION, AND ANY SERVICES PROVIDED HEREUNDER ARE PROVIDED ON AN "AS IS" BASIS, AND ALIENVAULT AND ITS AFFILIATES AND AGENTS (A) DO NOT MAKE, AND HEREBY EXPRESSLY DISCLAIM, ANY AND ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, NONINFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, TITLE, QUALITY, ACCURACY, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING, USAGE, OR TRADE PRACTICE; (B) DO NOT WARRANT THAT ACCESS TO ANY PRODUCT WILL BE UNINTERRUPTED, ERROR-FREE, OR SECURE, OR THAT ANY INFORMATION, SOFTWARE, OR OTHER MATERIAL ACCESSIBLE OR PROVIDED THROUGH ANY PRODUCT IS ACCURATE, COMPLETE, OR FREE OF VIRUSES OR OTHER HARMFUL CONTENTS OR COMPONENTS; OR (C) SHALL IN NO EVENT BE LIABLE TO MSSP OR ANYONE ELSE FOR ANY INACCURACY, ERROR, OR OMISSION IN, OR LOSS, INJURY OR DAMAGE (INCLUDING LOSS OF DATA) CAUSED IN WHOLE OR IN PART BY, OR FAILURES, DELAYS, OR INTERRUPTIONS OF ANY PRODUCT, OR DOCUMENTATION. ALIENVAULT EXERCISES NO CONTROL OVER AND EXPRESSLY DISCLAIMS ANY LIABILITY ARISING OUT OF OR BASED UPON THE RESULTS OF MSSP'S USE OF ANY PRODUCT OR DOCUMENTATION. SOME JURISDICTIONS MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF CERTAIN WARRANTIES. IN SUCH JURISDICTIONS, ALIENVAULT'S LIABILITY SHALL BE LIMITED TO THE MAXIMUM EXTENT PERMITTED BY LAW.

8. LIMITATION OF LIABILITY

IN NO EVENT, WHETHER IN TORT, CONTRACT, OR OTHERWISE, SHALL EITHER PARTY OR ITS LICENSORS, PARTNERS, OR SUPPLIERS BE LIABLE TO THE OTHER PARTY OR ANY END USERS OR THIRD PARTIES UNDER THIS AGREEMENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES, COSTS, LOSSES OR EXPENSE (INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOSS OR INTERRUPTION OF USE, LOSS OF DATA, DAMAGE TO NETWORKS, EQUIPMENT, OR HARDWARE, OR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR TECHNOLOGY). ADDITIONALLY, ALIENVAULT AND ITS LICENSORS, PARTNERS, OR SUPPLIERS SHALL NOT BE LIABLE TO MSSP OR ANY END USERS OR THIRD PARTIES UNDER THIS AGREEMENT FOR ANY AMOUNTS IN EXCESS OF THE AMOUNTS PAID BY MSSP TO ALIENVAULT DURING THE TWELVE (12) MONTH PERIOD PROCEEDING ANY SUCH CLAIM(S). THE FOREGOING LIMITATIONS SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW AND DO NOT APPLY TO BODILY INJURY TO A PERSON.

9. CONFIDENTIALITY

9.1. Confidential Information. "Confidential Information" means the terms of this Agreement and all confidential information disclosed by or otherwise obtained from a party ("Disclosing Party") to or by the other party ("Receiving Party"), whether orally, visually, or in writing, that is designated as confidential or that reasonably should be understood to be confidential given the nature of the information and the circumstances of disclosure. The parties agree that, without limiting the foregoing, AlienVault's Confidential Information includes, the Products, the Documentation, and AlienVault's financial, security, architectural, or similar information. Confidential Information of each party shall include business and marketing plans, technology and technical information, product plans and designs, and business processes disclosed by or on behalf of such party. Confidential Information does not include any information that (i) is or becomes generally known to the public without breach of any obligation owed to the Disclosing Party, (ii) was known to the Receiving Party prior to its disclosure by the Disclosing Party without breach of any obligation owed to the Disclosing Party, (iii) is received from a third party without breach of any obligation owed to the Disclosing Party, or (iv) was independently developed by the Receiving Party.

9.2. Obligations. Except as otherwise permitted in writing by the Disclosing Party, the Receiving Party shall (i) use the same degree of care that it uses to protect the confidentiality of its own confidential information of like kind (but in no event less than reasonable care); (ii) not disclose or use any Confidential Information of the Disclosing Party for any purpose outside the scope of this Agreement or evaluating proposals for new services; and (iii) limit access to Confidential Information of the Disclosing Party to its and its Affiliate's employees, contractors, and agents having a need-to-know for purposes consistent with this Agreement (but only if such agents and contractors are not direct competitors of the other party and agree to confidentiality requirements no less stringent than those herein) or to the extent authorized to be revealed by law, governmental authority, or legal process (but only if such disclosure is limited to that which is so authorized and prompt notice is provided to the Disclosing Party to the extent practicable and not prohibited by law, governmental authority or legal process). The confidentiality and non-disclosure obligations set forth in

this Section shall remain in effect for a period of three (3) years from the date of disclosure, notwithstanding earlier termination or expiration of this Agreement, except with respect to trade secret information, which shall remain in effect indefinitely.

9.3. Permitted Disclosures. Upon MSSP's written request and subject to AlienVault's written approval, which may be withheld in AlienVault's discretion, MSSP may disclose Confidential Information of AlienVault (other than the terms of this Agreement and any pricing information) to MSSP's End User or prospective End User on a need-to-know basis if each of the following conditions are met:

- (i) MSSP executes a non-disclosure agreement with such party with safeguards against disclosure that are substantially similar, and no less restrictive, than the terms in Sections 9.1 (Confidential Information) and 9.2 (Obligations) of this Agreement, provided, however, that the End User or prospective End User may not disclose Confidential Information to any third party without AlienVault's written consent;
- (ii) such party must expressly agree that the Confidential Information is provided as a courtesy by MSSP and creates no duty, obligation, or other relationship between such party and AlienVault; and
- (iii) MSSP shall be responsible for any improper disclosure of AlienVault Confidential Information by the party and agrees that in the event of such a disclosure, MSSP will bring an action against such party to enforce the terms of the non-disclosure agreement between MSSP and such party.

9.4. MSSP Information. AlienVault may use any technical information MSSP provides to AlienVault for any of AlienVault's reasonable business purposes, including product support and development. MSSP acknowledges that the Products include a monitoring capability that sends statistics about performance, device utilization, and network size remotely to AlienVault. AlienVault will not publish technical information in a form that personally identifies MSSP.

10. EXPORT CONTROLS AND SANCTIONS

Each party agrees to comply fully with all applicable export and sanctions laws and regulations of the United States, including but not limited to the Export Administration Regulations (15 C.F.R. Parts 730-774) ("EAR"), the Foreign Assets Control Regulations (31 C.F.R. Parts 500-598), and directives, orders and requirements administered by the U.S. Office of Foreign Assets Control ("OFAC"). MSSP shall ascertain the End User, channel party, and any other intermediaries in every potential sale and screen each such party against the Consolidated Screening List at <https://www.export.gov/csl-search> prior to sale. In the event that a match is identified in the Consolidated Screening List, MSSP shall immediately notify AlienVault and shall take no further action with respect to the relevant sale without completing any diligence measures required by AlienVault. MSSP shall also ascertain the end-destination and end-use for each potential sale and ensure that in no event shall any Product(s) be transferred, directly or indirectly, to or for the benefit of: (1) Cuba, Iran, North Korea, Syria, or the Crimea region of Ukraine; (2) parties subject to blocking or export denial, including parties identified on the OFAC Specially Designated Nationals List, or any entity owned 50% or more directly or indirectly by one or more such blocked parties; (3) parties designated by the U.S. State Department as part of the Russia defense or intelligence sectors at <https://www.state.gov/t/isn/caatsa/275116.htm>; (4) construction, modernization or repair of energy export pipelines or privatization of state-owned assets in Russia; (5) exploration or production in deepwater (>500 ft or 150m), Arctic offshore or shale formations that have the potential to produce oil or gas; or (6) activities involving nuclear proliferation, chemical, biological, or nuclear weapons or missiles capable of delivering such weapons.

11. TERM AND TERMINATION

11.1. Initial Term. The term of this Agreement shall commence upon the Effective Date and remain in effect for the period of the MSSP Technology Program purchased through a Sales Order incorporating this Agreement ("Term").

11.2. Extension Period. Notwithstanding the foregoing, if the Subscription Term of a Product extends beyond the Term of this Agreement, this Agreement shall automatically be extended to be coterminous with such Subscription Term.

11.3. Termination for Material Breach. Either party may terminate this Agreement or a Sales Order for material breach upon thirty (30) days prior written notice to the other party unless such breach is cured. Termination of the Agreement terminates all associated Sales Orders incorporating this Agreement. For avoidance of doubt, MSSP's failure to pay any fee under this Agreement shall constitute a breach of this Agreement.

11.4. Termination for Fraud or Abuse. AlienVault may also terminate or suspend a Subscription Term and/or MSSP's participation in the MSSP Technology Program if MSSP: (i) fails to pay any charges when due; (ii) commits a fraud upon AlienVault; (iii) utilizes a Product to commit a fraud upon another party; (iv) unlawfully uses the Products; (v) abuses or misuses a Product; or (vi) interferes with another customer's use of a Product.

11.5. Immediate Termination. This Agreement may be terminated immediately upon notice by either party if the other party becomes insolvent, ceases operations, is the subject of a bankruptcy petition, enters receivership or any state insolvency proceeding, or makes an assignment for the benefit of its creditors.

11.6 Effects of Termination. Upon expiration or termination of this Agreement, MSSP will (i) cease all use of the Products and terminate any access or use of the Products by End Users, and (ii) return to AlienVault and/or destroy each copy of the Software and all Documentation and related Products as well as AlienVault's Confidential Information in MSSP's possession or control, and so certify in writing to AlienVault.

If AlienVault terminates a Sales Order or the MA as a result of MSSP's failure to comply with any of its obligations under this Agreement, or MSSP terminates a Sales Order or the MA other than as permitted under Section 11.3 (Termination for Material Breach), MSSP shall pay 100% of any unpaid recurring charges for the unexpired portion of the applicable Sales Order (or in the case of a termination of the MA, all Sales Orders) as a termination charge. Termination of the MA or any Sales Order shall be in addition to and not in lieu of any equitable remedies available to AlienVault.

12. INDEMNIFICATION

12.1. Indemnification by AlienVault. AlienVault shall indemnify and hold harmless MSSP and its officers, employees, agents, and representatives and defend any action brought against same with respect to any third-party claim, demand, or cause of action, including reasonable attorney's fees, to the extent that it is based upon a claim that a Product infringes or violates any United States patents, copyrights, trade secrets, or other proprietary rights of a third-party. MSSP may, at its own expense, assist in such defense if it so chooses, provided that AlienVault shall control such defense and all negotiations relating to the settlement of any such claim. MSSP shall promptly provide AlienVault with written notice of any claim which MSSP believes falls within the scope of this Section 12 (Indemnification). In the event a Product or any portion thereof is held to constitute an infringement and its use is enjoined, AlienVault may, at its sole option and expense, (i) modify the infringing Product so that it is non-infringing; (ii) procure for MSSP the right to continue to use the infringing Product; or (iii) replace said Product with suitable, non-infringing software.

Notwithstanding the foregoing, AlienVault will have no obligation for any claims to the extent such claims result from (a) modifications or alterations of the Product made by or for MSSP or any other party that were not provided by AlienVault or authorized by AlienVault in writing; (b) use outside the scope of the license granted hereunder; (c) use of a superseded or previous version of the Product if infringement would have been avoided by the use of a newer version which AlienVault made available to MSSP; or (d) use of the Product in combination with any other software, hardware, or products not supplied by AlienVault. This indemnity obligation is subject to the limitation of liability and does not apply to any open source components of the Product.

12.2. Indemnification by MSSP. MSSP shall indemnify and hold AlienVault harmless from and against all claims, judgments, awards, costs, expenses, damages, and liabilities (including reasonable attorneys' fees) of any kind and nature that may be asserted, granted, or imposed against AlienVault, arising from or in connection with: (i) any claims that any hardware, service, application or other software supplied by MSSP (other than Products provided by AlienVault) infringe any third party intellectual property rights; (ii) any misrepresentation made by MSSP regarding AlienVault or the Products; (iii) any breach by MSSP of this Agreement, including any breach of warranty provided by MSSP herein; or (iv) any warranty, representation, or guarantee made by MSSP with respect to the Products in addition to the limited warranty provided by AlienVault in Section 7 (Warranty and Warranty Disclaimers) of this Agreement.

13. INTELLECTUAL PROPERTY RIGHTS

13.1. Ownership. Title to the Products, Documentation, and all patents, copyrights, trade secrets, and other worldwide proprietary and intellectual property rights in or related thereto are and will remain the exclusive property of AlienVault and its licensors. MSSP may not remove any titles, trademarks or trade names, copyright notices, legends, or other proprietary markings in or on the Products or Documentation and will not acquire any rights in the Products or Documentation, except the limited license specified in this Agreement. AlienVault and its licensors own all rights in any copy, translation, modification, adaptation, or derivative works of the Products, including any improvement or development thereof. AlienVault retains all rights not expressly granted to MSSP in this Agreement. MSSP shall promptly notify AlienVault in writing upon discovery of any unauthorized use of a Product or Documentation or infringement of AlienVault's proprietary rights in a Product or Documentation.

13.2. Open Source Components. AlienVault OSSIM is provided to MSSP under an open source software license, currently the GNU GPL Version 3.0 (<http://www.gnu.org/licenses/gpl.html>). This software includes certain third-party software as set out in the Documentation, which may be updated from time to time in line with new versions AlienVault OSSIM (as indicated at <https://www.alienvault.com/products/ossim>) and which may be used only in accordance with the licenses set forth therein. AlienVault OSSIM and AV-USM, include certain third-party software as set forth in the Documentation, and may be used only in accordance with the licenses set forth therein, which prevail over the terms of this Agreement with respect to such third-party software. With respect to the AV-USM, third-party components are integrated by AlienVault for and on behalf of MSSP in accordance with this Agreement. Therefore, any third-party software delivered to MSSP pursuant to this Agreement, including any third-party's plug-in that may be provided with the AV-USM is included for use at MSSP's option, solely in accordance with the corresponding third-party software license(s). AlienVault shall have no liability for MSSP or End User's use of any third-party software.

14. TRADEMARKS

Subject to the provisions of this Section 14 (Trademarks), during the term of this Agreement, MSSP will have the right to advertise the Products with AlienVault's trademarks, trade names, service marks, and logos of AlienVault ("AlienVault Trademarks"), solely in connection with the solicitation of orders for Managed Services incorporating the Products, subject to AlienVault's prior inspection and written approval. All representations of AlienVault Trademarks that MSSP intends to use will first be submitted to AlienVault for approval (which will not be unreasonably withheld) of design, color, and other details, or will be exact copies of those used by AlienVault. MSSP will fully comply with all guidelines, if any, communicated by AlienVault concerning the use of AlienVault Trademarks. Except as set forth in this Section 14 (Trademarks), nothing contained in this Agreement will grant or will be deemed to grant to MSSP any right, title, or interest in or to AlienVault Trademarks. MSSP grants AlienVault the limited right to use its logo for promotional purposes on its website during the term of this Agreement.

15. GENERAL

15.1. Assignment. Neither party may assign this Agreement or any right or obligation hereunder without the other party's prior written consent. Notwithstanding the preceding sentence, AlienVault may: (i) assign in whole or relevant part its rights and obligations under this Agreement to an Affiliate, or (ii) subcontract its duties to be performed under this Agreement, but AlienVault will in each such case remain responsible for the performance of such obligations. This Agreement will be binding upon and inure to the benefit of the permitted successors and assigns of each party.

15.2. Foreign Corrupt Practices Act and Anticorruption Laws. Each party agrees in connection with this Agreement to comply with the U.S. Foreign Corrupt Practices Act (the "FCPA"), and all other applicable anticorruption laws (i.e., U.K. Bribery Act of 2010 and local anticorruption laws). Each party further agrees that it, and its employees, officers, directors, principals, agents, brokers, and affiliates shall not directly or indirectly make an offer, payment, promise to pay, or authorize payment or an offer to pay, or offer a gift, promise to give, or authorize the giving of a bribe or, anything of value for the purpose of influencing an act or decision of any government official or other person (including a decision not to act) or inducing an official or other person to improperly use his/her influence to affect any such governmental act or business decision in order to assist in obtaining, retaining or directing any business, or securing any improper advantage. Each party shall have the right to audit the other party's compliance with this provision during normal business hours no more than once per annum and upon at least fourteen (14) business days' prior written notice. Each may be required to annually certify compliance with this provision upon written request by the other party. Failure to comply with this provision shall be considered a material breach of the Agreement.

15.3. Notices and Communication. Except as otherwise provided herein, all notices required to be sent hereunder shall be in writing, shall be sent to the addresses listed on the Sales Order, and shall be deemed to have been given upon (i) the date sent by confirmed facsimile or electronic transmission; (ii) on the date it was delivered by courier; or (iii) if by certified mail return receipt requested, on the date received, to the addresses set forth above and to the attention of the signatory of this Agreement or to such other address or individual as the parties may specify from time to time by written notice to the other party.

15.4. Force Majeure. AlienVault will not be held responsible for any failure, delay, or interruption caused by circumstances outside of its control, such as network failure, network connection failure, earthquake, flooding, strikes, embargos, or acts of government. If such event giving rise to force majeure lasts for more than thirty (30) days, then either party may terminate this Agreement without such termination giving rise to any liability or right to any refund.

15.5. Product Discontinuations. AlienVault reserves the right to modify or discontinue Products made available by AlienVault at any time; provided, however, AlienVault shall provide MSSP with written notice, which notice can be provided by e-mail. MSSP will no longer be obligated to make payments under this Agreement for products that have been discontinued.

15.6. Severability. If any provision of this Agreement is held illegal or unenforceable by any court of competent jurisdiction, such provision shall be deemed severed from the remaining provisions of this Agreement and shall not affect or impair the validity or enforceability of the remaining provisions of this Agreement.

15.7. Waiver. No failure of either party to exercise or enforce any of its rights under this Agreement will act as a waiver of those rights.

15.8. Independent Contractor. Each party is an independent contractor. Neither party controls the other, and neither party nor its Affiliates, employees, agents, or contractors are Affiliates, employees, agents, or contractors of the other party under this Agreement.

15.9. Governing Law and Jurisdiction. Unless local law would require otherwise, the construction, interpretation and performance of this Agreement shall be governed by the substantive law of the State of New York, excluding its choice of law rules, and applicable laws and regulations of the United States of America. The United Nations Convention on Contracts for International Sale of Goods shall not apply. The parties consent to the exclusive jurisdiction of the courts located in New York City, USA.

15.10. Compliance with Laws. Each party will comply with all applicable laws and regulations, including privacy laws applicable to its business, and with all applicable orders issued by courts or other governmental bodies of competent jurisdiction.

15.11. Survival. The respective obligations of MSSP and AlienVault that by their nature would continue beyond the termination or expiration of this Agreement, including the obligations set forth in Section 8 (Limitation of Liability), Section 9 (Confidentiality), Section 12 (Indemnification), and Section 13 (Intellectual Property Rights) will survive such termination or expiration.

15.12. Entire Agreement. This Agreement, including all schedules, exhibits, and attachments attached hereto, contains the complete understanding and agreement of the parties and supersedes all prior or contemporaneous agreements or understandings, oral or written, relating to the subject matter herein. Except as expressly stated herein, any waiver, modification, or amendment of any provision of this Agreement will be effective only if in writing and signed by duly authorized representatives of the parties, and in no case can be modified or supplemented by any other written or oral statements, proposals, service descriptions, or purchase order forms. For clarification purposes, neither AlienVault's acceptance of MSSP's purchase order nor AlienVault's commencement of performance under this Agreement shall constitute acceptance of any terms, conditions, or other provisions contained therein, and AlienVault shall have no obligation to honor any additional or conflicting terms unless contained in a written agreement signed by an authorized representative or officer of both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed by their duly authorized officers or representatives as of the Effective Date.

AlienVault, Inc.

The Consultants Consortium, Inc. DBA TCC Software Solutions

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____



OpenText Information Management Services (EDMS Solution).



Developer Cloud OEM Additional Terms

The documents referenced below together with the Quotation and GTC set forth the terms and conditions of the agreement between Developer and OT regarding use of OT Cloud Services.

<u>Description</u>	<u>Page(s)</u>
Developer Cloud OEM Annex	2 - 6
Data Processing Addendum	7 - 13
Schedule	14 - 15



Developer Cloud OEM Annex to the GTC referenced on the attached Quotation (this "Annex").

Defined terms in the GTC have the same meaning herein except as noted below.

The term "Customer" as used in the GTC has been replaced with the term "**Developer**" in this Annex, the Data Processing Addendum ("DPA"), and Schedule.

The term "**Cloud Service**" as used in the GTC has been replaced with "**OT Cloud Service**" for purposes of this OEM Annex in order to more clearly distinguish it from the Developer's proprietary Cloud Service.

ADDITIONAL DEFINITIONS. The following terms have the following meanings:

- 1.1 "**API**" means the set of application programming interface functions made available by OT that allows access to and interaction with an OT Cloud Service. The API delivers sender's information to an OT Cloud Service and sends the OT Cloud Service response back to the sender.
- 1.2 "**API Call**" means one request to an OT Cloud Service and the corresponding response. Each API Call is metered (and decremented against the balance of the API Calls purchased by you) unless it results in an error code or relates to a purely administrative function associated with an OT Cloud Service (such as user management), in which case it is not included within the definition of an 'API Call'.
- 1.3 "**API Documentation**" means any API documentation, specifications or other API materials made available by OT for you to develop Developer Cloud Services that consume the OT Cloud Services.
- 1.4 "**API Key**" means the security key OT makes available for you to access an OT Cloud Service API.
- 1.5 "**Change of Control**" means: (i) the consummation of a reorganization, merger or consolidation, or sale or other disposition of substantially all of the assets of Developer; or (ii) the acquisition by any individual, entity or group of beneficial ownership of more than 50% of either (a) the then-outstanding shares of common stock of Developer, or (b) the combined voting power of the then-outstanding voting securities of Developer entitled to vote generally in the election of directors.
- 1.6 "**Developer Cloud Services**" mean Developer's cloud offering that consume one or more APIs and that are made available to Subscribers as Software as a Service.
- 1.7 "**OCP**" means the Open Text Cloud Platform.
- 1.8 "**Organization**" means the organizational account from which Developer manages OT Cloud Services. Authorized Users will have access to an Organization within a Build and Test region/data center and an Organization within each production region/data center for which Developer has purchased an applicable OT Cloud Service, as indicated by the Developer's address on the Order and specified in a purchase order accepted by OT.
- 1.9 "**Subscriber**" means an ultimate end customer of Developer that has the granted rights by Developer to use and/or access Developer Cloud Services solely for the Subscriber's internal business use.
- 1.10 "**Subscription**" means the rights granted under an agreement that authorizes a Subscriber to access and use the Developer Cloud Services.
- 1.11 "**Territory**" means the territory set forth in the Order.
- 1.12 "**Trademarks**" has the meaning provided thereto in Section 4.3.

2. LICENSE AND SERVICES.

- 2.1 **License Grant.** Subject to and conditioned on your compliance with all terms and conditions set forth in the Agreement, OT hereby grants you a limited, revocable, non-exclusive, non-transferable, non-sublicensable right during the term of the Agreement to: (a) use the API Documentation solely for your internal business purposes in developing Developer Cloud Services that will communicate and interoperate with the OT Cloud Services; and (b) display certain OT Marks in compliance with usage guidelines that we may specify from time to time including those accessed at <https://www.opentext.com/who-we-are/copyright-information/trademark-logo-usage-policy> and <https://www.opentext.com/brandcentral/> solely in connection with the use of OT Cloud Services. You acknowledge that there are no implied licenses or rights granted under the Agreement. We reserve all rights that are not expressly granted. You may not use the API Documentation or any OT Mark or the Service for purpose not expressly granted without our prior written consent.
- 2.2 **Services.** For purposes of Section 5.1 of the GTC, use of the OT Cloud Services for 'internal business purposes'

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includes use of the OT Cloud Services by Developer in providing the Developer Cloud Services to Subscribers in compliance with all the terms and conditions of the Agreement. Such use shall not be considered a resale of OT Cloud Services for purposes of Section 5.2 of the GTC.

2.3 **Additional Restrictions.** Developer shall not change, sublicense, assign, sell, or transfer (electronically or otherwise), the API Documentation. Developer shall ensure that each Subscriber resides in the Territory. The Developer Cloud Services may not compete with the OT Cloud Services.

2.4 **Non-Exclusive.** OT can market and provide the OT Cloud Services and any of OT's other present or future services to developers and customers worldwide either directly or through any form of channel.

3. Build / Test / Commercialize

3.1 **Build & Test.** Subject to compliance with the terms and conditions of the Agreement, during the Term you have the right to access certain OT Cloud Service tenants or APIs to build and test Developer Cloud Services. Upon purchasing a Build and Test subscription, OT will upgrade your existing Trial subscription to a Developer Cloud Service, thus providing your Authorized User with access to the Organization, tenant(s) and APIs. The credentials for your Trial account will be used as the Authorized User for your Developer Cloud Service. It is the Developer's responsibility to notify OT of changes to the contact details for your designated administrator. Depending on the OT Cloud Service, the administrator may provision a number of additional Authorized User accounts. An email address will be the user ID for each Authorized User provisioned. Only one Authorized User may be associated with any single, unique email address. Developer agrees to keep such account provisioning information accurate, complete, and up to date.

(a) Your Developer Cloud Service enables access to an organizational account from which you can manage the Developer Cloud Services during the build and test phase of your application(s). The Developer Cloud Service will be provisioned within a designated Build and Test region/data center with the features and entitlements as indicated in the Schedule(s) attached to this document.

(b) During the Term, when your Developer Cloud Service has exhausted the bundled API Calls and data storage entitlement, you may submit a purchase order to OT to purchase additional API Calls and data storage capacity for the same Build and Test region/data center with the features and entitlements as indicated in the Schedule(s) attached to this document. OT may accept or reject a purchase order. If accepted, the API Calls and/or storage will be added to your OT Developer Organization within the Build and Test region/data center and the updated information will be reflected in the administration interface(s) available to Developer.

3.2 **Commercial Phase.** During the Term, when your application is ready for commercialization, you may submit a purchase order to OT to purchase API Calls and data storage capacity for a designated production region/data center with the features and entitlements as indicated in the Schedule(s) attached to this document. OT may accept or reject a purchase order. On receipt and approval of your first order for a production region/data center, OT will provision a production Organization within the production region/data center, which will provide access to the Organization, tenant(s) and APIs to your designated Authorized User. Purchased API Calls and/or storage will be added to your OT Developer production Organization and the updated information will be reflected in the administration interface(s) available to Developer.

(a) During the Term, you may submit a purchase order to OT to purchase additional API Calls and data storage capacity for your production region/data center. These will be assigned to your production Organization as outlined above.

(b) API Calls purchased by Developer within a given region/data center can be used with respect to any OT Cloud Service. Any inventory (remaining balance) of API Calls as of the termination of the OT Cloud Service expire without payment of any refund to Developer except as otherwise stated in the Agreement. Order details regarding API Calls and storage are summarized in the attached Service Schedule.

3.3 **Invoicing.** OT will invoice Developer for the OT Cloud Service described in the Order. OT will invoice Developer in arrears for applicable overage charges (if any). For Clarity, OT will issue the first invoice to Developer for the OT Cloud Services within thirty (30) days from the effective date of the Order.

3.4 **Renewal.** The initial subscription term begins on the effective date of the Order. After the initial subscription term, the OT Cloud Service will automatically renew annually unless a party terminates the Agreement by notifying the other party in writing no less than thirty (30) days prior to the expiration of the then-current term.

3.5 **Data Center Region.** The primary data zones for ordered OT Cloud Services will be determined by the OT USA and EU data center regions that correspond to Developer's address on the Order. OT may use a third-party cloud infrastructure provider to provide portions of the OT Cloud Services. Obligations related to security are held as shared obligations by OT and such third-party cloud infrastructure vendor, as applicable (for example, OT may provide copies of the third-party cloud infrastructure vendors security reports or certifications to Developer regarding the portion of the OT Cloud Service they provide). Access to such reports or other audit activities requested by Developer, or any data protection authorities having jurisdiction over Developer, may be limited in scope to that allowed by such third-party cloud infrastructure provider and may be subject to additional charges which will be the responsibility of Developer. If Developer intends to utilize a third-party auditor, OT or its third-party cloud infrastructure provider may object in writing to such auditor where such auditor is: (i) not reasonably qualified; or (ii) not independent; or (iii) a competitor of OT or such

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third-party cloud infrastructure provider. Where Developer requires specific functionality, which requires any additional processing service offered by a third party cloud infrastructure provider (such as online language translations services), such additional services may be conditional on Developer's acceptance of the additional terms and restrictions of such third-party cloud infrastructure provider. OT shall make available such additional terms to Developer prior to the implementation of such functionality. A third-party cloud infrastructure provider shall be considered a sub-processor. Such third-party infrastructure provider may utilize sub-contractors provided that such use shall be subject to the limitations set forth in this Agreement.

- 3.6 **Data.** The OT Cloud Services are not intended to be used for (i) activities where the failure of the OT Cloud Services could lead to death, serious personal injury, or severe environmental or property damage, or (ii) materials or activities that are subject to the International Traffic in Arms Regulations (ITAR) maintained by the United States Department of State. Any use of the OT Cloud Services for such activities by Developer will be at Developer's own risk, and Developer will be solely liable for the results of any failure of the OT Cloud Services when used for such activities.

If Developer processes personal information of any individuals, including without limitation, information concerning the health of any individuals, Developer represents and warrants that it has obtained any required consent of such individuals under applicable law. Developer will take appropriate measures to limit its use of such information within the OT Cloud Services to the minimum extent necessary for Developer to carry out its authorized use of such information.

- 3.7 **Service Level Agreement.** OT shall endeavor to operate the OT Cloud Services in such a manner that they are available to Developer for a specific amount of time each month (expressed as a percent); seven days per week, 24 hours per day (the "Target Service Availability" or "TSA"). The TSA for OT Cloud Services is 99.9%. Developer may terminate the Order if OT fails to meet the TSA by ten percent or more (a) during three (3) consecutive months or (b) during at least five (5) months (consecutive or not) over a twelve (12) month period. Such termination will be deemed termination for Cause. In the event that the Developer terminates the Order under this clause, OT will refund the portion of the prepaid annual Test and Development subscription fees (if any) attributable to the remaining days in the Term, and the unused API Calls.

- 3.8 **Backup & Recovery.** The Content associated with OT Cloud Services is backed up by means of regularly scheduled replication between the primary and alternate data center facilities in the assigned data center region.

In the event OT declares a disaster event that impacts delivery of the OT Cloud Services from the primary data center facility OT will restore service from an alternate facility for that data center region. The target recovery time objective ("RTO") following an OT declared disaster is 72 hours and the target recovery point objective ("RPO") is 4 hours.

- 3.9 **Support and Maintenance.** Support for OT Cloud Services is described in the Cloud Support Program Handbook for Multitenant Services published on www.opentext.com/agreements ("Cloud Handbook").

Developer acknowledges that OT will from time to time during the term be required to temporarily reduce or interrupt access to the OT Cloud Services for the purpose of maintaining or Updating the Services, as provided in the Cloud Handbook ("Routine Maintenance"). OT publishes a Routine Maintenance Schedule (available via the Developer Service Portal (My Support) located at <https://support.opentext.com>) detailing the regular cadence of reserved maintenance windows, which are available for use upon advance notice from OT to Developer.

OT and Developer also may mutually agree to conduct maintenance or implement changes on the OT Cloud Services outside of the predefined Routine Maintenance windows (conduct "Scheduled Developer Maintenance"). OT may temporarily limit or suspend the availability of all or part of the OT Cloud Services if it is necessary to conduct emergency maintenance to action an urgent situation that could not have been prevented by OT using IT industry standard practices and preventive measures described in this Agreement for reasons of public safety, interoperability of services, data protection; or to perform work that is immediately necessary for operational, technical or security reasons

4. MARKETING

- 4.1 **Intellectual Property.** All rights, title, and interest in and to OT trademarks related to the OT Cloud Services are retained by OT.
- 4.2 **Private Label.** Developer shall market and distribute Developer Cloud Services under its own name. Developer shall include copyright information where appropriate on OT Cloud Services user interfaces in the Developer Cloud Service.
- 4.3 **Trademarks.** Developer is authorized to use the OT trademarks, trade names or logos applicable to the OT Cloud Services (collectively, the "Trademarks"), but only for the purpose of promoting the Developer Cloud Service and only during the Term of the Agreement.
- 4.4 **Representations.** Developer shall make no representations or warranties concerning OT or the OT Cloud Services.
- 4.5 **Marketing.** Developer agrees to use its reasonable commercial efforts to promote, market and distribute Developer Cloud Services, and in particular, Developer agrees:
- (a) to demonstrate Developer Cloud Services at trade shows and marketing events where demonstration is considered by Developer appropriate;

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- (b) to participate in a press release on its relationship with OT and this Agreement; and
- (c) that OT may publish Developer's name and the Developer Cloud Service name(s) for the purpose of publicizing Developer's relationship with OT.

5. TERMINATION. The following provisions supplement Section 8 of the GTCs

5.1 Termination.

The Agreement shall terminate automatically, without notice:

- (i) upon a Change of Control;
- (ii) upon the institution by or against either party of insolvency, receivership or bankruptcy proceedings or any other proceedings for the settlement of its debts and such proceeding is not dismissed within 60 days of its being filed;
- (iii) upon either party making an assignment for the benefit of creditors;
- (iv) upon either party's dissolution or liquidation; or
- (v) upon either party's attempt to assign the Agreement in contravention hereof.

5.2 Consequences. In the event of any termination or expiration of the Agreement, Developer will immediately discontinue access to and use of any OT Cloud Services, as well as any user interface connecting to any OT Cloud Service and return all API Documentation to OT, and the rights granted to each party under the Agreement shall revert to their respective owners, except that access by Developer to the OT Cloud Service for any Subscription entered into prior to the termination or expiration date shall continue in accordance with their terms for up to 12 months from the date of termination of the Agreement (so long as such terms, at the date entered into, are not otherwise inconsistent with the Agreement, but only so long as Developer complies with all terms and conditions of the Agreement) and provided further that obligations of Developer to pay fees with respect to use of the OT Cloud Service shall continue in accordance the Agreement.

6. PROPRIETARY INFORMATION. The following supplements Section 13 of the GTCs.

6.1 Definition. OT and Developer each acknowledge and agree that certain information which it may receive from the other party shall be proprietary to the disclosing party. Such information includes, without limitation:

- (a) the fact that the disclosing party intends to develop or market any particular cloud service offering;
- (b) the API Documentation;
- (c) any other information the disclosure of which might harm or destroy a competitive advantage of the disclosing party (all of items (a) through (c) shall be collectively referred to as the "Proprietary Information").

6.2 Proprietary Information. Each of the parties agrees that it shall not, directly or indirectly, either during or subsequent to the term of the Agreement:

- (a) disclose any Proprietary Information of the other party, other than to its own employees and consultants, and those of its Affiliates who participate directly in the performance of the receiving party's respective obligations under the Agreement;
- (b) copy or use any Proprietary Information of the other party except for the purpose of fulfilling its respective obligations hereunder; or
- (c) publish any Proprietary Information of the other party without the prior written consent of such party.

The degree of care employed by each of the parties to protect and safeguard the Proprietary Information of the other party shall be no less protective than the degree of care used by such party to protect its own confidential information of like importance. Each party agrees that all employees and consultants, and those of its Affiliates to whom Proprietary Information is disclosed will have signed a confidentiality agreement in the form customarily used by such party prior to receiving such disclosure, and which is at least as protective as the terms of this Article 6.

The obligations of each party with respect to each item of Confidential Information disclosed to it shall terminate three years after the date of disclosure of such item of Confidential Information, except in the case of the API Documentation or an API or any software, for which such obligations shall not terminate until the occurrence of any circumstance listed in Section 13 (i) through (v) of the GTC. After the obligations with respect to an item of Confidential Information end as provided in the previous sentence, use of that item of Confidential Information shall continue to be governed by applicable law, including, without limitation, trade secret, patent and copyright law.

7. REPRESENTATIONS, WARRANTIES AND LIABILITIES.

7.1 OT's Representations. OT represents and warrants for the benefit of Developer that:

- (a) OT possesses full power and authority to enter into the Agreement to fulfill its obligations thereunder, and to grant the access rights concerning the OT Cloud Services, free of any liens or encumbrances, herein granted to Developer; and,
- (b) the performance of OT's obligations hereunder shall not breach any separate agreement by which OT is bound;

7.2 No Warranty Pass Through. Developer shall not pass through to its Subscribers or any third party any warranties made by OT and will expressly indicate to its Subscribers that they must look solely to Developer in connection with any problems, warranty claims or other matters concerning a Developer Cloud Service that consumes an OT Cloud Service.

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7.3 Developer's Representations.

- (a) Developer represents and warrants for the benefit of OT that:
- (i) Developer possesses full power and authority to enter into the Agreement to fulfill its obligations thereunder, free of any liens or encumbrances;
 - (ii) the performance of the Agreement and of Developer's obligations hereunder shall not breach any separate agreement by which Developer is bound; and
 - (iii) so long as the Agreement remains in effect, Developer shall not make or enter into any agreement or arrangement with any third party which is inconsistent with any of the provisions of the Agreement.
- (b) Developer shall comply with all applicable federal, state, provincial, and local laws and regulations in connection with its performance relating to the Agreement. Developer shall not engage in any deceptive or unethical practices that may be detrimental to OT. Developer shall comply with the Foreign Corrupt Practices Act of the U.S., the Bribery Act of the U.K., and any applicable local laws or regulations (collectively, the "Anti-Corruption Laws") including their prohibitions regarding the direct or indirect payment or giving of anything of value to an official of a foreign government, political party or governmental or non-governmental agency for the purpose of influencing an act or decision in their official capacity or inducing the official to use their or their organization's influence to obtain or retain business involving Developer Cloud Services. Developer shall not violate or knowingly let anyone violate the Anti-Corruption Laws with respect to the sale, licensing and use of the Developer Cloud Services or OT Cloud Services or related services. Developer warrants that none of Developer's principals, staff, officers or key employees are government officials, candidates of political parties, or other persons who might assert illegal influence on its behalf. OT shall have the right to: (i) audit Developer's books and records at any time on ten days' notice to verify Developer's compliance with this Section; and (ii) immediately terminate the Agreement for cause if OT has reason to believe that Developer has violated its obligations under this Section. Developer shall indemnify and hold harmless OT against and from any claim, loss, damage or expense (including attorneys' fees and disbursements): (a) arising from any breach by Developer of any representation, warranty, covenant or other obligation of Developer under this Section; (b) resulting from any unlawful act committed by Developer or any agent of Developer thereof, or which OT may sustain by reason of any act, omission or misrepresentation of Developer or any agent thereof relating to this Section 7.3(d). Developer agrees to maintain an effective program to comply with the Anti-Corruption Laws during the Term. Developer agrees to certify or recertify compliance with this Section promptly upon request of OT.

- 7.4 Indemnification.** Developer shall indemnify and hold OT harmless from and against any and all claims, losses, liabilities, costs, expenses or fines (including reasonable attorney's fees and expenses) which result from, arise in connection with, or are related in any way to: (i) Developer's failure to comply with the terms of the Agreement; (ii) Developer Cloud Services; or (iii) any wrongful conduct of Developer or its employees.

Data Processing Addendum

1. Background; Definitions.

1.1 Background.

1.1.1 This Data Processing Addendum (this "DPA", which includes the Appendices and incorporations by reference) forms part of the Agreement between OT and Developer under which OT shall carry out certain Services which include the Processing of Personal Data. Data Protection Legislation (defined below) applies to Developer's use of the Services.

1.1.2 This DPA is in addition to, and does not relieve, remove, or replace either party's obligations under the Data Protection Legislation.

1.1.3 If there is any conflict between the provisions of this DPA and the provisions of the Standard Contractual Clauses (defined below), the provisions of the Standard Contractual Clauses shall prevail to the extent of any such conflict. For the avoidance of doubt, where this DPA further specifies Sub-processor and audit rules in Sections 2.3 and 2.11, such specifications also apply in relation to, and satisfy Developer's and its Subscribers' rights under the respective provisions of the Standard Contractual Clauses.

1.1.4 The terms used in this DPA shall have the meanings set forth in this DPA. Capitalized terms not otherwise defined herein shall have the meaning given to them elsewhere in the Agreement.

1.1.5 The term "Customer" in Appendix 3 through 6 referred to in this DPA means "Developer"

1.2 Definitions.

1.2.1 In this DPA, the following terms shall have the meanings set out below and cognate terms shall be construed accordingly.

A. "Affiliate" means an entity that owns or controls, is owned or controlled by or is or under common control or ownership with a company, where control is defined as the possession, directly or indirectly, of the power to direct or cause the direction of management and the policies of an entity, whether through ownership of voting securities, by contract or otherwise.

B. "Data Protection Legislation" means, (i) the GDPR (and any laws of Member States of the European Economic Area ("EEA") implementing or supplementing the GDPR), (ii) UK Data Protection Law and (iii) data protection or privacy laws of Switzerland, in each case, to extent applicable to the Processing of Personal Data under this DPA and the Agreement.

C. "EEA Standard Contractual Clauses" means the EEA Controller to Processor SCCs and EEA Processor to Processor SCCs.

D. "EEA Controller to Processor SCCs" means the clauses set out at <https://www.opentext.com/assets/documents/en-US/pdf/opentext-eea-controller-to-processor-clauses-module-2-en.pdf> (and also sometimes referred to as "Appendix 4") which are incorporated into this DPA by reference, as may be amended, updated or replaced from time to time.

E. "EEA Processor to Processor SCCs" means the clauses set out at <https://www.opentext.com/assets/documents/en-US/pdf/opentext-eea-processor-to-processor-clauses-module-3-en.pdf> (and also sometimes referred to as "Appendix 5") which are incorporated into this DPA by reference, as may be amended, updated or replaced from time to time.

F. "GDPR" means EU General Data Protection Regulation 2016/679.

G. "Restricted Transfer" means a transfer of Personal Data which, subject to the paragraph below, is:

(1) from an exporter subject to GDPR which is only permitted in accordance with GDPR if a Transfer Mechanism is applicable to that transfer ("EEA Restricted Transfer"); from an exporter subject to UK Data Protection Law which is only permitted in accordance with UK Data Protection Law if a Transfer Mechanism is applicable to that transfer ("UK Restricted Transfer"); and/or

(2) from an exporter subject to Data Protection Legislation applicable in Switzerland which is only permitted under that law if a Transfer Mechanism is applicable to that transfer ("Swiss Restricted Transfer").

Transfers of Personal Data will not be considered a Restricted Transfer where:

(a) the jurisdiction to which the personal data is transferred has been approved by the European Commission under Article 45 of the GDPR or, as applicable, an equivalent provision under UK or Swiss Data Protection Law, as ensuring an adequate level of protection for the processing of Personal Data (an "Adequate Country"); or

(b) the transfer falls within the terms of a derogation as set out in Article 49 of the GDPR, equivalent under Swiss Data Protection Law or the UK GDPR (as applicable).

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H. "Services" means the OT Cloud Services and other activities to be supplied to or carried out by or on behalf of OT pursuant to the Agreement.

I. "Standard Contractual Clauses" means each of the EEA Standard Contractual Clauses and the UK Standard Contractual Clauses.

J. "Sub-processor" means any third party (including any OT Affiliate) appointed by or on behalf of OT as a sub-contractor to Process Personal Data on behalf of Developer or Developer Affiliate in connection with the Agreement.

K. "Technical and Organisational Measures" means the technical and organizational measures set out at <https://www.opentext.com/assets/documents/en-US/pdf/opentext-technical-and-organizational-measures-en.pdf> (and also referred to as Appendix 3) which are incorporated into this DPA by reference, as may be amended, updated or replaced from time to time.

L. "Transfer Mechanism" means the Standard Contractual Clauses or any other appropriate safeguards under article 46 of the GDPR or equivalent under Swiss or UK Data Protection Law applicable to a relevant transfer of Personal Data that has the effect of permitting that transfer.

M. "UK Data Protection Law" means UK GDPR (as defined in the UK Data Protection Act 2018) and the UK Data Protection Act 2018.

N. "UK Controller to Processor SCCs" means the UK International Data Transfer Addendum which is made up of the provisions set out at <https://www.opentext.com/assets/documents/en-US/pdf/opentext-uk-international-data-transfer-addendum-en.pdf> (and also referred to sometimes as Appendix 6) which are incorporated into this DPA by reference, as may be amended, updated or replaced from time to time, incorporating the EEA Controller to Processor SCCs.

O. "UK Processor to Processor SCCs" means the UK International Data Transfer Addendum which is made up of the provisions set out at <https://www.opentext.com/assets/documents/en-US/pdf/opentext-uk-international-data-transfer-addendum-en.pdf> (and also referred to sometimes as Appendix 6) which are incorporated into this DPA by reference, as may be amended, updated or replaced from time to time, incorporating the EEA Processor to Processor SCCs.

P. "UK Standard Contractual Clauses" means the UK Controller to Processor SCCs and UK Processor to Processor SCCs.

1.2.2 The terms "Controller", "Data Subject", "Personal Data", "Personal Data Breach", "Processing", and "Processor"; shall have the same meaning as in the applicable Data Protection Legislation. The terms "Member State", "Supervisory Authority" and "Union" shall have the same meaning as in the GDPR. The terms "data exporter" and "data importer" have the meaning set out in the applicable Standard Contractual Clauses. "including" shall mean including without limitation.

2. Data Processing Obligations.

2.1 Controller and Processor of Personal Data, Appointment of Processor and Purpose of Processing.

2.1.1 OT will comply with all applicable requirements of the Data Protection Legislation to the extent it imposes obligations upon OT as a Data Processor and expects Developer to also comply with Data Protection Legislation.

2.1.2 This DPA applies to the extent Developer is the Controller and OT is the Processor. It also applies to the extent that Developer is a Processor and OT is acting as a (sub) Processor. Where the Developer is a Processor, the Developer confirms that its instructions, including appointment of OT as a Processor or (sub) Processor, have been authorized by the relevant Controller.

2.1.3 Appendix 1 of this DPA sets out the scope, nature and purpose of Processing by OT, the duration of the Processing and the types of Personal Data and categories of Data Subjects.

2.2 OT's obligations with respect to the Developer.

2.2.1 OT will, in relation to any Personal Data it will be Processing under the Agreement and this DPA:

- A. process such Personal Data solely for the purpose of providing the Services;
- B. process such Personal Data in accordance with documented and commercially reasonable instructions from the Developer, subject to and in accordance with the terms of the Agreement;
- C. ensure that the persons authorized by it to process such Personal Data have committed themselves to confidentiality or are under an appropriate statutory obligation of confidentiality and have received appropriate training on their responsibilities; and
- D. limit access of OT personnel to the Personal Data undergoing processing to what is necessary for provision of the Services.

2.2.2 Developer agrees that the Agreement (including this DPA) are its complete documented instructions to OT for

the Processing of Personal Data. Additional instructions, if any, require prior written agreement between the Parties. Where in the opinion of OT an instruction from the Developer infringes Data Protection Legislation, it shall inform the Developer thereof (but such communication shall not constitute legal advice by OT). However, such obligation shall not relieve the Developer from its own responsibility for compliance with Data Protection Legislation.

2.2.3 Where OT is required under applicable law to process Personal Data other than on documented instructions from the Developer, including with regard to transfers of Personal Data to a third country or an international organization, OT shall use its reasonable endeavors to inform the Developer of that legal requirement before Processing, unless such information is prohibited by law on important grounds of public interest.

2.3 Sub-processing.

2.3.1 Developer provides OT a general authorization to engage Sub-processors. Sub-processors may include: (i) OT's global Affiliate companies as exist from time to time (and their vendors); and/or (ii) any of the sub-contractors that OT engages in connection with the provision of certain Processing activities as at the date of this Agreement. The Parties agree that the sub-processors listed at (i) and (ii) is the 'agreed list' for sub-processors in relation to Clause 9(a) of the EEA Standard Contractual Clauses and for the UK Standard Contractual Clauses.

2.3.2 OT shall Inform the Developer at least 14 days before OT appoints a new or replacement Sub-processor to give the Developer opportunity to reasonably object to the changes. OT must receive the notice of objection in writing from the Developer within 14 days of OT informing it of the proposed changes. The Parties agree that the name of the new or replacement Sub-processor together with details of the processing activities it will carry out and the location of such activities is the information the Developer requires to exercise such right. "Inform" shall include by posting the update on a website (and providing Developer with a mechanism to obtain notice of that update), by email or in other written form. The parties confirm that this mechanism is not required where the new or replacement Sub-processor is an OT global Affiliate company.

2.3.3 The Parties agree that the Developer's right to be object shall be as set out in this Section 2.3.3 and Section 2.3.4. Any objection raised by the Developer pursuant to Section 2.3.2 must be where the Sub-processor demonstrably fails to offer the same or a reasonably comparable level of protection as that previously applicable to the relevant Processing of Personal Data.

2.3.4 If Developer has a reasonable and legitimate reason to object to the new Sub-processor pursuant to Section 2.3.3, and OT is not able to provide an alternative Sub-processor, or the Parties are not otherwise able in good faith to achieve an alternative resolution, Developer may terminate the respective part of the Services where the new Sub-processor is to be used by giving written notice to OT no later than 30 days from the date that OT receives the Developer's notice of objection and such termination shall take effect no later than 90 days following OT's receipt of Developer's notice of termination. If Developer does not terminate within this 30-day period, Developer is deemed to have accepted the new Sub-processor. Any termination under this Section 2.3.4 shall be deemed to be without fault by either Party and shall be subject to the terms of the Agreement (including any documents agreed pursuant to it).

2.3.5 OT confirms that it has entered or (as the case may be) will enter into a written agreement with its third-party company Sub-processors incorporating terms which are substantially similar to those set out in this DPA.

2.3.6 As between the Developer and OT, OT shall remain fully liable for all acts or omissions of any Sub-processor appointed by it pursuant to this Section 2.3 (unless the Sub-processor acted in accordance with instructions directly or indirectly received from Developer).

2.4 Data Subjects' Right to Information. It is the Developer's (or the party acting as Controller) responsibility to inform the Data Subject(s) concerned of the purposes and the legal basis for which their Personal Data will be processed at the time the Personal Data is collected.

2.5 Exercise of Data Subjects' Rights.

2.5.1 Taking into account the nature of the Processing, OT shall assist the Developer insofar as this is possible and reasonable for the fulfilment of the Developer's obligation under Data Protection Legislation to respond to requests for exercising the Data Subject's rights of: access, rectification, erasure and objection, restriction of processing, data portability, not to be subject to a decision based solely on automated processing.

2.5.2 Where the Data Subjects submit requests to OT to exercise their rights, OT shall forward these requests by email to a Developer email address on file with OT. If Developer wishes for OT to forward Data Subject requests to a specific email address, it shall notify OT of such address. OT shall not respond to a Data Subject request unless and to the extent instructed by Developer to do so.

2.6 Notification of Personal Data Breach.

2.6.1 OT shall notify the Developer of a Personal Data Breach without undue delay after OT becoming aware of it by email to a Developer email address on file with OT, along with any necessary documentation to enable the Developer, where necessary, to notify this breach to the Data Subject and / or the competent Supervisory Authority.

2.6.2 If available and taking into account the nature of the Processing, the notification in accordance with Section 2.6.2 shall at least:

A. describe the nature of the Personal Data Breach including where possible, the categories and approximate number of Data Subjects concerned, and the categories and approximate number of Personal Data records concerned;

B. communicate the name and contact details of the data protection officer or other contact point where more information can be obtained;

C. describe the likely consequences of the Personal Data Breach; and

D. describe the measures taken or proposed to be taken by OT to address the Personal Data Breach, including, where appropriate, measures to mitigate its possible adverse effects.

2.6.3 Where, and in so far as, it is not possible to provide the information at the same time, the information may be provided in phases without undue further delay.

2.6.4 The Developer (or the party acting as Controller) is responsible to notify the Personal Data Breach to the Supervisory Authority, and to the Data Subjects, when this is required by the applicable Data Protection Legislation.

2.7 Assistance lent by OT to the Developer regarding Compliance with Developer's Obligations under the Data Protection Legislation.

2.7.1 Where requested by the Developer and to the extent required by Data Protection Legislation, OT shall, taking into account the nature of processing and the information available to OT, provide reasonable assistance to the Developer:

A. in carrying out data protection impact assessments; or

B. should the Developer need prior consultation with a Supervisory Authority.

2.8 Security Measures

2.8.1 Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of Processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, the Developer and OT shall both be responsible to implement appropriate technical and organizational measures to ensure a level of security appropriate to the risk.

2.8.2 OT agrees to implement the Technical and Organizational Measures in respect of the Services.

2.8.3 Developer shall procure implementation and maintenance of privacy protections and security measures for the Developer Cloud Service (including the OT Cloud Service) that Developer provides or controls. Developer shall apply the principle of data minimization and limit OT access to Developer systems or Personal Data to only where essential for the performance of the OT Cloud Services (and procure the same from Subscribers). Developer shall not store any Personal Data in a non-production environment unless it has production environment equivalent controls in place (and procure the same from Subscribers).

2.9 Data Return or Destruction. Where OT has stored Personal Data as part of the Services: at the end of the Service(s) upon Developer's written instruction, OT may (i) offer a data return service or (ii) following a reasonable data retention period delete the Personal Data unless applicable law requires further storage of the Personal Data. OT may charge a fee for any data return services.

2.10 The Data Protection Officer. OT has designated a data protection officer in accordance with Data Protection Legislation. They can be contacted by email via DPO@opentext.com.

2.11 Inspections and Audits

2.11.1 The right of audit, including inspections, which the Developer may have under Data Protection Legislation and under the Standard Contractual Clauses, are as set out in this Section 2.11.

2.11.2 Upon written request from Developer OT shall, where available, provide a copy of the latest Service Organization Control (SOC) audit report and/or other third-party audit reports or information to demonstrate the processing activities of OT relating to the Personal Data is in compliance with its obligations under this DPA.

2.11.3 Developer may request evidence of OT's relevant policies and other related documents to verify that OT is complying with its obligations under this DPA.

2.11.4 Developer may conduct an on-site inspection at OT's premise either by itself or by an independent third-party auditor (not to include a competitor of OT) where the information under Sections 2.11.2 and 2.11.3 has failed to verify compliance by OT of its obligations under this DPA or such an inspection is formally required by the Supervisory Authority.

2.11.5 General Procedure: The following Sections 2.11.6, 2.11.7 and 2.11.8 shall apply to each of Sections 2.11.2, 2.11.3 and 2.11.4.

2.11.6 Unless otherwise mandated by a Supervisory Authority, Developer shall: (a) give OT at least 30 days' prior written notice of its intention to conduct an audit, including inspection, under this Section 2.11; and (b) agree with

10

OT the frequency and duration of these, which shall not extend beyond two consecutive business days nor be more than once per contract year.

2.11.7 Any audit, including inspections, must be conducted during local business hours, not unreasonably disrupt OT business operations and not burden the provision of services by OT to its Developers. Developer shall limit these to remote audits or meetings with senior representatives of OT as far as possible and will avoid or minimize the need for an audit (including inspection), without limitation by using current certifications, other audit reports or combining them with others under the Agreement. Additionally, these rights are subject to limitations set out in the Agreement. Any audit, including inspections, shall be subject to OT's relevant policies and procedures.

2.11.8 Conditions of confidentiality and the scope of an audit, including inspection, shall be agreed in advance between OT and Developer. Developer shall provide OT the results of any audit, including inspection. Developer bears all expenses related to inspections and audits.

2.12 Developer Information and related Restrictions.

2.12.1 Instructions by Developer related to the Processing of Personal Data must be provided in writing duly signed by an authorized representative of Developer.

2.12.2 Developer is responsible to have all necessary consents and notices in place and confirms it is entitled to lawfully transfer the Personal Data to OT.

3. International Transfers.

3.1 Personal Data may be processed in the EEA, the United Kingdom and Switzerland (each a "Designated Country") and in countries outside of a Designated Country ("Other Countries") by OT or its Sub-processors. The transfer to Other Countries shall be in accordance with Data Protection Legislation (to the extent it applies).

3.2 The Parties shall have in place a Transfer Mechanism in respect of any Restricted Transfer:

3.2.1 In the event of an EEA Restricted Transfer where Personal Data is transferred from Developer as data exporter acting as a Controller or Processor (as applicable), to OT as data importer acting as a Processor, the Parties shall, as part of this DPA, comply with the EEA Controller to Processor SCCs where the Developer acts as a Controller and the EEA Processor to Processor SCCs where the Developer acts as a Processor.

3.2.2 In the event of a UK Restricted Transfer, where Personal Data is transferred from Developer as data exporter acting as a Controller or Processor (as applicable) to OT as data importer acting as a Processor, the Parties shall, as part of this DPA, comply with the UK Controller to Processor SCCs where the Developer acts as a Controller and the UK Processor to Processor SCCs where the Developer acts as a Processor.

3.2.3 In the event of a Swiss Restricted Transfer, whereby Personal Data is transferred from Developer as data exporter, acting as a Controller or Processor (as applicable), to OpenText as data importer acting as a Processor, the Parties shall, as part of this DPA, comply with the corresponding module of the EEA Standard Contractual Clauses.

3.2.4 The Standard Contractual Clauses will not apply to a Restricted Transfer to the extent that OT has adopted Binding Corporate Rules for Processors or an alternative recognized compliance standard for lawful Restricted Transfers.

3.3 Where pursuant to the Standard Contractual Clauses OT attempts to redirect a request from a public authority, including judicial authorities ("Government Request") to the Developer, and/or determines that a requirement to challenge or appeal a Government Request regarding Developer's Personal Data exists, Developer agrees to participate in and support such challenge as reasonably requested. Where possible, the Developer itself will seek a protective order or other appropriate remedy in response to the Government Request.

4. General Provisions.

4.1 The Parties agree that with respect to the period on and after the date that this DPA comes into effect between the Parties (or if earlier, the mandatory date when the relevant Standard Contractual Clauses must apply), this DPA shall replace and supersede any existing data processing addendum, attachment, exhibit or standard contractual clauses that Developer and OT may have previously entered into in connection with the Services.



APPENDIX 1

DETAILS OF PROCESSING OF DEVELOPER PERSONAL DATA

See Appendix 2 of this DPA for each of following: *Subject matter and duration of the Processing of Personal Data, the nature and purpose of the Processing of Personal Data, the types of Personal Data to be processed, special categories of data (if appropriate) and the categories of Data Subject to whom the Developer Personal Data relates.*



APPENDIX 2 DESCRIPTION OF TRANSFER

Categories of data subjects whose personal data is transferred

Data Subjects may include employees, contractors, business partners or other individuals having Personal Data stored, transmitted to, made available to, accessed or otherwise processed by OT.

Categories of personal data transferred

Developer determines the categories of Personal Data which are processed by OT in connection with the Services in accordance with the terms of the Agreement (and documentation governed by it). Developer submits Personal Data for processing after careful evaluation of compliance with applicable laws. The Personal Data may include the following categories of data: name, phone numbers, e-mail address, time zone, address data, company name, plus any application-specific data.

Sensitive data transferred (if applicable) and applied restrictions or safeguards that fully take into consideration the nature of the data and the risks involved, such as for instance strict purpose limitation, access restrictions (including access only for staff having followed specialised training), keeping a record of access to the data, restrictions for onward transfers or additional security measures.

None.

The choice and type of Personal Data that will be processed using the OT Services remains solely within the discretion and choice of the Developer. In selecting the Personal Data of any categories, the Developer shall ensure that such Personal Data is suitable for processing with and through the Services in compliance with applicable data protection laws. OT disclaims all liabilities in relation to the selection of data for use with the Services.

The frequency of the transfer (e.g., whether the data is transferred on a one-off or continuous basis).

Transfers shall be made on a continuous basis.

Nature of the processing

OT offers its Services, and in doing so, OT requires to process Personal Data.

The Personal Data is subject to the basic processing activities as set out in the Agreement which may include:

- (a) use of Personal Data to provide the Services;
- (b) storage of Personal Data;
- (c) computer processing of Personal Data for data transmission; and
- (d) other processing activities to deliver the Services.

Purpose(s) of the data transfer and further processing

See "nature of processing" above.

The period for which the personal data will be retained, or, if that is not possible, the criteria used to determine that period

The duration of the Processing of the Personal Data is set out in the Agreement (and documentation governed by it) and this DPA.

Subject matter, nature and duration of the processing for transfer to (sub-) processors

As above.

NOTE: Personal Data shall also include that of Subscribers (as defined in the Annex).

For purposes of Appendix 3 (see Section 1.2.1 (K) of the Data Processing Addendum), "Developer systems" refers to those of the Developer. Notwithstanding the foregoing, this shall not release the Developer of its obligations, in the Agreement or otherwise, and Developer shall remain responsible for the decisions, acts and omissions of Subscribers, and shall procure that Subscribers comply with the above Data Processing Addendum provisions.

Service Schedule

OT Cloud Service	OT Cloud Services
Description	The OpenText Developer offering provides Developers with access to certain OT Cloud Services to which they can submit API Calls. Developers' applications can incorporate API Calls to the OT Cloud Services.
Use Case(s)	The OpenText Developer offering provides OEM partners access to a platform for the self-service development and deployment of SaaS applications based on OCP Services and the provisioning of Subscribers on these SaaS applications.
Available SKU's / Product Name	<ol style="list-style-type: none"> 1. OT Developer – Build & Test (SKU: 1000055893). Transactions Per Year 2. OT Developer –Dev API Usage (SKU: 1000055964). Transactions Per Year 3. OT Developer – Dev Storage (SKU: 1000055965). Gigabytes 4. OT Developer –Prod API (SKU: 1000056185). Transactions Per Year 5. OT Developer –Prod Storage (SKU: 1000056186). Gigabytes
Available Data Center Regions*	<p>USA (Lithia Springs, Georgia and Allen, Texas)</p> <p>EU (Amstelveen, Netherlands and Munich, Germany)</p>
Unit of Measure	<p>Access and use of the OT Cloud Service described in this Schedule is measured by the following units of measure.</p> <ol style="list-style-type: none"> 1) For each SKU identified with a Transactions Per Year unit of measure, the following applies: <ol style="list-style-type: none"> a. For each twelve-month period (or portion thereof if the term is less than twelve months) beginning on the effective date of the Order or the anniversary thereof ("Annual Term"), Developer may use the OT Cloud Service to process a number of Transactions no greater than the maximum quantity of Transactions Per Year purchased by Customer. For clarity, the number of Transactions Per Year will be made available to Developer as of the first day of the Annual Term to which the entitlement applies. b. If the number of Transactions during any Annual Term exceeds the maximum number of Transactions Per Year purchased, Customer must purchase the applicable additional Transactions Per Year to cover the total number of Transactions. c. "Transactions" means a single API Call as measured by the OT Cloud Service and reported in the administration user interface as "APIs". 2) For each SKU identified with a Gigabytes unit of measure, "Gigabytes" means the total aggregate amount of storage (in gigabytes) across all the Developer's tenants that are used to store Content in the OT Cloud Service. Storage in Gigabytes will be made available to Developer as of the first day of the Annual Term to which the entitlement applies.
Overage Items	Access and use of the OT Cloud Services is limited to the quantities and units of measure stated in the Order and is subject to the terms stated herein. If such

	limitations are exceeded, Developer must promptly pay the requisite fees for the excess usage.
Client Side Software Components	None
Application specific Terms	<ol style="list-style-type: none"> 1) For the OT Developer – <u>Build & Test</u> (SKU: 1000055683), the Developer obtains a subscription to the OT Developer Cloud and has: (a) access to three (3) tenants for development and test use only; (b) the right to build and test unlimited applications in such tenants; (c) access to use no more than five hundred thousand (500,000) Transactions per Annual Term; and (d) a total of 100 Gigabytes of storage per Annual Term. This SKU does not allow the Developer to use such tenants, any of its applications, APIs or storage in the commercialization of any application or in any production use. For this SKU only, any unused Transactions during an Annual Term may be rolled over to the next Annual Term, whereby the unused number of Transactions are added to the Transactions Per Year for the subsequent Annual Term. 2) OT Developer – <u>Dev API Usage</u> (SKU: 1000055684) is an add-on SKU, where the Developer must also be simultaneously subscribed to OT Developer – <u>Build & Test</u> (SKU: 1000055683). This SKU does not allow the Developer to use APIs in the commercialization of any application or in production use. The quantity specified in the Order equals the number of blocks of 1 million Transactions Per Year. For this SKU only, any unused Transactions during an Annual Term may be rolled over to the next Annual Term, whereby the unused number of Transactions are added to the Transactions Per Year for the subsequent Annual Term. 3) OT Developer – <u>Dev Storage</u> (SKU: 1000055685) is an add-on SKU, where the Developer must also be simultaneously subscribed to OT Developer – <u>Build & Test</u> (SKU: 1000055683). The quantity specified in the Order equals the number of 50 Gigabyte blocks of storage that Developer has available for development and test use only. Purchase of this SKU must be co-terminated with the Developer's then current Annual Term – <u>Build & Test</u> (SKU: 1000055683). 4) OT Developer – <u>Prod API</u> (SKU: 1000056185) is an add-on SKU, where the Developer must also be simultaneously subscribed to OT Developer – <u>Build & Test</u> (SKU: 1000055683). For this SKU, the Developer has: (a) access to an unlimited number of tenants for production use only; (b) the ability to commercialize or use its developed applications in such tenants; (c) access to use no more than 1 million Transactions Per Year. This SKU does not allow the Developer to use the tenants, any of its applications, or the Transactions Per Year included in this SKU for non-production use, including but not limited building, testing and QA purposes. Purchase of this SKU must be co-terminated with the Developer's subscription to OT Developer – <u>Build & Test</u> (SKU: 1000055683). For this SKU only, any unused Transactions during an Annual Term may be rolled over to the next Annual Term, whereby the unused number of Transactions are added to the Transactions Per Year for the subsequent Annual Term. 5) OT Developer – <u>Prod Storage</u> (SKU: 1000056186) is an add-on SKU, where the Developer must also be simultaneously subscribed to OT Developer – <u>Build & Test</u> (SKU: 1000055683) and OT Developer – <u>NA Prod API</u> (SKU: 1000056185). The quantity specified in the Order equals the number of 50 Gigabyte blocks of storage that Developer has available for production use only. Purchase of this SKU must be co-terminated with the Developer's then current Annual Term to OT Developer – <u>Build & Test</u> (SKU: 1000055683).

*OT may add data center locations from time to time and will provision based on the then current list.

Supporting Material

Executive Summary

TCC's History and Background:

TCC is the leading provider of early childhood software and services to state and local government agencies for the benefit of children, families, and providers. TCC has supported states since the inception of the Child Care & Development Block Grant (CCDBG) in 1996 and the passage of the initial Child Care & Development Fund (CCDF) regulations in 1998. TCC launched its first licensing system in 1999 and has since continued to respond to an ever-changing early childhood landscape. This evolution includes enhancing our solutions to support CCDBG reauthorization in 2014 and federal rule promulgation in 2016 and expanding capacity to include publicly funded Pre-K programs, including community and department of education Pre-K programs. Most recently, TCC rapidly modified system functionality to support needs created by the COVID pandemic and the ensuing child care industry crisis. TCC continues to innovate based on legislative changes.

TCC is a minority-owned business enterprise (MBE), with more than 25 years of experience and 180 team members, including subject matter experts with deep expertise in early childhood business, program, and policy. TCC has designed, developed, implemented, operated, and/or maintained early childhood solutions for state and local governments nationwide. Importantly, TCC has a demonstrated track record of being nimble, flexible, and responsive as new legislation and changing technologies emerge.

Integration of a complex early childhood system:

Child care programs are inherently complex – more so than many other health and human service programs – often spanning across multiple systems and partners- as the Agency is currently navigating in North Carolina. This landscape of different partners, with disparate data systems that do not interface with one another results in a myriad of issues that makes the system much less efficient. Reduced efficiencies result in increased workloads for everyone that touches the system- state workers, partner agency staff, providers, caregivers, and families. Data reporting becomes incredibly time consuming and often inaccurate as workers struggle to deal with duplicate, missing, and inconsistent data. Policy makers struggle to have the data needed to make informed decisions and satisfy never-ending reporting requirements. States also struggle with the workload created by numerous paper-driven processes, managed by a variety of manual tools including spreadsheets and kluge processes, that greatly reduce efficiency, accuracy, and further limits data availability, as well as complicates ensuring compliance with state and federal requirements.

TCC's deep early childhood experience includes working with North Carolina at the state and local level for nearly three years. The TCC team has worked in partnership over the last three years with DCDEE to transform the legacy professional registry system into a workable, and useful application. The TCC team provides operations and maintenance (O&M) services, including resolution of issues, deployment of enhancements, reporting, and system documentation. TCC also participated in the CapTech Value Stream Mapping project for DCDEE Works project. Additionally, TCC provides a local PreK solution in Mecklenburg County. TCC's experience

implementing an urgently needed PreK solution in a very short time frame will allow us to leverage our learnings, experiences, and relationships within a local solution to support statewide implementation.

TCC's solutions, Ascend and eXpedite, provide a robust, integrated technology solution:

Child care solutions are inherently complex because the history and structure of child care agencies are often unique to each state. As such, choose a partner with demonstrated child care technology solutions that has been designed and deployed by purpose driven subject matter experts – not an immature out-of-the-box solution that dictates that the state itself must fundamentally change operations or limit policy changes because of software limitations. TCC's Ascend and eXpedite solutions includes all modules needed to manage and support providers, caregivers, families, and children and, importantly, has been deployed successfully across multiple states for many years.

TCC Early Childhood Subject Matter Experts

TCC has partnered with early childhood agencies since the dawn of the CCDBG program and the evolution as a bi-partisan, national issue. TCC valued early childhood as a worthy industry to support long before conglomerates and venture capital backed companies with small, inexperienced technical staff.

TCC is led by early childhood professionals, including former Child Care Administrators, who have over 100 combined years working in state government. TCC's leaders are passionate about solutions that support state agencies and the families and children they serve. In addition, many project managers, testing and development professionals, help desk and user support staff have been with TCC since our inception. They understand the unique and complex set of goals and objectives states are trying to achieve. Additionally, they understand the unique nature of working on government projects.

For instance, our experts have reviewed recent NC legislation intended to increase the supply of child care and reduce the cost to families. These that will have direct impact on the scope of this project, as noted below:

- **Senate Bill 291** requires that the NC Commission on Child Care complete recommendations for revisions to the NC QRIS/Star-Rating Systems by March 31, 2024, and submit QRIS reform recommendations to the Joint Legislative Oversight Committee before the 2024 Legislative Session begins. The reform will likely include a new pathway for programs accredited by a state approved body.

TCC understands the need to tailor the Ascend Licensing Management/QRIS module to not only meet current business and legislative requirements of the Rated License process yet plan for likely changes in this part of the solution at a future date.

- **Senate Bill 722** requires NC DCEE to modify current educator requirements (CDA credentials) needed to qualify for certain Star Rated License levels.



TCC will ensure that the Star Rated License Levels requirements around caregiver qualifications are easily modified in an accountable manner so that NCDEE will always be compliant with legislative mandates.

- **Senate Bill 20 (Part VII)** requires changes to child care market rate structure and payments. While this project scope does not include CCDF subsidy management, any changes in rates for subsidy providers may have a direct impact on the supply of Pre-K programs. TCC will work closely with DCDEE to consider potential influence on the NC Pre-K solution.

TCC is pleased to provide this response to the North Carolina Department of Health and Human Services and hopes to be able to provide a demonstration of the Ascend and eXpedite solutions and answer any questions that may arise.

Solution Overview

For a detailed view of the technical components and architecture of TCC's proposed solution, please see "Section 2. Vendor System Information."

In this section, TCC provides an overview of our solutions, Ascend, and eXpedite, and a sampling of screen shots that highlight key functionality and features.

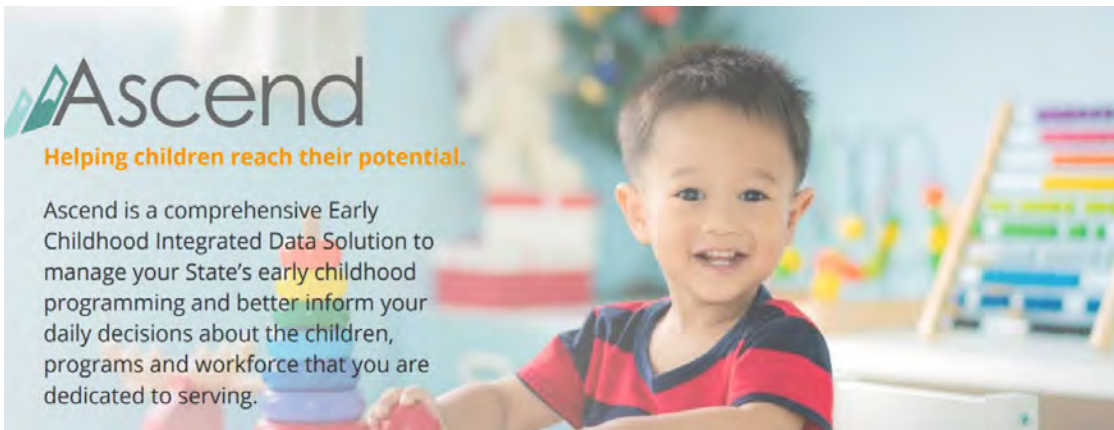
Technical Solution- TCC's Early Childhood Data Product: Ascend

TCC's proposed solution, Ascend, was developed based on experience working with state early childhood education and care agencies. **Ascend** is a comprehensive Early Childhood Integrated Data System to manage early childhood programming and better inform daily decisions about the children, families, programs, and caregivers that the Agency is dedicated to serving.

The requirements for Ascend were driven by TCC's early childhood policy and program experts to meet the complex needs of an early childhood lead agency and with additional program data integration opportunities in mind. The result is a system that meets requirements, functions and features needed by all states, and provides a flexible platform to make customizations needed due to the unique nature of each state.

Ascend Overview





Ascend Collects the Data You Need and Can Be Customized to Support Your Business Processes and Reporting Needs



Ascend is an early childhood data system that allows agencies, providers, families, *and educator workforce* to *conduct all their early childhood business -- in one system.*

Ascend benefits include:

- Reduced cost and risk of developing and maintaining multiple interfaces among siloed systems.
- Ability to identify and address equity gaps.
- Accurate reporting and analytic capacity.
- Unduplicated count of programs and children.
- Reduced administrative burden on families, providers, educator workforce, and State Agency staff.
- Rapid, nimble, grant applications and back-end management.

Provider Supply and Monitoring

Track supply and demographic attributes of all provider types in each agency. Online applications and other requests. Monitor and report individual provider compliance with regulations, including licensing and subsidy requirements.

Provider Continuous Quality Improvement

Manage provider progress in quality improvement activities, including self-assessment, technical assistance, quality assessments, and quality improvement plans.

Provider Grant Opportunities



Customize and launch any provider grant application. Manage application approvals and the grant payment process.

Workforce Qualifications

Track workforce training, education, certifications, employment history and career level. Associate workforce with their early education employers.

Workforce Training Opportunities

Offer one-stop platform for workforce to search and register for training with state-approved trainers and organizations. Completed training certificates automatically associate to workforce profile. Generate and print training profile.

Child Development Outcomes

Associate children to specific classrooms and educators. Collect developmental assessment, screening, and attendance data on children.

Informed Family Access to Quality Care

Families can perform and narrow searches for providers that meet their specific needs. Customizable results returned on a user-friendly map with save and print capabilities.

Ascend Overall Key Features

- | | | |
|--|---|---|
| <ul style="list-style-type: none">• Compatible with modern browsers and internet enabled devices (smart phones)• Workflow management tools• User role-based security• 508 compliant | <ul style="list-style-type: none">• User friendly online application wizards• Individualized dashboard alerts• Language translation tools• Email and hard copy letter management tools | <ul style="list-style-type: none">• User profile and account management• E-document upload and file cabinet storage• Canned and ad hoc reporting• Robust search features |
|--|---|---|

Ascend General Screens

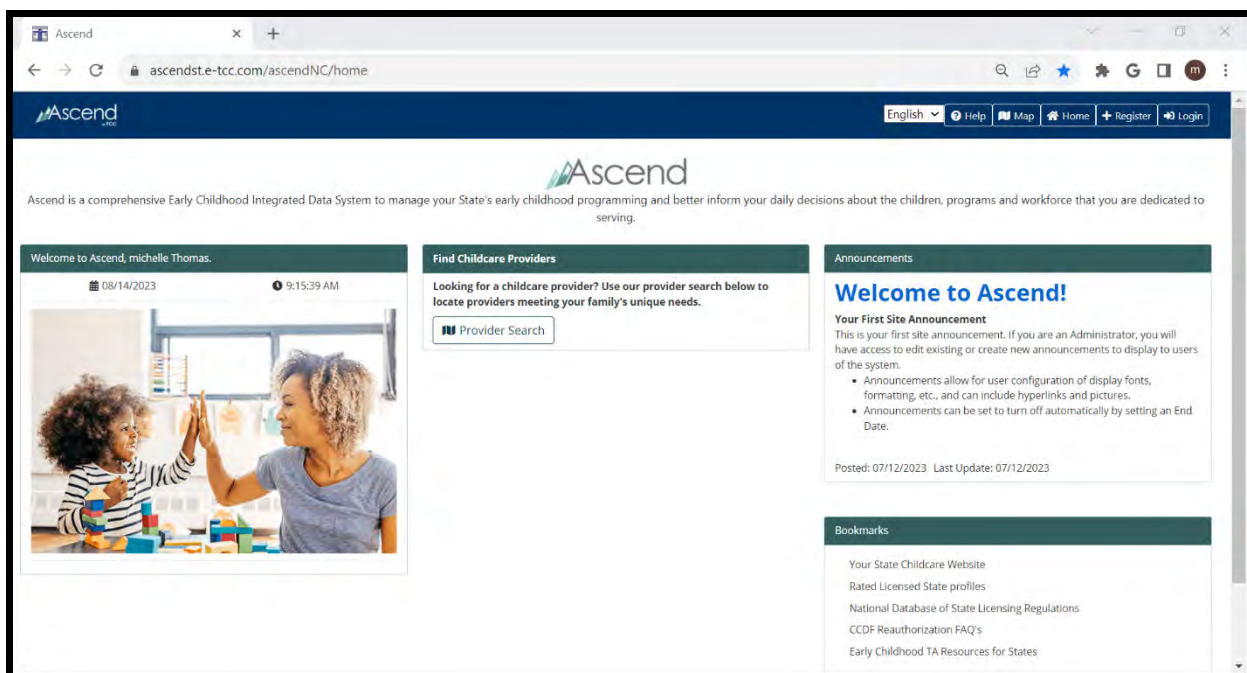


Below are screens that demonstrate how users access the system, register for an account, request user role, create a user profile and use standard features of the system.

Ascend Screen Gen.1 - User Landing Page

All users see the same landing page when they enter the url for Ascend. The landing page may be tailored to include your agency logo and preferred 508 compliant color scheme. Additionally, users may personalize their bookmarked weblinks. All important announcements and information may be made publicly available on the landing page so that everyone, including non-registered users may view the information.

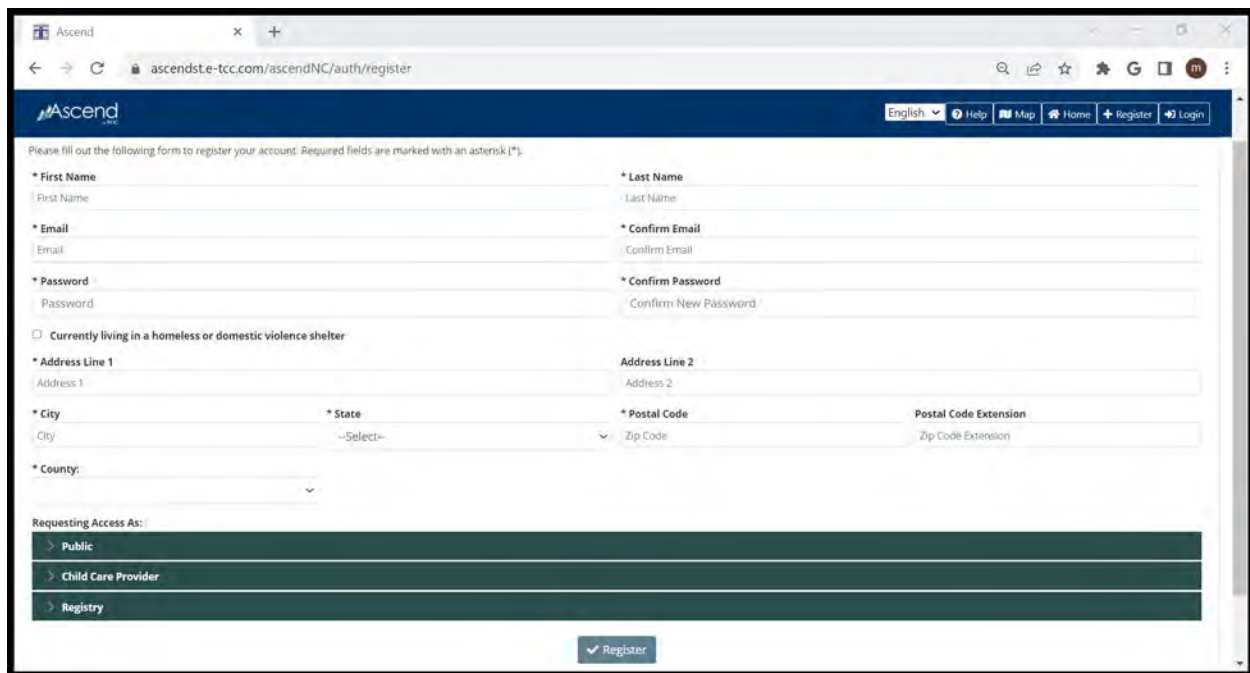
From this screen, first time users may register for an account or log on to their account. A registered account is not required to do a search for child care.



Ascend Screen G.2 User Account Registration

Users may register for an account and request role access. An email must be entered and a password chosen at the time of registration. Upon clicking the "Register" button at the bottom of the screen, a system generated email with an authentication link will be sent to the user. The user clicks the link and is directed to log on to their new account.

Each user will be assigned a Unique ID. The user may also request a specific role(s) at the time of registration. If the requested role requires approval by the State, an alert will be routed to the appropriate staff.



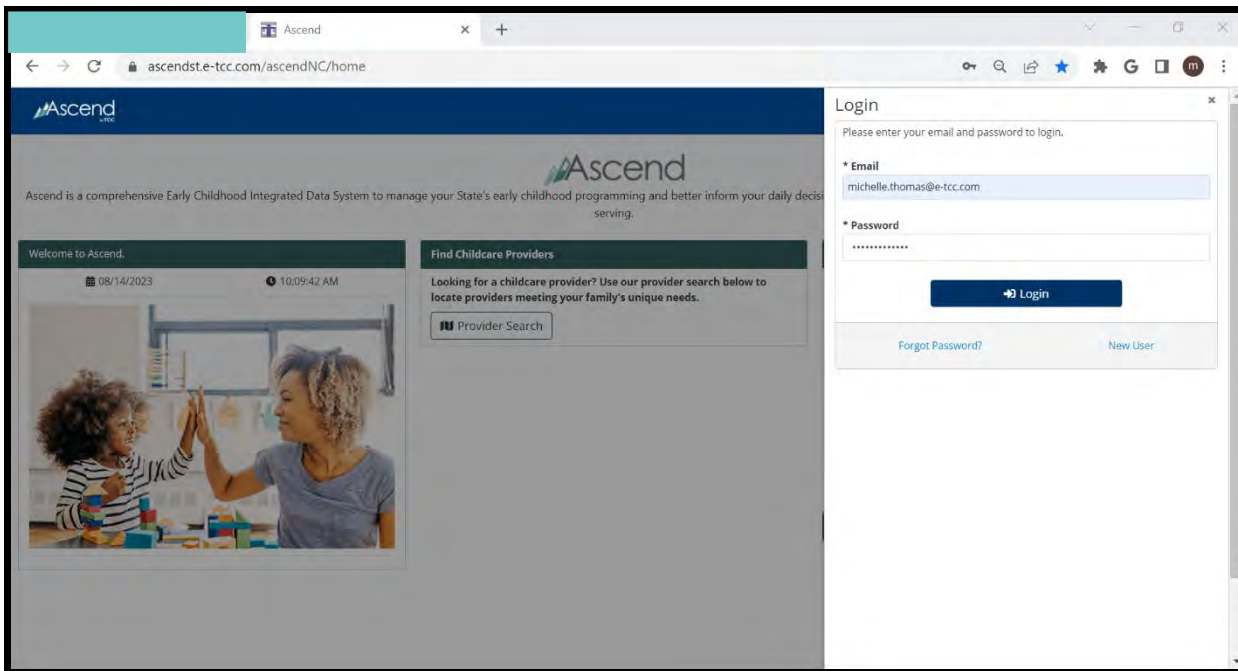
The screenshot shows a web browser window with the URL `ascendste-tcc.com/ascendNC/auth/register`. The page title is "Ascend". The form is titled "Please fill out the following form to register your account. Required fields are marked with an asterisk (*)." and contains the following fields:

- * First Name (text input)
- * Last Name (text input)
- * Email (text input)
- * Confirm Email (text input)
- * Password (text input)
- * Confirm Password (text input)
- ☐ Currently living in a homeless or domestic violence shelter
- * Address Line 1 (text input)
- Address Line 2 (text input)
- * City (text input)
- * State (dropdown menu, currently showing "--Select--")
- * Postal Code (text input)
- Postal Code Extension (text input)
- * County (dropdown menu)

Below the form, there is a section titled "Requesting Access As:" with three radio button options: "Public", "Child Care Provider", and "Registry". At the bottom right of the form is a "Register" button with a checkmark icon.

Ascend Screen G.3 User Log In

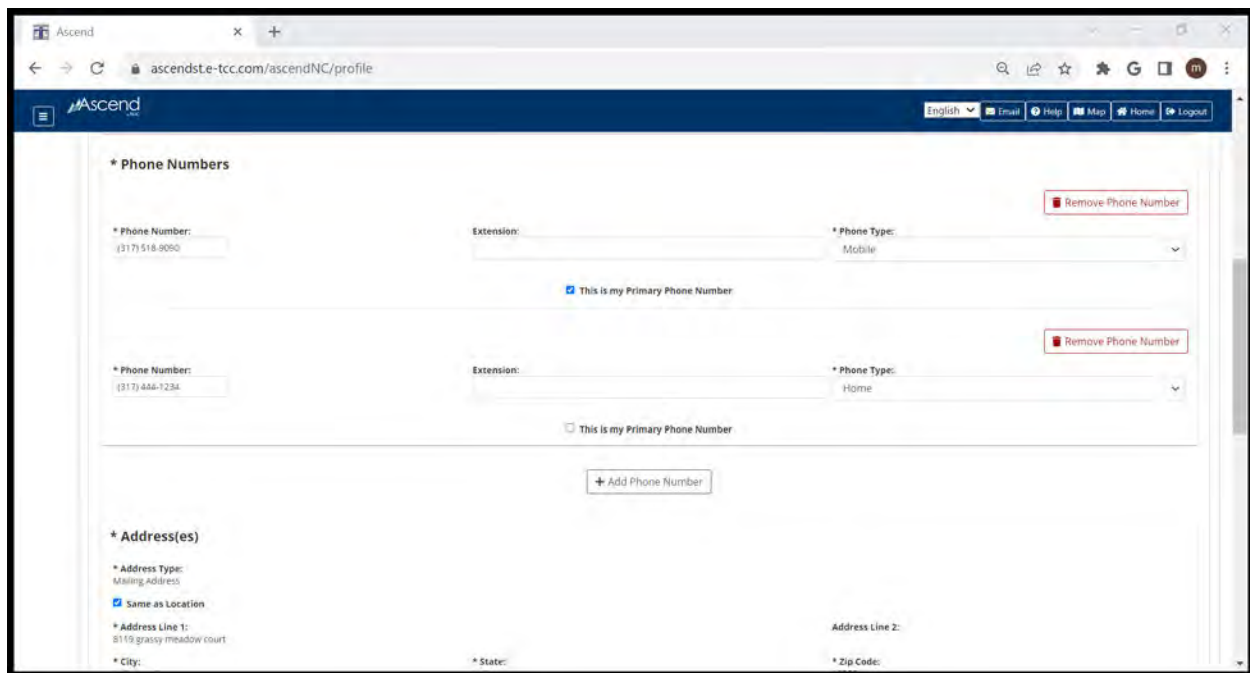
Once authenticated and registered, all users use the same log in page to access the system. Registered users may use the "forgot password" option to self-manage. The "new user" button will redirect non-registered users back to the account registration process.



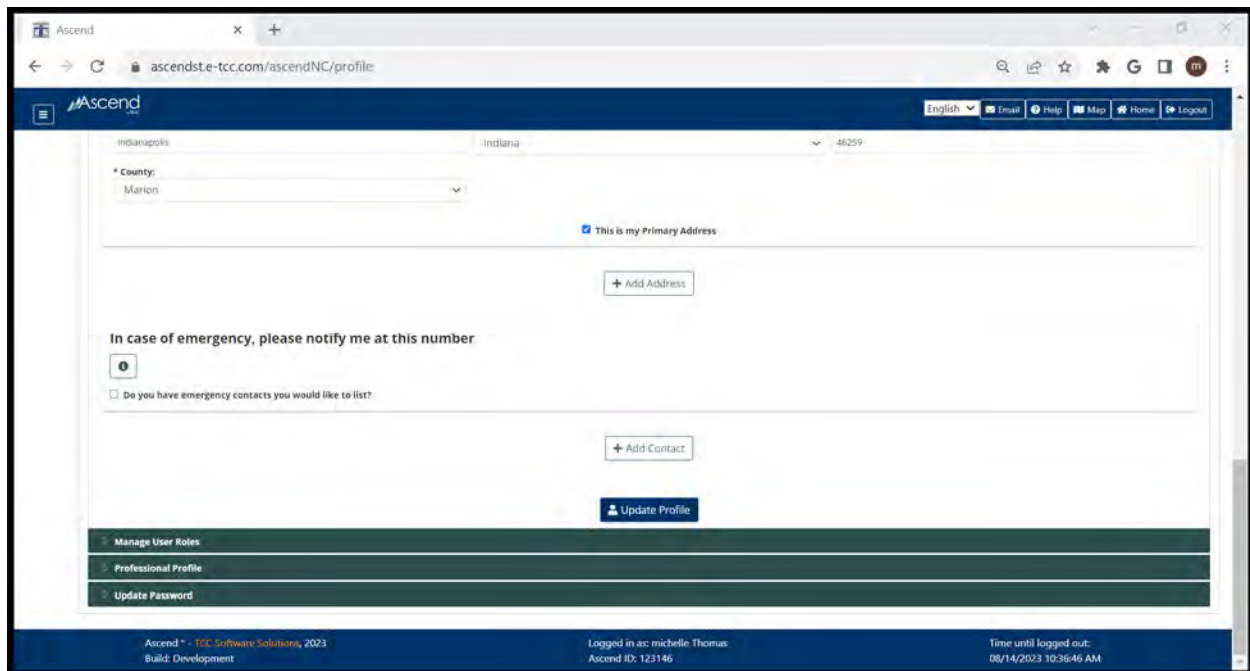
Ascend Screen G.4 User Profile

Upon first time registration and log in, Ascend will prompt the user to complete their User Profile. The User Profile can be tailored to collect a wide variety of information about each user, including preferred language, race, ethnicity, gender and multiple address and phone numbers. The user may return at any time to update their profile and request additional user role access, if needed.

A screenshot of the Ascend User Profile page. The browser's address bar shows 'ascendst-e-tcc.com/ascendNC/profile'. The page has a dark blue header with the Ascend logo and a navigation bar. On the left, there's a sidebar with icons for Profile, Alerts, Agreements, Licensing, EDC, Family, Recent, and Admin. The main content area is titled 'Profile' and contains two sections: 'User Account Profile' and 'User Profile Information'. The 'User Account Profile' section shows 'michelle Thomas (ID: 123146)' with fields for Address, Email, Phone, and Trainer Level. The 'User Profile Information' section has a note: 'Please complete the information in your account profile. Required fields are marked with an asterisk (*)'. It contains several dropdown menus for language, name, suffix, preferred salutation, sex, and ethnicity. There are also checkboxes for 'Are you known by any other legal name or nickname?' and 'Race' with radio button options for American Indian/Alaska Native, White/Caucasian, Asian, Biracial or Multiracial, Black/African American, and Native Hawaiian/Pacific Islander.



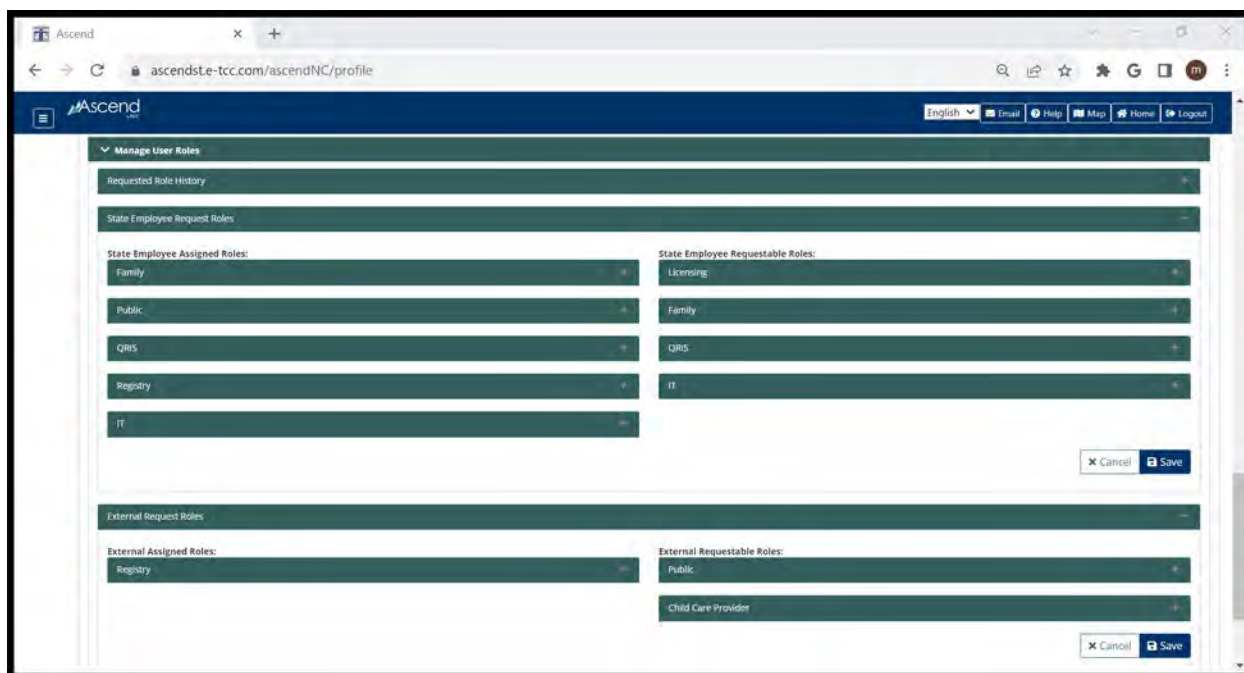
The screenshot shows the 'Ascend' profile page. The top navigation bar includes the Ascend logo, a search icon, and links for English, Email, Help, Map, Home, and Logout. The main content area is divided into two sections: 'Phone Numbers' and 'Address(es)'. The 'Phone Numbers' section contains two rows of input fields for phone number, extension, and phone type (Mobile/Home). Each row has a 'Remove Phone Number' button. The first row is marked as the primary phone number. Below the phone numbers is an 'Add Phone Number' button. The 'Address(es)' section contains input fields for address type (Mailing Address), address line 1, address line 2, city, state, and zip code. There is a checkbox for 'Same as Location' and an 'Add Address' button.



The screenshot shows the 'Ascend' profile page, continuing from the previous one. The 'Address(es)' section is now visible, showing input fields for county (Marion), address line 1, address line 2, city (Indianapolis), state (Indiana), and zip code (46259). There is a checkbox for 'This is my Primary Address' and an 'Add Address' button. Below the address section is a section for emergency contacts, titled 'In case of emergency, please notify me at this number'. It includes a checkbox for 'Do you have emergency contacts you would like to list?' and an 'Add Contact' button. At the bottom of the form is an 'Update Profile' button. The footer of the page displays the Ascend logo, version information (TCC Software Solutions, 2023), build number (Build: Development), login information (Logged in as: michelle Thomas, Ascend ID: 123146), and session expiration (Time until logged out: 08/14/2023 10:36:46 AM).

Ascend Screen G.5 Manage User Roles

Ascend is a role-based system that allows for different access and permissions based on client defined roles. The screen below demonstrates the wide variety of roles that are supported in Ascend. Role access history is saved for each user and may be reviewed by authorized users.

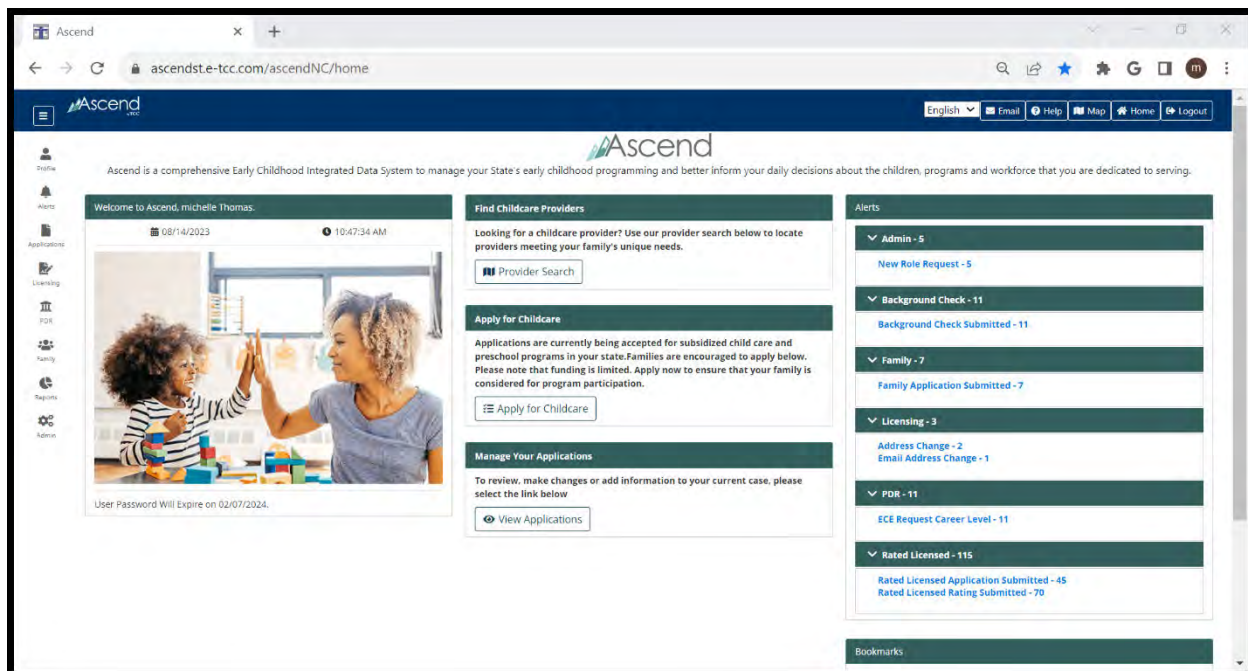


Below are examples of user roles in Ascend that can be tailored to State business rules.

Ascend User Role Examples	
Provider	State Licensing Staff (multiple)
Director	State Registry Staff (multiple)
Caregiver/Educator	State PreK Staff (multiple)
Trainer	Quality Partner Staff
Training Organization	PreK Partner Staff
Family	State Admin
Public	IT Security Officer

Ascend Screen G.6 Registered User Home Page

The Home Page provides user navigation based upon approved role access. Navigation on the left will show options specific to the user role. Alerts on the right side appear according to the user role and job function. Bookmarks may be set by the user. From here, the user may perform all necessary data entry and complete tasks and updates associated with their role.



Ascend General Screen G.7 Document Upload and File Cabinet

Ascend offers users the ability to upload electronic documents during a variety of tasks. For instance, Ascend makes document upload buttons available at relevant points in all of the online application processes and anywhere else documentation is needed to verify information. All documents uploaded are securely stored in the Ascend 'File Cabinet' where they may be searched, retrieved and printed by users with proper authorization rights.

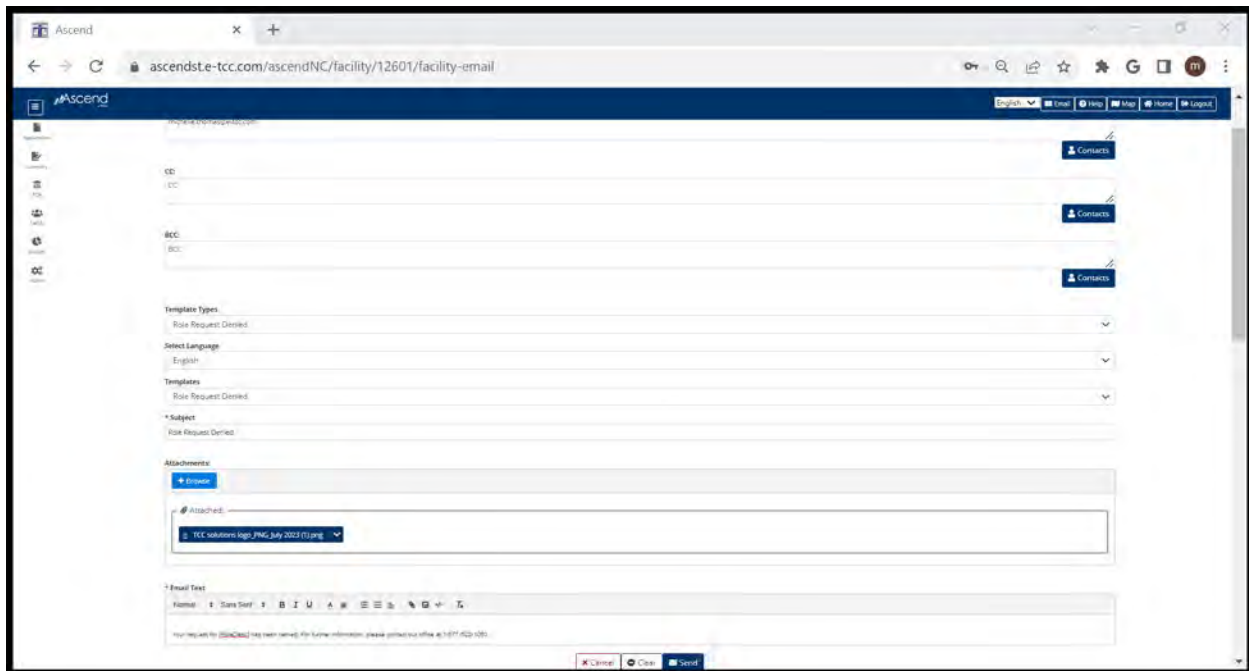


Ascend General Screen G.8 Email Communication

Ascend gives users the tools needed to manage communication with all user types, including families, providers, caregivers/teachers and other state agency partners. Email communication and electronic document attachments may be sent directly through the Ascend system and tracked for historical purposes.

Communication may be sent to individuals, defined groups and as a mass communication to all system users.

Frequently used email templates may be created, updated and managed by the State, so that your messages are consistent and accurate.

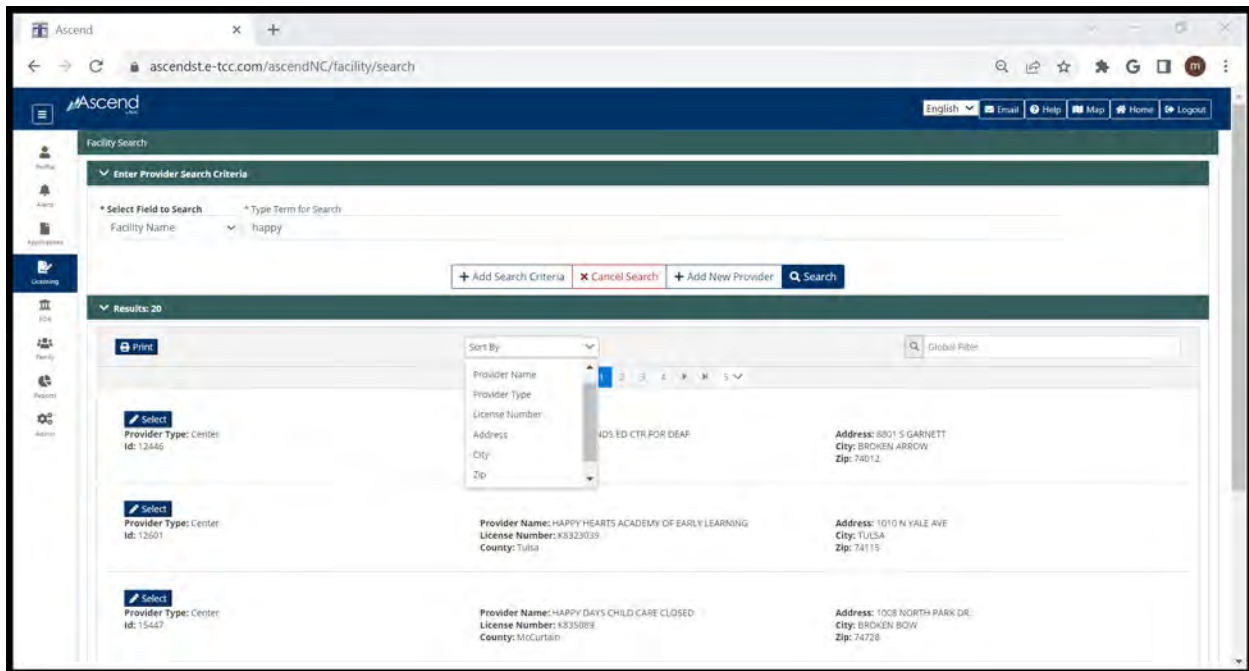


Ascend Licensing Management Screens

From the left navigation menu of the home page, authorized users may access the Ascend Licensing Management Module.

Ascend Screen L.1 Provider Search Screen

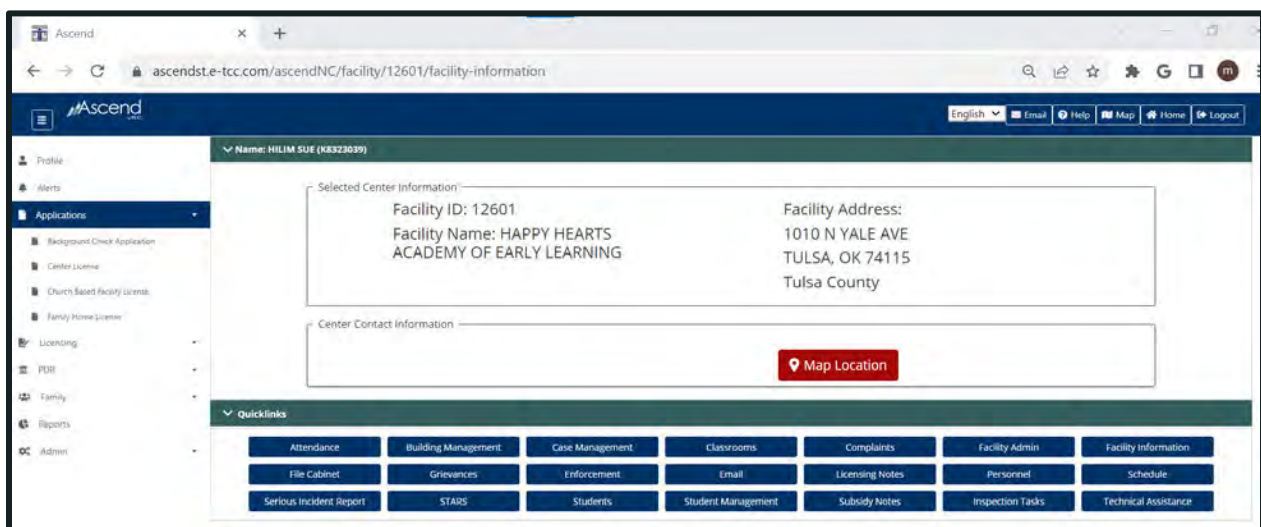
The Provider Search screen can be used by any authorized user to search Ascend for providers. Multiple search criteria may be used to quickly narrow the search results. Search results are listed and can be sorted by a variety of options. Clicking the “select” button takes the user to the provider record.



Ascend Screen L.2 Provider Record, Online Applications and Quicklinks

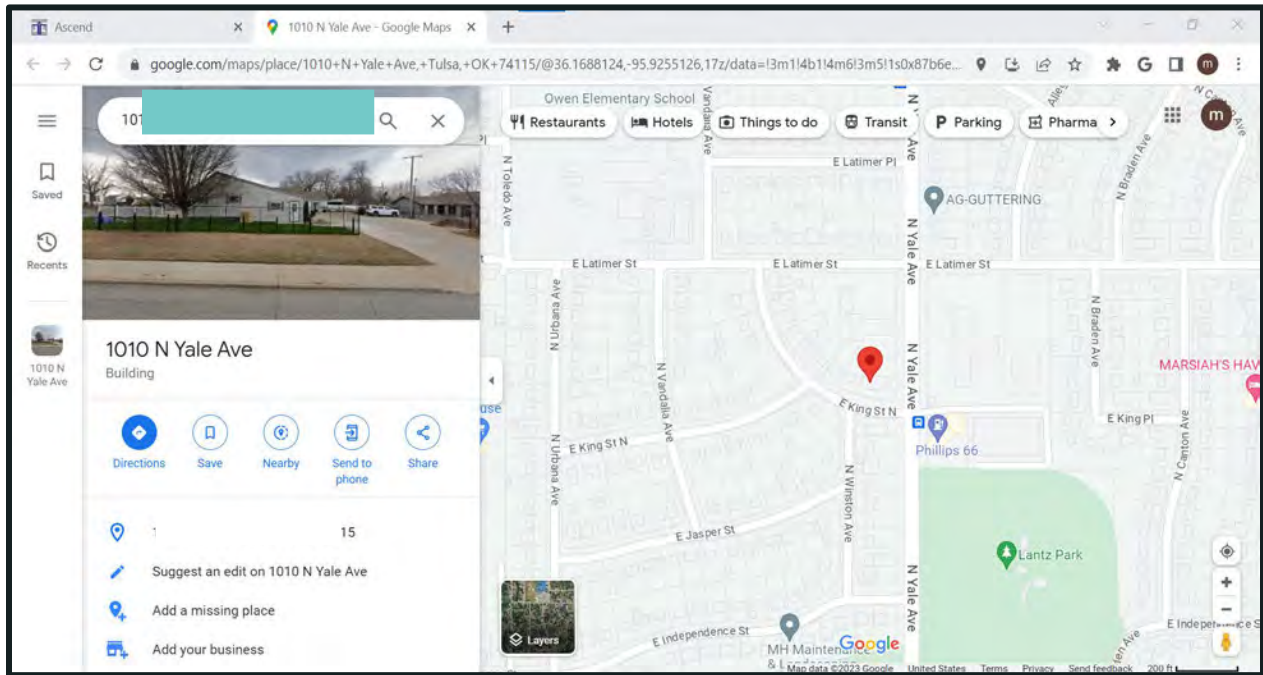
Users with approved role access may access all of the information and functionality needed to manage a provider record. The 'Quicklinks' are the core of this screen, and can be used to navigate all aspects of the provider record.

Online applications are made available on the left navigation menu. Providers may complete online applications associated with the regulatory process, including background check requests, application for new license and renewal applications TCC configures each application to simulate the State application using our application wizard tool. Providers may access online applications as well as perform updates about their program in accordance with Agency policy.



Ascend Licensing Screen L.3 Provider Map

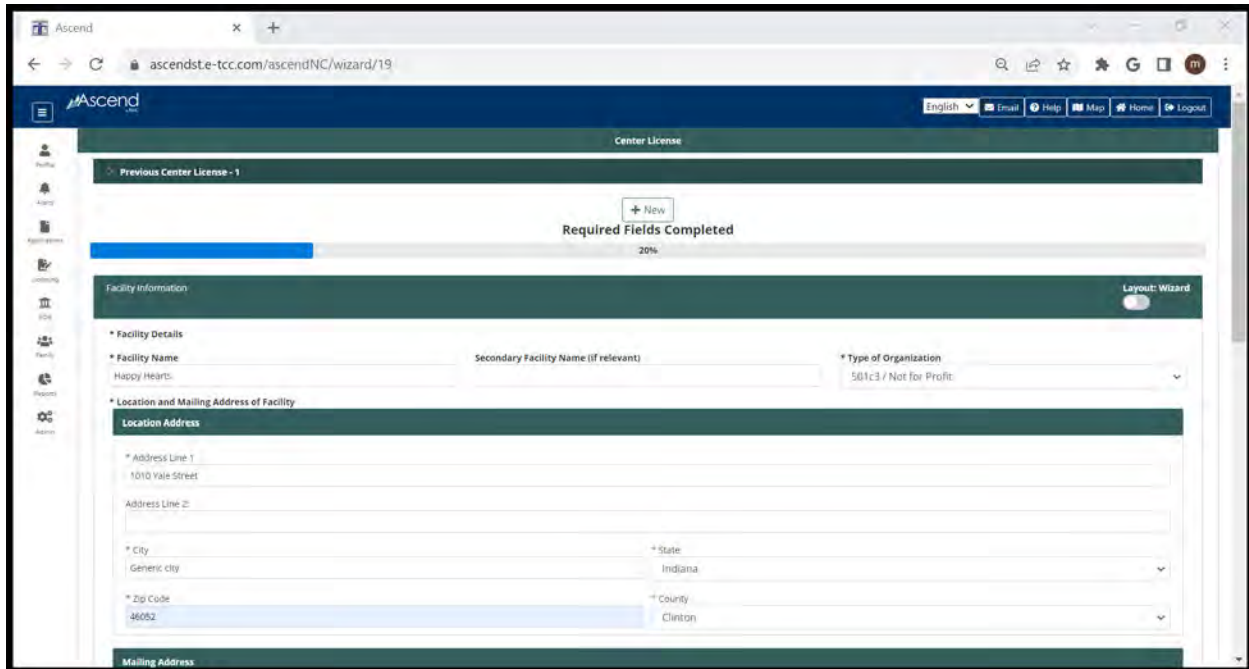
From the provider record screen, users may click on the red ‘map’ button to return a GPS result and option to get directions to the facility.



Ascend Licensing Screen L.4 Online Applications, including Background Checks

As noted in *Ascend Licensing Screen L.2*, providers may submit any State required application. The application will be prepopulated with basic information about the provider. Once an application is submitted, it is routed to a queue for the review and approval process. Additionally, a new application alert will appear on the appropriate worker(s) dashboard.

A progress bar at the top of the page and a ‘required fields remaining’ at the bottom of the application page assists users through the process. Additionally, the user may determine if they want to see the application in a ‘wizard’ or ‘flat file’ view. The ‘wizard’ view steps users through the process with small chunks of data entry at a time. The ‘flat file’ view requires the user to scroll down the complete application and is often preferred by State workers. Users may navigate the application with buttons at the bottom of the page. Additionally, work is saved as it is entered, and users may use the ‘save draft’ button and return to complete the application at a later time.



Ascend

ascendste-tcc.com/ascendNC/wizard/19

English Email Help Map Home Logout

Center License

Previous Center License - 1

+ New

Required Fields Completed 20%

Facility Information

Layout: Wizard

* Facility Details

* Facility Name Happy Hearts Secondary Facility Name (if relevant) * Type of Organization 501c3 / Not for Profit

* Location and Mailing Address of Facility

Location Address

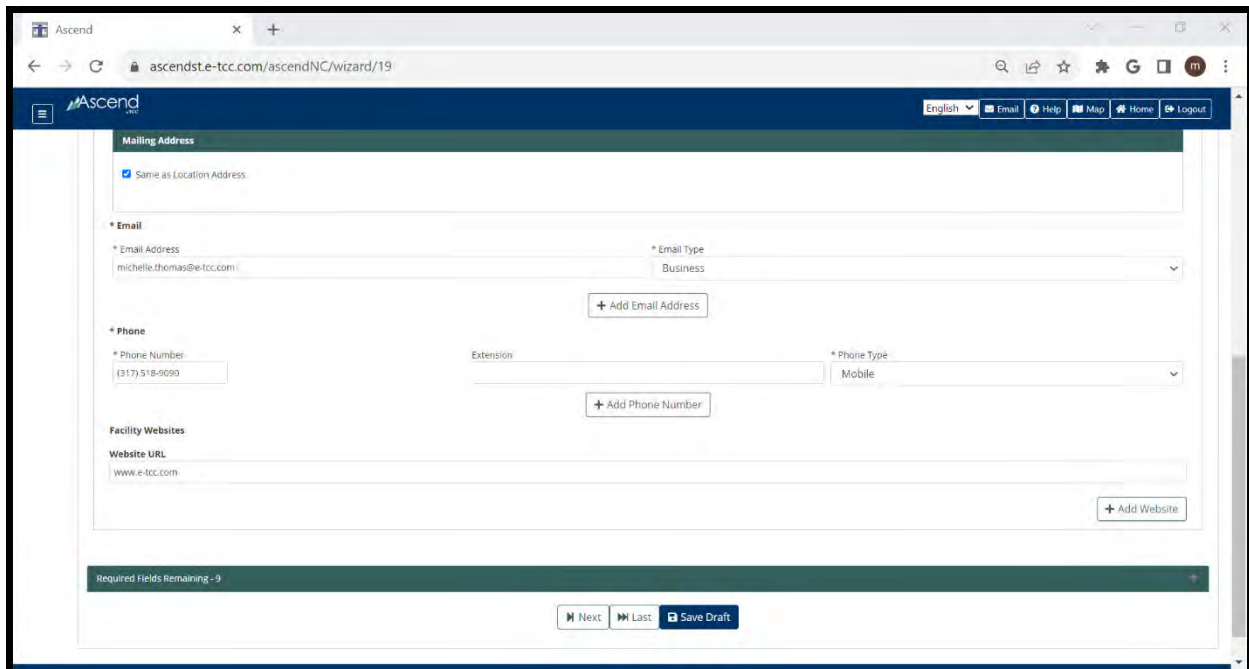
* Address Line 1 1010 Yale Street

Address Line 2

* City Generic City * State Indiana

* Zip Code 46052 * County Clinton

Mailing Address



Ascend

ascendste-tcc.com/ascendNC/wizard/19

English Email Help Map Home Logout

Mailing Address

☒ Same as Location Address

* Email

* Email Address michelle.thomas@e-tcc.com * Email Type Business

+ Add Email Address

* Phone

* Phone Number (317) 518-9090 Extension * Phone Type Mobile

+ Add Phone Number

Facility Websites


Website URL www.e-tcc.com

+ Add Website

Required Fields Remaining - 9

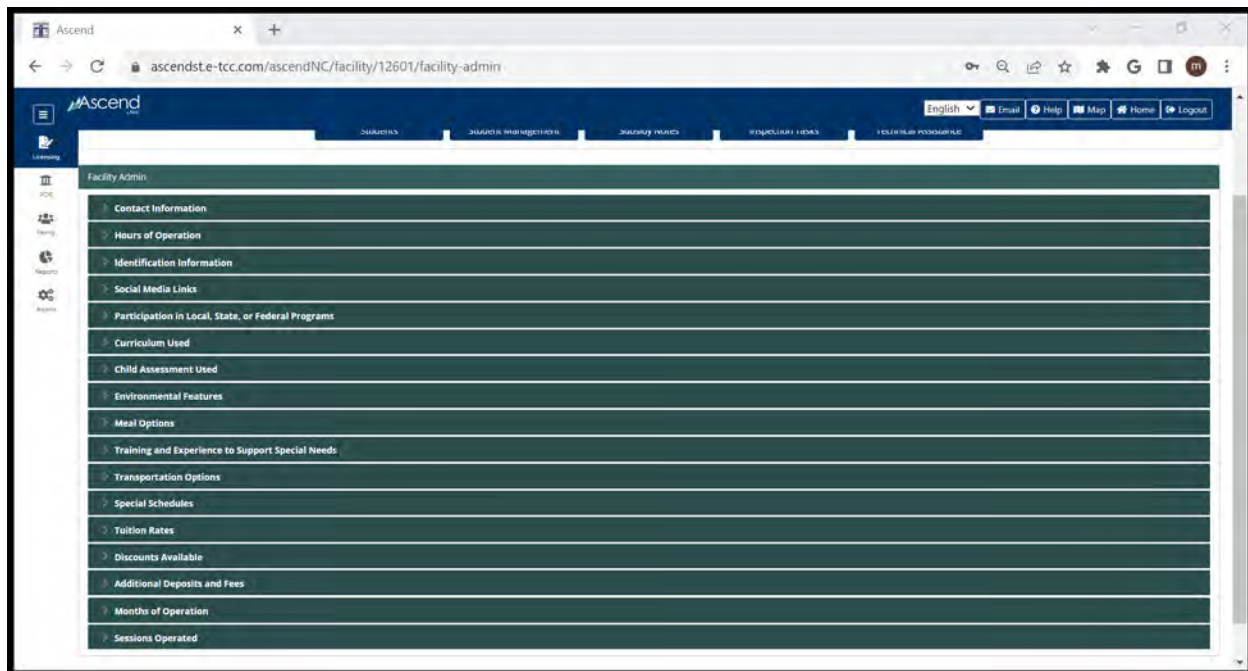
Next Last Save Draft

If a Background Check application is submitted, the results may be updated and tracked below.

ECE1 Trainer's Background Check Results						
Background Check History						
View	Id	Background Type	Review Date	Reviewed By	Created On	Updated On
	504				05/20/2022	
Background Check Details						
Summary						
State Criminal and Sex Offender Registry		Status:	Completed On:			
State Child Abuse and Neglect Registry		Status:	Completed On:			
National Crime Information Center		Status:	Completed On:			
Federal Bureau of Investigation (FBI) Fingerprint Check		Status:	Completed On:			
National Sex Offender Registry		Status:	Completed On:			

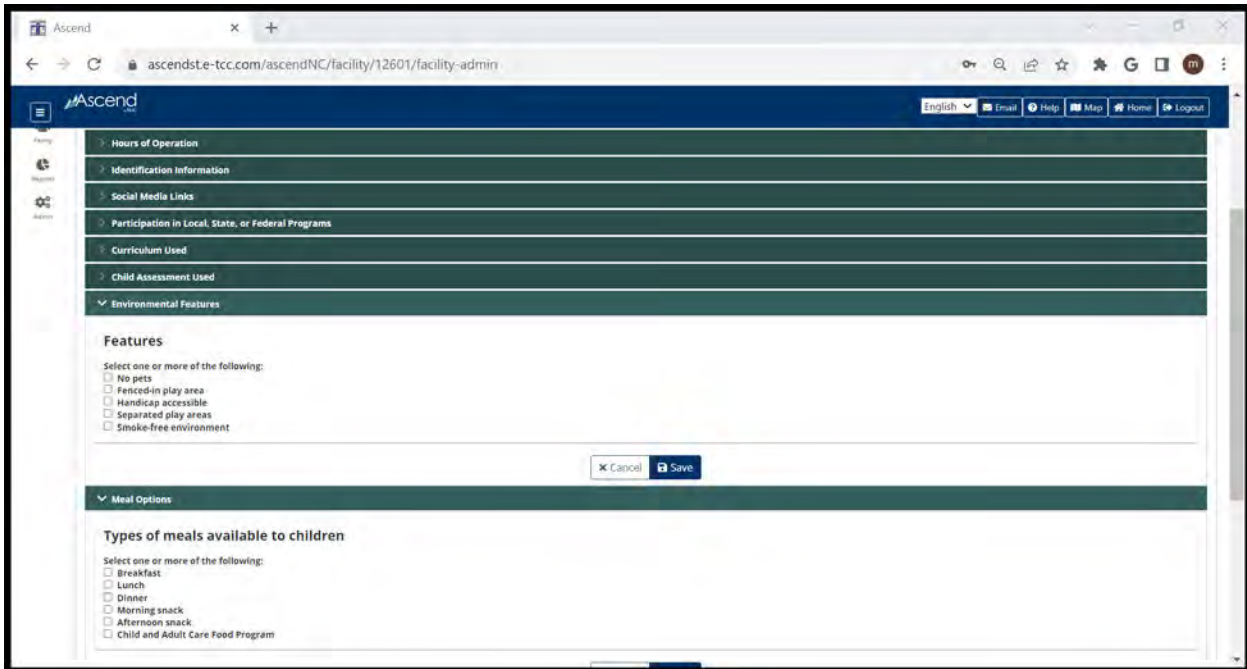
Ascend Licensing Screen L.5 Facility Admin Quicklink

The facility admin screen tracks a wide variety of program information about each provider. The admin screen may be used to collect and track enrollment. The information collected is designed to support families seeking care, as well as to give the State data points that may be used to aggregate and analyze provider supply characteristics. Each menu item may be expanded to collect associated details.



The screenshot shows the 'Facility Admin' screen in the Ascend system. The page has a dark blue header with the Ascend logo and navigation links. A sidebar on the left contains icons for various functions. The main content area is a list of expandable menu items, each with a right-pointing arrow. The items are:

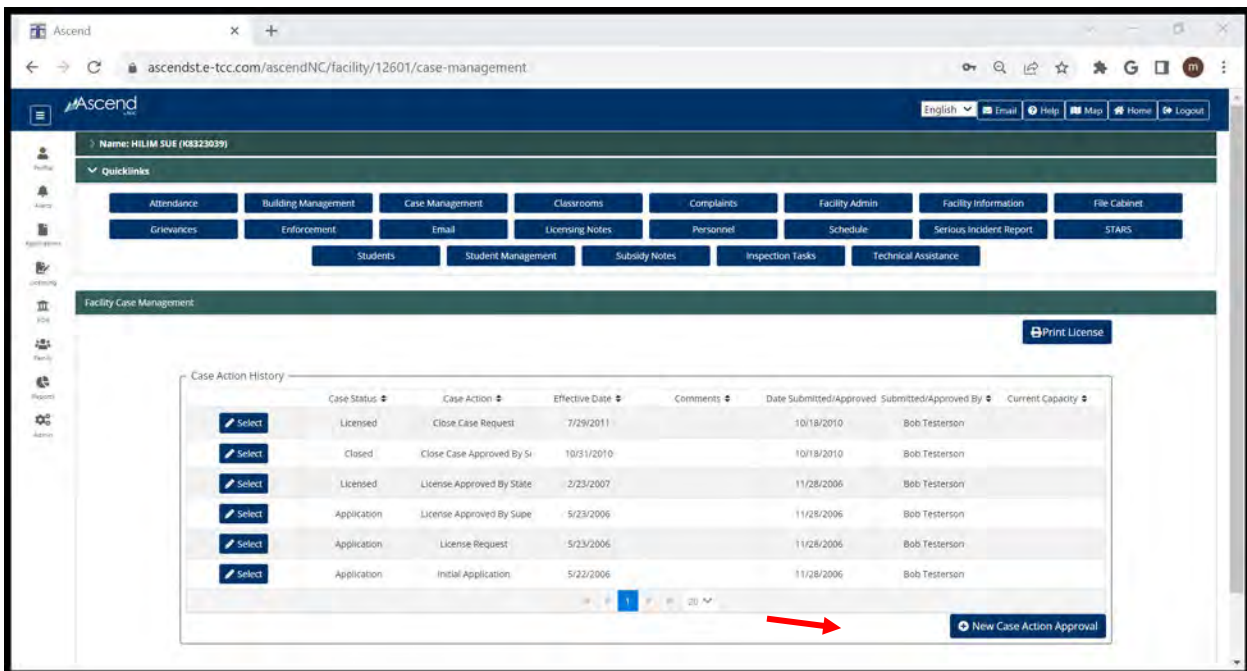
- Contact Information
- Hours of Operation
- Identification Information
- Social Media Links
- Participation in Local, State, or Federal Programs
- Curriculum Used
- Child Assessment Used
- Environmental Features
- Meal Options
- Training and Experience to Support Special Needs
- Transportation Options
- Special Schedules
- Tuition Rates
- Discounts Available
- Additional Deposits and Fees
- Months of Operation
- Sessions Operated



The screenshot shows the 'Facility Case Management Quicklink' screen in the Ascend system. The left sidebar contains navigation links for Family, Business, and Admin. The main content area has a list of expandable sections: Hours of Operation, Identification Information, Social Media Links, Participation in Local, State, or Federal Programs, Curriculum Used, Child Assessment Used, and Environmental Features. The 'Environmental Features' section is expanded, showing a 'Features' section with checkboxes for 'No pets', 'Fenced-in play area', 'Handicap accessible', 'Separated play areas', and 'Smoke-free environment'. Below this is a 'Meal Options' section with a 'Types of meals available to children' section, also with checkboxes for 'Breakfast', 'Lunch', 'Dinner', 'Morning snack', 'Afternoon snack', and 'Child and Adult Care Food Program'. At the bottom of the 'Features' section are 'Cancel' and 'Save' buttons.

Ascend Licensing Screen L.6 Facility Case Management Quicklink

Ascend supports and tracks all history of provider case management activity, including application processing and changes in licensing status. Users may print the license directly from this screen.

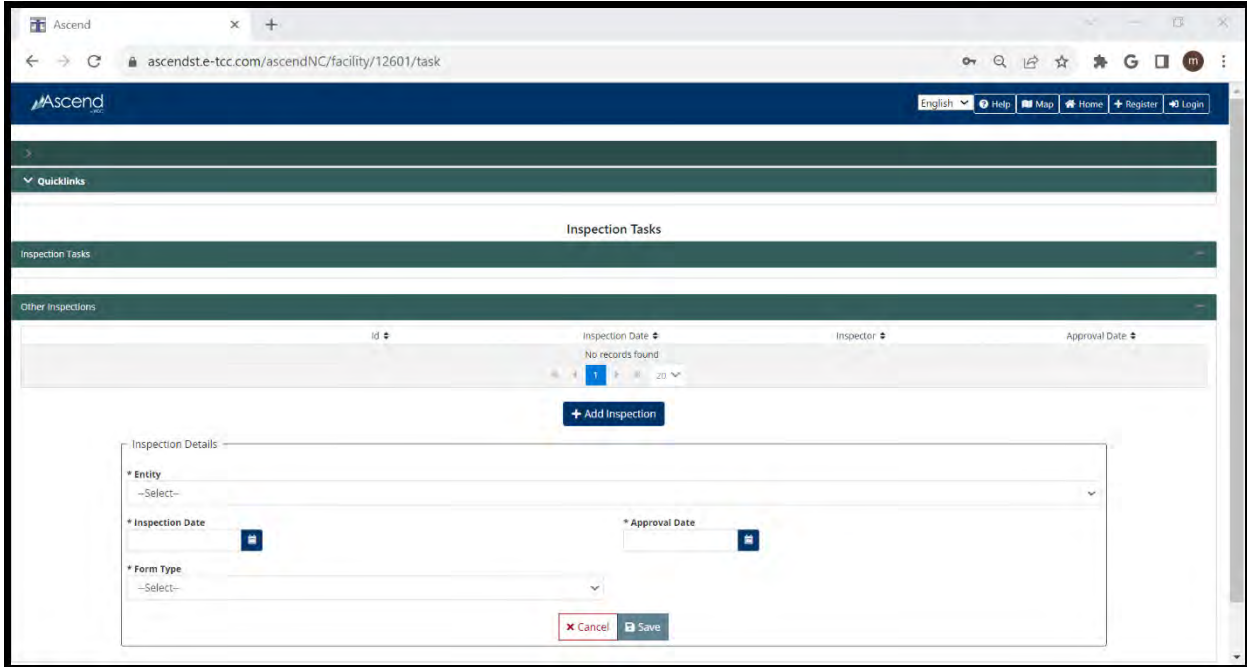


The screenshot shows the 'Inspection Tasks' screen in the Ascend system. The left sidebar contains navigation links for Family, Business, and Admin. The main content area has a 'Quicklinks' section with buttons for Attendance, Building Management, Case Management, Classrooms, Complaints, Facility Admin, Facility Information, File Cabinet, Grievances, Enforcement, Email, Licensing Notes, Personnel, Schedule, Serious Incident Report, and STARS. Below this is a 'Facility Case Management' section with buttons for Students, Student Management, Subsidy Notes, Inspection Tasks, and Technical Assistance. The 'Inspection Tasks' button is highlighted. Below the buttons is a 'Case Action History' table with columns for Case Status, Case Action, Effective Date, Comments, Date Submitted/Approved, Submitted/Approved By, and Current Capacity. The table contains six rows of data. At the bottom right of the table is a 'Print License' button. A red arrow points to the 'New Case Action Approval' button at the bottom right of the screen.

Case Status	Case Action	Effective Date	Comments	Date Submitted/Approved	Submitted/Approved By	Current Capacity
Licensed	Close Case Request	7/29/2011		10/18/2010	Bob Testerson	
Closed	Close Case Approved By Sr	10/31/2010		10/18/2010	Bob Testerson	
Licensed	License Approved By State	2/23/2007		11/28/2006	Bob Testerson	
Application	License Approved By Supe	5/23/2006		11/28/2006	Bob Testerson	
Application	License Request	5/23/2006		11/28/2006	Bob Testerson	
Application	Initial Application	5/23/2006		11/28/2006	Bob Testerson	

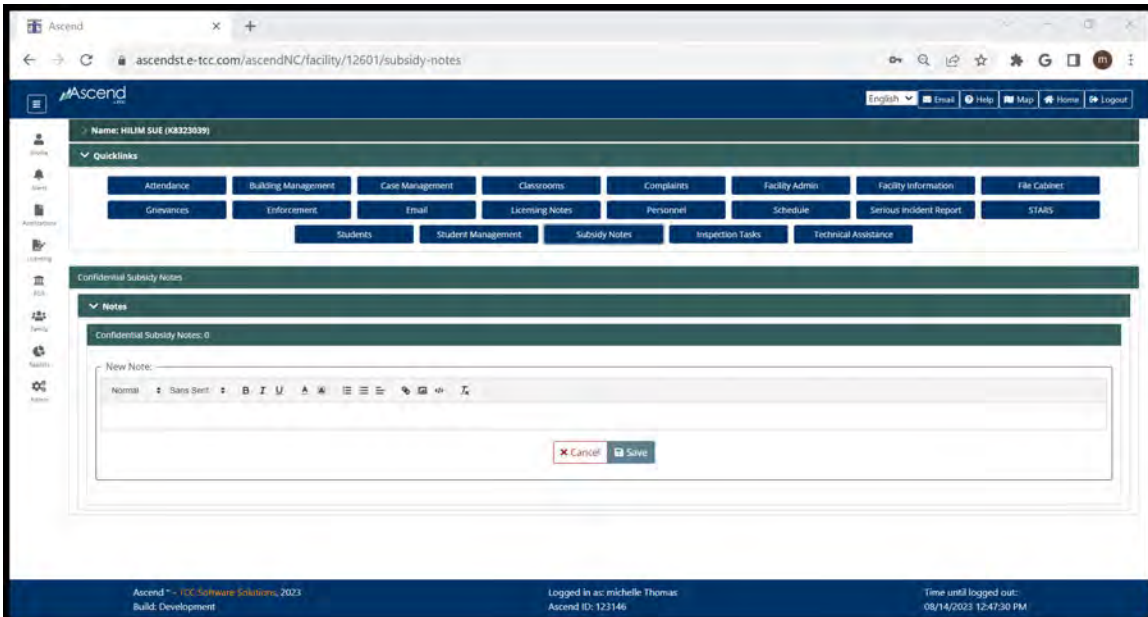
Ascend Licensing Screen L.7 Inspection Tasks

When a Consultant completes and syncs inspection findings using eXpedite, the results are listed on this screen for review and approval, if needed. Additionally, inspections conducted outside of NCDEE staff duties, such as a State Fire Marshall or Department of Health, can be loaded into Ascend using this screen.



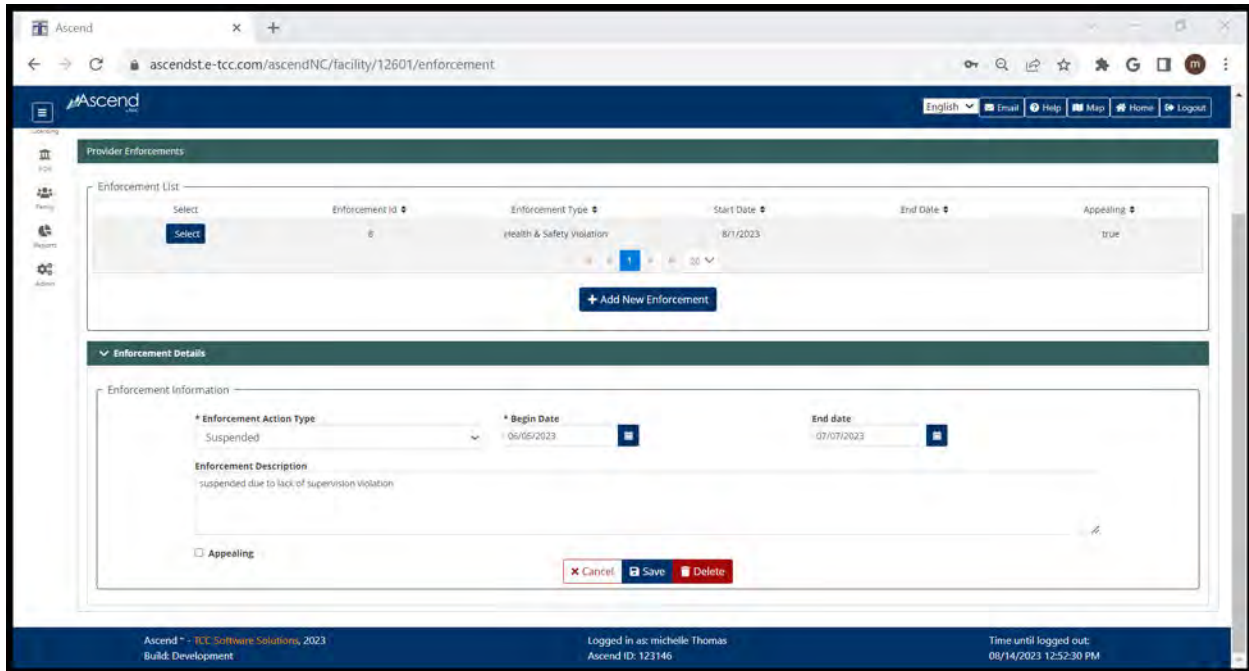
Ascend Licensing Screen L.8 Subsidy Notes

Subsidy participation, monitoring, notes, and general history may all be recorded and tracked on this screen. TCC can tailor this screen and functionality to meet the specific needs of the Agency.



Ascend Licensing Screen L.8 Enforcements

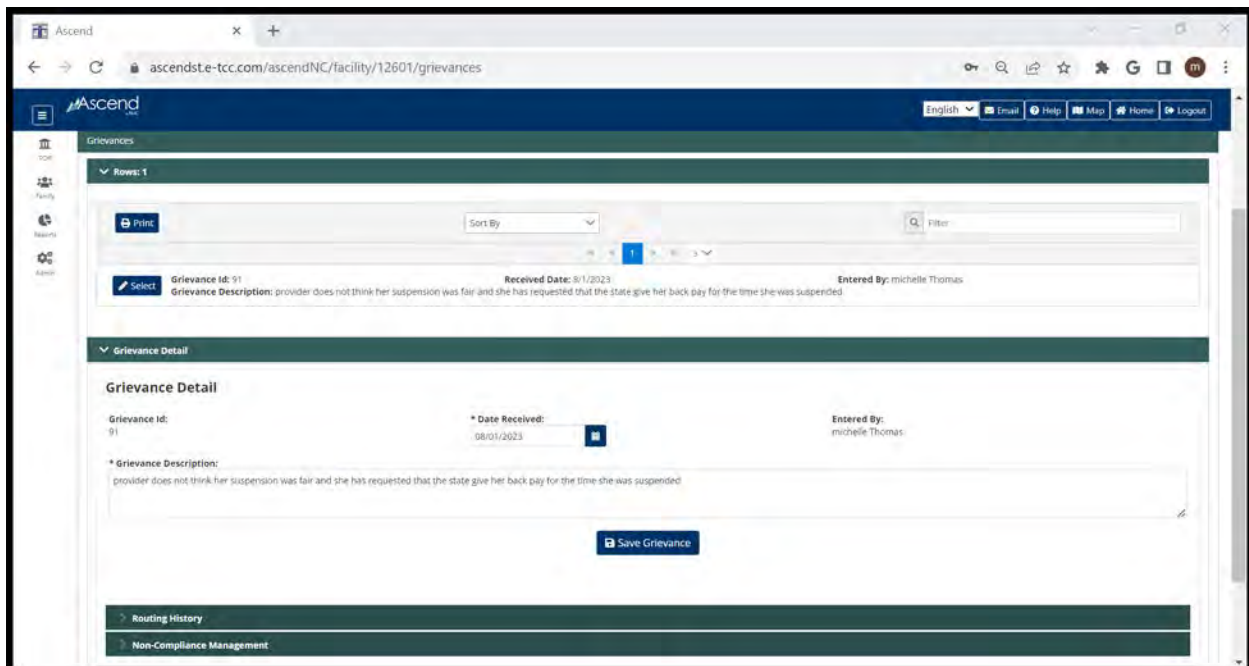
State staff may use this screen to report and track the history of all enforcements against the provider, as well as appeal status.



The screenshot shows the 'Ascend' web application interface for 'Provider Enforcements'. The browser address bar displays 'ascendste-tcc.com/ascendNC/facility/12601/enforcement'. The page features a sidebar with navigation icons for Home, Family, Reports, and Admin. The main content area is titled 'Provider Enforcements' and includes an 'Enforcement List' table with columns for Select, Enforcement ID, Enforcement Type, Start Date, End Date, and Appealing. A single record is visible with ID 8, Type 'Health & Safety Violation', Start Date '8/1/2023', and Appealing status 'true'. Below the table is a '+ Add New Enforcement' button. The 'Enforcement Details' section contains a form for 'Enforcement Information' with fields for 'Enforcement Action Type' (Suspended), 'Begin Date' (08/05/2023), and 'End Date' (07/07/2023). The 'Enforcement Description' field contains the text 'suspended due to lack of supervision violation'. There is an 'Appealing' checkbox and buttons for 'Cancel', 'Save', and 'Delete'. The footer shows 'Ascend - RCT Software Solutions, 2023', 'Built: Development', 'Logged in as: michelle Thomas', 'Ascend ID: 123146', and 'Time until logged out: 08/14/2023 12:52:30 PM'.

Ascend Licensing Management Screen L.9 Grievances

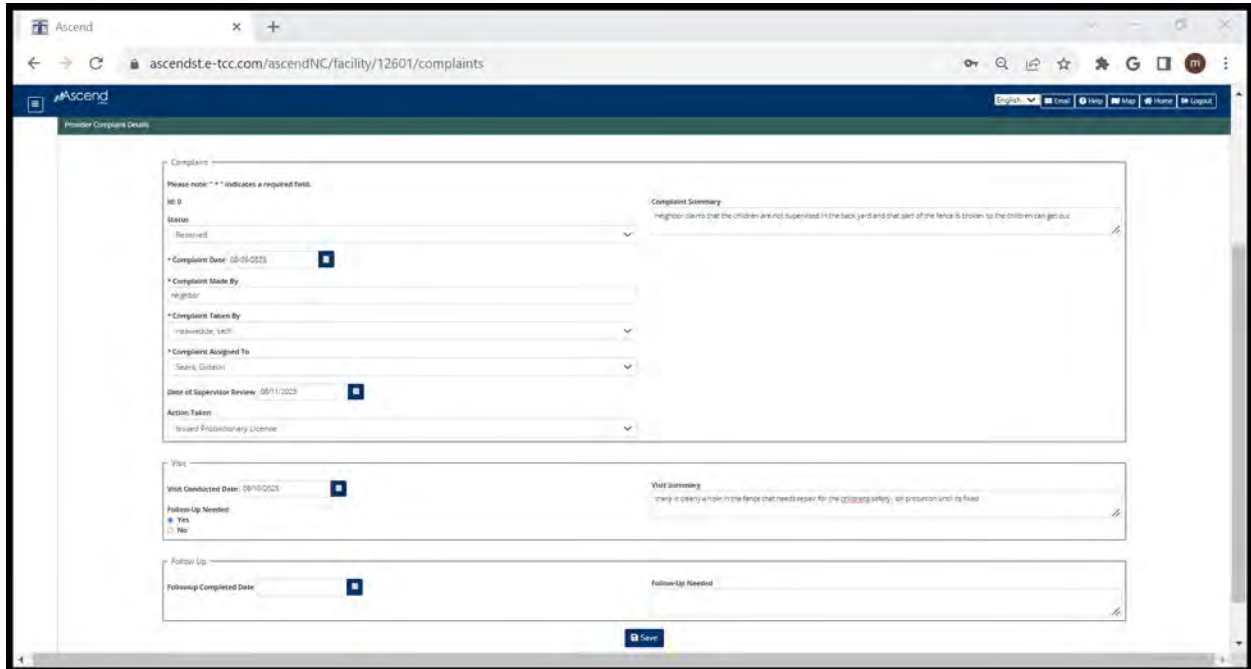
All provider grievances may be entered, routed to the next level of review, and tracked on the provider record.



The screenshot shows the 'Ascend' web application interface for 'Grievances'. The browser address bar displays 'ascendste-tcc.com/ascendNC/facility/12601/grievances'. The page features a sidebar with navigation icons for Home, Family, Reports, and Admin. The main content area is titled 'Grievances' and includes a 'Rows: 1' section with a 'Print' button and a 'Sort By' dropdown. A single record is visible with 'Grievance ID: 91', 'Received Date: 8/1/2023', and 'Entered By: michelle Thomas'. The 'Grievance Description' field contains the text 'provider does not think her suspension was fair and she has requested that the state give her back pay for the time she was suspended'. Below the table is a 'Save Grievance' button. The 'Grievance Detail' section contains a form for 'Grievance Information' with fields for 'Grievance ID' (91), 'Date Received' (08/01/2023), and 'Entered By' (michelle Thomas). The 'Grievance Description' field contains the text 'provider does not think her suspension was fair and she has requested that the state give her back pay for the time she was suspended'. There is a 'Save Grievance' button. The footer shows 'Routing History' and 'Non-Compliance Management' links.

Ascend Licensing Management Screen L.10 Complaints

Complaints are recorded and assigned for follow up through the screen below. All activity associated with follow up and resolution are tracked and retained for historical purposes. Depending on the State business rules, the complaint information may be sent to the consumer education website.



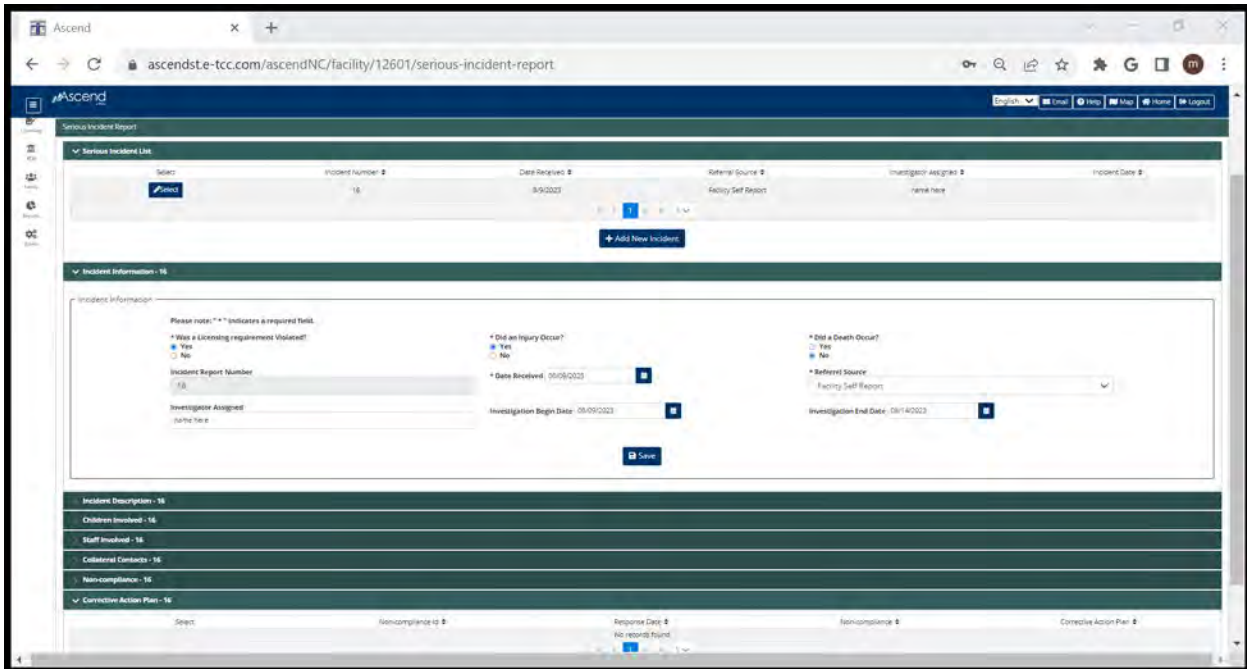
The screenshot shows the 'Ascend' web application interface for 'Provider Complaint Details'. The browser address bar shows 'ascendst-e-tcc.com/ascendNC/facility/12601/complaints'. The page has a blue header with the 'Ascend' logo and navigation links. The main content area is titled 'Provider Complaint Details' and contains several sections:

- Complaints:** A section with a 'Please note: * indicates a required field.' and a 'Complaint Summary' text area. It includes fields for 'Id #', 'Status' (set to 'Received'), 'Complaint Date' (08/05/2023), 'Complaint Made By' (registrar), 'Complaint Taken By' (registrar), 'Complaint Assigned To' (Sarah, Gordon), 'Date of Supervisor Review' (08/11/2023), and 'Action Taken' (Issued Probationary License).
- Visit:** A section with 'Visit Completed Date' (08/10/2023), 'Follow Up Needed' (Yes), and a 'Visit Summary' text area.
- Follow Up:** A section with 'Follow Up Completed Date' and a 'Follow Up Needed' text area.

A 'Save' button is located at the bottom right of the form.

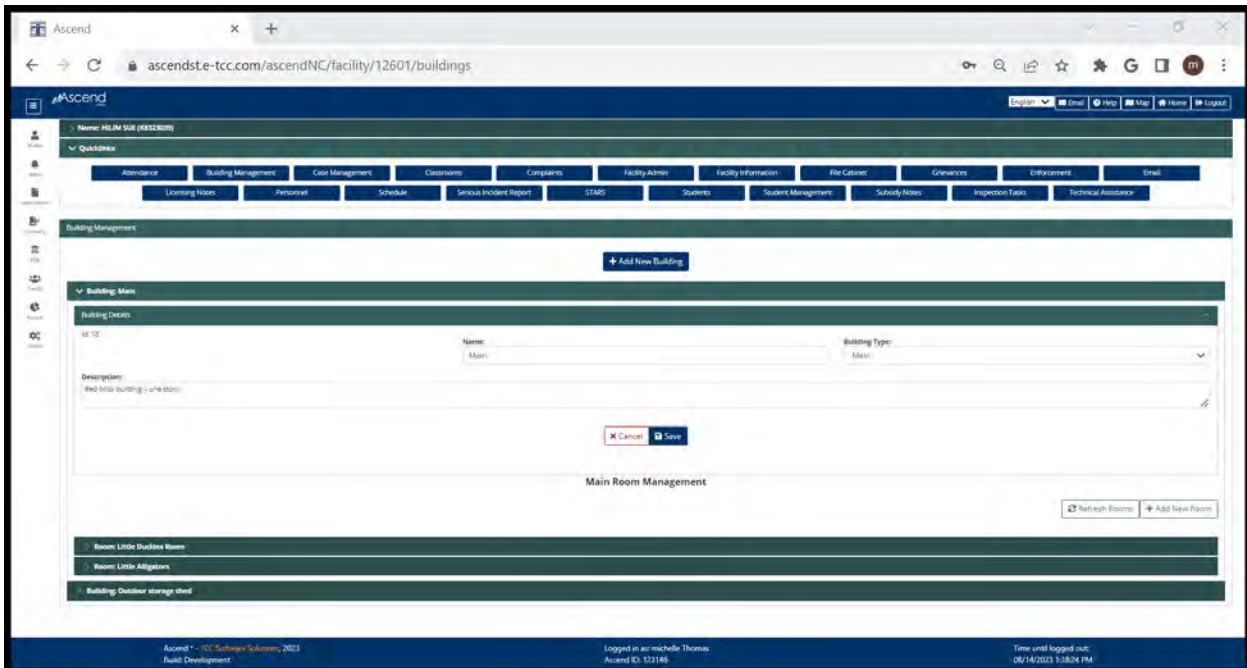
Ascend Licensing Management Screen L.11 Serious Incidents

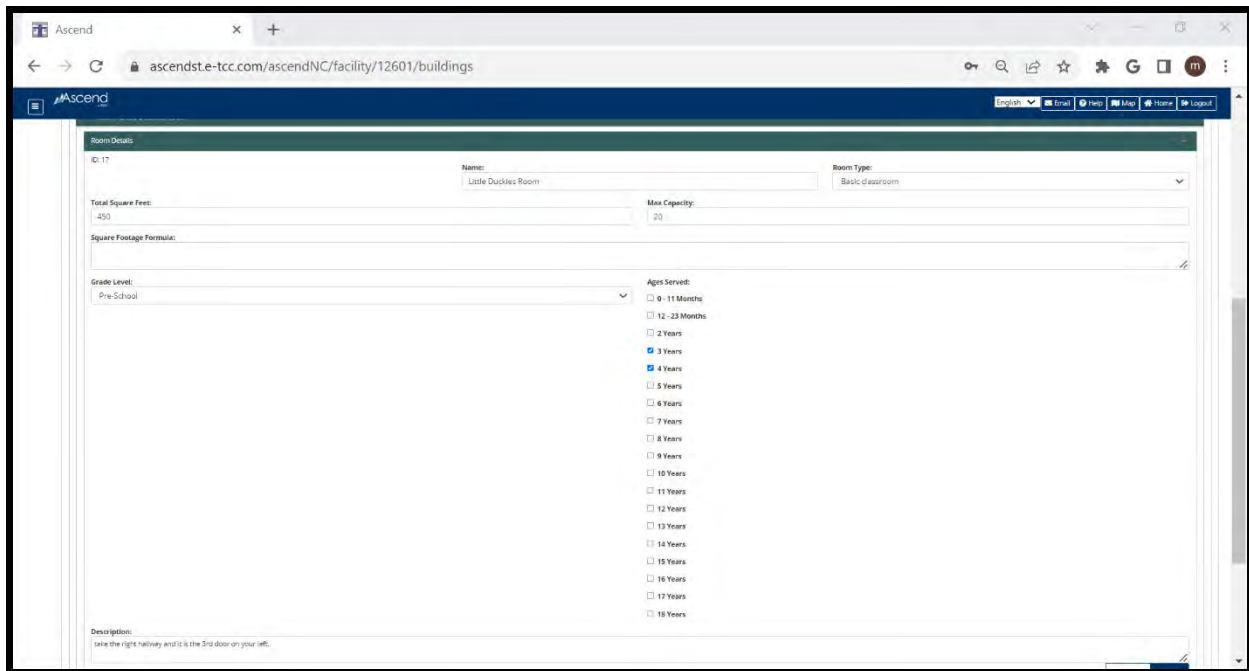
Similar to complaints, all serious incidents in a provider location can be entered and updated throughout the investigation and resolution process. All the menus expand to record and view additional details about the incident. Based on the State business rules, the incident information may be shared on the consumer education website and/or de-identified and aggregated for federal reporting purposes.



Ascend Licensing Management Screen L.12 Building Management

Track and update data about the building where care is being given. This screen allows users to track buildings, such as the main building as well as other storage and maintenance structures. Information about each room inside the building, such as kitchen, large playroom and standard classrooms may be collected and expanded for details.





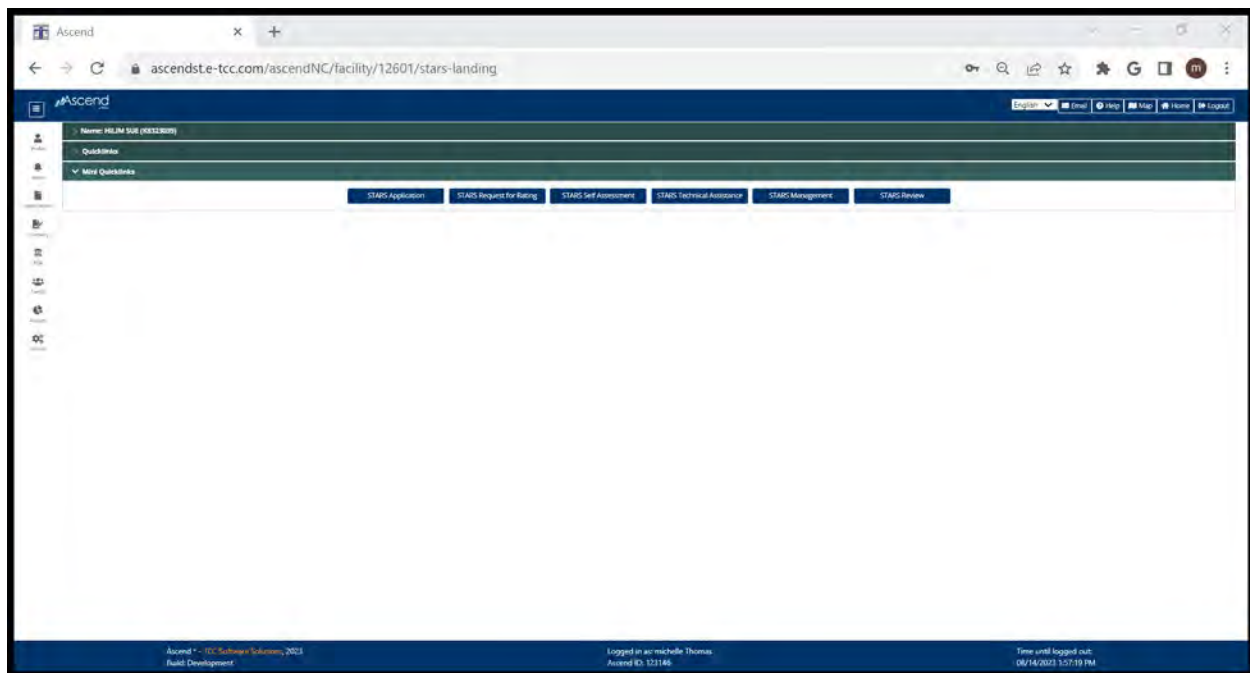
The screenshot displays the 'Room Details' form in the Ascend web application. The form is for room ID 17, named 'Little Doodles Room', which is a 'Basic classroom'. It shows a total square footage of 450 and a maximum capacity of 20. The 'Grade Level' is set to 'Pre-School'. The 'Age Services' section is expanded, showing a list of age ranges from 0-11 Months to 18 Years. The '3 Years' and '4 Years' options are selected. A description at the bottom reads: 'take the right hallway and it is the 3rd door on your left.'

Ascend Quality Rating and Improvement (QRIS) Screens

States across the country take various approaches to their QRIS model, including blocks, points, hybrid, or rated license model. Ascend comes out of the box with the primary functionality needed for any State QRIS model. TCC can tailor the finer details, such as specific domains and standards being measured and scoring algorithms to determine final QRIS level award.

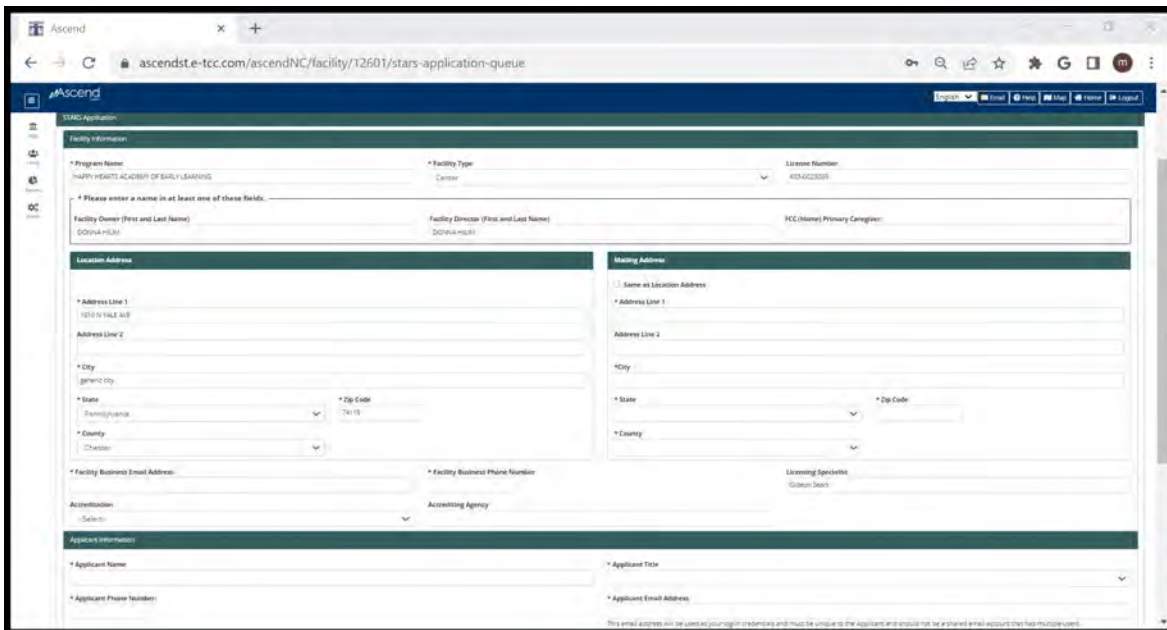
Ascend QRIS Screen Q.1 Mini Quicklinks Screen

To manage a State's QRIS, Ascend comes out of the box with a 'mini quicklinks' button that opens options to manage a variety of processes including application approvals, rating requests, self-assessments, and technical assistance.



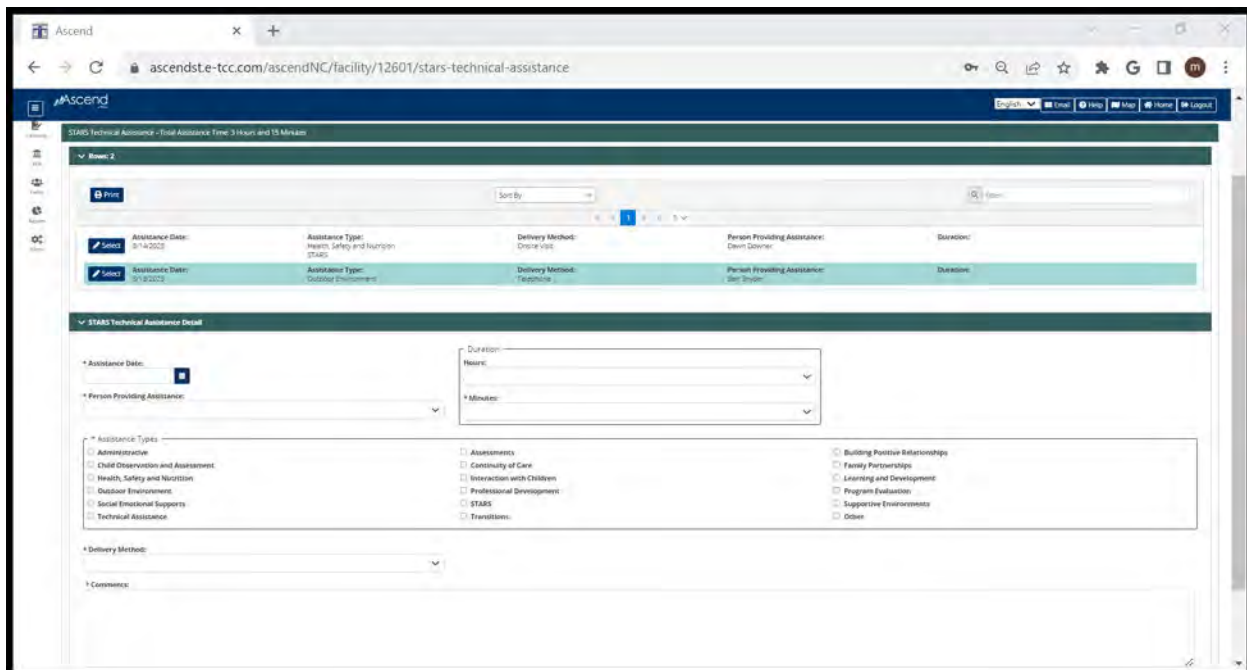
Ascend QRIS Screen Q.2 QRIS Application

The State's QRIS application will be automated through the Ascend wizard tool. The application will be prepopulated with known provider information. Providers can create an application, save a draft, and return to complete it. There are document upload options so that they can provide necessary information to approve the application. Once submitted, the application will show up in a queue to be processed and approved. Additionally, a dashboard alert will appear on the dashboard of the appropriate staff.



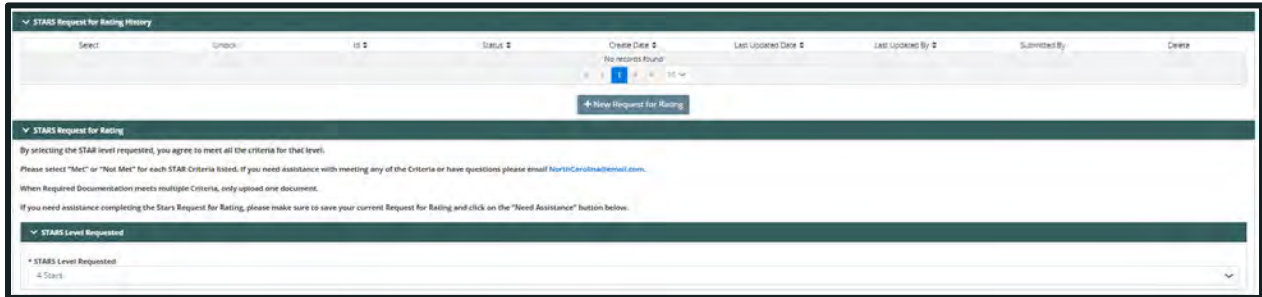
Ascend QRIS Screen Q.3 Technical Assistance

Technical assistance providers may record all activity and interaction with providers and their staff. The system retains all history of technical assistance and keeps a running total of the number and types of assistance the provider has received.



Ascend QRIS Screen Q.4 Rating Request

Providers may make a request for a rating visit through the system. The request is routed to a queue for processing and a dashboard alert is triggered for the appropriate staff to view.



Ascend QRIS Screen Q.5 Other QRIS Rating Management Options

Ascend provides the flexibility to let you track other ratings management activity, such as provider request for extended time to comply, rating reductions and history of star levels assigned to the provider.



TCC's Childcare Mobile Inspection Product: eXpedite

Ascend and eXpedite are a powerful combination of technology to fully support and integrate the licensing management process with the inspection process. TCC has extensive experience with populating consumer education websites with federally required inspection, complaint, and serious incident data.



By choosing to implement TCC's mobile forms product, eXpedite, the Agency can streamline and enhance the statewide licensing management process. TCC can utilize the eXpedite platform to automate all current paper licensing inspection forms. Field inspectors can collect inspection data in the field and seamlessly "sync" the data to the Ascend licensing management module that TCC proposes to implement.

TCC has over 20 years of experience implementing mobile forms solutions specifically for childcare licensing agencies. Our experience includes differential and risk-based monitoring practices.

The Solution You Need









Effective. Usable. Field-friendly



Software Overview

Every **eXpedite™** implementation includes all software components, software readiness, product updates, and technical support to ensure you have the tools you need to empower your field.

eXpedite Key Features

 Form Design Create and manage your custom digital forms using an intuitive, point-and-click interface	 Form Completion Complete forms and print reports anytime and anywhere
 Version Control Manage and access multiple version of any form, from any device	 Publishing Publish new forms to specific users so they stay in sync with the latest version
 Pictures Take and attach relevant photos of evidence and significant details	 Map Integration Tag inspection locations, pictures, and videos utilizing geotagging
 Calendar Organize your tasks and appointments and avoid potential conflicts	 Sign. Print. Share. Validate forms with client signatures and instantly print from your tablet

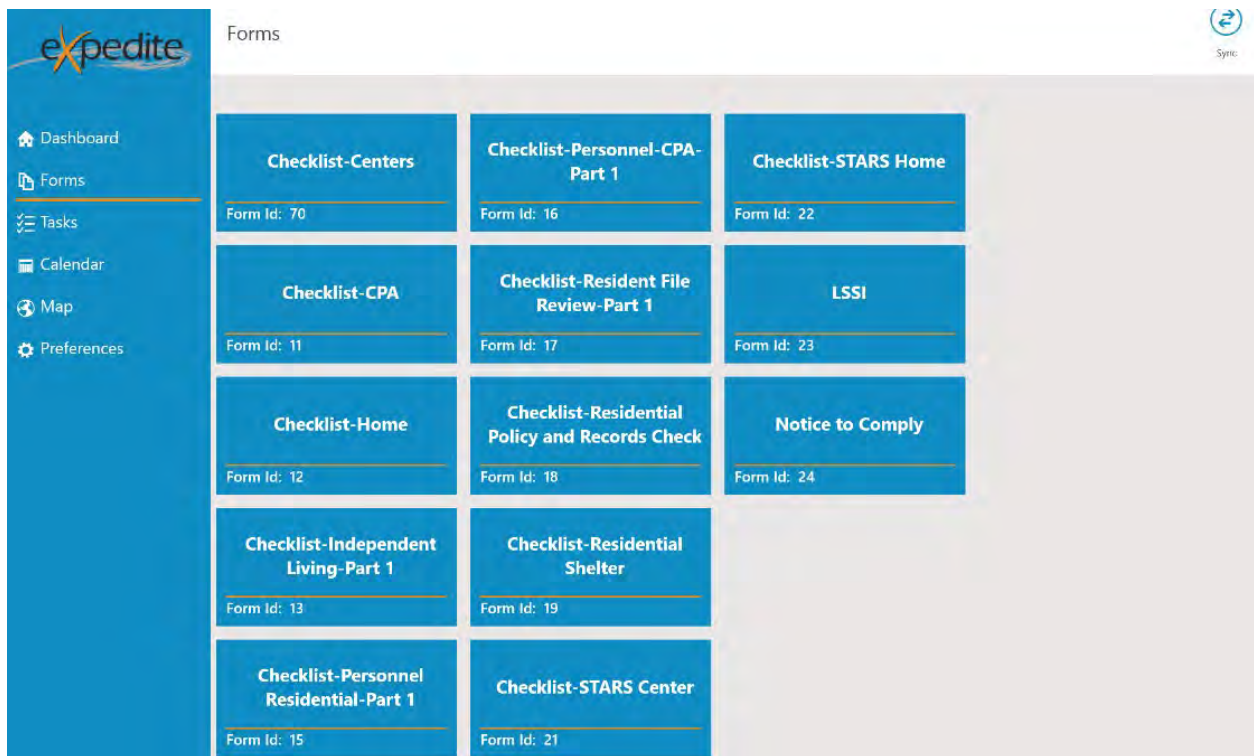
eXpedite Key Benefits

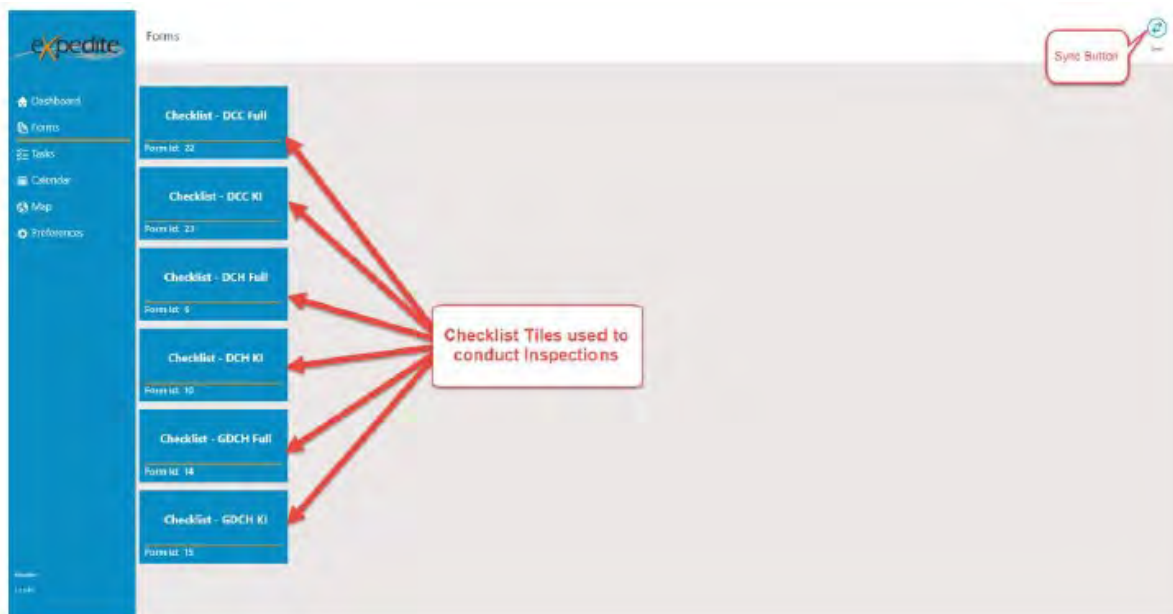


eXpedite Licensing Inspection Screens

eXpedite Screen E.1 - Inspectors start visits by selecting from a list of state approved forms.

All the forms published to the user are displayed on this screen. Examples of the Forms screen are displayed below:

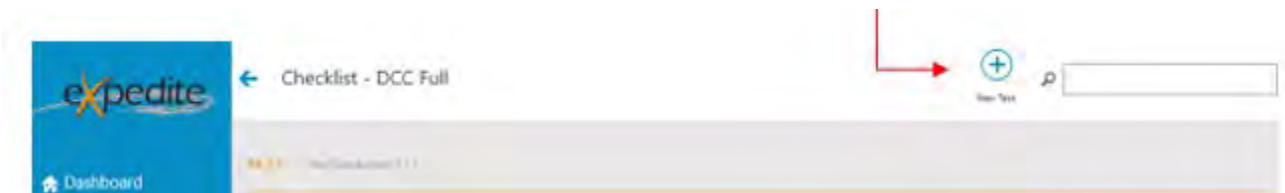




Expedite Screen E.2 When ready to start the monitoring visit, the inspector creates a new task.

New tasks can be created from the Tasks Overview Screen, allowing the user to generate a new form of the type selected on the Forms Screen.

To create a new task, click on the New Task command located in the top-right corner of the screen.



A blank form is displayed. The 'search buttons' are used to obtain and generate facility data to automatically populate into corresponding fields on the form.

Expedite Screen E.3 Once the needed form is opened, the inspector searches for the provider they are inspecting.
Once the provider is selected, some fields are pre-populated with provider information.

Family Child Care Homes & Large Child Care Homes Monitoring Checklist

Home Search

Program Name	License Number	Subtype	Visit Type	Purpose of Visit	Visit Date	Visit Time

Children present:

0-11 Months	12-23 Months	2 years old	3 years old	4-5 years old	6 years & older
Total children on-site	Personnel with children	Total children off-site	Personnel with children off-site		
Children engaged in the following activities:					

All items listed below are compliant unless marked as "NC" Non-compliant or "NR" Not Reviewed				
Item	Requirement descriptions	Remove Selections	NC	NR
01	Purpose and policy of the law	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
02	Necessity and issuance of license	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
03	Ages and number of children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Once a task has been opened and the form is displayed, data can be entered into any field that is enabled for editing. Located within the form are different types of form controls including text boxes, dropdown boxes, signatures boxes, radio buttons, date boxes, grids, etc.

Expedite Screen E.4 Inspectors indicate compliance with each regulation.

Clicking on the REQ/Rules button for a category opens the Requirements/Rules page. This page lists all the requirements that are associated with that inspection item.

Key Indicator Inspection Items			
Codes: C = Compliance, D = Discussed, N = Non-Compliance, NA = Not Applicable			
Section	Standard	Standard Description	Code
406.8.a.1	Safety	First aid kit present and contains all required items.	...
406.8.a.19	Safety	Caregivers and assistants are familiar with the written emergency preparedness plan which addresses specific actions to be taken in the event of a fire, terrorist, or other emergency.	...
406.8.a.23	Safety	The licensee logs the daily home inspection of escape routes, exit doors and windows and maintains the log for at least one year.	...
406.8.a.20	Safety	The licensee conducts and documents monthly fire safety inspections of the home and maintains this documentation for 1 year.	...
406.9.a	Household Qualifications	All persons subject to a background check have authorized background check and received clearance.	...

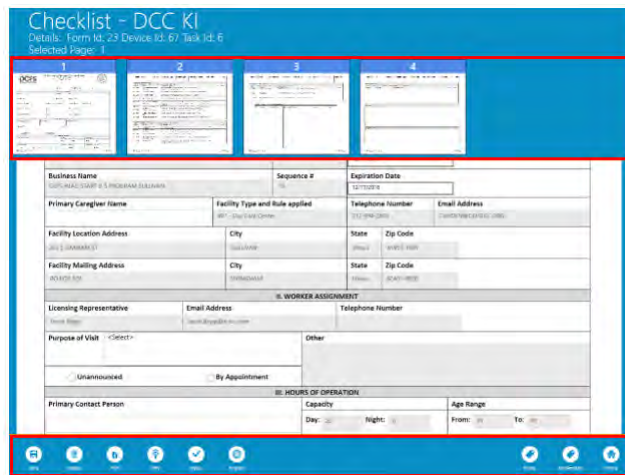
All items listed below are compliant unless marked as "NC" Non-compliant or "NR" Not Reviewed				
Item	Requirement descriptions	Remove Selections	NC	NR
06	General Records and Documentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
07	Posted Records and Documentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
08	Program Records and Documentation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Requirements	
110-3-281(a)	<input type="checkbox"/> Records and documents may have additional information in other Sections. Items are provided primarily to Oklahoma Department of Human Services (DHHS) staff, upon request, and are available to parents and personnel, unless the requirements specifically state otherwise. Noncompliance Observed: <div></div>
Characters Remaining (870 Limit) 870	
110-3-281(b)	<input type="checkbox"/> Confidentiality policies and procedures are maintained. Noncompliance Observed: <div></div>
Characters Remaining (870 Limit) 870	
110-3-281(b)(1)	<input type="checkbox"/> Child records and other items specific to individual children are only available to personnel as necessary, the individual child's parents, and DHS staff. Noncompliance Observed: <div></div>
Characters Remaining (870 Limit) 870	
110-3-281(b)(2)	<input type="checkbox"/> Personnel records are maintained in a confidential manner according to program procedures. Noncompliance Observed: <div></div>
Characters Remaining (870 Limit) 870	
110-3-281(d)	<input type="checkbox"/> Items, including certifications, are kept current. Noncompliance Observed: <div></div>
<input type="button" value="Send to Summary"/> <input type="button" value="Review Checked Requirements"/> <input type="button" value="Clear"/> <input type="button" value="Check All"/> <input type="button" value="Cancel"/>	

Expedite Screen E.5 After the form has been filled out, any item that was marked N (noncompliance) is displayed in the corresponding grid on the summary form.

II. Summary of Inspection/Violations				
Based on an inspection(s) conducted by the Child Care Resource & Referral Agency (CCR&R) on the above date(s), the provider needs to take the following actions in order to come into compliance with the Approved Home Health and Safety Requirements:				
Date Cited	Requirement Description	Noncompliances Observed	Date Due	Date Abated
9/20/2018	Ensure lockable interior doors can be unlocked from the outside.	Side door did not have ability to be unlocked from the outside		

eXpedite Screen E.6 User-friendly features for easy navigation.



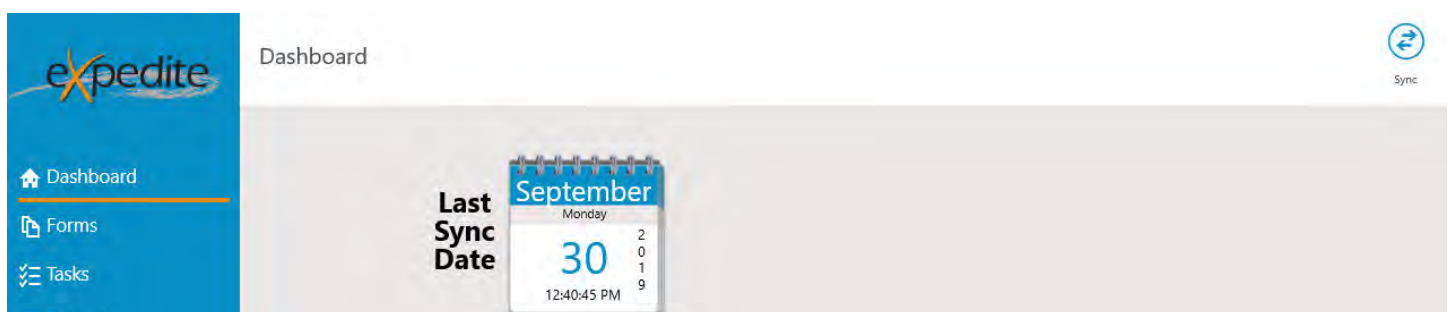
Additional functionality is available on the Forms Display Screen using App Bars. The App Bars are accessible by swiping up from the bottom or down from the top edge of the screen (touchscreen), or by moving the cursor to a location on the form other than a text field and right clicking (keyboard/touchpad).

The Top App Bar displays a thumbnail of each page on the form. Slide the pages left and right to scroll through all the pages. Pages can be selected and displayed by tapping them in the App Bar. This is a quick and easy method of going directly to a page.

The Bottom App bar displays nine commands: Save, Delete, PDF, GPS, Status, English, Note, Bookmarks and Home.

eXpedite Screen E.7 Once the monitoring visit is complete, inspectors sync the data to the Ascend licensing system.

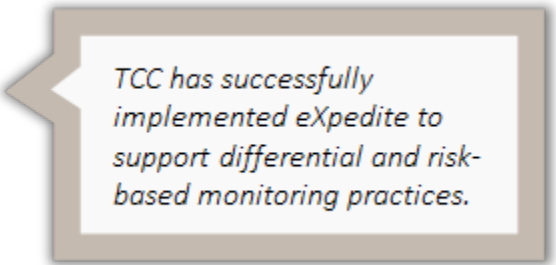
The Sync command is located in the upper right corner on the Home/Dashboard, Forms, Calendar, and Preferences screens. When connected to the Internet, clicking on the Sync sends the work completed and the data collected in the visit form to the eXpedite main server and database. This data is then sent to the system of record (facility record) every 30 minutes.



eXpedite Screen E.8 eXpedite supports Differential and Risk-Based Monitoring models.

Two types of checklists are available for each provider type. Those include:

- KI (Key Indicator) – an abbreviated checklist
- Key indicator and/or Non-Negotiable rules/requirements – always display.
- Other “Random” rules/requirements rotate on a schedule (i.e., every 4 months).
- Where the provider is found non-Compliant on a present number of Key Indicator and/or Non-Negotiable questions (i.e., 3), eXpedite will ask if you want to fail the KI and start a Full inspection checklist:
- Selecting Yes will make the original KI Checklist uneditable, copying any entries to the newly displayed Full Checklist.
- Selecting No will close the KI Fail message and allow the user to continue using the abbreviated checklist upon adding notation for decision.
- **Full** – the full set of Child Care rules for each provider type by section.



TCC has successfully implemented eXpedite to support differential and risk-based monitoring practices.



eXpedite Screen E.9 Example of inspection where threshold has been met to require a full monitoring inspection.

Key Indicator Inspection Items				
Codes: C = Compliance D = Discussed N = Non Compliance NA = Not Applicable				
Section	Standard	Standard Description	Code	Rules
407.100.f	General Requirements for Personnel	Staff have physical re-examinations every 2 years and/or whenever Communicable disease or illness is suspected.	C	Rules
407.120.a.1	Personnel Records	Confidential file for each staff contains the Department-prescribed information form.	N	Rules
407.120.a.3	Personnel Records	Confidential file for each staff contains three verified written references.	N	Rules
407.120.a.4	Personnel Records	Confidential file for each staff contains proof of education achievement required.	N	Rules
407.250.d	Enrollment and Discharge Procedures	Upon accepting a child for enrollment, the facility distributes to the parent, the Summary of Licensing Standards, consumer information materials and other materials designated by the	...	Rules

This provider has reached the limit of Key Indicator Checklist questions that are Non-compliant. Do you wish to switch to a Full Checklist at this time?

Yes No

407.380.b	Equipment and Materials	The center has equipment and materials in specified quantity and variety per the Appendices.	...	Rules
-----------	-------------------------	--	-----	-------

Non-negotiable Inspection Items				
Codes: C = Compliance D = Discussed N = Non Compliance NA = Not Applicable				
Section	Standard	Standard Description	Code	Rules
407.100.h	General Requirements for Personnel	At least one staff member is on duty at all times who has been trained and is current in first aid, CPR, Heimlich maneuver.	...	Rules
407.110	Background Checks for Personnel	All persons subject to background checks authorize such checks, submits to fingerprinting, and furnishes written information regarding any criminal convictions.	...	Rules
407.190.a	Grouping and Staffing	Facility is in compliance with capacity, ages, and groupings.	...	Rules

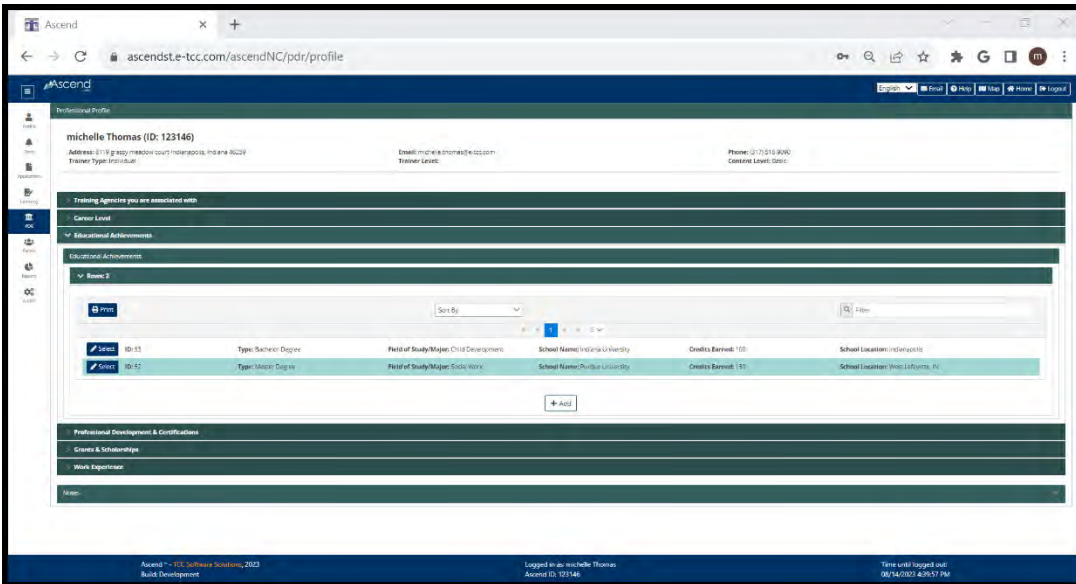
As noted in the Ascend Licensing Screen L.7, inspection history is stored in Ascend under the Provider Quicklinks. Approved Ascend Users can access details about each inspection and choose to Publish the results to the consumer education website.

Professional Registry Screens

Below we share key screens that demonstrate the power and functionality of the Ascend Professional Registry module.

Professional Registry Screen PR.1 Professional Profile

The workforce may enter and track details about their professional experience, including career level, education, training, certifications, scholarships/grants, and work experience. Each category below may be expanded into a much deeper level of data collection.



Professional Profile

Michelle Thomas (ID: 123146)
Address: 1118 gary road south indianapolis, indiana 46228
Email: michelle.thomas@dcdee.nc.gov
Phone: (317) 518-2040
Training Type: Individual
Current Level: 4
Content Level: Basic

Training Agencies you are associated with:

Career Level:

Educational Achievements:

Education:

ID	Type	Field of Study/Major	School Name	Credits Earned	School Location
10-13	Master's Degree	Child Development	Indiana University	100	Indianapolis, IN
10-12	Master's Degree	Social Work	Purdue University	101	West Lafayette, IN

Professional Development & Certifications:

Grants & Scholarships:

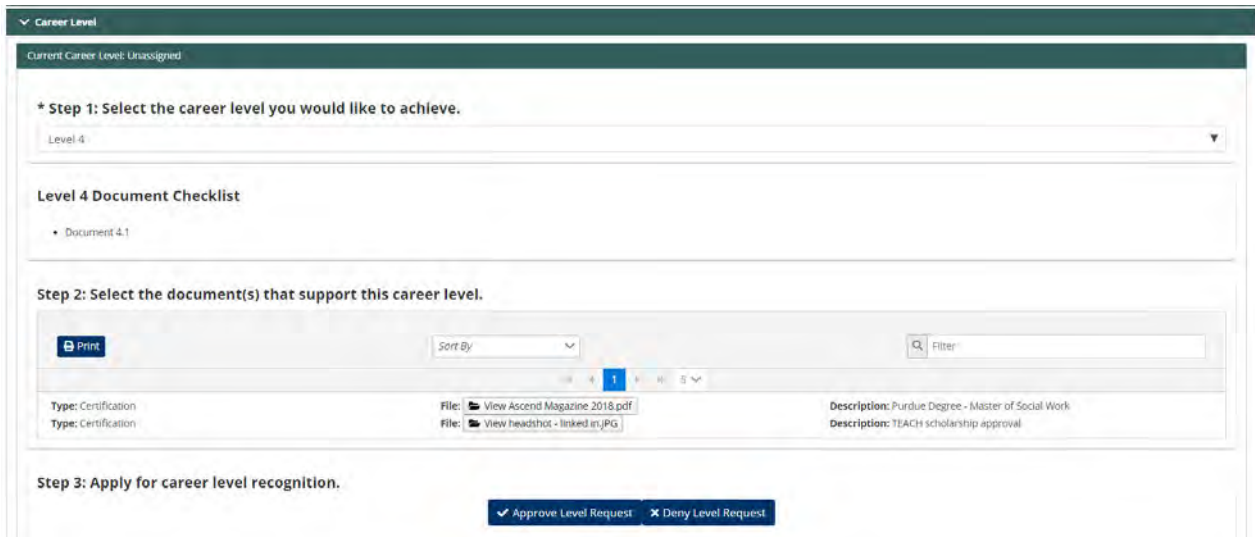
Work Experience:

Notes:

Ascend™ - ITG Software Solutions, 2023
Build: Development
Logged in as michelle.thomas
Ascend ID: 123146
Time until logout: 06/14/2023 4:05:57 PM

Ascend Professional Registry Screen PR.2 – Career Level Advancement

Below we show the screen where the workforce may access information about career levels and request a specific career level for approval.



Career Level

Current Career Level: Unassigned

*** Step 1: Select the career level you would like to achieve.**

Level 4

Level 4 Document Checklist

- Document 4.1

Step 2: Select the document(s) that support this career level.

Print

Sort By

Filter

Type	File	Description
Certification	View Ascend Magazine 2018.pdf	Purdue Degree - Master of Social Work
Certification	View headshot - linked in.JPG	TEACH scholarship approval

Step 3: Apply for career level recognition.

Approve Level Request Deny Level Request

Professional Registry Screen PR.3 Professional Development and Certifications

Registry users may enter information and upload documents regarding their professional development and certification qualifications. State workers receive alerts when new documents are uploaded and can review and verify they meet requirements.

Professional Development & Certifications

Professional Development

Print

Select	Id	Course Title	Begin Date	Completed Date	CEUs	Clock Hours	Verified	Delete
No records found								
1								

Add Professional Development

Certifications

Print

Select	Id	Certification Type	Clock Hours	CEUs	Effective Date	Expiration Date	Verified	Delete
No records found								
1								

Add Certification

Professional Registry Screen PR.4 - Associate Professional Profile with Employer and Track Work Experience

TCC Solutions - RFP30-23189 C...
Ascend
ascendst.e-tcc.com/ascendNC/profile

Ascend

Professional Profile

Training Agencies you are associated with

Career Level

Educational Achievements

Professional Development & Certifications

Grants & Scholarships

Work Experience

Work Experiences

Rows: 4

Print

Sort By

Filter

Select	Id: 51	Employer Name: Bright Horizons	Setting: Licensed Child Care	Start Date:	End Date:
Select	Id: 55	Employer Name: NELSON, CRYSTAL aka Chrysler's Little Angels	Setting: Licensed Child Care	Start Date:	End Date:
Select	Id: 108	Employer Name: Glenview REC	Setting: Licensed Child Care	Start Date:	End Date:
Select	Id: 52	Employer Name: Little Red Schoolhouse	Setting: Charter School	Start Date:	End Date:

Add

Notes

Update Password

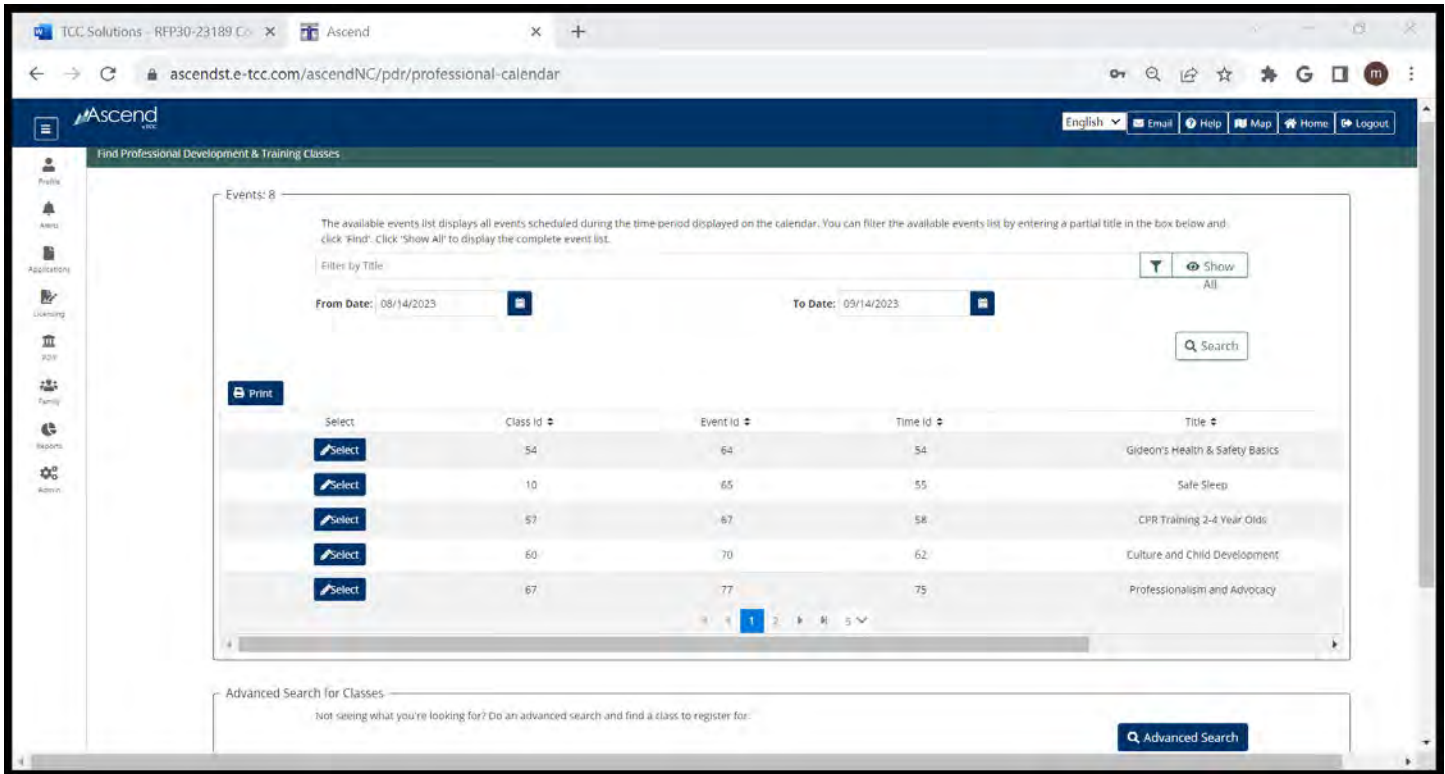
Ascend - TCC Software Solutions, 2023
Build: Development

Logged in as: michelle Thomas
Ascend ID: 123146

Time until logged out:
06/14/2023 4:58:46 PM

Ascend Professional Registry Screen PR.5 Search and Register for Training

Users may search for training and select to view details about each training. An advanced search may be done to further narrow the results, in needed. Once a training is selected, the user may select the ‘register’ button and receive a system generated pop up indicating successful registration.



The screenshot shows the 'Ascend' web application interface for finding professional development and training classes. The browser address bar shows 'ascendstc-tcc.com/ascendNC/pdr/professional-calendar'. The page title is 'Find Professional Development & Training Classes'. The interface includes a sidebar with navigation links (Profile, Alerts, Application, Licensing, PDR, Family, Reports, Admin) and a main content area. The main content area displays a list of events with filters for 'From Date' (08/14/2023) and 'To Date' (09/14/2023). A search bar is available for filtering by title. The table below lists the available events:

Select	Class Id	Event Id	Time Id	Title
Select	54	64	54	Gideon's Health & Safety Basics
Select	10	65	55	Safe Sleep
Select	57	67	58	CPR Training 2-4 Year Olds
Select	60	70	62	Culture and Child Development
Select	67	77	75	Professionalism and Advocacy

Below the table, there is an 'Advanced Search for Classes' section with a text input field and a 'Q Advanced Search' button. The text input field contains the placeholder text: 'Not seeing what you're looking for? Do an advanced search and find a class to register for:'.

ascendst.e-tcc.com/ascendNC/pdr/professional-calendar

Ascend

English Email Help Map Home Logout

Class Detail: Safe Sleep

Class ID: 10
Trainer ID: 2
Trainer: Trainer's R Us

Edit CCDBG Topics

☒ Select All

☒ Health and Safety Basics
☒ Child Development
☐ Child Abuse
☐ CPR and First Aid Training

* Class Title: Safe Sleep

* Course Code: ST101

Price: \$ 25.00

* Content Level: Intermediate

Higher Education CEUs: 0 Clock Hours: 1.99

Duration Hours: 4 Duration Minutes: 0

* Target Audience(s)

☐ Before/After School Age Program Staff
☒ Staff Working with 0-2 Year Olds
☒ Staff Working with 2-4 Year Olds
☒ Staff Working with 4-5 Year Olds
☐ Staff Working with K-3rd Graders
☐ Early Intervention/Special Education Staff
☒ Program Administrators
☐ Other

* Core Knowledge Area(s)

☐ ECE Level 1 Standards
☒ Child Growth and Development
☒ Health, Safety, and Nutrition
☐ Curriculum
☐ Inclusive Practices
☐ Learning Environments
☐ Observing, Documenting and Assessing to Support Young Children and Families
☐ Building Family and Community Relationship
☐ Diversity: Family, Language, Culture, and Society

ascendst.e-tcc.com/ascendNC/pdr/professional-calendar

Ascend

English Email Help Map Home Logout

Is this training always available?

☒ Yes
☐ No

Registered: 5 # Available: 45

Attendance Summary

[View Roster](#)

Attended: 1 # No Show: 0

Withdrawn/Canceled: 0

Trainer: Trainer's R Us

☐ Receive email notification when a participant registers

[+ Register for this Event](#)

Ascend Professional Registry Screen PR.6 Create Trainings and Manage Training Events

Approved trainers and organizations have a user-friendly way to create classes and manage training events. Trainers can track registrations, email participants, take attendance and generate a certificate of completion to be associated with each educator's professional profile. Printed certificates are also supported.

Class Detail

Class ID: 63882

Class Author:

Trainer ID: 1249

Trainer: Academic Excellence

Edit CCDBG Topics

Select All

☐ Health and Safety Basics

☐ Child Development

☐ Child Abuse

☐ CPR and First Aid Training

* Class Title:

Child Abuse and / or Neglect

* Course Code:

NONE

Price:

\$

* Content Level:

Higher Education CEUs:

0

Clock Hours:

2.5

Duration Hours:

2

Duration Minutes:

30

* Target Audience(s)

☐ Staff working with Infants and Toddlers Birth - 36 months

☐ Staff working with children 3-5

☐ Family Child Care Providers and Mixed age group

☐ Staff working with School-Age/Before/After Children 6-13 years

☐ Staff working with K - 3rd Graders

☐ Early Intervention/Special Education Staff

☐ Program Administrators

☐ Other

* Core Knowledge Area(s)

☐ Child Growth and Development

☐ Learning Environment and Curriculum

☐ Family and Community Relationships

☐ Child Assessment

☐ Professionalism and Leadership

☐ Program Organization and Management

☒ Child Wellness: Health, Safety, Nutrition and Physical Activities

☐ Teaching-Learning Interactions and Approaches

☐ Serving Diverse Populations

* Description:

Child Abuse and / or Neglect

* Training Outcomes:

What To Bring:

Special Instructions:

Prerequisite Courses:

Add/Remove Prerequisite Course Codes:

Type course code

** No prerequisites **

Cancel

Save

Delete

Class Notes

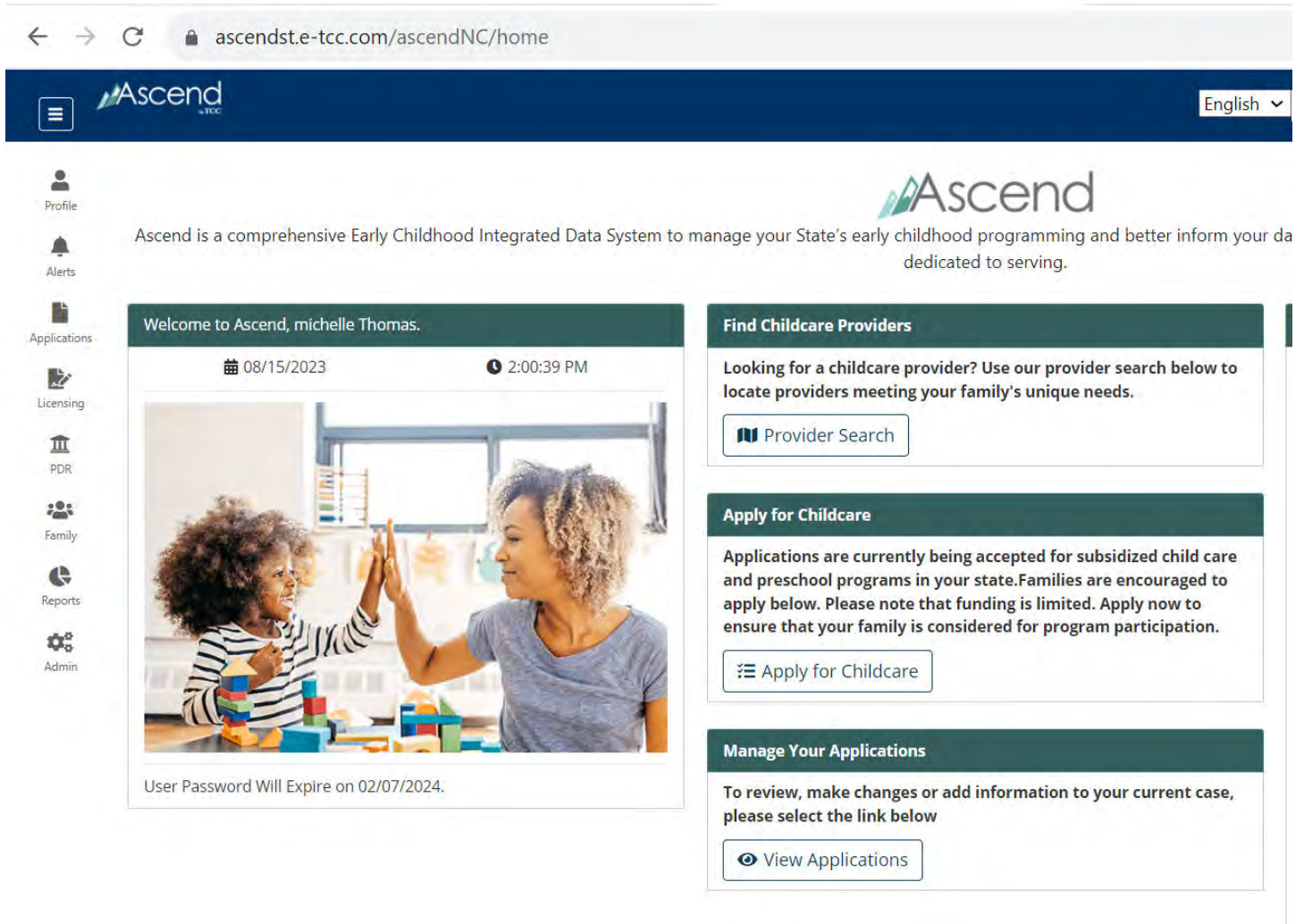
Class Events

Ascend Pre-K Management Screens

Below are key screens that demonstrate the robust nature of the Ascend PreK solution, including online family application and case management workflows, provider search and mapping, child placement, attendance, program budget management and wait list.

Ascend Pre-K Management Screen PK.1 Family Home Screen

Once a family registers for an Ascend account and logs in, they will see a friendly screen that allows them to initiate and complete an online application, view status of their application, make updates to their case (as allowable by State policy), and search for child care.



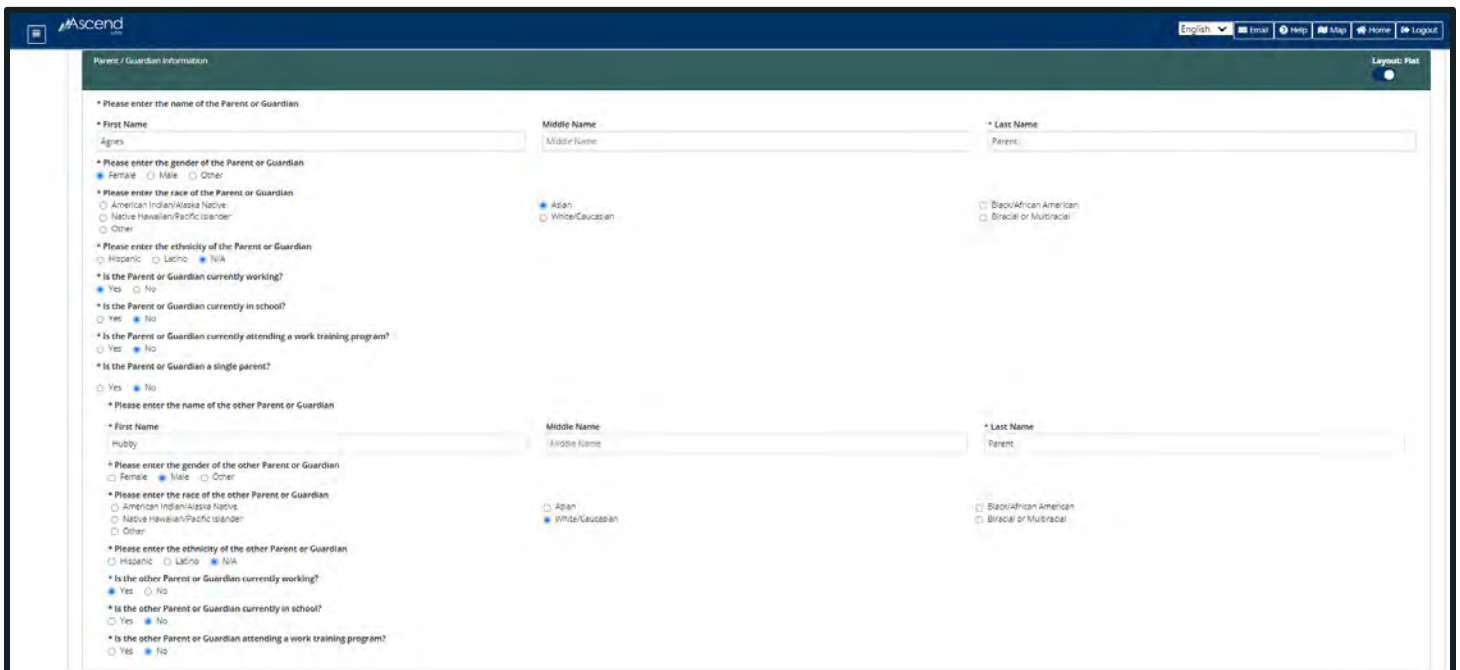
The screenshot displays the Ascend Pre-K Management Screen PK.1 Family Home Screen. The browser address bar shows the URL ascendst.e-tcc.com/ascendNC/home. The page features a dark blue header with the Ascend logo and a language dropdown set to English. A left sidebar contains navigation icons for Profile, Alerts, Applications, Licensing, PDR, Family, Reports, and Admin. The main content area includes a welcome message for Michelle Thomas, a date and time stamp (08/15/2023, 2:00:39 PM), and a photo of a woman and a young girl playing with blocks. A notification at the bottom of the photo states: "User Password Will Expire on 02/07/2024." On the right, three action cards are visible: "Find Childcare Providers" with a "Provider Search" button, "Apply for Childcare" with an "Apply for Childcare" button, and "Manage Your Applications" with a "View Applications" button.

Ascend Pre-K Management Screen PK.2 Online Family Application and Provider Search

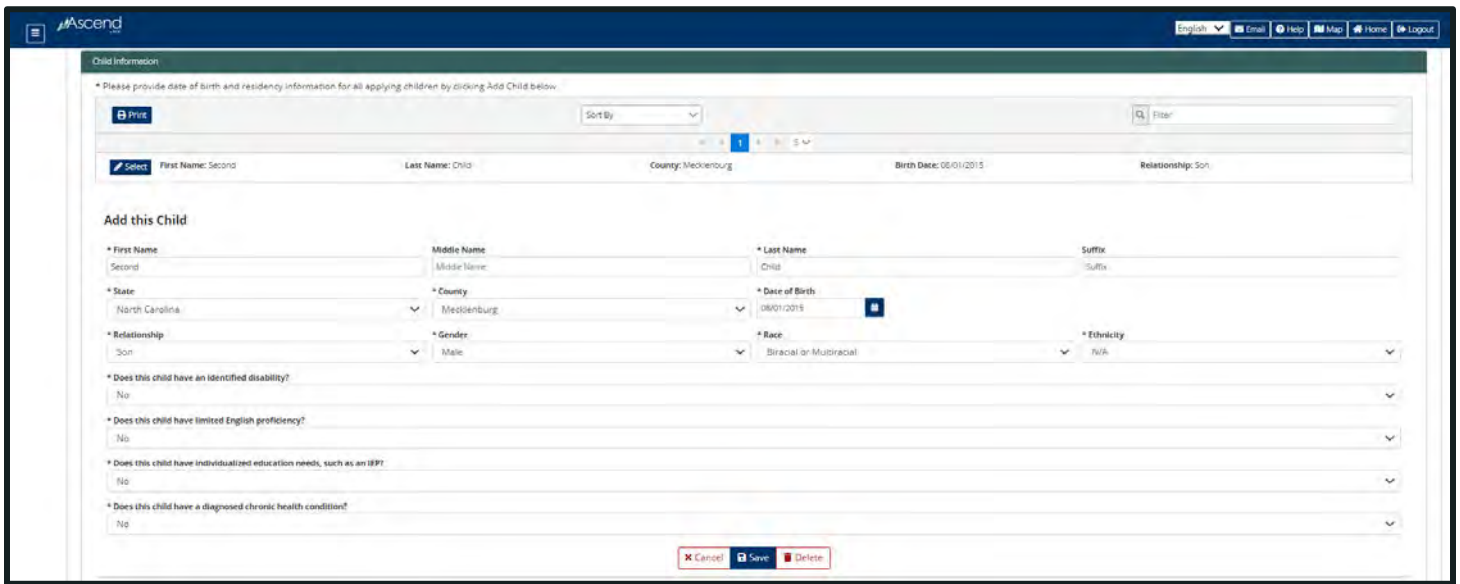
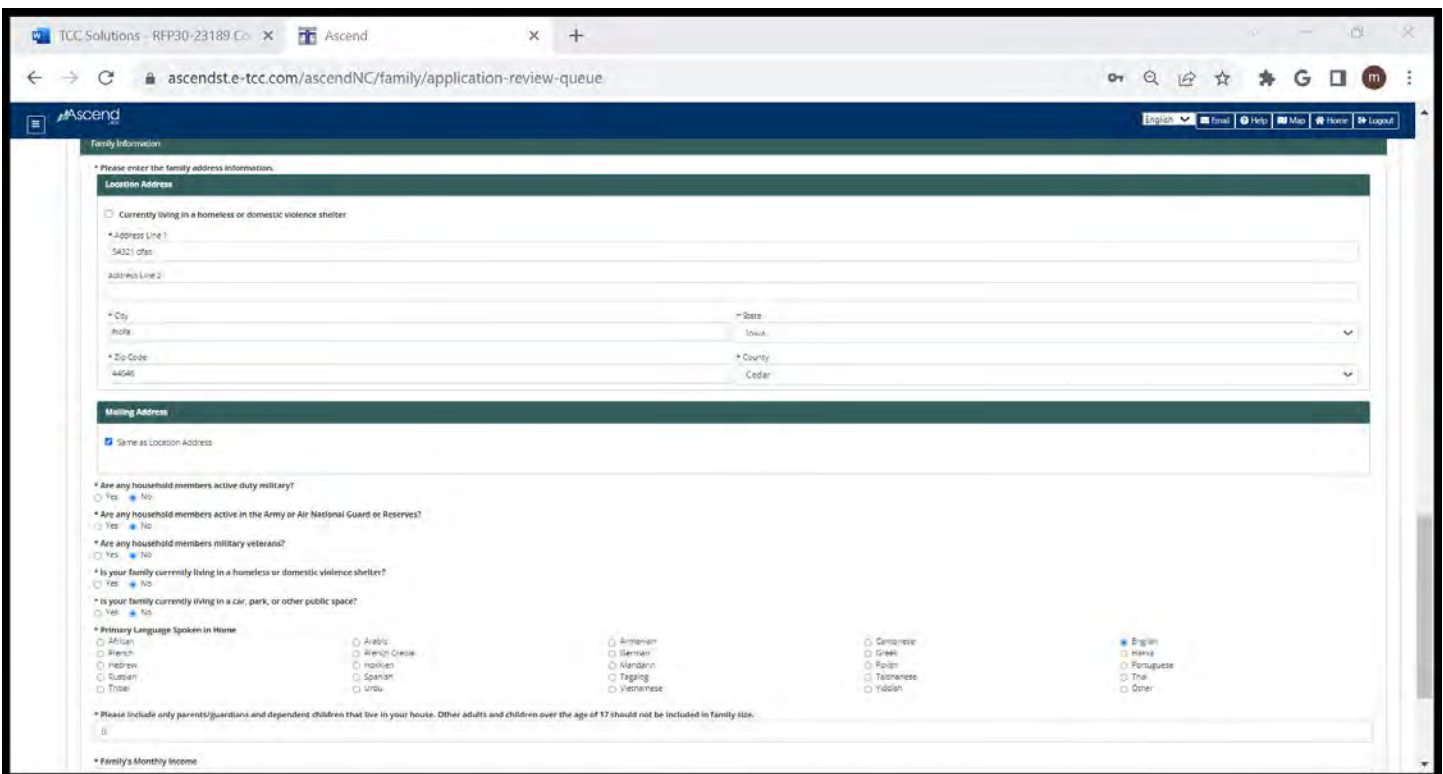
The screen below shows a family Pre-K application in the ‘flat file’ view. If preferred, the family may toggle to layout button on the top of the screen to see the application broken out into small chunks of information to be completed at a time. Families may save a partial application and return to complete it at another time.

Electronic documentation may be uploaded where required and securely stored in the ‘file cabinet’ to be reviewed and verified by authorized case managers/supervisors. To ensure case managers do not waste time reviewing incomplete applications, Ascend will not allow the application to be submitted until all required fields are completed.

For families that cannot or will not complete an online application, Ascend allows authorized users (e.g., case managers) to create an application on behalf of a family.



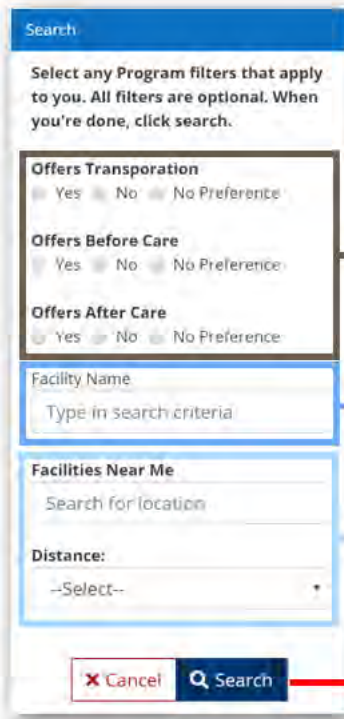
The screenshot shows the 'Parent / Guardian Information' section of the Ascend application. It contains two identical forms for entering information for a parent or guardian. The first form is for the primary parent/guardian, and the second is for a secondary parent/guardian. Each form includes fields for First Name, Middle Name, and Last Name, as well as radio buttons for Gender (Female, Male, Other), Race (American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Asian, White/Caucasian, Black/African American, Biracial or Multiracial), and Ethnicity (Hispanic, Latino, Hunk). There are also checkboxes for 'Is the Parent or Guardian currently working?', 'Is the Parent or Guardian currently in school?', and 'Is the Parent or Guardian currently attending a work training program?'. The 'Layout: Flat' button is visible in the top right corner.

Family Provider Search and Map Integration with NC Pre-K application

Ascend comes out of the box with our own child care search and map feature (shown below). Any family may search for child care from the Ascend landing page. An account is not needed to perform this search. Families who initiate the NC Pre-K program application process can also perform a child care search for eligible providers

and to identify their three preferred Pre-K programs. The family search and map feature are easily tailored to the State's desired search filters and criteria.

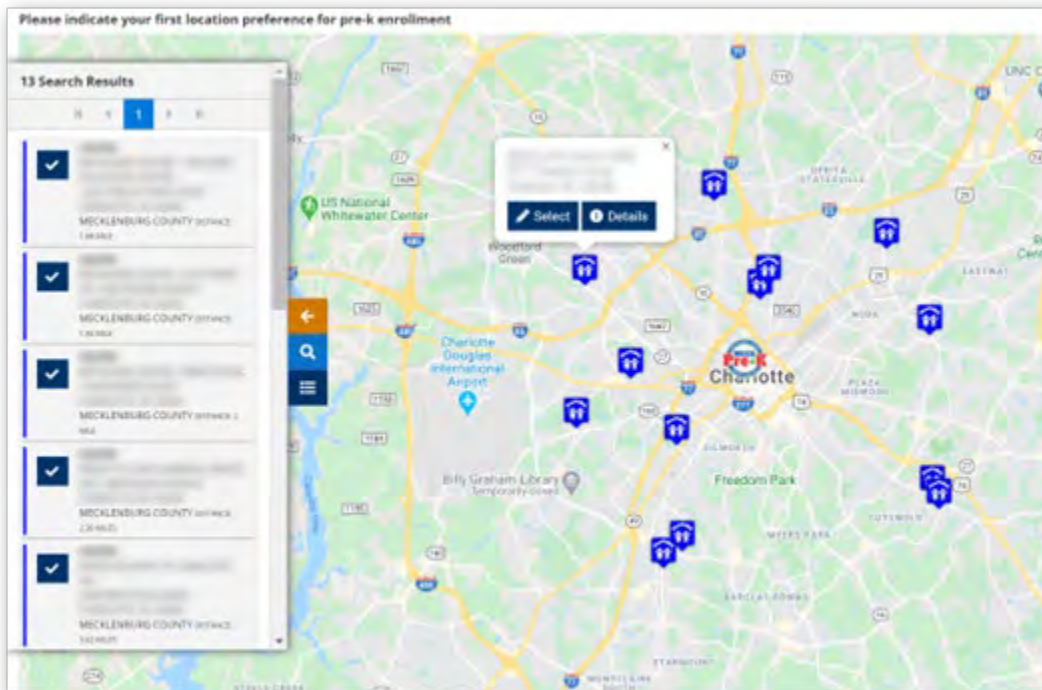


The screenshot shows a search interface with the following sections:

- Search** (header)
- Select any Program filters that apply to you. All filters are optional. When you're done, click search.**
- Offers Transportation** (Yes, No, No Preference)
- Offers Before Care** (Yes, No, No Preference)
- Offers After Care** (Yes, No, No Preference)
- Facility Name** (Type in search criteria)
- Facilities Near Me** (Search for location)
- Distance:** (--Select--)
- Buttons:** Cancel, Search

Annotations with arrows point to the following elements:

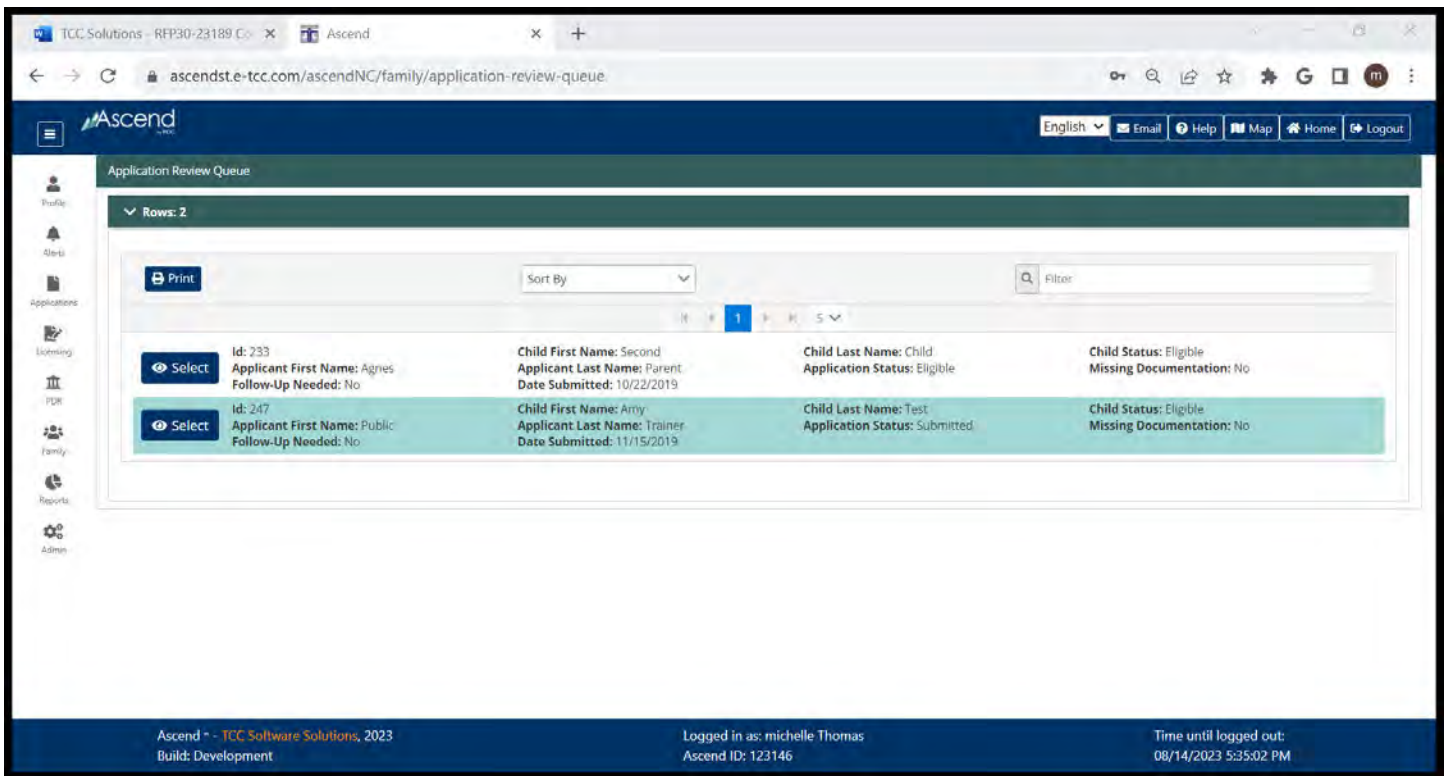
- Offers Transportation:** Select "Yes" to Offers Transportation to only see providers that offer transportation. Select "No Preference" to see all providers.
- Facility Name:** If you know the name of the provider you want to select, enter it here.
- Facilities Near Me:** Enter an address and select a distance to see all the providers around your work or home address.
- Search Button:** Once you have entered your desired search criteria, click the search button to see the results.



Ascend Pre-K Management Screen PK.3 Case Manager Application Queue

Once the family submits a NC Pre-K application, the workflow in Ascend sends the family application to the Application Review Queue where case managers may perform the next steps. In addition to the workflow that sends the applications to the queue, alerts will be displayed on the case managers dashboard to show how many applications are pending review. The case manager can also view the queue by clicking on their dashboard link. Case Managers may see families who meet criteria for priority enrollment. Priority applications, such as foster care, homeless, specific zip code, special needs, or exposure to domestic violence will have their application appear at the top of the queue and can also be assigned a 'flag' that readily identifies the family as a priority for available slots.

From this screen (below), the case manager can now click 'select' to open the application and begin the review, approval, and enrollment process.



The screenshot shows the 'Application Review Queue' interface in the Ascend system. The page has a dark blue header with the 'Ascend' logo and navigation links (English, Email, Help, Map, Home, Logout). A left sidebar contains icons for Profile, Alerts, Applications, Learning, PKR, Family, Reports, and Admin. The main content area displays a table of applications with columns for application details and status. The table has two rows of data, each with a 'Select' button. The footer shows the user is logged in as 'michelle Thomas' with ID '123146' and the time until logged out is '08/14/2023 5:35:02 PM'.

Id	Applicant First Name	Applicant Last Name	Child First Name	Child Last Name	Child Status	Application Status	Missing Documentation
233	Agnes	Parent	Second	Child	Eligible	Eligible	No
247	Public	Trainer	Arny	Test	Eligible	Submitted	No

Ascend Pre-K Management Screen PK.4 Enroll Children with Eligible Providers

Once an application is selected, the case manager will review the information and associated uploaded documents to determine application status (approved, denied, need more information, etc.). The case manager will view the preferred providers that the family has selected. The case manager will follow the State approved process to determine slots available and enroll the family/child with the provider that best meets their needs.

Child Placement

Select

First Name: Malaysia

Last Name: Grey

DOB: Feb 13, 2016

Age: 4

Child No: Malaysia

DOB: 2016

Child Race: Black/African American

Sex: Female

IEP: N

Ethnicity: Hispanic/Latino

View Eligible App

Household Income Percent of FPL:

Brigance Score:

Support Services:

Additional Services Needed: After School Care**

1st Preferred

Child Care Network #53 (I)

5017 South Boulevard

Charlotte, North Carolina 28217

Offers Transportation: Yes

Offers Before Care: Yes

Offers After Care: Yes

Presently Attending: Yes

Sibling Attending: Yes

Slots Available: 0/0

2nd Preferred

Smart Kids Child Development Center #9 (I)

13210 South Point Boulevard

Charlotte, North Carolina 28273

Offers Transportation: Yes

Offers Before Care: Yes

Offers After Care: Yes

Presently Attending: No

Sibling Attending: No

Slots Available: 0/0

3rd Preferred

Cadence Academy - Ballantyne (I)

14325 Ballantyne Meadows Drive

Charlotte, North Carolina 28277

Offers Transportation: No

Offers Before Care: Yes

Offers After Care: Yes

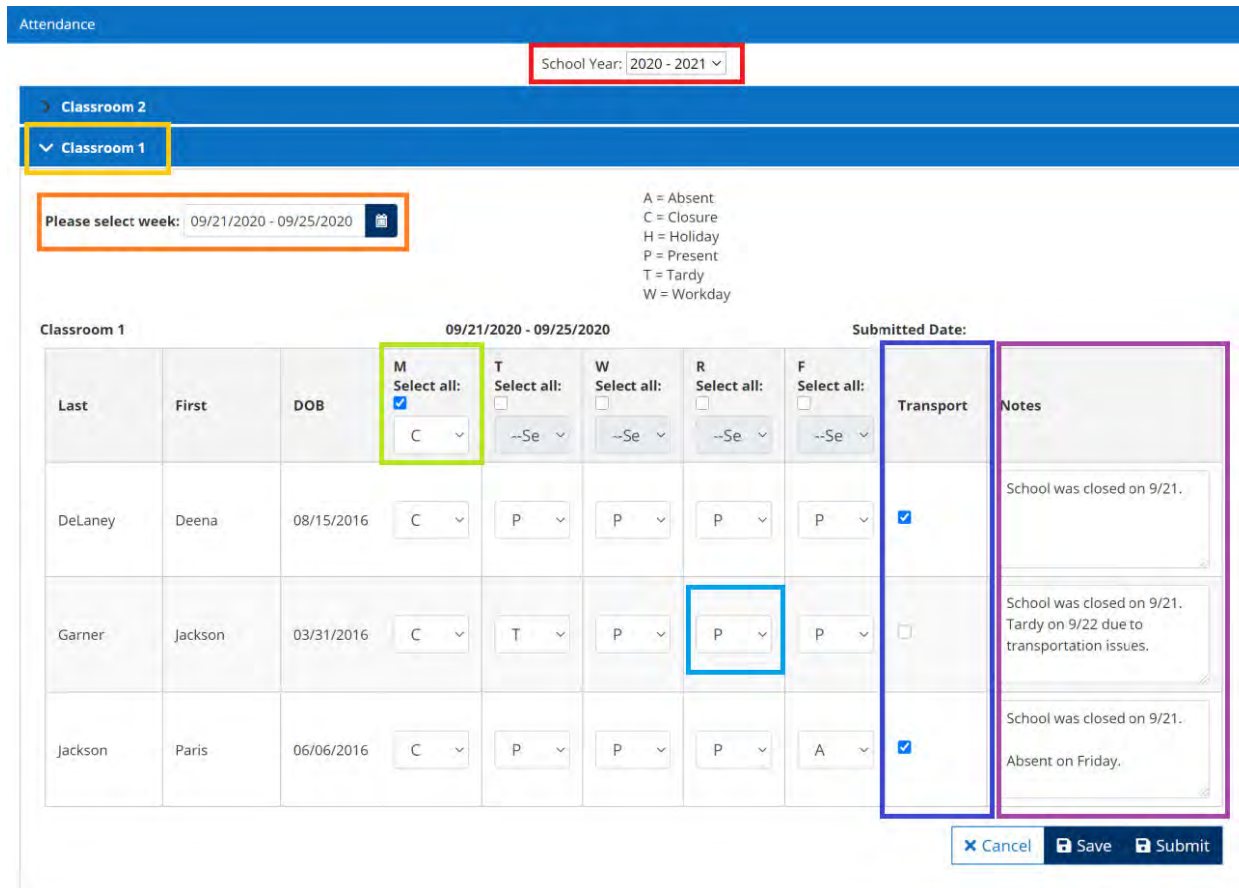
Presently Attending: No

Sibling Attending: No

Slots Available: 0/0

Ascend Pre-K Management Screen PK.5 Child Attendance Component

Ascend includes a child attendance component that works on any internet enabled-device -- meaning attendance can be entered by an approved user from a smart phone, tablet, laptop, or desktop.



School Year: 2020 - 2021

Classroom 2

Classroom 1

Please select week: 09/21/2020 - 09/25/2020

A = Absent
C = Closure
H = Holiday
P = Present
T = Tardy
W = Workday

Classroom 1			09/21/2020 - 09/25/2020					Submitted Date:	
Last	First	DOB	M Select all: <input checked="" type="checkbox"/> C	T Select all: <input type="checkbox"/> --Se	W Select all: <input type="checkbox"/> --Se	R Select all: <input type="checkbox"/> --Se	F Select all: <input type="checkbox"/> --Se	Transport	Notes
DeLaney	Deena	08/15/2016	C	P	P	P	P	<input checked="" type="checkbox"/>	School was closed on 9/21.
Garner	Jackson	03/31/2016	C	T	P	P	P	<input type="checkbox"/>	School was closed on 9/21. Tardy on 9/22 due to transportation issues.
Jackson	Paris	06/06/2016	C	P	P	P	A	<input checked="" type="checkbox"/>	School was closed on 9/21. Absent on Friday.

Cancel Save Submit

Manage Attendance in One Screen with Ascend

The Ascend screen displayed above allows an approved user to record attendance information. The Ascend attendance component can also track child participation status in transportation activities each day.

To record attendance, the user logs on to their account and follows these steps:

1. Select a school year, if desired. Defaults to current year.
2. Select the **Classroom**.
3. The week defaults to the current attendance week but can be changed to make updates to view historical data.
4. Click the **Select All** checkbox and select from the drop-down list immediately below to change the attendance for all students for the selected day.

5. Individual attendance data defaults to “Present” but can be changed via the drop-down list of state established attendance codes.
6. Click the **Transport** checkbox for any student who used the center’s transportation this week.
7. Enter any notes here.
8. **Save and Submit** when attendance entry is complete.
9. Once the provider is ready to invoice for services, Ascend auto-calculates the attendance for each child and generates an electronic invoice to be paid.

Reporting

Executive Dashboard Reporting

An Executive Dashboard is necessary for policy makers and other key stakeholders to quickly understand trends and adapt to meet the needs of providers and families/children. TCC approaches Executive Dashboard reporting at the beginning of the project. TCC’s project team works closely with clients to define the questions that need answered to better inform policy and management decisions. Further, TCC assists clients in defining metrics that are important to measuring success.

Once dashboard requirements are defined and report design is approved, TCC will use Microsoft Power BI or Tableau to develop a real time report summary that tells a visual story. Power BI and Tableau allow authorized users to drill down into the high-level information to see more details.

TCC’s experience with early childhood Executive Dashboards has shown that the State may wish to see the following information displayed in user friendly charts/graphs on an Executive Dashboard like the one below.





All examples can be filtered by a variety of data points, such as by county, zip code, provider type, licensing staff, etc.

Licensing Dashboard Report Examples:

- Number of providers by status/by type/by location.
- Number and status of complaints received per week.
- Number of overdue inspections.
- Number of new licenses granted or denied in the last week.
- Number of inspections due in the next 30/60/90 days.

Subsidy Dashboard Report Examples:

- Number of subsidy applications received.
- Number of subsidy applications approved, denied, pending.
- Number of subsidy recertifications due in the next 30/60/90 days.
- Number of children on the wait list, by county, zip code, etc.
- Number of CCDF eligible providers.

The example below demonstrates the interactive nature of Microsoft Power BI dashboard reporting. Users may filter and expand the data with the click of a button. Additionally, users may perform geographical analysis by clicking on areas (e.g., counties) and viewing immediate results.



All Pages of the Solicitation Document

All pages of the Solicitation Document are enclosed in Appendix B.



Draft Project Management Plan

TCC's Draft Project Management Plan is below.



PROJECT MANAGEMENT PLAN
STATE OF NORTH CAROLINA, DEPARTMENT OF HEALTH AND
HUMAN SERVICES
WORKFORCE REGISTRY AND NC PRE-K AND REGULATORY SYSTEM
REPLACEMENT

8/9/2023



e-tcc.com



317-625-2547



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740 East 52nd St., Ste. 7
Indianapolis, IN 46205



Connecting People with Productivity

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Consulting | Technology | Project Delivery

PROJECT BACKGROUND AND OBJECTIVES

The North Carolina Division of Child Development and Early Education (NCDEE) currently utilizes multiple software systems and various manual processes to administer their programs. The current operations systems in place make it difficult for reporting and result in time-consuming processes. Manual processes currently in place are cumbersome, and a cause for data concerns for NCDEE. The current software applications are outdated and need to be modernized and integrated into one solution.

The objective of this project is to fully integrate NCDEE business processes, manual workflows, and current software applications into one fully customizable solution.

1 – Business Processes – TCC will analyze NCDEE business processes to ensure user stories are created that can be fully integrated into an industry standard technological solution. User stories will contain all the requirements of the process, acceptance criteria and a testing strategy to ensure the process is fully covered for the business.

2 – Manual Workflows – TCC will analyze all manual workflows to ensure user stories are created to fully automate those workflows into the system. The objective of this process will be to eliminate any manual workflows that currently exist.

3 – Current Software Applications – TCC will work with partners to fully understand the current software in place. TCC will then work with NCDEE to determine what functionality to retain and what to enhance in the future system.

PROJECT SUCCESS CRITERIA AND CONTINGENCIES

Project success will be measured using PMI.org standards.

1 – On Time Delivery – TCC will manage the project to ensure all project deliverables are submitted in accordance with the project plan. On time delivery is essential to keep the project moving forward and according to the plans put in place. Change management will be important to manage the outcomes of deliverables and product delivery. TCC will ensure a change management process is defined and in place so that changes to the project plan can be documented and approved by NCDEE.

2 – Budget – TCC will manage the project's budget to ensure the funding put in place is utilized in a manner that keeps the project on track. Project metrics will be put into place, for example Earned Value Management, to ensure the project is on track, and within the specified budget put into place. The TCC Project Director will work with NCDEE on any budget concerns.

3 – Quality – TCC's testing division will ensure that product documented in user stories is implemented into the technical solution and abides by the acceptance criteria established during the analysis phase. Regression testing will also occur to ensure the solution works as specified and accomplishes the goals of NCDEE business partners. TCC also employs automated testing to ensure code does not break when new functionality is introduced.

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PROJECT ASSUMPTIONS AND CONSTRAINTS

Assumption	Constraint
1 TCC will have full access to NCDEE staff to ensure buy in from the business side is obligated to the project	Not having access to NCDEE staff may cause delays in delivery, miscommunication in the business processes and reduce the overall quality of the product
2 TCC will deliver Ascend and Expedite product as documented	Lack of documentation can cause quality concerns
3 Project Management will follow PMI.org standards	The project shall be managed based off of the Project Management Plan and the sub-plans included in that document

PROJECT SCOPE

The scope of this project is to deliver a comprehensive, highly configurable, and fully integrated Workforce Registry and PreK and Regulatory system solution. TCC plans to implement this system using the Ascend and Expedite platforms.

In Scope:

- 1 – Regulatory Modernization Business Specifications
- 2 – Workforce Registry Business Specifications
- 3 – NC Pre-K Specifications
- 4 – Subsidy Provider Compliance Business Specifications
- 5 – NCDEE Business and Technical Specifications
- 6 – Reports

Out of Scope:

- 1 – Enhancements to current operational software systems
- 2 – Requirement requests from agencies other than NCDEE
- 3 – Work requested that is outside of the approved requirements and user stories

PROJECT HIGH-LEVEL TIMELINE

The following high-level timeline was taken from the master project plan.

Milestone	Start Date	Finish Date
Kick-Off Meeting	11/23/2023	11/23/2023
Establish Project Governance	11/29/2023	12/8/2023
Analysis & Design	12/8/2023	2/9/2024



Regulatory Modernization Software Construction and Testing	11/1/2023	5/6/2024
Workforce Registry Registration & Workflow Construction	2/9/2024	8/12/2024
Pre-K Registration, Child Application & Workflow Construction	4/18/2024	9/20/2024
Subsidy Provider Compliance	11/1/2023	9/16/2024
Mobile Software Sprint – Expedite	2/9/2024	8/12/2024
Data Migration – Regulatory	2/12/2024	9/18/2024
Data Migration – Pre-K	7/10/2024	8/15/2024
Data Migration – WORKS Data	8/15/2024	9/18/2024
Training	7/30/2024	8/5/2024
User Acceptance Testing	8/6/2024	9/20/2024
Implementation	9/20/2024	9/30/2024

PROJECT DELIVERABLES

Project deliverables will be the responsibility of the TCC Project Manager. All deliverables will be submitted using TCC templates unless otherwise specified.

The following is a list of deliverables TCC will deliver according to the project plan dates and NCDEE approval:

- 1 – Kickoff Meeting
- 2 – Kickoff Meeting Report
- 3 – Executed Escrow Agreement
- 4 – Project Schedule
- 5 – Project Management Plan
- 6 – Project Staffing Plan
- 7 – Project Communication Plan and Matrix
- 8 – Project Risk and Issues Management Plan
- 9 – Project Risk Watch List Matrix
- 10 – Project Issues Log
- 11 – Software Quality Assurance Plan
- 12 – Project Change Management Plan
- 13 – Project Change Request Form
- 14 – Project Change Request Log
- 15 – Security Plan
- 16 – Technical Architecture Diagrams
- 17 – Configuration and Release Management Plan
- 18 – Training Plan
- 19 – Test Plan
- 20 – Deployment Plan
- 21 – GAP Analysis Document
- 22 – Solution Requirements Document
- 23 – Solution/Sprint Backlogs
- 24 – Use Case
- 25 – User Stories



- 26 – Requirements Traceability Matrix
- 27 – Data Model
- 28 – Data Dictionary
- 29 – Detailed Design Specifications Document
- 30 – Infrastructure Requirements
- 31 – Design Review Sessions/Design Sprint
- 32 – Test Cases
- 33 – Test Scripts
- 34 – Prepare & Demonstrate All Test Environments
- 35 – Unit Test Results Report
- 36 – System Test Results Report
- 37 – Regression Test Results Report
- 38 – Integration Test Results Report
- 39 – Accessibility Test Results Report
- 40 – Demonstration of Tested System
- 41 – General Backup and Recovery Plan
- 42 – Disaster Recovery Plan
- 43 – Performance Test Plan
- 44 – Performance Test Cases
- 45 – Performance Test Scripts
- 46 – Performance Test Readiness Report
- 47 – Performance Test Results Report
- 48 – Agency Approval of Performance Test
- 49 – Data Conversion and Migration Plan
- 50 – Data Map
- 51 – Data Conversion and Migration Software/Scripts
- 52 – Data Conversion and Migration Test Results Report
- 53 – Agency Acceptance of Converted and Migrated Data
- 54 – User Acceptance Test Plan
- 55 – UAT Test Cases and Test Scripts
- 56 – UAT Training Materials
- 57 – UAT Training
- 58 – UAT Results Report
- 59 – Agency Acceptance of the Tested Solution
- 60 – User Guided, Quick Reference Guides & Online Help Documentation
- 61 – Technical & System Administration Documentation
- 62 – Service Level Agreements
- 63 – Training Materials
- 64 – Training Delivery
- 65 – Operations and Maintenance Plan
- 66 – Release/Deployment Readiness Checklist
- 67 – Completed Readiness Checklist
- 68 – Operations and Maintenance Staffing Plan
- 69 – Production Validation Test Results Report
- 70 – Deployment UAT Results Report
- 71 – Agency Acceptance of Deployment UAT Results
- 72 – Stabilization Plan
- 73 – Agency Acceptance of the Stabilized Solution



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- 74 – Lessons Learned
- 75 – Project Status Meetings
- 76 – Project Status Reports
- 77 – Sprint Reports
- 78 – Operations and Maintenance Status Reports
- 79 – Transition Plan
- 80 – Project Peer Review
- 81 – Infrastructure Configuration Specifications
- 82 – Recommendation for Technical Training for State Support Personnel
- 83 – Configured State Technical Environments
- 84 – Technical Skills Transfer
- 85 – Base Product and Base Product Installation Instructions
- 86 – Assist State to Install Base Product

PROJECT MANAGEMENT METHODOLOGY AND APPROACH

TCC has extensive experience in implementing complex data management systems using a successful combination of Project Management Institute (PMI) standards, Agile techniques, and Software Development Life Cycle (SDLC) principles. In this section, we discuss the importance of stakeholder engagement throughout the project, and then provide information about the project methodologies TCC uses in every early childhood project.

PMI Standards





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TCC applies principles of Project Management Institute (PMI) Standards and other proven methodologies to ensure successful project implementation. Because of our long history of providing maintenance and support of public and private sector IT systems, TCC understands the dynamics of complex systems, and how the involvement of stakeholders can impact and support a project. As such, we utilize our breadth of knowledge to assist our clients in identifying and managing risks associated with all areas of service management. To identify and mitigate risk to the project, TCC uses a results-driven approach and the utilization of PMI Standards and Methodology. Being knowledgeable in project and product life cycles, TCC project managers are responsible for the development and implementation of project plans including project charters and/or statements of work (SOWs); work breakdown structures; project schedules and significant milestones; resource planning; assumptions and constraint list and risk identification and mitigation strategies.

Agile Techniques

Agile processes focus on the repetition of abbreviated work cycles, known as sprints, TCC remains adaptable and responsive to the needs of our clients during every aspect of data system development. One of the benefits of utilizing the Agile development methodology is the significant involvement of client stakeholders who provide feedback during each sprint, resulting in a working increment of the product delivered according to customer specifications. By using principles of Agile, TCC is confident that the following principles are adhered to during the development lifecycle of its projects, resulting in high levels of customer satisfaction:

Principles of Agile

- Measurable progress during all phases of the lifecycle
- Increased responsiveness to customer feedback
- Self-organized teams
- Effective cooperation between the customer and development team
- Adaptability





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TCC's process involves working with stakeholders to determine the necessary functionality of the system and organizing the activities which create this functionality. Below we describe the process of working with stakeholders to breakdown the business requirements into smaller, manageable chunks that are defined in user stories, developed, and demonstrated to stakeholders in the iterative sprint cycle process.



Terminology	Description
Epic	An Epic is a high-level business requirement, defining a piece of functionality that the user needs. The functionality in an Epic is loosely defined because it can be broken into lower levels of functionality called Features. It does not contain the details that go into a user story. These details are defined in the user stories, which are part of each feature. An epic usually takes more than one iteration to complete.
Feature	A feature is a chunk of functionality that delivers business value, and either stands-alone or is contained within an Epic. A feature must contain at least two user stories as child work items. Features do not contain details for development; these are contained in the child user stories.
User Story	A user story is a tool used in Agile software development to capture a description of a software feature from an end-user perspective. The user story describes the type of user, what they want and why. A user story is a description of a requirement. A User Story is a well-defined work item that



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	is specific, measurable, achievable, relevant, and time bound. A User story has well defined acceptance criteria that will be used by the developer for unit testing and the system tester for writing and passing test scripts.
Task	Sprint tasks are used by teams to decompose user stories or product backlog items (PBIs) at the sprint planning meeting to a more granular level. In scrum, planning and estimates become more detailed over time. At a high level, a project may start as epics or features, which are then broken down into user stories. Tasks are used to break down user stories even further. Tasks are the smallest unit used in scrum to track work. A task should be completed by one person on the team, though the team may choose to pair up when doing the work.
Bug	A bug is introduced into the software as the result of an error. It is an anomaly in the software that may cause it to behave incorrectly, and not according to the User Story specification. A user story is not completed until all bugs are fixed.

Development Occurs in Iteration

The phase for the actual development activity is called an iteration. An iteration is a collection of sprints. Each project may have a different number of sprints that make up an iteration. This allows the team to have a broader vision of the project.

Iterations support these requirements:

- Define sprints Scrum teams use to plan and execute their sprints.
- Set up more complex multi-release and sprint cycles.
- Filter queries based on sprints, milestones, or cycle time for your project.
- Support future work that you are not ready to assign to a target release cycle.

Prior to beginning work, the project team meets for Iteration Planning, which typically lasts for two days. The capacity for the iteration is determined based on staff availability and time-off requests. User stories are prioritized for the iteration by the product owner. The team talks through all prioritized user stories and estimates story points based on complexity. The team also estimates the task hours for each user story to determine what can realistically be completed in each iteration based on capacity. Any user stories that cannot be completed in the current iteration will be placed into the backlog.

Once the project team completes Iteration Planning, stakeholders are informed of the next set of user stories for development and schedule a stakeholder sprint demo to review the development progress of those items. Each project will have multiple iterations until each user story is complete and fully functional.

Minimum Viable Product (MVP)

TCC utilizes the Minimum Viable Product (MVP) methodology in conjunction with our Agile approach. A minimum viable product is a product with just enough features to satisfy a subset of possible customers such as early adapters, and to provide feedback for future development.



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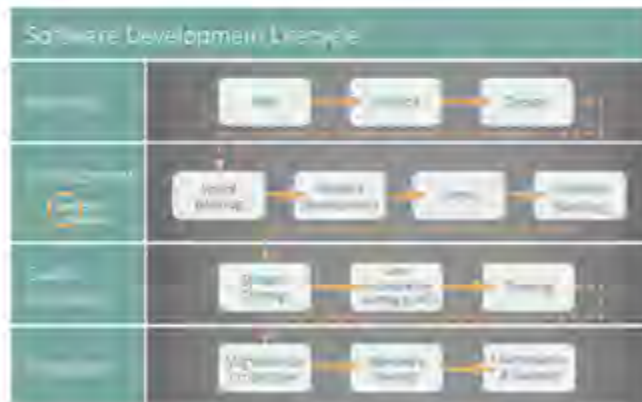
Gathering information from an MVP is often less expensive than developing a product with a full set of features, which increases costs and risk if the product fails due to incorrect assumptions.

Benefits of utilizing the MVP approach include:

- Stakeholder involvement to prioritize product features and functionality.
- Ability to test a product with minimal resources.
- Accelerated learning on the part of developers.
- Reduce wasted development hours.
- Get the product to early customers as quickly as possible.

Software Development Lifecycle

Below is a depiction of the four stages of Software Development Lifecycle (SDLC). TCC leverages and integrates some of the iterative processes into the SDLC. Combining Agile and SDLC methodologies ensures continuous and authentic client and stakeholder engagement. TCC works closely with our customers to identify and engage stakeholder groups in each step of the SDLC. Engagement does not stop after planning and requirements. We do not "go dark" after requirements are completed and then resume client engagement after development and testing are completed. Our processes ensure that stakeholders are involved throughout the entire SDLC approach, including development and testing.





ENTRANCE AND EXIT CRITERIA FOR SPECIFIC PROJECT SPRINT CYCLES/MODULES/MILESTONES

TCC will utilize an Agile SCRUM process to deliver software product for each sprint. The entrance criteria for each sprint will be a Release Plan, which contains the user stories and acceptance criteria for the product to be delivered. The Release Package will be the deliverable to close out the sprint. The Release Package will contain the user stories that were delivered and testing results of the sprint. The Release Package is intended to be a checklist for each user story that will be shown in the sprint demo.

STATUS REPORTING REQUIREMENTS AND MECHANISMS, INCLUDING UPDATE OF VENDOR PROJECT SCHEDULE PROGRESS

Project status meetings will take place bi-weekly, or as needed to discuss status and plans with all team members and project stakeholders when requested. TCC will produce the meeting agenda and notes for project status meetings using a standard template that captures discussion items, action items and risks. The meeting agenda will be sent 2 days prior to the project status meeting. Meeting notes will be produced 2 days after the project status meeting.

Weekly project status reports will be produced by TCC. The status report will contain the following information:

1. Overall completion status of the Project in terms of the Agency - approved Project Management Plan and Project Schedule.
2. Status of each pending Deliverable including, but not limited to, any changes to the time, quantity, or quality of that Deliverable.
3. Accomplishments during the reporting period.
4. Problems encountered and proposed/actual resolutions.
5. Work to be accomplished during the next reporting period.
6. Status of existing issue resolution and risk management assigned, as well as new risks and issues to be addressed, including contractual.
7. Quality Assurance status.
8. Change Request status.
9. Identification of schedule slippage and strategy for resolution.
10. Agency resources required for activities during the next time period; and
11. Resource allocation percentages including planned versus actual by Project Sprint Cycles/Modules/Milestones.

The TCC Project Manager will manage the project schedule. Weekly updates will be communicated during the project status meeting. Any changes to the baseline project schedule will be managed through the change control process and documented on the change request log.





Control – Maintain the gains and mature the process over time



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4 – Extract a full backup of the Agency's confidential information/State data collected, stored and maintained by the technical solution in an agreed usable format.

5 – Upon request of the Agency, destroy or purge any confidential information from all service provider databases, electronic files or paper files.

6 – Continue to comply with all data security sections of the contract after termination or expiration

THE ORGANIZATIONAL INFORMATION, INCLUDING ORGANIZATIONAL CHART THAT REFLECTS ROLES AND RESPONSIBILITIES FOR VENDOR AND SUBCONTRACTORS (IF APPLICABLE)

Job Title	Key Responsibilities
Project Director	<ul style="list-style-type: none"> Ensure that client is satisfied with project progress and outcomes. Act as a point of client escalation for client leadership and executive sponsor.
Project Manager	<ul style="list-style-type: none"> Oversight of project scope, goals, and resources. Track and report project timelines, tasks, deliverables, and risks. Implement communication protocols that support the overall project.
Business Analyst	<ul style="list-style-type: none"> Work closely with client stakeholders to define requirements of the system. Prepare functional design and business requirements documents for client approval.
Subject Matter Expert	<ul style="list-style-type: none"> Contribute expertise around national trends and best practices. Act as a liaison between the client staff and technical team. Act as escalation point for the Client.
Software Developers	<ul style="list-style-type: none"> Configure and code the product to client requirements.
Database Administrator	<ul style="list-style-type: none"> Develop API's and required System Interfaces Manage data conversion tasks. Manage and monitor infrastructure environment. Optimize the Database, Performance Tuning



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Quality Assurance/Testers	<ul style="list-style-type: none"> Thoroughly test the product to ensure that it meets client requirements. <u>Communicate</u> defects. Support final user acceptance testing process.
Trainer	<ul style="list-style-type: none"> Develop a training plan for end users of the product. Facilitate training for end users.
Help Desk	<ul style="list-style-type: none"> Support End Users with questions, training, etc..

KNOWLEDGE TRANSFER STRATEGY

TCC utilizes a knowledge transfer process to ensure that during a time of transition amongst the team tasks, processes and operational objectives are still met. The TCC Project Manager will be responsible for the knowledge transfer process and will be documented in the transition plan template.

Transition Plan of (NAME) - (Department) - (DATE)

Task/Current Assignments and Responsibilities	Target Completion Date	Required to Transition	Transition To	Knowledge Transfer Begin Date	Knowledge Transfer End Date	Transfer of tasks is completed and institutionalized	Comments
1.							
2.							
3.							

DOCUMENTATION DELIVERABLE AND RECORD MANAGEMENT APPROACH

TCC uses Microsoft Teams for documentation retention. MS Teams allows all members of the project to have access to documentation. The Project Manager and Business Analysts will have control of the MS Teams site. NCDEE Agency staff can be added to the Teams channel so that they have access to documentation.

TCC will use docusign to submit deliverables for signature. This tool allows for both vendor and Agency to sign and return documents with ease. Signed deliverables will then be stored on the MS Teams files site.

Draft Project Schedule

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
1	North Carolina Registry & Pre-K	11002 hrs	Wed 11/1/23	Tue 2/20/29		
2	Implementation Phase	1838 hrs	Wed 11/1/23	Mon 9/30/24		
3	Project Initiation and Analysis & Design	1040 hrs	Wed 11/1/23	Wed 5/8/24		
4	Project Initiation	1032 hrs	Wed 11/1/23	Tue 5/7/24		
5	Receive Notification of Contract Execution	2 hrs	Wed 11/1/23	Wed 11/1/23		PM,DCDEE
6	Identify Main DCDEE Contact	2 hrs	Wed 11/1/23	Wed 11/1/23	5	PM
7	Communicate with DCDEE Contact about Kick-Off Meeting Dates	4 hrs	Wed 11/1/23	Wed 11/1/23	6	PM,DCDEE
8	Finalize SLA	4 hrs	Wed 11/1/23	Wed 11/1/23	6	PM,DCDEE
9						
10	Prepare for Kick-Off Meeting	28 hrs	Thu 11/2/23	Tue 11/7/23		
11	Identify DCDEE Resources to Attend Meeting & Their Roles	2 hrs	Thu 11/2/23	Thu 11/2/23	7	PM,DCDEE
12	Send DCDEE Request for Information Required Prior to Meeting	4 hrs	Thu 11/2/23	Thu 11/2/23	11	PM,BA 1,TL 1,SME
13	Schedule the Meeting	2 hrs	Thu 11/2/23	Thu 11/2/23	12	PM,DCDEE
14	Review Requested Information sent by DCDEE	8 hrs	Fri 11/3/23	Fri 11/3/23	13	BA 1,TL 1,PM,SME
15	Prepare Agenda and Meeting Information Package	8 hrs	Mon 11/6/23	Mon 11/6/23	14	PM,BA 1,TL 1,SME
16	Identify Equipment Needed for the Meeting	2 hrs	Tue 11/7/23	Tue 11/7/23	15	PM,TL 1
17	Make Travel Arrangements	2 hrs	Tue 11/7/23	Tue 11/7/23	16	PM
18						
19	Conduct Kick-Off Meeting	62 hrs	Tue 11/7/23	Fri 11/17/23		
20	Identify Resources & Responsibilities	2 hrs	Tue 11/7/23	Tue 11/7/23	17	PM,BA 1,TL 1,SME,DCDEE
21	Define Scope of Project	6 hrs	Tue 11/7/23	Wed 11/8/23	20	PM,BA 1,TL 1,SME,DCDEE
22	Define Project Goals	2 hrs	Wed 11/8/23	Wed 11/8/23	21	PM,BA 1,TL 1,SME,DCDEE
23	Define Requirements	32 hrs	Wed 11/8/23	Tue 11/14/23	22	PM,BA 1,TL 1,SME,DCDEE
24	Define Project Constraints	2 hrs	Tue 11/14/23	Tue 11/14/23	23	PM,BA 1,TL 1,SME,DCDEE
25	Define Project Assumptions	2 hrs	Wed 11/15/23	Wed 11/15/23	24	PM,BA 1,TL 1,SME,DCDEE
26	Define Project Risks	2 hrs	Wed 11/15/23	Wed 11/15/23	25	PM,BA 1,TL 1,SME,DCDEE
27	Define Interfaces	4 hrs	Wed 11/15/23	Wed 11/15/23	26	PM,BA 1,TL 1,SME,DCDEE
28	Define Data to be Converted	4 hrs	Thu 11/16/23	Thu 11/16/23	27	PM,BA 1,TL 1,SME,DCDEE
29	Define Project Status Reports & Frequency	2 hrs	Thu 11/16/23	Thu 11/16/23	28	PM,BA 1,TL 1,SME,DCDEE
30	Review	2 hrs	Thu 11/16/23	Thu 11/16/23	29	PM,BA 1,TL 1,SME,DCDEE
31	Travel	2 hrs	Fri 11/17/23	Fri 11/17/23	30	PM,BA 1,TL 1,SME
32						
33	Kick-Off Meeting Deliverables	28 hrs	Fri 11/17/23	Wed 11/22/23		
34	Notes from the Kick-Off Meeting	16 hrs	Fri 11/17/23	Tue 11/21/23	31	BA 1,PM,SME
35	Provide Draft Project Schedule	8 hrs	Tue 11/21/23	Wed 11/22/23	34	PM
36	Send to DCDEE for Approval	2 hrs	Wed 11/22/23	Wed 11/22/23	35	PM,DCDEE
37	Obtain Sign-off From DCDEE To Proceed	2 hrs	Wed 11/22/23	Wed 11/22/23	36	PM,DCDEE
38						
39	Establish Project Governance	164 hrs	Wed 11/1/23	Fri 12/1/23		
40	Security Plan	80 hrs	Wed 11/1/23	Wed 11/15/23	6	NOG

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
41	Communication Plan	6 hrs	Wed 11/22/23	Mon 11/27/23	37	PM
42	Risk Management Plan	6 hrs	Mon 11/27/23	Tue 11/28/23	41	PM
43	Change Management Plan	6 hrs	Tue 11/28/23	Tue 11/28/23	42	PM
44	Issue Management Plan	6 hrs	Wed 11/29/23	Wed 11/29/23	43	PM
45	Quality Assurance Plan	6 hrs	Wed 11/29/23	Thu 11/30/23	44	PM
46	Configuration and Release Management Plan	6 hrs	Thu 11/30/23	Fri 12/1/23	45	PM
47	Provide Final Project Schedule	6 hrs	Fri 12/1/23	Fri 12/1/23	46	PM
48	Provide Escrow Agreement	6 hrs	Wed 11/29/23	Thu 11/30/23	44	PM
49	End Project Initiation	0 hrs	Fri 12/1/23	Fri 12/1/23	47	
50						
51	Establish Infrastructure & Technical Specifications	948 hrs	Wed 11/15/23	Tue 5/7/24		
52	Define Infrastructure Requirements	16 hrs	Wed 11/15/23	Fri 11/17/23	40	NOG
53	Define Infrastructure Configuration Requirements	16 hrs	Fri 11/17/23	Tue 11/21/23	52	NOG
54	Identify Configured State Technical Requirements	16 hrs	Tue 11/21/23	Mon 11/27/23	53	NOG
55	Create Technical Architecture Diagrams (TAD)	40 hrs	Mon 11/27/23	Mon 12/4/23	54	NOG
56	Create General Backup & Recovery Plan	40 hrs	Mon 12/4/23	Mon 12/11/23	55	NOG
57	Create Disaster Recovery Plan	40 hrs	Mon 12/11/23	Mon 12/18/23	56	NOG
58	Update Disaster Recovery Plan After 6 Months	40 hrs	Wed 5/1/24	Tue 5/7/24		NOG
59						
60	Analysis & Design	872 hrs	Mon 12/4/23	Wed 5/8/24		
61	System Analysis	872 hrs	Mon 12/4/23	Wed 5/8/24		
62	Document DCDEE Business Rules	40 hrs	Mon 12/4/23	Fri 12/8/23	49	BA 1,DCDEE
63	Document and Verify the Business Requirements	40 hrs	Mon 12/11/23	Fri 12/15/23	62	BA 1,DCDEE
64	Create Gap Analysis	40 hrs	Mon 12/18/23	Tue 12/26/23	63	BA 1
65	Create the Solution Requirements Document	40 hrs	Wed 12/27/23	Wed 1/3/24	64	BA 1
66	Document the Use Cases	40 hrs	Thu 1/4/24	Wed 1/10/24	65	BA 1
67	Create the Requirements Traceability Matrix	40 hrs	Thu 1/11/24	Thu 1/18/24	66	BA 1
68	Obtain Customer Sign-off	2 hrs	Fri 1/19/24	Fri 1/19/24	67	PM,DCDEE
69	Update Gap Analysis after 6 Months	40 hrs	Thu 5/2/24	Wed 5/8/24		BA 1
70						
71	System Design	122 hrs	Fri 1/19/24	Fri 2/9/24		
72	Create Functional Design	40 hrs	Fri 1/19/24	Fri 1/26/24	68	PM,TL 1,BA 1,SME
73	Update Data Model	40 hrs	Fri 1/26/24	Fri 2/2/24	72	DBA
74	Update Data Dictionary	40 hrs	Fri 2/2/24	Fri 2/9/24	73	DBA
75	Design the Reports	40 hrs	Fri 1/26/24	Fri 2/2/24	72	BA 1
76	Design the Interfaces	40 hrs	Fri 1/26/24	Fri 2/2/24	72	TL 2
77	Create the Detailed Design Specification Document	40 hrs	Fri 2/2/24	Fri 2/9/24	76	TL 2
78	Obtain Customer Sign-off	2 hrs	Fri 2/9/24	Fri 2/9/24	77	PM,DCDEE
79						
80	Quality Assurance	138 hrs	Fri 1/19/24	Tue 2/13/24		
81	Create Test Plan Strategy for the Entire Project	120 hrs	Fri 1/19/24	Fri 2/9/24	68	QAM
82	Prepare & Demonstrate All Test Environments	16 hrs	Fri 2/9/24	Tue 2/13/24	81	QAM,NOG

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
83	Obtain Customer Sign-off	2 hrs	Tue 2/13/24	Tue 2/13/24	82	QAM,DCDEE
84						
85	Regulatory Modernization	658 hrs	Thu 1/11/24	Tue 5/7/24		
86	Regulatory Modernization Software Construction & Testing	658 hrs	Thu 1/11/24	Tue 5/7/24		
87	Ensure Non-Prod Regions are Operational	8 hrs	Fri 1/19/24	Mon 1/22/24	68	NE
88						
89	License & Compliance Construction	266 hrs	Thu 1/11/24	Wed 2/28/24		
90	Create User Stories	64 hrs	Thu 1/11/24	Tue 1/23/24	66	BA 1
91	Update the Requirements Traceability Matrix	8 hrs	Wed 1/24/24	Wed 1/24/24	90	BA 1
92	Review Functional Requirements	4 hrs	Fri 2/9/24	Fri 2/9/24	77	PM,TL 1
93	Assign Functions to Development Staff	4 hrs	Fri 2/9/24	Mon 2/12/24	92	PM,TL 1
94	Build/Modify Software Components	64 hrs	Mon 2/12/24	Thu 2/22/24	93	SE 1
95	Build/Modify SQL Components	16 hrs	Thu 2/22/24	Mon 2/26/24	94	SE 1
96	Unit Test the Software & SQL Components	16 hrs	Mon 2/26/24	Wed 2/28/24	95	SE 1
97						
98	License & Compliance System Testing	330 hrs	Fri 2/9/24	Mon 4/8/24		
99	Review Test Plan	8 hrs	Fri 2/9/24	Mon 2/12/24	92	QA 1
100	Identify Resources	2 hrs	Mon 2/12/24	Mon 2/12/24	99	QA 1
101	Identify Functions to be Tested	4 hrs	Tue 2/13/24	Tue 2/13/24	100	PM,QA 1
102	Create Test Scripts	16 hrs	Tue 2/13/24	Thu 2/15/24	101	QA 1
103	Perform System Testing	24 hrs	Wed 2/28/24	Mon 3/4/24	96,102	QA 1
104	Modify Software Components	8 hrs	Mon 3/4/24	Tue 3/5/24	103	SE 1
105	Modify SQL Components	4 hrs	Tue 3/5/24	Tue 3/5/24	104	SE 1
106	Unit Test the Software Components	4 hrs	Tue 3/5/24	Wed 3/6/24	105	SE 1
107	Perform System & Regression Testing	8 hrs	Wed 3/6/24	Thu 3/7/24	106	QA 1
108	Create System Test Results Report	8 hrs	Thu 3/7/24	Fri 3/8/24	107	QAM
109	Create Regression Test Reports	8 hrs	Fri 3/8/24	Mon 3/11/24	108	QAM
110	Deploy to User Acceptance Testing Environment	2 hrs	Fri 4/5/24	Fri 4/5/24	107	SE 1
111	Product Demonstration of Tested System to DCDEE	4 hrs	Fri 4/5/24	Fri 4/5/24	110	PM,TL 1,BA 1
112	Add Feedback to Solution Backlog	8 hrs	Mon 4/8/24	Mon 4/8/24	111	PM
113						
114	Provider Portal & Complaints Construction	410 hrs	Wed 1/24/24	Thu 4/4/24		
115	Create User Stories	64 hrs	Wed 1/24/24	Fri 2/2/24	90	BA 1
116	Update the Requirements Traceability Matrix	8 hrs	Mon 2/5/24	Mon 2/5/24	115	BA 1
117	Review Functional Requirements	4 hrs	Wed 3/6/24	Wed 3/6/24	106	TL 1
118	Assign Functions to Development Staff	4 hrs	Wed 3/6/24	Thu 3/7/24	117	TL 1
119	Build/Modify Software Components	64 hrs	Wed 3/13/24	Mon 3/25/24	118	SE 1
120	Build/Modify SQL Components	16 hrs	Wed 3/27/24	Fri 3/29/24	119	SE 1
121	Unit Test the Software & SQL Components	16 hrs	Tue 4/2/24	Thu 4/4/24	120	SE 1
122						
123	Provider Portal & Complaints System Testing	94 hrs	Thu 4/4/24	Fri 4/19/24		
124	Review Test Plan	8 hrs	Thu 4/4/24	Fri 4/5/24	121,166	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
125	Identify Resources	2 hrs	Fri 4/5/24	Fri 4/5/24	124	QA 1
126	Identify Functions to be Tested	4 hrs	Fri 4/5/24	Fri 4/5/24	125	QA 1
127	Create Test Scripts	16 hrs	Mon 4/8/24	Tue 4/9/24	126	QA 1
128	Perform System Testing	24 hrs	Wed 4/10/24	Fri 4/12/24	121,127,166	QA 1
129	Modify Software Components	8 hrs	Mon 4/15/24	Mon 4/15/24	128	SE 1
130	Modify SQL Components	4 hrs	Tue 4/16/24	Tue 4/16/24	129	SE 1
131	Unit Test the Software Components	4 hrs	Tue 4/16/24	Tue 4/16/24	130	SE 1
132	Perform System Testing	8 hrs	Wed 4/17/24	Wed 4/17/24	131	QA 1
133	Create System Test Results Report	8 hrs	Thu 4/18/24	Thu 4/18/24	132	QAM
134	Create Regression Test Reports	8 hrs	Fri 4/19/24	Fri 4/19/24	133	QAM
135	Deploy to User Acceptance Testing Environment	2 hrs	Thu 4/18/24	Thu 4/18/24	132	SE 1
136	Product Demonstration of Tested System to DCDEE	4 hrs	Thu 4/18/24	Thu 4/18/24	135	PM,TL 1,BA 1
137	Add Feedback to Solution Backlog	8 hrs	Thu 4/18/24	Fri 4/19/24	136	PM
138						
139	Regulatory Modernization Interfaces	392 hrs	Wed 2/28/24	Tue 5/7/24		
140	Identify Data to Interface and Direction	8 hrs	Wed 2/28/24	Thu 2/29/24	96	SE 2,TL 2
141	Identify Frequency	2 hrs	Thu 2/29/24	Thu 2/29/24	140	SE 2,TL 2
142	Identify Method of Data Transfer	2 hrs	Thu 2/29/24	Thu 2/29/24	141	SE 2,TL 2
143	Build & Unit Test the Interface Program(s)	380 hrs	Thu 2/29/24	Tue 5/7/24		
144	Integration with CSDW	40 hrs	Thu 2/29/24	Thu 3/7/24	142	SE 2
145	Integration with NCRLAP	40 hrs	Thu 3/7/24	Thu 3/14/24	144	SE 2
146	Integration with ABCMS	40 hrs	Thu 3/14/24	Thu 3/21/24	145	SE 2
147	Integration with NCFast	40 hrs	Thu 3/21/24	Thu 3/28/24	146	SE 2
148	Integration with CCSA	40 hrs	Thu 3/28/24	Thu 4/4/24	147	SE 2
149	Integration with Secretary of State (SOS)	40 hrs	Thu 4/4/24	Thu 4/11/24	148	SE 2
150	Integration with Registration & Payment Platforms	80 hrs	Thu 4/11/24	Mon 4/29/24	149	SE 2
151	Correct Defects	20 hrs	Mon 4/29/24	Wed 5/1/24	150	SE 2
152	Final System Test of Interface Program(s)	4 hrs	Wed 5/1/24	Thu 5/2/24	151	SE 2
153	Create System Test Results Report	8 hrs	Thu 5/2/24	Fri 5/3/24	152	QAM
154	Create Integration Test Results Report	16 hrs	Fri 5/3/24	Tue 5/7/24	153	QAM
155	End Regulatory Modernization Construction & Testing	0 hrs	Thu 5/2/24	Thu 5/2/24	152	
156						
157	Workforce Registry	886 hrs	Wed 1/24/24	Thu 6/27/24		
158	Workforce Registry Software Construction & Testing	886 hrs	Wed 1/24/24	Thu 6/27/24		
159	Workforce Registration & Workflow Construction	394 hrs	Wed 1/24/24	Tue 4/2/24		
160	Create User Stories	64 hrs	Wed 1/24/24	Fri 2/2/24	90	BA 2
161	Update the Requirements Traceability Matrix	8 hrs	Mon 2/5/24	Mon 2/5/24	160	BA 2
162	Review Functional Requirements	4 hrs	Fri 2/9/24	Fri 2/9/24	78	PM,TL 2
163	Assign Functions to Development Staff	4 hrs	Mon 2/12/24	Mon 2/12/24	162	PM,TL 2
164	Build/Modify Software Components	64 hrs	Wed 2/28/24	Wed 3/13/24	163	SE 1
165	Build/Modify SQL Components	16 hrs	Mon 3/25/24	Wed 3/27/24	164	SE 1
166	Unit Test the Software & SQL Components	16 hrs	Fri 3/29/24	Tue 4/2/24	165	SE 1

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
167						
168	Workforce Registration & Workflow Testing	112 hrs	Tue 4/2/24	Mon 4/22/24		
169	Review Test Plan	8 hrs	Tue 4/2/24	Wed 4/3/24	166	QA 2
170	Identify Resources	2 hrs	Fri 4/5/24	Fri 4/5/24	169	QA 2
171	Identify Functions to be Tested	4 hrs	Fri 4/5/24	Fri 4/5/24	170	PM,QA 2
172	Create Test Scripts	16 hrs	Mon 4/8/24	Tue 4/9/24	171	QA 2
173	Perform System Testing	24 hrs	Wed 4/10/24	Fri 4/12/24	172	QA 2
174	Modify Software Components	8 hrs	Mon 4/15/24	Mon 4/15/24	173	SE 3
175	Modify SQL Components	4 hrs	Tue 4/16/24	Tue 4/16/24	174	SE 3
176	Unit Test the Software Components	4 hrs	Tue 4/16/24	Tue 4/16/24	175	SE 3
177	Perform System Testing	8 hrs	Wed 4/17/24	Wed 4/17/24	176	QA 2
178	Create System Test Results Report	8 hrs	Thu 4/18/24	Thu 4/18/24	177	QAM
179	Create Regression Test Reports	8 hrs	Fri 4/19/24	Fri 4/19/24	178	QAM
180	Deploy to User Acceptance Testing Environment	2 hrs	Thu 4/18/24	Thu 4/18/24	177	SE 3
181	Product Demonstration of Tested System to DCDEE	8 hrs	Thu 4/18/24	Fri 4/19/24	180	PM,BA 2,TL 2,DCDEE
182	Add Feedback to Solution Backlog	8 hrs	Fri 4/19/24	Mon 4/22/24	181	PM
183						
184	Data Management, Reporting, etc. Construction	472 hrs	Mon 2/5/24	Thu 4/25/24		
185	Create User Stories	64 hrs	Mon 2/5/24	Wed 2/14/24	160	BA 2
186	Update the Requirements Traceability Matrix	8 hrs	Thu 2/15/24	Thu 2/15/24	185	BA 2
187	Review Functional Requirements	4 hrs	Mon 3/4/24	Mon 3/4/24	78,185,259,309,317	PM,TL 2
188	Assign Functions to Development Staff	4 hrs	Mon 3/4/24	Mon 3/4/24	187	PM,TL 2
189	Build/Modify Software Components	64 hrs	Tue 3/5/24	Thu 3/14/24	188	SE 4
190	Build/Modify Software Components	64 hrs	Fri 3/15/24	Tue 3/26/24	189	SE 4
191	Build/Modify Software Components	64 hrs	Wed 3/27/24	Fri 4/5/24	190	SE 4
192	Build/Modify Software Components	64 hrs	Mon 4/8/24	Wed 4/17/24	191	SE 4
193	Build/Modify SQL Components	24 hrs	Thu 4/18/24	Mon 4/22/24	189,192,190	SE 4
194	Unit Test the Software & SQL Components	24 hrs	Tue 4/23/24	Thu 4/25/24	193	SE 4
195						
196	Data Management, Reporting, etc. Testing	492 hrs	Mon 3/4/24	Wed 5/29/24		
197	Review Test Plan	8 hrs	Mon 3/4/24	Tue 3/5/24	187	QA 2
198	Identify Resources	2 hrs	Tue 3/5/24	Tue 3/5/24	197	QA 2
199	Identify Functions to be Tested	4 hrs	Tue 3/5/24	Wed 3/6/24	198	PM,QA 2
200	Create Test Scripts	16 hrs	Wed 3/6/24	Fri 3/8/24	199	QA 2
201	Perform System Testing	80 hrs	Mon 5/6/24	Tue 5/21/24	194,200	QA 2
202	Modify Software Components	8 hrs	Wed 5/22/24	Wed 5/22/24	201	SE 4
203	Modify SQL Components	4 hrs	Thu 5/23/24	Thu 5/23/24	202	SE 4
204	Unit Test the Software Components	4 hrs	Thu 5/23/24	Thu 5/23/24	203	SE 4
205	Perform System Testing	8 hrs	Fri 5/24/24	Fri 5/24/24	204	QA 2
206	Create System Test Results Report	8 hrs	Tue 5/28/24	Tue 5/28/24	205	QAM
207	Create Regression Test Reports	8 hrs	Wed 5/29/24	Wed 5/29/24	206	QAM
208	Deploy to User Acceptance Testing Environment	2 hrs	Tue 5/28/24	Tue 5/28/24	205	SE 4
209	Product Demonstration of Tested System to DCDEE	4 hrs	Tue 5/28/24	Tue 5/28/24	208	PM,BA 2,TL 2

State North Carolina DHHS DCDEE
Workforce Registry, Pre-K and Regulatory System Replacement
Request for Proposal No. 30-23189



North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
210	Add Feedback to Solution Backlog	8 hrs	Tue 5/28/24	Wed 5/29/24	209	PM
211						
212	Workforce Registry Interfaces	636 hrs	Thu 3/7/24	Thu 6/27/24		
213	Identify Data to Interface and Direction	8 hrs	Thu 3/7/24	Fri 3/8/24	118,163	TL 2,SE 3
214	Identify Frequency	2 hrs	Fri 3/8/24	Fri 3/8/24	213	TL 2,SE 3
215	Identify Method of Data Transfer	2 hrs	Fri 3/8/24	Fri 3/8/24	214	TL 2,SE 3
216	Build & Unit Test the Interface Program(s)	320 hrs	Thu 4/18/24	Fri 6/14/24		
217	Integration with Department of Public Instruction Online Licensure System	40 hrs	Thu 4/18/24	Thu 4/25/24	215,180	SE 3
218	Integration with Department of Public Instruction Human Resource Management System	40 hrs	Thu 4/25/24	Thu 5/2/24	217	SE 3
219	Integration with Child Maltreatment Registry	40 hrs	Thu 5/2/24	Thu 5/9/24	218	SE 3
220	Integration with Training platforms	40 hrs	Thu 5/9/24	Thu 5/16/24	219	SE 3
221	Integration with North Carolina Institute for CDP	40 hrs	Thu 5/16/24	Thu 5/23/24	220	SE 3
222	Integration with Health and Safety trainers' information	40 hrs	Thu 5/23/24	Fri 5/31/24	221	SE 3
223	Integration with Vital Records application	40 hrs	Fri 5/31/24	Fri 6/7/24	222	SE 3
224	Integration with Official Transcripts	40 hrs	Fri 6/7/24	Fri 6/14/24	223	SE 3
225	System Test the Interface Program(s)	8 hrs	Fri 6/14/24	Mon 6/17/24	224	SE 3
226	Correct Defects	40 hrs	Mon 6/17/24	Mon 6/24/24	225	SE 3
227	Final System Test of Interface Program(s)	4 hrs	Mon 6/24/24	Mon 6/24/24	226	SE 3
228	Create System Test Results Report	8 hrs	Mon 6/24/24	Tue 6/25/24	227	QAM
229	Create Integration Test Results Report	16 hrs	Tue 6/25/24	Thu 6/27/24	228	QAM
230	End Workforce Registry Construction & Testing	0 hrs	Mon 6/24/24	Mon 6/24/24	227	
231						
232	Pre-K	1396 hrs	Wed 11/1/23	Fri 7/12/24		
233	Registration, Child Application & Workflow Construction	530 hrs	Mon 2/5/24	Tue 5/7/24		
234	Create User Stories	64 hrs	Mon 2/5/24	Wed 2/14/24	115	BA 1
235	Update the Requirements Traceability Matrix	8 hrs	Thu 2/15/24	Thu 2/15/24	234	BA 1
236	Review Functional Requirements	4 hrs	Thu 4/18/24	Thu 4/18/24	90,135	PM,TL 2
237	Assign Functions to Development Staff	4 hrs	Thu 4/18/24	Fri 4/19/24	236	PM,TL 2
238	Build/Modify Software Components	64 hrs	Fri 4/19/24	Wed 5/1/24	237	SE 1
239	Build/Modify SQL Components	16 hrs	Wed 5/1/24	Fri 5/3/24	238	SE 1
240	Unit Test the Software & SQL Components	16 hrs	Fri 5/3/24	Tue 5/7/24	239	SE 1
241						
242	Registration, Child Application & Workflow Testing	1146 hrs	Wed 11/1/23	Wed 5/29/24		
243	Review Test Plan	8 hrs	Wed 11/1/23	Wed 11/1/23		QA 1
244	Identify Resources	2 hrs	Thu 11/2/23	Thu 11/2/23	243	QA 1
245	Identify Functions to be Tested	4 hrs	Thu 11/2/23	Thu 11/2/23	244	PM,QA 1
246	Create Test Scripts	16 hrs	Thu 11/2/23	Mon 11/6/23	245	QA 1
247	Perform System Testing	80 hrs	Tue 5/7/24	Tue 5/21/24	240	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
248	Modify Software Components	8 hrs	Tue 5/21/24	Wed 5/22/24	247	SE 1
249	Modify SQL Components	4 hrs	Wed 5/22/24	Wed 5/22/24	248	SE 1
250	Unit Test the Software Components	4 hrs	Wed 5/22/24	Thu 5/23/24	249	SE 1
251	Perform System Testing	8 hrs	Thu 5/23/24	Fri 5/24/24	250	QA 1
252	Create System Test Results Report	8 hrs	Fri 5/24/24	Tue 5/28/24	251	QAM
253	Create Regression Test Reports	8 hrs	Tue 5/28/24	Wed 5/29/24	252	QAM
254	Deploy to User Acceptance Testing Environment	2 hrs	Fri 5/24/24	Fri 5/24/24	251	SE 1
255	Product Demonstration of Tested System to DCDEE	4 hrs	Fri 5/24/24	Fri 5/24/24	254	PM,BA 1,TL 2
256	Add Feedback to Solution Backlog	8 hrs	Tue 5/28/24	Tue 5/28/24	255	PM
257						
258	Reporting, Document & Data Management etc. Construction	602 hrs	Thu 2/15/24	Fri 5/31/24		
259	Create User Stories	64 hrs	Thu 2/15/24	Mon 2/26/24	234	BA 1
260	Update the Requirements Traceability Matrix	8 hrs	Tue 2/27/24	Tue 2/27/24	259	BA 1
261	Review Functional Requirements	4 hrs	Tue 5/7/24	Tue 5/7/24	240	PM,TL 2
262	Assign Functions to Development Staff	4 hrs	Tue 5/7/24	Wed 5/8/24	261	PM,TL 2
263	Build/Modify Software Components	64 hrs	Wed 5/8/24	Mon 5/20/24	262,152	SE 2
264	Build/Modify SQL Components	24 hrs	Mon 5/20/24	Thu 5/23/24	263	SE 2
265	Unit Test the Software & SQL Components	40 hrs	Thu 5/23/24	Fri 5/31/24	264	SE 2
266						
267	Reporting, Document & Data Management etc. Testing	140 hrs	Fri 5/24/24	Wed 6/19/24		
268	Review Test Plan	8 hrs	Fri 5/24/24	Tue 5/28/24	261,251	QA 1
269	Identify Resources	2 hrs	Tue 5/28/24	Tue 5/28/24	268	QA 1
270	Identify Functions to be Tested	4 hrs	Tue 5/28/24	Tue 5/28/24	269	QA 1
271	Create Test Scripts	16 hrs	Wed 5/29/24	Thu 5/30/24	270	QA 1
272	Perform System Testing	64 hrs	Fri 5/31/24	Tue 6/11/24	271	QA 1
273	Modify Software Components	8 hrs	Wed 6/12/24	Wed 6/12/24	272	SE 2
274	Modify SQL Components	4 hrs	Thu 6/13/24	Thu 6/13/24	273	SE 2
275	Unit Test the Software Components	4 hrs	Thu 6/13/24	Thu 6/13/24	274	SE 2
276	Perform System Testing	8 hrs	Fri 6/14/24	Fri 6/14/24	275	QA 1
277	Create System Test Results Report	8 hrs	Mon 6/17/24	Mon 6/17/24	276	QAM
278	Create Regression Test Reports	8 hrs	Tue 6/18/24	Tue 6/18/24	277	QAM
279	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/17/24	Mon 6/17/24	276	SE 2
280	Product Demonstration of Tested System to DCDEE	8 hrs	Mon 6/17/24	Tue 6/18/24	279	PM,BA 1,TL 2
281	Add Feedback to Solution Backlog	8 hrs	Tue 6/18/24	Wed 6/19/24	280	PM
282						
283	Pre-K Interfaces	1396 hrs	Wed 11/1/23	Fri 7/12/24		
284	Identify Data to Interface and Direction	8 hrs	Wed 11/1/23	Wed 11/1/23		SE 2
285	Identify Frequency	2 hrs	Thu 11/2/23	Thu 11/2/23	284	SE 2
286	Identify Method of Data Transfer	2 hrs	Thu 11/2/23	Thu 11/2/23	285	SE 2
287	Build & Unit Test the Interface Program(s)	120 hrs	Tue 5/7/24	Wed 5/29/24		
288	Integration with NCID	40 hrs	Tue 5/7/24	Tue 5/14/24	286,240	SE 2
289	Integration with PowerSchool	40 hrs	Tue 5/14/24	Tue 5/21/24	288	SE 2
290	Integration with Microsoft Outlook	40 hrs	Tue 5/21/24	Wed 5/29/24	289	SE 2

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
291	System Test the Interface Program(s)	8 hrs	Wed 5/29/24	Thu 5/30/24	290	SE 6
292	Correct Defects	20 hrs	Thu 6/27/24	Mon 7/1/24	291	SE 2
293	Final System Test of Interface Program(s)	4 hrs	Tue 7/9/24	Tue 7/9/24	292	SE 2
294	Create System Test Results Report	8 hrs	Tue 7/9/24	Wed 7/10/24	293	QAM
295	Create Integration Test Results Report	16 hrs	Wed 7/10/24	Fri 7/12/24	294	QAM
296	End Pre-K Construction & Testing	0 hrs	Tue 7/9/24	Tue 7/9/24	293	
297						
298	Subsidy Provider Compliance	1188 hrs	Wed 11/1/23	Wed 6/5/24		
299	Checklist & Documentation Log Construction	998 hrs	Wed 11/1/23	Wed 5/1/24		
300	Create User Stories	16 hrs	Thu 2/15/24	Fri 2/16/24	185	BA 2
301	Review Functional Requirements	4 hrs	Thu 4/18/24	Thu 4/18/24	180	SE 3
302	Assign Functions to Development Staff	4 hrs	Thu 4/18/24	Fri 4/19/24	301	SE 3
303	Assign Functions to Development Staff	4 hrs	Fri 4/19/24	Fri 4/19/24	302	SE 3
304	Build/Modify Components	64 hrs	Fri 4/19/24	Wed 5/1/24	303	SE 3
305	Build/Modify SQL Components	24 hrs	Wed 11/1/23	Fri 11/3/23		SE 3
306	Unit Test the Software & SQL Components	40 hrs	Mon 11/6/23	Fri 11/10/23	305	SE 3
307						
308	Investigations Findings Report & Investigations Letters Construction	216 hrs	Mon 2/19/24	Tue 3/26/24		
309	Create User Stories	16 hrs	Mon 2/19/24	Tue 2/20/24	300	BA 2
310	Review Functional Requirements	4 hrs	Mon 3/4/24	Mon 3/4/24	309,317,300	SE 3
311	Assign Functions to Development Staff	4 hrs	Mon 3/4/24	Mon 3/4/24	310	SE 3
312	Build/Modify Components	64 hrs	Tue 3/5/24	Thu 3/14/24	311	SE 3
313	Build/Modify SQL Components	24 hrs	Fri 3/15/24	Tue 3/19/24	312	SE 3
314	Unit Test the Software & SQL Components	40 hrs	Wed 3/20/24	Tue 3/26/24	313	SE 3
315						
316	Document Repository Construction	336 hrs	Wed 2/21/24	Thu 4/18/24		
317	Create User Stories	64 hrs	Wed 2/21/24	Fri 3/1/24	309	BA 2
318	Update the Requirements Traceability Matrix	8 hrs	Mon 3/4/24	Mon 3/4/24	317	BA 2
319	Review Functional Requirements	4 hrs	Wed 3/27/24	Wed 3/27/24	314	SE 3
320	Assign Functions to Development Staff	4 hrs	Wed 3/27/24	Wed 3/27/24	319	SE 3
321	Build/Modify Components	64 hrs	Thu 3/28/24	Mon 4/8/24	320	SE 3
322	Build/Modify SQL Components	24 hrs	Tue 4/9/24	Thu 4/11/24	321	SE 3
323	Unit Test the Software & SQL Components	40 hrs	Fri 4/12/24	Thu 4/18/24	322	SE 3
324						
325	Subsidy Provider Compliance Testing	656 hrs	Fri 2/9/24	Wed 6/5/24		
326	Review Test Plan	8 hrs	Fri 2/9/24	Thu 3/21/24	78	QA 2
327	Identify Resources	2 hrs	Fri 3/22/24	Fri 3/22/24	326	QA 2
328	Identify Functions to be Tested	4 hrs	Fri 3/22/24	Fri 3/22/24	327	QA 2
329	Create Test Scripts	16 hrs	Fri 3/22/24	Tue 3/26/24	328	QA 2
330	Perform System Testing for Checklist & Documentation Log	80 hrs	Fri 4/19/24	Thu 5/2/24	329,323	QA 2

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
331	Perform System Testing for Investigations Findings Report & Investigations Letters	64 hrs	Fri 5/3/24	Wed 5/15/24	330	QA 2
332	Perform System Testing for Document Repository	40 hrs	Thu 5/16/24	Thu 5/23/24	331	QA 2
333	Modify Software Components	8 hrs	Fri 5/24/24	Tue 5/28/24	331,332	QA 2
334	Modify SQL Components	4 hrs	Thu 5/30/24	Thu 5/30/24	333	QA 2
335	Unit Test the Software Components	4 hrs	Fri 5/31/24	Fri 5/31/24	334	QA 2
336	Perform System Testing	8 hrs	Fri 5/31/24	Mon 6/3/24	335	QA 2
337	Create System Test Results Report	8 hrs	Mon 6/3/24	Tue 6/4/24	336	QAM
338	Create Regression Test Reports	8 hrs	Tue 6/4/24	Wed 6/5/24	337	QAM
339	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/3/24	Mon 6/3/24	336	QA 2
340	Product Demonstration of Tested System to DCDEE	4 hrs	Mon 6/3/24	Tue 6/4/24	339	QA 2
341	Add Feedback to Solution Backlog	8 hrs	Tue 6/4/24	Wed 6/5/24	340	QA 2
342	End Subsidy Provider Compliance Construction & Testing	0 hrs	Wed 6/5/24	Wed 6/5/24	341	
343						
344	Mobile Software Sprint	820 hrs	Fri 2/9/24	Wed 7/3/24		
345	eXpedite Forms	154 hrs	Fri 2/9/24	Thu 3/7/24		
346	Get Agreement from Management& Field Workers on the forms being used	8 hrs	Fri 2/9/24	Mon 2/12/24	78	BA 2
347	Get Agreement from Management& Field Workers on correct version of each form being used	8 hrs	Mon 2/12/24	Tue 2/13/24	346	BA 2
348	Define Business Rules for each form	16 hrs	Tue 2/13/24	Thu 2/15/24	347	BA 2
349	Define History Forms and Data for Each Form	16 hrs	Thu 2/15/24	Mon 2/19/24	348	BA 2
350	Define Field Edits on Each Form	16 hrs	Mon 2/19/24	Wed 2/21/24	349	BA 2
351	Define Relationships& Process Flows Between Forms	16 hrs	Wed 2/21/24	Fri 2/23/24	350	BA 2
352	Define the custom coding required for each form	16 hrs	Fri 2/23/24	Tue 2/27/24	351	BA 2,TL 3
353	Identify What Departments the Forms are assigned to	8 hrs	Tue 2/27/24	Wed 2/28/24	352	BA 2
354	Identify all members or users	4 hrs	Wed 2/28/24	Wed 2/28/24	353	BA 2
355	Identify Which Department each Member belongs to	4 hrs	Thu 2/29/24	Thu 2/29/24	354	BA 2
356	Define Interface to Licensing System	40 hrs	Thu 2/29/24	Thu 3/7/24	355	BA 2,TL 3
357	Obtain Agreement from DCDEE on the Design	2 hrs	Thu 3/7/24	Thu 3/7/24	356	PM
358						
359	eXpedite Data	80 hrs	Thu 3/7/24	Thu 3/21/24		
360	Define Search Fields and Data for Each Form	16 hrs	Thu 3/7/24	Mon 3/11/24	357	BA 2
361	Define Search Data for pop-up Forms	16 hrs	Mon 3/11/24	Wed 3/13/24	360	BA 2
362	Define Data for Combo Boxes	16 hrs	Wed 3/13/24	Fri 3/15/24	361	BA 2
363	Define Status' for each Form	16 hrs	Fri 3/15/24	Tue 3/19/24	362	BA 2
364	Define 'Custom Columns' for each Form	16 hrs	Tue 3/19/24	Thu 3/21/24	363	BA 2
365						
366	Build Forms& Custom Code	282 hrs	Thu 3/21/24	Thu 5/9/24		
367	Review Functional Requirements	4 hrs	Thu 3/21/24	Fri 3/22/24	364	BA 2,TL 3,SE 6
368	Assign Functions to Development Staff	2 hrs	Fri 3/22/24	Fri 3/22/24	367	SE 6,TL 3
369	Build the 1st set of Forms in eXpedite Manager	64 hrs	Fri 3/22/24	Wed 4/3/24	368	BA 2

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
370	Build the 2nd set of Forms in eXpedite Manager	64 hrs	Wed 4/3/24	Mon 4/15/24	369	BA 2
371	Construct the Custom Code for 1st set of Forms	64 hrs	Tue 4/16/24	Thu 4/25/24	369,370	SE 6
372	Construct the Custom Code for 2nd set of Forms	64 hrs	Fri 4/26/24	Tue 5/7/24	371	SE 6
373	Load initial Search Data	8 hrs	Wed 5/8/24	Wed 5/8/24	371,372	SE 6
374	Unit Test	8 hrs	Thu 5/9/24	Thu 5/9/24	373	SE 6
375						
376	eXpedite Interfaces	72 hrs	Fri 5/10/24	Wed 5/22/24		
377	Determine which forms will interface with back-end system	8 hrs	Fri 5/10/24	Fri 5/10/24	374	TL 3
378	Determine the direction of the interface for each form	4 hrs	Mon 5/13/24	Mon 5/13/24	377	TL 3
379	Determine the frequency of the interface by form	4 hrs	Mon 5/13/24	Mon 5/13/24	378	TL 3
380	Determine data sent to eXpedite from back-end system for each form	8 hrs	Tue 5/14/24	Tue 5/14/24	379	TL 3
381	Determine data sent to back-end system from eXpedite for each form	8 hrs	Wed 5/15/24	Wed 5/15/24	380	TL 3
382	Build the Interface to the Licensing System	40 hrs	Thu 5/16/24	Wed 5/22/24	373,381	TL 3
383						
384	Integration& System Testing	232 hrs	Thu 5/23/24	Wed 7/3/24		
385	Review Test Plan	8 hrs	Thu 5/23/24	Thu 5/23/24	382	QA 2
386	Identify Resources	2 hrs	Fri 5/24/24	Fri 5/24/24	385	PM
387	Identify Functions to be Tested	4 hrs	Fri 5/24/24	Fri 5/24/24	386	QA 2
388	Create Test Scripts	24 hrs	Fri 5/24/24	Fri 5/31/24	387	QA 2
389	Perform System Testing	24 hrs	Fri 5/31/24	Wed 6/5/24	388	QA 2
390	Build/Modify .eXpedite Forms/Custom Code	16 hrs	Wed 6/5/24	Fri 6/7/24	389	SE 6
391	Unit Test the eXpedite Modifications	4 hrs	Mon 6/10/24	Mon 6/10/24	390	SE 6
392	Perform System Testing	8 hrs	Mon 7/1/24	Mon 7/1/24	391	QA 2
393	Create System Test Results Report	8 hrs	Tue 7/2/24	Tue 7/2/24	392	QAM
394	Create Integration Test Results Report	8 hrs	Wed 7/3/24	Wed 7/3/24	393	QAM
395	Deploy to User Acceptance Testing Environment	4 hrs	Tue 7/2/24	Tue 7/2/24	392	SE 6
396	Add Feedback to Solution Backlog	2 hrs	Wed 7/3/24	Wed 7/3/24	395	PM
397	End Mobile System Construction& Testing	0 hrs	Wed 7/3/24	Wed 7/3/24	396	
398						
399	Data Migration	832 hrs	Fri 2/9/24	Mon 7/8/24		
400	Create the Data Conversion and Migration Plan	40 hrs	Fri 2/9/24	Fri 2/16/24	78	TL 3
401						
402	Regulatory Data	392 hrs	Fri 2/16/24	Thu 4/25/24		
403	Determine Data Source	8 hrs	Fri 2/16/24	Mon 2/19/24	400	SE 6
404	Data Map the Elements to Convert	24 hrs	Thu 3/21/24	Mon 3/25/24	403	SE 6
405	Determine File Transfer Method	4 hrs	Tue 3/26/24	Tue 3/26/24	404	SE 6
406	Design Data Conversion & Migration Scripts	8 hrs	Tue 3/26/24	Wed 3/27/24	405	SE 6
407	Determine How to Handle Rejects or Errors	8 hrs	Wed 3/27/24	Thu 3/28/24	406	SE 6
408	Build The Conversion Program	80 hrs	Thu 3/28/24	Thu 4/11/24	407	SE 6

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
409	Unit Test The Conversion Program	16 hrs	Thu 4/11/24	Mon 4/15/24	408	SE 6
410	System Test the Conversion Program	16 hrs	Mon 4/15/24	Wed 4/17/24	409	SE 6
411	Correct Defects	16 hrs	Wed 4/17/24	Fri 4/19/24	410	SE 6
412	Final System Test of the Conversion Program	16 hrs	Fri 4/19/24	Tue 4/23/24	411	SE 6
413	Create Data Conversion & Migration Test Results Report	8 hrs	Tue 4/23/24	Wed 4/24/24	412	SE 6
414	Create System Test Results Report	8 hrs	Wed 4/24/24	Thu 4/25/24	413	QAM
415	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Wed 4/24/24	Wed 4/24/24	413	DCDEE
416						
417	Pre-K Data	228 hrs	Tue 4/23/24	Mon 6/3/24		
418	Determine Data Source	8 hrs	Tue 4/23/24	Wed 4/24/24	412	SE 5
419	Data Map the Elements to Convert	24 hrs	Wed 4/24/24	Mon 4/29/24	418	SE 5
420	Determine File Transfer Method	4 hrs	Mon 4/29/24	Mon 4/29/24	419	SE 5
421	Design Data Conversion & Migration Scripts	8 hrs	Tue 4/30/24	Tue 4/30/24	420	SE 5
422	Determine How to Handle Rejects or Errors	8 hrs	Wed 5/1/24	Wed 5/1/24	421	SE 5
423	Build The Conversion Program	80 hrs	Thu 5/2/24	Wed 5/15/24	422	SE 5
424	Unit Test The Conversion Program	16 hrs	Thu 5/16/24	Fri 5/17/24	423	SE 5
425	System Test the Conversion Program	24 hrs	Mon 5/20/24	Wed 5/22/24	424	SE 5
426	Correct Defects	24 hrs	Thu 5/23/24	Tue 5/28/24	425	SE 5
427	Final System Test of the Conversion Program	16 hrs	Wed 5/29/24	Thu 5/30/24	426	SE 5
428	Create Data Conversion & Migration Test Results Report	8 hrs	Fri 5/31/24	Fri 5/31/24	427	SE 5
429	Create System Test Results Report	8 hrs	Mon 6/3/24	Mon 6/3/24	428	QAM
430	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Mon 6/3/24	Mon 6/3/24	428	DCDEE
431						
432	WORKS Data	204 hrs	Fri 5/31/24	Mon 7/8/24		
433	Determine Data Source	8 hrs	Fri 5/31/24	Fri 5/31/24	427	SE 5
434	Data Map the Elements to Convert	24 hrs	Mon 6/3/24	Wed 6/5/24	433	SE 5
435	Determine File Transfer Method	4 hrs	Thu 6/6/24	Thu 6/6/24	434	SE 5
436	Design Data Conversion & Migration Scripts	8 hrs	Mon 6/10/24	Tue 6/11/24	435	SE 5
437	Determine How to Handle Rejects or Errors	8 hrs	Wed 6/12/24	Thu 6/13/24	436	SE 5
438	Build The Conversion Program	40 hrs	Mon 6/17/24	Mon 6/24/24	437	SE 5
439	Unit Test The Conversion Program	16 hrs	Mon 6/24/24	Wed 6/26/24	438	SE 5
440	System Test the Conversion Program	16 hrs	Wed 6/26/24	Fri 6/28/24	439	SE 5
441	Correct Defects	16 hrs	Fri 6/28/24	Tue 7/2/24	440	SE 5
442	Final System Test of the Conversion Program	8 hrs	Tue 7/2/24	Wed 7/3/24	441	SE 5
443	Create Data Conversion & Migration Test Results Report	8 hrs	Wed 7/3/24	Fri 7/5/24	442	SE 5
444	Create System Test Results Report	8 hrs	Fri 7/5/24	Mon 7/8/24	443	QAM
445	Obtain Agency Approval of Converted & Migrated Data	2 hrs	Fri 7/5/24	Fri 7/5/24	443	DCDEE
446	End Data Conversion	0 hrs	Wed 7/3/24	Wed 7/3/24	412,427,442	

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
447						
448	Demonstration Of Tested System	26 hrs	Tue 9/3/24	Fri 9/6/24		
449	Install the Software Build	4 hrs	Tue 9/3/24	Tue 9/3/24		
450	Convert Static Data	4 hrs	Tue 9/3/24	Tue 9/3/24	449	SE 5
451	Convert Dynamic Data	4 hrs	Wed 9/4/24	Wed 9/4/24	450	SE 5
452	Evaluate Results of Conversion	2 hrs	Wed 9/4/24	Wed 9/4/24	451	SE 5
453	Perform Production Tests Including Interfaces	4 hrs	Wed 9/4/24	Thu 9/5/24	452	QA 1
454	Demonstrate System to DCDEE	8 hrs	Thu 9/5/24	Fri 9/6/24	453	DCDEE
455						
456	Training & Documentation	918 hrs	Fri 2/9/24	Tue 7/23/24		
457	Identify the Training Program Required	16 hrs	Fri 2/9/24	Tue 2/13/24	78	TR
458	Create the Training Plan	80 hrs	Tue 2/13/24	Tue 2/27/24	457	TR
459	Recommend Technical Training for State IT Support Personnel	8 hrs	Tue 2/27/24	Wed 2/28/24	458	TR,NOG
460	Obtain Customer Sign-off of Training Plan	4 hrs	Wed 2/28/24	Wed 2/28/24	459	TR,DCDEE
461	Create Finalized User Guides, Quick Reference Guides & Online Help Documentation	40 hrs	Wed 7/3/24	Thu 7/11/24	397	TR
462	Create Finalized Training Material	40 hrs	Thu 7/11/24	Thu 7/18/24	461	TR
463	Create Finalized Technical and System Administration Documentation	80 hrs	Wed 7/3/24	Thu 7/18/24	397	NOG
464	Conduct the Training for UAT Pilot	24 hrs	Thu 7/18/24	Tue 7/23/24	462	TR,DCDEE
465	End Training & Documentation	0 hrs	Tue 7/23/24	Tue 7/23/24	464	TR
466						
467	Performance Testing	66 hrs	Fri 9/6/24	Wed 9/18/24		
468	Create Performance Test Plan	8 hrs	Fri 9/6/24	Mon 9/9/24	454	TL 3
469	Create Performance Test Cases	8 hrs	Mon 9/9/24	Fri 9/13/24	468	TL 3
470	Create Performance Test Scripts	8 hrs	Fri 9/13/24	Mon 9/16/24	469	TL 3
471	Create Performance Test Readiness Report	8 hrs	Mon 9/16/24	Tue 9/17/24	470	TL 3
472	Create Performance Test Report	8 hrs	Tue 9/17/24	Wed 9/18/24	471	TL 3
473	Gain Agency Approval of Performance	2 hrs	Wed 9/18/24	Wed 9/18/24	472	TL 3
474						
475	Pilot Implementation	310 hrs	Wed 7/3/24	Tue 8/27/24		
476	Planning	60 hrs	Wed 7/3/24	Mon 7/15/24		
477	Establish the Pilot's Objectives	4 hrs	Wed 7/3/24	Wed 7/3/24	397	PM,DCDEE
478	Establish the Pilot's Scope	6 hrs	Wed 7/3/24	Fri 7/5/24	477	PM,DCDEE
479	Determine the Requirements for the Pilot	6 hrs	Fri 7/5/24	Mon 7/8/24	478	PM,DCDEE
480	Establish the Key Performance Metrics & Measures of Success	4 hrs	Mon 7/8/24	Mon 7/8/24	479	PM,DCDEE
481	Determine How to Measure User Satisfaction	4 hrs	Mon 7/8/24	Tue 7/9/24	480	PM,DCDEE
482	Decide on the Length of Time to Run the Pilot	4 hrs	Tue 7/9/24	Tue 7/9/24	481	PM,DCDEE
483	Choose the Group to Run the Pilot	4 hrs	Tue 7/9/24	Wed 7/10/24	482	PM,DCDEE
484	Create Pilot Implementation Document	24 hrs	Wed 7/10/24	Mon 7/15/24	483	PM,DCDEE
485	Obtain Sign-off From DCDEE To Proceed	4 hrs	Mon 7/15/24	Mon 7/15/24	484	DCDEE

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
486						
487	User Acceptance Testing	100 hrs	Thu 7/11/24	Mon 7/29/24	461	
488	Plan UAT Process with DCDEE For Pilot	4 hrs	Thu 7/11/24	Thu 7/11/24	397	DCDEE,PM,QA 2
489	Create UAT Plan For Pilot	8 hrs	Thu 7/11/24	Fri 7/12/24	488	QAM
490	Create UAT Test Cases & Test Scripts For Pilot	8 hrs	Fri 7/12/24	Mon 7/15/24	489	QAM
491	Perform UAT For Pilot	40 hrs	Mon 7/15/24	Mon 7/22/24	490	DCDEE
492	Update Product Backlog	8 hrs	Mon 7/22/24	Tue 7/23/24	491	PM
493	Resolve Defects	24 hrs	Tue 7/23/24	Fri 7/26/24	492	TL 3,TL 2,TL 1
494	Create UAT Results Report For Pilot	4 hrs	Fri 7/26/24	Mon 7/29/24	493	QAM
495	Create Accessibility Test Report For Pilot	4 hrs	Mon 7/29/24	Mon 7/29/24	494	QAM
496	Agency Acceptance of UAT Pilot & Sign Off	2 hrs	Mon 7/29/24	Mon 7/29/24	494	DCDEE,PM
497	End User Acceptance Testing For Pilot	0 hrs	Mon 7/29/24	Mon 7/29/24	496	
498						
499	Pilot Implementation Preparation	28 hrs	Mon 7/15/24	Fri 7/19/24		
500	Create Deployment Plan	8 hrs	Mon 7/15/24	Tue 7/16/24	485	PM
501	Create Production Test Scripts	8 hrs	Tue 7/16/24	Wed 7/17/24	500	QAM
502	Ensure Production Infrastructure is Operational	8 hrs	Wed 7/17/24	Thu 7/18/24	501	NOG
503	Establish Support Environment	4 hrs	Thu 7/18/24	Fri 7/19/24	502	NOG
504						
505	Pilot Installation	30 hrs	Fri 7/19/24	Wed 7/24/24		
506	Install the Production Build	8 hrs	Fri 7/19/24	Mon 7/22/24	503	TL 1
507	Convert Static Data	4 hrs	Mon 7/22/24	Mon 7/22/24	506	SE 5
508	Convert Dynamic Data	8 hrs	Mon 7/22/24	Tue 7/23/24	507	SE 5
509	Evaluate Results of Conversion	4 hrs	Tue 7/23/24	Wed 7/24/24	508	SE 5
510	Perform Production Tests Including Interfaces	4 hrs	Wed 7/24/24	Wed 7/24/24	509	QA 1
511	Cut Over to the Pilot System	2 hrs	Wed 7/24/24	Wed 7/24/24	510	TL 1
512						
513	Pilot Monitoring	192 hrs	Thu 7/25/24	Tue 8/27/24		
514	Daily Meetings with the Pilot User Groups	160 hrs	Thu 7/25/24	Wed 8/21/24	511	DCDEE,SME,PM
515	Address Issues	160 hrs	Thu 7/25/24	Wed 8/21/24	511	DCDEE,SME,PM
516	Correct Software Defects	160 hrs	Thu 7/25/24	Mon 8/26/24	511	TL 1
517	Add Requests to the Backlog	160 hrs	Thu 7/25/24	Wed 8/21/24	511	BA 1
518	Create Pilot Results Document	16 hrs	Thu 8/22/24	Fri 8/23/24	517	SME
519	Obtain Sign-off From DCDEE to Roll-out to Remaining Users	16 hrs	Mon 8/26/24	Tue 8/27/24	518	DCDEE
520	End of Pilot	0 hrs	Tue 8/27/24	Tue 8/27/24	519	
521						
522	Prepare for Statewide Rollout	110 hrs	Mon 8/26/24	Fri 9/13/24		
523	Conduct the Training for UAT	40 hrs	Mon 8/26/24	Fri 8/30/24	518	TR
524	Create UAT Plan	12 hrs	Mon 8/26/24	Tue 8/27/24	518	QAM
525	Create UAT Test Cases & Test Scripts	16 hrs	Tue 8/27/24	Thu 8/29/24	524	QAM
526	Perform UAT	40 hrs	Thu 8/29/24	Fri 9/6/24	525	DCDEE
527	Update Product Backlog	8 hrs	Fri 9/6/24	Mon 9/9/24	526	PM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
528	Resolve Defects	24 hrs	Mon 9/9/24	Thu 9/12/24	527	TL 3,TL 2,TL 1
529	Create UAT Results Report	4 hrs	Thu 9/12/24	Thu 9/12/24	528	QAM
530	Create Accessibility Test Report	4 hrs	Fri 9/13/24	Fri 9/13/24	529	QAM
531	Agency Acceptance of UAT & Sign Off	2 hrs	Fri 9/13/24	Fri 9/13/24	530	DCDEE,PM
532	End User Acceptance Testing	0 hrs	Fri 9/13/24	Fri 9/13/24	531	
533						
534	Implementation	88 hrs	Fri 9/13/24	Mon 9/30/24		
535	Implementation Preparation	80 hrs	Fri 9/13/24	Fri 9/27/24		
536	Create Release/Deployment Readiness Checklist	40 hrs	Fri 9/13/24	Fri 9/20/24	532	TL 1
537	Provide Onsite Assistance during Deployment Readiness	40 hrs	Fri 9/20/24	Fri 9/27/24	536	NOG
538	Create Production Test Scripts	8 hrs	Fri 9/20/24	Mon 9/23/24	536	QA 2
539	Ensure Production Infrastructure is Operational	8 hrs	Mon 9/23/24	Tue 9/24/24	538	NOG
540	Provide Technical Skills Transfer	8 hrs	Tue 9/24/24	Wed 9/25/24	539	NOG
541	Establish Support Environment	4 hrs	Tue 9/24/24	Wed 9/25/24	539	PM
542						
543	Installation	28 hrs	Wed 9/25/24	Mon 9/30/24		
544	Install the Production Build	4 hrs	Wed 9/25/24	Wed 9/25/24	541	TL 1
545	Convert Static Data	4 hrs	Wed 9/25/24	Thu 9/26/24	544	SE 5
546	Convert Dynamic Data	4 hrs	Thu 9/26/24	Thu 9/26/24	545	SE 5
547	Evaluate Results of Conversion	2 hrs	Thu 9/26/24	Thu 9/26/24	546	SE 5
548	Perform Production Tests Including Interfaces	4 hrs	Fri 9/27/24	Fri 9/27/24	547	QA 1
549	Create Validation Test Report	4 hrs	Fri 9/27/24	Fri 9/27/24	548	QAM
550	Cut Over to the New Systems	2 hrs	Fri 9/27/24	Fri 9/27/24	548	TL 1
551	Create Deployment UAT Results Report	4 hrs	Fri 9/27/24	Mon 9/30/24	550	PM
552	Create Agency Acceptance of Deployment UAT Results Report	4 hrs	Mon 9/30/24	Mon 9/30/24	551	PM
553	End Implementation	0 hrs	Mon 9/30/24	Mon 9/30/24	551	
554						
555	Post-Implementation	748 hrs	Fri 9/27/24	Thu 2/6/25		
556	Documentation Updates	48 hrs	Fri 9/27/24	Mon 10/7/24		
557	Update Gap Analysis	16 hrs	Fri 9/27/24	Tue 10/1/24	550	BA 1
558	Update Data Model	16 hrs	Fri 9/27/24	Tue 10/1/24	550	DBA
559	Update Data Dictionary	16 hrs	Tue 10/1/24	Thu 10/3/24	558	DBA
560	Update Detailed Design Specifications Document	16 hrs	Tue 10/1/24	Thu 10/3/24	557	BA 1
561	Update Solution Requirements Document	16 hrs	Thu 10/3/24	Mon 10/7/24	560	BA 1
562						
563	Stabilization	748 hrs	Fri 9/27/24	Thu 2/6/25		
564	Vendor Support During Stabilization	720 hrs	Fri 9/27/24	Fri 1/31/25	550	BA 1,NOG,PM,QA,SE 1,SE
565	Agency Acceptance of the Stabilized Solution	4 hrs	Fri 1/31/25	Mon 2/3/25	564	DCDEE
566	Lessons Learned	24 hrs	Mon 2/3/25	Thu 2/6/25	565	PM,DCDEE O&M
567						

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
568	Operation & Maintenance Phase - Years 2-5	2780 hrs	Tue 10/1/24	Thu 1/29/26		
569	Create Operations & Maintenance Plan	40 hrs	Thu 2/6/25	Thu 2/13/25	566	PM
570						
571	Documentation Updates	32 hrs	Thu 2/6/25	Wed 2/12/25		
572	Technical Architecture Diagrams (TAD)	16 hrs	Thu 2/6/25	Mon 2/10/25	566	NOG
573	Configuration & Release Management Plan	6 hrs	Thu 2/6/25	Thu 2/6/25	566	PM
574	Training Plan	16 hrs	Thu 2/6/25	Mon 2/10/25	566	TR
575	Test Plan	16 hrs	Thu 2/6/25	Mon 2/10/25	566	QAM
576	Solution Requirements Document	16 hrs	Thu 2/6/25	Mon 2/10/25	566	BA 1
577	Requirements Traceability Matrix	16 hrs	Mon 2/10/25	Wed 2/12/25	576	BA 1
578						
579	Sprint 1	72 hrs	Thu 2/13/25	Wed 2/26/25		
580	Sprint Planning	8 hrs	Fri 2/13/25	Fri 2/14/25	569	PM,BA 1
581	Detailed Design Specifications Document Revisions	8 hrs	Fri 2/14/25	Mon 2/17/25	580	BA 1
582	Create/Update Use Cases	16 hrs	Mon 2/17/25	Wed 2/19/25	581	BA 1
583	Create User Stories	40 hrs	Wed 2/19/25	Wed 2/26/25	582	BA 1
584						
585	Sprint	424 hrs	Wed 2/26/25	Mon 5/12/25		
586	Planning, Construction & Unit Testing	162 hrs	Wed 2/26/25	Wed 3/26/25		
587	Assign Functions to Development Staff	2 hrs	Wed 2/26/25	Wed 2/26/25	583	PM
588	Data Model Revisions	8 hrs	Wed 2/26/25	Thu 2/27/25	587	DBA
589	Data Dictionary Revisions	8 hrs	Thu 2/27/25	Fri 2/28/25	588	DBA
590	Build/Modify Software Components	136 hrs	Wed 2/26/25	Fri 3/21/25	587	SE1,SE2,TL 1
591	Build/Modify SQL Components	16 hrs	Fri 3/21/25	Tue 3/25/25	590	SE1,SE2,TL 1
592	Unit Test the Software & SQL Components	8 hrs	Tue 3/25/25	Wed 3/26/25	591	SE1,SE2,TL 1
593						
594	Provider Portal & Complaints System Testing	238 hrs	Wed 2/26/25	Tue 4/8/25		
595	Review Test Plan	2 hrs	Wed 2/26/25	Wed 2/26/25	583	QAM
596	Identify Functions to be Tested	2 hrs	Wed 2/26/25	Wed 2/26/25	595	QAM
597	Create Test Scripts	16 hrs	Wed 2/26/25	Fri 2/28/25	596	QA 1
598	Perform System Testing	40 hrs	Wed 3/26/25	Wed 4/2/25	592,597	QA 1
599	Modify Software Components	8 hrs	Wed 4/2/25	Thu 4/3/25	598	SE1,SE2,TL 1
600	Modify SQL Components	4 hrs	Thu 4/3/25	Thu 4/3/25	599	SE1,SE2,TL 1
601	Unit Test the Software Components	4 hrs	Fri 4/4/25	Fri 4/4/25	600	SE1,SE2,TL 1
602	Perform System Testing	4 hrs	Fri 4/4/25	Fri 4/4/25	601	QA 1
603	Create System Test Results Report	4 hrs	Mon 4/7/25	Mon 4/7/25	602	QAM
604	Create Regression Test Reports	4 hrs	Mon 4/7/25	Mon 4/7/25	603	QAM
605	Update Training Materials	16 hrs	Fri 4/4/25	Tue 4/8/25	601	TR
606	Deploy to User Acceptance Testing Environment	2 hrs	Tue 4/8/25	Tue 4/8/25	604	SE1,SE2,TL 1
607	Product Demonstration of Tested System to DCDEE	2 hrs	Tue 4/8/25	Tue 4/8/25	606	PM,TL 1,DCDEE O&M
608	Add to the Solution/Sprint Backlog	4 hrs	Tue 4/8/25	Tue 4/8/25	607	PM,BA 1
609						

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
610	Sprint Implementation	190 hrs	Tue 4/8/25	Mon 5/12/25		
611	Implementation Preparation	176 hrs	Tue 4/8/25	Thu 5/8/25		
612	Create Release/Deployment Readiness Checklist	8 hrs	Tue 4/8/25	Wed 5/7/25	606	TL 1
613	Provide Onsite Assistance during Deployment Readiness	4 hrs	Wed 5/7/25	Wed 5/7/25	612	NOG
614	Create Production Test Scripts	4 hrs	Thu 5/8/25	Thu 5/8/25	613	QAM
615						
616	Installation	14 hrs	Thu 5/8/25	Mon 5/12/25		
617	Install the Production Build	4 hrs	Thu 5/8/25	Thu 5/8/25	614	TL 1
618	Perform Production Tests	2 hrs	Fri 5/9/25	Fri 5/9/25	617	QA 1
619	Create Validation Test Report	2 hrs	Fri 5/9/25	Fri 5/9/25	618	QAM
620	Cut Over to the Updated System	2 hrs	Fri 5/9/25	Fri 5/9/25	619	TL 1
621	Create Deployment UAT Results Report	2 hrs	Fri 5/9/25	Fri 5/9/25	620	QAM
622	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Mon 5/12/25	Mon 5/12/25	621	QAM
623						
624	Sprint Planning	72 hrs	Wed 2/26/25	Tue 3/11/25		
625	Sprint Planning	8 hrs	Wed 2/26/25	Thu 2/27/25	583	PM,BA 1
626	Detailed Design Specifications Document Revisions	8 hrs	Thu 2/27/25	Fri 2/28/25	625	BA 1
627	Create/Update Use Cases	16 hrs	Fri 2/28/25	Tue 3/4/25	626	BA 1
628	Create User Stories	40 hrs	Tue 3/4/25	Tue 3/11/25	627	BA 1
629						
630	Sprint	424 hrs	Wed 4/9/25	Fri 6/20/25		
631	Planning, Construction & Unit Testing	162 hrs	Wed 4/9/25	Wed 5/7/25		
632	Assign Functions to Development Staff	2 hrs	Wed 4/9/25	Wed 4/9/25	608,628	PM
633	Data Model Revisions	8 hrs	Wed 4/9/25	Thu 4/10/25	632	DBA
634	Data Dictionary Revisions	8 hrs	Thu 4/10/25	Fri 4/11/25	633	DBA
635	Build/Modify Software Components	136 hrs	Wed 4/9/25	Fri 5/2/25	632	SE1,SE2,TL 1
636	Build/Modify SQL Components	16 hrs	Fri 5/2/25	Tue 5/6/25	635	SE1,SE2,TL 1
637	Unit Test the Software & SQL Components	8 hrs	Tue 5/6/25	Wed 5/7/25	636	SE1,SE2,TL 1
638						
639	Provider Portal & Complaints System Testing	100 hrs	Fri 5/2/25	Tue 5/20/25		
640	Review Test Plan	2 hrs	Fri 5/2/25	Fri 5/2/25	635	QAM
641	Identify Functions to be Tested	2 hrs	Fri 5/2/25	Fri 5/2/25	640	QAM
642	Create Test Scripts	16 hrs	Fri 5/2/25	Tue 5/6/25	641	QA 1
643	Perform System Testing	40 hrs	Wed 5/7/25	Wed 5/14/25	637,642	QA 1
644	Modify Software Components	8 hrs	Wed 5/14/25	Thu 5/15/25	643	SE1,SE2,TL 1
645	Modify SQL Components	4 hrs	Thu 5/15/25	Thu 5/15/25	644	SE1,SE2,TL 1
646	Unit Test the Software Components	4 hrs	Thu 5/15/25	Fri 5/16/25	645	SE1,SE2,TL 1
647	Perform System Testing	4 hrs	Fri 5/16/25	Fri 5/16/25	646	QA 1
648	Create System Test Results Report	4 hrs	Fri 5/16/25	Mon 5/19/25	647	QAM
649	Create Regression Test Reports	4 hrs	Mon 5/19/25	Mon 5/19/25	648	QAM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
650	Update Training Materials	16 hrs	Fri 5/16/25	Tue 5/20/25	646	TR
651	Deploy to User Acceptance Testing Environment	2 hrs	Mon 5/19/25	Mon 5/19/25	649	SE1,SE2,TL 1
652	Product Demonstration of Tested System to DCDEE	2 hrs	Tue 5/20/25	Tue 5/20/25	651	PM,TL 1,DCDEE O&M
653	Add to the Solution/Sprint Backlog	4 hrs	Tue 5/20/25	Tue 5/20/25	652	PM,BA 1
654						
655	Sprint Implementation	190 hrs	Tue 5/20/25	Fri 6/20/25		
656	Implementation Preparation	176 hrs	Tue 5/20/25	Thu 6/19/25		
657	Create Release/Deployment Readiness Checklist	8 hrs	Tue 5/20/25	Wed 6/18/25	651	TL 1
658	Provide Onsite Assistance during Deployment Readiness	4 hrs	Wed 6/18/25	Wed 6/18/25	657	NOG
659	Create Production Test Scripts	4 hrs	Wed 6/18/25	Thu 6/19/25	658	QAM
660						
661	Installation	14 hrs	Thu 6/19/25	Fri 6/20/25		
662	Install the Production Build	4 hrs	Thu 6/19/25	Thu 6/19/25	659	TL 1
663	Perform Production Tests	2 hrs	Thu 6/19/25	Thu 6/19/25	662	QA 1
664	Create Validation Test Report	2 hrs	Fri 6/20/25	Fri 6/20/25	663	QAM
665	Cut Over to the Updated System	2 hrs	Fri 6/20/25	Fri 6/20/25	664	TL 1
666	Create Deployment UAT Results Report	2 hrs	Fri 6/20/25	Fri 6/20/25	665	QAM
667	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Fri 6/20/25	Fri 6/20/25	666	QAM
668						
669	Sprint Planning	72 hrs	Tue 3/11/25	Mon 3/24/25		
670	Sprint Planning	8 hrs	Tue 3/11/25	Wed 3/12/25	628	PM,BA 1
671	Detailed Design Specifications Document Revisions	8 hrs	Wed 3/12/25	Thu 3/13/25	670	BA 1
672	Create/Update Use Cases	16 hrs	Thu 3/13/25	Mon 3/17/25	671	BA 1
673	Create User Stories	40 hrs	Mon 3/17/25	Mon 3/24/25	672	BA 1
674						
675	Sprint	414 hrs	Tue 5/20/25	Thu 7/31/25		
676	Planning, Construction & Unit Testing	162 hrs	Tue 5/20/25	Tue 6/17/25		
677	Assign Functions to Development Staff	2 hrs	Tue 5/20/25	Tue 5/20/25	673,653	PM
678	Data Model Revisions	8 hrs	Wed 5/21/25	Wed 5/21/25	677	DBA
679	Data Dictionary Revisions	8 hrs	Thu 5/22/25	Thu 5/22/25	678	DBA
680	Build/Modify Software Components	136 hrs	Wed 5/21/25	Thu 6/12/25	677	SE1,SE2,TL 1
681	Build/Modify SQL Components	16 hrs	Fri 6/13/25	Mon 6/16/25	680	SE1,SE2,TL 1
682	Unit Test the Software & SQL Components	8 hrs	Tue 6/17/25	Tue 6/17/25	681	SE1,SE2,TL 1
683						
684	Provider Portal & Complaints System Testing	100 hrs	Fri 6/13/25	Tue 7/1/25		
685	Review Test Plan	2 hrs	Fri 6/13/25	Fri 6/13/25	680	QAM
686	Identify Functions to be Tested	2 hrs	Fri 6/13/25	Fri 6/13/25	685	QAM
687	Create Test Scripts	16 hrs	Fri 6/13/25	Tue 6/17/25	686	QA 1
688	Perform System Testing	40 hrs	Wed 6/18/25	Tue 6/24/25	682,687	QA 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
689	Modify Software Components	8 hrs	Wed 6/25/25	Wed 6/25/25	688	SE1,SE2,TL 1
690	Modify SQL Components	4 hrs	Thu 6/26/25	Thu 6/26/25	689	SE1,SE2,TL 1
691	Unit Test the Software Components	4 hrs	Thu 6/26/25	Thu 6/26/25	690	SE1,SE2,TL 1
692	Perform System Testing	4 hrs	Fri 6/27/25	Fri 6/27/25	691	QA 1
693	Create System Test Results Report	4 hrs	Fri 6/27/25	Fri 6/27/25	692	QAM
694	Create Regression Test Reports	4 hrs	Mon 6/30/25	Mon 6/30/25	693	QAM
695	Update Training Materials	16 hrs	Fri 6/27/25	Mon 6/30/25	691	TR
696	Deploy to User Acceptance Testing Environment	2 hrs	Mon 6/30/25	Mon 6/30/25	694	SE1,SE2,TL 1
697	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 6/30/25	Mon 6/30/25	696	PM,TL 1,DCDEE O&M
698	Add to the Solution/Sprint Backlog	4 hrs	Tue 7/1/25	Tue 7/1/25	697	PM,BA 1
699						
700	Sprint Implementation	182 hrs	Mon 6/30/25	Thu 7/31/25		
701	Implementation Preparation	16 hrs	Mon 6/30/25	Wed 7/2/25		
702	Create Release/Deployment Readiness Checklist	8 hrs	Mon 6/30/25	Tue 7/1/25	696	TL 1
703	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 7/1/25	Wed 7/2/25	702	NOG
704	Create Production Test Scripts	4 hrs	Wed 7/2/25	Wed 7/2/25	703	QAM
705						
706	Installation	14 hrs	Tue 7/29/25	Thu 7/31/25		
707	Install the Production Build	4 hrs	Tue 7/29/25	Wed 7/30/25	704	TL 1
708	Perform Production Tests	2 hrs	Wed 7/30/25	Wed 7/30/25	707	QA 1
709	Create Validation Test Report	2 hrs	Wed 7/30/25	Wed 7/30/25	708	QAM
710	Cut Over to the Updated System	2 hrs	Wed 7/30/25	Wed 7/30/25	709	TL 1
711	Create Deployment UAT Results Report	2 hrs	Thu 7/31/25	Thu 7/31/25	710	QAM
712	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 7/31/25	Thu 7/31/25	711	QAM
713						
714	Performance Testing	42 hrs	Mon 7/7/25	Mon 7/14/25		
715	Create Performance Test Plan	8 hrs	Mon 7/7/25	Mon 7/7/25		TL 2
716	Create Performance Test Cases	8 hrs	Tue 7/8/25	Tue 7/8/25	715	TL 2
717	Create Performance Test Scripts	8 hrs	Wed 7/9/25	Wed 7/9/25	716	TL 2
718	Create Performance Test Readiness Report	8 hrs	Thu 7/10/25	Thu 7/10/25	717	TL 2
719	Create Performance Test Report	8 hrs	Fri 7/11/25	Fri 7/11/25	718	TL 2
720	Gain Agency Approval of Performance	2 hrs	Mon 7/14/25	Mon 7/14/25	719	TL 2
721						
722	Sprint Planning	72 hrs	Mon 3/24/25	Fri 4/4/25		
723	Sprint Planning	8 hrs	Mon 3/24/25	Tue 3/25/25	673	PM,BA 1
724	Detailed Design Specifications Document Revisions	8 hrs	Tue 3/25/25	Wed 3/26/25	723	BA 1
725	Create/Update Use Cases	16 hrs	Wed 3/26/25	Fri 3/28/25	724	BA 1
726	Create User Stories	40 hrs	Fri 3/28/25	Fri 4/4/25	725	BA 1
727						

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
728	Sprint	414 hrs	Tue 7/1/25	Thu 9/11/25		
729	Planning, Construction & Unit Testing	162 hrs	Tue 7/1/25	Tue 7/29/25		
730	Assign Functions to Development Staff	2 hrs	Tue 7/1/25	Tue 7/1/25	726,698	PM
731	Data Model Revisions	8 hrs	Tue 7/1/25	Wed 7/2/25	730	DBA
732	Data Dictionary Revisions	8 hrs	Wed 7/2/25	Thu 7/3/25	731	DBA
733	Build/Modify Software Components	136 hrs	Tue 7/1/25	Thu 7/24/25	730	SE1,SE2,TL 1
734	Build/Modify SQL Components	16 hrs	Thu 7/24/25	Mon 7/28/25	733	SE1,SE2,TL 1
735	Unit Test the Software & SQL Components	8 hrs	Mon 7/28/25	Tue 7/29/25	734	SE1,SE2,TL 1
736						
737	Provider Portal & Complaints System Testing	100 hrs	Thu 7/24/25	Tue 8/12/25		
738	Review Test Plan	2 hrs	Thu 7/24/25	Thu 7/24/25	733	QAM
739	Identify Functions to be Tested	2 hrs	Fri 7/25/25	Fri 7/25/25	738	QAM
740	Create Test Scripts	16 hrs	Fri 7/25/25	Tue 7/29/25	739	QA 1
741	Perform System Testing	40 hrs	Tue 7/29/25	Tue 8/5/25	735,740	QA 1
742	Modify Software Components	8 hrs	Tue 8/5/25	Wed 8/6/25	741	SE1,SE2,TL 1
743	Modify SQL Components	4 hrs	Wed 8/6/25	Thu 8/7/25	742	SE1,SE2,TL 1
744	Unit Test the Software Components	4 hrs	Thu 8/7/25	Thu 8/7/25	743	SE1,SE2,TL 1
745	Perform System Testing	4 hrs	Thu 8/7/25	Fri 8/8/25	744	QA 1
746	Create System Test Results Report	4 hrs	Fri 8/8/25	Fri 8/8/25	745	QAM
747	Create Regression Test Reports	4 hrs	Fri 8/8/25	Mon 8/11/25	746	QAM
748	Update Training Materials	16 hrs	Thu 8/7/25	Mon 8/11/25	744	TR
749	Deploy to User Acceptance Testing Environment	2 hrs	Mon 8/11/25	Mon 8/11/25	747	SE1,SE2,TL 1
750	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 8/11/25	Mon 8/11/25	749	PM,TL 1,DCDEE O&M
751	Add to the Solution/Sprint Backlog	4 hrs	Mon 8/11/25	Tue 8/12/25	750	PM,BA 1
752						
753	Sprint Implementation	182 hrs	Mon 8/11/25	Thu 9/11/25		
754	Implementation Preparation	16 hrs	Mon 8/11/25	Wed 8/13/25		
755	Create Release/Deployment Readiness Checklist	8 hrs	Mon 8/11/25	Tue 8/12/25	749	TL 1
756	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 8/12/25	Tue 8/12/25	755	NOG
757	Create Production Test Scripts	4 hrs	Wed 8/13/25	Wed 8/13/25	756	QAM
758						
759	Installation	14 hrs	Tue 9/9/25	Thu 9/11/25		
760	Install the Production Build	4 hrs	Tue 9/9/25	Tue 9/9/25	757	TL 1
761	Perform Production Tests	2 hrs	Wed 9/10/25	Wed 9/10/25	760	QA 1
762	Create Validation Test Report	2 hrs	Wed 9/10/25	Wed 9/10/25	761	QAM
763	Cut Over to the Updated System	2 hrs	Wed 9/10/25	Wed 9/10/25	762	TL 1
764	Create Deployment UAT Results Report	2 hrs	Wed 9/10/25	Wed 9/10/25	763	QAM
765	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 9/11/25	Thu 9/11/25	764	QAM
766						
767	Sprint Planning	72 hrs	Fri 4/4/25	Thu 4/17/25		

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
768	Sprint Planning	8 hrs	Fri 4/4/25	Mon 4/7/25	726	PM,BA 1
769	Detailed Design Specifications Document Revisions	8 hrs	Mon 4/7/25	Tue 4/8/25	768	BA 1
770	Create/Update Use Cases	16 hrs	Tue 4/8/25	Thu 4/10/25	769	BA 1
771	Create User Stories	40 hrs	Thu 4/10/25	Thu 4/17/25	770	BA 1
772						
773	Sprint	416 hrs	Tue 8/12/25	Thu 10/23/25		
774	Planning, Construction & Unit Testing	162 hrs	Tue 8/12/25	Tue 9/9/25		
775	Assign Functions to Development Staff	2 hrs	Tue 8/12/25	Tue 8/12/25	771,751	PM
776	Data Model Revisions	8 hrs	Tue 8/12/25	Wed 8/13/25	775	DBA
777	Data Dictionary Revisions	8 hrs	Wed 8/13/25	Thu 8/14/25	776	DBA
778	Build/Modify Software Components	136 hrs	Tue 8/12/25	Thu 9/4/25	775	SE1,SE2,TL 1
779	Build/Modify SQL Components	16 hrs	Thu 9/4/25	Mon 9/8/25	778	SE1,SE2,TL 1
780	Unit Test the Software & SQL Components	8 hrs	Mon 9/8/25	Tue 9/9/25	779	SE1,SE2,TL 1
781						
782	Provider Portal & Complaints System Testing	100 hrs	Thu 9/4/25	Mon 9/22/25		
783	Review Test Plan	2 hrs	Thu 9/4/25	Thu 9/4/25	778	QAM
784	Identify Functions to be Tested	2 hrs	Thu 9/4/25	Thu 9/4/25	783	QAM
785	Create Test Scripts	16 hrs	Fri 9/5/25	Mon 9/8/25	784	QA 1
786	Perform System Testing	40 hrs	Tue 9/9/25	Tue 9/16/25	780,785	QA 1
787	Modify Software Components	8 hrs	Tue 9/16/25	Wed 9/17/25	786	SE1,SE2,TL 1
788	Modify SQL Components	4 hrs	Wed 9/17/25	Wed 9/17/25	787	SE1,SE2,TL 1
789	Unit Test the Software Components	4 hrs	Thu 9/18/25	Thu 9/18/25	788	SE1,SE2,TL 1
790	Perform System Testing	4 hrs	Thu 9/18/25	Thu 9/18/25	789	QA 1
791	Create System Test Results Report	4 hrs	Fri 9/19/25	Fri 9/19/25	790	QAM
792	Create Regression Test Reports	4 hrs	Fri 9/19/25	Fri 9/19/25	791	QAM
793	Update Training Materials	16 hrs	Thu 9/18/25	Mon 9/22/25	789	TR
794	Deploy to User Acceptance Testing Environment	2 hrs	Mon 9/22/25	Mon 9/22/25	792	SE1,SE2,TL 1
795	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 9/22/25	Mon 9/22/25	794	PM,TL 1,DCDEE O&M
796	Add to the Solution/Sprint Backlog	4 hrs	Mon 9/22/25	Mon 9/22/25	795	PM,BA 1
797						
798	Sprint Implementation	182 hrs	Mon 9/22/25	Thu 10/23/25		
799	Implementation Preparation	168 hrs	Mon 9/22/25	Tue 10/21/25		
800	Create Release/Deployment Readiness Checklist	8 hrs	Mon 9/22/25	Mon 10/20/25	794	TL 1
801	Provide Onsite Assistance during Deployment Readiness	4 hrs	Mon 10/20/25	Mon 10/20/25	800	NOG
802	Create Production Test Scripts	4 hrs	Tue 10/21/25	Tue 10/21/25	801	QAM
803						
804	Installation	14 hrs	Tue 10/21/25	Thu 10/23/25		
805	Install the Production Build	4 hrs	Tue 10/21/25	Tue 10/21/25	802	TL 1
806	Perform Production Tests	2 hrs	Wed 10/22/25	Wed 10/22/25	805	QA 1
807	Create Validation Test Report	2 hrs	Wed 10/22/25	Wed 10/22/25	806	QAM
808	Cut Over to the Updated System	2 hrs	Wed 10/22/25	Wed 10/22/25	807	TL 1

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
809	Create Deployment UAT Results Report	2 hrs	Wed 10/22/25	Wed 10/22/25	808	QAM
810	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 10/23/25	Thu 10/23/25	809	QAM
811						
812	Sprint Planning	72 hrs	Thu 4/17/25	Wed 4/30/25		
813	Sprint Planning	8 hrs	Thu 4/17/25	Fri 4/18/25	771	PM,BA 1
814	Detailed Design Specifications Document Revisions	8 hrs	Fri 4/18/25	Mon 4/21/25	813	BA 1
815	Create/Update Use Cases	16 hrs	Mon 4/21/25	Wed 4/23/25	814	BA 1
816	Create User Stories	40 hrs	Wed 4/23/25	Wed 4/30/25	815	BA 1
817						
818	Sprint	426 hrs	Tue 9/23/25	Fri 12/5/25		
819	Planning, Construction & Unit Testing	164 hrs	Tue 9/23/25	Tue 10/21/25		
820	Assign Functions to Development Staff	2 hrs	Tue 9/23/25	Tue 9/23/25	816,796	PM
821	Data Model Revisions	8 hrs	Tue 9/23/25	Wed 9/24/25	820	DBA
822	Data Dictionary Revisions	8 hrs	Wed 9/24/25	Thu 9/25/25	821	DBA
823	Build/Modify Software Components	136 hrs	Tue 9/23/25	Thu 10/16/25	820	SE1,SE2,TL 1
824	Build/Modify SQL Components	16 hrs	Thu 10/16/25	Mon 10/20/25	823	SE1,SE2,TL 1
825	Unit Test the Software & SQL Components	10 hrs	Mon 10/20/25	Tue 10/21/25	824	SE1,SE2,TL 1
826						
827	Provider Portal & Complaints System Testing	102 hrs	Thu 10/16/25	Mon 11/3/25		
828	Review Test Plan	2 hrs	Thu 10/16/25	Thu 10/16/25	823	QAM
829	Identify Functions to be Tested	2 hrs	Thu 10/16/25	Thu 10/16/25	828	QAM
830	Create Test Scripts	16 hrs	Thu 10/16/25	Mon 10/20/25	829	QA 1
831	Perform System Testing	40 hrs	Tue 10/21/25	Tue 10/28/25	825,830	QA 1
832	Modify Software Components	8 hrs	Tue 10/28/25	Wed 10/29/25	831	SE1,SE2,TL 1
833	Modify SQL Components	4 hrs	Wed 10/29/25	Wed 10/29/25	832	SE1,SE2,TL 1
834	Unit Test the Software Components	4 hrs	Thu 10/30/25	Thu 10/30/25	833	SE1,SE2,TL 1
835	Perform System Testing	4 hrs	Thu 10/30/25	Thu 10/30/25	834	QA 1
836	Create System Test Results Report	4 hrs	Fri 10/31/25	Fri 10/31/25	835	QAM
837	Create Regression Test Reports	4 hrs	Fri 10/31/25	Fri 10/31/25	836	QAM
838	Update Training Materials	16 hrs	Thu 10/30/25	Mon 11/3/25	834	TR
839	Deploy to User Acceptance Testing Environment	2 hrs	Mon 11/3/25	Mon 11/3/25	837	SE1,SE2,TL 1
840	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 11/3/25	Mon 11/3/25	839	PM,TL 1,DCDEE O&M
841	Add to the Solution/Sprint Backlog	4 hrs	Mon 11/3/25	Mon 11/3/25	840	PM,BA 1
842						
843	Sprint Implementation	190 hrs	Mon 11/3/25	Fri 12/5/25		
844	Implementation Preparation	176 hrs	Mon 11/3/25	Wed 12/3/25		
845	Create Release/Deployment Readiness Checklist	8 hrs	Mon 11/3/25	Tue 12/2/25	839	TL 1
846	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 12/2/25	Tue 12/2/25	845	NOG
847	Create Production Test Scripts	4 hrs	Wed 12/3/25	Wed 12/3/25	846	QAM

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
848						
849	Installation	14 hrs	Wed 12/3/25	Fri 12/5/25		
850	Install the Production Build	4 hrs	Wed 12/3/25	Wed 12/3/25	847	TL 1
851	Perform Production Tests	2 hrs	Thu 12/4/25	Thu 12/4/25	850	QA 1
852	Create Validation Test Report	2 hrs	Thu 12/4/25	Thu 12/4/25	851	QAM
853	Cut Over to the Updated System	2 hrs	Thu 12/4/25	Thu 12/4/25	852	TL 1
854	Create Deployment UAT Results Report	2 hrs	Thu 12/4/25	Thu 12/4/25	853	QAM
855	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Fri 12/5/25	Fri 12/5/25	854	QAM
856						
857	Sprint Planning	72 hrs	Tue 10/21/25	Mon 11/3/25		
858	Sprint Planning	8 hrs	Tue 10/21/25	Wed 10/22/25	802	PM,BA 1
859	Detailed Design Specifications Document Revisions	8 hrs	Wed 10/22/25	Thu 10/23/25	858	BA 1
860	Create/Update Use Cases	16 hrs	Thu 10/23/25	Mon 10/27/25	859	BA 1
861	Create User Stories	40 hrs	Mon 10/27/25	Mon 11/3/25	860	BA 1
862						
863	Sprint	424 hrs	Tue 11/4/25	Thu 1/15/26		
864	Planning, Construction & Unit Testing	162 hrs	Tue 11/4/25	Tue 12/2/25		
865	Assign Functions to Development Staff	2 hrs	Tue 11/4/25	Tue 11/4/25	861,841	PM
866	Data Model Revisions	8 hrs	Tue 11/4/25	Wed 11/5/25	865	DBA
867	Data Dictionary Revisions	8 hrs	Wed 11/5/25	Thu 11/6/25	866	DBA
868	Build/Modify Software Components	136 hrs	Tue 11/4/25	Thu 11/27/25	865	SE1,SE2,TL 1
869	Build/Modify SQL Components	16 hrs	Thu 11/27/25	Mon 12/1/25	868	SE1,SE2,TL 1
870	Unit Test the Software & SQL Components	8 hrs	Mon 12/1/25	Tue 12/2/25	869	SE1,SE2,TL 1
871						
872	Provider Portal & Complaints System Testing	100 hrs	Thu 11/27/25	Mon 12/15/25		
873	Review Test Plan	2 hrs	Thu 11/27/25	Thu 11/27/25	868	QAM
874	Identify Functions to be Tested	2 hrs	Thu 11/27/25	Thu 11/27/25	873	QAM
875	Create Test Scripts	16 hrs	Thu 11/27/25	Mon 12/1/25	874	QA 1
876	Perform System Testing	40 hrs	Tue 12/2/25	Tue 12/9/25	870,875	QA 1
877	Modify Software Components	8 hrs	Tue 12/9/25	Wed 12/10/25	876	SE1,SE2,TL 1
878	Modify SQL Components	4 hrs	Wed 12/10/25	Wed 12/10/25	877	SE1,SE2,TL 1
879	Unit Test the Software Components	4 hrs	Wed 12/10/25	Thu 12/11/25	878	SE1,SE2,TL 1
880	Perform System Testing	4 hrs	Thu 12/11/25	Thu 12/11/25	879	QA 1
881	Create System Test Results Report	4 hrs	Thu 12/11/25	Fri 12/12/25	880	QAM
882	Create Regression Test Reports	4 hrs	Fri 12/12/25	Fri 12/12/25	881	QAM
883	Update Training Materials	16 hrs	Thu 12/11/25	Mon 12/15/25	879	TR
884	Deploy to User Acceptance Testing Environment	2 hrs	Fri 12/12/25	Fri 12/12/25	882	SE1,SE2,TL 1
885	Product Demonstration of Tested System to DCDEE	2 hrs	Mon 12/15/25	Mon 12/15/25	884	PM,TL 1,DCDEE O&M
886	Add to the Solution/Sprint Backlog	4 hrs	Mon 12/15/25	Mon 12/15/25	885	PM,BA 1
887						
888	Sprint Implementation	190 hrs	Mon 12/15/25	Thu 1/15/26		

North Carolina Registry & Pre-K Project Plan V4

ID	Task Name	Duration	Start	Finish	Preds	Res Init
889	Implementation Preparation	176 hrs	Mon 12/15/25	Wed 1/14/26		
890	Create Release/Deployment Readiness Checklist	8 hrs	Mon 12/15/25	Tue 1/13/26	884	TL 1
891	Provide Onsite Assistance during Deployment Readiness	4 hrs	Tue 1/13/26	Tue 1/13/26	890	NOG
892	Create Production Test Scripts	4 hrs	Tue 1/13/26	Wed 1/14/26	891	QAM
893						
894	Installation	14 hrs	Wed 1/14/26	Thu 1/15/26		
895	Install the Production Build	4 hrs	Wed 1/14/26	Wed 1/14/26	892	TL 1
896	Perform Production Tests	2 hrs	Wed 1/14/26	Wed 1/14/26	895	QA 1
897	Create Validation Test Report	2 hrs	Thu 1/15/26	Thu 1/15/26	896	QAM
898	Cut Over to the Updated System	2 hrs	Thu 1/15/26	Thu 1/15/26	897	TL 1
899	Create Deployment UAT Results Report	2 hrs	Thu 1/15/26	Thu 1/15/26	898	QAM
900	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 1/15/26	Thu 1/15/26	899	QAM
901						
902	Sprint Planning	504 hrs	Mon 11/3/25	Thu 1/29/26		
903	Sprint Planning	8 hrs	Mon 11/3/25	Tue 11/4/25	861	PM,BA 1
904	Detailed Design Specifications Document Revisions	8 hrs	Tue 11/4/25	Wed 11/5/25	903	BA 1
905	Create/Update Use Cases	16 hrs	Wed 11/5/25	Fri 11/7/25	904	BA 1
906	Create User Stories	40 hrs	Fri 11/7/25	Fri 11/14/25	905	BA 1
907						
908	Sprint	262 hrs	Mon 12/15/25	Thu 1/29/26		
909	Planning, Construction & Unit Testing	162 hrs	Mon 12/15/25	Mon 1/12/26		
910	Assign Functions to Development Staff	2 hrs	Mon 12/15/25	Mon 12/15/25	906,886	PM
911	Data Model Revisions	8 hrs	Tue 12/16/25	Tue 12/16/25	910	DBA
912	Data Dictionary Revisions	8 hrs	Wed 12/17/25	Wed 12/17/25	911	DBA
913	Build/Modify Software Components	136 hrs	Tue 12/16/25	Wed 1/7/26	910	SE1,SE2,TL 1
914	Build/Modify SQL Components	16 hrs	Thu 1/8/26	Fri 1/9/26	913	SE1,SE2,TL 1
915	Unit Test the Software & SQL Components	8 hrs	Mon 1/12/26	Mon 1/12/26	914	SE1,SE2,TL 1
916						
917	Provider Portal & Complaints System Testing	100 hrs	Thu 1/8/26	Mon 1/26/26		
918	Review Test Plan	2 hrs	Thu 1/8/26	Thu 1/8/26	913	QAM
919	Identify Functions to be Tested	2 hrs	Thu 1/8/26	Thu 1/8/26	918	QAM
920	Create Test Scripts	16 hrs	Thu 1/8/26	Mon 1/12/26	919	QA 1
921	Perform System Testing	40 hrs	Tue 1/13/26	Mon 1/19/26	915,920	QA 1
922	Modify Software Components	8 hrs	Tue 1/20/26	Tue 1/20/26	921	SE1,SE2,TL 1
923	Modify SQL Components	4 hrs	Wed 1/21/26	Wed 1/21/26	922	SE1,SE2,TL 1
924	Unit Test the Software Components	4 hrs	Wed 1/21/26	Wed 1/21/26	923	SE1,SE2,TL 1
925	Perform System Testing	4 hrs	Thu 1/22/26	Thu 1/22/26	924	QA 1
926	Create System Test Results Report	4 hrs	Thu 1/22/26	Thu 1/22/26	925	QAM
927	Create Regression Test Reports	4 hrs	Fri 1/23/26	Fri 1/23/26	926	QAM
928	Update Training Materials	16 hrs	Thu 1/22/26	Fri 1/23/26	924	TR

North Carolina Registry & Pre-K Project Plan V4						
ID	Task Name	Duration	Start	Finish	Preds	Res Init
929	Deploy to User Acceptance Testing Environment	2 hrs	Fri 1/23/26	Fri 1/23/26	927	SE1,SE2,TL 1
930	Product Demonstration of Tested System to DCDEE	2 hrs	Fri 1/23/26	Fri 1/23/26	929	PM,TL 1,DCDEE O&M
931	Add to the Solution/Sprint Backlog	4 hrs	Mon 1/26/26	Mon 1/26/26	930	PM,BA 1
932						
933	Sprint Implementation	30 hrs	Fri 1/23/26	Thu 1/29/26		
934	Implementation Preparation	16 hrs	Fri 1/23/26	Tue 1/27/26		
935	Create Release/Deployment Readiness Checklist	8 hrs	Fri 1/23/26	Mon 1/26/26	929	TL 1
936	Provide Onsite Assistance during Deployment Readiness	4 hrs	Mon 1/26/26	Tue 1/27/26	935	NOG
937	Create Production Test Scripts	4 hrs	Tue 1/27/26	Tue 1/27/26	936	QAM
938						
939	Installation	14 hrs	Tue 1/27/26	Thu 1/29/26		
940	Install the Production Build	4 hrs	Tue 1/27/26	Wed 1/28/26	937	TL 1
941	Perform Production Tests	2 hrs	Wed 1/28/26	Wed 1/28/26	940	QA 1
942	Create Validation Test Report	2 hrs	Wed 1/28/26	Wed 1/28/26	941	QAM
943	Cut Over to the Updated System	2 hrs	Wed 1/28/26	Wed 1/28/26	942	TL 1
944	Create Deployment UAT Results Report	2 hrs	Thu 1/29/26	Thu 1/29/26	943	QAM
945	Create Agency Acceptance of Deployment UAT Results Report	2 hrs	Thu 1/29/26	Thu 1/29/26	944	TL 2
946						
947	Establish Infrastructure & Technical Specifications	96 hrs	Tue 10/1/24	Wed 10/16/24		
948	Update Infrastructure Requirements	16 hrs	Tue 10/1/24	Wed 10/2/24		NOG
949	Create General Backup & Recovery Plan	40 hrs	Thu 10/3/24	Wed 10/9/24	948	NOG
950	Create Disaster Recovery Plan	40 hrs	Thu 10/10/24	Wed 10/16/24	949	
951						
952	Transition	250 hrs	Mon 1/8/29	Tue 2/20/29		
953	Receive notification of Transition	2 hrs	Mon 1/8/29	Mon 1/8/29		PM
954	Create Transition Plan	40 hrs	Mon 1/8/29	Mon 1/15/29	953	PM
955	DCDEE Reviews Transition Plan	40 hrs	Mon 1/15/29	Mon 1/22/29	954	DCDEE O&M
956	Revisions to the Transition Plan	8 hrs	Mon 1/22/29	Tue 1/23/29	955	PM
957	Begin Transition	160 hrs	Tue 1/23/29	Tue 2/20/29	956	
958	End Transition	0 hrs	Tue 2/20/29	Tue 2/20/29	957	

Draft Staffing Plan

Project Team

The table below highlights the TCC staffing plan that is typical for a project of this scope and size.

Role/Skills	Responsibility	Percentage of Time During Implementation	Percentage of Time During Pilot	Percentage of Time During Stabilization	Percentage of Time During M&O
TCC Project Director <ul style="list-style-type: none"> • 5 years' experience as a project manager • Bachelor's degree • Leadership and business management skills 	<ul style="list-style-type: none"> • Ensure that client is satisfied with project progress and outcomes. • Act as the ultimate escalation point for client leadership and executive sponsor. • Provides oversight and support of the Project Manager. 	25%	25%	25%	5%
TCC Project Manager <ul style="list-style-type: none"> • 3 years' experience as a project manager • PMP • Bachelor's degree • Agile experience 	<ul style="list-style-type: none"> • Oversight of the project execution. • Track and report on project timelines, tasks, and deliverables. • Implement communication protocols that support the overall project. • Track, communicate, and manage risks. • Manage appropriate resource allocation, scope, and change requests. • Ensure accurate project documentation. 	100%	100%	100%	100%
TCC Subject Matter Expert <ul style="list-style-type: none"> • Bachelor's degree 	<ul style="list-style-type: none"> • Contribute expertise around national 	5%	5%	5%	5%

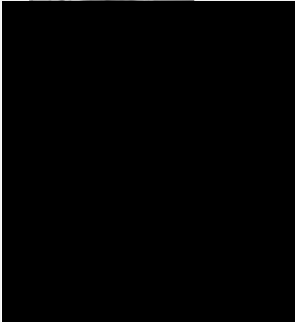

<ul style="list-style-type: none"> 10 years direct experience with state and federal early childhood law and policies 	<ul style="list-style-type: none"> trends, best practices and lessons learned. Act as a liaison between the client staff and technical team. Act as escalation point for the County. 				
TCC Project Coordinator <ul style="list-style-type: none"> Strong organizational and multi-tasking skills Documentation management and ability to use project management tools 	<ul style="list-style-type: none"> Provide administrative support including scheduling, notetaking, documentation, and reporting. 	25%	25%	25%	10%
TCC Business Analyst <ul style="list-style-type: none"> Bachelor's degree 2 years' experience as a business analyst Advanced experience in Microsoft Suite, Visio 	<ul style="list-style-type: none"> Work closely with client stakeholders to define requirements of the system. Prepare functional design and business requirements documents for client approval. Works with the Developers to ensure shared understanding of client's needs. 	100%	100%	100%	100%
TCC Developers <ul style="list-style-type: none"> 3-6 years' experience in collaborate development environment Associate degree Development tools 	<ul style="list-style-type: none"> Configure and code the product to client requirements. Develop API's and system interfaces. Code review and unit testing. Root cause analysis and defeat resolution. 	100%	100%	100%	100%
TCC Database Administrator	<ul style="list-style-type: none"> Manage data conversion tasks. 	10%	10%	10%	10%

<ul style="list-style-type: none"> • Bachelor's degree • 4-8 years of relevant experience • Knowledge of transactional databases 	<ul style="list-style-type: none"> • Manage and monitor infrastructure environment. 				
TCC Quality Assurance <ul style="list-style-type: none"> • Associate degree • 2-5 years' experience in testing • Experience in implementing automated testing software 	<ul style="list-style-type: none"> • Develop and run automated test scripts. • Thoroughly test the product to ensure that it meets client requirements. • Track and communicate defects. • Support final user acceptance testing process. 	100%	100%	100%	100%
TCC Network Operations <ul style="list-style-type: none"> • 4-7 years of networking experience • ITIL Functions • CCMP Certification preferred 	<ul style="list-style-type: none"> • Set up and Maintain the AWS infrastructure. • Develop and maintain Security Documentation. 	25%	25%	25%	25%
TCC Trainer <ul style="list-style-type: none"> • Bachelor's degree • 3-5 years of experience as a trainer • Excellent interpersonal and communication skills 	<ul style="list-style-type: none"> • Develop a training plan and training resources for end users of the product. • Facilitate training for end users. 	50%	75%	75%	20%
TCC Help Desk and Call Center <ul style="list-style-type: none"> • Associate degree • 2-5 years of experience troubleshooting 	<ul style="list-style-type: none"> • Support End Users with answers to questions and issue resolutions. • Track issues in MESD ticketing system 	N/A	100%	100%	100%

<ul style="list-style-type: none">Excellent written and verbal communication skills	<ul style="list-style-type: none">Escalate Tier III issues to project team.				
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Unlike some competitors, TCC does not replace the implementation staff with a new team for Maintenance and Operations (M&O). Continuity of resources is of the utmost importance for continued success after Go-Live, therefore the institutional knowledge the implementation staff has from the project is retained in M&O by keeping the team together.

Proposed TCC Project Manager

	
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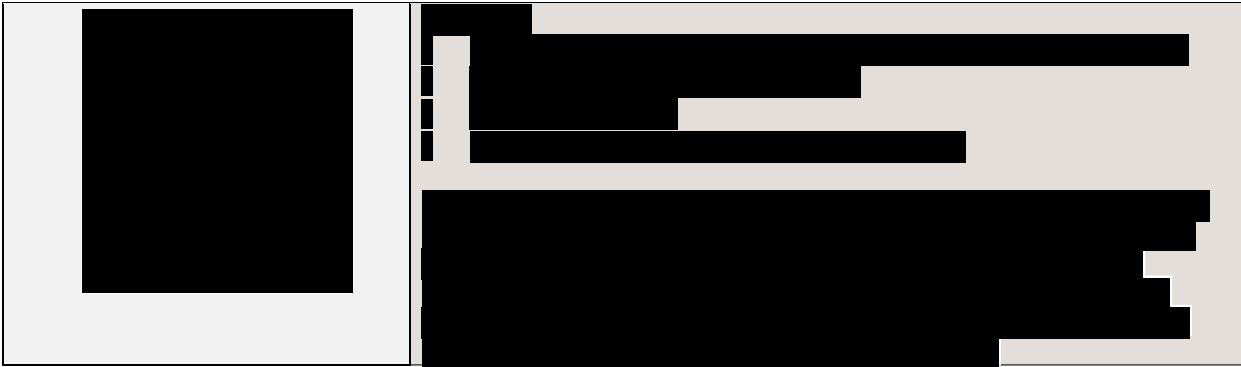
TCC Early Childhood Subject Matter Experts

TCC is led by early childhood professionals with a combined 100 years of experience working in state government that are passionate about solutions that support state agencies and the families and children they serve. Many TCC project managers and development staff have been with the company since its inception.

Below, TCC highlights the depth of subject matter expertise offered, including [four prior Early Childhood State Administrators on the team.](#)

	
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To plan for resource turnover, TCC develops a Staffing Plan for all long-term staff augmentation contracts.

A staffing plan is a strategic planning process by which a company assesses and identifies personnel needs. In other words, a good staffing plan helps you understand the number and types of employees needed to accomplish business goals.

A staffing plan involves three main steps:

1. Determine current staffing levels.
2. Assess staffing needs.
3. Analyze staffing gaps.

After assessing the current staffing landscape, some predictions can be made about future staffing needs.

TCC considers the factors that can affect staffing decisions and opportunities, including:

- Business goals
- Turnover rates and projections
- New technology
- Changes in the economy
- Industry labor costs
- Unemployment rate

All these internal and external factors can influence the workforce and long-term staffing needs. Once future staffing needs are identified, TCC will outline recommendations for how to address those needs, which might include recruiting and hiring new talent, promoting internally, focusing on training and employee development, or adding additional staff skill sets. These forecasts and recommendations will help TCC develop the overall staffing plan for your organization.

Security Plan

TCC has provided a sample draft version of a System Security Plan for this proposal. However, as required, TCC will work with the State to update and leverage any templates for this documentation provided by the State to satisfy the requirement. The attached draft sample is for reference only and any final documentation would be fully updated and maintained following all State requirements.



North Carolina Workforce Registry, PreK, and Regulatory System Solution

System Security Plan

Version 0.1





Document Approval

Reviewers' Signatures

Your signature indicates that, as a content expert, you have reviewed this document and that it accurately reflects the level of detail needed for the impacted systems.

Name	Title	Signature	Date

Approvers' Signatures

Your signature indicates that you acknowledge your responsibilities, agree with the purpose and scope of this document, and that the document has been reviewed by appropriate personnel to ensure successful completion of this procedure.

Name	Title	Signature	Date



Document Version History

This Version History documents changes to this document. Any differences between this version and previous ones are resolved in favor of the present document.

Ver.	Date	Author	Section changed/ Description
0.1	08/01/2023	Lisa Hill	Initial version



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Purpose

The document defines the System Security Plan (SSP) for TCC's information systems as they relate to North Carolina, including TCC owned and operated equipment, customer equipment operated by TCC resources, cloud and virtual assets managed by TCC resources, and customer systems that TCC has been contractually obligated to maintain.

Scope and Description

This charter implements the policies, guidelines, and standards that govern TCC's SSPs, a key component of the risk management process intended to protect TCC and its employees, customers, systems, data, and facilities. This SSP does not apply to protection of personnel, facilities, and property not directly associated with information technology utilized to support delivery of services to [TCC's North Carolina Workforce Registry, PreK, and Regulatory System Solution contract](#).

Risk management activities, including those related to SSP, apply to all administrative, physical, and technical areas in scope. Risk management activities can include review, approval, and implementation of changes, developing and implementing secure system guidelines, and performing system audits.

Compliance and Conformity

- FIPS-200: Federal Information Processing Standards (FIPS) 200, Minimum Security Requirements for Federal Information and Information Systems, March 2006.
- National Institute of Standards and Technology (NIST) Special Publication 800-53, Revision 5: Security and Privacy Controls for Information Systems and Organizations.
- National Institute of Standards and Technology (NIST) Special Publication 800-128: Guide for Security-Focused Configuration Management of Information Systems.

Enforcement

Violation of this procedure could result in loss or limitations on use of information resources, as well as disciplinary and/or legal action, including termination of employment, termination of agreements, or referral for criminal prosecution.

Roles and Responsibilities

The individuals and groups assigned to each role are recorded in the TCC Role-Title Matrix.



Role	Responsibility	Scope of Access
Business Owners	Highest level officials with overall responsibility to develop, implement, and maintain accountability and to provide active support, oversight, and management commitment for information security objectives.	<ul style="list-style-type: none"> Full physical access to all facilities Non-privileged access to TCC components
Chief Information Officer	Responsible for: <ul style="list-style-type: none"> Ensuring that the appropriate operational security posture is maintained for information systems. Ensuring coordination among groups is managed and maintained for these policies and procedures. <u>Providing for</u> appropriate security, to include management, operational, and technical controls. Carrying out security officer responsibilities under FISMA. Ensuring that information security requirements necessary to protect TCC's core mission/business processes are adequately addressed in all aspects of enterprise architecture. Developing, implementing, maintaining, and ensuring compliance with information security policies, procedures, and controls. Has final responsibility for TCC's information security program. 	<ul style="list-style-type: none">
Director, Information Security	Responsible for: <ul style="list-style-type: none"> Acting on behalf of the Chief Information Officer to coordinate and conduct day-to-day activities associated with the security authorization process. Performing auditing to ensure compliance with appropriate policies and guidelines. Conducting comprehensive assessments of the management, operational, and technical security controls present within the system boundaries. 	<ul style="list-style-type: none"> Full physical access to all facilities Non-privileged access to TCC components Privileged access to TCC data necessary to complete assigned responsibilities.
Network Operations Group (NOG)	Responsible for:	<ul style="list-style-type: none"> Physical access to all TCC facilities.

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	<ul style="list-style-type: none"> Assisting information owners with implementing configuration management measures. Operating information systems at an acceptable level of risk to organizational operations and assets. Procuring, developing, integrating, modifying, operating, maintaining, and disposing of information system components. 	<ul style="list-style-type: none"> Privileged access to assigned TCC components.
Engineering	Responsible for: <ul style="list-style-type: none"> Implementing and monitoring the security requirements prescribed in this policy. Monitoring conformity with the environmental requirements prescribed in this policy. Monitoring conformity with the availability requirements prescribed in this policy. 	<ul style="list-style-type: none"> Full access to all facilities. Privileged access to assigned TCC components.
Director, Enterprise Infrastructure	Responsible for: <ul style="list-style-type: none"> Overseeing data center operations. Ensuring that their personnel understand policy regarding physical security and configuration management. Monitoring their employees' compliance with this policy. Providing physical access authorizations and controls. 	<ul style="list-style-type: none"> Full physical access to all facilities. Privileged access to all TCC components.
System Owner	Responsible for: <ul style="list-style-type: none"> FISMA system ownership responsibilities. Appointing individuals to fill roles related to TCC. Making decisions related to TCC. 	<ul style="list-style-type: none"> Physical access to the TCC environment. Privileged or non-privileged access to TCC as authorized.

Terminology

This document contains the following terms, acronyms and abbreviations.

Term	Explanation
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SOP	Standard Operating Procedure
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Management Commitment

Management recognizes and supports this document and is committed to supporting its purpose. This document has been reviewed and approved for general application to the stated scope by the Chief Information Officer.

Chad Hughes

System Security Plan Approvals

Cloud Service Provider Signatures

Name	<Enter Name>	Date	<Select Date>
Title	<Enter Title>		
Cloud Service Provider	CSP Name		

Name	<Enter Name>	Date	<Select Date>
Title	<Enter Title>		
Cloud Service Provider	CSP Name		

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Name	<Enter Name>	Date	<Select Date>
Title	<Enter Title>		
Cloud Service Provider	CSP Name		

I. INFORMATION SYSTEM – NAME/TITLE

This System Security Plan provides an overview of the security requirements for the North Carolina Workforce Registry, PreK, and Regulatory System Solution and describes the controls in place or planned for implementation to provide a level of security appropriate for the information to be transmitted, processed or stored by the system. Information security is vital to our critical infrastructure and its effective performance and protection is a key component of our national security program. Proper management of information technology systems is essential to ensure the confidentiality, integrity and availability of the data transmitted, processed, or stored by the North Carolina Workforce Registry, PreK, and Regulatory System Solution.

The security safeguards implemented for the North Carolina Workforce Registry, PreK, and Regulatory System Solution meet the policy and control requirements set forth in this System Security Plan. All systems are subject to monitoring consistent with applicable laws, regulations, agency policies, procedures, and practices.

The overall information system sensitivity categorization is recorded in Table 2-1 Security Categorization that follows. Directions for attaching the FIPS 199 document may be found in the following section: ATTACHMENT 10 - FIPS 199.

Table 2-1. Security Categorization

System Sensitivity Level:	Moderate
----------------------------------	----------

2.1. Information Types

This section describes how the information types used by the information system are categorized for confidentiality, integrity, and availability sensitivity levels.

The following tables identify the information types that are input, stored, processed and/or output from the North Carolina Workforce Registry, PreK, and Regulatory System Solution. The selection of the information types is based on guidance provided by Office of Management and Budget (OMB) Federal Enterprise Architecture Program Management Office Business Reference Model 2.0 and FIPS Pub 199, Standards for Security Categorization of Federal Information and Information Systems which is based on NIST Special Publication (SP) 800-60, Guide for Mapping Types of Information and Information Systems to Security Categories.



The tables also identify the security impact levels for confidentiality, integrity, and availability for each of the information types expressed as low, moderate, or high. The security impact levels are based on the potential impact definitions for each of the security objectives (i.e., confidentiality, integrity, and availability) discussed in NIST SP 800-60 and FIPS Pub 199.

The potential impact is low if—

- The loss of confidentiality, integrity, or availability could be expected to have a limited adverse effect on organizational operations, organizational assets, or individuals.
- A limited adverse effect means that, for example, the loss of confidentiality, integrity, or availability might: (i) cause a degradation in mission capability to an extent and duration that TCC is able to perform its primary functions, but the effectiveness of the functions is noticeably reduced; (ii) result in minor damage to organizational assets; (iii) result in minor financial loss; or (iv) result in minor harm to individuals.

The potential impact is moderate if—

- The loss of confidentiality, integrity, or availability could be expected to have a serious adverse effect on organizational operations, organizational assets, or individuals.
- A serious adverse effect means that, for example, the loss of confidentiality, integrity, or availability might: (i) cause a significant degradation in mission capability to an extent and duration that TCC is able to perform its primary functions, but the effectiveness of the functions is significantly reduced; (ii) result in significant damage to organizational assets; (iii) result in significant financial loss; or (iv) result in significant harm to individuals that does not involve loss of life or serious life threatening injuries.

The potential impact is high if—

- The loss of confidentiality, integrity, or availability could be expected to have a severe or catastrophic adverse effect on organizational operations, organizational assets, or individuals.
- A severe or catastrophic adverse effect means that, for example, the loss of confidentiality, integrity, or availability might: (i) cause a severe degradation in or loss of mission capability to an extent and duration that TCC is not able to perform one or more of its primary functions; (ii) result in major damage to organizational assets; (iii) result in major financial loss; or (iv) result in severe or catastrophic harm to individuals involving loss of life or serious life threatening injuries.

Instruction: Record your information types in the tables that follow. Record the sensitivity level for Confidentiality, Integrity and Availability as High, Moderate, or Low. Add more rows as needed to add more information types. Use NIST SP 800-60 Guide for Mapping Types of Information and Systems to Security Categories, Volumes I & II, Revision 1 for guidance.

Delete this instruction from your final version of this document.

Example:

Information Type (Use only information types from NIST SP 800-60, Volumes I and II as amended)	NIST 800-60 identifier for Associated Information Type	Confidentiality	Integrity	Availability



System Development	C.3.5.1	Low	Moderate	Low
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Table 2-2. Sensitivity Categorization of Information Types

Information Type (Use only information types from NIST SP 800-60, Volumes I and II as amended)	NIST 800-60 identifier for Associated Information Type	Confidentiality	Integrity	Availability
<Enter Information Type>	<Enter NIST Identifier>	Choose level.	Choose level.	Choose level.
<Enter Information Type>	<Enter NIST Identifier>	Choose level.	Choose level.	Choose level.
<Enter Information Type>	<Enter NIST Identifier>	Choose level.	Choose level.	Choose level.

I.1. Security Objectives Categorization (FIPS 199)

Based on the information provided in Table 2-2 Sensitivity Categorization of Information Types, for the North Carolina Workforce Registry, PreK, and Regulatory System Solution, default to the high-water mark for the Information Types as identified in Table 2-3 Security Impact Level below.

Table 2-3. Security Impact Level

Security Objective	Low, Moderate or High
Confidentiality	Choose level.
Integrity	Choose level.
Availability	Choose level.

Through review and analysis, it has been determined that the baseline security categorization for the North Carolina Workforce Registry, PreK, and Regulatory System Solution is listed in the Table 2-4 Baseline Security Configuration that follows.

Table 2-4. Baseline Security Configuration

North Carolina Workforce Registry, PreK, and Regulatory System Solution Security Categorization	Moderate
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Using this categorization, in conjunction with the risk assessment and any unique security requirements, we have established the security controls for this system, as detailed in this SSP.



2. INFORMATION SYSTEM OWNER

The following individual is identified as the system owner or functional proponent/advocate for this system.

Table 3-1. Information System Owner

Information System Owner Information	
Name	<Enter Name>
Title	<Enter Title>
Company / Organization	<Enter Company/Organization>
Address	<Enter Address, City, State and Zip>
Phone Number	<555-555-5555>
Email Address	<Enter email address>

3. AUTHORIZING OFFICIAL

Instruction: The Authorizing Official is determined by the path that the CSP is using to obtain an authorization.

JAB P-ATO: FedRAMP, JAB, as comprised of member representatives from the General Services Administration (GSA), Department of Defense (DoD) and Department of Homeland Security (DHS)

Agency Authority to Operate (ATO): Agency Authorizing Official name, title and contact [information](#)

Delete this and all other instructions from your final version of this document.

The Authorizing Official (AO) or Designated Approving Authority (DAA) for this information system is the
Insert AO information as instructed above.

I. OTHER DESIGNATED CONTACTS

The following individual(s) identified below possess in-depth knowledge of this system and/or its functions and operation.

Table 5-1. Information System Management Point of Contact

Information System Management Point of Contact	
Name	<Enter Name>
Title	<Enter Title>



North Carolina Workforce Registry, PreK, and Regulatory System Solution SSP

Company / Organization	<Enter Company/Organization>
Address	<Enter Address, City, State and Zip>
Phone Number	<555-555-5555>
Email Address	<Enter email address>

Table 5-2. Information System Technical Point of Contact

Information System Technical Point of Contact	
Name	<Enter Name>
Title	<Enter Title>
Company / Organization	<Enter Company/Organization>
Address	<Enter Address, City, State and Zip>
Phone Number	<555-555-5555>
Email Address	<Enter email address>

Instruction: Add more tables as needed.

Delete this and all other instructions from your final version of this document.

Point of Contact	
Name	<Enter Name>
Title	<Enter Title>
Company / Organization	<Enter Company/Organization>
Address	<Enter Address, City, State and Zip>
Phone Number	<555-555-5555>
Email Address	<Enter email address>

I. ASSIGNMENT OF SECURITY RESPONSIBILITY

The Information System Security Officers (ISSO), or their equivalent, identified below, have been appointed in writing and are deemed to have significant cyber and operational role responsibilities.

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Table 6-1. CSP Name Internal ISSO (or Equivalent) Point of Contact

CSP Name Internal ISSO (or Equivalent) Point of Contact	
Name	<Enter Name>
Title	<Enter Title>
Company / Organization	<Enter Company/Organization>.
Address	<Enter Address, City, State and Zip>
Phone Number	<555-555-5555>
Email Address	<Enter email address>

I. INFORMATION SYSTEM OPERATIONAL STATUS

The system is currently in the life-cycle phase shown in Table 7-1 System Status that follows. (Only operational systems can be granted an ATO).

Table 7-1. System Status

System Status		
<input checked="" type="checkbox"/>	Operational	The system is operating and in production.
<input checked="" type="checkbox"/>	Under Development	The system is being designed, developed, or implemented
<input type="checkbox"/>	Major Modification	The system is undergoing a major change, development, or transition.
<input type="checkbox"/>	Other	Explain: Click here to enter text.

2. INFORMATION SYSTEM TYPE

The North Carolina Workforce Registry, PreK, and Regulatory System Solution makes use of unique managed service provider architecture layer(s).





2.1. Cloud Service Models

Information systems, particularly those based on cloud architecture models, are made up of different service layers. Below are some questions that help the system owner determine if their system is a cloud followed by specific questions to help the system owner determine the type of cloud.

Question (Yes/No)	Conclusion
Does the system use virtual machines?	Yes
Does the system <u>have the ability to</u> expand its capacity to meet customer demand?	Yes
Does the system <u>have the ability to</u> expand its capacity to meet customer demand?	Yes
Does the system allow the consumer to build anything other than servers?	A no response means that the system is an IaaS. A yes response means that the system is either a PaaS or a SaaS.
Does the system offer the ability to create databases?	A yes response means that the system is a PaaS.
Does the system offer various developer toolkits and APIs?	A yes response means that the system is a PaaS.
Does the system offer only applications that are available by obtaining a login?	A yes response means that <u>system</u> is a SaaS. A no response means that the system is either a PaaS or an IaaS.

The layers of the North Carolina Workforce Registry, PreK, and Regulatory System Solution defined in this SSP are indicated in Table 8-1 Service Layers Represented in this SSP that follows.

Table 8-1. Service Layers Represented in this SSP

Service Provider Architecture Layers		
<input type="checkbox"/>	Software as a Service (SaaS)	Major Application
<input type="checkbox"/>	Platform as a Service (PaaS)	Major Application
<input type="checkbox"/>	Infrastructure as a Service (IaaS)	General Support System
<input type="checkbox"/>	Other	Explain: Click here to enter text.

Note: Refer to NIST SP 800-145 for information on cloud computing architecture models.

1.1. Cloud Deployment Models

Information systems are made up of different deployment models. The deployment models of the North Carolina Workforce Registry, PreK, and Regulatory System Solution that are defined in this SSP and are not leveraged by any other FedRAMP Authorizations, are indicated in Table 8-2 Cloud Deployment Model Represented in this SSP that follows.

Instruction: Check deployment model that applies.



Delete this and all other instructions from your final version of this document.

Table 8-2. Cloud Deployment Model Represented in this SSP

Service Provider Cloud Deployment Model		
<input type="checkbox"/>	Public	Cloud services and infrastructure supporting multiple organizations and agency clients
<input type="checkbox"/>	Private	Cloud services and infrastructure dedicated to a specific organization/agency and no other clients
<input type="checkbox"/>	Government Only Community	Cloud services and infrastructure shared by several organizations/agencies with same policy and compliance considerations
<input type="checkbox"/>	Hybrid	<p>Explain: (e.g., cloud services and infrastructure that provides private cloud for secured applications and data where required and public cloud for other applications and data)</p> <p>Click here to enter text.</p>

2. GENERAL SYSTEM DESCRIPTION

This section includes a general description of the North Carolina Workforce Registry, PreK, and Regulatory System Solution.

2.1. System Function or Purpose

Instruction: In the space that follows, describe the purpose and functions of this system.

Delete this and all other instructions from your final version of this document.

This system serves the function of delivering application services to the North Carolina Workforce Registry, PreK, and Regulatory System Solution --

1.1. Information System Components and Boundaries

Instruction: In the space that follows, provide an explicit definition of the system's Authorization Boundary. Provide a diagram that portrays this Authorization Boundary and all its connections and components, including the means for monitoring and controlling communications at the external boundary and at key internal boundaries within the system. Address all components and managed interfaces of the information system authorized for operation (e.g., routers, firewalls).

The diagram must include a predominant border drawn around all system components and services included in the authorization boundary. The diagram must be easy to read and understand.

Formal names of components as they are known at the service provider organization in functional specifications, configuration guides, other documents and live configurations shall be named on the diagram and described. Components identified in the Boundary diagram should be consistent with the Network diagram and the inventory(jes). Provide a key to symbols used. Ensure consistency between the



boundary and network diagrams and respective descriptions (Section 9.4) and the appropriate Security Controls [AC-20, CA-3(1)].

Additional FedRAMP Requirements and Guidance:

Guidance: See the FedRAMP Documents page under Key Cloud Service Provider (CSP) Documents> FedRAMP Authorization Boundary Guidance

<https://www.fedramp.gov/documents/>

Delete this and all other instructions from your final version of this document.

A detailed and explicit definition of the system authorization boundary diagram is represented in Figure 9-1 Authorization Boundary Diagram below.



Figure 9-1 Authorization Boundary Diagram

1.1. Types of Users

All personnel have their status categorized with a sensitivity level in accordance with PS-2. Personnel (employees or contractors) of service providers are considered Internal Users. All other users are considered External Users. User privileges (authorization permission after authentication takes place) are described in Table 9-1 Personnel Roles and Privileges that follows.

Instruction: For an External User, write “Not Applicable” in the Sensitivity Level Column. This table must include all roles including systems administrators and database administrators as a role types. (Also include web server administrators, network administrators and firewall administrators if these individuals have the ability to configure a device or host that could impact the CSP service offering.)

This table must also include whether these roles are fulfilled by foreign nationals or systems outside the United States.

Delete this and all other instructions from your final version of this document.

Table 9-1. Personnel Roles and Privileges

Role	Internal or External	Privileged (P), Non-Privileged (NP), or No Logical Access (NLA)	Sensitivity Level	Authorized Privileges	Functions Performed
NOG Administrator	Internal	P	Moderate	Full administrative access (root)	Add/remove users and hardware, <u>install and</u> configure software, OS updates, patches and hotfixes,



					perform backups
Developer	Internal	NP	N/A	Portal administration	Add/remote client users. Create, <u>modify</u> and delete client applications
North Carolina Client Admin	Internal	NLA	Limited	N/A	Reviews, <u>approves</u> and enforces policy
North Carolina Client User	Choose an item.	Choose an item.	Choose an item.		
	Choose an item.	Choose an item.	Choose an item.		
	Choose an item.	Choose an item.	Choose an item.		
	Choose an item.	Choose an item.	Choose an item.		

There are currently <number> internal personnel and <number> external personnel. Within one year, it is anticipated that there will be <number> internal personnel and <number> external personnel.

1.1. Network Architecture

Instruction: Insert a network architectural diagram in the space that follows. Ensure that the following items are labeled on the diagram: hostnames, Domain Name System (DNS) servers, DHCP servers, authentication and access control servers, directory servers, firewalls, routers, switches, database servers, major applications, storage, Internet connectivity providers, telecom circuit numbers, network interfaces and numbers, VLANs. Major security components should be represented. If necessary, include multiple network diagrams.

Delete this and all other instructions from your final version of this document.

Assessors should be able to easily map hardware, software and network inventories back to this diagram.

The logical network topology is shown in Figure 9-2 Network Diagram mapping the data flow between components.

The following Figure 9-2 Network Diagram(s) provides a visual depiction of the system network components that constitute the North Carolina Workforce Registry, PreK, and Regulatory System Solution.



Figure 9-2 Network Diagram

2. SYSTEM ENVIRONMENT AND INVENTORY

Directions for attaching the FedRAMP Inventory Workbook may be found in the following section:
ATTACHMENT 13 – FedRAMP Inventory Workbook.

Instruction: In the space that follows, provide a general description of the technical system environment. Include information about all system environments that are used, e.g., production environment, test environment, staging or QA environments. Include the specific location of the alternate, backup and operational facilities.

In your description, also include a reference to Attachment 13, the system’s Integrated Inventory Workbook, which should provide a complete listing of the system’s components (operating systems/infrastructure, web applications/software, and databases). The Integrated Inventory Workbook should be maintained and updated monthly by the CSP, as part of continuous monitoring efforts. Instructions for completing the Integrated Inventory Workbook are provided within the Integrated Inventory Workbook.

Delete this and all other instructions from your final version of this document.

1.1. Data Flow

Instruction: In the space that follows, describe the flow of data in and out of system boundaries and insert a data flow diagram. Describe protections implemented at all entry and exit points in the data flow as well as internal controls between customer and project users. Include data flows for privileged and non-privileged authentication/authorization to the system for internal and external users. If necessary, include multiple data flow diagrams.

Delete this and all other instructions from your final version of this document.

The data flow in and out of the system boundaries is represented in Figure 10-1 Data Flow Diagram below.



Figure 10-1 Data Flow Diagram

1.2. Ports, Protocols and Services

Table 10-1 Ports, Protocols and Services below lists the ports, protocols and services enabled in this information system.

Instruction: In the column labeled “Used By” please indicate the components of the information system that make use of the ports, protocols and services. In the column labeled “Purpose” indicate the purpose for the service (e.g., system logging, HTTP redirector, load balancing). This table should be consistent with CM-6 and CM-7. You must fill out this table, even if you are leveraging a pre-existing FedRAMP Authorization. Add more rows as needed.

Table 10-1 Ports, Protocols and Services



Ports (TCP/UDP)*	Protocols	Services	Purpose	Used By
443	TCP	HTTPS	Web Application / Website Access	NC Client Computers
1433	TCP	MSSQL	Database Access	Web servers communicating with SQL DBs
<Enter Port>	<Enter Protocols>	<Enter Services>	<Enter Purpose>	<Enter Used By>
<Enter Port>	<Enter Protocols>	<Enter Services>	<Enter Purpose>	<Enter Used By>
<Enter Port>	<Enter Protocols>	<Enter Services>	<Enter Purpose>	<Enter Used By>
<Enter Port>	<Enter Protocols>	<Enter Services>	<Enter Purpose>	<Enter Used By>

* Transmission Control Protocol (TCP), User Datagram Protocol (UDP)

I. SYSTEM INTERCONNECTIONS

Instruction: List all interconnected systems. Provide the IP address and interface identifier (eth0, eth1, eth2) for the CSP system that provides the connection. Name the external organization and the IP address of the external system. Provide a point of contact and phone number for the external organization. For Connection Security indicate how the connection is being secured. For Data Direction, indicate which direction the packets are flowing. For Information Being Transmitted, describe what type of data is being transmitted. If a dedicated telecom line is used, indicate the circuit number. Add additional rows as needed. This table must be consistent with Table 13-3 CA-3 Authorized Connections.

Additional FedRAMP Requirements and Guidance:

Guidance: See the FedRAMP Documents page under Key Cloud Service Provider (CSP) Documents> FedRAMP Authorization Boundary Guidance

<https://www.fedramp.gov/documents/>

Delete this and all other instructions from your final version of this document.

The Table 11-1 System Interconnections below is consistent with Table 13-3 CA-3 Authorized Connections.

Table 11-1. System Interconnections

SP* IP Address and Interface	External Organizati on Name and IP Address of System	External Point of Contact and Phone Number	Connection Security (IPSec, VPN, SSL, Certificates , Secure File Transfer, etc.)**	Data Direction (incomin g, outgoing, or both)	Informati on Being Transmit ted	Port or Circuit Numbers
------------------------------------	---	--	--	--	--	-------------------------------



<SP IP Address/Interface>	<External Org/IP>	<External Org POC> <Phone 555-555-5555>	<Enter Connection Security>	Choose an item.	<Information Transmitted>	<Port/Circuit Numbers>
<SP IP Address/Interface>	<External Org/IP>	<External Org POC> <Phone 555-555-5555>	<Enter Connection Security>	Choose an item.	<Information Transmitted>	<Port/Circuit Numbers>
<SP IP Address/Interface>	<External Org/IP>	<External Org POC> <Phone 555-555-5555>	<Enter Connection Security>	Choose an item.	<Information Transmitted>	<Port/Circuit Numbers>
<SP IP Address/Interface>	<External Org/IP>	<External Org POC> <Phone 555-555-5555>	<Enter Connection Security>	Choose an item.	<Information Transmitted>	<Port/Circuit Numbers>
<SP IP Address/Interface>	<External Org/IP>	<External Org POC> <Phone 555-555-5555>	<Enter Connection Security>	Choose an item.	<Information Transmitted>	<Port/Circuit Numbers>

*Service Processor

**Internet Protocol Security (IPSec), Virtual Private Network (VPN), Secure Sockets Layer (SSL)

I. LAWS, REGULATIONS, STANDARDS AND GUIDANCE

A summary of FedRAMP Laws and Regulations is included in ATTACHMENT 12 – FedRAMP Laws and Regulations.

I.1. Applicable Laws and Regulations

The FedRAMP Laws and Regulations can be found on this web page: [Templates](#).

Table 12-1 Information System Name Laws and Regulations includes additional laws and regulations specific to Information System Name.

Instruction: The information system name is a repeatable field that is populated when the Title Page is completed. If the CSP does not have additional laws and regulations that it must follow, please specify "N/A" in the table.

Delete this and all other instructions from your final version of this document.

Table 12-1. Information System Name Laws and Regulations

Identification Number	Title	Date	Link
<Reference ID>	<Reference Title>State of North Carolina security policy	<Ref Date>	<Reference Link>



<Reference ID>	<Reference Title>HIPPA?	<Ref Date>	<Reference Link>
<Reference ID>	<Reference Title>	<Ref Date>	<Reference Link>

1.2. Applicable Standards and Guidance

The FedRAMP Standards and Guidance be found on this web page: [Templates](#)

Table 12-2 Information System Name Standards and Guidance includes in this section any additional standards and guidance specific to Information System Name.

Instruction: The information system name is a repeatable field that is populated when the Title Page is completed. If the CSP does not have additional standards or guidance that it must follow, please specify "N/A" in the table.

Delete this and all other instructions from your final version of this document.

Table 12-2. Information System Name Standards and Guidance

Identification Number	Title	Date	Link
<Reference ID>	<Reference Title>	<Ref Date>	<Reference Link>
<Reference ID>	<Reference Title>	<Ref Date>	<Reference Link>
<Reference ID>	<Reference Title>	<Ref Date>	<Reference Link>

1. MINIMUM SECURITY CONTROLS

Security controls must meet minimum security control baseline requirements. Upon categorizing a system as Low, Moderate, or High sensitivity in accordance with FIPS 199, the corresponding security control baseline standards apply. Some of the control baselines have enhanced controls which are indicated in parentheses.

Security controls that are representative of the sensitivity of the North Carolina Workforce Registry, PreK, and Regulatory System Solution are described in the sections that follow. Security controls that are designated as "Not Selected" or "Withdrawn by NIST" are not described unless they have additional FedRAMP controls. Guidance on how to describe the implemented standard can be found in NIST SP 800-53, Rev 5. Control enhancements are marked in parentheses in the sensitivity columns.

Systems that are categorized as FIPS 199 Low use the controls designated as Low, systems categorized as FIPS 199 Moderate use the controls designated as Moderate and systems categorized as FIPS 199 High use the controls designated as High. A summary of which security standards pertain to which sensitivity level is found in Table 13-1 Summary of Required Security Controls that follows.

Table 13-1. Summary of Required Security Controls (Needs updated to Rev. 5)

ID	Control Description	Sensitivity Level		
		Low	Moderate	High



AC	Access Control			
AC-1	Access Control Policy and Procedures	AC-1	AC-1	AC-1
AC-2	Account Management	AC-2	AC-2 (1) (2) (3) (4) (5) (7) (9) (10) (12)	AC-2 (1) (2) (3) (4) (5) (7) (9) (10) (11) (12) (13)
AC-3	Access Enforcement	AC-3	AC-3	AC-3
AC-4	Information Flow Enforcement	Not Selected	AC-4 (21)	AC-4 (8) (21)
AC-5	Separation of Duties	Not Selected	AC-5	AC-5
AC-6	Least Privilege	Not Selected	AC-6 (1) (2) (5) (9) (10)	AC-6 (1) (2) (3) (5) (7) (8) (9) (10)
AC-7	Unsuccessful Logon Attempts	AC-7	AC-7	AC-7 (2)
AC-8	System Use Notification	AC-8	AC-8	AC-8
AC-10	Concurrent Session Control	Not Selected	AC-10	AC-10
AC-11	Session Lock	Not Selected	AC-11 (1)	AC-11 (1)
AC-12	Session Termination	Not Selected	AC-12	AC-12 (1)
AC-14	Permitted Actions Without Identification or Authentication	AC-14	AC-14	AC-14
AC-17	Remote Access	AC-17	AC-17 (1) (2) (3) (4) (9)	AC-17 (1) (2) (3) (4) (9)
AC-18	Wireless Access	AC-18	AC-18 (1)	AC-18 (1) (3) (4) (5)
AC-19	Access Control For Mobile Devices	AC-19	AC-19 (5)	AC-19 (5)
AC-20	Use of External Information Systems	AC-20	AC-20 (1) (2)	AC-20 (1) (2)
AC-21	Information Sharing	Not Selected	AC-21	AC-21
AC-22	Publicly Accessible Content	AC-22	AC-22	AC-22
AT	Awareness and Training			
AT-1	Security Awareness and Training Policy and Procedures	AT-1	AT-1	AT-1
AT-2	Security Awareness Training	AT-2	AT-2 (2)	AT-2 (2)
AT-3	Role-Based Security Training	AT-3	AT-3	AT-3 (3) (4)
AT-4	Security Training Records	AT-4	AT-4	AT-4
AU	Audit and Accountability			
AU-1	Audit and Accountability Policy and Procedures	AU-1	AU-1	AU-1
AU-2	Audit Events	AU-2	AU-2 (3)	AU-2 (3)



AU-3	Content of Audit Records	AU-3	AU-3 (1)	AU-3 (1) (2)
AU-4	Audit Storage Capacity	AU-4	AU-4	AU-4
AU-5	Response to Audit Processing Failures	AU-5	AU-5	AU-5 (1) (2)
AU-6	Audit Review, Analysis and Reporting	AU-6	AU-6 (1) (3)	AU-6 (1) (3) (4) (5) (6) (7) (10)
AU-7	Audit Reduction and Report Generation	Not Selected	AU-7 (1)	AU-7 (1)
AU-8	Time Stamps	AU-8	AU-8 (1)	AU-8 (1)
AU-9	Protection of Audit Information	AU-9	AU-9 (2) (4)	AU-9 (2) (3) (4)
AU-10	Non-repudiation	Not Selected	Not Selected	AU-10
AU-11	Audit Record Retention	AU-11	AU-11	AU-11
AU-12	Audit Generation	AU-12	AU-12	AU-12 (1) (3)
CA Security Assessment and Authorization				
CA-1	Security Assessment and Authorization Policies and Procedures	CA-1	CA-1	CA-1
CA-2	Security Assessments	CA-2 (1)	CA-2 (1) (2) (3)	CA-2 (1) (2) (3)
CA-3	System Interconnections	CA-3	CA-3 (3) (5)	CA-3 (3) (5)
CA-5	Plan of Action and Milestones	CA-5	CA-5	CA-5
CA-6	Security Authorization	CA-6	CA-6	CA-6
CA-7	Continuous Monitoring	CA-7	CA-7 (1)	CA-7 (1) (3)
CA-8	Penetration Testing	Not Selected	CA-8 (1)	CA-8 (1)
CA-9	Internal System Connections	CA-9	CA-9	CA-9
CM Configuration Management				
CM-1	Configuration Management Policy and Procedures	CM-1	CM-1	CM-1
CM-2	Baseline Configuration	CM-2	CM-2 (1) (2) (3) (7)	CM-2 (1) (2) (3) (7)
CM-3	Configuration Change Control	Not Selected	CM-3 (2)	CM-3 (1) (2) (4) (6)
CM-4	Security Impact Analysis	CM-4	CM-4	CM-4 (1)
CM-5	Access Restrictions <u>For</u> Change	Not Selected	CM-5 (1) (3) (5)	CM-5 (1) (2) (3) (5)
CM-6	Configuration Settings	CM-6	CM-6 (1)	CM-6 (1) (2)
CM-7	Least Functionality	CM-7	CM-7 (1) (2) (5)*	CM-7 (1) (2) (5)
CM-8	Information System Component Inventory	CM-8	CM-8 (1) (3) (5)	CM-8 (1) (2) (3) (4) (5)
CM-9	Configuration Management Plan	Not Selected	CM-9	CM-9



CM-10	Software Usage Restrictions	CM-10	CM-10 (1)	CM-10 (1)
CM-11	User-Installed Software	CM-11	CM-11	CM-11 (1)
*FedRAMP does not include CM-7 (4) in the Moderate Baseline. NIST supplemental guidance states that CM-7 (4) is not required if (5) is implemented.				
CP	Contingency Planning			
CP-1	Contingency Planning Policy and Procedures	CP-1	CP-1	CP-1
CP-2	Contingency Plan	CP-2	CP-2 (1) (2) (3) (8)	CP-2 (1) (2) (3) (4) (5) (8)
CP-3	Contingency Training	CP-3	CP-3	CP-3 (1)
CP-4	Contingency Plan Testing	CP-4	CP-4 (1)	CP-4 (1) (2)
CP-6	Alternate Storage Site	Not Selected	CP-6 (1) (3)	CP-6 (1) (2) (3)
CP-7	Alternate Processing Site	Not Selected	CP-7 (1) (2) (3)	CP-7 (1) (2) (3) (4)
CP-8	Telecommunications Services	Not Selected	CP-8 (1) (2)	CP-8 (1) (2) (3) (4)
CP-9	Information System Backup	CP-9	CP-9 (1) (3)	CP-9 (1) (2) (3) (5)
CP-10	Information System Recovery and Reconstitution	CP-10	CP-10 (2)	CP-10 (2) (4)
IA	Identification and Authentication			
IA-1	Identification and Authentication Policy and Procedures	IA-1	IA-1	IA-1
IA-2	Identification and Authentication (Organizational Users)	IA-2 (1) (12)	IA-2 (1) (2) (3) (5) (8) (11) (12)	IA-2 (1) (2) (3) (4) (5) (8) (9) (11) (12)
IA-3	Device Identification and Authentication	Not Selected	IA-3	IA-3
IA-4	Identifier Management	IA-4	IA-4 (4)	IA-4 (4)
IA-5	Authenticator Management	IA-5 (1) (11)	IA-5 (1) (2) (3) (4) (6) (7) (11)	IA-5 (1) (2) (3) (4) (6) (7) (8) (11) (13)
IA-6	Authenticator Feedback	IA-6	IA-6	IA-6
IA-7	Cryptographic Module Authentication	IA-7	IA-7	IA-7
IA-8	Identification and Authentication (Non-Organizational Users)	IA-8 (1) (2) (3) (4)	IA-8 (1) (2) (3) (4)	IA-8 (1) (2) (3) (4)
IR	Incident Response			
IR-1	Incident Response Policy and Procedures	IR-1	IR-1	IR-1



IR-2	Incident Response Training	IR-2	IR-2	IR-2 (1) (2)
IR-3	Incident Response Testing	Not Selected	IR-3 (2)	IR-3 (2)
IR-4	Incident Handling	IR-4	IR-4 (1)	IR-4 (1) (2) (3) (4) (6) (8)
IR-5	Incident Monitoring	IR-5	IR-5	IR-5 (1)
IR-6	Incident Reporting	IR-6	IR-6 (1)	IR-6 (1)
IR-7	Incident Response Assistance	IR-7	IR-7 (1) (2)	IR-7 (1) (2)
IR-8	Incident Response Plan	IR-8	IR-8	IR-8
IR-9	Information Spillage Response	Not Selected	IR-9 (1) (2) (3) (4)	IR-9 (1) (2) (3) (4)
MA	Maintenance			
MA-1	System Maintenance Policy and Procedures	MA-1	MA-1	MA-1
MA-2	Controlled Maintenance	MA-2	MA-2	MA-2 (2)
MA-3	Maintenance Tools	Not Selected	MA-3 (1) (2) (3)	MA-3 (1) (2) (3)
MA-4	Nonlocal Maintenance	MA-4	MA-4 (2)	MA-4 (2) (3) (6)
MA-5	Maintenance Personnel	MA-5	MA-5 (1)	MA-5 (1)
MA-6	Timely Maintenance	Not Selected	MA-6	MA-6
MP	Media Protection			
MP-1	Media Protection Policy and Procedures	MP-1	MP-1	MP-1
MP-2	Media Access	MP-2	MP-2	MP-2
MP-3	Media Marking	Not Selected	MP-3	MP-3
MP-4	Media Storage	Not Selected	MP-4	MP-4
MP-5	Media Transport	Not Selected	MP-5 (4)	MP-5 (4)
MP-6	Media Sanitization	MP-6	MP-6 (2)	MP-6 (1) (2) (3)
MP-7	Media Use	MP-7	MP-7 (1)	MP-7 (1)
PE	Physical and Environmental Protection			
PE-1	Physical and Environmental Protection Policy and Procedures	PE-1	PE-1	PE-1
PE-2	Physical Access Authorizations	PE-2	PE-2	PE-2
PE-3	Physical Access Control	PE-3	PE-3	PE-3 (1)
PE-4	Access Control <u>For</u> Transmission Medium	Not Selected	PE-4	PE-4
PE-5	Access Control <u>For</u> Output Devices	Not Selected	PE-5	PE-5



PE-6	Monitoring Physical Access	PE-6	PE-6 (1)	PE-6 (1) (4)
PE-8	Visitor Access Records	PE-8	PE-8	PE-8 (1)
PE-9	Power Equipment and Cabling	Not Selected	PE-9	PE-9
PE-10	Emergency Shutoff	Not Selected	PE-10	PE-10
PE-11	Emergency Power	Not Selected	PE-11	PE-11 (1)
PE-12	Emergency Lighting	PE-12	PE-12	PE-12
PE-13	Fire Protection	PE-13	PE-13 (2) (3)	PE-13 (1) (2) (3)
PE-14	Temperature and Humidity Controls	PE-14	PE-14 (2)	PE-14 (2)
PE-15	Water Damage Protection	PE-15	PE-15	PE-15 (1)
PE-16	Delivery and Removal	PE-16	PE-16	PE-16
PE-17	Alternate Work Site	Not Selected	PE-17	PE-17
PE-18	Location of Information System Components	Not Selected	Not Selected	PE-18
PL	Planning			
PL-1	Security Planning Policy and Procedures	PL-1	PL-1	PL-1
PL-2	System Security Plan	PL-2	PL-2 (3)	PL-2 (3)
PL-4	Rules of Behavior	PL-4	PL-4 (1)	PL-4 (1)
PL-8	Information Security Architecture	Not Selected	PL-8	PL-8
PS	Personnel Security			
PS-1	Personnel Security Policy and Procedures	PS-1	PS-1	PS-1
PS-2	Position Risk Designation	PS-2	PS-2	PS-2
PS-3	Personnel Screening	PS-3	PS-3 (3)	PS-3 (3)
PS-4	Personnel Termination	PS-4	PS-4	PS-4 (2)
PS-5	Personnel Transfer	PS-5	PS-5	PS-5
PS-6	Access Agreements	PS-6	PS-6	PS-6
PS-7	Third-Party Personnel Security	PS-7	PS-7	PS-7
PS-8	Personnel Sanctions	PS-8	PS-8	PS-8
RA	Risk Assessment			
RA-1	Risk Assessment Policy and Procedures	RA-1	RA-1	RA-1
RA-2	Security Categorization	RA-2	RA-2	RA-2



RA-3	Risk Assessment	RA-3	RA-3	RA-3
RA-5	Vulnerability Scanning	RA-5	RA-5 (1) (2) (3) (5) (6) (8)	RA-5 (1) (2) (3) (4) (5) (6) (8) (10)
SA	System and Services Acquisition			
SA-1	System and Services Acquisition Policy and Procedures	SA-1	SA-1	SA-1
SA-2	Allocation of Resources	SA-2	SA-2	SA-2
SA-3	System Development Life Cycle	SA-3	SA-3	SA-3
SA-4	Acquisition Process	SA-4 (10)	SA-4 (1) (2) (8) (9) (10)	SA-4 (1) (2) (8) (9) (10)
SA-5	Information System Documentation	SA-5	SA-5	SA-5
SA-8	Security Engineering Principles	Not Selected	SA-8	SA-8
SA-9	External Information System Services	SA-9	SA-9 (1) (2) (4) (5)	SA-9 (1) (2) (4) (5)
SA-10	Developer Configuration Management	Not Selected	SA-10 (1)	SA-10 (1)
SA-11	Developer Security Testing and Evaluation	Not Selected	SA-11 (1) (2) (8)	SA-11 (1) (2) (8)
SA-12	Supply Chain Protection	Not Selected	Not Selected	SA-12
SA-15	Development Process, Standards and Tools	Not Selected	Not Selected	SA-15
SA-16	Developer-Provided Training	Not Selected	Not Selected	SA-16
SA-17	Developer Security Architecture and Design	Not Selected	Not Selected	SA-17
SC	System and Communications Protection			
SC-1	System and Communications Protection Policy and Procedures	SC-1	SC-1	SC-1
SC-2	Application Partitioning	Not Selected	SC-2	SC-2
SC-3	Security Function Isolation	Not Selected	Not Selected	SC-3
SC-4	Information In Shared Resources	Not Selected	SC-4	SC-4
SC-5	Denial of Service Protection	SC-5	SC-5	SC-5
SC-6	Resource Availability	Not Selected	SC-6	SC-6
SC-7	Boundary Protection	SC-7	SC-7 (3) (4) (5) (7) (8) (12) (13) (18)	SC-7 (3) (4) (5) (7) (8) (10) (12) (13) (18) (20) (21)
SC-8	Transmission Confidentiality and Integrity	Not Selected	SC-8 (1)	SC-8 (1)



SC-10	Network Disconnect	Not Selected	SC-10	SC-10
SC-12	Cryptographic Key Establishment and Management	SC-12	SC-12 (2) (3)	SC-12 (1) (2) (3)
SC-13	Cryptographic Protection	SC-13	SC-13	SC-13
SC-15	Collaborative Computing Devices	SC-15	SC-15	SC-15
SC-17	Public Key Infrastructure Certificates	Not Selected	SC-17	SC-17
SC-18	Mobile Code	Not Selected	SC-18	SC-18
SC-19	Voice Over Internet Protocol	Not Selected	SC-19	SC-19
SC-20	Secure Name / Address Resolution Service (Authoritative Source)	SC-20	SC-20	SC-20
SC-21	Secure Name / Address Resolution Service (Recursive or Caching Resolver)	SC-21	SC-21	SC-21
SC-22	Architecture and Provisioning for Name / Address Resolution Service	SC-22	SC-22	SC-22
SC-23	Session Authenticity	Not Selected	SC-23	SC-23 (1)
SC-24	Fail in Known State	Not Selected	Not Selected	SC-24
SC-28	Protection of Information <u>At</u> Rest	Not Selected	SC-28 (1)	SC-28 (1)
SC-39	Process Isolation	SC-39	SC-39	SC-39
SI	System and Information Integrity			
SI-1	System and Information Integrity Policy and Procedures	SI-1	SI-1	SI-1
SI-2	Flaw Remediation	SI-2	SI-2 (2) (3)	SI-2 (1) (2) (3)
SI-3	Malicious Code Protection	SI-3	SI-3 (1) (2) (7)	SI-3 (1) (2) (7)
SI-4	Information System Monitoring	SI-4	SI-4 (1) (2) (4) (5) (14) (16) (23)	SI-4 (1) (2) (4) (5) (11) (14) (16) (18) (19) (20) (22) (23) (24)
SI-5	Security Alerts, Advisories and Directives	SI-5	SI-5	SI-5 (1)
SI-6	Security Function Verification	Not Selected	SI-6	SI-6
SI-7	Software, Firmware and Information Integrity	Not Selected	SI-7 (1) (7)	SI-7 (1) (2) (5) (7) (14)
SI-8	Spam Protection	Not Selected	SI-8 (1) (2)	SI-8 (1) (2)
SI-10	Information Input Validation	Not Selected	SI-10	SI-10



SI-11	Error Handling	Not Selected	SI-11	SI-11
SI-12	Information Handling and Retention	SI-12	SI-12	SI-12
SI-16	Memory Protection	SI-16	SI-16	SI-16

Note: The -1 Controls (AC-1, AU-1, SC-1, etc.) cannot be inherited and must be provided in some way by the service provider.

Instruction: In the sections that follow, describe the information security control as it is implemented on the system. All controls originate from a system or from a business process. It is important to describe where the control originates from so that it is clear whose responsibility it is to implement, manage and monitor the control. In some cases, the responsibility is shared by a CSP and by the customer. Use the definitions in the table that follows to indicate where each security control originates from.

Throughout this SSP, policies and procedures must be explicitly referenced (title and date or version) so that it is clear which document is being referred to. Section numbers or similar mechanisms should allow the reviewer to easily find the reference.

For SaaS and PaaS systems that are inheriting controls from an IaaS (or anything lower in the stack), the "inherited" check box must be checked and the implementation description must simply say "inherited." FedRAMP reviewers will determine whether the control-set is appropriate or not.

In Section 13, the NIST term "organization defined" must be interpreted as being the CSP's responsibility unless otherwise indicated. In some cases the JAB has chosen to define or provide parameters, in others they have left the decision up to the CSP.

Please note: CSPs should not modify the control requirement text, including the parameter assignment instructions and additional FedRAMP requirements. CSP responses must be documented in the "Control Summary Information" and "What is the solution and how is it implemented?" tables.

Delete this and all other instructions from your final version of this document.

The definitions in Table 13-2. Control Origination and Definitions indicate where each security control originates.

Table 13-2. Control Origination and Definitions

Control Origination	Definition	Example
Service Provider Corporate	A control that originates from the CSP Name corporate network.	DNS from the corporate network provides address resolution services for the information system and the service offering.
Service Provider System Specific	A control specific to a particular system at the CSP Name and the control is not part of the standard corporate controls.	A unique host-based intrusion detection system (HIDS) is available on the service offering platform but is not available on the corporate network.



Service Provider Hybrid	A control that makes use of both corporate controls and additional controls specific to a particular system at the CSP Name.	There are scans of the corporate network infrastructure; scans of databases and web-based application are system specific.
Configured by Customer	A control where the customer needs to apply a configuration <u>in order to</u> meet the control requirement.	User profiles, policy/audit configurations, enabling/disabling key switches (e.g., enable/disable http* or https, etc.), entering an IP range specific to their organization are configurable by the customer.
Provided by Customer	A control where the customer needs to provide additional hardware or software <u>in order to</u> meet the control requirement.	The customer provides a SAML SSO solution to implement two-factor authentication.
Shared	A control that is managed and implemented partially by the CSP Name and partially by the customer.	Security awareness training must be conducted by both the CSPN and the customer.
Inherited from pre-existing FedRAMP Authorization	A control that is inherited from another CSP Name system that has already received a FedRAMP Authorization.	A PaaS or SaaS provider inherits PE controls from an IaaS provider.

*Hyper Text Transport Protocol (http)

Responsible Role indicates the role of CSP employee who can best respond to questions about the particular control that is described.



SYSTEMS SECURITY PLAN ATTACHMENTS

Instruction: Attach any documents that are referred to in the North Carolina Workforce Registry, PreK, and Regulatory System Solution System Security Plan. Documents and attachments should provide the title, version and exact file name, including the file extension. All attachments and associated documents must be delivered separately. No embedded documents will be accepted.

Delete this and all other instructions from your final version of this document.

2. ATTACHMENTS

A recommended attachment file naming convention is <information system abbreviation> <attachment number> <document abbreviation> <version number> (for example, "Information System Abbreviation A8 IRP v1.0"). Use this convention to generate names for the attachments. Enter the appropriate file names and file extensions in Table 15-1 to describe the attachments provided. Make only the following additions/changes to Table 15-1:

- The first item, Information Security Policies and Procedures (ISPP), may be fulfilled by multiple documents. If that is the case, add lines to Table 15-1. Attachment File Naming Convention to differentiate between them using the "xx" portion of the File Name. *Example* North Carolina Workforce Registry, PreK, and Regulatory System Solution *A1 ISPP xx v1.0*. Delete the "xx" if there is only one document.
- Enter the file extension for each attachment.
- Do not change the Version Number in the File Name in Table 15-1. Attachment File Naming Convention. (Information System Abbreviation, attachment number, document abbreviation, version number)

Table 15-1. Names of Provided Attachments

Attachment	File Name	File Extension
Information Security Policies and Procedures	North Carolina Workforce Registry, PreK, and Regulatory System Solution A1 ISPP xx v1.0	. enter extension
User Guide	North Carolina Workforce Registry, PreK, and Regulatory System Solution A2 UG v1.0	. enter extension
Digital Identity Worksheet	Included in Section 15	
PTA	Included in Section 15	
PIA (if needed)	North Carolina Workforce Registry, PreK, and Regulatory System Solution A4 PIA v1.0	. enter extension
Rules of Behavior	North Carolina Workforce Registry, PreK, and Regulatory System Solution A5 ROB v1.0	. enter extension
Information System Contingency Plan	North Carolina Workforce Registry, PreK, and Regulatory System Solution A6 ISCP v1.0	. enter extension
Configuration Management Plan	North Carolina Workforce Registry, PreK, and Regulatory System Solution A7 CMP v1.0	. enter extension
Incident Response Plan	North Carolina Workforce Registry, PreK, and Regulatory System Solution A8 IRP v1.0	. enter extension





CIS Workbook	North Carolina Workforce Registry, PreK, and Regulatory System Solution A9 CIS Workbook v1.0	. enter extension
FIPS 199	Included in Section 15	
Inventory	North Carolina Workforce Registry, PreK, and Regulatory System Solution A13 INV v1.0	. enter extension

Information Security Policies and Procedures

All Authorization Packages must include an Information Security Policies and Procedures attachment, which will be reviewed for quality.

User Guide

All Authorization Packages must include a User Guide attachment, which will be reviewed for quality.

Digital Identity Worksheet

This Attachment Section has been revised to include the Digital Identity template. Therefore, a separate attachment is not needed. Delete this note and all other instructions from your final version of this document.

The Digital Identity section explains the objective for selecting the appropriate Digital Identity levels for the candidate system. Guidance on selecting the system authentication technology solution is available in NIST SP 800-63, Revision 3, Digital Identity Guidelines.

Introduction and Purpose

This document provides guidance on digital identity services (Digital Identity, which is the process of establishing confidence in user identities electronically presented to an information system). Authentication focuses on the identity proofing process (IAL), the authentication process (AAL), and the assertion protocol used in a federated environment to communicate authentication and attribute information (if applicable) (FAL). NIST SP 800-63-3, Digital Identity Guidelines, does not recognize the four Levels of Assurance model previously used by federal agencies and described in OMB M-04-04, instead requiring agencies to individually select levels corresponding to each function being performed.

NIST SP 800-63-3 can be found at the following URL: [NIST SP 800-63-3](#)

Information System Name/Title

This Digital Identity Plan provides an overview of the security requirements for the North Carolina Workforce Registry, PreK, and Regulatory System Solution in accordance with NIST SP 800-63-3.

Table 15-2. Information System Name and Title



Unique Identifier	Information System Name	Information System Abbreviation
Enter FedRAMP Application Number.		<Enter Abbreviation>

Digital Identity Level Definitions

NIST SP 800-63-3 defines three levels in each of the components of identity assurance to categorize a federal information system's Digital Identity posture. NIST SP 800-63-3 defines the Digital Identity levels as:

IAL – refers to the identity proofing process.

AAL – refers to the authentication process.

FAL – refers to the strength of an assertion in a federated environment, used to communicate authentication and attribute information (if applicable) to a relying party (RP).

FedRAMP maps its system categorization levels to NIST 800-63-3's levels as shown in Table 15-3

Table 15-3. Mapping FedRAMP Levels to NIST SP 800-63-3 Levels

FedRAMP System Categorization	Identity Assurance Level (IAL)	Authenticator Assurance Level (AAL)	Federation Assurance Level (FAL)
High	IAL3: In-person, or supervised remote identity proofing	AAL3: Multi-factor required based on hardware-based cryptographic authenticator and approved cryptographic techniques	FAL3: The subscriber (user) must provide proof of possession of a cryptographic key, which is referenced by the assertion. The assertion is signed and encrypted by the identity provider, such that only the relying party can decrypt it
Moderate	IAL2: In-person or remote, potentially involving a "trusted referee"	AAL2: Multi-factor required, using approved cryptographic techniques	FAL2: Assertion is signed and encrypted by the identity provider, such that only the relying party can decrypt it
Low	IAL1: Self-asserted	AAL1: Single-factor or multi-factor	FAL1: Assertion is digitally signed by the identity provider
FedRAMP Tailored LI-SaaS	IAL1: Self-asserted	AAL1: Single-factor or multi-factor	FAL1: Assertion is digitally signed by the identity provider

Selecting the appropriate Digital Identity level for a system enables the system owner to determine the right system authentication technology solution for the selected Digital Identity levels. Guidance on selecting the system authentication technology solution is available in NIST SP 800-63-3.

Review Maximum Potential Impact Levels

CSP Name has assessed the potential risk from Digital Identity errors, or Digital Identity misuse, related to a user's asserted identity. CSP Name has taken into consideration the potential for harm (impact) and the likelihood of the occurrence of the harm and has identified an impact profile as found in Table 15-4 Potential Impacts for Assurance Levels.



Assurance is defined as 1) the degree of confidence in the vetting process used to establish the identity of the individual to whom the credential was issued, and 2) the degree of confidence that the individual who uses the credential is the individual to whom the credential was issued.

Table 15-4. Potential Impacts for Assurance Levels

<u>Potential Impact Categories</u>	Assurance Level Impact Profile		
	1	2	3
Inconvenience, <u>distress</u> or damage to standing or reputation	Low	Mod	High
Financial loss or agency liability	Low	Mod	High
Harm to agency programs or public interests	N/A	Low/Mod	High
Unauthorized release of sensitive information	N/A	Low/Mod	High
Personal Safety	N/A	Low	Mod/High
Civil or criminal violations	N/A	Low/Mod	High

Digital Identity Level Selection

Instruction: Select the lowest level that will cover all potential impact identified from Table 15-4 Potential Impacts for Assurance Levels.

Delete this instruction from your final version of this document.

The CSP Name has identified that they support the Digital Identity Level that has been selected for the North Carolina Workforce Registry, PreK, and Regulatory System Solution as noted in Table 15-5 Digital Identity Level. The selected Digital Identity Level indicated is supported for federal agency consumers of the cloud service offering. Implementation details of the Digital Identity mechanisms are provided in the System Security Plan under control IA-2.

Table 15-5. Digital Identity Level

Digital Identity Level	Maximum Impact Profile	Selection
Level 1: AAL1, IAL1, FAL1	Low	<input type="checkbox"/>
Level 2: AAL2, IAL2, FAL2	Moderate	<input type="checkbox"/>
Level 3: AAL3, IAL3, FAL3	High	<input type="checkbox"/>



This Attachment Section has been revised to include the PTA Template. Therefore, a separate PTA attachment is not needed. If any of the answers to Question 1-4 are "Yes" then complete a Privacy Impact Assessment Template and include it as an Attachment.

Delete this note and all other instructions from your final version of this document.

All Authorization Packages must include a Privacy Threshold Analysis (PTA) and if necessary, the Privacy Impact Assessment (PIA) attachment, which will be reviewed for quality.

The PTA is included in this section, and the PIA Template can be found on the following FedRAMP website page: [Templates](#).

The PTA and PIA Template includes a summary of laws, regulations and guidance related to privacy issues in ATTACHMENT 12 – FedRAMP Laws and Regulations.

Privacy Overview and Point of Contact (POC)

The Table 15-6 - Information System Name; Privacy POC individual is identified as the Information System Name; Privacy Officer and POC for privacy at CSP Name.

Table 15-6. - Information System Name; Privacy POC

Name	Click here to enter text.
Title	Click here to enter text.
CSP / Organization	Click here to enter text.
Address	Click here to enter text.
Phone Number	Click here to enter text.
Email Address	Click here to enter text.

APPLICABLE LAWS AND REGULATIONS

The FedRAMP Laws and Regulations may be found on: [Templates](#). A summary of FedRAMP Laws and Regulations is included in the System Security Plan (SSP) ATTACHMENT 12 – FedRAMP Laws and Regulations.

Table 12-1 Information System Name Laws and Regulations include additional laws and regulations that are specific to North Carolina Workforce Registry, PreK, and Regulatory System Solution. These will include laws and regulations from the Federal Information Security Management Act (FISMA), Office of Management and Budget (OMB) circulars, Public Law (PL), United States Code (USC), and Homeland Security Presidential Directives (HSPD).

Table 15-7. <Information System Name> Laws and Regulations

Identification Number	Title	Date	Link
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.





Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
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APPLICABLE STANDARDS AND GUIDANCE

The FedRAMP Standards and Guidance may be found on: [Templates](#). The FedRAMP Standards and Guidance is included in the System Security Plan (SSP) ATTACHMENT 12 – FedRAMP Laws and Regulations. For more information, see the FedRAMP website.

Table 12-2 Information System Name Standards and Guidance includes any additional standards and guidance that are specific to North Carolina Workforce Registry, PreK, and Regulatory System Solution. These will include standards and guidance from Federal Information Processing Standard (FIPS) and National Institute of Standards and Technology (NIST) Special Publications (SP).

Table 15-8. <Information System Name> Standards and Guidance

Identification Number	Title	Date	Link
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

PERSONALLY IDENTIFIABLE INFORMATION (PII)

Personally Identifiable Information (PII) as defined in OMB Memorandum M-07-16 refers to information that can be used to distinguish or trace an individual's identity, either alone or when combined with other personal or identifying information that is linked or linkable to a specific individual. Information that could be tied to more than one person (date of birth) is not considered PII unless it is made available with other types of information that together could render both values as PII (for example, date of birth and street address). A non-exhaustive list of examples of types of PII includes:

- Social Security numbers
- Passport numbers
- Driver's license numbers
- Biometric information
- DNA information
- Bank account numbers

PII does not refer to business information or government information that cannot be traced back to an individual person.

Privacy Threshold Analysis

CSP Name performs a Privacy Threshold Analysis annually to determine if PII is collected by any of the North Carolina Workforce Registry, PreK, and Regulatory System Solution components. If PII is discovered, a Privacy Impact Assessment is performed. The Privacy Impact Assessment template used by CSP Name can be found in Section 3. This section constitutes the Privacy Threshold Analysis and findings.

QUALIFYING QUESTIONS

Select One	Does the ISA collect, maintain, or share PII in any identifiable form?
------------	--



North Carolina Workforce Registry, PreK, and Regulatory System Solution SSP

Select One	Does the ISA collect, maintain, or share PII information from or about the public?
Select One	Has a Privacy Impact Assessment ever been performed for the ISA?
Select One	Is there a Privacy Act System of Records Notice (SORN) for this ISA system? If yes; the SORN identifier and name is: Enter SORN ID/Name.

If answers to Questions 1-4 are all "No" then a Privacy Impact Assessment may be omitted. If any of the answers to Question 1-4 are "Yes" then complete a Privacy Impact Assessment.

DESIGNATION

Check one.

<input type="checkbox"/>	A Privacy Sensitive System
<input type="checkbox"/>	Not a Privacy Sensitive System (in its current version)

The Privacy Impact Assessment Template can be found on the following FedRAMP website page:

[Templates.](#)

Rules of Behavior

All Authorization Packages must include a Rules of Behavior (RoB) attachment, which will be reviewed for quality.

The RoB describes controls associated with user responsibilities and certain expectations of behavior for following security policies, standards and procedures. Security control PL-4 requires a CSP to implement rules of behavior.

The Rules of Behavior Template can be found on the following FedRAMP website page: [Templates.](#)

The Template provides two example sets of rules of behavior: one for Internal Users and one for External Users. The CSP should modify each of these two sets to define the rules of behavior necessary to secure their system.

Information System Contingency Plan

All Authorization Packages must include an Information System Contingency Plan attachment, which will be reviewed for quality.

The Information System Contingency Plan Template can be found on the following FedRAMP website page: [Templates.](#)

The Information System Contingency Plan Template is provided for CSPs, 3PAOs, government contractors working on FedRAMP projects, government employees working on FedRAMP projects and any outside organizations that want to make use of the FedRAMP Contingency Planning process.

Confidential Information

Version 1.0

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Configuration Management Plan

All Authorization Packages must include a Configuration Management Plan attachment, which will be reviewed for quality.

Incident Response Plan

All Authorization Packages must include an Incident Response Plan attachment, which will be reviewed for quality.

CIS Workbook

All Authorization Packages must include Control Implementation Summary (CIS) Workbook attachment, which will be reviewed for quality.

The Template can be found on the following FedRAMP website page: [Templates](#).

FIPS 199

This Attachment Section has been revised to include the FIPS 199 Template. Therefore, a separate PTA attachment is not needed. Delete this note and all other instructions from your final version of this document.

All Authorization Packages must include a Federal Information Processing Standard (FIPS) 199 Section, which will be reviewed for quality.

The FIPS-199 Categorization report includes the determination of the security impact level for the cloud environment that may host any or all of the service models: IaaS, PaaS and SaaS. The ultimate goal of the security categorization is for the CSP to be able to select and implement the FedRAMP security controls applicable to its environment.

Introduction and Purpose

This section is intended to be used by service providers who are applying for an Authorization through the U.S. federal government FedRAMP program.

The Federal Information Processing Standard 199 (FIPS 199) Categorization (Security Categorization) report is a key document in the security authorization package developed for submission to the Federal Risk and Authorization Management Program (FedRAMP) authorizing officials. The FIPS199 Categorization report includes the determination of the security impact level for the cloud environment that may host any or all of the service models (Information as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS)). The ultimate goal of the security categorization is for the cloud



service provider (CSP) to be able to select and implement the FedRAMP security controls applicable to its environment.

The purpose of the FIPS199 Categorization report is for the CSP to assess and complete the categorization of their cloud environment, to provide the categorization to the System Owner/Certifier and the FedRAMP Joint Authorization Board (JAB) and in helping them to make a determination of the CSP's ability to host systems at that level. The completed security categorization report will aid the CSP in selection and implementation of FedRAMP security controls at the determined categorization level.

Scope

The scope of the FIPS199 Categorization report includes the assessment of the information type categories as defined in the NIST Special Publication 800-60 Volume II Revision 1 Appendices to Guide for Mapping Types of Information and Information Systems to Security Categories.

System Description

The <Information System Name> system has been determined to have a security categorization of Choose level.

Instruction: Insert a brief high-level description of the system, the system environment and the purpose of the system. The description should be consistent with the description found in the System Security Plan (SSP).

Delete this instruction from your final version of this document.

Methodology

Instruction: The CSP should review the NIST Special Publication 800-60 Volume 2 Revision 1 Appendix C Management and Support Information and Information System Impact Levels and Appendix D Impact Determination for Mission-Based Information and Information Systems to assess the recommended impact level for each of the information types. For more information, the CSP should also consult Appendix D.2. After reviewing the NIST guidance on Information Types, the CSP should fill out Table 2-1 CSP Applicable Information Types with Security Impact Levels Using NIST SP 800-60 V2 R1.

Delete this instruction from your final version of this document.

Impact levels are determined for each information type based on the security objectives (confidentiality, integrity, availability). The confidentiality, integrity, and availability impact levels define the security sensitivity category of each information type. The FIPS PUB 199 is the high watermark for the impact level of all the applicable information types.

The FIPS PUB 199 analysis represents the information type and sensitivity levels of the CSP's cloud service offering (and is not intended to include sensitivity levels of agency data). Customer agencies will be expected to perform a separate FIPS 199 Categorization report analysis for their own data hosted on the CSP's cloud environment. The analysis must be added as an appendix to the SSP and drive the results for the Categorization section.

Instruction: In the first three columns, put the NIST SP-60 V2 R1 recommended impact level. In the next three columns, put in the CSP determined recommended impact level. If the CSP determined recommended impact level does not match the level recommended by NIST, put in an explanation in the last column as to why this decision was made.

Delete this instruction from your final version of this document.



The Table 2-1 CSP Applicable Information Types with Security Impact Levels Using NIST SP 800-60 V2 R1 below uses the NIST SP 800-60 V2 R1 Volume II Appendices to Guide for Mapping Types of Information and Information Systems to Security Categories to identify information types with the security impacts.

Table 15-9. CSP Applicable Information Types with Security Impact Levels Using NIST SP 800-60 V2 R1

Information Type	NIST SP 800-60 V2 R1 Recommended Confidentiality Impact Level	NIST SP 800-60 V2 R1 Recommended Integrity Impact Level	NIST SP 800-60 V2 R1 Recommended Availability Impact Level	CSP Selected Confidentiality Impact Level	CSP Selected Integrity Impact Level	CSP Selected Availability Impact Level	Statement for Impact Adjustment Justification
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
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Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.
Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.	Enter text.

Separation of Duties Matrix

All Authorization Packages have the option to provide a Separation of Duties Matrix attachment, which will be reviewed for quality.

ATTACHMENT 11 - Separation of Duties Matrix is referenced in the following controls.

AC-5 Separation of Duties (M) (H) Additional FedRAMP Requirements and Guidance



FedRAMP Laws and Regulations

The Table 15-8 FedRAMP Templates that Reference FedRAMP Laws and Regulations Standards and Guidance lists all of the FedRAMP templates in which FedRAMP laws, regulations, standards and guidance are referenced.

Table 15-10. FedRAMP Templates that Reference FedRAMP Laws and Regulations Standards and Guidance

Phase		Document Title	
Document Phase		SSP	System Security Plan
	SSP Attachment 4	PTA/PIA	Privacy Threshold Analysis and Privacy Impact Assessment
	SSP Attachment 6	ISCP	Information System Contingency Plan
	SSP Attachment 10	FIPS 199	FIPS 199 Categorization
Assess Phase		SAP	Security Assessment Plan
Authorize Phase		SAR	Security Assessment Report

The FedRAMP Laws and Regulations can be submitted as an appendix or an attachment. The attachment can be found on this page: [Templates](#).

Note: All NIST Computer Security Publications can be found at the following URL: <http://csrc.nist.gov/publications/PubsSPs.html>

A. FedRAMP Inventory Workbook

All Authorization Packages must the Inventory attachment, which will be reviewed for quality.

When completed, FedRAMP will accept this inventory workbook as the inventory information required by the following:

- System Security Plan
- Security Assessment Plan
- Security Assessment Report
- Information System Contingency Plan
- Initial POAM
- Monthly Continuous Monitoring (POAM or as a separate document)

The FedRAMP Inventory Workbook can be found on the following FedRAMP website page: [Templates](#).

Note: A complete and detailed list of the system hardware and software inventory is required per NIST SP 800-53, Rev 4 CM-8.



Appendix A: Authorized Exceptions

Description	Justification	Approver

Draft Service Level Agreement

Availability and Uptime:

- The solution will maintain a minimum uptime of 99.9%, for all calendar days, with the exception of state-approved scheduled downtime.
- Scheduled maintenance will be communicated to the customer at least 48 hours in advance and will typically occur during off-peak hours.

Response and Resolution Times:

- Category 1- Major Problems will be responded to within 1 hour of initial voice notification, with a goal to resolve them within 24 hours. Major problems are defined as an outage that results in the unavailability of the solution or the solutions hosting environment or a Severity Level 2 issues that has persisted for more than 48 hours.
- Category 2- Critical Problem will be responded to within two (2) standard business hours of initial voice notification, with a resolution within 48 hours.
- Category 3- Minor Problem will be responded to within one (1) standard business days and resolved within five (5) business days.
- Category 4- Requested changes to the solution will be responded to within three (3) business days and a level of effort determined within five (5) business days.
- Category 5- General questions or informal contacts will be responded to within three (3) business days and resolved within two (2) business weeks.

Issue Resolution and Critical Fixes

- TCC shall provide Help Desk support for the resolution of issues.
- Issues can be reported 24 hours a day/seven days a week through the Help Desk email.
- Help Desk staff shall be available from 7:00 am to 6:00 pm Eastern Time, Monday-Friday, and responses to help desk inquiries will be provided within four (4) business hours.
- TCC Call Center staff will be available by phone and email for public users including providers, workforce members and families, Monday-Friday, 8:00 am-5:00 pm.
- Reported issues shall be tracked with TCC's ticketing system.
- Resolution times for reported issues are defined above in number 2.
- Status updates on reported issues according to the assigned criticality, and updates will be provided to the State during biweekly project status calls and monthly written report.
- A Master List report of all work items including reported issues and change requests will be provided biweekly.

System Updates and Patches

- TCC shall provide periodic system updates and patches as needed at no additional cost to the State.

System Enhancements and Change Requests



- Post-production new work requests will be submitted via email to a dedicated email in box and tracked in Azure DevOps.
- A master list report of all issues and change requests will be provided weekly.
- A response to all new work requests will be provided within three business days.
- Change request hours will be estimated after the State has finalized requirements and approved user stories.
- Time spent on approved changes will be tracked in Azure DevOps and reported to the State in Sprint Status Reports.
- Changes will be thoroughly tested and released into production on a State approved sprint schedule.

Account Management and Status Reporting

- TCC shall provide project status update on biweekly project status calls that include TCC status on deliverables, accomplishments, problems encountered and proposed/actual resolutions, work plan updates, uses and risks to be addressed, status of change requests/enhancements, status of release management and strategic planning. reported issues, change requests and sprint updates.
- TCC shall provide monthly project reports that include status updates on deliverables, accomplishments, problems encountered and proposed/actual resolutions, work plan updates, uses and risks to be addressed, status of change requests/enhancements and status of release management for the reported timeframe.
- TCC shall provide additional reports as outlined below in item 10.
- During the Stabilization period, TCC shall provide defect resolution and tracking. regression testing and will assist the State with the UAT of remediated defects.

System Response Times

- TCC shall ensure a minimum load capacity of 690 concurrent users up to 1380 concurrent users will minimal performance degradation.
- TCC shall ensure a consistent response time for all users directly interacting with the production environment with:
 - Ninety (90) percent of responses to occur in two (2) seconds or less.
 - Ninety-five (95) percent of responses to occur in three (3) seconds or less.
 - Ninety-seven (97) percent of responses to occur in four (4) seconds or less.
 - Ninety-nine (99) percent of responses to occur in five (5) seconds or less.

Testing Support

- TCC shall provide use case and test cases with every requirement mapping to at least one test case.
- TCC shall provide role based UAT training to UAT testers.
- TCC shall provide enhanced support during UAT including a bridge line in case testers have questions or issues.
- TCC shall provide UAT Result Reports at the conclusion of UAT and will obtain Agency acceptance prior to deployment.

Defect Response, Diagnostic and Resolution Timeframes

TCC shall meet the following response, diagnostic and resolution timeframes for reported defects:

- Total System Failure occurs when the System is not functioning and there is no workaround, such as a Central Server is down or when the workflow of an entire section is not functioning. A telephone conference will be scheduled within one (1) hour of initial voice notification and the issue will be resolved within 24 hours of initial voice notification.
- Critical Failure occurs when a crucial element in the System is not functioning, and there is no suitable work-around, but it does not prohibit continuance of basic operations. A telephone conference will be scheduled within two (2) standard business hours of initial voice notification and the issue will be resolved within three (3) standard business days of initial voice notification.
- Non-Critical Issue occurs when a System component is not functioning, but the System is still useable for its intended purpose, or there is a reasonable workaround. The State will be updated with status updates provided weekly. The issue will be resolved based on the level of effort, release schedule, and prioritization of the issue by the State.

Reporting

- The solution shall provide the 15 canned reports detailed in Attachment P of the RFP in a format provided by the State.
- TCC shall provide Ad Hoc reports within three (3) business days of a finalized request.
- TCC shall provide the following project management reports in a format approved by the State:
 - Kick off Meeting Report (within three (3) business days of the meeting).
 - Issue (problem log) status report (weekly).
 - Master List of all issues and change requests (weekly).
 - Project Status Report (monthly), includes reporting on performance, including metrics related to SLAs, status of change requests and issue resolution, updates on work in flight, Help Desk metrics including closure percentages, staffing updates, risk mitigation log and any changes in schedules.
 - Testing Results Reports (Unit, System, Regression, Integration, Performance, User Acceptance) (within two (2) business days of the conclusion of each phase of testing for each release)
 - Release Status Report (within one (1) business day of the conclusion of each release)
 - Release Notes (within two (2) business days of the conclusion of each release)
 - Operations and Maintenance Status Report (monthly, within ten (10) business days of the end of the previous month)

Miscellaneous

- This SLA will be finalized by mutual agreement prior to the Contract award.
- TCC will review and update the SLA at least every twelve months, and each time the SLA is impacted by a request from the Agency to revise service level commitments.
- TCC shall monitor penalties associated with SLAs using the help desk ticket tracking system and monitoring tools which calculate the uptime of the system.

Draft Vendor Operations and Maintenance Phase Staffing Plan

Role/Skills	Responsibility	Percentage of Time During M&O
TCC Project Director <ul style="list-style-type: none"> • 5 years' experience as a project manager • Bachelor's degree • Leadership and business management skills 	<ul style="list-style-type: none"> • Ensure that client is satisfied with project progress and outcomes. • Act as the ultimate escalation point for client leadership and executive sponsor. • Provides oversight and support of the Project Manager. 	5%
TCC Project Manager <ul style="list-style-type: none"> • 3 years' experience as a project manager • PMP • Bachelor's degree • Agile experience 	<ul style="list-style-type: none"> • Oversight of the project execution. • Track and report on project timelines, tasks, and deliverables. • Implement communication protocols that support the overall project. • Track, communicate, and manage risks. • Manage appropriate resource allocation, scope, and change requests. • Ensure accurate project documentation. 	100%
TCC Subject Matter Expert <ul style="list-style-type: none"> • Bachelor's degree • 10 years direct experience with state and federal early childhood law and policies 	<ul style="list-style-type: none"> • Contribute expertise around national trends, best practices and lessons learned. • Act as a liaison between the client staff and technical team. • Act as escalation point for the County. 	5%

TCC Project Coordinator <ul style="list-style-type: none"> • Strong organizational and multi-tasking skills • Documentation management and ability to use project management tools 	<ul style="list-style-type: none"> • Provide administrative support including scheduling, notetaking, documentation, and reporting. 	10%
TCC Business Analyst <ul style="list-style-type: none"> • Bachelor's degree • 2 years' experience as a business analyst • Advanced experience in Microsoft Suite, Visio 	<ul style="list-style-type: none"> • Work closely with client stakeholders to define requirements of the system. • Prepare functional design and business requirements documents for client approval. • Works with the Developers to ensure shared understanding of client's needs. 	100%
TCC Developers <ul style="list-style-type: none"> • 3-6 years' experience in collaborate development environment • Associate degree • Development tools 	<ul style="list-style-type: none"> • Configure and code the product to client requirements. • Develop API's and system interfaces. • Code review and unit testing. • Root cause analysis and defeat resolution. 	100%
TCC Database Administrator <ul style="list-style-type: none"> • Bachelor's degree • 4-8 years of relevant experience • Knowledge of transactional databases 	<ul style="list-style-type: none"> • Manage data conversion tasks. • Manage and monitor infrastructure environment. 	10%
TCC Quality Assurance <ul style="list-style-type: none"> • Associate degree • 2-5 years' experience in testing • Experience in implementing automated testing software 	<ul style="list-style-type: none"> • Develop and run automated test scripts. • Thoroughly test the product to ensure that it meets client requirements. • Track and communicate defects. • Support final user acceptance testing process. 	100%

TCC Network Operations <ul style="list-style-type: none"> • 4-7 years of networking experience • ITIL Functions • CCMP Certification preferred 	<ul style="list-style-type: none"> • Set up and Maintain the AWS infrastructure. • Develop and maintain Security Documentation. 	25%
TCC Trainer <ul style="list-style-type: none"> • Bachelor's degree • 3-5 years of experience as a trainer • Excellent interpersonal and communication skills 	<ul style="list-style-type: none"> • Develop a training plan and training resources for end users of the product. • Facilitate training for end users. 	20%
TCC Help Desk and Call Center <ul style="list-style-type: none"> • Associate degree • 2-5 years of experience troubleshooting • Excellent written and verbal communication skills 	<ul style="list-style-type: none"> • Support End Users with answers to questions and issue resolutions. • Track issues in MESD ticketing system • Escalate Tier III issues to project team. 	100%



Attachment K – Regulatory Modernization Business Specifications

Category	ID	Specification
Authentication	Auth_1	Describe how the proposed solution will externalize identity management utilize the North Carolina Identity Service (NCID) for the identity management and authentication related functions. NCID is the State's enterprise identity management (IDM) service. It is operated by the North Carolina Department of Information Technology.
		TCC Response: The solution can incorporate a standard Single Sign-on integration with the NCID using a SAML, OAuth, or similar protocol for the purposes of managing user accounts, identity validation, automatically assigning appropriate roles based on user attributes, or to automate certain key functions to deliver a seamless and secure user authentication experience.
License	LIC_1	Describe how the proposed solution informs or educates prospective childcare provider with North Carolina Child Care Laws, Child Care Rules and licensing process for different types of facilities; Direct the prospective childcare provider to register for pre licensing workshop and pay appropriate fee. Describe the capabilities of solution to integrate with event registration and payment application.
		TCC Response: The current Ascend solution provides information and workflow to enhance and guide the user experience based on the type of licensure they seek. For instance, during the registration process, the user is guided through the required steps based upon the type of licensing they are seeking. Links or an interface may be provided within the Ascend system so that users can access information, such as state created videos and training documents about NC regulatory requirements and licensing process by provider type. TCC can tailor our application wizard to walk the prospective provider through a series of questions to help them determine the type of licensure they seek. Resource links are available on Ascend Home and Help page to direct providers with questions to the most relevant resources, such as their local CCRR. Ascend Tool Tips can be inserted with additional information when clicked or hovered over. While completing the online registration application process, users are shown a progress bar, so they understand what they have left to complete. Any required fields left to complete are listed on the screen and can be clicked to return the user to that area of the application. For users needing additional assistance, a Help Desk with live support from 7am-6pm M-F is available, as well as the ability to send questions through email or chat.
	LIC_2	Describe how the proposed solution supports configurable automation of initial license, license renewal, Star Rated license, change of license status, permit change, NC religious sponsored programs (notice of compliance), Summer Day Camp etc. application from initial

Category	ID	Specification
		<p>submission through approval, incomplete application, withdrawal, reapply or denial using workflow management and queuing process. Include in your response the ability of the system to support,</p> <ul style="list-style-type: none"> a. Configuration of workflows to meet the business process and change in legislation b. Alerts and notifications for each step of the process for next person in the queue; Mention what are the methods used for notification c. All data validation capabilities within the system prior to submission of application d. Ability for a consultant to access system offline during a visit to a facility; document visit summary, print visit summary, schedule visits and follow up visits where needed e. System support capabilities to pull visit monitoring results as part of system integration and provide outcomes during consultant monitoring visits. g. Ability to sync up offline data periodically to minimize loss of data h. Ability to upload documents; Mention file types supported i. Notify DCDEE staff of any online activity by facility operator for any activity <p>TCC Response: TCC's solution includes the Ascend Licensing Module and eXpedite Mobile Licensing Inspection Tool. These tools help in automating processes, simplifying management, and improving efficiency in licensing, workflow management, and inspection.</p> <p>A: New or updated legislation is entered into Ascend, according to the naming and numbering convention used by NC. An effective date is captured to ensure compliance and accuracy of monitoring the most current regulations. Finally, new legislation that impacts/changes the content of licensing checklists will result in a revision to the relevant form(s). A version control convention is used to again ensure compliance with effective date of legislation and an audit history to support appeals or grievances associated with the new legislation and effective date.</p> <p>Overall, the solution provides features such as self-service provisioning, application lifecycle management, tailored case management dashboard and email alerts and notifications, data validation, offline access, document upload, and support for mobile devices, among others to meet any requirements related to updates in business process.</p> <p>B: In-application and email-based alerts and notifications are displayed on a dashboard designed to assist users with managing their daily workload. Rules and triggers are used for notifications and can be based on dates or other attributes. Authorized users may "assign" tasks, such as supervisor review of complaint status.</p> <p>C: Dynamic responses and prompts are displayed to applicants throughout the application form to prevent incomplete or ineligible applications. Users do not see a "submit" button highlighted until all required fields are completed. Additionally, some data fields contain edit checks to ensure the validity of the data being entered.</p> <p>D: eXpedite, TCC's Mobile Licensing Inspection Tool offers the ability to collect data related to an inspection in an off-line mode. The user can sync the data collected during a</p>



Category	ID	Specification
		<p>monitoring visit to the back-end licensing system and the facility records once an internet connection has been reestablished.</p> <p>E: eXpedite, TCC's Mobile Licensing Inspection Tool has a bi-directional data flow with the Ascend licensing management system. Inspectors may sync data from the Ascend licensing management system down to their tablet. Likewise, any new inspection data that the inspector collected since the last sync will be synced back to the Ascend licensing management system. An internet connection must be available to support in the field provided an internet connection is available to sync data from the back-end licensing server.</p> <p>G: eXpedite, TCC's Mobile Licensing Inspection Tool turns any state form into an electronic form that field workers can use to collect data, even when no internet connection is available. Once an internet connection is established, workers perform a sync to send all data directly to the Ascend licensing management system.</p> <p>H: Documents can be uploaded in the solution. The system accepts a wide variety of document types, including PNG, JPEG, Excel, Word, PDF, JPG, GIF, PNG, DOC, DOCX, TXT, and XLSX.</p> <p>I: Ascend workflow may be tailored to trigger a workflow process and/or alert to the appropriate DCDEE staff that a provider has changed information about their facility. This type of communication supports DCDEE's ability to determine if the type of change(s) made by the provider requires a new visit or supporting documentation. For instance, if a provider changes the number of classrooms, DCDEE would need to know so staff can go out and perform a follow up visit.</p>
	LIC_3	<p>Describe how the proposed solution will facilitate,</p> <ul style="list-style-type: none"> a. state staff to receive inspection reports for Building, Fire, Sanitation, and other compliance reports from external agencies b. automatically alert each childcare provider to obtain new fire, sanitation inspection or any other records that are required to be completed annually before it is due. <p>TCC Response:</p> <p>A: Facilities can upload electronic documents and store them in their facility "filing cabinet." State staff will have a variety of search and filtering options to retrieve documents, as necessary. Where possible, TCC will implement an interface to automatically obtain these documents from external agencies.</p> <p>B: Notification reminders for licensing requirement renewals can be configured for date-based delivery.</p>
Compliance	COM_1	<p>Describe how the proposed solution will facilitate configurable workflow to support Annual Compliance (AC) and other announced and unannounced visits to Facilities (all types of Facilities) by Regulatory staff ,</p> <ul style="list-style-type: none"> a. Configuration of workflows to meet the business process and change in legislation b. Alerts and notifications for each step of the process for next person in the queue. Alerts of upcoming visits due date and tracking compliance of violations cited during visits;

Category	ID	Specification
		<p>including flexibility to schedule, suspend, repeat, edit, delete alerts</p> <p>c. All data validation capabilities within the system</p> <p>d. Ability for a consultant to access system offline during a visit to the facility; document visit summary, print visit summary, and follow up visits where needed</p> <p>e. System support capabilities to pull visit monitoring results for compliance as part of system integration and provide outcomes during monitoring visits</p> <p>g. Ability to sync up offline data periodically to minimize loss of data</p> <p>h. Ability to upload documents; What are the supported formats</p> <p>i. Notify DCDEE staff of any online by facility operator for any activity</p>
		<p>TCC Response:</p> <p>A: The solution provides features such as self-service provisioning, application lifecycle management, alerts and notifications, data validation, offline access, document upload, and support for mobile devices, among others to meet any requirements related to updates in business process.</p> <p>B: In-application and email-based alerts and notifications are displayed on a dashboard designed to assist users with managing their daily workload. Rules and triggers are used for notifications and can be based on dates or other attributes.</p> <p>C: Dynamic responses can be provided to compliance staff throughout the inspection form to prevent incomplete or ineligible applications. Users receive dynamic responses through the inspection process to resolve missing or incomplete information.</p> <p>D: The Mobile Licensing Inspection Tool offers the ability to collect data related to an inspection in an off-line mode. The user can sync the data collected during a monitoring visit to the back-end licensing system and the facility records once an internet connection has been reestablished.</p> <p>E: The Mobile Licensing Inspection Tool allows inspectors to pull inspection data in the field provided an internet connection is available to sync data from the back-end licensing server.</p> <p>G: The Mobile Licensing Inspection Tool turns any state form into an electronic form that field workers can use to collect data, even when no internet connection is available. Once an internet connection is established, workers perform a sync to send all data directly to the back-end system.</p> <p>H: Documents can be uploaded in the solution. The system accepts a wide variety of document types, including PNG, JPEG, Excel, Word, PDF, JPG, GIF, PNG, DOC, DOCX, TXT, and XLSX.</p> <p>I: Changing facility information will trigger a workflow or notification, which may involve various steps such as completing documentation, data entry, and follow-up visits.</p>
	COM_2	Describe how the proposed solution will facilitate user's ability to Automatically calculate and award visit compliance score and compliance history for 18 months based on ending

Category	ID	Specification
		<p>date, items, types of facilities, types of programs, violations cited, etc.; Ability to configure the change in business process and/ or legislation</p> <p>TCC Response: TCC will tailor our eXpedite solution to automate DCDEE licensing forms to collect data about all areas that are being monitored during the visit. TCC will prepopulate the appropriate forms with the historical data needed to calculate a licensing compliance score.</p> <p>When the Consultant is finished collecting necessary data during the visit, they will be able to save the data and generate a form that summarizes findings. TCC will translate the DCDEE compliance score business rules into an algorithm so that the summary of findings will include the actual compliance score. Once the Consultant syncs the data from eXpedite, it will be inserted into the appropriate Ascend screens for review and any approvals needed. Ascend offers a built-in tool to manage the exchange with the consumer education website. Only users with approved access may approve licensing data that will be made available on the consumer education website.</p> <p>TCC understands legislation recently passed in NC that may impact the methodology for this process. Because eXpedite is an easy to configure tool to revise forms and calculations, TCC can adapt the solution to support changes in legislation and business processes. TCC will work closely with DCDEE to determine which fields on the licensing form would need to be added or changed and to modify the compliance score algorithm to support changes to scoring rules.</p> <p>TCC saves version history of all eXpedite forms and creates a start and end date for all changes of this nature. This approach ensures that DCDEE is compliant with all effective dates associated with legislative, business process and policy changes.</p>
	COM_3	<p>Describe how the proposed solution will facilitate the following for evaluating the star rating for facilities,</p> <ol style="list-style-type: none"> 1. Evaluate and assess the Program Standards 2. Evaluate and assess Staff Education 3. Evaluate and assess quality points for rated licensed facilities. <p>TCC Response: TCC will use eXpedite to automate the forms currently used to monitor/assess each of the 3 Domains that determine the star rating level for facilities. TCC will prepopulate the forms with any historical data needed to support the process. Additionally, TCC will develop an algorithm to calculate points earned and assign the appropriate star level. Once the Consultant syncs the data from eXpedite, it will be inserted into the appropriate Ascend screens for review and any approvals needed. Ascend offers a built-in tool to manage the exchange with the consumer education website. Only users with approved access may approve licensing data that will be made available on the consumer education website.</p> <p>TCC understands that Environment Rating Scales (ERS) are used as part of the final rating determination. TCC will work with DCDEE to determine if it is allowable for TCC to create and automate ERS forms on the eXpedite platform, as it is our understanding these forms may be proprietary.</p>

Category	ID	Specification
		TCC will create fields in an Ascend screen to document the ERS domain scores. Any data collected in the field related to ERS may be entered into Ascend if the ERS forms are proprietary and may not be automated.
	COM_4	Describe how the proposed solution will handle grievance from a childcare provider to violation/citation TCC Response: The process for disputing a violation or citation from an inspection may vary depending on the state or program policy. However, in general, the childcare provider may be able to dispute the violation or citation by providing documentation or evidence uploaded to the solution that shows compliance with the regulation or policy in question. Ascend includes a Grievance screen in the provider management module so that NCDEE can record and track all grievance activity and interactions.
Complaints and Incidents	COMP_IN C_1	Describe how the proposed solution will facilitate configurable workflow to support the following, a. Receive and process incident reports b. Receive and process complaint reports c. Manage and document summary of investigation d. Schedule follow up visits if required. TCC Response: A: The solution provides customizable fields for inspectors or state staff to enter information pertaining to incidents that occur at a provider location. The workflow process allows state users to process and view/update existing incident records. The system also includes audit log functionality and role/permission-based access features for security purposes. B: The solution provides customizable fields for users to enter complaint information, allegations, findings, and referrals. The workflow process allows state users to process and view/update existing complaint records. The system also includes audit log functionality and role/permission-based access features for security purposes. C: The solution allows users to report, record, and track childcare concerns while investigating concerns of licensed or non-licensed provider facilities. It also captures the status of investigations on complaints/concerns submitted, additional information from informant if available. The solution also tracks whether the parents are notified when a CPS investigation is complete and can capture any licensing actions necessary due to a complaint or concern submitted. D: The workflow for scheduling of follow-up visits can be modified to be required if an incident or complaint has been submitted about a facility, whether publicly submitted, or submitted in the course of an inspection.
	COMP_IN C_2	Describe how the proposed solution will enable anyone to report a complaint online that occurred in the childcare facility TCC Response: Users can anonymously report concerns or complaints electronically and capture the status of the investigation on the complaint or concern submitted. The system also captures additional information from the informant, if available, and whether the informant/witness is willing to testify at a court hearing.

Category	ID	Specification
	COMP_IN C_3	Describe how the proposed solution will facilitate regulatory section staff to track complaint depending on their severity including the closure of facility TCC Response: The solution can track complaints by allowing the public to make online complaints, assigning complaints to appropriate staff, routing complaints for supervisor review and approval, and identifying any action or follow-up needed as the result of a complaint. The solution can also track legal and licensing actions taken against a facility, including closures, and record details about serious injuries and fatalities that occur in early childhood facilities.
	COMP_IN C_4	Describe how the proposed solution will handle issuance and correction of notice of administrative action following queuing process; Include in your response the ability of the system to support, a. Ability to configure the administrative action b. Ability to accept, reject the supporting documents uploaded by provider TCC Response: The solution has an Enforcement tab that allows users to add and track all enforcements according to State policies. Review and approval task alerts may be routed to appropriate users and appear on their dashboards for required follow up. Additionally, the workflow automation tool can be leveraged to categorize providers that have been prohibited from operation and trigger workflows based on each category for corrective action. The solution does provide a user-friendly interface for administrative staff to upload and maintain required documentation related to enforcements, while also ensuring that only authorized users have access to sensitive information via the role-based access workflow rules.
	COMP_IN C_5	Describe how the proposed solution will facilitate system to assess civil penalties and collect dues integrating with approved payment system TCC Response: The solution supports an integrated payment processor and access to the tool can be provided to the childcare providers as an avenue for payments to the state related to civil penalties and owed dues.
Provider Portal	PRO_POR T_1	Describe how and when the proposed solution will facilitate childcare provider to perform the following, a. Create and manage their profile b. Create and manage hours, days of operation, services, programs etc. TCC Response: The provision of childcare provider profiles will be done through a self-registration process, or bulk upload of state-owned data. Providers with sufficient roles will be able to modify the attributes relevant to their operation, including the hours of operation, available weekday schedules including exceptions, offered services such as before-care, after-care, or transportation for children. Details provided by a provider can be displayed to parents in the provider search to help assist parents with selecting a provider that meets their needs.
	PRO_POR T_2	Describe how the proposed solution will facilitate childcare provider to upload any supporting documents; What are the supported formats. TCC Response:

Category	ID	Specification
		Documents can be uploaded in the solution by a provider and stored in categorized repository. The system accepts a wide variety of document types, including PNG, JPEG, Excel, Word, PDF, JPG, GIF, PNG, DOC, DOCX, TXT, and XLSX.
	PRO_POR T_7	Describe how the proposed solution will facilitate communication between childcare provider and state staff
		TCC Response: The Ascend solution provides correspondence management functionality between providers and state staff within the system. State staff will have access to several templates for communication management with providers directly within the system.
Integrations	INT_1	Describe how the system integrates with CSDW to push all Regulatory data periodically
		TCC Response: The system can interface with the Client Services Data Warehouse through an API or data sharing agreement. Interface parameters will be established by the business department and shall meet all security requirements.
	INT_2	Describe how the system shares data between workforce table and Facility table with Registry to get data for Facility information, Teacher Qualification, Training, QRIS, etc....
		TCC Response: TCC's solution provides an integrated database amongst modules and the data is synced through an internal process between the tables.
	INT_3	Describe how the proposed solution will maintain Search Site from Main DCDEE website
		TCC Response: The solution will interface the link to Provider Search. The search area will remain available to the public.
	INT_4	Describe how the system integrates with NC Pre K and SSRS to send Regulatory data to SSRS
		TCC Response: TCC's solution provides an integrated database and SSRS reporting utilizes the integrated database. There is no external sending of data in our solution.
	INT_5	Describe how the system integrates with NCRLAP to get Environmental Rating assessment data from NCRLAP
		TCC Response: The system can interface with the NCRLAP through an API or data sharing agreement. Interface parameters will be established by the business department and shall meet all security requirements. Imported data will be associated with the appropriate provider.
	INT_6	Describe how the system integrates with ABCMS to get data for CMR (Child Maltreatment Registry) and CBC qualification letter information and send Regulatory data
		TCC Response: The system can interface with the ABCMS to get data for CMR through an API or data sharing agreement. Interface parameters will be established by the business department and shall meet all security requirements. Imported data will be associated with the appropriate provider.

Category	ID	Specification
	INT_7	Describe how the system integrates with NCFast for following activities, a. Send Facility data from Regulatory to NC FAST b. Send Out of State Data from Regulatory to NCFast c. Get Subsidy Data from NCFast to Regulatory
		TCC Response: The system can interface with the NC FAST through an API or data sharing agreement. Interface parameters will be established by the business department and shall meet all security requirements. Imported data will be associated with the appropriate provider.
	INT_8	Describe how the system integrates with CCSA to send Facility, Owner, Admin, Permit data from Regulatory periodically
		TCC Response: The system can interface with CCSA through an API or data agreement. Information will be associated with the corresponding provider.
	INT_9	Describe how the system integrates with Secretary of State Corporation (SOS) to get Corporation Id and Corporation status updates
		TCC Response: The solution can interface with the SOS to obtain the corporation id and associate with the corresponding agency. Interface parameters to obtain updates will be established to support business rules.
	INT_10	Describe how the system integrates with NC Pre-K to Send Facility information to NC PreK and NC Pre-K field in Regulatory to update based on the info in the NC Pre-K system
		TCC Response: The TCC system includes modules for NC Pre-K and Regulatory that are integrated in the database. Pre-K will have Real Time access to the facility information in Regulatory.
	INT_11	Registration and Payment System – Integration with State approved Registration and payment platform(s) for collection of licensing fees and civil penalties, and pre-licensing registration.
		TCC Response: The system can interface with the State approved Registration and payment platform(s) for collection of licensing fees and civil penalties, and pre-licensing registration. TCC has a variety of proven methods to integrate systems and develop interfaces.

Attachment L – Workforce Registry Business Specifications

Category	ID	Requirement
Administrative	ADM_1	Describe the capabilities of the Administrator roles within the solution, at a minimum to assignee user roles and permissions, modify roles, delegate permission, create/activate/deactivate/archive users, temporary revoke access, create and modify workflows.
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role.</p> <p>The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p> <p>The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments.</p> <p>In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments and has access to view staff workload, etc.</p> <p>When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Approval of a change in role is approved by the designated Administrator.</p>
Administrative	ADM_2	Describe the Solution’s account administrative functions for creating and managing user roles.

Category	ID	Requirement
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator is able to approve user accounts, redirect workflows, make assignments and has access to view workload of staff. When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Approval of a change in role is approved by the designated Administrator.</p>
Administrative	ADM_3	Describe how the Solution defines the distinct levels of a multi-level organization (i.e., state, providers, partnership agencies) and how each level can have its own administrator
		<p>TCC Response:</p> <p>As user groups/ levels are identified, roles are established for that individual group/level. Each group will contain the user roles and permissions needed to support their business need. Each group may identify administrative users whose roles have additional permissions to administer accounts and workflow. The solution currently supports multi-level organizations such as the state, providers, partnership agencies, parents, etc. TCC and the Agency will define the access for each level and user role.</p>
Administrative	ADM_4	Describe the solutions ability to archive/delete users.
		<p>TCC Response:</p> <p>The system is designed to accommodate changes in user roles, including terminating a user's account. permissions. When users leave the system or change roles, their access rights should be revoked or updated accordingly. Approval of a change in role is approved by the designated Administrator.</p>

Category	ID	Requirement
		<p>For quality purposes, accounts with terminated permissions are archived within the system. Administrators may view terminated accounts. Traceability to the user's workflow will also remain in the system.</p> <p>Routine periodic reviews of account activity will be conducted to determine if account permissions should be modified or terminated as part of normal security best practices.</p>
Workforce Registration	REG_1	<p>Describe self-service capabilities that allow end users to log into the system, fill out registration application, complete registration, upload documentation(s) and submit for further processing. Describe what documentation types are supported by the solution.</p> <p>At a minimum, the solution should provide the capability for the following user types to enroll and register in the system -</p> <ol style="list-style-type: none"> 1. Mentors & Evaluators 2. Teachers (both Lead and Assistants) 3. Technical Assistance Providers 4. Early childhood and school age administrators 5. Students training in early education 6. Program Coordinator 7. Prospective Childcare owners and Facility Owners/Directors 8. Prospective Teachers <p>TCC Response:</p> <p>Stakeholders may complete a request for a specific role. A public URL provides access to request an account. The application includes a description of required documents. Document may be uploaded into the solution. Many file types are accepted, including scanned documents, pdf, word, jpg. Etc. User Roles are defined based on the organizational structure, business rules, job functions, and tasks performed by the users. The system allows the ability to create an unlimited number of user roles. Roles may be associated with a group. At a minimum, TCC will include the following users:</p> <ol style="list-style-type: none"> 1. Mentors & Evaluators 2. Teachers (both Lead and Assistants) 3. Technical Assistance Providers 4. Early childhood and school age administrators 5. Students training in early education 6. Program Coordinator 7. Prospective Childcare owners and Facility Owners/Directors

Category	ID	Requirement
		<p>8. Prospective Teachers</p> <p>Groups contain roles and permissions needed to support the business need. Each group may identify administrative users who have additional permissions to administer accounts and workflow. Administrators will approve users within their group.</p> <p>The solution will support the following document types: Adobe Portable Document Format, Apple iWorks Numbers (when saved with an embedded PDF preview), Apple Keynote (when saved with an embedded PDF preview), Apple Pages (when saved with an embedded PDF preview), Comma Separated Values, Extensible Markup Language, Microsoft Email, Microsoft Excel, Microsoft PowerPoint, Microsoft Word, Text, and Text Graphic.</p>
Workforce Registration	REG_2	Describe the solutions capability to identify duplicate registration records
		<p>TCC Response:</p> <p>A user's email is limited to one account. If an individual tries to complete a second registration, a pop-up will tell them that the email is associated with an existing account and that it may not be completed. Reset password, recover username, and link to contact additional help is provided. Each user is assigned a unique identifier upon registration. In the event the user can create more than one account, the system has predefined queries that assist in identifying the duplicate records.</p>
Workforce Registration	REG_3	Describe the solution's capability to merge identified duplicate registration records and unmerge records. What checks and balances are in place for approvals prior to merging or separating records
		<p>TCC Response:</p> <p>If a duplicate record is identified the Help Desk, in coordination with the development team, runs specific procedures to integrate the data sets. The system checks for unique identifiers such as an e-mail address to prevent duplicate accounts.</p>
Workforce Registration	REG_4	Describe the solutions OCR capabilities.
		<p>TCC Response:</p> <p>The solution utilizes OpenText as the OCR-powered tool designed to streamline document management and data extraction processes. OCR technology accurately converts scanned paper documents, images, and PDFs into editable and searchable text. This enables the system to digitize paper-based information swiftly and efficiently, reducing manual data entry efforts and minimizing errors.</p>



Category	ID	Requirement
Workforce Registration	REG_5	Describe the solutions capability to validate data in real time at all points of entry, including manual and bulk upload entry.
		TCC Response: Users register in real time from all points of entry. The required data points are validated during the registration process. The system validates the registration of a user by sending an email to the email address entered in the registration. The user will have to validate the registration by clicking a link in the system generated email. Processes are in place to facilitate the bulk upload of user data.
Workforce Registration	REG_6	Describe the solutions capability to handle incomplete registration including prompting users to complete registration or removing application after a certain period of time.
		TCC Response: The solution identifies required responses. If a user does not complete a required field, a notice will be clearly visible. If a user tries to submit without all required fields completed, a notice will show, listing the incomplete fields. The solution saves applications regardless of completion status. The application autosaves information as the applicant moves through steps of the application process. If the applicant closes the window, they will receive a prompt to save before leaving.
Workforce Registration	REG_7	Describe the solutions capabilities to assist applicants' complete registration and provide confirmation to the applicants upon completion. Your response should registration completion for all types of end users described above.
		TCC Response: The application for registration is available through a public URL. The application clearly identifies required fields, alerting the user if a field is missed. Quicklinks are provided for any field missed to direct the user to the field that needs to be completed. Once the application is submitted, the application is placed in a queue for approval. The user responsible for reviewing applications will receive an alert with a direct link to the application. An unapproved application will remain in the staff's work queue with the status listed. If additional information is needed for approval, staff can email the applicant directly from the system. Communications can be automated or manual and may be customized for the individual situation. All communications remain in the system.
Workforce Registration	REG_8	Describe the solutions ability for manual verification and approval of registrations.
		TCC Response:

Category	ID	Requirement
		<p>Approval of registration for user accounts is performed by an administrator within the group. For example, a licensing administrator approves new state licensing staff within their group. Teachers are approved by state staff or designee. The provider administrator where the individual works can approve an association, listing the individual as a teacher at their facility.</p> <p>Registrations that are not processed remain in the work queue. Administrators may view the work queues for their staff.</p>
Workforce Registration	REG_12	<p>In instances where the business receives supporting documentation (ex: electronic/hard copy transcripts) for an applicant prior to creating their account, describe the solutions capability for enabling state staff to stage and manage such documents, including the capability to integrate the documents with the appropriate account, manually and/or automatically, when the corresponding account is subsequently created.</p>
		<p>TCC Response:</p> <p>State staff may initiate a registration and add supporting documentation for a user, if desired. For an account that is initiated by state staff, the user may complete the registration process by validating user information and logging into the account. If the user attempts to create a new account, it will be identified as a duplicate and redirected to the existing account.</p>
Workforce Registration	REG_13	<p>Describe how applicants can update and maintain their profile in the system and how the system allows applicants to upload additional credentials as their skills are enhanced.</p>
		<p>TCC Response:</p> <p>Once an account is established, the user can maintain their profile, providing updates as needed. Additional documents may be uploaded directly into the user's account. Documents uploaded into the system are indexed for placement in the correct area of the system. Changes that require validation or approval will generate a work alert and go into the appropriate staff member's queue.</p>
Workforce Registration	REG_14	<p>Describe how the solution would allow applicants / facility owners and directors to associate the applicant with facility(ies). Describe how the solution provides the ability for applicant or their supervisor to indicate hours of work and wages at each facility and the start and end dates</p>
		<p>TCC Response:</p> <p>During the enrollment process, individual users have the option to request an "association" with an enrolled provider entity. The user may select an enrolled provider and their role. The Owner/ Administrators have permission to accept an</p>

Category	ID	Requirement
		association. Once associated, the Administrator can approve and modify roles and permissions for staff.
Workforce Registration	REG_15	Describe the ability for prospective like Childcare owners, Teachers to enroll with the workforce registry.
		TCC Response: Access to the Workforce Registry is seamless for eligible users, such as childcare owners and teachers. The tab to enter the registry is available on the user's home screen. Account information used for registration is defaulted into the registry.
Security	SEC_1	Describe how the Solution provides role-based access
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator is able to approve user accounts, redirect workflows, make assignments, and has access to view workload of staff, while other roles in the system may have read only or limited access. When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.
Security	SEC_2	Describe how the Solution integrates with the North Carolina Identity Management System (NCID) (https://it.nc.gov/vendor-engagement-resources#dit-services) for authentication and authorization services.
		TCC Response:



Category	ID	Requirement
		The solution leverages Azure Active Directory B2C combined with Azure External Identities. These provide the foundation for all authentication, sign-up, and sign-in activities. By creating user flows, the solution can be configured to integrate with defined external identify sources such as NCID by passing tokens. These tokens can be based on standard authentication protocols such as OAuth 2.0, OpenID Connect, or SAML. The tokens will have defined user claims mappings that map user attributes from the NCID system to the solutions directory services (Azure AD B2C). This includes, but is not limited to, attributes like FirstName, LastName, EmailAddress, UserRole, and whether or not the MFA requirement has been satisfied.
Security	SEC_3	Describe the Solution's native user authentication and authorization features, including whether multi-factor authentication is available.
		TCC Response: When creating an account, an email is sent to the user to validate the individual creating the account and email. Once an account is established, the user is authenticated against information in the database, including username and password. Once logged into the system, the user will have access to only those areas and features associated with their role. Multi-factor authentication is available and may be implemented for all users or for specific groups.
Workflow	WF_1	Describe the capability of the system to configure existing workflows to meet DCDEE's needs and build new workflows, where required. Provide details about which user roles will have the capability to configure workflows in the system and build new workflows.
		TCC Response: Workflows are built into the system based on business needs and can be reconfigured as business needs change. Administrative users have the ability to configure workflows within their permissions area. For example, the Provider Administrator may manage staff. Assigned state administrators can modify work assignments, including areas assigned, directing applications into the staff member's queue. New workflows may be built into the system at the request of the agency, by TCC administrators.
Workflow	WF_2	DCDEE would like configurable workflows to support the following activities for all user types. Describe the capabilities of automated workflows within the system to support - 1. Registration for new and returning users 2. Education evaluation 3. Background check 4. Initial licensure approvals and renewals including verification of education and training completion.

Category	ID	Requirement
		<p>5. Grants application evaluation</p> <p>6. Trainer approval - initial and recurring</p> <p>7. Survey distribution and circulation</p> <p>Include in your response workflow triggers, roles that could create the workflows and deploy them, alerts and notification for pending reviews, e-signature capabilities and reporting capabilities.</p> <p>TCC Response:</p> <p>Workflows are built into the system based on business needs and can be reconfigured as business needs change.</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. These permissions and corresponding workflows are based on the tasks and responsibilities associated with each role. As users complete tasks, automation of activities provides an intuitive process and supports completion of work in a consistent manner.</p> <p>Administrative users can configure workflow within their permissions area. For example, Provider Administrators may manage staff. Assigned state administrators can modify work assignments, including areas assigned, directing applications into the staff member's queue. New workflows may be built into the system at the request of the agency, by TCC administrators.</p> <p>The system has existing workflows for the following functions that can configured to meet the Agency's business needs:</p> <ol style="list-style-type: none"> 1. Registration for new and returning users 2. Education evaluation 3. Background check 4. Initial licensure approvals and renewals including verification of education and training completion. 5. Grants application evaluation 6. Trainer approval - initial and recurring 7. Survey distribution and circulation <p>Based on the User's role, automated alerts are available on the dashboard. Alerts are linked directly to the workflow for at-a-click access to program detail and assignments. Alerts reflect real time data and indicate actions that need to be completed, including pending work items.</p>

Category	ID	Requirement
		<p>Triggers are automated for distribution based on actions in the system. Emails and email templates may be modified by Users with authorized permissions. Triggers for auto generated emails include actions such as submission and decision of an application. Templates allow easy updates and modifications to correspondence.</p> <p>Signature capabilities and reporting are available within the solution. Reports are designed to support the business rules and to provide information to support program administration.</p>
Workflow	WF_3	<p>Describe the capability to support workflow queueing (sequential, conditional, and parallel); capability to expedite requests in a queue; reassigning requests and redirect workflow for further assistance.</p> <p>TCC Response:</p> <p>Workflows are built into the system based on business needs and can be reconfigured as business needs change. Administrative users have the ability to configure workflow within their permissions area. For example, Provider Administrators may manage staff. Assigned state administrators can modify work assignments, including areas assigned, directing applications into the staff member's queue. New workflows may be built into the system at the request of the agency, by TCC administrators.</p>
Workflow	WF_4	<p>Describe all the pre-defined workflow status and the ability to customize and add new status fields.</p> <p>TCC Response</p> <p>Workflows, including statuses, are built into the system to meet business needs and are configurable. Administrative users can configure workflow within their permissions area.</p> <p>Examples of statuses currently in the solution are Application Draft or Application Submitted. Once review of the application is started, the status may be changed to Approved, Documentation Needed, Not eligible. Status determinations may be customized to meet the business rules.</p>
Workflow	WF_5	<p>Describe the capability of the system to provide visibility on the status of workflow to the various stakeholders based on their roles</p> <p>TCC Response:</p> <p>To facilitate workflow “at a glance” an alert system is on the user's home page, displaying activities that are pending for the individual user. Alerts may include such things as: Application not processed, Application in Draft, User Approval needed, etc. Users click on the alert to be directed to their work queue.</p>

Category	ID	Requirement
		Administrators have permission to view their staff's work queue. The work queue may be filtered, and reports produced.
Workflow	WF_6	Describe how the solution supports assignment of training or technical assistance (TA) by self and others. Include in your response the ability for participants to select training/technical assistance based on services/ type of delivery, location, dates, availability, cost etc.
		TCC Response: Workflows are designed to support the needs of the program. When an action or status results in a required follow up activity, an automated response can be placed in the workflow, guiding the user to the next step. Follow up may be enrollment in a training course or scheduling a visit. Enrollment in training can be self-initiated, allowing users to select their preferred training. Communication can also be triggered to notify the user of their requirements. Alerts in the can also be put into place to track follow up activities "at a glance."
Workflow	WF_7	Describe how the solution allows automatic assignment of mandatory training at a pre-determined frequency
		TCC Response: Workflows can be built into the solution that provides automatic assignment for mandatory training. Requirements can be built into a role (mandatory training yearly based on enrollment date) and based on a specific requirement (a visit finding requires completion of a training course). Legislative changes may also trigger a training requirement and an alert that the mandatory action is in the system.
Workflow	WF_8	Describe all the status to track training and TA services including and not limited to completion, overdue, pending assignment etc. Can the status values be updated to meet NC needs.
		TCC Response: Required activities within the system can have an associated status. Workflow and the status of activities are designed to support business requirements. Statuses of Complete, Overdue, Pending, Missing information can be accommodated. Status and workflow can be updated.
Workflow	WF_9	Describe how the training completion records can be uploaded to track completion. Where required, does the solution support workflows to enable approval of self-uploaded records. Describe the workflow when records are received from authorized trainers
		TCC Response:

Category	ID	Requirement
		<p>Record of training completion is stored in the Professional Development Registry. Courses completed outside of the registry will have an uploaded verification, as permitted by program rules.</p> <p>Education and training to support a career level can be uploaded within the user's profile.</p>
Workflow	WF_10	Describe how the system can integrate with other training platforms for digital transaction of training records.
		<p>TCC Response:</p> <p>The system can interface with outside training platforms to receive training records. Interface would occur through an API with a written agreement.</p>
Workflow	WF_11	Does the solution provide the capability for the State to group training by category. Based on legislative changes can the training category be renamed, and new category be added. Describe how the system maintains integrity of data for reporting purposes.
		<p>TCC Response:</p> <p>The solution classifies training and groups by category. The solution currently groups training by CCDBG topics, training entity, and User Groups. Training can also be classified as required or optional and can indicate intended audience and level. The system's database tracks the start date of the training group, end date of the training group and start date of the renamed training group to ensure data integrity.</p>
Workflow	WF_12	Does the solution support trainee to communicate with trainer or technical assistance provider prior to and after training / technical assistance
		<p>TCC Response:</p> <p>The system can include a communication link within the registration page. This allows the trainee to send an email while on the registration or their training page. Phone numbers can also be entered as requested.</p>
Workflow	WF_13	Describe how the solution supports trainers, technical assistance providers and training center administrators to create their profile or company profile, services covered and submit their credentials.
		<p>TCC Response:</p> <p>The solution provides information and workflow when registering. During the registration process, the user is guided through the required steps and provided with background information on the requirements. Links or an interface may also be provided where the activity such as training, background checks, etc. may be completed. Tool Tips can be inserted with additional information when clicked or</p>

Category	ID	Requirement
		hovered over. When completing an application, a progress bar or required elements counter can be made available. Missed requirements are listed and can be clicked, returning to that area of the application or additional information as requested. For users needing additional assistance, a Help Desk can be made available, as well as the ability to send questions through email or chat.
Workflow	WF_14	Describe how the solution supports configurable workflows for trainer/technical assistance provider approval and annual renewals. Include the capability the solution offers for upload of credentials and documentation.
		TCC Response: Workflows are configurable to support the business needs of the program. Annual renewals and credentialing requirements can be built into the solution, providing notice when action is upcoming, due, or past due. Documentation can be uploaded to the user's profile.
Workflow	WF_15	Describe how the system supports assigning mentors and evaluators with whom the participant can work with.
		TCC Response: Workflows can be built to sort and filter qualified mentors and evaluators, producing a list for selection by the participant. Prior to building the workflow, identifiable characteristics and requirements would be determined.
Workflow	WF_16	Describe how the Plans of Study and Licensure only plan and supporting documents can be managed and tracked for participants.
		TCC Response: Workflows will be designed to meet participant requirements. Users may select their level of participation, selecting the checklist or guide meeting their enrollment. Plans of Study and Licensure as well as other supporting documents to support a stakeholder's participation can be uploaded to their profile.
Workflow	WF_17	Describe how the system supports aggregating and accruing overall training and TA hours towards professional development.
		TCC Response: Training descriptions, such as hours and CTEs are included in the system. Credits can be applied and calculated to support personnel requirements. TA and mentoring documentation can include hours completed.
Workflow	WF_18	Describe the Solution's capability for displaying, to state staff, eligibility/ineligibility status, past and/or present as defined by the business, in real time or at the point in time when the applicant's record is viewed.

Category	ID	Requirement
		TCC Response: State staff can see the status of users in real time, starting at the enrollment process. Based on workflow requirements, alerts can be developed to notify staff when a status changes or needs action.
Grants	WF_19	Describe the solutions ability to allow eligible enrollees to apply for grants and track educational scholarships within the system
		TCC Response: Eligible grants and scholarships are listed in the user's profile or provider page. Applications for grants are intuitive, guiding the user through the process. Required fields are clearly identified. If documentation is required, upload can occur within the application.
Manual Document Generation Workflow	WF_MANU_DOC_1	Describe the solutions ability to provide spell check, grammar check, free form text, document customization, printing options, email options, delete/undelete documents, option to reuse captions, audit documents, annotate within the documents as needed and serve as a document repository.
		TCC Response: Free form boxes are available in designated areas of the system. In those cells, spell check is available. Forms within the system may be customized to meet business needs. Emails and email templates may be modified by Users with authorized permissions.
Automatic Document Generation Workflow	WF_AUTO_DOC_1	Describe the solutions ability to automatically generate letters and certifications. Describe the solutions ability to print, update fonts, letterheads, and signatures, delete/undelete and save automatically generated documents.
		TCC Response: Auto generated emails are triggered for distribution based on actions in the system. Email and letter templates may be modified by users with authorized permission. Letterheads, logos, signatures, and font can be included in the development of the templates, which may be updated as needed. All communications generated in the system are saved in the system with the case file. Triggers for auto generated emails include actions such as submission and decision of an application. Templates allow easy updates and modifications to correspondence
Job Listing		Describe the solutions ability to support job listings from multiple sources.
		TCC Response: The homepage can be customized to include a link to a job posting website or may be updated to include job postings. Administrative users have permission to add

Category	ID	Requirement
		information to the website as needed. The homepage is available publicly and to users.
Data Management	DAT_1	Describe how the Solution uses role-based access models and previously described security requirements for protected data as outlined in NC State Security Plan and any other relevant security documents to control access to and edit capacity for records that includes citizen data and associate PII data that may be shared between agencies.
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p> <p>Routine reviews of users and associated roles will occur to ensure proper Access Control pertaining to account management procedures can be maintained aligning with the State's Security Plan.</p> <p>The solution can also use data masking to eliminate visibility of data to all users. Risk Guard, which is built into OpenText services provides the capability to classify and report on data contained within files of the file cabinet.</p>
Data Management	DAT_2	Describe how the Solution grants role-based permissions to access program data which may or may not be stored in a common set of tables depending on any field level differences identified during discovery.
		<p>TCC Response:</p> <p>User Roles and permissions are established to support business processes, while safeguarding sensitive information and preventing unauthorized use. Users may only have access to information in the system that is needed for their role.</p>
Data Management	DAT_3	Describe how the Solution's role-based permissions will define CRUD transactions with the program data, as most users will not have full access to both programs specific data.
		TCC Response:



Category	ID	Requirement
		Role-based permissions establish a framework where users are granted access to perform specific actions on program data based on their assigned roles. CRUD (Create, Read, Update, Delete) transactions are defined within the solution allowing users to interact with data in accordance with their roles. This ensures that most users will have limited access to program-specific data, as their permissions are tailored to their roles, preventing unauthorized actions, and promoting data security and integrity.
Data Management	DAT_4	Describe how the Solution records changes to user data (PII), including specific user info and time frame, existing for four levels of change, as well as other restrictions and recordings as required by State Security plan/legal concerns/Federal regulations for data protection and security.
		<p>TCC Response:</p> <p>All systems and services of the solution are configured to capture audit log data per State policy which at a minimum contains the necessary information to establish the following:</p> <ul style="list-style-type: none"> a. What type of event occurred. b. When the event occurred. c. Where the event occurred. d. Source of the event. e. Outcome of the event. f. Identity of any individuals, subjects, or objects/entities associated with the event. <p>In addition to these established parameters, all system clocks are synced with an authorized time source ensuring time and date stamps of audit records are in sync across the solution. The audit logs are then all centrally contained and correlated within the SIEM solution as part of the overall incident response capabilities. Alert notifications specific to the creation, modification, destruction, or potentially other actions against user data (PII) will be configured and monitored.</p>
Data Management	DAT_5	Describe how the Solution records permissions by roles as changes by a specific user in a specific time frame existing for two levels of change.
		TCC Response:

Category	ID	Requirement
		<p>All systems and services of the solution are configured to capture audit log data per company policy which at a minimum contains the necessary information to establish the following:</p> <ul style="list-style-type: none"> a. What type of event occurred. b. When the event occurred. c. Where the event occurred. d. Source of the event. e. Outcome of the event. f. Identity of any individuals, subjects, or objects/entities associated with the event. <p>In addition to these established parameters, all system clocks are synced with an authorized time source ensuring time and date stamps of audit records are in sync across the solution. The audit logs are then all centrally contained and correlated within the SIEM solution as part of the overall incident response capabilities. Alert notifications specific to the creation, modification, destruction, or potentially other actions against user data (PII) will be configured and monitored.</p>
Data Management	DAT_6	Describe how the Solution ensures user access is governed by the security plan of the State and any other identified regulations/policies or requirements for systems governing Personally Identifying Information, or greater if discovered.
		<p>TCC Response:</p> <p>TCC has adopted the NIST SP 800-37 – Guide for Applying Risk Management Framework for Federal Information Systems, as a standard for managing information security risk across all resources. This RMF utilizes NIST SP 800-53 Rev. 5 as the foundation for identifying and implementing security controls. The security controls are organized across 20 control families and serve as the basis for all security policies and associated processes and procedures to securely store, transmit, and process data on behalf of TCC customers. At a minimum, all resources within the control and responsibility of TCC are categorized and secured following a “Moderate” baseline within the NIST SP 800-53 Rev. 5 Guidelines unless required otherwise.</p>
Data Management	DAT_7	Describe how the Solution uses a single sign on for user authentication and identifies the user with a specific role-base set of permissions.
		<p>TCC Response:</p>

Category	ID	Requirement
		The solution leverages Azure Active Directory B2C combined with Azure External Identities. These provide the foundation for all authentication, sign-up, and sign-in activities. By creating user flows, the solution can be configured to integrate with defined external identify sources such as NCID by passing tokens. These tokens can be based on standard authentication protocols such as OAuth 2.0, OpenID Connect, or SAML. The tokens will have defined user claims mappings that map user attributes from the NCID system to the solutions directory services (Azure AD B2C). This includes, but is not limited to, attributes like FirstName, LastName, EmailAddress, UserRole, and whether or not the MFA requirement has been satisfied.
Data Management	DAT_8	Describe how the Solution allows administrative roles for both Regulatory and EEB, which allows user roles to be defined by either Regulatory, EEB or both.
		TCC Response: <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p>
Data Management	DAT_9	Describe how the Solution allows for separate landing pages or zones for users based on their roles.
		TCC Response: <p>Landing pages are customized to the user's group and role. Individual users may have alerts, directing them to their individual workflow, messages, and links that support their responsibilities.</p>
Data Management	DAT_10	Describe how the Solution normalizes data within the system, proactively avoiding duplicate records and citizens.
		TCC Response: <p>The solution standardizes and organizes incoming data with techniques such as data cleansing, validation, and transformation to ensure consistency and accuracy. The solution proactively avoids duplicate records by employing algorithms and rules to compare data against existing records checking for similarities and potential duplicates.</p>
	DAT_11	Describe how the Solution normalizes migrated, historical data.

Category	ID	Requirement
Data Management		<p>TCC Response:</p> <p>The system allows for the migration of historical data. Standardization of data will occur during the migration. The database is designed in a 3rd normal form, so any data migrated is normalized.</p>
Dynamic Generation of document	ECM_1	<p>Describe the solutions capability to dynamically generate documents.</p> <p>TCC Response:</p> <p>The solution has the capability to dynamically generate documents through an automated and flexible process. It can create various types of documents, such as applications, emails, reports, forms, and letters, by intelligently populating predefined templates with relevant data and content. This dynamic document generation leverages data from integrated sources, databases, or user inputs to produce accurate and customized documents on demand.</p>
Integration and System Interfaces	INI_1	<p>DIT- Describe the solutions ability to Integrate with the State agencies authentication platforms.</p> <p>TCC Response:</p> <p>The solution leverages Azure Active Directory B2C combined with Azure External Identities. These provide the foundation for all authentication, sign-up, and sign-in activities. By creating user flows, the solution can be configured to integrate with defined external identify sources such as NCID by passing tokens. These tokens can be based on standard authentication protocols such as OAuth 2.0, OpenID Connect, or SAML. The tokens will have defined user claims mappings that map user attributes from the NCID system to the solutions directory services (Azure AD B2C). This includes, but is not limited to, attributes like FirstName, LastName, EmailAddress, UserRole, and whether or not the MFA requirement has been satisfied.</p>
Integration and System Interfaces	INI_3	<p>DPI- Describe the solutions ability to receive file/real time information about Licensed teachers & send information on enrollee's (teacher's) training from Department of Public Instruction Online Licensure System.</p> <p>Describe the solutions ability to receive wage and Licensure file; send new approved lead NC Pre-k teacher from Department of Public Instruction Human Resource Management System.</p> <p>TCC Response:</p> <p>The proposed solution showcases a robust capability to seamlessly obtain real-time data on licensed teachers and their training via the Department of Public Instruction Online Licensure System through an API or data sharing agreement. It efficiently processes and transmits information about enrollees' training to ensure accurate and up-to-date records. Additionally, the solution adeptly manages wage and licensure files, facilitating the transmission of newly approved NC Pre-K</p>



Category	ID	Requirement
		teachers from the Department of Public Instruction Human Resource Management System, streamlining the onboarding process, and ensuring data accuracy.
Integration and System Interfaces	INI_4	Describe the solutions ability to receive file containing the names of adults flagged for maltreatment from the Child Maltreatment Registry.
		TCC Response: The system provides the ability to receive files of data through an API or data agreement. Standardization of data will occur during the migration.
Integration and System Interfaces	INI_5	Describe how the solution shares facility and workforce qualification data between workforce and regulatory areas and keeps information current.
		TCC Response: Data is shared between different areas of the system, ensuring that data is current. Data that is entered into the Workforce area is automated to update in other areas, such as Licensing/Regulatory.
Integration and System Interfaces	INI_6	Describe the solutions ability to integrate or receive data from Training platforms such as Moodle, Voyage Sporis & Teaching Strategies for enrollees.
		TCC Response: The solution has the ability to receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during the migration. TCC currently supports the integration of several types Training platforms, one example is an existing integration with a LMS based on Moodle.
Integration and System Interfaces	INF_7	Describe the solutions ability to integrate with partnership agencies application to receive and provide information to end users. CCSA-Receive a list of bonus approval administered. CCSA Grants System – (T.E.A.C.H., WAGE\$, AWARD Plus and AWARDS) Receive files with enrollee grant and wage information.
		TCC Response: The solution can integrate with partnership agency applications and data to support professional development grants/awards can be integrated into the user's profile. The solution can also place grant or scholarship applications within the solution for easy access to providers.
Integration and System Interfaces	INI_8	North Carolina Institute for CDP – Send a list of EEC certifications granted.
		TCC Response:

Category	ID	Requirement
		The solution can inform outside organizations, including the North Carolina Institute for CDP of awarded certificates.
Integration and System Interfaces	INI_9	Describe the solution ability to integrate with external agencies to receive Health and Safety trainers' information
		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INF_10	CBC/ABCMS-Real time integration with CBC for background check of enrollees
		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INI_11	Describe the ability of the solution to Integrate with state approved payment platforms for training payments
		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INI_12	Describe the solutions ability to Integrate or receive monthly file from Vital Records application
		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INI_13	Describe the solutions ability to integrate with Clearing houses to receive Official Transcripts.
		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
	INI_14	Describe the solutions ability to integrate with NCRLAP to view, assign, or participate in trainings

Category	ID	Requirement
Integration and System Interfaces		TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INI_15	Describe the solutions ability to integrate with NC Pre-K's application to route change requests for appropriate approvals by EES and Workforce Education Unit. TCC Response: The solution can receive and integrate data files from outside sources through an API or data sharing agreement. Standardization of data will occur during migration.
Integration and System Interfaces	INI_16	Describe the solutions ability to integrate with Scribbles to add, retrieve, annotate, and manage documents. TCC Response: The system can interface with external systems through an API. Interface parameters will be established by the business and shall meet all security requirements.
Dashboards	DS_1	Describe the solutions ability to provide Dashboard capabilities for users based on their requirements. TCC Response: Dashboards are personalized to the role and permissions of the user. Alerts and information support the role of the user.
SFTP	SFTP_REC_1	Describe the solutions ability to receive SFTP, Batch Job, integrate with other solutions to receive data. May include Job boards, Grants, or any places where secured SFTP is required. TCC Response: The solution is able to receive SFTP data, process batch jobs, and interface with other solutions through established channels for data transfer or APIs. Automating the data process, ensuring robust error handling, and maintaining security at every step of the process are critical to the process.
Search	SRC_1	Describe the solution's ability to support and search for all data fields within the solution. TCC Response: Users within the system have access to search functions to support identification of users and documents in the system. Search features may be added to meet the

Category	ID	Requirement
		business need. Search of the full database may be completed by IT admins, including historical data.
Search	SRC_4	Describe the solutions ability to support users to search by facility association and data elements pertaining to facilities.
		TCC Response: Users within the system have access to search functions to support identification of users and documents in the system. Users may filter on a specific provider or provider type. Search features may be added to meet the business need.
Search	SRC_5	Describe the solutions ability to support Partnership agencies ability to search for data as per their requirements
		TCC Response: Roles with permissions can be created to allow Partner Agencies access data, reports, and search functions within the system. Reports to export data can also be put in place.
Search	SRC_6	Describe the solutions ability to support users to search by Education information
		TCC Response: The system indexes documents and data which allows users to search for educational information.
Search	SRC_7	Describe the solutions ability to support users to search by Training information (Training type, location, cost etc.)
		TCC Response: Users may search for training using the name or type of training, training groups, descriptions, trainers, dates, etc. Classification of training will be determined during the design.
Requirement	CMP_1	The solution complies with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) for accessibility.
		TCC Response: The solution complies with WCAG 2.0.
Requirement	CMP_2	The solution must be Family Educational Rights and Privacy Act (FERPA) compliant (20 U.S.C. § 1232g; 34 CFR Part 99)
		TCC Response:



Category	ID	Requirement
		The solution meets Family Educational Rights and Privacy requirements. As a role-based system, permissions to access information is only granted in support of the law.
Requirement	CMP_3	The solution complies with the North Carolina State Government security requirements (https://it.nc.gov/vendor-engagement-resources#security).
		TCC Response: TCC has adopted the NIST SP 800-37 – Guide for Applying Risk Management Framework for Federal Information Systems, as a standard for managing information security risk across all resources. This RMF utilizes NIST SP 800-53 Rev. 5 as the foundation for identifying and implementing security controls. The security controls are organized across 20 control families and serve as the basis for all security policies and associated processes and procedures to securely store, transmit, and process data on behalf of TCC customers. At a minimum, all resources within the control and responsibility of TCC are categorized and secured following a “Moderate” baseline within the NIST SP 800-53 Rev. 5 Guidelines unless required otherwise.
Requirement	CMP_4	The solution complies with the North Carolina Department of Health and Human Service's Privacy and Security policies and manuals (https://policies.ncdhhs.gov/departmental/policies-manuals/section-viii-privacy-and-security).
		TCC Response: TCC has adopted the NIST SP 800-37 – Guide for Applying Risk Management Framework for Federal Information Systems, as a standard for managing information security risk across all resources. This RMF utilizes NIST SP 800-53 Rev. 5 as the foundation for identifying and implementing security controls. The security controls are organized across 20 control families and serve as the basis for all security policies and associated processes and procedures to securely store, transmit, and process data on behalf of TCC customers. At a minimum, all resources within the control and responsibility of TCC are categorized and secured following a “Moderate” baseline within the NIST SP 800-53 Rev. 5 Guidelines unless required otherwise.
Requirement	CMP_5	Describe how the Solution protects user privacy via user access levels and masking of social security numbers, to include restricting read/write access to user SSN by unauthorized staff.
		TCC Response: The solution ensures user privacy through user roles and access levels and masking of social security numbers. User roles are established with specific permissions based on their responsibilities. SSNs are encrypted and stored in a way that even



Category	ID	Requirement
		authorized staff have limited visibility with partial masking of digits. Unauthorized users are strictly prohibited from accessing SSNs.
Requirement	CMP_6	Describe how the Solution archives records and/or to designate inactive users for reason e.g., death, migration out of area, no longer eligible, achieved self-sufficiency.
		TCC Response: The system is designed to accommodate changes in user roles, including terminating a user's account. permissions. When users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator. For quality purposes, accounts with terminated permissions are archived within the system. Administrators may view terminated accounts. Traceability to the user's workflow will also remain in the system. Periodic reviews of account activity will be conducted to determine if account permissions should be modified or terminated as part of normal security best practices.
Intake	WFR_INT_1	Describe how the Solution maintains data for individuals, partnership agencies, facilities, TA's, state staff etc. at any point in time. During and after changes or updates.
		TCC Response: Data is maintained in real time including the status of users starting at the enrollment process. Based on workflow requirements, alerts can be developed to notify staff when a status changes or needs action.
Intake	WFR_INT_2	Describe the process the Solution utilizes to link individuals to programs, agencies, facilities etc.
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc. When new accounts are created, the individual requests a group and role. Approval of the account is completed by the assigned administrator.
Intake	WFR_INT_3	Describe how the proposed Solution can track reference-from source for example trainings referred.
		TCC Response:

Category	ID	Requirement
		Business rules will guide workflow. Referral sources can be added to the system. An example of this feature is in the Pre-K application.
Intake	WFR_INT_4	Describe how the Solution captures employment and education.
		TCC Response: Employment and education are recorded in the user's profile. Rules on verification will be built into the workflow.
Intake	WFR_INT_5	Describe how the Solution gives "real time" prompts and not move forward if certain required data is not entered
		TCC Response: The solution provides information and workflow when completing tasks in the system. Required elements are clearly marked. Users are guided through the required steps and provided with background information on the requirements. Links or an interface may also be provided where the activity such as training, background checks, etc. may be completed. Tool Tips can be inserted with additional information when clicked or hovered over. When completing an application, a progress bar or required elements counter can be made available. Missed requirements are listed and can be clicked, returning to that area of the application or additional information as requested. For users needing additional assistance, a Help Desk can be made available, as well as the ability to send questions through email or chat. Missing a required step may prevent a user from moving forward or submission, based on business rules.
Intake	WFR_INT_6	Describe how the Solution will allow the user information changed by one component updated across the entire database.
		TCC Response: Workflows are utilized to build efficiency, while supporting business rules. Efficiencies such as integrating changes across the system are built into the solution. An example would be changing the phone number in the user account and the number would be changed in any other section where the phone number was stored.
Intake	WFR_INT_7	Describe how the Solution's error/omission tracking is handled for user intake or updating.
		TCC Response: Workflows and business rules will be identified to capture data that is necessary for monitoring. Alerts can be built to identify errors in real time and to capture occurrences of specific errors.

Category	ID	Requirement
Agency services	AS_1	Describe how the Solution will allow custom program/service creation.
		TCC Response: Workflows and business rules are built on the needs of the program. Rules to support custom program/service creation can be inserted. Currently the solution customizes provider selection to meet the indicated priorities of the parent. Providers may customize their profiles and workflow to meet their roles in the system.
Agency services	AS_2	Describe how the Solution enters narratives of user progress, developments, concerns, etc. for the overall facility record.
		TCC Response: The solution can capture narrative responses in text boxes and notes. Business rules guide where text boxes are made available. Information typed into text boxes may be defaulted into correspondence as needed.
Case management	Case_Mgt_S_1	Describe how the Solution initiates and facilitates case management by staff, to record detailed case notes, and to follow-up on user.
		TCC Response: As a user navigates through the system, checklists and areas for notes are available. Text box limits can be increased or reduced and can contain prompts to support note taking. Business rules can include making specific fields mandatory.
Case management	Case_Mgt_S_2	Describe how the Solution tracks users' goals, progress, and outcomes professional development, trainings, education update etc.
		TCC Response: Users can indicate the goals that they are striving to achieve. Requirements, checklists, and workflow can be linked to the selected goal, guiding the user to the "next step." An example would be to achieve the next rating. Users will be presented with the requirements, can upload supporting documentation, and will receive results from missing requirements.
Case management	Case_Mgt_S_11	Describe how the Solution provides financial reports, including how it tracks training costs and provides a report by paid training taken by users.
		TCC Response: The solution will effectively track and monitor all training costs. Tracking mechanisms and integrated financial tools provide visibility into costs and payment. The solution enhances transparency, accountability, and informed decision-making.
	SA_1	Describe how the Solution ability to separate users based on user groups.

Category	ID	Requirement
System Administration		<p>TCC Response:</p> <p>User groups and roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by users. During enrollment, a user indicates the role and group matching their enrollment.</p>
Reporting and Analytics	RA_1	<p>Describe all aggregate and individual level operational reports available to support the following areas in the Workforce Registry for the various roles including administrators, State users, partnership agencies, facility owners and operators, enrollees, trainers, general public etc. -</p> <ul style="list-style-type: none"> a. Information about workforce registrant including reports on their demographic, qualification, training, technical assistance, licensure, place of employment, wages etc. b. Information about trainers including hours of training provided, training feedback etc. c. Information and characteristics of the childcare facilities. d. Staff turnover and students in pipeline e. Required training by role f. Capabilities that exist to support correlation report g. Information about customer service provided (issue history, issue frequency, etc.) h. Others, as applicable <p>TCC Response:</p> <p>Reports will be identified based on the needs of the program. Defined reports will be available on the report dashboard and will allow for modification based on user permissions. Ad hoc reporting is also available. All reports listed above can be accommodated.</p>
Reporting and Analytics	RA_2	<p>Using the data in the system describe the reports that support longitudinal analysis of enrollees and facilities to establish the correct sequence of events and identify changes over time.</p> <p>TCC Response:</p> <p>A sample of reports that could support a longitudinal analysis of enrollees and facilities are:</p> <ol style="list-style-type: none"> 1. Enrollee Demographics. 2. Enrolment and Disenrollment of users and enrollees. 3. Provider utilization.

Category	ID	Requirement
		<ol style="list-style-type: none">4. Service utilization.5. Graphical analysis/mapping enrollee and facility data geographically.6. Provider compliance, training, level.7. Financial Analysis.8. Quality metrics of providers.9. Comparative analysis providers and star ratings.10. Predictive Analysis.

Attachment M – NC Pre-K Specifications

Category	ID	Specification
Administrative	PK_ADM_1	Describe the solution’s capabilities to manage the Administrator roles, at a minimum to assign user roles and permissions, modify roles, delegate permission, create/activate/deactivate/archive users, temporarily revoke access, create and modify workflows by identified stakeholders at state and local level.
		<p>TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p> <p>The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments and has access to view workload of staff. When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
Administrative	PK_ADM_2	Describe the solution’s capabilities for account administrative functions to create and manage user roles.
		<p>TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools</p>



Category	ID	Specification
		<p>and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p> <p>The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments and has access to view workload of staff. When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
Administrative	PK_ADM_3	Describe the solution's capabilities to define the different levels of a multi-level organization (i.e., state, providers, partnership/contracting agencies) and how each level can have its own administrator capabilities.
		<p>TCC Response:</p> <p>As user groups/ levels are identified, roles are established for that individual group/level. Each group will contain the user roles and permissions needed to support their business need. Each group may identify administrative users whose roles have additional permissions to administer accounts and workflow.</p>
Administrative	PK_ADM_4	Describe the solution's ability to create a user role above the local administrators.
		<p>TCC Response:</p> <p>User roles are configured to meet the business needs of the program, including oversight and management of the system. System Administrators or Security Officers may be identified in the system. System Administrators and Security Officers can be assigned a higher level of access to the system and have a role that is above the local administrators.</p>
Registration	PK_REG_1	Describe the solution's self-service capabilities that allow end users to log into the system, fill out registration application, complete registration, and upload documentation(s) for further processing. Describe the types of documentation types that are supported by the solution.
		<p>TCC Response:</p> <p>The public URL is available for parents to register a new account. The registration process is easy and user friendly. Once registered, the parent/applicant can fill out and complete the Pre-K application and upload any required documentation in support of the application. Ascend provides multiple locations for a wide variety of electronic file types to be uploaded (e.g., PDF, PNG, JPEG, Word, Excel, etc.). The "Upload Document" option is located throughout Ascend in the obvious places where supporting documentation may be required.</p>
Registration	PK_REG_2	Describe the solution's ability to create user groups and associate users with them.

Category	ID	Specification
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc. When a new user registers for an account, the user selects the group and role requested. The user account is reviewed and approved by the group administrator or designee. The State can add or modify the groups and roles as needed. As changes are made to user groups and roles, permissions are defined.
Registration	PK_REG_3	Describe the solution's ability to identify duplicate records for users. TCC Response: A user's email is limited to one account. If an individual tries to complete a second registration, a pop-up will tell them that the email is associated with an existing account and will not allow duplication. Each user is assigned a unique identifier upon registration. In the event the user creates more than one account, the system has predefined queries that assist in identifying the duplicate records. A report is available identifying potential duplicate records. Verification of duplicates occurs through automated and manual verification, based on the level of match between the two records.
Registration	PK_REG_4	Describe the solution's ability to merge user records in case of duplicates. TCC Response: Once duplicate records are identified, the support team has processes and procedures it can execute that will merge the duplicate records into one unique record and eliminate the duplicate user record.
Registration	PK_REG_5	Describe the solution's ability to allow management of stakeholder specific profiles. TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. User Roles include internal and external users of the system, including stakeholders. The system allows the ability to create an unlimited number of user roles. As user groups/ levels are identified, roles are established for that individual group/level. Each group will contain the user roles and permissions needed to support their business need. Each group may identify administrative users whose roles have additional permissions to administer accounts and workflow.
Registration	PK_REG_6	Describe the solution's ability to enable stakeholders to create an account to submit electronic applications and supporting documentation. TCC Response: As mentioned in PK_REG_5, the solution allows for the management of stakeholder specific profiles. Upon the establishment of the stakeholder profile, the stakeholder can submit electronic applications along with supporting documentation. Supported document types are described in PK_REG_1.



Category	ID	Specification
Registration	PK_REG_7	Describe the solution's ability to read text and convert it to the data fields.
		TCC Response: By incorporating Open Text, the solution is designed to streamline document management and data extraction processes. OCR technology accurately converts scanned paper documents, images, and PDFs into editable and searchable text. This enables the system to digitize their paper-based information swiftly and efficiently, reducing manual data entry efforts and minimizing errors.
Registration	PK_REG_8	Describe the solution's ability to track electronic application updates.
		TCC Response: The system tracks any updates made to an application, who made the change and when the change was made. When an update occurs to an application, an alert is triggered to the appropriate person. Application changes are maintained in an audit log.
Registration	PK_REG_9	Describe the solution's ability to enable communications between stakeholders and present alerts as needed.
		TCC Response: Automated and manual communication strategies are built into the solution. In areas where an action should result in a notification to a user, communication can be automated. For example, when a document is submitted or modified, notice is sent to appropriate staff and work activity is recorded in the alert system. A user may also send a manual communication, such as asking questions, which will show up as a "new message" for the user. A hybrid solution is also available where automated communication can be modified before sending. Users may also modify communications before going out. Communication is available as bi-directional. SMS texts are also available within the solution. All communication is saved in the message center.
Registration	PK_REG_10	Describe the solution's capability for manual and automatic verification and approval of registrations records.
		TCC Response: The solution automatically verifies that the data submitted for registration is entered and valid. Once verification is complete, Parent/Guardian registrations are set for automatic approval. Registrations of user roles with permissions within the system, are manually approved by the administrator or other approved user.
Registration	PK_REG_11	Describe the solution's capability to validate data in real time at all points of entry, including manual and bulk upload entry.
		TCC Response: Data is validated in real-time as it is being entered. The parent/guardian is prompted to enter or re-enter any data that is blank or invalid during the registration process. Processes are in place to facilitate the bulk upload of user data.
Registration	PK_REG_12	Describe the solution's ability to save incomplete applications or registrations.
		TCC Response:

Category	ID	Specification
		When an application is started, it is saved within the system. Partial and complete applications are saved in accordance with state retention policies. Incomplete applications may be completed at a later date by the associated user or staff member as permitted by business rules.
Child Application	CHL_APP_1	Describe the solutions ability to accept electronic applications automatically and manually.
		TCC Response: Applications are saved in the system and submitted automatically when the submit button is clicked. Applications not submitted may be viewable in the system to identify partial applications or assist in the application process. Paper applications may be entered in the system using Optical Character Recognition (OCR) capabilities.
Child Application	CHL_APP_2	Describe the solutions ability to provide confirmation of successful completion of application.
		TCC Response: When a user submits an application, confirmation of submission is requested. Once confirmed, the applicant receives a screen message successfully confirming submission. An auto-generated email is also sent to the applicant confirming submission. Email confirmation may include additional program information. Staff receive notice in their work queue of submission of the application.
Child Application	CHL_APP_3	Describe capability to identify duplicate stakeholder records and merge them.
		TCC Response: Duplicates are identified by key data elements, such as home address, first and last name, email address, etc. A report is available identifying potential duplicate applications. Verification of duplicates occurs through automated and manual verification, based on the level of match between the two records. Based on the business rules for resolving duplicates, the support team has processes and procedures it can execute that will merge the duplicate records into one unique record and eliminate the duplicate user record.
Child Application	CHL_APP_4	Describe the solution's capabilities to upload (import and export) supporting documents and management of those documents.
		TCC Response: Documents may be uploaded, including scanning, within the solution. Uploaded documents are indexed to allow for appropriate placement and search functions. The ability to view, download and modify documents is available based on User role and business rules. Uploading documents is a very intuitive process and may include a description of what documentation will support a requirement. Upload functions are located throughout the solution and are located directly in applications or areas where supporting documentation is required. Users may upload a variety of document types, including but not limited to, PDF, PNG, JPEG, Word, Excel. Documents are stored with indexing to allow for easy search and retrieval. Documents supporting an application are available when reviewing the application for

Category	ID	Specification
		simplified workflow. Documents may also be in the filing cabinet by indexing criteria. Multiple criteria may be used when searching for a document to narrow down the document or version. An example may be Provider ID, Date, document type/name.
Child Application	CHL_APP_5	Describe the solution's Optical Character Recognition (OCR) capabilities, including abilities to scan postal application and supporting documents as well as automated text extraction to tables.
		TCC Response: Open Text is designed to streamline document management and data extraction processes. OCR technology accurately converts scanned paper documents, images, and PDFs into editable and searchable text. This enables the system to digitize their paper-based information swiftly and efficiently, reducing manual data entry efforts and minimizing errors.
Child Application	CHL_APP_6	Describe the solution's ability to support updating child application based on the legislation, childcare rules, and policies. This should be table driven to support updates of the eligibility criteria.
		TCC Response: The solution has the functionality for applications to be updated at any time. New or modified applications may replace existing applications or be available with the existing one. For example, a new application may be entered and available to families meeting a priority criteria where new funds are available. The new application will allow collection of newly required information and may only be available for a limited time. For modifications to an existing application, modification will replace prior versions. All application versions are retained in the system for traceability.
Child Application	CHL_APP_7	Describe the solution's ability to perform automated calculations to inform business processes specified by the business.
		TCC Response: As determined by business rules, automatic calculations are integrated into the system. An example of this feature is calculations of income and Federal Poverty Level, when determining eligibility. Age is also auto generated. Applications that do not meet eligibility requirements receive notice and submission may be prevented. Within the application, calculations are shown in real time to allow the applicant to view the information.
Child Application	CHL_APP_8	Describe the solution's ability to support configurable workflows in support of processes specified by the business, including capability that enables and enforces process steps where approvals are required that are informed by data from internal and external interfaces with ancillary solutions (ex: Workforce Registry).
		TCC Response: Workflows are built into the system based and can be configured to meet business needs. Administrative users have the ability to configure workflow within their permissions area. For example, an Intake administrator may assign a service area for staff, having applications directed into the staff

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		member's queue. New workflows may be built into at the request of the agency, by TCC administrators.
Child Application	CHL_APP_9	Describe the solution's ability to track all funding sources for relevant stakeholders.
		TCC Response: The solution effectively tracks and monitors all funding sources. By employing robust tracking mechanisms and integrated financial tools, it ensures comprehensive visibility into funding origins and stakeholder association. The solution enhances transparency, accountability, and informed decision-making.
Child Application	CHL_APP_10	Describe the solution's ability to support processing of data in bulk or individually.
		TCC Response: The solution strikes a balance between bulk and individual data processing capabilities, ensuring efficient handling of data irrespective of the data volume or type of processing required. Support for both bulk and individual processing facilitates processing of a wide range of use cases and provides optimal performance and scalability.
Child Application	CHL_APP_11	Describe the solution's capability to support workflow queueing (sequential, conditional, and parallel) including the capability to expedite requests in a queue, reassign queued requests, and redirect queued requests for further assistance.
		TCC Response: The system is built to meet the business rules of the agency, giving flexibility to Administrators to assign and reassign work as needed. Individual staff members have access to a work queue, containing required action. Work may be managed or reprioritized based on criteria in the system. An example is processing applications. Applications are listed in receipt order. If the worker needed to review applications needing follow up, those can be selected and worked first. Administrators can reassign applications as needed.
Child Application	CHL_APP_12	Describe the solution's capability to support assigning a priority value to applications based on the eligibility criteria met.
		TCC Response: The application includes criteria that may be used to determine priority. For example, the state may assign priority to applications with children in protective custody, or those with working parents. Priorities are assigned based on state identification. An eligibility score may also be determined within the application. This score may be a combination of criteria. The application captures an eligibility score as well as eligibility category. The system can sort, or filter applications based on business rules. Workflow may include the priority to guide work. Priorities may be modified as directed by the state.
Child Application	CHL_APP_13	Describe the solution's capability to automatically recalculate priorities for all applications.
		TCC Response:

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		The application includes criteria to determine priority. For example, the state may assign priority to applications with children in protective custody, or those with working parents. Priorities are assigned based on state identification. An eligibility score may also be determined within the application. This score may be a combination of criteria. The application captures an eligibility score as well as eligibility category. The system can sort, or filter applications based on business rules. Sort and filter can be implemented by the individual user. (ex. I want to sort and work the oldest applications first, or only those with foster families.) State priorities may be modified or recalculated as directed by the state. For example, legislation is created to prioritize an age group needing childcare.
Child Application	CHL_APP_14	Describe the solution's ability to track and report the status of documents for internal and external stakeholders.
		TCC Response: To facilitate workflow "at a glance," an alert system is on the Users home page, displaying activities that are pending for the individual user. Alerts may include such things as: Applications not processed, Applications in Draft, Eligible application needing assistance with placement. Users may click on the alert to be directed to the work activity. Users may also search and or filter their work queue using specific criteria. Managers or Administrators can see work in the individual queues and receive reports on the status of applications. Examples of reports are, number of applications in Draft status, document status, and master data report, with all students during a specific time. Reports may be modified or added based on the need of the program.
Workflow	PK_WF_1	Describe the solution's ability to provide workflows that enable the moving and removal of forms at periods specified by the business.
		TCC Response: Forms are entered in the system with a start and end date. These dates allow forms to be developed and tested prior to implementation and to be made unavailable at a designated time. The form will become available on the designated start date. Forms that need to be removed may be "end dated." Modification or new forms may be added as requested by the business unit. All form versions and/or end dated forms will remain available in the system in accordance with state document retention policies.
Workflow	PK_WF_2	Describe the solution's ability to provide workflows that support scheduling requirements.
		TCC Response: The solution includes a scheduling function that allows users to schedule meetings, send email and SMS reminders. Scheduling may be automated or manually selected and can send automated notifications and reminders to stakeholders about upcoming appointments or tasks to avoid delays or conflicts. The software provides flexibility to adjust schedules as needed, accommodating changes in priorities, resource availability, or unforeseen circumstances. Integration with popular calendar applications is available.

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Workflow	PK_WF_3	Describe the solution's ability to provide workflows to enable seamless data entry from it into ancillary applications (ex: PowerSchool).
		TCC Response: The system can interface with any external system through an API. Interface parameters will be established by the business department and shall meet all security requirements. Once the API is established, workflows can be built to process the data to the appropriate users.
Workflow	PK_WF_4	Describe all the pre-defined workflow statuses and the ability to customize and add new status values.
		TCC Response: All applications are identified as either Draft or Submitted. Once in the review process, documentation may be defined as: missing, unreviewed, or complete. Reviewed applications will result in the student being determined: Pending, Eligible, Ineligible, or Placed. Families may insert a status of "need follow-up". Status determinations may be customized to meet the business rules and needs of the program.
Workflow	PK_WF_5	Describe the capability of the system to provide visibility into the status of stakeholder entries in various workflows based on their roles.
		TCC Response: To facilitate "at a glance" status and workflow, an alert system is on the Users home page, displaying activity status, and those pending action for the individual user. Alerts may include such things as: Applications not processed, Applications in Draft, Eligible application needing assistance with placement. Users may click on the alert to be directed to the work activity. Users may also search and or filter their work queue using specific criteria. Managers or Administrators can see work in the individual queues and receive reports on the status of applications. Examples of reports are, number of applications in Draft status, document status, and master data report, with all students during a specific time. Reports may be modified or added based on the need of the program.
Workflow	PK_WF_6	Describe the solution's ability to support document generation and distribution to individual and multiple internal and external stakeholders.
		TCC Response: Reports may be exported to CSV, TXT, MS Excel, or PDF, etc. Reports may be accessed and delivered in multiple ways. Examples are: 1. Users may request a download of a report directly to their device, selecting the format. 2. Users may email reports from their device. 3. An automated schedule of report generation and delivery can be established 4. API integration can be established to request and deliver reports from external systems, Reports may be displayed on a data dashboard, which may be shared through the URL or download, Cloud storage of reports may also occur.

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Workflow	PK_WF_7	Describe any automated calculation features of the solution.
		<p>TCC Response: Automatic calculations are integrated into the solution and business rules. Calculations may be used in determining eligibility and business flow, for requirements such as age, income, FPL etc. Workflow is implemented based on the results of the calculation. For example, an application that does not meet eligibility requirements will have a pop-up notice and may not be able to be submitted. Within an application, calculations are shown in real time to allow the applicant to view.</p> <p>Automatic calculations may also be built in the provider area of the solution to calculate attendance.</p>
Workflow	PK_WF_8	Describe the solution's ability to produce documentation from calculations in formats prescribed by the business.
		<p>TCC Response: The solution generates reports, alerts, and action items, using calculations in the solution. Reports, Alerts, and Action items are based on program rules and workflow and are updated in real time. Results from calculations can be presented in formats meeting business needs.</p>
Workflow	PK_WF_9	Describe the solution's capability for enabling management of specified content directly by the business.
		<p>TCC Response: During design and implementation, the State selects and verifies the roles and business rules for the solution. Permissions are established for each user role. Permissions will include access to areas in the solution. Ability for data entry or read-only. Users with administrative access may have management capabilities within the solution, such as to assign tasks, establish classrooms, send correspondence etc.</p>
Workflow	PK_WF_10	Describe the capability of the solution to configure existing workflows to meet DCDEE's needs and build new workflows, where required. Provide details about which user roles can configure workflows in the solution and build new workflows.
		<p>TCC Response: Workflows are built into the solution based and can be configured to meet business needs. Administrative users can configure workflow within their permissions area. For example, an Intake administrator may assign a service area for staff, having applications directed into the staff member's queue. New workflows may be built into at the request of the agency, by TCC administrators.</p>
Workflow	PK_WF_11	Describe the solution's ability to enable designated stakeholders to view and reserve classroom seats for children.
		<p>TCC Response: Providers have access to their classrooms within the solution. The number of seats available in a classroom is determined by the State. The Provider</p>

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		Administrator can fill seats to the maximum number of classroom seats. Seats may be reserved by the Administrator if desired.
Workflow	PK_WF_12	Describe the solution's ability to enable specified users to configure portions of it.
		TCC Response: Based on the user's role, there is the ability to make modifications within the solution. For example, designated administrators may update or modify the stakeholder resource page. Provider Administrators can update their classrooms, staffing, and assign children to classrooms within their facility. Providers may also manage their schedule, indicating closers and holidays. State Administrators can modify email templates and forms. Permissions are determined by business rules and assigned to specific roles.
Workflow	PK_WF_13	Describe the solution's role-based security capability for managing internal day-to-day operations for internal and external stakeholders.
		TCC Response: The solution offers a robust and flexible role-based security layer. The definitions and the hierarchical structure of user roles can be defined by the State at the time of implementation and modifications to those structures can be updated as new roles are required.
Workflow	PK_WF_14	Describe the solution's ability to support automation of prescribed workflows.
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. These permissions are based on the tasks and responsibilities associated with each role. As a user completes tasks, automation of activities provides an intuitive process and supports completion of work in a consistent manner. Based on the User's role, automated alerts are available on the dashboard. Alerts are linked directly to the workflow for at-a-click access to program detail and assignments. Alerts reflect real time data. Triggers are automated for distribution based on actions in the solution. Emails and email templates may be modified by Users with authorized permissions. Triggers for auto generated emails include actions such as submission and decision of an application. Templates allow easy updates and modifications to correspondence.
Workflow	PK_WF_15	Describe the solution's ability to enable stakeholders to create and manage stakeholder specific site pages and tailored content.
		TCC Response: Administrative Users can manage Participant Resources. Documents, Videos, and links may be added to the page. Content may be organized by the user and offered in multiple languages. Links to outside resources can also be added.
Workflow	PK_WF_16	Describe the solution's capability to support maintenance of site and associated data attributes in the system.

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		<p>TCC Response:</p> <p>The solution has a comprehensive maintenance management system designed to support efficient and streamlined site maintenance processes while managing associated data attributes to facilitate the organization, tracking, and optimization of maintenance activities while minimizing downtime. Maintenance Management includes:</p> <ul style="list-style-type: none"> • Preventive Maintenance, creating predefined maintenance schedules. • Data Analytics and Reporting which gathers data on performance. • Work Order Management, allowing users to create tickets or work orders.
Workflow	PK_WF_17	Describe the solutions ability to support creation, review, update, deletion, and recreation of forms.
		<p>TCC Response:</p> <p>The solution has the functionality for forms to be created, updated, or deleted at any time. New or modified forms may replace an existing form or may be available as an additional form. For example, a new application may be entered and available to families meeting a priority criteria where new funds are available. The new application will allow collection of newly required information and may only be available for a limited time. For modifications to an existing application, modification will replace prior versions. All application versions are retained in the for traceability. When recreating a form, the prior form template may be used.</p> <p>Forms have a beginning and end date. Forms may be entered into the system in advance of the beginning date. The form will not be active until the date set in the system and will remain active until the end date unless it is terminated early. All forms remain in the system and may be reviewed at any time.</p>
Workflow	PK_WF_18	Describe the solution's ability to interface with ancillary solutions (ex: Workforce Registry) to compile stakeholder records per prescribed business processes.
		<p>TCC Response:</p> <p>The solution can interface with any other system, ancillary or external. Some of the ancillary solutions are part of the integrated database of the solution, so the interface itself is a function internal to the system.</p>
Workflow	PK_WF_19	Describe the solution's ability to transition configurations and data from a point in time to stand corresponding abstractions in preparation for the subsequent periods while keeping the data for current and previous periods intact.
		<p>TCC Response:</p> <p>The solution enables the smooth transition of configurations and data from a specific point in time to compatible abstractions, ensuring seamless preparation for future periods. It retains the data from the current and previous periods without any loss or disruption, facilitating a continuous and consistent flow of information across different timeframes.</p>

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Workflow	PK_WF_20	Describe the solution's ability to configure program type, application, priorities, NC Pre-K score, appointment schedule, distance calculator, and assignment of sites to a program.
		<p>TCC Response: The solution is built to be configurable to meet the business rules and workflow of the client. Applications will be configured to meet business rules. Applications are developed using an application wizard that decouples eligibility logic from the application code, making it easier to adapt changes without modifying the software itself. During this process eligibility requirements are identified, and configuration tables are designed. Modification to the application to read configurations and implement evaluation logic will occur. Application configurations may include characteristics such as program type, priorities, NC Pre-K scores, and workflow.</p> <p>Workflow be configured can occur to meet program rules and priorities. Task lists and alerts will be organized to meet the configuration. Example of workflow configuration changes are assigning application by location, priority, or program type. Within the assignments, priority can be given to application criteria, such as provider type, eligibility score, etc.</p> <p>Based on role, a user may modify their workflow to prioritize their workload. For example, staff may prioritize processing applications in a specific district or distance, to allow for efficiency. Managers may also modify workflows for individual staff, such as modifying an assignment area. Systemwide configurations are completed with direction from the State.</p>
Workflow	PK_WF_21	Describe the solution's ability to archive data for the past year and export it as needed.
		<p>TCC Response: Data can be kept in the database as long as it is needed. The solution will archive the data in accordance with the States document retention policy. Data can be exported using the ETL tool as needed.</p>
Workflow	PK_WF_22	Describe the solution's authorization and permissions model supporting security and administration capability.
		<p>TCC Response: The solution is role based with each role having a clear set of permissions as established by the program. During account set up, the user will request their role. Administrative Users review requested roles and assign a status of Approved, Denied, or Pending. Providers who create an account are asked to identify their Agency. Agency Administrators can approve or deny an association request. Parent/Guardian roles do not require approval, as they may only access their child's information.</p>
Workflow	PK_WF_23	Describe the solution's ability to add site operational/non-operational days for specified reporting periods, apply them to subsequent reporting periods, and edit as needed.

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		TCC Response: Operational, and non-operational days can be reflected in the solution. Providers can indicate which days are operational or non-operational and apply them to subsequent reporting periods.
Workflow	PK_WF_24	Describe the solution's ability to manually add records for reporting periods and duplicate their additions in subsequent reporting periods.
		TCC Response: The solution allows for manual entry of records. Data entry duplicated in future reporting periods without additional data entry would be facilitated through a data request.
Workflow	PK_WF_25	Describe the solution's ability to merge content as prescribed by the business.
		TCC Response: Once business rules are established, the technical team can run specific procedures to merge and integrate the data sets.
Workflow	PK_WF_26	Describe the solution's electronic signature capabilities.
		TCC Response: The system can require and capture signatures. The need for signatures is determined by the business unit and guides workflow and business rules. For example, a signature may be required prior to submission of a form or moving to a new area of the system.
Workflow	PK_WF_27	Describe the solution's ability to support distribution of forms individually and in bulk.
		TCC Response: Correspondence with attachments may be sent to individual people or groups. Selection of individuals is based on account criteria. An example would be the ability to send out an update to Agency Admins with program updates.
Workflow	PK_WF_28	Describe the solution's ability to support workflows that track and provide updates on the status of forms.
		TCC Response: Forms in the solution are identified with a "status." Individual user's dashboard includes an alert for forms requiring a specific action. Administrators can see the status of forms for their entire group. An example of an alert built on a form status would be an Administrator showing the number of Accounts that need to be approved for new staff. Applications will also produce alerts based on status, such as providing information on applications that are not processed, pending placement, in draft, etc. Form statuses and alerts may be modified based on program rules.
System Administrators	SA_1	Describe the solution's support for hierarchical implementation of user roles and permissions.
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and

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		<p>responsibilities associated with each role.</p> <p>The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments.</p> <p>In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments, and has access to view workload of staff, while other roles in the system may have read only or limited access.</p> <p>When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
System Administrators	SA_2	Describe the solution's ability lock and reopen functionalities.
		<p>TCC Response:</p> <p>Based on business rules, locking capability is put in place. Currently the system allows administrators to lock and reopen user accounts and applications. Administrators may also change the role of an individual, changing the permissions to access specific areas of the system or complete tasks. Applications and forms have a start and end date. Availability of the applications/forms may be turned off before the end date and may be reinitiated as needed.</p>
System Administrators	SA_3	Describe the solution's capability to aid the business in delivering effective and efficient end user support through use of screenshare and chat functionality.
		<p>TCC Response:</p> <p>Screen share capability with live communication or chat is available during meetings. End user support is available from 9AM to 6PM for State users and 8AM to 5PM for public users.</p>
Reporting and Analytics	RT_1	Describe the solution's role-based reporting capability. Include all aggregate and individual level operational reports available for all roles.
		<p>TCC Response:</p> <p>Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. Based on the user's role, users may be granted access to view, create,</p>

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		or modify reports. Permissions are made for each individual report and may be modified or changed as required by the business.
Reporting and Analytics	RT_2	Describe the solution's longitudinal analysis and related reporting capabilities using data accessible to the system.
		TCC Response: Integration with a business intelligence tool such as Tableau or Power BI allows for data visualization. Reports can be integrated into the dashboard and program statistics tracked. In addition, each child is assigned a unique identifier. This identifier can then be integrated with public school data to facilitate longitudinal analysis.
Reporting and Analytics	RT_3	Describe the solution's capability for enabling stakeholders to configure and tailor reports to meet their needs.
		TCC Response: Reports are built with the flexibility to filter information built on the user's needs. The user has the ability to choose from several different filters that enable the report to be tailored to each user's needs. Reports can also be exported to excel to allow for sharing and additional modifications.
Reporting and Analytics	RT_4	Describe the solution's ability to schedule automatic report generation (single and batch).
		TCC Response: With integration with a business intelligence tool and using SSRS, reporting schedules can be created that allow for automatic report generation of a single report or a batch of reports.
Reporting and Analytics	RT_5	Describe the solution's capability for guiding ad-hoc report generation, including capabilities for role-based access to relevant data elements to build and save reports.
		TCC Response: Users within the solution have access to reports based on their role. Reports may be generated using specific criteria and may be exported to excel for additional review. Integration with a business intelligence tool will allow designated users to produce custom reports or modify existing reports. Using a business Intelligence tool such as Power BI or Tableau a user is capable of creating Ad hoc reports. In addition, ad hoc reports can be generated upon request.
Reporting and Analytics	RT_6	Describe the process and related role/permissions model for managing (create, read, update, and delete) production level reports.
		TCC Response: Roles and permissions are based on program rules. Based on permissions, users may create views and/or modify reports. Deletion of reports is limited to the user's individual reports.
Reporting and Analytics	RT_7	Describe the proposed solution's predictive analytics capabilities to enable DCDEE to better allocate resources and improve customer satisfaction. Include in your response the various analytic reports provided for various stakeholders to support analytics informed decision making.
		TCC Response:

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		The proposed solution can be integrated with Tableau, Power BI or other business intelligence tools with reports and data visualization. Reports can be customized to business needs. An example of a current report is Numbers of families served based on area and service type. The information is displayed on the map and as a longitudinal report, showing trends and projections. Provider location and availability can also be produced, showing at quick glance locations where services are more or less available. Current reports also include financial reporting.
Reporting and Analytics	RT_8	Describe the solution's audit trail capabilities, including audit logging and associated reporting.
		TCC Response: The solution can produce audit reports utilizing data and business requirements within the system. Information on specific reports and delivery options can be discussed during design.
Reporting and Analytics	RT_9	Describe the security reports the solution offers to support State security requirements.
		TCC Response: The following security reports can serve as a basis for the security reporting the solution offers to support the State's requirements. However, additional reports based on agreed upon needs/requirements can be added as required by the State: <ol style="list-style-type: none"> 1. Routine Vulnerability/Patch Management Status Reports. 2. Configuration compliance / Security Governance reports. 3. Summarized failed login reports. 4. Privileged Account Inventory reports. 5. PPS Inventory Report (Ports, Protocols, Services). 6. Change Management Reports (Tickets/Status). 7. Incident Response / RCA Reports (As Needed). 8. Various SIEM Audit Reports (Frequency and content to be agreed upon). 9. Firewall Executive Summary Reports. 10. DR Status / Testing results report. 11. Disabled user reports. 12. EDMS Reports (Data Classification Reports). 13. SLA / Monitoring / Maintenance Activity Reports. 14. Risk Assessment Reports.
Reporting and Analytics	RT_10	Describe supported report output formats (CSV, TXT, etc.) and methods for delivering them.
		TCC Response: Reports may be exported to CSV, TXT, MS Excel, or PDF, etc. Reports may be accessed and delivered in multiple ways. Examples are: 1. Users may request a download of a report directly to their device, selecting the format. 2. Users may email reports from their device. 3. An automated schedule of report generation and delivery can be established 4. API integration can be

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		established to request and deliver reports from external systems, Reports may be displayed on a data dashboard, which may be shared through the URL or download, Cloud storage of reports may also occur.
Reporting and Analytics	RT_11	Describe the solution's ability to enable stakeholders to generate reports from survey data.
		TCC Response: As surveys are created, reporting needs are identified. Requested reports would be available in the report tab and/or on the dashboard. Survey results may be limited to specific individuals or groups based on roles.
Automated Processes	AUT_1	Describe the solution's capability for accurate real-time display and reporting of data.
		TCC Response: Data within the solution is updated in real time. Reports are generated from current data, producing real-time information.
Automated Processes	AUT_2	Describe the solution's automated communications capability (alert, email, etc.), including communications management functionality and triggers.
		TCC Response: Roles and permissions are determined based on the business rules. Each role is assigned permissions. Based on business rules, communications are built into the solution. <ul style="list-style-type: none"> Alerts: Based on the User's role, automated alerts are available on the dashboard. Alerts are linked directly to the workflow for at-a-click access to program detail and assignments. Alerts reflect real time data. Emails: Automatic emails are triggered for distribution based on actions taken. Emails and email templates may be modified by Users with authorized permissions. Triggers for auto generated emails include actions such as submission and decision of an application. Templates allow easy updates and modifications to correspondence. If requested, the solution can generate SMS responses triggered by actions within the system, such as scheduling, application submission, appointment confirmation, etc.
Automated Processes	AUT_3	Describe the solution's capability for supporting automatic calculations defined by the business.
		TCC Response: Automatic calculations are integrated into the solution and business rules. Calculations may be used in determining eligibility and business flow, for requirements such as age, income, Federal Poverty Level etc. Workflow is implemented based on the results of the calculations, for example, an application that does not meet eligibility requirements will have a pop-up notice and may not be able to be submitted. Within an application, calculations are shown in real time to allow the applicant to view. Automatic calculations may also be built in the provider area of the solution to calculate attendance.

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Integration	PK_INT_1	Describe the solution's ability to interface with multiple internal and external systems (ex: NCID, Registry, Regulatory, Open Windows, CSDW, PowerSchool, Microsoft Outlook, etc.) to inform functionality it provides in supporting business processes.
		TCC Response: The solution can interface with any external system through an API. Interface parameters will be established by the business department and shall meet all security requirements.
Integration	PK_INT_2	Describe the solution's capability for managing surveys, including distribution, tracking, and reporting.
		TCC Response: Surveys may be integrated into the system to allow for easy access and completion. Distribution can be completed to individuals or user groups via email. Surveys may also be imbedded in the application to guide a user to provide feedback on their experience or needs (ex. a survey on training needs or use of the system). Surveys can be limited to specific users or time. Survey results will be captured within the system to allow for individual or cumulative results. Reports may be requested to display and filter results. Access to survey results may be limited to individuals or groups based on roles.
Integration	PK_INT_3	Describe the solution's ability to support bidirectional email communications for authorized users.
		TCC Response: Automated and manual communication strategies are built into the solution. In areas where an action should result in a notification to a user, communication can be automated. For example, when a document is submitted or modified, notice is sent to appropriate staff and work activity is recorded in the alert system. A user may also send a manual communication, such as asking questions, which will show up as a "new message" for the user. A hybrid solution is also available where automated communication can be modified before sending. Users may also modify communications before going out. Communication is available as bi-directional. SMS texts are also available within the solution. All communications are saved in the message center.
Security	PK_SEC_1	Describe the solution's capability for managing role-based user access.
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. The solution is designed to accommodate changes in

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		<p>user roles and responsibilities. New roles may be created, or existing roles may require adjustments.</p> <p>In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments and can view staff workload, while other staff may have read only or limited access.</p> <p>When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
Security	PK_SEC_2	<p>Describe the solution's capability for integrating with the North Carolina Identity Management System (NCID) to meet authentication and authorization requirements.</p> <p>TCC Response: The solution leverages Azure Active Directory B2C combined with Azure External Identities. These provide the foundation for all authentication, sign-up, and sign-in activities. By creating user flows, the solution can be configured to integrate with defined external identify sources such as NCID by passing tokens. These tokens can be based on standard authentication protocols such as OAuth 2.0, OpenID Connect, or SAML. The tokens will have defined user claims mappings that map user attributes from the NCID system to the solutions directory services (Azure AD B2C). This includes, but is not limited to, attributes like FirstName, LastName, Email Address, User Role, and whether the MFA requirement has been satisfied.</p>
Security	PK_SEC_3	<p>Describe the solution's native user authentication and authorization features, including multi-factor authentication if available.</p> <p>TCC Response: When creating an account, an email is sent to the user to validate the individual creating the account and email. Once an account is established, the user is authenticated against information in the database, including username and password. When logged into the system, the user will have access to only those areas and features associated with their role. Multi-factor authentication is available and may be implemented for all users or for specific groups.</p>
Security	PK_SEC_4	<p>Describe the solution's ability to transmit and receive data securely, including SFTP.</p> <p>TCC Response: The solution can transmit and receive data through an SFTP tool.</p>
Document Management	PK_MANU_DOC_1	Describe the solution's ability to provide spell check, grammar check, free form text, document customization, printing options, email options, delete/undelete documents, option to reuse captions, audit documents, and annotate within the documents as needed.



Category	ID	Specification
		<p>TCC Response:</p> <p>Free form boxes are available in designated areas of the system. In those cells, spell check is available. Forms within the system may be customized to meet business needs. Emails and email templates may be modified by Users with authorized permissions.</p>
Document Management	PK_AUTO_DOC_1	Describe the solution's ability to automatically generate letters and certifications. Describe the solution's ability to print, update fonts, letterheads, and signatures, delete/undelete and save automatically generated documents.
		<p>TCC Response:</p> <p>Auto generated emails are triggered for distribution based on actions in the system. Emails and email templates may be modified by Users with authorized permissions. Letterhead, logos, and font can be included in the development of the templates. All system generated communication is saved with the case file. Triggers for auto generated emails include actions such as submission and decision of an application. Templates allow easy updates and modifications to correspondence.</p>
Document Management	PK_AUTO_DOC_2	Describe the solution's ability to receive and store documents (for example, when digital transcripts are received or when attachments are sent by postal mail and scanned) to be shared among authorized users. Describe in detail how the documents are indexed, stored, and not duplicated when it is shared among users.
		<p>TCC Response:</p> <p>Documents may be uploaded, including scanning, within the solution. Uploaded documents are indexed to allow for appropriate placement and search functions. The ability to view, download and modify documents is available based on User role and business rules.</p> <p>Uploading documents is a very intuitive process and may include a description of what documentation will support a requirement. Upload functions are throughout the solution and directly in applications or areas where supporting documentation is required. Users may upload a variety of document types, including but not limited to, PDF, PNG, JPEG, Word, Excel.</p> <p>Documents are stored with indexing to allow for easy search and retrieval. Documents supporting an application are available when reviewing the application for simplified workflow. Documents may also be in the filing cabinet by indexing criteria. Multiple criteria may be used when searching for a document to narrow down the document or version. An example may be Provider ID, Date, document type/name.</p>
Document Management	PK_AUTO_DOC_3	Describe the solution's support for flagging documents that might be incomplete.
		<p>TCC Response:</p> <p>Documents received in the solution are assigned a status. Documents are placed in a queue based on the status. Staff may view all documents received</p>

Category	ID	Specification
		or only those with a specific status, such “Documents Missing or Incomplete.” Staff may change the status as guided by the business rules.
Document Management	PK_AUTO_DOC_4	Describe how the solution allows scanned documents to be stored.
		TCC Response: Scanned documents will be stored in the file cabinet via the Open Text solution and stored in accordance with business rules. Documents are stored with indexing to allow for easy search and retrieval. Documents supporting an application are available when reviewing the application for simplified workflow. Documents may also be in the filing cabinet by indexing criteria. Multiple criteria may be used when searching for a document to narrow down the document or version. An example may be Provider ID, Date, and document type/name.
Document Management	PK_AUTO_DOC_5	Describe the solution’s ability to support document management processes including and not limited to indexing, version control, audit trail, check in-check out, preview documents, upload of files and images, annotation capabilities etc.
		TCC Response: Documents may be uploaded, including scanning, within the solution, via Open Text. Uploaded documents are indexed to allow for appropriate placement and search functions. The ability to view, download and modify documents is available based on User role and business rules. Uploading documents is a very intuitive process and may include a description of what documentation will support a requirement. Upload functions are throughout the solution and directly in applications or areas where supporting documentation is required. Users may upload a variety of document types, including but not limited to, PDF, PNG, JPEG, Word, Excel. Documents are stored with indexing to allow for easy search and retrieval. Documents supporting an application are available when reviewing the application for simplified workflow. Documents may also be in the filing cabinet by indexing criteria. Multiple criteria may be used when searching for a document to narrow down the document or version. An example may be Provider ID, Date, and document type/name. Based on the user's role, documents may be viewed, downloaded, or modified. Versioning includes tracking changes to a document and replacing or adding a new document. Traceability includes who made changes, dates, and change.
Document Management	PK_AUTO_DOC_6	Describe the solution’s search capabilities for document retrieval.
		TCC Response: Documents are stored with indexing to allow for easy search and retrieval. Documents supporting an application are available when reviewing the application for simplified workflow. Documents may also be in the filing cabinet by indexing criteria. Multiple criteria may be used when searching for

Category	ID	Specification
		<p>a document to narrow down the document or version. An example may be Provider ID, Date, and document type/name.</p> <p>Based on the user's role, documents may be viewed, downloaded, or modified. Versioning includes tracking changes to a document, as well as replacing, or adding a new document. Traceability includes who made changes, dates, and change.</p>
Data Management	PK_DAT_1	Describe how the solution uses role-based access to satisfy state security requirements for protected data as outlined in the NC State Security Plan and any other relevant security documents. Describe its ability to control access to and editing of records that includes citizen data and associate PII data that may be shared between agencies.
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users, and limit access to information based on the required job function. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. Permissions define what actions may be taken within the system, such as read-only, editing, assignments etc.</p> <p>The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments, and has access to view the workload of staff.</p> <p>When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p> <p>PII masking may also be applied within the system.</p>
Data Management	PK_DAT_2	Describe how the solution manages role-based permissions for accessing program data which may or may not be stored in a common set of tables.
		<p>TCC Response:</p> <p>Based on the user's role, permissions are granted, as defined within the system, to allow access to program data and to allow completion of tasks. Access to back-end data tables is limited to IT administrators. Requests for exported data or specific reports can be requested. The assigned permissions</p>



Category	ID	Specification
		<p>align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. The solution is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments.</p> <p>In some cases, user roles may have hierarchical relationships. For instance, an Administrator can approve user accounts, redirect workflows, make assignments and has access to view staff workload. When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
Data Management	PK_DAT_3	Describe how the solution's role-based access and permissions functionality influence its data management capability (create, read, update, and delete), as most users will not have full access to all data.
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users, and limit access to information based on the required job function. Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions. Permissions define what actions may be taken within the system, such as read-only, editing, assignments etc.</p>
Data Management	PK_DAT_4	Describe how the solution records changes to user data (PII), including specific user info and time frame and other restrictions and recordings as required by State Security plan/legal concerns/Federal regulations for data protection and security.
		<p>TCC Response:</p> <p>All systems and services of the solution are configured to capture audit log data per company policy which at a minimum contains the necessary information to establish the following:</p> <ol style="list-style-type: none"> What type of event occurred. When the event occurred. Where the event occurred. Source of the event. Outcome of the event. Identity of any individuals, subjects, or objects/entities associated with the event.

Category	ID	Specification
		In addition to these established parameters, all system clocks are synced with an authorized time source ensuring time and date stamps of audit records are in sync across the solution. The audit logs are then all centrally contained and correlated within the SIEM solution as part of the overall incident response capabilities. Alert notifications specific to the creation, modification, destruction, or potentially other actions against user data (PII) will be configured and monitored.
Data Management	PK_DAT_5	Describe how the solution records permissions by roles as changes by a specific user in a specific time frame.
		TCC Response: User accounts capture and record when an account is created, modified, or terminated. All information within the account is stored, including the role(s). Changes within the system, captured and maintained in accordance with record retention policies. The record of the change will include the user with role at time of change, the change made, and time of change.
Data Management	PK_DAT_6	Describe the solution's support for single sign-on user authentication and the application of user access based on assigned roles and permissions.
		TCC Response: User authentication occurs during the establishment of the account and during log-in. When creating an account, an email is sent to the user to validate the individual creating the account and email. Accounts other than Parent are approved by the appropriate administrator before access to the system. Once an account is established, the user is authenticated against information in the database, including username and password. Once logged into the system, the user will have access to only those areas and features associated with their role. Multi-factor authentication is available and may be implemented for all users or for specific groups. The solutions support Single Sign-on (SSO).
Data Management	PK_DAT_7	Describe the solution's capability for managing administrative roles within and across business units. (Ex: for both Regulatory and EEB, which allows user roles to be defined by either Regulatory, EEB or both.)
		TCC Response: User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are associated with a group. For example, the Regulatory Unit may be defined as a group, which includes multiple roles, such as Administrator, Regulatory Manager, Lead Child Care Consultant, Administrative Assistant etc. Management of user roles, permissions and communication can be implemented for all users, a group, role or at the individual level. Groups and roles may be modified or added as needed.
Data Management	PK_DAT_8	Describe the solution's support for provisioning landing pages or zones for users based on their roles.
		TCC Response:

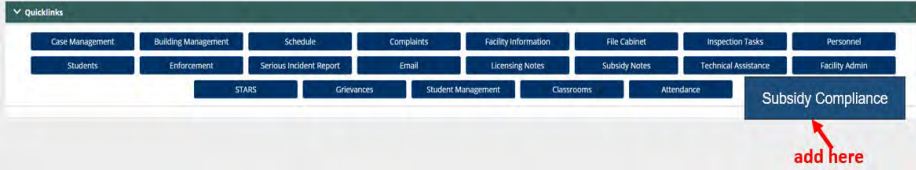
Category	ID	Specification
		Landing pages are customized to the user and include relevant alerts and program information. Designated administrative users may publish information or updates on the homepage and in the help section.
Data Management	PK_DAT_9	Describe how the solution normalizes data within the system, proactively preventing duplicate records.
		TCC Response: The solutions' database is designed to 3 rd normal form. This design eliminates the duplication of data across the database. In addition, to minimize duplicate records, measures are put into place to identify the potential for duplication and alert the user. When creating an account, edits are in place to prohibit the creation of multiple accounts to the same email. When entering a child application, parents/guardians are provided a link to their application, to prevent a new application being initiated. When staff are entering an application on behalf of a family, edits are initiated to show potential drafts before the application is entered.
Data Management	PK_DAT_10	Describe how the solution normalizes migrated, historical data.
		TCC Response: The solutions' database is designed to 3 rd normal form. This design eliminates the duplication of data across the database. The solution normalizes migrated historical data by transforming and standardizing the data from its original format into the database that is a consistent and unified structure. This process involves cleaning, restructuring, and validating the data to fit the target system's schema and data model. Normalization ensures that the migrated data conforms to a predefined set of rules, eliminating redundancies and inconsistencies. Standardization of data will occur during migration.
Search functionality	PK_SRC_1	Describe the solution's ability to support and search for all data fields within the solution.
		TCC Response: Users in the system can utilize the search function in the system to search on a multitude of data fields. Search features may be added to meet the business need. Search of the full database may be completed by IT admins, including historical data.
Compliance	PK_CMP_1	The solution complies with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) for accessibility.
		TCC Response: The solution is 508 compliant.
Compliance	PK_CMP_2	The solution must be Family Educational Rights and Privacy Act (FERPA) compliant (20 U.S.C. § 1232g; 34 CFR Part 99)
		TCC Response: The system complies with FERPA.
Compliance	PK_CMP_3	The solution complies with the North Carolina State Government security requirements (https://it.nc.gov/vendor-engagement-resources#security).
		TCC Response: TCC has adopted the NIST SP 800-37 – Guide for Applying Risk Management Framework for Federal Information Systems, as a standard for managing

Category	ID	Specification
		information security risk across all resources. This RMF utilizes NIST SP 800-53 Rev. 5 as the foundation for identifying and implementing security controls. The security controls are organized across 20 control families and serve as the basis for all security policies and associated processes and procedures to securely store, transmit, and process data on behalf of TCC customers. At a minimum, all resources within the control and responsibility of TCC are categorized and secured following a “Moderate” baseline within the NIST SP 800-53 Rev. 5 Guidelines unless required otherwise.
Compliance	PK_CMP_4	The solution complies with the North Carolina Department of Health and Human Service's Privacy and Security policies and manuals (https://policies.ncdhhs.gov/departmental/policies-manuals/section-viii-privacy-and-security).
		TCC Response: TCC has adopted the NIST SP 800-37 – Guide for Applying Risk Management Framework for Federal Information Systems, as a standard for managing information security risk across all resources. This RMF utilizes NIST SP 800-53 Rev. 5 as the foundation for identifying and implementing security controls. The security controls are organized across 20 control families and serve as the basis for all security policies and associated processes and procedures to securely store, transmit, and process data on behalf of TCC customers. At a minimum, all resources within the control and responsibility of TCC are categorized and secured following a “Moderate” baseline within the NIST SP 800-53 Rev. 5 Guidelines unless required otherwise.
Compliance	PK_CMP_5	Describe how the solution archives records and/or inactivates users (for reasons such as death, migration out of area, no longer eligible, achieved self-sufficiency.)
		TCC Response: Records are archived within the system in compliance with State Record Retention policies. Business rules may be put into place to close records that are inactive for a specific period or that pass an eligibility date. In a situation where a user should no longer receive communication, the account may be manually closed.



Attachment N – Subsidy Provider Compliance Business Specifications

Category/Area of Focus	ID	Requirements
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_1	<p>Describe how the solution enables the following:</p> <p>A method to accept, store, retrieve and manipulate data related to Provider Compliance work. This includes the Checklist, Report, Letters, and Documentation Logs</p>
		<p>TCC Response:</p> <p>TCC understands that the Subsidy Services Provider Compliance Unit (Subsidy Unit) is responsible for conducting on-site monitoring visits to evaluate provider compliance with DCDEE policies and procedures. Additional goals of the Unit are to establish corrective action plans, identify training needs, make referrals for assistance, and increase the quality of childcare. Each month, the Subsidy Unit chooses a random sample of providers to conduct onsite monitoring visits. The Subsidy Unit divides up the random sample list and emails each provider to schedule a visit and to request attendance records prior to the visit. The Subsidy Unit Consultant conducts the onsite monitoring and makes recommendations, including technical assistance and any specific corrective actions. The process is largely manual and difficult to manage.</p> <p>TCC proposes using a combination of the Ascend Licensing Management module product along with the eXpedite mobile inspection solution to give DCDEE the tools needed to streamline the work, automate the process, and generate auditable history and documents, including the monitoring checklist and results, reports, email/letter history, all documentation/notes and any referrals made.</p> <p>The Ascend system already has a place to record information related to provider participation in the subsidy program. TCC will either expand the current area called subsidy notes or create an additional area or “Quicklink” on the provider record to be called “Subsidy Compliance.” All associated documentation and activity will be collected and maintained here. The screenshot below provides a view of the base product Ascend provider record and Quicklinks.</p>

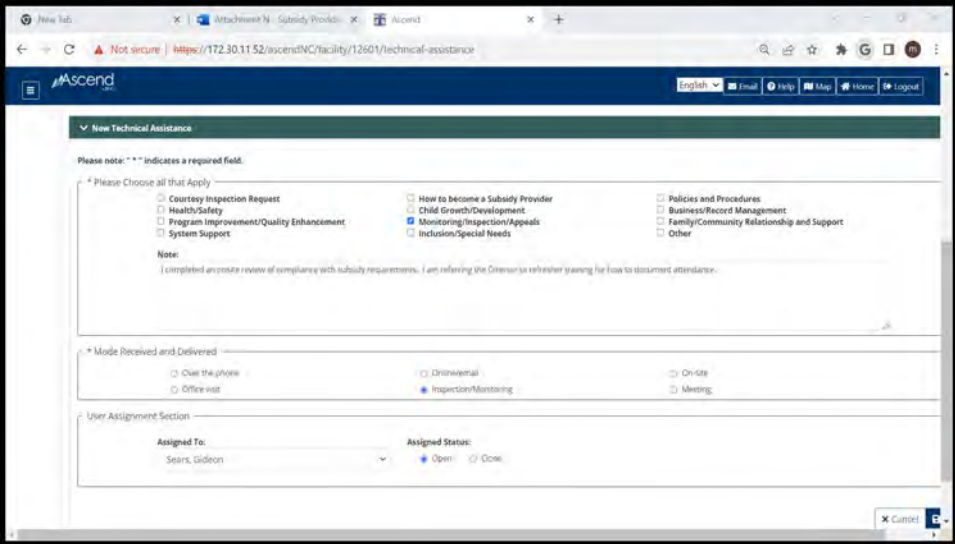
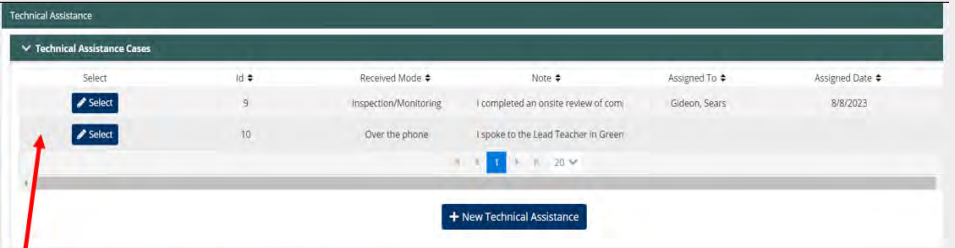
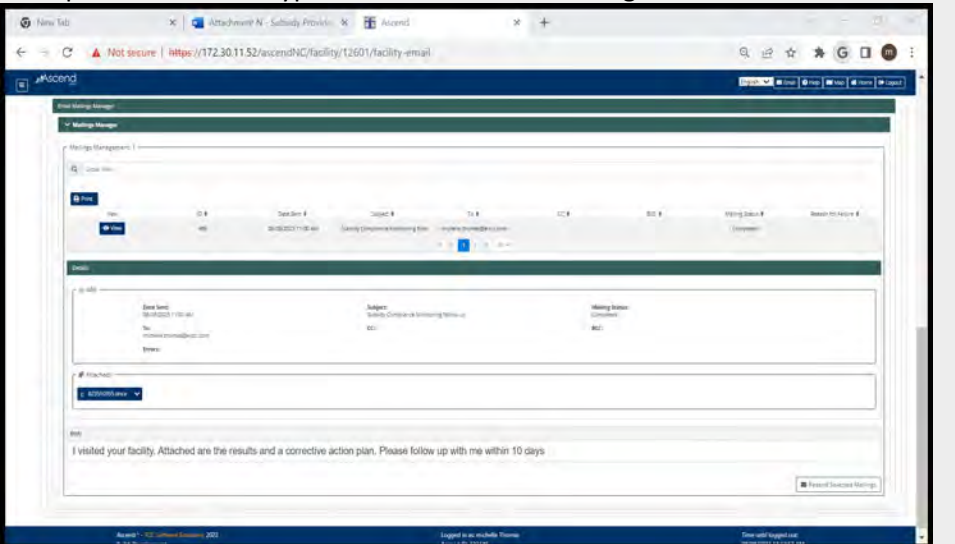
Category/Area of Focus	ID	Requirements
		 <p>The Subsidy Unit will be able to log on to Ascend to generate a random sample and assign the caseload among the Subsidy Unit Consultant staff. The Subsidy Unit Consultants may email each provider directly from within the Ascend system and include a link to scheduling options and a request for attendance records. The Subsidy Unit can create email templates for efficiency and consistency in communication about the process. Email history is tracked, auditable and available to view in Ascend.</p> <p>Once the compliance monitoring assignments are made to each Consultant, Ascend will “push” them out to the Consultant’s eXpedite task list (the user must sync to see the tasks). Each Consultant will be able to see and open only their own monitoring assignment tasks. There is also the ability to transfer a task(s) to a different Consultant, if needed. Upon opening the new task, the Consultant may begin the visit with a prepopulated form. Data collected on the form during the onsite visit will be transferred to Ascend once the user syncs.</p>
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_ 2	<p>Describe how the solution enables the following:</p> <p>For each random evaluation a checklist is created. The checklist will be automated in the new system.</p> <p>The Checklist will:</p> <ul style="list-style-type: none"> o Prefill the selected format with the following information in response to entry of the license number: <ul style="list-style-type: none"> Facility Name Owner Administrator Address Phone number Email address License Number Capacity by shift (1, 2, 3) (These field will be searchable once the checklists are completed.) o Add standard comments to checklist from a library using a keyword search (these comments must be user maintained so they can be changed when items change within DCDEE) o Comment field for consultant to place free-form text (this field needs to be large – like 7000 characters and needs to be format-able with bullets, numbering, and paragraph breaks) o Allow selection of types of Technical Assistance from a drop down multiselect (include the types of TA on page 3 of the flowchart along with a

Category/Area of Focus	ID	Requirements
		<p>comment field of 7000 characters)</p> <ul style="list-style-type: none"> o Assurances (electronic signature) o Closing (standard language that must be user maintained) o Insert phone number and email address of consultant upon selection of the consultant's name or dropdown (must be user maintained) <p>TCC Response:</p> <p>The Ascend Licensing Management module will store the provider data needed to support the Subsidy Unit. For instance, the Ascend base product contains all the data points noted above, including a unique provider ID, and can be used to generate a random sample report. The Subsidy Unit will use Ascend to assign random sample providers amongst the staff, who will be able to view their task assignments on their tablet device that is loaded with eXpedite mobile forms.</p> <p>For staff to conduct and record the onsite compliance visit, TCC will take the current Subsidy Compliance Checklist(s) and turn it into an electronic form. The forms will have pertinent provider information pre-populated with information from Ascend, as well as key information about the Subsidy Unit Consultant. User-friendly controls are built into the electronic forms to limit the amount of data that needs to be keyed in (multi-select options, dropdowns, date pickers, radio buttons, etc.). For instance, the worker will be able to multi-select radio buttons to identify the types of Technical Assistance offered or referred to the provider during the visit.</p> <p>Additionally, eXpedite has a handwriting to text conversion option for those staff who prefer to use a stylus or touch pen for narrative sections, such as technical assistance and general discussions with the provider. With the handwriting to text conversion, large capacity notes fields can be made available for technical assistance narrative and other comment fields.</p> <p>Upon completion of the onsite checklist, the Subsidy Unit Consultant can present the final report to the provider to review and provide an electronic signature. eXpedite will give the worker a user friendly (and quick) option to email the signed form directly to the provider. Should DCDEE prefer, portable printers may also be used to print and leave a copy of the signed form.</p> <p>Once saved, the information collected on the form in eXpedite may be "synced" to Ascend. TCC will create a Subsidy Compliance QUICKLINK (as seen above) to collect and store all data related to this function. Based on approved user roles, users may view historical information and update other data fields associated with Subsidy Compliance processes. Additionally, pertinent data about provider subsidy compliance may be sent to the consumer education/family search website, if desired.</p>
		Describe how the solution enables the following:



Category/Area of Focus	ID	Requirements
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_3	<p>Upon assignment of the providers the consultants create a documentation log. This log is maintained throughout the life cycle of the provider’s evaluation and follow-up.</p> <p>The Documentation Log will:</p> <ul style="list-style-type: none"> o Create documentation log upon entry of the license number (Regulatory Interface) <ul style="list-style-type: none"> Facility Name Owner Administrator Email address Phone Number Address Star Level Consultant Supervisor Regional Manager o Screens to enter data (this is currently a Word table) <ul style="list-style-type: none"> Date Event Contact Type Contact with Narrative fields (must 7000 characters and be able to accept paste from other Word documents and screenshots and snips from NC FAST, or other related documents. <p>TCC Response:</p> <p>TCC will work closely with DCDEE to determine if the documentation log is best maintained in Ascend or in eXpedite. If the goal is to be able to document and maintain a history of offsite interactions and activity, TCC recommends that this documentation be entered into the Ascend system in a table in the “Subsidy Compliance” area. If the goal is to collect ongoing discussions with the provider while onsite, the data may be best collected in the field using an eXpedite form and synced back to Ascend Subsidy Compliance Quicklink area.</p> <p>An example is provided below of how Ascend allows technical assistance interactions to be created, updated, and stored. TCC proposes to leverage this approach to manage ongoing interactions and contact history.</p>



Category/Area of Focus	ID	Requirements
		  <p>Technical Assistance history is stored here.</p> <p>Additionally, Ascend tracks all email and hard copy letter generation, so that these types of provider contacts will have an auditable history. Below is an example of how these types of communications are generated and tracked.</p> 

Category/Area of Focus	ID	Requirements
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_4	<p>Describe how the solution enables the following:</p> <p>When the error rate for attendance or other violations are cited, an Investigations Findings Report is created. Refer to Page 1 of flowchart. This portion is part of the actions listed.</p> <p>The report will:</p> <ul style="list-style-type: none"> o Select report type to create format Investigation Findings o Prefill the selected format with the following information in response to entry of the license number: Facility Name Owner Administrator Address Phone number Email address License Number Capacity by shift (1, 2, 3) o Insert standard language upon request for “Summary of Findings” (self-maintained) o Insert a table with the data from the spreadsheet (This can be a field where the data from the spreadsheet created outside the system is pasted in). <p>Also, a field for entry for the below fields that will create a table in the report. This is currently a Word table within the Word document.)</p> <ul style="list-style-type: none"> Month(s) (with one line for each month) Number of Entries per month Number of Unsupported Attendance Days per month Total Unsupported Attendance Days for period assessed Unsupported days error rate Insert the consultant’s name and title from a drop down (also self-maintained) Included a heading: Service Months Evaluated and insert the service months assessed from a drop down this is multiselect from a calendar and must allow for unlimited selections. <p>TCC Response:</p> <p>TCC will use the required fields and format listed above to create a solution for consultants to review and record attendance findings. TCC will work closely with DCDEE to better understand where the Consultants review the attendance records – at the provider site or at the Consultants office. A clearer understanding of the process and potential areas for innovation will inform our final solution.</p>



Category/Area of Focus	ID	Requirements
		<p>For instance, if Consultants review the attendance records prior to doing the onsite visit, the best solution may be to create screens in Ascend for the Consultants to record, store, email and print the findings. If Consultants review attendance while onsite with the provider, TCC would create an electronic form to be used on the eXpedite platform. Either way, when the Consultant saves the work on an eXpedite form or an Ascend screen, an option to “Generate Investigations Findings Report” would be displayed. The Consultant would click this option, and the summary would open a report that transfers all monitoring findings to a grid layout approved by DCDEE.</p>
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_ 5	<p>Describe how the solution enables the following:</p> <p>Following the Random Evaluations with error rate greater than 10% for attendance or for violations of other parts of requirements for participation or Investigations Findings, a letter is created (this includes the Investigations Findings on a separate page).</p> <p>The Letters will:</p> <ul style="list-style-type: none"> o Create a letter from a template in response to selection of letter type <ul style="list-style-type: none"> No error Error 1st Non-Comp 2nd Non-Comp 3rd Non-Comp Ineligibility o Store all template information needed for letter types (must be self-maintained) o Include the following information in response to a license number entry <ul style="list-style-type: none"> Facility Name Owner Administrator Address License Number o Insert phone number and email address of consultant upon selection of the consultant’s name (dropdown) o Insert names for cc line from license number <ul style="list-style-type: none"> Tables Regulatory Services Managers (from Regulatory system) Other names by a list (include Andrea Lewis, etc. Could be a field to add names) Subsidy Staff (from a table self-maintained. Select from list. Have titles there but can delete lines) <ul style="list-style-type: none"> Managers Lead Worker Technical Assistance Consultants Data Manager Others

Category/Area of Focus	ID	Requirements
		<p>Interface with Regulatory Data Base</p> <p>Consultant</p> <p>Supervisor</p> <p>Regional Manager</p> <ul style="list-style-type: none"> o Add pages for <ul style="list-style-type: none"> Appeal Rights Applicable Authority <p>TCC Response:</p> <p>TCC will use the outline of required fields to create an electronic form to be used by consultants on the eXpedite platform. TCC will leverage years of technical and policy experience with this type of “risk-based monitoring” approach, whereby if a certain threshold of error or non-compliance is exceeded, additional fields and/or additional forms are automatically opened, and the Consultant is prompted to record other information per DCDEE policy and business rules. Once finished, the Consultant may obtain an electronic signature from the provider and email all approved forms directly to the provider. Following signatures, the Consultant will be able to sync the results to the Ascend module.</p>
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_6	<p>Describe how the solution enables the following:</p> <p>All documents must generate a pdf for use in the “send for signature” functionality within the Adobe application</p> <p>TCC Response:</p> <p>As noted above in SPC-2, the eXpedite mobile inspection solution generates a PDF for electronic provider signature at the time of the monitoring visit. The document may also be easily emailed to the provider directly from the Consultant’s tablet.</p>
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_7	<p>Describe how the solution enables the following:</p> <p>Other functions:</p> <p>Document repository attached to license number by date of occurrence</p> <ul style="list-style-type: none"> o Attendance Evaluation o Letters o Reports <p>These would be the pdf documents and must be available on demand by license number.</p> <p>On Demand query results for parameters currently filtered from existing excel logs</p> <ul style="list-style-type: none"> o Standard o Ad Hoc



Category/Area of Focus	ID	Requirements
		<p>This includes at least consultant, license number, type of action and we need to think of other parameters we need.</p> <p>TCC Response:</p> <p>The documents generated, signed, and saved on the eXpedite forms will be synced to the Ascend platform by the Consultant. Authorized users will have a robust search option to find, view and print saved documents.</p>



Attachment O – Business and Technical Specifications

Solution Functional Area(s)	ID	Specification
Workflow Management Data Management Usability	TSpec_1	Explain the solution’s capability to enable stakeholders to manage and tailor workflows (create, edit, delete). Describe the degree of workflow complexity the solution will enable the state to manage. Describe its ability to evaluate data values internal and external to it in directing its workflows.
		TCC Response: The system is built to meet the business rules of the system, giving flexibility to users to make modifications to their workflow and assignments. For example, Administrators may assign and reassign work as needed. Individual staff members have access to a work queue, and an alert system, containing required action. Work may be managed or reprioritized based on criteria in the system. As an example, applications are currently listed in order of receipt. If a staff member needs to modify work priorities, the list may be sorted or modified to meet the new priority. Staff may also filter applications in the work queue to select applications documents meeting specific criteria. System-wide rule changes in workflow can be facilitated by development staff.
Workflow Management Data Management Document/Forms Management	TSpec_2	Explain the solution’s ability to use metadata in exercising its functionality, including creating, reading, updating, and deleting it. Explain its capability of doing so for digital data internal and external to it. Explain its ability to assess metadata in informing conditions required for exercising specific workflows.
		TCC Response: The solution integrates system data with essential metadata for traceability and to effectively store and manage data and documents generated by or uploaded to the system. By incorporating relevant metadata, such as document type, author, date created, and any other pertinent information, the system can ensure efficient organization, retrieval, and tracking of documents. External data can be uploaded or imported to the solution and both these and internal documents can be part of the informing conditions for exercising specific workflows. User roles contain permissions for the creation, updating, and soft deletion of data. All data is stored in the system, capturing entry details. Soft deleted data remains in the system for historical traceability.
Workflow Management Data Management Document/Forms Management	TSpec_3	Describe the solution’s support for electronic signatures, including its ability to assess them in informing the execution of workflows defined in the solution.
		TCC Response: The solution can interface with DocuSign for electronic signature capability for Ascend. TCC’s eXpedite solution supports electronic signature without the need for a third-party tool.

Solution Functional Area(s)	ID	Specification
Workflow Management Data Management	TSpec_4	Describe the solution's capability for assessing internal and external data values as conditions for executing specified workflows.
		TCC Response: Workflow and business rules contain validation of data. Conditions are placed on fields to guide users in entering values that meet business rules. Data received from an external source will be audited and scrubbed prior to integration into the system.
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_5	Describe the solution's use of scheduling capability in exercising and enforcing specified workflows involving internal and external stakeholders.
		TCC Response: The solution includes a scheduling function that allows users to schedule meetings, send email and SMS reminders. Scheduling may be automated or manually selected and can send automated notifications and reminders to stakeholders about upcoming appointments or tasks to avoid delays or conflicts. The software provides flexibility to adjust schedules as needed, accommodating changes in priorities, resource availability, or unforeseen circumstances. Integration with popular calendar applications is available.
Workflow Management Document/Forms Management Interface, Network, Security	TSpec_6	Describe the solution's ability to manually and automatically route documents and packets of documents through specified workflows.
		TCC Response: The solution offers a document routing system that seamlessly navigates through predetermined workflows aligned with business rules and processes. Capabilities enable both manual and automated routing, directing documents and document sets. Integrated alerts and user prompts enhance user engagement and decision-making.
Workflow Management	TSpec_7	Describe the solution's ability to enforce the sequence of steps in workflows.
		TCC Response: Workflows identify mandatory requirements and data sets, allowing users to easily identify requirements and satisfactory completion of required steps needed prior to advancing in the system. Additional information/instruction is available by highlighting missed cells, providing hover over information or tip sheets. A progress counter is also available, listing the number of fields remaining prior to advancing.
Workflow Management Communication (alerts, reminders, emails, text)	TSpec_8	Describe the solution's ability to visually illustrate real-time progress through defined workflows.
		TCC Response: Required cells are identified when building a workflow. Required cells are imbedded into a progress bar or counter, allowing users to visually see where they are and what remains. Cells not in compliance remain highlighted and links to missing items are provided.
Workflow Management Scheduling	TSpec_9	Describe the solution's automatic alerting, notification, reminder, reply, emailing, and messaging capabilities, triggered by events and conditions defined by the business, as part of supporting enforcement of specified workflows. Describe the

Solution Functional Area(s)	ID	Specification
Communication (alerts, reminders, emails, text) Interface, Network, Security		solution's ability to exercise those capabilities in ways tailored for specific workflows involving various internal and external stakeholder groups.
		<p>TCC Response: To facilitate workflow “at a glance,” an alert system is on the Users homepage, displaying activities that are pending for the individual user. Alerts may include such things as: Applications not processed, Applications in Draft, and Applications with follow up needed. Users may click on the alert and be directed to the work list. Users may search and filter their work queue using specific criteria. Administrators have access to see work in the individual queues as well as receive reports on the status of applications.</p> <p>Workflows may be created to trigger distribution of reminders through email. An example of an automated email reminder would be sending out a reminder for an upcoming annual renewal. Reminders can be distributed when a rule or process changes for a group of users.</p> <p>The Ascend solution allows for internal and external emails to be sent from within the system, tailored for specific workflows. For example, the licensing module has the ability to send out emails such as confirmation of application received, status of application, requests for more information. The solution also allows for sending mass emails to large groups of providers. For example, a mass email to all licensed centers informing them of changes in regulations.</p>
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_10	Describe the solution's capability for manual alerting, notification, reminder, emailing, and messaging in supporting enforcement of specified workflows. Describe the solution's ability to exercise those capabilities in ways tailored for specific workflows involving internal and external stakeholder groups.
		<p>TCC Response: System users are able to manually assign and send notifications, alerts and emails within the system.</p> <p>Individual users may customize their landing page, including alerts and workflow. The system includes criteria that may be used to assign priority to work. The system can sort, or filter documents based on business rules. Workflows may include the priority to guide work. Priorities may be modified as directed by the State. Users may also trigger communication and reminders directly from the system. All communication is saved in the system.</p>
Workflow Management Data Management Document/Forms Management	TSpec_11	Describe the solution's capability to assess the status of documents and field values as conditions informing workflow paths of execution.
		<p>TCC Response: Workflows are designed to support business requirements and identify progress. Mandatory data requirements are identified guiding activities toward completion. To facilitate workflow “at a glance,” an alert system is on the user's home page, displaying activities that are pending for the individual user and their status.</p>

Solution Functional Area(s)	ID	Specification
		<p>Status alerts may include such things as: Applications not processed, Applications in Draft, and Not Placed.</p> <p>Users may click on the alert to be directed to the work activity. Users may also search and or filter their work queue using specific criteria. Managers or Administrators have access to see work in the individual queues as well as receive reports on the status of applications. Examples of reports are, number of applications in Draft status, document status, and master data report, with all students during a specific time. Reports may be modified or added based on the need of the program.</p>
Workflow Management Documents/Forms Management	TSpec_12	Describe the solution's capability for manual and automatic generation of electronic forms as inputs to and as outputs of specified workflows.
		<p>TCC Response:</p> <p>Based on the user's role and workflow, forms are made available and may be downloaded and distributed within the system. Forms are auto populated based on entered data.</p>
Workflow Management Documents/Forms Management	TSpec_13	Describe the solution's capability to require specified fields be populated within its various workflows.
		<p>TCC Response:</p> <p>Workflow design will identify fields that are required, and actions taken if a field is not complete or expected data is not included. Required fields can stop submission of an application. All forms and workflows can identify required fields.</p>
Data Management Interface, Network, Security	TSpec_14	Describe the solution's capability to manage lists or support interface with an auxiliary application to that end.
		<p>TCC Response:</p> <p>The system can interface with auxiliary applications. Interface would occur through an API with a written agreement. If requested, data from auxiliary applications can be utilized and documents stored.</p>
Workflow Management Data Management Interface, Network, Security	TSpec_15	Describe the solution's capability to automatically perform calculations per formulas provided by the business. The source of data used to perform the calculations may be internal and/or external to the solution. Describe the solution's ability to assess calculation results as conditions informing execution of specified workflows. Describe the solution's ability to report on the calculations.
		<p>TCC Response:</p> <p>Automatic calculations can be integrated into the system and business rules. A sample of current calculations are: Calculating income and FPL for families. Calculation also occurs when determining due dates for inspections.</p>
Interface, Network, Security Workflow Management Documents/Forms Management	TSpec_16	Describe the solution's capability for managing user access (add, remove, suspend, archive, permissions, roles, etc.) including hierarchical implementation capabilities and organizational associations, and the levels to which the solution supports their application in workflows, forms, fields, and reports.
		<p>TCC Response:</p> <p>User Roles are identified and defined based on the organizational structure, business rules, job functions, and tasks performed by the users. All roles are</p>

Solution Functional Area(s)	ID	Specification
Report Management Administration		<p>associated with a group. For example, the Licensing Unit may be defined as a group, which includes multiple roles, such as Administrator, Lead Child Care Consultant, Administrative Assistant etc.</p> <p>Each user role is assigned specific permissions that grant or restrict access to various features and data within the system. These permissions are based on the tasks and responsibilities associated with each role. The assigned permissions align with the workflow and business processes, to ensure users have access to the necessary tools and data to perform their tasks efficiently, while also safeguarding sensitive information and preventing unauthorized actions.</p> <p>The system is designed to accommodate changes in user roles and responsibilities. New roles may be created, or existing roles may require adjustments. In some cases, user roles may have hierarchical relationships. For instance, an Administrator is able to approve user accounts, redirect workflows, make assignments and has access to view workload of staff.</p> <p>When new accounts are created, the individual indicates the role requested. Approval of the account is completed by the assigned administrator. Similarly, when users leave the system or change roles, their access rights should be revoked or updated accordingly. Request for a change in role is approved by the designated Administrator.</p>
User Management Workflow Management Data Management	TSpec_17	<p>Describe the solution's ability to support simultaneous use of it by multiple stakeholders. Describe how it manages simultaneous access to the same data while ensuring data integrity.</p> <p>TCC Response: The solution facilitates concurrent use by multiple stakeholders through features like user authentication, role-based access control, and version control. It employs techniques such as locking mechanisms, transaction isolation levels, and conflict resolution algorithms to maintain data integrity during simultaneous access, ensuring consistent and accurate updates while preventing conflicts or data corruption.</p>
Interface, Network, Security Data Management	TSpec_18	<p>Describe the solution's model(s) for interfacing with auxiliary systems and solutions. Discuss all types that are feasible with the solution and the levels of effort to implement them. Describe the solution's capability to enable stakeholders to exercise functionality within the auxiliary systems/solution with and without leaving the environment of your solution. Describe associated data exchange capabilities.</p> <p>TCC Response: The preferred method for interfacing with external systems is through an API. TCC has several methods which can be used to develop integrations with external systems whether it is through Rest Services, Web Services, or SFTP file transfers. TCC's solution is able to exercise functionality in auxiliary systems without leaving the solution environment.</p>



Solution Functional Area(s)	ID	Specification
		<p>An example of data exchange capabilities with an external system in the solution can be found in the payment process. The solution captures credit card information and passes the information securely to a third party. The data is stored in that third party's system based on input from our client application. Data is also received from the third party for this transaction and stored in the TCC solution.</p>
Interface, Network, Security	TSpec_19	<p>The solution will need to interface with multiple systems, some of which require authentication for access. Describe the solution's authentication model and explain how the solution minimizes the number of times stakeholders are required to enter user credentials to access each interfaced system/solution, including when the authentication models between solutions/systems differ.</p> <p>TCC Response:</p> <p>The solution leverages Azure Active Directory B2C (Azure AD B2C) and Azure External Identities to address the authentication requirements and minimize the number of times stakeholders need to enter user credentials while interfacing with multiple systems. Azure AD B2C provides a comprehensive identity and access management platform, while Azure External Identities extends this functionality to external users and systems such as the NCID platform for the State.</p> <p>Authentication Model:</p> <p>Single Sign-On (SSO): The solution implements SSO using Azure AD B2C and Azure External Identities. Users authenticate once with their credentials, and subsequent access to interfaced systems or solutions is seamless without requiring additional logins. This greatly enhances user experience and reduces the need for multiple authentication prompts.</p> <p>Identity Federation: For systems that have different authentication models, the solution employs identity federation. This allows users who have authenticated through Azure AD B2C to access external systems without having to re-enter their credentials. Federation protocols such as SAML or OAuth are utilized to establish trust between Azure AD B2C and the external systems.</p> <p>Minimizing Credential Entry:</p> <ul style="list-style-type: none"> • Multi-Platform Integration: Azure AD B2C and Azure External Identities enable integration with a wide range of systems, whether they support traditional username/password logins, social identity providers, or modern authentication methods like biometrics. This integration ensures that stakeholders can access various systems using the same set of credentials. • Claims and Tokens: The solution employs claims-based authentication and security tokens. Once a user is authenticated through Azure AD B2C, a security token is issued. This token contains claims that attest to the

Solution Functional Area(s)	ID	Specification
		<p>user's identity. Systems that trust Azure AD B2C can validate these tokens, eliminating the need for additional credential prompts.</p> <ul style="list-style-type: none"> • Conditional Access Policies: The solution uses conditional access policies to define access controls based on various factors such as user location, device, and risk level. This ensures that stakeholders are prompted for additional authentication only when necessary, based on the specific conditions defined. • Single Identity Store: Azure AD B2C acts as a central identity store for users. Stakeholders' identities and authentication status are managed here, reducing the need for separate credentials across interfaced systems. This centralization simplifies identity management and reduces the number of times credentials need to be entered. • Passwordless Authentication: Where supported, the solution promotes passwordless authentication methods like biometrics, one-time codes, or FIDO2 keys. This further reduces the reliance on traditional passwords and enhances security and user convenience. <p>The solution utilizes Azure Active Directory B2C and Azure External Identities to establish a robust authentication model that incorporates single sign-on, identity federation, and modern authentication methods. By centralizing identity management, utilizing security tokens, and implementing conditional access, the solution minimizes the frequency of credential entry for stakeholders while accessing interfaced systems, even when authentication models differ between systems.</p>
Interface, Network, Security	TSpec_20	Explain the solution's capability to incorporate the state's authentication model for accessing it.
		TCC Response: See response to TSpec_19 above.
Interface, Network, Security Workflow Management Data Management	TSpec_21	Explain the solution's capability to assess data passed during authentication to inform workflows availed to the stakeholders.
		TCC Response: See response to TSpec_19 above.
Interface, Network, Security	TSpec_22	Describe the solution's authorization capability.
		TCC Response: See response to TSpec_19 above.
Data Management Interface, Network, Security	TSpec_23	Explain the solutions capability to interface with and manage data in the government cloud or on government premises.
		TCC Response: The system can interface with external systems through an API. Interface parameters will be established by the business and shall meet all security requirements.

Solution Functional Area(s)	ID	Specification
Usability Security	TSpec_24	Describe the capabilities the solution offers to enable stakeholders to enter data via standard data types (ex: checkbox, radio button, textbox, etc.) and its ability to mask data on entry.
		TCC Response: Data entry is available by checkbox, radio button, textbox, etc. During design, the client works with a TCC UX expert to select the entry method. Masking of data identified as sensitive occurs during entry.
Error Checking Data Management	TSpec_25	Describe how the solution minimizes the opportunity for user errors during data entry and before data submission.
		TCC Response: Data fields are designed to capture data in the most efficient and accurate manner. Edits can be placed on a data entry field to limit inaccurate entries.
Interface, Network, Security Workflow Management Data Management Document Management	TSpec_26	Describe the solution's ability to support manual and automated management (create, update, view, delete) of electronic records and documents that comprise them. Explain its ability to manage data internal to it and external to it.
		TCC Response: The solution can accommodate manual and automated management of data. Workflows and business rules guide what data is automated and which need data entry. Data such as QRIS scores can be automated. Data can also be automated to auto fill in like cells, such as name, ID #s, address.
Interface, Network, Security Document Management	TSpec_27	Describe the solution's ability to upload/download and/or distribute documents and/or data from forms to internal and external stakeholders.
		TCC Response: Reports may be exported to CSV, TXT, MS Excel, or PDF, etc. Reports may be accessed and delivered in multiple ways. Examples are: 1. Users may request a download of a report directly to their device, selecting the format. 2. Users may email reports from their device. 3. An automated schedule of report generation and delivery can be established 4. API integration can be established to request and deliver reports from external systems, Reports may be displayed on a data dashboard, which can be shared through the URL or download, Cloud storage of reports may also occur.
Communication (alerts, reminders, emails, text) Interface, Network, Security Usability	TSpec_28	Describe the solution's automatic, real-time update capability.
		TCC Response: Data maintained within the systems is updated in real-time. For example, as an application is submitted it is added to the work queue and data for the number of reports will be updated. Data that is obtained through an API or data agreement will be updated on the approved schedule.
Document Management Report Management	TSpec_29	Describe the solution's capability for generating standard and ad-hoc documents, including reports.
		TCC Response:

Solution Functional Area(s)	ID	Specification
		The solution contains the ability to produce and export standard reports within the system. Standard reports have filters for customizing the report. Applications in the system can be downloaded. Email templates are available and can be customized by authorized users. Ad hoc reports and documents can be made available.
Report Management	TSpec_30	Describe the solution's reporting capability, including its ability to generate standard and customized reports in output formats specified by stakeholders. TCC Response: The solution contains the ability to produce standard reports within the system. Standard reports have filters for modification and can be exported and shared. A report dashboard is available. Support of a business intelligence tool can also be made available
Report Management	TSpec_31	Describe the solution's capability for manual and/or scheduled individual and/or batch reporting. TCC Response: Users may request a download of a report directly to their device, selecting the format. Users may email reports from their device. An automated schedule of report generation and delivery can be established. API integration can be established to request and deliver reports from external systems. Reports may be displayed on a data dashboard, which can be shared through the URL or download. Cloud storage of reports may also occur.
Report Management	TSpec_32	Describe the solution's capability to enable stakeholders to edit specified reports and documents it generates. TCC Response: Reports within the system may be filtered by the user. Reports can be exported for customization. Power BI can be used to support customization.
Report Management	TSpec_33	Describe the solution's capability to prevent stakeholders from editing specified reports and documents it generates. TCC Response: For reports that should not be edited, the export function can be limited to PDF and can contain a watermark or identifier.
Report Management Data Management File Management Document Management	TSpec_34	Describe the document and report formats the solution enables stakeholders to produce. TCC Response: Reports may be exported to CSV, TXT, MS Excel, or PDF, etc. Reports may be accessed and delivered in multiple ways. Examples are: 1. Users may request a download of a report directly to their device, selecting the format. 2. Users may email reports from their device. 3. An automated schedule of report generation and delivery can be established 4. API integration can be established to request and deliver reports from external systems, Reports may be display on a data dashboard, which can be shared through the URL or download, Cloud storage of reports may also occur.

Solution Functional Area(s)	ID	Specification
Data Management File Management Interface, Network, Security	TSpec_35	<p>Describe the solution's ability to save data to stores internal and external to it.</p> <p>TCC Response: The solution is equipped with a versatile data storage capability that enables seamless saving of data to both internal and external repositories. It offers native integration with its internal databases, allowing users to store and retrieve information efficiently. Additionally, the solution supports external data stores through APIs, connectors, or data export features, facilitating the secure transfer and storage of data in external systems for enhanced flexibility and interoperability.</p>
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_36	<p>Explain the solution's ability to, manually and automatically, create data records and documents and export them to specified data stores.</p> <p>TCC Response: Based on workflow and business rules, data records will be created. For example, if a provider earns points in QRIS, a record may be created, awarding them an additional star rating, and will produce a certificate for distribution. The increased star rating will also be shared in coordinating parts of the system. Staff can manually complete functions that would produce data records and documents, as well.</p>
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_37	<p>Explain the solution's ability to, manually and automatically, import data records and documents from external stores and consume them in exercising workflows managed within the solution.</p> <p>TCC Response: The solution possesses a versatile data ingestion capability, allowing both manual and automated import of data records and documents from external repositories. Users can manually upload files or input data through intuitive interfaces. Additionally, the solution offers automated integration with external sources via APIs, connectors, or scheduled tasks. Once imported, the solution seamlessly integrates the ingested data into its managed workflows, enabling efficient processing, analysis, and collaboration within the system. This ensures that external data becomes an integral part of the solution's operations, enhancing its overall functionality and utility.</p>
Interface, Network, Security Data Management	TSpec_38	<p>Explain how the solution secures data in transit and at rest.</p> <p>TCC Response: The solution employs robust security measures to protect data both in transit and at rest.</p> <p>For data in transit, it utilizes industry-standard encryption protocols (such as SSL/TLS) when transmitting information between users and the solution's servers. This ensures that data exchanged during communication is encrypted and remains confidential, safeguarding it from potential eavesdropping or interception by unauthorized parties.</p>

Solution Functional Area(s)	ID	Specification
		<p>Regarding data at rest, the solution employs encryption mechanisms to safeguard information stored in its databases or storage systems. This encryption transforms the data into an unreadable format, requiring decryption using authorized keys to access the original information. This ensures that even if unauthorized individuals gain access to the physical storage, the data remains protected and inaccessible.</p> <p>Furthermore, the solution enforces access controls, authentication processes, and audit trails to prevent unauthorized access, track user activities, and maintain data integrity throughout its lifecycle, offering comprehensive protection against potential security threats.</p>
Interface, Network, Security Data Management	TSpec_39	<p>Describe the solution's capability for remaining useable when offline.</p> <p>TCC Response: The solution supports offline use in designated areas of the system. TCC's mobile inspection tool, eXpedite remains usable when offline.</p>
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_40	<p>Describe the solution's ability to manage data while it is offline and automatically synchronize that data with all required internal and external data stores when it comes online.</p> <p>TCC Response: TCC's mobile inspection tool, eXpedite can collect data while offline, store it in a local database, and when an internet connection is established, users can synchronize the data.</p>
Search and Filter	TSpec_41	<p>Describe the solution's capability for searching data internal and external to it. Include capabilities for constraining the search and filtering search results.</p> <p>TCC Response: The search functionality includes advanced options for constraining and refining searches. Users can apply filters based on various criteria such as date ranges, keywords, file types, or specific attributes, narrowing down results to precisely match their requirements. 7Features are available to enhance search precision, which allows users to drill down, and filter search results based on predefined categories or facets.</p> <p>For external searches, the solution's integration capabilities enable it to interact with other data sources, leveraging APIs or connectors to retrieve and incorporate relevant information seamlessly.</p>
User Editability	TSpec_42	<p>Describe how it enables the business to directly manage text as it needs to (ex: letterhead, signature line, legislative narrative, message text, notification text, alert text, email text, help text, etc.)</p> <p>TCC Response: The solution's flexibility allows text correspondence to be modified quickly and efficiently. Correspondence templates are stored in the system and may be changed at any time. This includes the examples listed above.</p>

Solution Functional Area(s)	ID	Specification
Forms Management	TSpec_43	Describe how the solution enables management (generation and customization) of form templates.
		TCC Response: An application wizard provides a user-friendly interface that guides users through the process of modifying forms within the application. Business rules can be implemented to allow administrative users to make changes to templates if desired.
Data Management File Management Document Management	TSpec_44	Describe the solution's ability to enable stakeholders to view common file types (ex: pdf, doc, jpg, png, mp4, etc.)
		TCC Response: Stakeholders can effortlessly view a wide range of common file types, including PDF, DOC, JPG, PNG, MP4, and more. The solution offers built-in viewers enabling stakeholders to access and interact with various types of content without the need for external applications.
User Management Workflow Management Data Management Interface, Network, Security Document Management Usability User Editability	TSpec_45	Describe the solution's capability to present information from internal and external sources to stakeholders tailored to their individual needs by role. Explain ways it enables stakeholders to tailor the way the information is presented.
		TCC Response: The Ascend solution, in conjunction with OCR (Optical Character Recognition) and Risk Guard capabilities of OpenText, offers a robust role-based access control (RBAC) framework that facilitates the tailored presentation of information from both internal and external sources to stakeholders based on their individual roles. This ensures that stakeholders receive pertinent information in a format that suits their specific needs and responsibilities. Capabilities for Tailored Information Presentation: <ol style="list-style-type: none"> Role-Based Access Control (RBAC): The Ascend solution employs RBAC to define different roles within the system, such as administrators, managers, analysts, and users. Each role is associated with specific permissions and access levels. Stakeholders are categorized into these roles, and the solution ensures that they can only access information and features relevant to their roles. Customizable Dashboards and Views: Ascend's user interface allows stakeholders to customize their dashboards and views according to their preferences. Users can arrange widgets, data visualizations, and reports to highlight the information most relevant to their roles. This empowers stakeholders to create a personalized workspace that aligns with their specific responsibilities and tasks. Dynamic Content Filtering: Ascend's presentation layer supports dynamic content filtering based on RBAC roles. Stakeholders can configure filters to display or hide certain types of information, helping them focus on

Solution Functional Area(s)	ID	Specification
		<p>what's important within their role without being overwhelmed by irrelevant data.</p> <ol style="list-style-type: none"> 4. Contextual Data Enrichment: The OCR capabilities of OpenText enable the extraction of textual information from scanned documents or images. This extracted data can be associated with specific stakeholders' roles and presented in a meaningful manner. For example, risk-related data extracted from documents can be highlighted for risk managers. 5. Risk Guard Integration: The Risk Guard capabilities of OpenText provide advanced risk analysis and assessment. The Ascend solution can leverage this data to dynamically adjust the way information is presented to stakeholders. High-risk items can be flagged and brought to the forefront for risk management stakeholders, ensuring their attention is directed to critical issues. 6. Personalized Notifications: Ascend enables stakeholders to set up personalized notifications based on their roles and preferences. For instance, compliance officers can receive alerts about regulatory changes, while financial analysts can be notified about market fluctuations. This proactive approach ensures stakeholders are informed about relevant developments. 7. Adaptive Reporting and Analytics: Ascend offers interactive reporting and analytics features that allow stakeholders to create and customize reports based on their roles. This empowers them to analyze data in a manner that aligns with their specific decision-making needs. 8. User Experience Customization: Ascend's user interface can be customized to match the branding and visual preferences of the organization. This consistent and familiar interface contributes to a seamless experience for stakeholders as they access and interact with information. <p>In summary, the Ascend solution, in collaboration with OpenText's OCR and Risk Guard capabilities, delivers tailored information presentation through RBAC, customizable dashboards, content filtering, contextual data enrichment, risk analysis integration, personalized notifications, adaptive reporting, and user experience customization. This comprehensive approach ensures that stakeholders receive information in a format that is optimized for their roles, enhancing their decision-making and efficiency.</p>
Usability Workflow Management Data Management	TSpec_46	<p>Describe the solution's capability for enabling stakeholders to define new fields needed to support business process.</p> <p>TCC Response: When a field is identified that should be added or modified to the system, a change request should be initiated. A Business Analyst will work with the client to define the field and business rules. Once approved, the field will be added to the system.</p>

Solution Functional Area(s)	ID	Specification
Workflow Management Administration	TSpec_47	Describe the solution's ability to automatically enable, disable, and/or populate fields based on conditions defined by the business.
		TCC Response: The solution uses business rules to build workflow that will support the practices of the organization. Workflow can allow the automation of data population. For example, when a provider is found in violation, information can be auto populated into letters, licensure fields, and may trigger alerts to notify other users. If an action should have a manual process, it can be built into the workflow.
Workflow Management Data Management File Management Document Management	TSpec_48	Describe the solutions capability to enable stakeholders to save work at a point in time and resume that work from that point as needed.
		TCC Response: As users' complete applications or workflow, the data is automatically saved. Users may return to complete their work, without data loss.
Interface, Network, Security Data Management File Management Document Management	TSpec_49	Describe how the solution minimizes the need for stakeholders to leave the solution to access data/functionality in systems/solutions to which it interfaces.
		TCC Response: The solution is a comprehensive system that allows operations in one place. Data or information needed from an outside source can be integrated through an API or data agreement. TCC has extensive experience with interface design and deployment and will ensure that users can seamlessly perform tasks and find needed information. TCC can use a variety of methods to develop interfaces. TCC primarily uses web Application Programming Interfaces (API), Windows Communication Foundation (WCF), and web services to communicate between the client application/websites and the webserver. Entity Framework is used for the communication between the webserver and database server for SQL executions. SQL server integration services (SSIS) is used for data migrations. SSIS is utilized for scheduled maintenance tasks and interfaces. TCC utilizes Secure File Transfer Protocol (SFTP) for flat file interfaces. Some legacy State applications cannot utilize some of the newer technologies like web interfaces, and in those cases TCC will upload/download flat files and then parse out the data. SMTP is utilized for email. TCC utilizes Internet Information Services (IIS) to host the websites and web services. Multiple .NET Frameworks and nugget libraries are incorporated into our code baseline. To mitigate risks with interfaces, TCC develops an interface control document that is used throughout the contract. Representatives from the systems being interfaced would agree on the contents of the document and sign off. The document includes details of the interface, schedules, contact information for resolving issues, contingency plans for outages, etc.

Solution Functional Area(s)	ID	Specification
		TCC works carefully with representatives of the other state systems on the interface design and will conduct thorough testing according to the state approved Test Management Plan. Once the system is implemented, regression testing of all interfaces will occur with each release.
Interface, Network, Security Audit Log Report Management	TSpec_50	Describe the solution's audit logging capability. Describe opportunities for enabling the business to define information to be captured in the log and for creating customized logs. Explain how it enables stakeholders to view, query, filter, and report on its content.
		<p>TCC Response: Audit logging capability captures and records key events and activities within the system. It provides opportunities for businesses to define specific information to be included in the audit log, tailoring it to their unique needs. This customization can involve selecting the types of events to be logged, specifying relevant data fields, and even implementing triggers for capturing custom events.</p> <ol style="list-style-type: none"> 1. View Logs: Stakeholders can access the audit log directly from within the solution, allowing them to see a chronological list of recorded events. 2. Query and Filter: The solution provides advanced querying and filtering options, enabling stakeholders to narrow down log entries based on specific criteria such as date ranges, users, event types, or specific data attributes. 3. Custom Reports: Users can create custom reports by selecting desired fields, filters, and sorting options to generate tailored summaries of audit trail data. 4. Export and Integration: The solution allows stakeholders to export audit log data in various formats (such as CSV or PDF) for external analysis or integration with other reporting tools. 5. Alerts and Notifications: Some solutions offer real-time alerts or notifications for critical events, ensuring stakeholders are promptly informed of important activities. 6. Visualization: Advanced solutions may provide graphical representations or dashboards that offer insights into audit trail patterns and trends.
Help	TSpec_51	Describe the solution's help capability.
		<p>TCC Response: In-system user Help menu at the top of the system navigation menu that includes resources such as: Online tip sheets, Online How-To videos, online electronic user guides, and FAQ's. Additionally, throughout the solution users can click on the information icon to learn more about a specific area of the solution.</p>
Training Testing	TSpec_52	Describe provisions for testing changes to the solution and for training stakeholders.
		TCC Response:



Solution Functional Area(s)	ID	Specification
		<p>All changes to the system go through System Testing and validation by User Acceptance Testing. TCC will work with the client to document the acceptance criteria.</p> <p>Training is available and can be accommodated as onsite, virtual, or recorded.</p>
Print Document Management	TSpec_53	<p>Describe the solution's print capability.</p> <p>TCC Response: Forms within the system, including reports, can be converted to PDF for printing.</p>
Usability	TSpec_54	<p>Describe how the solution is built to be mobile friendly and browser agnostic.</p> <p>TCC Response: Ascend utilizes Angular TS as the front end of the system and is mobile friendly and browser agnostic.</p>
Payment Processing	TSpec_55	<p>Describe the solution's payment processing capabilities and/or support for them.</p> <p>TCC Response: The solution can interface with the State's payment processing platform through an API to collect any fees or penalties.</p> <p>TCC can also calculate payment files within the solution and send the payment files to the payment processing system to disperse funds for payments made to providers, for example for T.E.A.C.H. scholarships, if needed.</p>
Geo-mapping Usability	TSpec_56	<p>Describe the solution's geo-mapping capability.</p> <p>TCC Response: The Family Provider Search and Map functionality includes geo-mapping capability with critical data points needed to assist families as they search for care that fits their needs. TCC has significant experience developing interfaces with consumer education websites. Additionally, Ascend comes out of the box with TCC's child care search and map feature. The family search and map features are easily customized to DCDEE's desired search components.</p>
Accessibility Usability	TSpec_57	<p>Describe the solution's capability to enable stakeholders to customize the user interface and corresponding correspondence and artifacts such that they conform to a selected language preference, including translation capability to and from selected language preference. Include in description support for special characters associated with language preference.</p> <p>TCC Response: The system has the capability to convert to the language of choice.</p>
Usability Security	TSpec_58	<p>Describe the solution's capability for redacting or supporting redaction of documents it generates and/or manages.</p> <p>TCC Response: Business rules can be defined to redact or mask information within a document and system.</p>
Self-Service Workflow Management	TSpec_59	<p>Describe the solution's self-service capability (self-registration and/or enrollment functionality, profile maintenance, etc.). Include description of queueing capability in support of registration/enrollment process management (ex: FIFO). Include automatic registration/enrollment capability and handling of exception</p>

Solution Functional Area(s)	ID	Specification
		<p>cases (ex: partial or incomplete registration/enrollment, purging dangling registration records, etc.)</p> <p>TCC Response: Individuals may self-register through a public URL. The user is guided through the required steps and provided with background information on the requirements. Links or an interface may also be provided where the activity such as training, background checks, etc. may be completed. Tool Tips can be inserted with additional information when clicked or hovered over. Completed applications are moved to the user's queue who is responsible for processing the application.</p> <p>To facilitate "at a glance" status and workflow an Alert System is on the Users homepage, displaying activity status, and those pending action. Alerts may include such things as: Applications not processed, Applications in Draft, Follow Up Needed. Users may click on the alert to be directed to the work Queue. Users may search or filter their work queue.</p> <p>Exceptions can be handled with defined business rules or an administrative request. Cleansing records such as archiving records that are inactive for a number of days can be handled through an automated process or per request.</p>
Administration Security File Management	TSpec_60	<p>Describe the solution's registration and/or enrollment record management capability (create, read, update, delete, suspend, merge, unmerge, confirmation, etc.)</p> <p>TCC Response: Based on the individual's role in the system, records can be created, read, updated, suspended, or confirmed. Merging or unmerging of records are facilitated through a request, which is completed by development staff.</p>
Document Management Report Management File Management	TSpec_61	<p>Describe the solution's capability for enabling stakeholders to manage libraries of standardized text and use it in managing (create, update) documents and reports it generates.</p> <p>TCC Response: The solution uses business rules to build workflow that will support the practices of the organization. Workflow can allow the automation of data population. For example, when a provider is found in violation, information can be auto populated into letters, licensure fields, and may trigger alerts to notify other users. If an action should have a manual process, it can be built into the workflow.</p>
Describe the solution's ability to convert an image of text into a machine-readable text format or support for that functionality via interface with an	TSpec_62	<p>Describe the solution's ability to convert an image of text into a machine-readable text format or support for that functionality via interface with an auxiliary solution that does.</p> <p>TCC Response: The solution uses OpenText for the Electronic Document Management System capabilities. OpenText offers Optical Character Recognition (OCR) capabilities within their document capture solutions. This technology converts scanned paper documents and images into editable and searchable text. OpenText's OCR</p>

Solution Functional Area(s)	ID	Specification
auxiliary solution that does.		includes features like accurate text recognition, data extraction, searchable documents, and integration with workflows, enhancing document management and automation processes for businesses.
Security	TSpec_63	Describe your process detecting and minimizing security vulnerabilities resulting from solution development. Describe your process for resolving security vulnerabilities discovered after deployment to production.
		<p>TCC Response: TCC's process starts with Source code analyses including:</p> <ul style="list-style-type: none"> • Static application security testing- we inspect the static application before its deployed to review the source for issues like insecure deserialization, depreciated function libraries, buffer overflows etc. • Dynamic Application Security Testing-inspects the application while it is running to find issues, such as SQL injection, Cross sight scripting etc. <p>TCC's processes and routine security operational tasks include vulnerability scanning to prevent invulnerability settings, configurations, and application code ensuring protection against things like the OWASP Top Ten. Any findings become part of the patch management process and development lifecycle to remediate according to State requirements.</p>
Accounting and Budgeting	TSpec_64	Describe the solution's capability for supporting business processes requiring accounting and budget management.
		<p>TCC Response: TCC's solution includes several options for accounting management and budget functionality. For example:</p> <ul style="list-style-type: none"> • The Pre-K module has budget functionality. • The Workforce Registry module has grants and budget functionality. • Ascend will interface with the State's preferred payment platform to accept payments for fees and civil penalties and will provide any reports necessary for account management and reconciliation of payments received.
Branding	TSpec_65	Describe the solution's ability to support stakeholder branding requirements.
		<p>TCC Response: TCC is able to support stakeholder branding requirements, such as State division logos, and color scheme requests as long as they are 508 compliant.</p>
Analytics	TSpec_66	Describe the solution's data analytics capabilities.
		<p>TCC Response: Once dashboard requirements are defined and report design is approved, TCC will use Microsoft Power BI or Tableau as preferred by the Agency, to develop a real-time report summary that tells a story. Power BI allows authorized users to drill down into the high-level information to see more details.</p>

Solution Functional Area(s)	ID	Specification
Classroom Management	TSpec_67	Describe the solution's classroom management capabilities, including functionality enabling the use of classroom relevant abstractions that support operations and future state preparation activities.
		TCC Response: Classroom management is available in the solution. Providers can upload building plans, add classrooms and Establishment of a classroom includes capacity, staff, and hours of operation. Students may be placed in classrooms and attendance recorded.
Survey Management	TSpec_68	Describe the solution's survey management capabilities.
		TCC Response: Surveys may be integrated into the system to allow for easy access and completion. Distribution can be completed to individuals or user groups via email. Surveys may also be imbedded in the application to guide a user to provide feedback on their experience or needs, such as a survey on training needs or use of the system. Surveys can be limited to specific users or for a time. Survey results will be captured within the system to allow for individual or cumulative results. Reports may be requested to display and filter results. Access to survey results may be limited to individuals or groups based on roles.

Appendix A: Solicitation Addendum 1 and Addendum 2



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

Office of Procurement, Contracts and
Grants

Solicitation Addendum

Solicitation Number: 30-23189

Solicitation Description: DCDEE – Workforce Registry and NC Pre-K and Regulatory System Replacement

Solicitation Opening Date and Time: August 14, 2023
2:00 PM EST

Addendum Number: 1

Addendum Date: July 21, 2023

Contract Specialist or Purchasing Agent: Jillian Kennedy, Contract Specialist
Jillian.kennedy@dhhs.nc.gov

1. Vendor must return one properly executed copy of this addendum with bid response or prior to the Bid Opening Date/Time listed above.
2. The solicitation is hereby modified as follows:

- a) Section 2.2 **CONTRACT TERM** on page 5 shall be replaced with the following:

A contract awarded pursuant to this RFP shall have an effective date as provided in the Notice of Award. The term shall be **three (3) year(s)** and will expire upon the anniversary date of the effective date unless otherwise stated in the Notice of Award, or unless terminated earlier. The State retains the option to extend the Agreement for **two (2) one(1) year** renewal period at its sole discretion.

- b) Section 5.2 **EVALUATION CRITERIA** on page 27 shall be replaced with the following:

5.2 EVALUATION CRITERIA

Evaluation shall include best value, as the term is defined in N.C.G.S. § 143-135.9(a)(1), compliance with information technology project management policies as defined by N.C.G.S. §143B-1340, compliance with information technology security standards and policies, substantial conformity with the specifications, and other conditions set forth in the solicitation. The following Evaluation Criteria are listed in Order of Importance.

1. Substantial conformity to the specifications (Section 3.0)
2. Technical Approach (Section 3.0)
3. Past Performance and Experience (includes the following) (Section 6.3)
 - a. Experience of similar size, scope, complexity, and magnitude of effort to that of the solicitation

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b. References

4. Financial Viability (Section 7.0)
5. Total Cost of Ownership (Section 7.0)

c) Specifications for Integration and System Interfaces on page 147 shall be replaced with the following:

Integration and System Interfaces	INI_1	DIT- Describe the solutions ability to Integrate with the State agencies authentication platforms.
	INI_3	DPI- Describe the solutions ability to receive file/real time information about Licensed teachers & send information on enrollee's (teacher's) training from Department of Public Instruction Online Licensure System. Describe the solutions ability to receive wage and Licensure file; send new approved lead NC Pre-k teacher from Department of Public Instruction Human Resource Management System.
	INI_4	Describe the solutions ability to receive file containing the names of adults flagged for maltreatment from the Child Maltreatment Registry.
	INI_5	Describe how the solution shares facility and workforce qualification data between workforce and regulatory areas and keeps information current.
	INI_6	Describe the solutions ability to integrate or receive data from Training platforms such as Moodle, Voyage Sports & Teaching Strategies for enrollees.
	INF_7	Describe the solutions ability to integrate with partnership agencies application to receive and provide information to end users. CCSA-Receive a list of bonus approval administered. CCSA Grants System – (T.E.A.C.H., WAGES, AWARD Plus and AWARDS) Receive files with enrollee grant and wage information.
	INI_8	North Carolina Institute for CDP – Send a list of EEC certifications granted.
	INI_9	Describe the solution ability to integrate with external agencies to receive Health and Safety trainers' information
	INF_10	CBC/ABCMS-Real time integration with CBC for background check of enrollees
	INI_11	Describe the ability of the solution to Integrate with state approved payment platforms for training payments

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	INI_12	Describe the solutions ability to Integrate or receive monthly file from Vital Records application
	INI_13	Describe the solutions ability to integrate with Clearing houses to receive Official Transcripts.
	INI_14	Describe the solutions ability to integrate with NCRLAP to view, assign, or participate in trainings
	INI_15	Describe the solutions ability to integrate with NC Pre-K's application to route change requests for appropriate approvals by EES and Workforce Education Unit.
	INI_16	Describe the solutions ability to integrate with Scribbles to add, retrieve, annotate, and manage documents.

3. Following are questions received about the solicitation and the State's answers to the questions.

Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
1	2.2 Contract Term Attachment E: Cost Form	a) Cost Table 2: Operations and Maintenance	Please clarify the contract terms for submission of pricing for the initial term and optional years.	Please see above change to the solicitation.
2	3.5 Management Specifications	3.5.5 Data Conversion and Migration	Are there any systems other than Regulatory, WORKS, and NC Pre-K in scope for data migration?	No.
3	3.5 Management Specifications	3.5.5 Data Conversion and Migration	What data should be migrated from the existing systems? Is the scope limited to a subset of the data or all data in the systems? How many tables and records comprise each existing/legacy system?	WORKS: All Data should be migrated. 40 tables and 192,209 records. NC Pre-K: All Data should be migrated. 198 tables and 27,394 records. Regulatory: All Data. Approximately 20+ tables and 5,414,554 records.
4	3.5 Management Specifications	3.5.5 Data Conversion and Migration	Please provide the database structure of NC Pre-K (ex: Oracle, MySQL, etc.).	Oracle DB. The NC Pre-K database has data for Children, Sites, Classrooms, Teacher's Licensure and Education, Contracting Agencies and Budget.

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
5	3.5 Management Specifications	3.5.6 Operations and Maintenance 6.0 Help Desk Support	Is the expectation that the Vendor Help Desk would provide system support to all user types, including external users such as outlined in Attachment L, Workforce Registration REG_1 (Mentors & Evaluators, Teachers (both Lead and Assistants), Technical Assistance Providers, Early childhood and school age administrators, Students training in early education, Program Coordinator, Prospective Childcare owners and Facility Owners/Directors, and Prospective Teachers), or would external users contact the Agency Help Desk for their system support inquiries?	Workforce Registry: Yes. Also, engage with DHHS and NCDIT for issues related to State's systems. NC Pre-K: Yes. Also, engage with DHHS and NCDIT for issues related to State's systems. Regulatory: Yes. Also, engage with DHHS and NCDIT for issues related to State's systems. EES: Ensure the business-related questions are routed to the EES team.
6	Attachment L:	REG_1	Please confirm the number of expected users by type as included in REG_1, Attachment L: 1. Mentors & Evaluators 2. Teachers (both Lead and Assistants) 3. Technical Assistance Providers 4. Early childhood and school age administrators 5. Students training in early education 6. Program Coordinator 7. Prospective Childcare owners and Facility Owners/Directors 8. Prospective Teachers	1. Mentors & Evaluators: 60 2. Teachers (both Lead and Assistants): Lead Teacher only in public and private school-2000. 7. Prospective Childcare owners and Facility Owners/Directors: We currently have 5450 childcare facilities (centers- 4354 and homes - 1196). Some facilities may have more than one owner and some owners may own more than one facility. Therefore, the number of owners will not match the number of facilities. We do not collect other information and can't provide that data.
7			What is the budget for this project?	In accordance with 09 NCAC 08B .0103 – Confidentiality of Solicitation Documents: In order to preserve fairness and encourage competitiveness, all information and documentation relative to the development of a solicitation for a proposed procurement shall be withheld from public inspection. Refer to cited rule above for complete language.

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
8			Is there a planned payment schedule based on project phases?	The Vendor shall propose its itemized payment schedule based on the content of its offer. All payments must be based upon acceptance of one or more Deliverables during Project Execution Contract Phase.
9	ATTACHMENT L: WORKFORCE REGISTRY	WF_6-9, WF_11 – Page 144, 145 INI_6 – Page 147	Does DHHS intend to use an existing LMS platform for integration with the Workforce Registry, or should the vendor propose a LMS solution for training/coursework assignment? If using an existing LMS platform, please confirm Moodle, Voyage Sporis and Teaching Strategies are the only integrations.	Yes. Currently, Programs use Moodle. Proposals can include other LMS platforms, but they need to meet Business needs for a LMS including data reporting.
10	ATTACHMENT A: Definitions	#71 – Page 47	Does DHHS intend to use SCRIBBLES as an external system for document storage and management, or should the vendor propose a document storage solution?	The Workforce Registry will act as a repository and document management system for the EEB Unit. See Addendum 1 2.c) for details. Vendor may submit proposal with an alternate document management solution.
11	General		Does DHHS require multi-language application support across all three platforms? If so, what languages must be included in each application for users?	DCDEE requests English and Spanish at a minimum. This application should match the DCDEE public facing website setup. DCDEE public facing website offers Google Translate as a translation resource.
12	ATTACHMENT K: REGULATORY MODERNIZATION	COM_3 – Page 139	Please confirm whether DHHS requires the system to auto-calculate the QRIS based on interfaces and data entry, or if this will be manually calculated/assessed by a consultants/state worker with a combination of data integration and manual data entry.	Yes, DHHS requires the system to auto-calculate the QRIS based on interfaces, data entry and required algorithms. Authorized Users shall have ability to modify data if needed.
13	ATTACHMENT L: WORKFORCE REGISTRY	INF_7 – Page 147 WF_19 – Page 145 SFTP_REC_1 – Page 148	WF_19 specifies 'eligible enrollees can apply for grants' within the workforce registry. Please specify what types of grants and eligibility requirements would be directly managed within the workforce registry. Alternatively, please confirm if this is an interface with CCSA and the workforce registry would be utilized solely for tracking and reporting capabilities.	The Registry shall allow state staff to track and report on various grants such as Child Care and Development Block Grant (CCDBG) and others. This feature would be utilized solely for tracking and reporting purposes. DCDEE would receive the data from CCSA and update the Registry.

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
14	ATTACHMENT M: NC PRE-K SPECIFICATIO NS	PK_ADM_1 – Page 151 CHL_APP_9 – Page 152 PK_WF_2, 11, 20, 23 & 24 – Page 153	Will families use the Pre-K portal, or is this portal only for state and contracted agencies? If families use the Pre-K portal, please detail the functionality available within the portal for families. 2. Can DHHS provide a user manual or screenshots of the NC Pre-K legacy system?	Yes. Families will use Pre-K portal. Please refer to specifications applicable to Registration and Child_Application for the portal functionality in page 151 and 152 of the RFP. Question 2: Attached link should suffice https://ncchildcare.ncdhhs.gov/Home/DCDEE-Sections/North-Carolina-Pre-Kindergarten-NC-Pre-K . Three user manuals can be accessed via the website.
15	ATTACHMENT M: NC PRE-K SPECIFICATIO NS	PK_WF_3 – Page 153	PowerSchool has a wide array of modules available. What part of PowerSchool's functionality is being used by the state?	Currently, there is no integration. This is a manual process. However, DCDEE is interested in knowing if the proposed solution has the ability to download data from PowerSchool to Excel or other document type(s) and upload it into NC Pre-K applications.
16	General		Could the state please share how many internal state users (including any state consultants) are expected to use this system? Similarly, how many childcare professionals and families are expected to utilize the solution's portals.	300+ internal users and 55,000+ childcare professionals.
17	page 5 and page 82		Can you clarify contract term? Page 5 describes 2 year term with one year optional but cost table on page 82 in appendix E has form that asks for information on a three year term with 2 additional one year terms as optional. Will cost be evaluated on contract term only or will it include contract term and the optional years?	Please refer to # 1.
18	page 23		How many total internal state users are there that will use the system? Page 23 describes concurrent users of 690 and capacity to handle up to 1380 users. Is 1380 the total number of users?	How many total internal state users are there that will use the system? See answer to #16. Page 23 describes concurrent users of 690 and capacity to handle up to 1380

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
				users. Is 1380 the total number of users? 1380 is an estimate of the upper capacity of concurrent users the solution is to support with minimal performance degradation.
19	page 5		How many licensed child care providers organizations are there in the state of NC? How many child care providers apply for new applications annually? How many child care providers renew annually? And how long does the renewal term last?	How many licensed child care providers organizations are there in the state of NC? See response to # 6. How many child care providers apply for new applications annually? We currently do not track how many providers apply. How many child care providers renew annually? NA – 2 to 5 star licensed facilities must be reassessed every 3 years. And how long does the renewal term last? See response above.
20	Page 5		How many individual early child care professionals are there in the state? How many individual early child care professionals apply for new licenses annually? How many individual child care professionals renew annually? And how long does the renewal term last?	How many individual early child care professionals are there in the state? Response: See answer to #18. How many individual early child care professionals apply for new licenses annually? This is a moving target year to year. We cannot predict or estimate how many new people will enroll with the EES Unit and apply for new licenses. How many individual child care professionals renew annually? around 80 to 85 And how long does the renewal term last? Renewal terms are based on licensure types. Continuing licenses have a 5 year renewal term. Initial license have a 3 year renewal term and/or convert to a Continuing license at the end of the 3 years. Residency licenses last for 1 year and can be renewed up to 2 additional years (at the end of the 3rd year it needs to

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
				<p>convert to an Initial or Continuing license). Provisional BK add-on licenses are a 1 year renewable license for up to 5 years.</p> <p>Note: EES only caters to Lead Teacher. We are speaking about childcare professionals that include several different categories. Lead teacher is only one.</p>
21	page 20 3.5.5 Data Conversion and Migration		<p>Can you describe the amount and type of data that will need to be migrated to the new solution? ...data volume vs file volume...total number of GB or terabytes of each.....is it structured data or Unstructured?</p> <p>Does your organization anticipate storing CJI data as a part of the cloud-based solution?</p> <p>Can a solution be proposed whereby CJI data lives in an on-premise solution at a data center and is integrated with the cloud-based solution being proposed using tokenization to ensure Cloud Service Provider (CSP) personnel have no access to the CJI data?</p> <p>With this approach, CJI data would not be stored in a cloud database but would provide a pointer from a cloud database to the CJI data stored in the data center enabling your organization users to securely access that data.</p> <p>We further assume that the CSP will not need to comply with the CJIS compliance requirements. Please confirm.</p>	<p>Both structured and unstructured.</p> <p>Workforce Registry: Approximately 200GB. The WORKS database houses data for education, qualification, and licensure for 10 positions including Teachers, Lead Teacher, FCOH Providers, Program Coordinator, Group Leader, DPI Teacher, DPI Teacher Assistant and Administrator (EC, SA, DPI).</p> <p>NC Pre-K: Approximately 50 GB but could be more depending on size of archived data. The NC Pre-K database houses data for Child, Sites, Classrooms, Teacher licensure and education, Contracting Agencies and Budget.</p> <p>Regulatory: Approximately 30 GB.</p> <p>Yes, as long as government cloud is managed by NCDIT. Further, for compliance requirements please refer to the CJIS Security Policy document. (https://cjin.nc.gov/infoSharing/Presentations/CJIS%20Security%20Policy%20v5%201_07132012_-ns[1].pdf)</p>

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
22	page 64 III) (5)		Does your organization anticipate storing CJI data as a part of the cloud-based solution? Can a solution be proposed whereby CJI data lives in an on-premise solution at a data center and is integrated with the cloud-based solution being proposed using tokenization to ensure Cloud Service Provider (CSP) personnel have no access to the CJI data? With this approach, CJI data would not be stored in a cloud database but would provide a pointer from a cloud database to the CJI data stored in the data center enabling your organization users to securely access that data. We further assume that the CSP will not need to comply with the CJIS compliance requirements. Please confirm.	Response: See response to question 21.
23	Page 22 2.f.		Cloud Services Provider (CSP) uses commercially reasonable efforts to make its on-demand services available to its customers 24/7, except for planned downtime, for which the CSP gives customers prior notice, and force majeure events. While availability SLAs can be negotiated in a contract, the calculation is measured quarterly and not monthly. Can your organization please adjust this requirement and specify that the SLA requirements can be negotiated based on the Service provider chosen?	Vendor may submit their standard SLA. However, the SLA will be finalized during contract negotiations with finalists.
24	7.8 Security and Background Checks		We assume this only applies to contractor personnel that are performing the solution implementation services and not the Cloud Service Provider (CSP) personnel that are hosting the solution. For example, CSP engages the services of a background screening vendor to conduct background checks on employees at the time of hire. The CSP also performs background investigations in certain foreign countries. The scope of these checks is subject to local laws in the jurisdictions in which the employee is hired. Can your organization please modify this requirement accordingly? Does your organization agree with this interpretation of this requirement? If your organization mandates that CSP's also needing to meet this requirement, will your organization be willing to sponsor and pay for these background checks?	This is State requirement for which DHHS cannot provide an exception. This can be discussed with State CIO during negotiations.
25	Immediate Breach Notification		The Cloud Service Provider (CSP) is a service provider and your organization would be one of hundreds of thousands of customers using the service. CSP can contractually commit to incident	This is State requirement for which DHHS cannot provide an exception. This can be discussed with State CIO during negotiations.

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740 East 52nd St., Ste. 7
Indianapolis, IN 46205

Solicitation Number: 30-23189
Addendum Number: 1

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
			<p>response reporting timeframes in a customer contract. One component driving the timeframes are the CSP's ability to communicate to a wide customer base in the event of an incident. In a multi-tenant cloud environment, the CSP could be reporting to thousands of customers if there is a security incident impacting multiple customers. CSPs utilize one incident response process for all customers. Utilizing one approach allows for scalability and ease of operations.</p> <p>Additionally, due to the nature of the CSP's service, the CSP can only report confirmed breaches, not attempted, suspected, threatened, or foreseeable breaches. As a multitenant environment, an attempted breach against another tenant would not be reported to your organization.</p> <p>In the event of a security breach and if negotiated in the agreement, the CSP can notify your organization identified points of contact. The CSP cannot notify affected parties because the CSP does not view customer data. The CSP is responsible for maintaining access in terms of performance and availability to the data. The data is owned by the customer. As such, we would like to request the requirements for breach notifications should align with the existing CSP reporting requirements that also align with FedRAMP and request that your organization change this requirement.</p>	
26	Liquidated Damages		<p>Your organization will have full control of the data they store within the Salesforce Services. Salesforce does not classify Customer Data. All information that has been electronically submitted by customers to the Salesforce Services is considered "Customer Data" and is protected as confidential. Permitted access to the production environment infrastructure is restricted to a very limited number of full-time Salesforce employees required to manage the service. These Salesforce employees do not have login access to customer's instances (org), and because of Salesforce's multi-tenant infrastructure, they do not see customer data in an assembled manner.</p> <p>Our interpretation is that this would primarily apply to the System Integration personnel (its employees and subcontractors) that would be directly performing the solution implementation services and could have direct access to your organization's data.</p> <p>Would your organization be willing to make an adjustment to the breach liability and related costs and remove "amount determined to be adequate by the agency" to allow for negotiation of these</p>	No.

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Question #	Solicitation Section	Solicitation Subsection	Vendor Question	Agency Response
			requirements to refine the parameters, guidelines, and associated costs. Typically breach liability and related costs are considered indirect damages as they are unknowable and unpredictable. As such, they are a source of risk to a provider and the provider needs to be able to further assess such risk after consideration and discussion with your organization.	
27			It indicates in Section 7.2 on page 34 that Vendors are to provide "b) a written statement" from a CPA. Would evidence that a Vendor is currently working with MCOs in NC and has serviced these entities for 15 years serve as a substitute for this requirement?	No
28			As part of your redundancy plan are you wanting a crosscheck of electronic documents versus the paper documents. Is it necessary to reference (or store) these paper documents. Does the redundancy plan include an electronic record (scan) of the existing paper documents?	Crosscheck: Yes. DCDEE will not be storing paper documents. Once the documents are scanned into the Registry the expectation is to store the documents as per Division's records management policy. Yes, all documents will be electronically stored and managed within the Registry. DCDEE does want this system to interface with the DHHS ITD's document management system (documents stored on a file server). The solution will need to support the Division's records management schedule.

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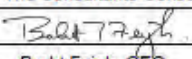
Failure to acknowledge receipt of this addendum may result in rejection of the response.

Check ONE of the following options:

- ☒ Bid has not been mailed. Any changes resulting from this addendum are included in our bid response.
- ☐ Bid has been mailed. No changes resulted from this addendum.
- ☐ Bid has been mailed. Changes resulting from this addendum are as follows:

Execute Addendum:

Offeror: The Consultants Consortium, Inc

Authorized Signature: 

Name and Titled (Typed): Breht Feigh, CEO

Date: 8/7/2023

X

Rev. 07/13/2016



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

Office of Procurement, Contracts and
Grants

Solicitation Addendum

Solicitation Number: 30-23189
Solicitation Description: DCDEE – Workforce Registry and NC Pre-K and Regulatory System Replacement
Solicitation Opening Date and Time: August 17, 2023
2:00 PM EST
Addendum Number: 2
Addendum Date: August 9, 2023
Contract Specialist or Purchasing Agent: Jillian Kennedy, Contract Specialist
Jillian.kennedy@dhhs.nc.gov

1. Vendor must return one properly executed copy of this addendum with bid response or prior to the Bid Opening Date/Time listed above.
2. The solicitation is hereby modified as follows:
 - a) Section 1.0 ANTICIPATED PROCUREMENT SCHEDULE on page 4, the "Offer Opening Deadline" shall be replaced with the following:
August 17, 2023 at 2:00pm Eastern
 - b) Attachment Q -MMM on pages 171-173 shall be replaced with the following:
Attachments Q-MMM are made available through the Ariba system and are attached to Addendum 2.

Failure to acknowledge receipt of this addendum shall result in rejection of the response.

Check ONE of the following options:

- ☒ Bid has not been mailed. Any changes resulting from this addendum are included in our bid response.
- ☐ Bid has been mailed. No changes resulted from this addendum.
- ☐ Bid has been mailed. Changes resulting from this addendum are as follows:

Execute Addendum:

Offeror: The Consultants Consortium, Inc.
Authorized Signature: Breht Feigh
Name and Titled (Typed): Breht Feigh, CEO
Date: 8/11/2023

Appendix B: All Pages of the Solicitation Document

STATE OF NORTH CAROLINA Department of Health and Human Services	REQUEST FOR PROPOSAL NO. 30-23189	
	Offers will be publicly opened:	
	Issue Date: June 27, 2023	
Refer <u>ALL</u> inquiries regarding this RFP to: Maureen Salman Contract Specialist Office of Procurements, Contracts and Grants maureen.salman@dhhs.nc.gov	Commodity Number: 811118	
	Description: DCDEE - Workforce Registry and NC Pre-K and Regulatory System Replacement	
	Purchasing Agency: Department of Health and Human Services (DHHS), Division of Child Development and Early Education (DCDEE)	
	Requisition No.: 	

OFFER

The Purchasing Agency solicits offers for Services and/or goods described in this solicitation. All offers and responses received shall be treated as Offers to contract as defined in 9 NCAC 06A.0102(12).

EXECUTION

In compliance with this Request for Proposal, and subject to all the conditions herein, the undersigned offers and agrees to furnish any or all Services or goods upon which prices are offered, at the price(s) offered herein, within the time specified herein.

Failure to execute/sign offer prior to submittal shall render offer invalid. Late offers are not acceptable.

OFFEROR: The Consultants Consortium, Inc. (TCC)		
STREET ADDRESS: 720 E. 52nd Street, Ste. 7	P.O. BOX:	ZIP: 46205
CITY, STATE & ZIP: Indianapolis, IN 46205	TELEPHONE NUMBER: (317) 638-0173	TOLL FREE TEL. NO (866) 563-6767
PRINT NAME & TITLE OF PERSON SIGNING: Breht Feigh, Chief Executive Officer	FAX NUMBER: (877) 448-9989	
AUTHORIZED SIGNATURE:	DATE:	E-MAIL: Breht.Feigh@e-tcc.com

Offer valid for ninety (90) days from date of offer opening unless otherwise stated here: ____ days

ACCEPTANCE OF OFFER

If any or all parts of this offer are accepted, an authorized representative of DCDEE shall affix its signature hereto and any subsequent Request for Best and Final Offer, if issued. Acceptance shall create a contract having an order of precedence as follows: Best and Final Offers, if any, Special terms and conditions specific to this RFP, Specifications of the RFP, the Department of Information Technology Terms and Conditions, Department of Health and Human Services Terms and Conditions, and the agreed portion of the awarded Vendor's Offer. A copy of this acceptance will be forwarded to the awarded Vendor(s).

<u>FOR PURCHASING AGENCY USE ONLY</u>	
Offer accepted and contract awarded this date	, as indicated on attached certification,
by	(Authorized representative of Purchasing Agency Name).

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1.0 ANTICIPATED PROCUREMENT SCHEDULE

The Agency Procurement Agent will make every effort to adhere to the following schedule:

Action	Responsibility	Date
RFP Issued	Agency	June 27, 2023
Written Questions Deadline	Potential Vendors	July 10, 2023
Agency's Response to Written Questions/ RFP Addendum Issued	Agency	July 21, 2023
Offer Opening Deadline	Vendor(s)	August 14, 2023, at 2:00 PM EST
Offer Evaluation	Agency	August 28, 2023
Selection of Finalists	Agency	September 19, 2023
Oral Presentations and/or Product Demonstrations by Finalists	Selected Vendors	September 1, 2023, through September 19, 2023
Negotiations with Finalists	Agency designees and selected Vendor(s)	September 20, 2023, through September 29, 2023
Best and Final Offers Deadline from Finalists	Selected Vendors	October 13, 2023
Contract Award	Agency	October 31, 2023
Protest Deadline	Responding Vendors	15 days after award

2.0 PURPOSE OF RFP

2.1 INTRODUCTION

The purpose of this RFP is to solicit offers for the purchase of a comprehensive, highly configurable and fully integrated Workforce Registry and PreK and Regulatory System solution ("Solution"), including Vendor provided technical, operational and maintenance support. The Solution may be hosted on State Infrastructure, hosted on Vendor provided infrastructure or a combination of the two. Either COTs software, Software as a Service (SaaS), or a combination thereof, is an acceptable solution for this RFP. (Vendors will need to include in their proposal if any COTs components are to be utilized in a SaaS solution.) The proposed Workforce Registry and PreK and Regulatory solution is needed to automate business processes and to improve the operational efficiency and effectiveness of the Early Education, Regulatory, and Subsidy Section staff of DCDEE. The system will serve as a secure, trusted source for information regarding licensed childcare facilities and early childcare professionals in NC.

2.2 CONTRACT TERM

A contract awarded pursuant to this RFP shall have an effective date as provided in the Notice of Award. The term shall be two (2) year(s) and will expire upon the anniversary date of the effective date unless otherwise stated in the Notice of Award, or unless terminated earlier. The State retains the option to extend the Agreement for one (1) one(1) year renewal period at its sole discretion.

2.2.1 EFFECTIVE DATE

This solicitation, including any Exhibits, or any resulting contract or amendment shall not become effective nor bind the State until the appropriate State purchasing authority/official, or Agency official has signed the document(s), contract or amendment; the effective award date has been completed on the document(s), by the State purchasing official, and that date has arrived or passed. The State shall not be responsible for reimbursing the Vendor for goods provided nor Services rendered prior to the appropriate signatures and the arrival of the effective date of the Agreement. No contract shall be binding on the State until an encumbrance of funds has been made for payment of the sums due under the Agreement.

2.3 CONTRACT TYPE

Definite Quantity Contract - This request is for a closed-ended contract between the awarded Vendor and the State to furnish a pre-determined quantity of a good or service during a specified period of time.

The State reserves the right to make partial, progressive, or multiple awards: where it is advantageous to award separately by items; or where more than one supplier is needed to provide the contemplated specifications as to quantity, quality, delivery, service, geographical areas; and where other factors are deemed to be necessary or proper to the purchase in question.

2.4 AGENCY BACKGROUND

2.4.1. Department of Health and Human Services Mission

The mission of the NC Department of Health and Human Services (DHHS) is, in collaboration with our partners, to provide essential human services to improve the health, safety and well-being of all North Carolinians.

The NC Division of Child Development and Early Education (DCDEE) is a division of the NC DHHS.

2.4.2. Division of Child Development and Early Education Mission

The mission of the Division of Child Development and Early Education (DCDEE) is to ensure the health and safety of children in childcare programs, to promote quality childcare by implementing evidenced-based standards and to increase access to quality childcare to families and children across North Carolina.

2.4.3. Responsibilities of DCDEE

1. To ensure the health and safety of children in childcare programs DCDEE:
 - Licenses, monitors and provides technical assistance to childcare programs.
 - Investigates any concerns regarding illegally operating childcare programs, as well as complaints alleging violations of childcare requirements.
 - Conducts comprehensive Criminal Background Checks with all individuals who work in licensed or regulated child care programs and other social and human services programs
 - Supports the NC Child Care Commission, which has responsibility to create, amend or repeal rules to implement Child Care Law.
2. Promotes quality childcare by implementing evidenced-based standards DCDEE:
 - Evaluates teacher and administrator education to determine qualification for different positions in childcare programs.
 - Licenses early childhood educators in non-public programs
 - Administers the NC Prekindergarten (NC Pre-K) program
 - Funds the statewide Child Care Resource and Referral system which provides evidence-based technical assistance, professional development, coaching and compensation supports for early childhood professionals
 - Works with a variety of early childhood partners to provide training, coaching, and evaluation for early childhood professionals across the state.
 - Collaborates with the state funded NC Partnership for Children/Smart Start
3. Increases access to quality childcare to families and children across North Carolina DCDEE:
 - Administers North Carolina's Subsidized Child Care Assistance program
 - Provides parents a web-based tool to search for quality childcare programs.
 - Collaborates with early childhood partners and homeless service providers to address the need for child care for families experiencing homelessness or temporary housing arrangements.
 - Administers NC's Child Care and Development Fund federal block grant.

2.5 PROBLEM STATEMENT

DCDEE has and uses multiple systems, through partners – DCDEE WORKS, Regulatory System, Scribbles, DPI Systems (Human Resources Management System (HRMS), NCDPI Online Licensure System (OLS)), CCSA Systems (which includes AWARDS, TEACH, WAGE\$) etc. – to support Early Education Branch

workforce and Regulatory Services Section needs. These systems do not interface with one another or provide real-time data.

The current process flow for Early Education Branch and Regulatory Services Section staff are highly manual, paper driven, and partially automated resulting in time-consuming processes and challenges in data reporting. Data inaccuracy and duplication is unavoidable when disparate systems are used bogging the team in administrative tasks. It also creates a burden on end-users to repeatedly provide the same or similar information to multiple systems. Overall, these challenges limit the ability to connect with the end-users.

Subsidy staff are accessing disparate data sources as well as sharing significant volumes of multiple forms, documents, and sizeable spreadsheets to manage information required to perform their work. Currently, the Staff uses a kluge of office tools and server stores to support their business processes which have become complex and multi-tiered. Because data management tasks are largely manual, the data management tasks have extremely tedious and inefficient, and introduces unacceptable risks to data security and fidelity. In addition, all managed information is subject to audit and may be used as evidence in judicial proceedings, which means that data security, fidelity, and ready accessibility are critical components of subsidy staff's ability to effectively conduct their business.

The NC Pre-K program, currently, uses 3 separate applications to complete their day- to-day work. These applications are outdated and do not meet current technology standards. The NC Pre-K program is used throughout the state of NC and needs to be modernized.

See the workflow models in *Attachments Q through TT* illustrating the business processes representative of where the problems referred to exist for added context. Additionally, the Attachments reflect current and future state context diagrams that model internal and external entities with which the indicated business does/will interface respectively. See attachment P for a sample of reports currently generated.

DCDEE must have a fully implemented new solution complete and in use by the end of September, 2024.

2.6 CONTRACT PHASES

This RFP will address two (2) distinct Contract Phase: The Project Execution Contract Phase to implement the Solution and the Operations and Maintenance (O&M) Contract Phase to maintain the Solution, as outlined below:

- 2.6.1.** The Project Execution Contract Phase sections in this document will explain the approach, Deliverables and tasks/activities that will occur to configure the Vendor's product to implement the Solution. During these activities, the Vendor will execute all Solution implementation tasks (i.e., requirements definition, development/configuration, testing, pilot, and training) until the Solution is deployed. For additional information about the Project, refer to Section III. 12) c) ii. 2.; Section V. 9) and 10); and *Attachment J. Minimum Content Requirements for Project and O&M Deliverables*.

The Solution must be fully deployed no later than September 30, 2024.

- 2.6.2.** The O&M Contract Phase sections in this document will explain the approach, Deliverables and tasks/activities that will occur in this phase. During this phase, the Vendor will complete all Deliverables and execute all tasks/activities related to operating and maintaining the Solution. In addition, the Vendor will maintain the hosting environment (if Vendor-hosted Solution is selected) or provide support and updates/new releases for the product the Solution is based on (if State-hosted Solution is selected), as well as modify the Solution if requested by the Agency. For

additional information about Operations and Maintenance, refer to Section 3.5.6 and *Attachment J, Minimum Content for Project and O&M Deliverables*.

3.0 RFP REQUIREMENTS AND SPECIFICATIONS

3.1 GENERAL REQUIREMENTS AND SPECIFICATIONS

3.1.1 REQUIREMENTS

Means, as used herein, a function, feature, or performance that the system must provide. See subsequent sections for requirements.

3.1.2 SPECIFICATIONS

Means, as used herein, a specification that documents the function and performance of a system or system component.

The apparent silence of the specifications as to any detail, or the apparent omission of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only processes, configurations, materials and workmanship of the first quality may be used. Upon any notice of noncompliance provided by the State, Vendor shall supply proof of compliance with the specifications. Vendor must provide written notice of its intent to deliver alternate or substitute Services, products, goods or other Deliverables. Alternate or substitute Services, products, goods or Deliverables may be accepted or rejected in the sole discretion of the State; and any such alternates or substitutes must be accompanied by Vendor's certification and evidence satisfactory to the State that the function, characteristics, performance and endurance will be equal or superior to the original Deliverables specified.

3.1.3 SITE AND SYSTEM PREPARATION

Vendors shall provide the Purchasing State Agency complete site requirement specifications for the Deliverables, if any. These specifications shall ensure that the Deliverables to be installed or implemented shall operate properly and efficiently within the site and system environment. Any alterations or modification in site preparation, which are directly attributable to incomplete or erroneous specifications provided by the Vendor and which would involve additional expenses to the State, shall be made at the expense of the Vendor.

3.1.4 EQUIVALENT ITEMS

Whenever a material, article or piece of equipment is identified in the specification(s) by reference to a manufacturers or Vendor's name, trade name, catalog number or similar identifier, it is intended to establish a standard for determining substantial conformity during evaluation, unless otherwise specifically stated as a brand specific requirement (no substitute items will be allowed). Any material, article or piece of equipment of other manufacturers or Vendors shall perform to the standard of the item named. Equivalent offers must be accompanied by sufficient descriptive literature and/or specifications to provide for detailed comparison.

3.1.5 ENTERPRISE LICENSING

In offering the best value to the State, Vendors are encouraged to leverage the State's existing resources and license agreements, which can be viewed here:

<https://it.nc.gov/resources/statewide-it-procurement/statewide-it-contracts>

- a) Identify components or products that are needed for your solution that may not be available with the State's existing license agreement.
- b) Identify and explain any components that are missing from the State's existing license agreement.
- c) If the Vendor can provide a more cost-effective licensing agreement, please explain in detail the agreement and how it would benefit the State.

3.2 SECURITY REQUIREMENTS AND SPECIFICATIONS

The State is seeking a solution that is either hosted on State Infrastructure or hosted on Vendor provided Infrastructure depending on the solution the Vendor recommends.

3.2.1 SOLUTIONS HOSTED ON STATE INFRASTRUCTURE

Vendors shall provide a completed Vendor Readiness Assessment Report State Hosted Solutions ("VRAR") at offer submission. This report is located at the following website:

<https://it.nc.gov/documents/vendor-readiness-assessment-report>

The Registry, NC Pre-K, and Regulatory Systems will be required to receive and securely manage data that is classified as medium and high risk. Refer to the North Carolina Statewide Data Classification and Handling policy for more information regarding this data classification. The policy is located at the following website: <https://it.nc.gov/document/statewide-data-classification-and-handling-policy>.

To comply with the State's Security Standards and Policies, State agencies are required to perform annual security/risk assessments on their information systems using NIST 800-53 controls.

3.2.2 SOLUTIONS NOT HOSTED ON STATE INFRASTRUCTURE

The Registry, NC Pre-K, and Regulatory systems will be required to receive and securely manage data that is classified as medium and high risk. Refer to the North Carolina Statewide Data Classification and Handling policy for more information regarding data classification. The policy is located at the following website: <https://it.nc.gov/document/statewide-data-classification-and-handling-policy>.

To comply with the State's Security Standards and Policies, State agencies are required to perform annual security/risk assessments on their information systems using NIST 800-53 controls. This requirement additionally applies to all Vendor-provided, agency-managed Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS) solutions which will handle data classified as Medium Risk (Restricted) or High Risk (Highly Restricted) data.

- (a) Vendors shall provide a completed Vendor Readiness Assessment Report Non-State Hosted Solutions ("VRAR") at offer submission. This report is located at the following website: <https://it.nc.gov/documents/vendor-readiness-assessment-report>
- (b) Upon request, Vendors shall provide a current independent 3rd party assessment report in accordance with the following subparagraphs (i)-(iii) prior to contract award. However, Vendors are encouraged to provide a current independent 3rd party assessment report in accordance with subparagraphs (i)-(iii) at the time of offer submission.

(i) Federal Risk and Authorization Management Program (FedRAMP) certification, SOC 2 Type 2, ISO 27001, or HITRUST are the preferred assessment reports for any Vendor solutions which will handle data classified as Medium Risk (Restricted) or High Risk (Highly Restricted).

(ii) A Vendor that cannot provide a preferred independent 3rd party assessment report as described above may submit an alternative assessment, such as a SOC 2 Type 1 assessment report. The Vendor shall provide an explanation for submitting the alternative assessment report. If awarded this contract, a Vendor who submits an alternative assessment report shall submit one of the preferred assessment reports no later than 365 days of the Effective Date of the contract. Timely submission of this preferred assessment report shall be a material requirement of the contract.

(iii) An IaaS vendor cannot provide a certification or assessment report for a SaaS provider UNLESS permitted by the terms of a written agreement between the two vendors and the scope of the IaaS certification or assessment report clearly includes the SaaS solution.

(c) Additional Security Documentation. Prior to contract award, the State may in its discretion require the Vendor to provide additional security documentation, including but not limited to vulnerability assessment reports and penetration test reports. The awarded Vendor shall provide such additional security documentation upon request by the State during the term of the contract.

3.3 ENTERPRISE SPECIFICATIONS

3.3.1 ENTERPRISE STRATEGIES, SERVICES, AND STANDARDS

Agencies and vendors should refer to the Vendor Resources Page for information on North Carolina Information Technology enterprise services, security policies and practices, architectural requirements, and enterprise contracts. The Vendor Resources Page can be found at the following link: <https://it.nc.gov/vendor-engagement-resources>. This site provides vendors with statewide information and links referenced throughout the RFP document. Agencies may request additional information.

3.3.2 ARCHITECTURE DIAGRAMS DEFINED

The State utilizes architectural diagrams to better understand the design and technologies of a proposed solution. These diagrams (i.e., Network Diagram and Technology Stack Diagram), required at offer submission, can be found at the following link: <https://it.nc.gov/architectural-artifacts>.

There may be additional architectural diagrams requested of the vendor after contract award. This will be communicated to the vendor by the agency as needed during the project.

3.3.3 VIRTUALIZATION

The State desires the flexibility to host Vendor's proposed solution in a virtualized environment, should it determine in the future that virtualized hosting for such solution would be more economical or efficient. The State currently utilizes server virtualization technologies including VMware, Solaris and zLinux. The Vendor should state whether its solution operates in a virtualized environment. Vendor also should identify and describe all differences, restrictions or limitations of its proposed solution with respect to operation, licensing, support, certification, warranties, and any other details that may impact its proposed solution when hosted in a virtualized environment.

3.3.4 IDENTITY AND ACCESS MANAGEMENT (IAM)

The proposed solution must externalize identity and access management. The protocols describing the State's Identity and Access Management can be found at the following link:

<https://it.nc.gov/services/vendor-engagement-resources#identity-access-management>

Describe how your solution supports the above protocols as well as making them available for application integration/consumption.

3.4 BUSINESS AND TECHNICAL SPECIFICATIONS

REFER TO THE FOLLWING ATTACHMENTS:

ATTACHMENT K, REGULATORY MODERNIZATION BUSINESS SPECIFICATIONS

ATTACHMENT L, WORKFORCE REGISTERY BUSINESS SPECIFICATIONS

ATTACHMENT M, NC PRE-K SPECIFICATIONS

ATTACHMENT N, SUBSIDY PROVIDER COMPLIANCE BUSINESS SPECIFICATIONS

SEE ATTACHMENT O. BUSINESS AND TECHNICAL SPECIFICATIONS

3.5 MANAGEMENT SPECIFICATIONS

The following specifications concern specific tasks to be completed during the Contract term, which will be divided into the Project Execution Contract Phase and Operations and Maintenance (O&M) Contract Phase. This section also requests additional information about the Vendor's proposed Project and ongoing O&M support approach, including partnership with State IT and Business personnel for delivery.

Awarded Vendor will complete delivery (defined as Agency acceptance of the stabilized solution) no later than September 30, 2024.

3.5.1 Software Development Lifecycle (SDLC)

Describe the SDLC approach, methodology, and tools you will use for supporting the Agency in delivering the proposed Solution, including Changes made to the Solution. The Agency requests use of agile-based methodologies.

3.5.2 Project Management

1. Vendor Project Management Approach

The State's framework employs decision points throughout the project for approval to proceed with next tasks (reference <https://it.nc.gov/programs/project-portfolio-management/quality-management-system>). The project stages in which the Vendor will be engaged include the Planning and Design Phase, Execution and Build, Implementation and Closeout phases. Reference Section 7.11 for additional information about Project Management.

Describe your approach to Project Management to be utilized in support of the State's project management framework, including:

- a. All project management tools needed to deliver the Solution and meet Business and Technical and Management Specifications.

- b. Approach and tasks for monitoring and controlling the project's schedule, scope, budget/resource tracking, risks, issues, change and quality.

The State prefers use of Agile frameworks.

2. Vendor Project and O&M Deliverables

Describe your approach to complete, or assist State personnel in completing, all Project Deliverables according to the Vendor Responsibilities listed in the table provided below in this section during the Project Execution Contract Phase and the O&M Contract Phase. If the Vendor Responsibility is listed as Contributor for a Project Management Deliverable, then the State is the Owner and is responsible for the completion of the Project Management Deliverable, with Vendor assistance. If the Vendor is listed as the Owner, then the Vendor is responsible for completion of the Project Management Deliverable, with State assistance (i.e., State is the Contributor).

Reference *Attachment J: Minimum Content for Project and O&M Deliverables* for description of and provision requirements for Project Management Deliverables. (The requirements set forth in *Attachment J: Minimum Content for Project and O&M Deliverables* apply to the deliverables during the contract term.)

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Kick-Off Meeting	Contributor	n/a
Project Kick-Off Meeting Report	Owner	n/a
Executed Escrow Agreement and Escrowed Solution Source Code (if COTS product(s) are included in the proposal)	Owner	n/a
Vendor Project Schedule	Owner	n/a
Vendor Project Management Plan	Owner	n/a
Vendor Project Staffing Plan	Owner	n/a
Project Communication Plan and Communications Matrix	Contributor	n/a
Project Risk and Issues Management Plan, Project Risk Watch List Matrix, and Project Issues Log	Contributor	n/a

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Vendor Software Quality Assurance Plan	Owner	Review and update every twelve (12) months or when impacted
Project Change Management Plan, Project Change Request Form, and Project Change Request Log	Contributor	n/a
Security Plan	Vendor-Hosted Solution: Owner ; or State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted
Technical Architecture Diagrams	Owner	Owner
Configuration and Release Management Plan	Owner	Review and update every twelve (12) months or when impacted
Training Plan	Owner	Review and update every twelve (12) months or when impacted
Test Plan (Technical Testing; see also dedicated Data Migration and Performance Test Plans below)	Owner	Review and update every twelve (12) months or when impacted
Deployment Plan	Owner	Review and update every twelve (12) months or when impacted
Gap Analysis Document	Owner	n/a

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
System Requirements Document	Owner	Update when impacted
Solution/Sprint Backlogs	Solution Backlog: Contributor Sprint Backlog: Owner	Contributor
Use Cases	Owner	Owner
User Stories	Contributor	Contributor
Requirements Traceability Matrix	Owner	Owner
Data Model	Owner	Update when impacted
Data Dictionary	Owner	Update when impacted
Detailed Design Specifications Document	Owner	Review and update when impacted
Infrastructure Requirements (State-Hosting Option only)	Owner	Update when impacted
Infrastructure Configuration Specifications (State-Hosting Option only)	Owner	Update when impacted
Vendor Recommendation for Technical Training for State IT Support Personnel	Owner	Update when impacted
Configured State Technical Environments (for State-Hosting Option)	Contributor	n/a
Technical Skills Transfer (State-Hosting Option only)	Owner	Update when impacted

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Base Product and Base Product Installation Instructions (for COTS products with State-Hosting Option)	Owner	Owner for new product releases
Assist the State to install the Base Product(s) (for COTS products with State-Hosting Option)	Owner	Owner for new product releases
Design Review Sessions	Owner	Owner
Test Cases	Owner	Owner
Test Scripts	Owner	Owner
Prepare and Demonstrate All Test Environments	Vendor-Hosted Environments: Owner State-Hosted Testing Environments: Contributor	Vendor-Hosted Environments: Maintain testing environments as needed State-Hosted Testing Environments: Contributor
Unit Test Results Report	Owner	Owner
System Test Results Report	Owner	Owner
Regression Test Results Report	Owner	Owner
Integration Test Results Report	Owner	Owner
Accessibility Test Results Report	Owner	Owner
Demonstration of Tested System	Owner	Owner
General Backup and Recovery Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Disaster Recovery Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Review and update every twelve (12) months or when impacted
Performance Test Plan	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Cases	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Scripts	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Readiness Report	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Performance Test Results Report	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor	Vendor-Hosted Solution: Owner State-Hosted Solution: Contributor
Agency Approval of Performance	Owner	Owner
Data Conversion and Migration Plan	Owner	n/a
Data Map	Owner	n/a
Data Conversion Test Cases/Scripts	Owner	n/a

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Data Conversion and Migration Test Results Report	Owner	n/a
Agency Acceptance of the Converted and Migrated Data	Owner	n/a
User Acceptance Test Plan	Contributor	Contributor
UAT Test Cases and Test Scripts	Contributor	Contributor
UAT Training Materials	Owner	Owner
UAT Training	Owner	Owner
UAT Results Report	Contributor	Contributor
Agency Acceptance of Tested Solution (for all releases or deployment phases)	Owner	Owner
User Guides, Quick Reference Guides, and Online Help Documentation	Owner	Owner
Technical and System Administration Documentation	Owner	Owner
Service Level Agreement(s)	Owner	Review and update every twelve (12) months or when impacted
Training Materials	Owner	Owner
Training Delivery	Owner	Owner
Operations and Maintenance Plan (State Hosting option only)	Owner	Review and update every twelve (12) months or when impacted

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Release/Deployment Readiness Checklist	Contributor	Contributor
Completed Release/Deployment Readiness Checklist (For all releases or deployment phases)	Contributor	Contributor
Onsite Assistance during Release/Deployment Readiness (State-Hosted Solutions only)	Owner	Owner
Vendor Operations and Maintenance Staffing Plan	Owner	Update when impacted
Onsite Assistance during Release/Deployment (State-Hosted Solutions only)	Owner	Owner
Validation Test Results Report	Owner	Owner
Deployment UAT Results Report	Contributor	Contributor
Agency Acceptance of Deployment UAT Results (For all releases or all deployment phases)	Owner	Owner
Vendor Support during the Stabilization Period	Owner	n/a
Agency Acceptance of the Stabilized Solution	Owner	n/a
Lessons Learned	Contributor	n/a
Project Status Meetings	Contributor	n/a
Project Status Reports	Owner	n/a
Sprint Reports	Owner	Owner

<i>Project & O&M Deliverable</i>	<i>Vendor Responsibility for Project Execution Contract Phase</i>	<i>Vendor Responsibility for O&M Contract Phase</i>
Operations and Maintenance Status Reports	Owner	Owner
Transition Plan	Owner	Owner
Project Peer Review	Contributor	n/a

3. Vendor Project Staffing

Vendors are to include a draft project schedule in their response that includes and describes all planning activities, development activities, pilot, and deployment as well as the Project Management Deliverables listed in Section 3.5.2.2 above. For each Project and O&M Deliverable in the table above, Vendor shall identify Vendor and/or State personnel required to complete the task in the project schedule.

4. Releases/Production Deployment and Support

Describe your approach to deploying the developed Solution for production use, including the following items below in your RFP response:

- The strategy for deploying the Solution for production use, including the number of Releases proposed;
- Deployment planning and preparation, including site visits, site readiness verification, end user device upgrades;
- Security considerations;
- Hardware, software or facilities needed to support the deployment if the Solution proposed will not be hosted by the Vendor;
- The deployment activities and reference to any milestones proposed by the Vendor;
- The roles and responsibilities to complete the deployment;
- Support provided during deployment, including onsite support; and
- Support provided during the Stabilization Period.

Refer to *Attachment J, Minimum Content for Project and O&M Deliverables* for the Agency's expectations regarding Solution deployment.

3.5.3 Testing

Describe your testing processes for the Solution in detail, specifically:

- a. Your approach to conducting all types of technical testing needed prior to User Acceptance Testing, each release/deployment, including pilot deployment, and post-deployment validation.
- b. Your proposed approach to UAT, data conversion testing, and performance testing.
- c. A description of the testing environment(s) and any specific software tools that you intend to use or make available for State use for all types of testing.
- d. How any test results for any Vendor-performed testing are presented for the Agency approval.
- e. Your proposed process for identifying, prioritizing, resolving, and documenting Defects found in the Solution during testing. Include in your description any software tools that you intend to make available for Defect management.
- f. How these tools will be integrated with DHHS tools including HP Quality Center/ALM, Jira, and Confluence.

Address all the test-related items described in Section 3.5.2.2 and *Attachment J, Minimum Content for Project and O&M Deliverables*.

3.5.4 Training

Describe your approach to training, identifying the points in your SDLC where training will occur for each type of training that you will provide to User Acceptance Testers, pilot users, end users, State Trainers, and State IT support staff. Include in this description:

- a. The training content that you will provide for the Solution, including the approach for in-person, remote, or pre-recorded training. Reference Section 3.5.2.2 and *Attachment J, Minimum Content for Project and O&M Deliverables* for details regarding the Agency's training documentation needs.
- b. Describe the training technical (hosting) environment for the Solution. Include in your description how your training technical environment addresses the following items:
 - i. Configurable mirror production functionality, and
 - ii. Online help.
- c. Describe how you provide training and knowledge transfer training to the Agency and other State IT staff as needed to assist Solution development efforts, system administration, and ongoing support for your proposed Solution.
- d. Describe any on demand training resources available to users such as recorded training sessions, computer-based training, FAQs, community forums, etc.
- e. Training provided during the O&M Contract Phase for new releases, enhancements, and any other changes to the Solution's underlying technology or hosting environment.

3.5.5 Data Conversion and Migration

Describe the Vendor's approach to converting and migrating data from existing systems (Regulatory (SQL), WORKS (Oracle), etc.) to the Solution. Include a list of all tools that will be used, and State resources required.

3.5.6 Operations and Maintenance

1. Vendor Approach to Operations and Maintenance

O&M will start after the Solution is deployed and the Vendor has obtained documentation of Agency Acceptance of the Stabilized Solution (i.e., the Stabilization Period has been successfully completed). The Vendor, when offering a Vendor-hosted Solution, will maintain the hardware and operating systems needed to host the Solution and updating the Solution with product patches and new releases.

Describe the Vendor's plan to perform/provide all O&M tasks/Deliverables. Reference 3.5.2.2 and *Attachment J, Minimum Content for Project and O&M Deliverables* for Deliverables that are to be maintained during O&M. Include a description of how the Vendor will do the following:

- a. Describe how you will provide ongoing maintenance and support for the Solution. This includes, but is not limited to, periodic updates based on new product versions.
- b. Provide a mechanism for the Agency to request Changes to the Solution and report Defects.
- c. Maintain a tracking system, at no cost to the Agency, to track all requested Changes and reported Defects, their status, expected resolution time, testing results, and final resolution.
- d. Provide the Agency with the status of releases, Changes, and Defect resolution in a format specified by the Agency, O&M Status Reports will contain at a minimum the contents outlined in *Attachment J, Minimum Content for Project and O&M Deliverables*.
- e. Perform technical testing all releases and fixes for Changes and Defects in Vendor's environment prior to delivery to the Agency for UAT. Reference Section 3.5.2.2 for technical testing deliverables.
- f. For modifications made by the Vendor to remediate Defects or make Changes requested by the Agency, Vendor shall provide the Regression Test Results Report to confirm that the Solution has not regressed because of modifications prior to releasing the next version of the Solution for UAT.
- g. Provide the Agency with technical testing results for Changes and Defects as outlined in Section 3.5.2.2 in a format specified by the Agency. Testing results will contain at a minimum the contents outlined in *Attachment J, Minimum Content for Project and O&M Deliverables*.
- h. Upon State request, assist UAT Testers during UAT of any Changes, Defects, and new releases. Vendor will assist the Agency in documenting the UAT Results Report. UAT assistance may be provided onsite or offsite as agreed upon by the Office.
- i. Troubleshoot and correct all problems and Defects identified during UAT of new releases, Defect remediations, or Vendor-assisted Changes to ensure that the Solution continues to operate as designed.

- j. Document Agency Acceptance of Tested Solution prior to deployment of Changes or new releases.
- k. Perform Deployment Validation and document Agency Acceptance of Deployment UAT Results.
- l. The Vendor will troubleshoot browser and other compatibility issues that may develop with new releases, Changes, or new supported browser versions as needed.
- m. Describe the review and update process (annually and when impacted by Changes) for O&M Deliverables listed in Section 3.5.2.2.

2. Vendor Hosting

- a. Describe your development, test, training, production, disaster recovery, and any separate reporting technical hosting environments.
- b. Describe the schedule required to stand up each technical hosting environment.
- c. Describe how Confidential Information will be securely maintained in the Vendor's hosted environment.
- d. Describe how the Vendor will troubleshoot, review, maintain and upgrade all technical environments (servers, operating systems, utility software application software, and SAN storage) as needed to ensure continual compliance/conformance (as applicable) with federal, State, and NCDHHS architectural, privacy, and security policies and standards.
- e. Describe how you will provide 24x7x365 monitoring of the production environment for unusual behavior, error conditions, and hardware, Solution, and operating systems' failures, except during planned or unplanned maintenance periods.
- f. Describe how you will ensure that there is 99.9% uptime Production availability, with unplanned downtime equal to or less than eight (8) hours forty-five (45) minutes and thirty-six (36) seconds annually. Unplanned downtime will be defined in an approved Service Level Agreement (SLA) as indicated in this RFP and resulting Contract.
- i. Indicate whether and describe the Solution supports offline access and data entry if the Internet connection is not available, and how this access can be provided.
- g. Describe how you will maintain the Solution and database backups and perform automated nightly encrypted backups of all the Solution data files with full and incremental methodology.
- h. Describe how you assure a recovery point objective (RPO) of 24 hours and a recovery time objective (RTO) of 72 hours (i.e., maximum down time).
- i. Describe how you will perform disaster recovery testing and the frequency of this testing.
- j. Describe how you will provide, at the request of the Agency, and at no additional cost, a full backup of the Solution data. The data must be accompanied by the following documentation:

- i. Data dictionaries for all tables/databases; and
 - ii. Related reference files and coding guides.
- k. Clearly delineate and maintain the Development, Test, and Production technical hosting environments and a physical separation of hardware, where necessary for security and Change purposes.

3. State Hosting

- a. Describe the development, test, training, production, disaster recovery, and any separate reporting technical hosting environments the State will need to establish and operate to host the Solution.
- b. Describe the schedule required to stand up each technical hosting environment.
- c. Describe how the Vendor will assist the State to troubleshoot, review, maintain and upgrade all technical environments (servers, operating systems, utility software application software, and SAN storage) as needed to ensure continual compliance/conformance (as applicable) with federal, State, and DHHS architectural, privacy, and security policies and standards.
- d. Indicate whether the Solution supports offline access and data entry if the WAN connection is not available.
- e. Describe how you will support the State in performing disaster recovery tasks, including DR testing.

4. Metrics and Performance

- a. Describe how the proposed Solution ensures adequate space on servers, bandwidth, and response time in the Solution to allow for a minimum 690 concurrent users accessing, entering, and reporting information with a capacity to handle up to 1380 with minimal performance degradation.
- b. Describe how the Solution provides capability for transaction response time to be consistent for all users directly interacting with the production environment, based on a common application access for network access point, processed and returned to the network access point:
 - i. Ninety (90) percent of responses to occur in two (2) seconds or less.
 - ii. Ninety-five (95) percent of responses: to occur in three (3) seconds or less.
 - iii. Ninety-seven (97) percent of responses to occur in four (4) seconds or less.
 - iv. Ninety-nine (99) percent of responses to occur in five (5) seconds or less.
- c. Describe your proposed Solution's established performance metrics, and whether it conforms to the response times listed above in b. of this specification. If a separate reporting environment is included in your proposal, please describe the response times for the environment.

5. Vendor Service Level Agreement (SLA)

The Vendor will submit with its RFP response a draft SLA that defines formally the levels of service the Vendor will provide for the Solution during the Project and during O&M and addresses the Agency's service level expectations as listed below. Refer to *Attachment J, Minimum Content for Project and O&M Deliverables* for more information about the expectations of the SLAs contents.

The Agency's service level expectations for the Solution, its availability, and Vendor services are as follows:

- a. Provide 99.9%, 24x7x365 system availability for all calendar days except for any system maintenance windows approved by the Agency.
- b. Provide timely Solution upgrades for fixes and changes in the form of software releases and critical error fixes. Please discuss your support structure including, but not limited to, help desk, problem tracking, maintenance windows and hours of operation.
- c. Provide periodic Solution updates that are provided to all customers at no additional cost to the Office.
- d. Details the process for requesting Changes, tracking the accumulation of Change Request Hours, estimating work hours required for completion, and completing Changes requested by the Agency.
- e. Provide on-going account management and status reporting. If not specified in the SLA included in your offer, describe in your proposal the level of account management provided and any specific services included.
- f. Provide capability for response time to be consistent for all users directly interacting with the Production hosting environment, based on a common Web Portal access for network access point and processed and returned to the network access point according to the response times outlined above in Section 3.5.6.4.
- g. Provide the response, diagnostic and resolution timeframes for problem log entries for the service request categories listed in Section 3.5.6.
- h. Discuss your support for testing performance of the Solution.
- i. Explain the types of reporting that you provide regarding your Solution, including frequency and format (e.g., performance per the SLA, change management, performance/capacity management). Address the types of reporting specified in Section 3.5.2.2.

The draft SLA will be finalized by the Agency prior to Contract award.

During the term of the Contract, Vendor will review and update the SLA each time the SLA is impacted by a request from the Agency to revise service level commitments. During O&M, the SLA will also be subject to periodic review by the Agency's Contract Administrator.

6. Help Desk Support

- a. Describe the help desk support you provide and indicate whether the support is available Monday through Friday 7:00 a.m. – 6:00 p.m. ET. Help desk support activity is considered resolution of the following:
 - i. Category 1, 2, or 3 problems;
 - ii. Persistent product instability;
 - iii. Application of advanced tools for intensive research and development to produce a new release to fix the issue reported;
 - iv. Auditing ability unavailable; and
 - v. Escalated application errors.
- b. Describe any extended hours of help desk support available for emergency response.
- c. Describe additional methods users or the Agency can use to request support (e.g., Internet mechanisms, e-mail, FAX, phone (voicemail)) and response times proposed.

7. Acquisition, Licensing, and Product Overview

- a. Describe all licensing options and licenses terms for your software, including Third-Party software if used as part of your Solution. **The Third-Party Software License Agreements are to be included in the Vendor's offer.**
- b. Explain how your company gathers change feedback from customers and involves them in the prioritization of future releases. Describe how your company measures its ability to satisfy customers' needs.
- c. Discuss how many customers are using the current release of the software. Provide a summary of customer size, industry segment, countries operating in, and applications implemented. Also, indicate for the above, details on transaction volumes, time taken for implementation, the average duration a customer has used the product.
- d. Describe your schedule for new releases, including the next scheduled release for your proposed Solution, detailing how often you provide upgrades, patches or bug fixes to your product; how the customer is notified; and once a new release is made public, how long the previous release is supported.
- e. Describe your procedure for the distribution of upgrades/new releases, modifications, Changes and corresponding documentation.
- f. Discuss the largest implementation you have currently installed (include the number of users, locations and the amount of content stored).
- g. If applicable, provide the name and address of your recommended implementation partner who would support implementation of your products, and the role it would play in the implementation.
- h. Explain whether you have a customer advisory board or user group. If yes, include a list of the present members and explain how often (per year) this organization meets and average meeting duration.

4.0 COST OF VENDOR'S OFFER

4.1 OFFER COSTS

The Vendor must list, itemize, and describe any applicable offer costs which may include the following:

- a) Software License fees or costs to accommodate user base identified.
- b) Additional modules required or proposed addressing specifications, if any.
- c) Third-party software, if any, required for the operation of the Solution.
- d) Installation/configuration/integration/transition costs.
- e) Customization required or proposed addressing specifications: The costs for customization shall be detailed on an attachment by item and cost for each customization to the Vendor product
- f) Conversion and migration of legacy data.
- g) Deliverables in accordance with Section 3.5.2 Table 1: Project Execution and/or O&M Deliverables and Responsibilities, and *Attachment J: Minimum Content for Project and O&M Deliverables*, including updates and revisions.
- h) Training and training materials.
- i) Annual maintenance and Vendor hosting costs per contract year, if not included in Software License Costs.
- j) Customer Support to include Help Desk and Technical Support costs per contract year, if not included in annual maintenance costs or Software License Costs.
- k) Escrow costs (If COTS products are included in the Solution).
- l) Cost of Change Hours per year.
- m) Other costs shall be listed separately by type of service/cost as an attachment. List separately any changes associated with State hosting. Travel and lodging expenses, if any, must be thoroughly described, and are limited by the State's Terms and Conditions.
- n) Hourly rate for additional professional services such as consulting and other value-added services provided the Vendor upon request by the Division.

4.2 PAYMENT SCHEDULE

The Vendor shall propose its itemized payment schedule based on the content of its offer. All payments must be based upon acceptance of one or more Deliverables.

5.0 EVALUATION

5.1 SOURCE SELECTION

A trade-off/ranking method of source selection will be utilized in this procurement to allow the State to award this RFP to the Vendor providing the Best Value and recognizing that Best Value may result in award other than the lowest price or highest technically qualified offer. By using this method, the overall ranking may be adjusted up or down when considered with or traded-off against other non-price factors.

- a) Evaluation Process Explanation. State Agency employees will review all offers. All offers will be initially classified as being responsive or non-responsive. If an offer is found non-responsive, it will not be considered further. All responsive offers will be evaluated based on stated evaluation criteria. Any references in an answer to another location in the RFP materials or Offer shall have specific page numbers and sections stated in the reference.
- b) To be eligible for consideration, Vendor's offer must substantially conform to the intent of all specifications. Compliance with the intent of all specifications will be determined by the State. Offers that do not meet the full intent of all specifications listed in this RFP may be deemed deficient. Further, a serious deficiency in the offer to any one (1) factor may be grounds for rejection regardless of overall score.
- c) The evaluation committee may request clarifications, an interview with or presentation from any or all Vendors as allowed by 9 NCAC 06B.0307. However, the State may refuse to accept, in full or partially, the response to a clarification request given by any Vendor. Vendors are cautioned that the evaluators are not required to request clarifications; therefore, all offers should be complete and reflect the most favorable terms. Vendors should be prepared to send qualified personnel to Raleigh, North Carolina, to discuss technical and contractual aspects of the offer.
- d) Vendors are advised that the State is not obligated to ask for or accept after the closing date for receipt of offer, data that is essential for a complete and thorough evaluation of the offer.

5.2 EVALUATION CRITERIA

Evaluation shall include best value, as the term is defined in N.C.G.S. § 143-135.9(a)(1), compliance with information technology project management policies as defined by N.C.G.S. §143B-1340, compliance with information technology security standards and policies, substantial conformity with the specifications, and other conditions set forth in the solicitation. The following Evaluation Criteria are listed in Order of Importance.

- 1. How well the Vendor's offer conforms with the specifications
- 2. How each Vendor's offer compares with other Vendors' offers
- 3. Total Cost of Ownership
- 4. Illustration(s) and/or explanations of adherence to Section 3.3 Enterprise Specifications
- 5. Vendor Schedule / Timeline for completing work
- 6. Strength of references relevant or material to technology area(s) or Specifications
- 7. Vendor Past Performance - The Vendor may be disqualified from any evaluation or award if the Vendor or any key personnel proposed, has previously failed to perform satisfactorily during the performance of any contract with the State, or violated rules or statutes applicable to public bidding in the State.
- 8. Risks associated with Vendor's offer.

5.3 BEST AND FINAL OFFERS (BAFO)

The State may establish a competitive range based upon evaluations of offers, and request BAFOs from the Vendor(s) within this range, e.g., "Finalist Vendor(s)". If negotiations or subsequent offers are solicited, the Vendor(s) shall provide BAFO(s) in response. Failure to deliver a BAFO when requested shall disqualify the non-responsive Vendor from further consideration. The State will

evaluate BAFO(s), oral presentations, and product demonstrations as part of the Vendors' respective offers to determine the final rankings.

5.4 POSSESSION AND REVIEW

During the evaluation period and prior to award, possession of the bids and accompanying information is limited to personnel of the issuing agency, and to the committee responsible for participating in the evaluation. Vendors who attempt to gain this privileged information, or to influence the evaluation process (i.e., assist in evaluation) will be in violation of purchasing rules and their offer will not be further evaluated or considered.

After award of contract the complete bid file will be available to any interested persons with the exception of trade secrets, test information or similar proprietary information as provided by statute and rule. Any proprietary or confidential information which conforms to exclusions from public records as provided by N.C.G.S. §132-1.2 must be clearly marked as such in the offer when submitted.

6.0 VENDOR INFORMATION AND INSTRUCTIONS

6.1 GENERAL CONDITIONS OF OFFER

6.1.1 VENDOR RESPONSIBILITY

It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and comply with all specifications, requirements and the State's intent as specified herein. If a Vendor discovers an inconsistency, error or omission in this solicitation, the Vendor should request a clarification from the State's contact person.

The Vendor will be responsible for investigating and recommending the most effective and efficient solution. Consideration shall be given to the stability of the proposed configuration and the future direction of technology, confirming to the best of their ability that the recommended approach is not short lived. Several approaches may exist for hardware configurations, other products and any software. The Vendor must provide a justification for their proposed hardware, product and software solution(s) along with costs thereof. Vendors are encouraged to present explanations of benefits and merits of their proposed solutions together with any accompanying Services, maintenance, warranties, value added Services or other criteria identified herein.

6.1.2 RIGHTS RESERVED

While the State has every intention to award a contract as a result of this RFP, issuance of the RFP in no way constitutes a commitment by the State of North Carolina, or the procuring Agency, to award a contract. Upon determining that any of the following would be in its best interests, the State may:

- a) waive any formality;
- b) amend the solicitation;
- c) cancel or terminate this RFP;
- d) reject any or all offers received in response to this RFP;
- e) waive any undesirable, inconsequential, or inconsistent provisions of this RFP;
- f) if the response to this solicitation demonstrates a lack of competition, negotiate directly with one or more Vendors;

- g) not award, or if awarded, terminate any contract if the State determines adequate State funds are not available; or
- h) if all offers are found non-responsive, determine whether Waiver of Competition criteria may be satisfied, and if so, negotiate with one or more known sources of supply.

6.1.3 SOLICITATION AMENDMENTS OR REVISIONS

Any and all amendments or revisions to this document shall be made by written addendum from the Agency Procurement Office. If either a unit price or extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded.

6.1.4 ORAL EXPLANATIONS

The State will not be bound by oral explanations or instructions given at any time during the bidding process or after award. Vendor contact regarding this RFP with anyone other than the State's contact person may be grounds for rejection of said Vendor's offer. Agency contact regarding this RFP with any Vendor may be grounds for cancellation of this RFP.

6.1.5 E-PROCUREMENT

This is not an E-Procurement solicitation. Attachment B, subparagraphs #38(a) and 38(b) of the attached North Carolina Department of Information Technology Terms and Conditions Services for General Purchases do not apply to this solicitation.

6.1.6 INTERACTIVE PURCHASING SYSTEM (IPS)

The State has implemented links to the Interactive Purchasing System (IPS) that allow the public to retrieve offer award information electronically from our Internet website: <https://www.ips.state.nc.us/ips/>. Click on the IPS BIDS icon, click on Search for BID, enter the Agency prefix-offer number 30-23189-DCDEE, and then search. This information may not be available for several weeks depending upon the complexity of the acquisition and the length of time to complete the evaluation process.

6.1.7 PROTEST PROCEDURES

Protests of awards exceeding \$25,000 in value must be submitted to the issuing Agency at the address given on the first page of this document. Protests must be received in the purchasing Agency's office within fifteen (15) calendar days from the date of this RFP award and provide specific reasons and any supporting documentation for the protest. **All protests are governed by Title 9, Department of Information Technology (formerly Agency of Information Technology Services), Subchapter 06B Sections .1101 - .1121.**

6.2 GENERAL INSTRUCTIONS FOR VENDOR

6.2.1 SITE VISIT OR PRE-OFFER CONFERENCE (RESERVED)

6.2.2 QUESTIONS CONCERNING THE RFP

All inquiries regarding the solicitation specifications or requirements are to be addressed to the contact person listed on Page One of this solicitation via the Ariba Sourcing Tool's message board. Vendor contact regarding this Solicitation with anyone other than the contact person listed on Page One of this Solicitation may be grounds for rejection of said Vendor's offer.

Written questions concerning this Solicitation will be received until **July 10, 2023, at 12:00 pm Eastern Time**.

They must be submitted to the contact person listed on Page One of this Solicitation via Procurement.Questions@dhhs.nc.gov. Please enter "Questions Solicitation 23189" as the subject for the message. Questions should be submitted in the following format:

REFERENCE	VENDOR QUESTION
RFP Section, Page Number	

6.2.3 ADDENDUM TO RFP

If a pre-offer conference is held or written questions are received prior to the submission date, an addendum comprising questions submitted and responses to such questions, or any additional terms deemed necessary by the State shall become an Addendum to this RFP and provided via the State's Ariba Sourcing Tool. Vendors' questions posed orally at any pre-offer conference must be reduced to writing by the Vendor and provided to the Purchasing Officer as directed by said Officer. Oral answers are not binding on the State.

Critical updated information may be included in this Addenda. It is important that all Vendors bidding on this RFP periodically check the State's Ariba Sourcing Tool for any and all Addenda that may be issued prior to the offer opening date.

6.2.4 COSTS RELATED TO OFFER SUBMISSION

Costs for developing and delivering responses to this RFP and any subsequent presentations of the offer as requested by the State are entirely the responsibility of the Vendor. The State is not liable for any expense incurred by the Vendors in the preparation and presentation of their offers.

All materials submitted in response to this RFP become the property of the State and are to be appended to any formal documentation, which would further define or expand any contractual relationship between the State and the Vendor resulting from this RFP process.

6.2.5 VENDOR ERRATA AND EXCEPTIONS

Any errata or exceptions to the State's requirements and specifications may be presented on a separate page labeled "Exceptions to Requirements and Specifications". Include references to the corresponding requirements and specifications of the Solicitation. Any deviations shall be explained in detail. **The Vendor shall not construe this paragraph as inviting deviation or implying that any deviation will be acceptable. Offers of alternative or non-equivalent goods or services may be rejected if not found substantially conforming; and if offered, must be supported by independent documentary verification that the offer substantially conforms to the specified goods or services specification.** If a vendor materially deviates from RFP requirements or specifications, its offer may be determined to be non-responsive by the State.

Offers conditioned upon acceptance of Vendor Errata or Exceptions may be determined to be non-responsive by the State.

6.2.6 ALTERNATE OFFERS

The Vendor may submit alternate offers for various levels of service(s) or products meeting specifications. Alternate offers must specifically identify the RFP specifications and advantage(s)

addressed by the alternate offer. Any alternate offers must be clearly marked with the legend as shown herein. Each offer must be for a specific set of Services or products and offer at specific pricing. If a Vendor chooses to respond with various service or product offerings, each must be an offer with a different price and a separate RFP offer. Vendors may also provide multiple offers for software or systems coupled with support and maintenance options, provided, however, all offers must satisfy the specifications.

Alternate offers must be submitted in a separate document and clearly marked "Alternate Offer for 'name of Vendor'" and numbered sequentially with the first offer if separate offers are submitted.

6.2.7 MODIFICATIONS TO OFFER

An offer may not be unilaterally modified by the Vendor.

6.2.8 BASIS FOR REJECTION

Pursuant to 9 NCAC 06B.0401, the State reserves the right to reject any and all offers, in whole or in part; by deeming the offer unsatisfactory as to quality or quantity, delivery, price or service offered; non-compliance with the specifications or intent of this solicitation; lack of competitiveness; error(s) in specifications or indications that revision would be advantageous to the State; cancellation or other changes in the intended project, or other determination that the proposed specification is no longer needed; limitation or lack of available funds; circumstances that prevent determination of the best offer; or any other determination that rejection would be in the best interest of the State.

6.2.9 NON-RESPONSIVE OFFERS

Vendor offers will be deemed non-responsive by the State and will be rejected without further consideration or evaluation if statements such as the following are included:

- a) "This offer does not constitute a binding offer",
- b) "This offer will be valid only if this offer is selected as a finalist or in the competitive range",
- c) "The Vendor does not commit or bind itself to any terms and conditions by this submission",
- d) "This document and all associated documents are non-binding and shall be used for discussion purposes only",
- e) "This offer will not be binding on either party until incorporated in a definitive agreement signed by authorized representatives of both parties", or
- f) A statement of similar intent

6.2.10 VENDOR REGISTRATION WITH THE SECRETARY OF STATE

Vendors do not have to be registered with the NC Secretary of State to submit an offer; however, in order to receive an award/contract with the State, they must be registered. Registration can be completed at the following website: https://www.sosnc.gov/Guides/launching_a_business

6.2.11 VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM

The NC electronic Vendor Portal (eVP) allows Vendors to electronically register with the State to receive electronic notification of current procurement opportunities for goods and Services available on the Interactive Purchasing System at the following website: <https://www.ips.state.nc.us/ips/>.

This RFP is available electronically on the Interactive Purchasing System at <https://www.ips.state.nc.us/ips/>.

6.2.12 VENDOR POINTS OF CONTACT

CONTACTS AFTER CONTRACT AWARD:

Below are the Vendor Points of Contact to be used after award of the contract.

VENDOR CONTRACTUAL POINT OF CONTACT	VENDOR TECHNICAL POINT OF CONTACT
[NAME OF VENDOR] [STREET ADDRESS] [CITY, STATE, ZIP] Attn: Assigned Contract Manager	[NAME OF VENDOR] [STREET ADDRESS] [CITY, STATE, ZIP] Attn: Assigned Technical Lead

6.3 INSTRUCTIONS FOR OFFER SUBMISSION

6.3.1 GENERAL INSTRUCTIONS FOR OFFER

Vendors are strongly encouraged to adhere to the following general instructions in order to bring clarity and order to the offer and subsequent evaluation process:

- Organize the offer in the exact order in which the specifications are presented in the RFP. The Execution page of this RFP must be placed at the front of the Proposal. Each page should be numbered. The offer should contain a table of contents, which cross-references the RFP specification and the specific page of the response in the Vendor's offer.
- Provide complete and comprehensive responses with a corresponding emphasis on being concise and clear. Elaborate offers in the form of brochures or other presentations beyond that necessary to present a complete and effective offer are not desired.
- Clearly state your understanding of the problem(s) presented by this RFP including your proposed solution's ability to meet the specifications, including capabilities, features, and limitations, as described herein, and provide a cost offer.
- Supply all relevant and material information relating to the Vendor's organization, personnel, and experience that substantiates its qualifications and capabilities to perform the Services and/or provide the goods described in this RFP. If relevant and material information is not provided, the offer may be rejected from consideration and evaluation.
- Furnish all information requested; and if response spaces are provided in this document, the Vendor shall furnish said information in the spaces provided. Further, if required elsewhere in this RFP, each Vendor must submit with its offer sketches, descriptive literature and/or complete specifications covering the products offered. References to literature submitted with a previous offer will not satisfy this provision. Proposals that do not comply with these instructions may be rejected.
- Any offer that does not adhere to these instructions may be deemed non-responsive and rejected on that basis.

- g) **Only information that is received in response to this RFP will be evaluated.** Reference to information previously submitted or Internet Website Addresses (URLs) will not suffice as a response to this solicitation.

6.3.2 OFFER ORGANIZATION

Within each section of its offer, Vendor should address the items in the order in which they appear in this RFP. Forms, or attachments or exhibits, if any provided in the RFP, must be completed and included in the appropriate section of the offer. All discussion of offered costs, rates, or expenses must be presented in Section 4.0. Cost of Vendor's Offer.

The offer should be organized and indexed in the following format and should contain, at a minimum, all listed items below.

- a) Signed Execution Page
- b) Table of Contents
- c) Description of Vendor Submitting Offer Form (Attachment D)
- d) Vendor Response to Specifications and Requirements
- e) Security Vendor Readiness Assessment Report (VRAR)
- f) Architecture Diagrams
- g) Cost Form for Vendor's Offer (Attachment E)
- h) Schedule of Offered Solution
- i) Signed Vendor Certification Form (Attachment F)
- j) Location of Workers Utilized by Vendor Form (Attachment G)
- k) References (Attachment H)
- l) Financial Statements (Attachment I)
- m) Errata and Exceptions, if any
- n) Vendor's License and Maintenance Agreements, if any, and Third-Party License Agreements, if any.
- o) Supporting material such as technical system documentation, training examples, etc.
- p) Vendor may attach other supporting materials that it feels may improve the quality of its response. These materials should be included as items in a separate appendix.
- q) All pages of this solicitation document (including Attachments A, B, and C).
- r) Draft Project Management Plan, draft Project Schedule, draft Staffing Plan, draft Service Level Agreement, and draft Vendor Operations and Maintenance Phase Staffing Plan. Please refer to Attachment J: Minimum Content for Project and O&M Deliverables.

6.3.3 OFFER SUBMITTAL

IMPORTANT NOTE: Vendor shall bear the risk for late submission due to unintended or unanticipated delay—whether submitted electronically, delivered by hand, U.S. Postal Service, courier, or other delivery service. **Vendor must include all the pages of this solicitation in their**

response. It is the Vendor's sole responsibility to ensure its offer has been delivered to this Agency by the specified time and date of opening. Any proposal delivered after the proposal deadline will be rejected.

Sealed offers, subject to the conditions made a part hereof, will be received until **2:00pm Eastern Time** on the day of opening and then opened, for furnishing and delivering the commodity as described herein. **Offers must be submitted via the Ariba Sourcing Module** with the Execution page signed and dated by an official authorized to bind the Vendor's firm. **Failure to return a signed offer shall result in disqualification.**

Attempts to submit a proposal via facsimile (FAX) machine, telephone, or email in response to this Bid shall NOT be accepted.

- a) All File names should start with the Vendor name first, in order to easily determine all the files to be included as part of the vendor's response. For example, files should be named as follows: Vendor Name-your file name.
- b) File contents **SHALL NOT** be password protected, the file formats must be in .PDF, .JPEG, .DOC or .XLS format, and shall be capable of being copied to other sources. Inability by the State to open the Vendor's files may result in the Vendor's offer(s) being rejected.
- c) **If the vendor's proposal contains any confidential information (as defined in Attachment B, Section 2, Paragraph #17), then the vendor must provide one (1) signed, original electronic offer and one (1) redacted electronic copy.**

7.0 OTHER REQUIREMENTS AND SPECIAL TERMS

7.1 VENDOR UTILIZATION OF WORKERS OUTSIDE OF U.S.

In accordance with N.C.G.S. §143B-1361(b), the Vendor must detail the manner in which it intends to utilize resources or workers in the RFP response. The State of North Carolina will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award for any such Vendor's offer.

Complete ATTACHMENT G - Location of Workers Utilized by Vendor and submit with your offer.

7.2 FINANCIAL STATEMENTS

The Vendor shall provide evidence of financial stability by returning with its offer 1) completed Financial Review Form (Attachment I), and 2) copies of Financial Statements as further described hereinbelow. As used herein, Financial Statements shall exclude tax returns and compiled statements.

- a) For a publicly traded company, Financial Statements for the past three (3) fiscal years, including at a minimum, income statements, balance sheets, and statement of changes in financial position or cash flows. If three (3) years of financial statements are not available, this information shall be provided to the fullest extent possible, but not less than one year. If less than 3 years, the Vendor must explain the reason why they are not available.
- b) **For a privately held company, when certified audited financial statements are not prepared: a written statement from the company's certified public accountant stating the financial condition, debt-to-asset ratio for the past three (3) years and any pending actions that may affect the company's financial condition.**

- c) The State may, in its sole discretion, accept evidence of financial stability other than Financial Statements for the purpose of evaluating Vendors' responses to this RFP. The State reserves the right to determine whether the substitute information meets the requirements for Financial Information sufficiently to allow the State to evaluate the sufficiency of financial resources and the ability of the business to sustain performance of this RFP award. Scope Statements issued may require the submission of Financial Statements and specify the number of years to be provided, the information to be provided, and the most recent date required.

7.3 FINANCIAL RESOURCES ASSESSMENT, QUALITY ASSURANCE, PERFORMANCE AND RELIABILITY

- a) Contract Performance Security. The State reserves the right to require performance guaranties pursuant to N.C.G.S. §143B-1340(f) and 09 NCAC 06B.1207 from the Vendor without expense to the State.
- b) Project Assurance, Performance and Reliability Evaluation – Pursuant to N.C.G.S. §143B-1340, the State CIO may require quality assurance reviews of Projects as necessary.

7.4 VENDOR'S LICENSE OR SUPPORT AGREEMENTS

Vendor should present its license or support agreements for review and evaluation. Terms offered for licensing and support of Vendors' proprietary assets will be considered.

The terms and conditions of the Vendor's standard services, license, maintenance or other agreement(s) applicable to Services, Software and other Products acquired under this RFP may apply to the extent such terms and conditions do not materially change the terms and conditions of this RFP. In the event of any conflict between the terms and conditions of this RFP and the Vendor's standard agreement(s), the terms and conditions of this RFP relating to audit and records, jurisdiction, choice of law, the State's electronic procurement application of law or administrative rules, the remedy for intellectual property infringement and the exclusive remedies and limitation of liability in the DIT Terms and Conditions herein shall apply in all cases and supersede any provisions contained in the Vendor's relevant standard agreement or any other agreement. The State shall not be obligated under any standard license and/or maintenance or other Vendor agreement(s) to indemnify or hold harmless the Vendor, its licensors, successors or assigns, nor arbitrate any dispute, nor pay late fees, penalties, legal fees or other similar costs.

7.5 RESELLERS (RESERVE)

7.6 DISCLOSURE OF LITIGATION

The Vendor's failure to fully and timely comply with the terms of this section, including providing reasonable assurances satisfactory to the State, may constitute a material breach of the Agreement.

- a) The Vendor shall notify the State in its offer, if it, or any of its subcontractors, or their officers, directors, or key personnel who may provide Services under any contract awarded pursuant to this solicitation, have ever been convicted of a felony, or any crime involving moral turpitude, including, but not limited to fraud, misappropriation, or deception. The Vendor shall promptly notify the State of any criminal litigation, investigations or proceeding involving the Vendor or any subcontractor, or any of the foregoing entities' then current officers or directors during the term of the Agreement or any Scope Statement awarded to the Vendor.

- b) The Vendor shall notify the State in its offer, and promptly thereafter as otherwise applicable, of any civil litigation, arbitration, proceeding, or judgments against it or its subcontractors during the three (3) years preceding its offer, or which may occur during the term of any awarded to the Vendor pursuant to this solicitation, that involve (1) Services or related goods similar to those provided pursuant to any contract and that involve a claim that may affect the viability or financial stability of the Vendor, or (2) a claim or written allegation of fraud by the Vendor or any subcontractor hereunder, arising out of their business activities, or (3) a claim or written allegation that the Vendor or any subcontractor hereunder violated any federal, state or local statute, regulation or ordinance. Multiple lawsuits and or judgments against the Vendor or subcontractor shall be disclosed to the State to the extent they affect the financial solvency and integrity of the Vendor or subcontractor.
- c) All notices under subsection A and B herein shall be provided in writing to the State within thirty (30) calendar days after the Vendor learns about any such criminal or civil matters; unless such matters are governed by the DIT Terms and Conditions annexed to the solicitation. Details of settlements which are prevented from disclosure by the terms of the settlement shall be annotated as such. Vendor may rely on good faith certifications of its subcontractors addressing the foregoing, which certifications shall be available for inspection at the option of the State.

7.7 CRIMINAL CONVICTION

In the event the Vendor, an officer of the Vendor, or an owner of a 25% or greater share of the Vendor, is convicted of a criminal offense incident to the application for or performance of a State, public or private Contract or subcontract; or convicted of a criminal offense including but not limited to any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of North Carolina employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State, reflects upon the Vendor's business integrity and such vendor shall be prohibited from entering into a contract for goods or Services with any department, institution or agency of the State.

7.8 SECURITY AND BACKGROUND CHECKS

The Agency reserves the right to conduct a security background check or otherwise approve any employee or agent provided by the Vendor, and to refuse access to or require replacement of any such personnel for cause, including, but not limited to, technical or training qualifications, quality of work or change in security status or non-compliance with the Agency's security or other similar requirements.

All State and Vendor personnel that have access to data restricted by the State Security Manual and Policies must have a security background check performed. The Vendors are responsible for performing all background checks of their workforce and subcontractors. The State reserves the right to check for non-compliance.

7.9 ASSURANCES

In the event that criminal or civil investigation, litigation, arbitration or other proceedings disclosed to the State pursuant to this Section, or of which the State otherwise becomes aware, during the term of the Agreement, causes the State to be reasonably concerned about:

- a) the ability of the Vendor or its subcontractor to continue to perform the Agreement in accordance with its terms and conditions, or

- b) whether the Vendor or its subcontractor in performing Services is engaged in conduct which is similar in nature to conduct alleged in such investigation, litigation, arbitration or other proceedings, which conduct would constitute a breach of the Agreement or violation of law, regulation or public policy, then the Vendor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that: the Vendor or its subcontractors hereunder will be able to continue to perform the Agreement in accordance with its terms and conditions, and the Vendor or its subcontractors will not engage in conduct in performing Services under the Agreement which is similar in nature to the conduct alleged in any such litigation, arbitration or other proceedings.

7.10 CONFIDENTIALITY OF OFFERS

All offers and any other RFP responses shall be made public as required by the NC Public Records Act and GS 143B-1350. Vendors may mark portions of offers as confidential or proprietary, after determining that such information is excepted from the NC Public Records Act, provided that such marking is clear and unambiguous and preferably at the top and bottom of each page containing confidential information. Standard restrictive legends appearing on every page of an offer are not sufficient and shall not be binding upon the State.

Certain State information is not public under the NC Public Records Act and other laws. Any such information which the State designates as confidential and makes available to the Vendor in order to respond to the RFP or carry out the Agreement, or which becomes available to the Vendor in carrying out the Agreement, shall be protected by the Vendor from unauthorized use and disclosure. The Vendor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Vendor without restriction, (3) information independently developed or acquired by the Vendor or its personnel without reliance in any way on otherwise protected information of the State. Notwithstanding the foregoing restrictions, the Vendor and its personnel may use and disclose any information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity, if possible, to obtain reasonable protection for such information in connection with such disclosure.

7.11 PROJECT MANAGEMENT

All project management and coordination on behalf of the Agency shall be through a single point of contact designated as the Agency Project Manager. The Vendor shall designate a Vendor Project Manager who will provide a single point of contact for management and coordination of the Vendor's work. All work performed pursuant to the Agreement shall be coordinated between the Agency Project Manager and the Vendor Project Manager.

7.12 MEETINGS

The Vendor is required to meet with Agency personnel, or designated representatives, to resolve technical or contractual problems that may occur during the term of the Agreement. Meetings will occur as problems arise and will be coordinated by the Agency. The Vendor will be given reasonable and sufficient notice of meeting dates, times, and locations. Face-to-face meetings are desired unless noted below. However, at the Vendor's option and expense, a conference call meeting may be substituted. Failure to participate in two (2) consecutive problem resolution meetings, two (2) consecutive missed or rescheduled meetings, or failure to make a good faith effort to resolve problems, may result in termination of the Contract in accordance with Attachment B: Section 1, subsection 19. Default.

The appropriate Vendor Staff will be required to participate in the following project meetings. The DHHS Project Manager will provide 24-hour meeting notice for project meetings. Project meetings specified as “Onsite” require attendance in person in Raleigh, North Carolina or a designated Facility as needed unless public health measures require virtual meetings (e.g., NC DHHS’s COVID-19 pandemic plan response is still active). Project meetings specified as “Offsite” will be conducted via teleconference/Microsoft Teams, or Cisco WebEx.

- a) Project Kick-Off (Onsite)
- b) System Requirements/User Story/Use Case/Backlog Development, Gap Analysis and Detailed Design (Onsite)
- c) Configured State Technical Environments (if the Division selects a State-hosting option) (Onsite or Offsite as warranted by the context and scope of the individual meetings)
- d) Pre-UAT Training (Onsite)
- e) UAT Support (Onsite or Offsite as warranted by the context and scope of the individual meetings)
- f) Role-Based Training for testers, end users, State Administrators, State trainers, and IT support personnel training (Onsite/Offsite, including on demand training such as e-Learning)
- g) Readiness for Deployment (Go-Live) (Onsite)
- h) Deployment (Onsite)
- i) Project Closeout (Offsite)
- j) Ad Hoc Meetings (Onsite/Offsite)
- k) Change Management Meetings (Onsite/Offsite)
- l) Project Review Meetings (Onsite/Offsite)
- m) Executive Steering Committee (Onsite/Offsite)
- n) Project Status Meetings (Onsite/Offsite)

The Project Status Meetings will follow an agenda mutually developed by Vendor and the DHHS Project Manager and will contain the minimum content requirements as described in *Attachment J: Minimum Content for Project and O&M Deliverables*. The Vendor Project Manager will work with the DHHS Project Manager to plan, strategize, and prepare required materials for all the meetings.

When required to be onsite, the Vendor will provide Vendor personnel with any required personal computer equipment and software and will reimburse the Agency for all long-distance telephone calls charged to the Agency.

7.13 RECYCLING AND SOURCE REDUCTION

It is the policy of this State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable, and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of goods purchased. However, no sacrifice in quality of packaging will be acceptable. The Vendor remains responsible for providing packaging that will protect the commodity and contain it for its intended use. Vendors are strongly urged to bring to the attention of the purchasers at the NCDIT

Statewide IT Procurement Agency those products or packaging they offer which have recycled content and that are recyclable.

7.14 INVOICES

- a) The State Contractual Point of Contact (i.e., Division Contract Administrator) will be responsible for receiving and tracking statements of completed Deliverables and invoices, and for verifying information and costs submitted in invoices.
- b) Project Deliverables must be grouped in accordance with Solution development and delivery and must be completed and accepted by the Division before the Vendor is eligible to invoice for payment.
- c) Invoices must bear the correct Contract number and purchase order number to ensure prompt payment. Vendor's failure to include the correct purchase order number may cause delay in payment.
- d) Invoices must include an accurate description of the work, identifying the specific Sprint Cycles/Modules/Milestones and Deliverables for which the invoice is being submitted, the invoice date, the period of time covered, the amount of fees due to Vendor and the original signature of the Vendor's Project Manager.
- e) Invoices for O&M will be submitted monthly by the Vendor for the O&M services provided in the prior month and must include penalty adjustments for any Vendor non-performance per the terms of the Service Level Agreement or the penalties listed in Section 3.5.6 Categories of Defects/issues identified during the Stabilization Period.

7.15 SPECIAL TERMS AND CONDITIONS (RESERVED)

ATTACHMENT A: DEFINITIONS

- 1) **24x7:** A statement of availability of systems, communications, and/or supporting resources every hour (24) of each day (7 days weekly) throughout every year for periods specified herein. Where reasonable downtime is accepted, it will be stated herein. Otherwise, 24x7 implies NO loss of availability of systems, communications, and/or supporting resources.
- 2) **ABCMS:** Automated Background Check Management System (ABCMS) which has been developed for use by licensed providers who are required to conduct criminal background checks.
- 3) **Ad-hoc Reports:** Ad hoc reporting is a business intelligence process used to quickly create reports on an as-needed basis. Ad hoc reports are generally created for one-time use to find the answer to a specific business question.
- 4) **Agency:** Division of Child Development and Early Education (DCDEE).
- 5) **Agency Contract Administrator:** The person authorized by the Division of Child Development and Early Education to make day-to-day contract decisions and oversee the contract.
- 6) **Agency Project Manager:** All project management and coordination on behalf of the Agency is through a single point of contact designated as the Agency Project Manager.
- 7) **Agile Software Development:** Refers to a group of software development methodologies based on iterative development, where requirements and solutions evolve through collaboration between self-organizing cross-functional teams.
- 8) **Annual Compliance:** Visit made to a facility within a twelve-month time period by a childcare consultant to monitor for compliance with all applicable childcare requirements.
- 9) **Annual Compliance with Rated License Assessment:** Visit made to monitor compliance with all minimum childcare requirements and applicable enhanced requirements for a Rated License Assessment. (Completed if an annual compliance visit has not been conducted within the last 6 months.)
- 10) **Audit log:** An audit log, also called an audit trail, is essentially a record of events and changes. IT devices across the network create logs based on events. Audit logs are records of these event logs, typically regarding a sequence of activities or a specific activity, they capture events by recording who performed an activity, what activity was performed, and how the system responded.
- 11) **BAFO:** Best and Final Offer.
- 12) **Business Associate Agreement (BAA):** A legally binding document guided by HIPAA rules for signing this agreement before sharing any Protected Health Information (PHI).
- 13) **CBC:** The North Carolina Child Care Law requires a criminal background check (CBC) be conducted and a determination of fitness be made on all persons who work or provide childcare in a licensed or regulated childcare facility.
- 14) **CCSA:** Child Care Service Association (CCSA) improves the quality of childcare in North Carolina for all children by helping families find childcare, offering informational events for families, professional development opportunities and programs for providers and comprehensive childcare research for policymakers.
- 15) **Change:** For the purposes of this RFP, the term Change means the process of modifying the Solution and/or a component of the Solution, whether by Customization or Configuration for the purpose of increasing or decreasing functionality and capability of the Solution or by correcting/resolving Defects or other issues affecting the operation of the Solution. The definition of

the term Change shall not be based on the time and/or size of the effort required to provide such services.

- 16) Change Hours:** Four hundred (400) hours provided by Vendor to the State during Contract Year 1 and two hundred (200) hours for each subsequent Contract Year of the awarded Contract, to be used by the State to obtain Changes to the Solution or Supplemental Support Services at no additional cost. Any of the Change Hours allocated, but unused, during the respective Contract Year, will be rolled over into following Contract Year.
- 17) Change Management:** The processes to be employed by the Division and Vendor to ensure that Changes are captured, planned, and implemented in a visible, controlled, and orderly fashion during the Project Execution and the O&M parts of the Contract. (See Section 7.14 for further information.)
- 18) Change Request (CR):** Changes to the Solution or scope of services will be requested, documented and controlled in forms and logs as outlined in the Change Management process(es).
- 19) Child Care Center:** An arrangement where, at any one time, there are three or more preschool-age children or nine or more school-age children receiving childcare. This does not include arrangements described in Item (18) of the Child Care Rule regarding Family Child Care Homes.
- 20) Child Care Facility:** Includes childcare centers and family childcare homes, and any other childcare arrangement not excluded by N.C.G.S. 110-86(2) that provides childcare.
- 21) Child Care Consultant:** DCDEE employs childcare consultants to ensure childcare regulations are being met. Childcare consultants conduct various visits to programs.
- 22) Child Care Provider:** "Childcare providers" are the following employees who have contact with the children in a childcare program: facility directors, childcare administrative staff, teachers, teachers' aides, substitute providers, uncompensated providers, cooks, maintenance personnel and drivers.
- 23) Child Maltreatment Registry:** The CMR is a list of individuals who have maltreated a child in childcare since the January 2016 Session Law 2015-123 took effect.
- 24) Clearing Houses:** Clearing houses provides educational reporting, verification, and research services to North American colleges and universities.
- 25) Client Services Data Warehouse (CSDW):** a data warehouse accessed by clients via query tools that stores transactional and summarized information from multiple source systems.
- 26) Configurable:** Capable of being configured; customizable; permitting rearrangement or adjustment.
- 27) Customization:** 1) Development of functionality within the Base Product requested by the State to address the specific needs of the State; or 2) Development of functionality outside the Base Product requested by the State to address the specific needs of the State. A Customization is not a Configuration. Customizations must be maintained by Vendor to ensure compatibility with all future Product Upgrades and releases of the Base Product. For the solution to be a considered COTS solution by the Division, the total amount of Customization must not exceed 10% of the base Solution.
- 28) Cybersecurity Incident (GS 143B-1320):** An occurrence that:
- a. Actually, or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information or an information system; or
 - b. Constitutes a violation or imminent threat of violation of law, security policies, privacy policies, security procedures, or acceptable use policies.

- 29) Defect:** A Defect is an error in coding or logic that causes a program to malfunction or to produce incorrect or unexpected results.
- 30) Defect and Release Management:** Defect and Release Management is the plan and process governing the identification and triage of a Defect to classify, assign, remediate and regression test, assemble and manage the quality of the software release that contains the Defect/s. Traceability entries document Defects found in the Solution, reporting, and recurrence.
- 31) Deliverables:** Deliverables, as used herein, shall comprise all Hardware, Vendor Services, professional Services, Software and provided modifications to any Software, and incidental materials, including any goods, Software or Services access license, data, reports and documentation provided or created during the performance or provision of Services hereunder. Deliverables include “Work Product” and means any expression of Licensor’s findings, analyses, conclusions, opinions, recommendations, ideas, techniques, know-how, designs, programs, enhancements, and other technical information, but not source and object code or software.
- 32) Early Childcare (EC) Workforce:** The EC workforce is made up of individuals working in a variety of settings who serve children prior to kindergarten including home and center-based childcare, private Pre-K, Head Start and Early Head Start and public Pre-K within those programs. Individuals may be program administrators, lead teachers, assistant teachers, or aides.
- 33) Environment Rating Scale:** A tool that is used by an assessor to measure how well caregivers respond to and provide care for children. The Environment Rating Scale (ERS) also assesses health and safety practices. The quality and quantity of play and learning activities are also assessed.
- 34) Executive Steering Committee (ESC):** The governance body responsible for providing direction and oversight to the project, The ESC provides a stabilizing influence with a visionary view. The committee ensures business objectives are met and the project remains under control.
- 35) Facility Administrators/Directors:** Facility administrators/directors supervise and lead staffs, design program plans, oversee daily activities, and prepare budgets. They are responsible for all aspects of their center's program, which may include before- and after-school care.
- 36) Facility Owner:** Facility Owner is the person or entity held legally responsible for the childcare business. An owner is defined as any person with a 5% or greater equity interest in a childcare facility.
- 37) Family Child Care Home (FCCH):** An arrangement located in a residence where, at any one time, more than two children, but less than nine children, receive childcare. Family childcare home operators must reside at the location of the family childcare home.
- 38) FERPA:** Family Educational Rights and Privacy Act
- 39) Frequently Asked Questions (FAQs):** A convenient location within a document to collect common questions which a user might pose along with the appropriate answers and references.
- 40) Goods:** Includes intangibles such as computer software; provided, however that this definition does not modify the definition of “goods” in the context of N.C.G.S. §25-2-105 (UCC definition of goods).
- 41) Go-Live:** The time at which a software Solution becomes available for end users. At this point, all users should have access to the agreed feature set without any restrictions. Prior to going live, the project will complete a project Go-Live readiness assessment based on State and DHHS project management methodology/practices.
- 42) Help Desk:** A service providing information and support to computer users.
- 43) HIPAA:** The Health Insurance Portability and Accountability Act of 1996 and all subsequent acts that updated HIPAA requirements such as the Health Information Technology for Economic and Clinical

Health (HITECH) Act passed as part of the American Recovery and Reinvestment Act of 2009 (ARRA).

- 44) ID:** Identifier (or key) used by a software solution to locate and report on a particular record or piece of electronic information.
- 45) Identify and Access Management (IAM):** Used to administer user identities, roles and access control rights. IAM provides a mechanism to allow users to have access to the appropriate Information Technology (IT) resources and nothing more, based on their role.
- 46) Investigation Consultant:** DCDEE employs investigation consultants to conduct investigations of child maltreatment in childcare facilities, to ensure childcare regulations are being met.
- 47) License Number:** Every home and center has an Identification Number (ID) that is assigned by the Division of Child Development and Early Education. The ID# is listed on the permit (license) or Notice of Compliance. If you have a question about a program, or want to receive information about a program, it is very helpful to have the ID# available when you call or write to the Division of Child Development and Early Education.
- 48) Local Education Agency (LEA):** Local educational agency or LEA means a public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties as are recognized in a State as an administrative agency for its public elementary schools or secondary schools. (<https://www.ed.gov/race-top/district-competition/definitions>)
- 49) LEA License & Salary Info Center (LicSal):** Part of the North Carolina Department of Instruction's (NC DPI's) enhanced Salary Administration System that provides LEAs access to key Salary Administration System information.
- 50) Licensure Only Plan:** A plan issued to a teacher candidate with a BA/BS degree who is not employed in a teaching position. A Licensure Only Plan is written by a four-year college or university outlining courses and requirements that must be successfully completed to attain teacher licensure.
- 51) Multi-Factor Authentication (MFA):** An authentication method which requires a user to provide two or more verification factors to gain access to sensitive information or systems.
- 52) Notice of Action (Administrative Action):** Programs that have serious or repeated violations may receive an Administrative Action issued by the Division of Child Development and Early Education. Providers have the right to appeal an Administrative Action. When a provider appeals an action, a contested case hearing before an Administrative Law Judge is scheduled. The hearing is an opportunity for the provider and the Division of Child Development and Early Education to have witnesses testify about the situation which resulted in the Administrative Action. The provider/operator has 30 days after receiving the Notice of Administrative Action to file an appeal.
- 53) NCDHHS:** The North Carolina Department of Health and Human Services
- 54) NCID:** North Carolina Identity Management. The State's standard identity and access management platform from the N.C. Department of Information Technology.
- 55) NCICDP:** North Carolina Institute for Child Development Professionals (NCICDP) provides high quality professional development opportunities to the ECE Workforce. Professional development, in this context, refers to a combination of education and continuing education via college courses, continuing education units, conferences and professional forums as well as workshops along with coaching and mentoring opportunities.

- 56) NCRLAP:** The North Carolina Rated License Assessment Project (NCRLAP) is a collaborative project between the North Carolina Division of Child Development and Early Education (NCDCEE) and other institutions of higher education across the State. NCRLAP's purpose is to conduct voluntary environmental rating scale (ERS) assessments of childcare centers and homes attempting to earn three or more stars within the North Carolina Star Rated License system.
- 57) NIST 800-53 Controls:** The National Institute of Standards and Technology publication known as NIST 800-53 outlines security controls for federal information systems and provides documentation for standards required for all federal information systems, except for those designed for national security.
- 58) Offsite:** Meetings and team collaboration are conducted via teleconference meetings (e.g., Microsoft Teams or Cisco WebEx).
- 59) Onsite:** Requires attendance in person in Raleigh, North Carolina or designated facility as needed unless public health measures require virtual meetings (e.g., NCDHHS's COVID- 19 pandemic plan response is still active).
- 60) Operations and Maintenance (O&M) Contract Phase:** Operations and Maintenance is the process of supporting the Stabilized production Solution and/or components of the Solution to correct defects and maintain performance of the Solution. The definition of Operations and Maintenance shall not be based on the time and/or size of the effort required to provide such services. For the purposes of this RFP and resulting Contract, Operations and Maintenance and the O&M Contract Phase shall also include implementation of Changes that are required by federal or state statutes, regulations and/or rule changes, and reporting requirements. For purposes of this RFP and resulting Contract, the O&M Contract Phase will begin on the first State business day after the Vendor successfully completes the Stabilization Period.
- 61) Out-of-State Providers:** Out-of-State providers are those located more than 40 miles outside of the borders of North Carolina. Border providers are those providers who render services within 40 miles of the North Carolina border.
- 62) Project Execution Contract Phase (or Project Execution Phase):** During the Project Execution Contract Phase, the Vendor will perform the Solution development activities outlined in this RFP. Activities include the full project lifecycle, including, but not limited to, identifying detailed requirements, performing gap analysis, building the Solution to meet the Agency's requirements and specifications, communication to stakeholders; technical testing, training, assuring Agency acceptance of the delivered Solution, deploying the Solution for production use, and Stabilizing the Solution. For more information reference Section 3.7.1-3.7.5. The Project Execution Contract Phase does not include activities that are considered part of the Operations and Maintenance (O&M) Contract Phase.
- 63) Quality Point:** Childcare facilities may choose to meet additional criteria to earn one quality point which will be added to the total points earned in program standards and staff education to determine the total number of stars earned.
- 64) Quality Rating and Improvement System (QRIS):** a systemic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs
- 65) Rated License Assessment:** Visit made to monitor for enhanced licensing requirements for the issuance of a Rated License. (Completed if annual compliance visit has been completed within the last six months.)

- 66) Regional Assistance Licensing Centers (RALC):** There are four Regional Assistance Licensing Centers (RALCs) in North Carolina, created by the NC State Board of Education and the Department of Public Instruction. The centers evaluate provisionally licensed teachers' applications, prescribe courses of study, and outline other requirements needed in order to receive full professional educators' licenses. Upon completion of individuals' plans of study, the RALC will make recommendation to the Licensure Section at DPI for clear licenses.
- 67) Reasonable, Necessary or Proper:** as used herein shall be interpreted solely by the State of North Carolina.
- 68) Residency License:** According to § 115C.270.20.a.5, the Residency License is a one-year license that is renewable twice and has replaced the Lateral Entry License. This is the current alternative pathway to be issued a teaching license in North Carolina.
- 69) RPO:** The Recovery Point Objective is the maximum targeted period in which data might be lost from an IT service due to a major incident or disaster. It is calculated backward from the time of occurrence of the incident.
- 70) RTO:** The Recovery Time Objective is the targeted duration of time and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity.
- 71) Scribbles:** a document management solution.
- 72) Security Breach:** As defined in N.C.G.S. §75-61.
- 73) Significant Security Incident (GS 143B-1320):** A cybersecurity incident that is likely to result in demonstrable harm to the State's security interests, economy, critical infrastructure, or to the public confidence, civil liberties, or public health and safety of the residents of North Carolina. A significant cybersecurity incident is determined by the following factors:
- a. Incidents that meet thresholds identified by the Department jointly with the Department of Public Safety that involve information:
 - i. That is not releasable to the public and that is restricted or highly restricted according to Statewide Data Classification and Handling Policy; or
 - ii. That involves the exfiltration, modification, deletion, or unauthorized access, or lack of availability to information or systems within certain parameters to include (i) a specific threshold of number of records or users affected as defined in G.S. 75-65 or (ii) any additional data types with required security controls.
 - b. Incidents that involve information that is not recoverable or cannot be recovered within defined timelines required to meet operational commitments defined jointly by the State agency and the Department or can be recovered only through additional measures and has a high or medium functional impact to the mission of an agency.
- 74) SDLC:** The Software Development Life Cycle is a process followed for a software Project, within a software organization. It consists of a detailed plan describing how to develop, maintain, replace, and alter or enhance specific software. The life cycle defines a methodology for improving the quality of software and the overall development process
- 75) Section 508 Compliance:** This indicates compliance with a US federal government law which requires websites to be safe and accessible for people with disabilities. Complete requirements can be found at: www.section508.gov
- 76) SLA:** Service Level Agreement.

- 77) Smart Start:** Smart Start is a statewide initiative to help all North Carolina children enter school healthy and ready to succeed. Smart Start may help with the cost of childcare. It may help childcare homes or centers improve their programs. Smart Start also helps families access health care and other services that are very important during a child's early years.
- 78) Solution Roadmap:** This is a longer-term view of a project which outlines the key milestones and deliverables needed to achieve the overall solution vision.
- 79) Sprint:** For the purposes of this RFP and resulting Contract, the term Sprint means a specific period in the Project Execution when Solution Functionality and/or Deliverables are completed and submitted to the Division for approval.
- 80) Stabilization Period:** For the purposes of this RFP and resulting Contract, the Stabilization Period is an unbroken period of ninety (90) Calendar Days after Statewide deployment and during the Project Execution Contract Phase where: users can successfully log into the Solution; users can perform their daily work without frequent lockups/freezes/shutdowns caused by the Solution; the Solution is routinely available 24x7x365 during the Stabilization Period; and the Solution functions correctly as deployed, with no Severity 1 or Severity 2 defective functionality.
- 81) Stakeholder:** The Stakeholders are the Project business partners and the government agencies at the local and state levels.
- 82) Standard Reports:** Standard Report means a compilation or study developed to display information on selected topics published periodically.
- 83) Star Rated License:** A star rated license is issued based on the evaluation of program standards and staff education. Child Care facilities with a one-star license meet minimum licensing standards. Facilities with a two-to-five-star license voluntarily meet a higher level of enhanced standards.
- 84) State business day:** State business days are Monday through Friday, with the exception of State of North Carolina holidays established by the Office of State Human Resources (reference <https://oshr.nc.gov/state-employee-resources/benefits/leave/holidays>)
- 85) Summer Day Camp:** A center providing care for school-age children exclusively on a seasonal basis between May 15 and September 15. These programs are not required to be licensed unless they participate in the subsidized childcare program.
- 86) System Administrator:** The System Administrator is a State-level administrator for the Solution. The State's System Administrator can grant any location or process to any user account, view any account within User Security, and update any user information.
- 87) Systems and Organization Controls (SOC) 2 Type 2 or Type II:** A vendor certification that indicates a high level of confidence in security, availability, confidentiality and privacy.
- 88) T.E.A.C.H:** The T.E.A.C.H. Early Childhood® Scholarship Program is an umbrella for a variety of different scholarship programs for those working in the early education field in North Carolina. Every TEACH scholarship has 4 components: scholarship, education, compensation, and commitment.
- 89) Technical Assistance (TA):** Technical Assistance (TA) is the provision of targeted and customized supports by a professional(s) with subject matter and adult learning knowledge and skills to develop or strengthen processes, knowledge application, or implementation of services by recipients.
- 90) Technical Support:** A service provided by a hardware or software company which provides registered users with help and advice about their products.
- 91) Third-party:** Relating to a person or group besides the two primarily involved in the situation (for example, third-party service provider, third-party supplier, third-party payer, etc.).

- 92) Total Cost of Ownership (TCO):** The total cost of the contract is defined in Title 9 NCAC 6A . 0102 (28) “as a summation of all purchase, operating, and related costs for the projected lifetime of a good or service”. See Cost Table 3, Attachment E, for significant elements of the Total Cost of Ownership. In addition, the State may incur additional costs based on the Vendor’s proposal (i.e., need to purchase additional/newer equipment to operate the proposed solution, State staff required to complete data conversion or other aspect of the Vendor’s response, etc.) The Total Cost of Ownership will be used to compare costs across bids during the evaluation process.
- 93) User Acceptance Testing (UAT):** Often the final stage of testing for rollout of a software Solution. In this stage, actual users test the software in real-world situations.
- 94) Vendor:** Company, firm, corporation, partnership, individual, etc., submitting an offer in response to a solicitation.
- 95) Vendor Project Manager:** The Vendor designates a Vendor Project Manager who will provide a single point of contact for management and coordination of the Vendor’s work.
- 96) Vendor Readiness Assessment Report (VRAR):** A report that provides information for the State to perform Cybersecurity due diligence when evaluating proposals (and afterward). Refer to the link here: <https://it.nc.gov/documents/vendor-readiness-assessment-report>.
- 97) Vital Records:** NC Vital Records are responsible for recording North Carolina vital events Including: legally registering all births, deaths, fetal deaths, marriages, and divorces which occur in North Carolina, coding vital events for statistical purposes, maintaining vital records and providing certified or uncertified copies to individuals, researchers, and public health programs.
- 98) VMWare:** VMWare, Inc. is a US based company that specializes in cloud computing and computer virtualization. VMWare solutions provide the ability to configure, deploy and manage complex server configurations remotely, without the need for on-site computing hardware.
- 99) Workforce Online Reporting and Knowledge System (WORKS) Application** functions as a single portal of entry for workforce education and professional development to collect, report, and track childcare workforce information needed to support education requirements.
- 100)XML:** Extensible Markup Language. A standard, simple, and widely adopted method of formatting text and data so that it can be exchanged across all of the different computer platforms, languages, and applications.

ATTACHMENT B: DEPARTMENT OF INFORMATION TECHNOLOGY TERMS AND CONDITIONS

Section 1. General Terms and Conditions Applicable to All Purchases

1) **DEFINITIONS:** As used herein;

Agreement means the contract awarded pursuant to this RFP.

Deliverable/Product Warranties shall mean and include the warranties provided for products or deliverables licensed to the State unless superseded by a Vendor's Warranties pursuant to Vendor's License or Support Agreements.

Purchasing State Agency or Agency shall mean the Agency purchasing the goods or Services.

Services shall mean the duties and tasks undertaken by the Vendor to fulfill the requirements and specifications of this solicitation. For a Software as a Service ("SaaS") Solution, Services further include, without limitation, providing web browser access by authorized users to certain Vendor online software applications identified herein, and to related services, such as Vendor hosted Computer storage, databases, Support, documentation, and other functionalities.

State shall mean the State of North Carolina, the Department of Information Technology (DIT), or the Purchasing State Agency in its capacity as the Contracting Agency, as appropriate.

- 2) **STANDARDS:** Any Deliverables shall meet all applicable State and federal requirements, such as State or Federal Regulation, and NC State Chief Information Officer's (CIO) policy or regulation. Vendor will provide and maintain a quality assurance system or program that includes any Deliverables and will tender or provide to the State only those Deliverables that have been inspected and found to conform to the RFP specifications. All Deliverables are subject to operation, certification, testing and inspection, and any accessibility specifications.
- 3) **WARRANTIES:** Unless otherwise expressly provided, any goods Deliverables provided by the Vendor shall be warranted for a period of 90 days after acceptance.
- 4) **SUBCONTRACTING:** The Vendor may subcontract the performance of required Services with Resources under the Agreement only with the prior written consent of the State contracting authority. Vendor shall provide the State with complete copies of any agreements made by and between Vendor and all subcontractors. The selected Vendor remains solely responsible for the performance of its subcontractors. Subcontractors, if any, shall adhere to the same standards required of the selected Vendor and the Agreement. Any contracts made by the Vendor with a subcontractor shall include an affirmative statement that the State is an intended third-party beneficiary of the Agreement; that the subcontractor has no agreement with the State; and that the State shall be indemnified by the Vendor for any claim presented by the subcontractor. Notwithstanding any other term herein, Vendor shall timely exercise its contractual remedies against any non-performing subcontractor and, when appropriate, substitute another subcontractor.
- 5) **TRAVEL EXPENSES:** All travel expenses should be included in the Vendor's proposed costs. Separately stated travel expenses will not be reimbursed. In the event that the Vendor, upon specific request in writing by the State, is deemed eligible to be reimbursed for travel expenses arising under the performance of the Agreement, reimbursement will be at the out-of-state rates set forth in N.C.G.S. §138-6; as amended from time to time. Vendor agrees to use the lowest available airfare not requiring a weekend stay and to use the lowest available rate for rental vehicles. All Vendor incurred travel expenses shall be billed on a monthly basis, shall be supported by receipt and shall be paid by the State within thirty (30) days after invoice approval. Travel expenses exceeding the foregoing rates shall not be paid by the State. The State will reimburse travel allowances only for days on which the Vendor is required to be in North Carolina performing Services under the Agreement.
- 6) **GOVERNMENTAL RESTRICTIONS:** In the event any restrictions are imposed by governmental requirements that necessitate alteration of the material, quality, workmanship, or performance of the

Deliverables offered prior to delivery thereof, the Vendor shall provide written notification of the necessary alteration(s) to the Agency Contract Administrator. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Agreement. The State may advise Vendor of any restrictions or changes in specifications required by North Carolina legislation, rule or regulatory authority that require compliance by the State. In such event, Vendor shall use its best efforts to comply with the required restrictions or changes. If compliance cannot be achieved by the date specified by the State, the State may terminate the Agreement and compensate Vendor for sums then due under the Agreement.

- 7) **PROHIBITION AGAINST CONTINGENT FEES AND GRATUITIES:** Vendor warrants that it has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the State for the purpose of obtaining any Contract or award issued by the State. Vendor further warrants that no commission or other payment has been or will be received from or paid to any third-party contingent on the award of any Contract by the State, except as shall have been expressly communicated to the State Purchasing Agent in writing prior to acceptance of the Agreement or award in question. Each individual signing below warrants that he or she is duly authorized by their respective Party to sign the Agreement and bind the Party to the terms and conditions of this RFP. Vendor and their authorized signatory further warrant that no officer or employee of the State has any direct or indirect financial or personal beneficial interest, in the subject matter of the Agreement; obligation or Contract for future award of compensation as an inducement or consideration for making the Agreement. Subsequent discovery by the State of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts. Violations of this provision may result in debarment of the Vendor(s) as permitted by 9 NCAC 06B..1206, or other provision of law.
- 8) **AVAILABILITY OF FUNDS:** Any and all payments to Vendor are expressly contingent upon and subject to the appropriation, allocation and availability of funds to the Agency for the purposes set forth in the Agreement. If the Agreement or any Purchase Order issued hereunder is funded in whole or in part by federal funds, the Agency's performance and payment shall be subject to and contingent upon the continuing availability of said federal funds for the purposes of the Agreement or Purchase Order. If the term of the Agreement extends into fiscal years subsequent to that in which it is approved, such continuation of the Agreement is expressly contingent upon the appropriation, allocation and availability of funds by the N.C. Legislature for the purposes set forth in this RFP. If funds to effect payment are not available, the Agency will provide written notification to Vendor. If the Agreement is terminated under this paragraph, Vendor agrees to take back any affected Deliverables and software not yet delivered under the Agreement, terminate any Services supplied to the Agency under the Agreement, and relieve the Agency of any further obligation thereof. The State shall remit payment for Deliverables and Services accepted prior to the date of the aforesaid notice in conformance with the payment terms.
- 9) **ACCEPTANCE PROCESS:**
- a) The State shall have the obligation to notify Vendor, in writing ten calendar days following provision, performance (under a provided milestone or otherwise as agreed) or delivery of any Services or other Deliverables described in the Agreement that are not acceptable.
 - b) Acceptance testing is required for all Vendor supplied software and software or platform services unless provided otherwise in the solicitation documents or a Statement of Work. The State may define such processes and procedures as may be necessary or proper, in its opinion and discretion, to ensure compliance with the State's specifications, and Vendor's Product Warranties and technical representations. The State shall have the obligation to notify Vendor, in writing and within thirty (30) days following installation of any software deliverable if it is not acceptable.
 - c) Acceptance of Services or other Deliverables including software or platform services may be controlled by an amendment hereto, or additional terms as agreed by the Parties consistent with IT Project management under GS §143B-1340.
 - d) The notice of non-acceptance shall specify in reasonable detail the reason(s) a Service or given Deliverable is unacceptable. Acceptance by the State shall not be unreasonably withheld; but may be conditioned or delayed as required for installation and/or testing of Deliverables. Final acceptance is expressly conditioned upon completion of any applicable inspection and testing procedures. Should

a Service or Deliverable fail to meet any specifications or acceptance criteria, the State may exercise any and all rights hereunder. Services or Deliverables discovered to be defective or failing to conform to the specifications may be rejected upon initial inspection or at any later time if the defects or errors contained in the Services or Deliverables or non-compliance with the specifications were not reasonably ascertainable upon initial inspection. If the Vendor fails to promptly cure or correct the defect or replace or re-perform the Services or Deliverables, the State reserves the right to cancel the Purchase Order, contract with a different Vendor, and to invoice the original Vendor for any differential in price over the original Contract price.

- 10) PAYMENT TERMS:** Monthly Payment terms are Net 30 days after receipt of correct invoice (with completed timesheets for Vendor personnel) and acceptance of one or more of the Deliverables, under milestones or otherwise as may be provided in Paragraph 9 (Acceptance), or elsewhere in this solicitation, unless a period of more than thirty (30) days is required by the Agency. The Purchasing State Agency is responsible for all payments under the Agreement. No additional charges to the Agency will be permitted based upon, or arising from, the Agency's use of a Business Procurement Card. The State may exercise any and all rights of Set Off as permitted in Chapter 105A-1 *et. seq.* of the N.C. General Statutes and applicable Administrative Rules. Upon Vendor's written request of not less than thirty (30) days and approval by the State or Agency, the Agency may:
- Forward the Vendor's payment check(s) directly to any person or entity designated by the Vendor, or
 - Include any person or entity designated in writing by Vendor as a joint payee on the Vendor's payment check(s), however
 - In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Contract obligations.
- 11) EQUAL EMPLOYMENT OPPORTUNITY:** Vendor shall comply with all Federal and State requirements concerning fair employment and employment of the disabled, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or physical disability.
- 12) ADVERTISING/PRESS RELEASE:** The Vendor absolutely shall not publicly disseminate any information concerning the Agreement without prior written approval from the State or its Agent. For the purpose of this provision of the Agreement, the Agent is the Purchasing Agency Contract Administrator unless otherwise named in the solicitation documents.
- 13) LATE DELIVERY:** Vendor shall advise the Agency contact person or office immediately upon determining that any Deliverable will not, or may not, be delivered or performed at the time or place specified. Together with such notice, Vendor shall state the projected delivery time and date. In the event the delay projected by Vendor is unsatisfactory, the Agency shall so advise Vendor and may proceed to procure the particular substitute Services or other Deliverables.
- 14) ACCESS TO PERSONS AND RECORDS:** Pursuant to N.C.G.S. §147-64.7, the Agency, the State Auditor, appropriate federal officials, and their respective authorized employees or agents are authorized to examine all books, records, and accounts of the Vendor insofar as they relate to transactions with any department, board, officer, commission, institution, or other agency of the State of North Carolina pursuant to the performance of the Agreement or to costs charged to the Agreement. The Vendor shall retain any such books, records, and accounts for a minimum of three (3) years after the completion of the Agreement. Additional audit or reporting requirements may be required by any Agency, if in the Agency's opinion, such requirement is imposed by federal or state law or regulation.
- 15) ASSIGNMENT:** Vendor may not assign the Agreement or its obligations hereunder except as permitted by 09 NCAC 06B.1003 and this Paragraph. Vendor shall provide reasonable notice of not less than thirty (30) days prior to any consolidation, acquisition, or merger. Any assignee shall affirm the Agreement attorning and agreeing to the terms and conditions agreed, and that Vendor shall affirm that the assignee is fully capable of performing all obligations of Vendor under the Agreement. An assignment may be made, if at all, in writing by the Vendor, Assignee and the State setting forth the foregoing obligation of Vendor and Assignee.
- 16) INSURANCE COVERAGE:** During the term of the Agreement, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably

associated with the Agreement. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

- a) **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$100,000.00, covering all of Vendor's employees who are engaged in any work under the Agreement. If any work is sublet, the Vendor shall require the subcontractor to provide the same coverage for any of his employees engaged in any work under the Agreement; and
- b) **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$2,000,000.00 Combined Single Limit (Defense cost shall be in excess of the limit of liability); and
- c) **Automobile** - Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used in connection with the Agreement. The minimum combined single limit shall be \$500,000.00 bodily injury and property damage; \$500,000.00 uninsured/under insured motorist; and \$5,000.00 medical payment; and
- d) Providing and maintaining adequate insurance coverage described herein is a material obligation of the Vendor and is of the essence of the Agreement. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or the Agreement. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations under the Agreement.

17) DISPUTE RESOLUTION: The parties agree that it is in their mutual interest to resolve disputes informally. A claim by the Vendor shall be submitted in writing to the Agency Contract Administrator for decision. A claim by the State shall be submitted in writing to the Vendor's Contract Administrator for decision. The Parties shall negotiate in good faith and use all reasonable efforts to resolve such dispute(s). During the time the Parties are attempting to resolve any dispute, each shall proceed diligently to perform their respective duties and responsibilities under the Agreement. If a dispute cannot be resolved between the Parties within thirty (30) days after delivery of notice, either Party may elect to exercise any other remedies available under the Agreement, or at law. This term shall not constitute an agreement by either party to mediate or arbitrate any dispute.

18) CONFIDENTIALITY: In accordance with N.C.G.S. §143B-1350(e) and 143B-1375, and 09 NCAC 06B.0103 and 06B.1001, the State may maintain the confidentiality of certain types of information described in N.C.G.S. §132-1 *et seq.* Such information may include trade secrets defined by N.C.G.S. §66-152 and other information exempted from the Public Records Act pursuant to N.C.G.S. §132-1.2. Vendor may designate appropriate portions of its response as confidential, consistent with and to the extent permitted under the Statutes and Rules set forth above, by marking the top and bottom of pages containing confidential information with a legend in boldface type "**CONFIDENTIAL**". By so marking any page, the Vendor warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors that the portions marked confidential meet the requirements of the Rules and Statutes set forth above. ***However, under no circumstances shall price information be designated as confidential.*** The State may serve as custodian of Vendor's confidential information and not as an arbiter of claims against Vendor's assertion of confidentiality. If an action is brought pursuant to N.C.G.S. §132-9 to compel the State to disclose information marked confidential, the Vendor agrees that it will intervene in the action through its counsel and participate in defending the State, including any public official(s) or public employee(s). The Vendor agrees that it shall hold the State and any official(s) and individual(s) harmless from any and all damages, costs, and attorneys' fees awarded against the State in the action. The State agrees to promptly notify the Vendor in writing of any action seeking to compel the disclosure of Vendor's confidential information. The State shall have the right, at its option and expense, to participate in the defense of the action through its counsel. The State shall have no liability to Vendor with respect to the disclosure of Vendor's confidential

information ordered by a court of competent jurisdiction pursuant to N.C.G.S. §132-9 or other applicable law.

- a) Care of Information: Vendor agrees to use commercial best efforts to safeguard and protect any data, documents, files, and other materials received from the State or the Agency during performance of any contractual obligation from loss, destruction or erasure. Vendor agrees to abide by all facilities and security requirements and policies of the agency where work is to be performed. Any Vendor personnel shall abide by such facilities and security requirements and shall agree to be bound by the terms and conditions of the Agreement.
- b) Vendor warrants that all its employees and any approved third-party Vendors or subcontractors are subject to a non-disclosure and confidentiality agreement enforceable in North Carolina. Vendor will, upon request of the State, verify and produce true copies of any such agreements. Production of such agreements by Vendor may be made subject to applicable confidentiality, non-disclosure or privacy laws; provided that Vendor produces satisfactory evidence supporting exclusion of such agreements from disclosure under the N.C. Public Records laws in N.C.G.S. §132-1 *et seq.* The State may, in its sole discretion, provide a non-disclosure and confidentiality agreement satisfactory to the State for Vendor's execution. The State may exercise its rights under this subparagraph as necessary or proper, in its discretion, to comply with applicable security regulations or statutes including, but not limited to 26 USC 6103 and IRS Publication 1075, (Tax Information Security Guidelines for Federal, State, and Local Agencies), HIPAA, 42 USC 1320(d) (Health Insurance Portability and Accountability Act), any implementing regulations in the Code of Federal Regulations, and any future regulations imposed upon the Department of Information Technology or the N.C. Department of Revenue pursuant to future statutory or regulatory requirements.
- c) Nondisclosure: Vendor agrees and specifically warrants that it, its officers, directors, principals and employees, and any subcontractors, shall hold all information received during performance of the Agreement in the strictest confidence and shall not disclose the same to any third party without the express written approval of the State.
- d) The Vendor shall protect the confidentiality of all information, data, instruments, studies, reports, records and other materials provided to it by the Agency or maintained or created in accordance with this Agreement. No such information, data, instruments, studies, reports, records and other materials in the possession of Vendor shall be disclosed in any form without the prior written consent of the State Agency. The Vendor will have written policies governing access to and duplication and dissemination of all such information, data, instruments, studies, reports, records and other materials.
- e) All project materials, including software, data, and documentation created during the performance or provision of Services hereunder that are not licensed to the State or are not proprietary to the Vendor are the property of the State of North Carolina and must be kept confidential or returned to the State, or destroyed. Proprietary Vendor materials shall be identified to the State by Vendor prior to use or provision of Services hereunder and shall remain the property of the Vendor. Derivative works of any Vendor proprietary materials prepared or created during the performance of provision of Services hereunder shall be subject to a perpetual, royalty free, nonexclusive license to the State.

19) DEFAULT: In the event Services or other Deliverable furnished or performed by the Vendor during performance of any Contract term fail to conform to any material requirement(s) of the Contract specifications, notice of the failure is provided by the State and if the failure is not cured within ten (10) days, or Vendor fails to meet the requirements of Paragraph 9) herein, the State may cancel the contract. Default may be cause for debarment as provided in 09 NCAC 06B.1206. The rights and remedies of the State provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

- a) If Vendor fails to deliver or provide correct Services or other Deliverables within the time required by the Agreement, the State shall provide written notice of said failure to Vendor, and by such notice require performance assurance measures pursuant to N.C.G.S. 143B-1340(f). Vendor is responsible for the delays resulting from its failure to deliver or provide services or other Deliverables.
- b) Should the State fail to perform any of its obligations upon which Vendor's performance is conditioned, Vendor shall not be in default for any delay, cost increase or other consequences

resulting from the State's failure. Vendor will use reasonable efforts to mitigate delays, costs or expenses arising from assumptions in the Vendor's offer documents that prove erroneous or are otherwise invalid. Any deadline that is affected by any such failure in assumptions or performance by the State shall be extended by an amount of time reasonably necessary to compensate for the effect of such failure.

- c) Vendor shall provide a plan to cure any delay or default if requested by the State. The plan shall state the nature of the delay or default, the time required for cure, any mitigating factors causing or tending to cause the delay or default, and such other information as the Vendor may deem necessary or proper to provide.
- d) If the prescribed acceptance testing stated in the Solicitation Documents or performed pursuant to Paragraph **Error! Reference source not found.** of the DIT Terms and Conditions is not completed successfully, the State may request substitute Software, cancel the portion of the Contract that relates to the unaccepted Software, or continue the acceptance testing with or without the assistance of Vendor. These options shall remain in effect until such time as the testing is successful or the expiration of any time specified for completion of the testing. If the testing is not completed after exercise of any of the State's options, the State may cancel any portion of the contract related to the failed Software and take action to procure substitute software. If the failed software (or the substituted software) is an integral and critical part of the proper completion of the work for which the Deliverables identified in the solicitation documents or statement of work were acquired, the State may terminate the entire contract.

20) WAIVER OF DEFAULT: Waiver by either party of any default or breach by the other Party shall not be deemed a waiver of any subsequent default or breach and shall not be construed to be a modification or novation of the terms of the Agreement, unless so stated in writing and signed by authorized representatives of the Agency and the Vendor, and made as an amendment to the Agreement pursuant to Paragraph 40) herein below.

21) TERMINATION: Any notice or termination made under the Agreement shall be transmitted via US Mail, Certified Return Receipt Requested. The period of notice for termination shall begin on the day the return receipt is signed and dated.

- a) The parties may mutually terminate the Agreement by written agreement at any time.
- b) The State may terminate the Agreement, in whole or in part, pursuant to Paragraph 19), or pursuant to the Special Terms and Conditions in the Solicitation Documents, if any, or for any of the following:
 - i) Termination for Cause: In the event any goods, software, or service furnished by the Vendor during performance of any Contract term fails to conform to any material requirement of the Contract, and the failure is not cured within the specified time after providing written notice thereof to Vendor, the State may cancel and procure the articles or Services from other sources; holding Vendor liable for any excess costs occasioned thereby, subject only to the limitations provided in Paragraphs 22) and 23) herein. The rights and remedies of the State provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract. Vendor shall not be relieved of liability to the State for damages sustained by the State arising from Vendor's breach of the Agreement; and the State may, in its discretion, withhold any payment due as a setoff until such time as the damages are finally determined or as agreed by the parties. Voluntary or involuntary Bankruptcy or receivership by Vendor shall be cause for termination.
 - ii) Termination For Convenience Without Cause: The State may terminate service and indefinite quantity contracts, in whole or in part by giving thirty (30) days prior notice in writing to the Vendor. Vendor shall be entitled to sums due as compensation for Deliverables provided and Services performed in conformance with the Contract. In the event the Contract is terminated for the convenience of the State the Agency will pay for all work performed and products delivered in conformance with the Contract up to the date of termination.
 - iii) Consistent failure to participate in problem resolution meetings, two (2) consecutive missed or rescheduled meetings, or failure to make a good faith effort to resolve problems, may result in termination of the Agreement.

22) LIMITATION OF VENDOR'S LIABILITY:

- a) Where Deliverables are under the State's exclusive management and control, the Vendor shall not be liable for direct damages caused by the State's failure to fulfill any State responsibilities of assuring the proper use, management and supervision of the Deliverables and programs, audit controls, operating methods, office procedures, or for establishing all proper checkpoints necessary for the State's intended use of the Deliverables. Vendor shall not be responsible for any damages that arise from (i) misuse or modification of Vendor's Software by or on behalf of the State, (ii) the State's failure to use corrections or enhancements made available by Vendor, (iii) the quality or integrity of data from other automated or manual systems with which the Vendor's Software interfaces, (iv) errors in or changes to third party software or hardware implemented by the State or a third party (including the vendors of such software or hardware) that is not a subcontractor of Vendor or that is not supported by the Deliverables, or (vi) the operation or use of the Vendor's Software not in accordance with the operating procedures developed for the Vendor's Software or otherwise in a manner not contemplated by this Agreement.
- b) The Vendor's liability for damages to the State arising under the contract shall be limited to two times the value of the Contract.
- c) The foregoing limitation of liability shall not apply to claims covered by other specific provisions including but not limited to Service Level Agreement or Deliverable/Product Warranties, or to claims for injury to persons or damage to tangible personal property, gross negligence or willful or wanton conduct. This limitation of liability does not apply to contributions among joint tortfeasors under N.C.G.S. 1B-1 *et seq.*, the receipt of court costs or attorney's fees that might be awarded by a court in addition to damages after litigation based on the Agreement. For avoidance of doubt, the Parties agree that the Service Level Agreement and Deliverable/Product Warranty Terms in the Contract are intended to provide the sole and exclusive remedies available to the State under the Contract for the Vendor's failure to comply with the requirements stated therein.

23) VENDOR'S LIABILITY FOR INJURY TO PERSONS OR DAMAGE TO PROPERTY:

- a) The Vendor shall be liable for damages arising out of personal injuries and/or damage to real or tangible personal property of the State, employees of the State, persons designated by the State for training, or person(s) other than agents or employees of the Vendor, designated by the State for any purpose, prior to, during, or subsequent to delivery, installation, acceptance, and use of the Deliverables either at the Vendor's site or at the State's place of business, provided that the injury or damage was caused by the fault or negligence of the Vendor.
- b) The Vendor agrees to indemnify, defend and hold the Agency and the State and its Officers, employees, agents and assigns harmless from any liability relating to personal injury or injury to real or personal property of any kind, accruing or resulting to any other person, firm or corporation furnishing or supplying work, Services, materials or supplies in connection with the performance of the Agreement, whether tangible or intangible, arising out of the ordinary negligence, wilful or wanton negligence, or intentional acts of the Vendor, its officers, employees, agents, assigns or subcontractors.
- c) Vendor shall not be liable for damages arising out of or caused by an alteration or an attachment not made or installed by the Vendor.

24) TIME IS OF THE ESSENCE: Time is of the essence in the performance of the Agreement.

25) DATE AND TIME WARRANTY: The Vendor warrants that any Deliverable, whether Services, hardware, firmware, middleware, custom or commercial software, or internal components, subroutines, and interface therein which performs, modifies or affects any date and/or time data recognition function, calculation, or sequencing, will still enable the modified function to perform accurate date/time data and leap year calculations. This warranty shall survive termination or expiration of the Contract.

26) INDEPENDENT CONTRACTORS: Vendor and its employees, officers and executives, and subcontractors, if any, shall be independent Vendors and not employees or agents of the State. The Agreement shall not operate as a joint venture, partnership, trust, agency or any other similar business relationship.

- 27) TRANSPORTATION:** Transportation of any tangible Deliverables shall be FOB Destination; unless otherwise specified in the solicitation document or purchase order. Freight, handling, hazardous material charges, and distribution and installation charges shall be included in the total price of each item. Any additional charges shall not be honored for payment unless authorized in writing by the Purchasing State Agency. In cases where parties, other than the Vendor ship materials against this order, the shipper must be instructed to show the purchase order number on all packages and shipping manifests to ensure proper identification and payment of invoices. A complete packing list must accompany each shipment.
- 28) NOTICES:** Any notices required under the Agreement should be delivered to the Contract Administrator for each party. Unless otherwise specified in the Solicitation Documents, any notices shall be delivered in writing by U.S. Mail, Commercial Courier or by hand.
- 29) TITLES AND HEADINGS:** Titles and Headings in the Agreement are used for convenience only and do not define, limit or proscribe the language of terms identified by such Titles and Headings.
- 30) AMENDMENT:** The Agreement may not be amended orally or by performance. Any amendment must be made in written form and signed by duly authorized representatives of the State and Vendor in conformance with Paragraph 36) herein.
- 31) TAXES:** The State of North Carolina is exempt from Federal excise taxes and no payment will be made for any personal property taxes levied on the Vendor or for any taxes levied on employee wages. Agencies of the State may have additional exemptions or exclusions for federal or state taxes. Evidence of such additional exemptions or exclusions may be provided to Vendor by Agencies, as applicable, during the term of the Agreement. Applicable State or local sales taxes shall be invoiced as a separate item.
- 32) GOVERNING LAWS, JURISDICTION, AND VENUE:**
- a) The Agreement is made under and shall be governed and construed in accordance with the laws of the State of North Carolina and applicable Administrative Rules. The place of the Agreement or purchase order, its situs and forum, shall be Wake County, North Carolina, where all matters, whether sounding in Contract or in tort, relating to its validity, construction, interpretation and enforcement shall be determined. Vendor agrees and submits, solely for matters relating to the Agreement, to the jurisdiction of the courts of the State of North Carolina, and stipulates that Wake County shall be the proper venue for all matters.
 - b) Except to the extent the provisions of the Contract are clearly inconsistent therewith, the applicable provisions of the Uniform Commercial Code as modified and adopted in North Carolina shall govern the Agreement. To the extent the Contract entails both the supply of "goods" and "Services," such shall be deemed "goods" within the meaning of the Uniform Commercial Code, except when deeming such Services as "goods" would result in a clearly unreasonable interpretation.
- 33) FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.
- 34) COMPLIANCE WITH LAWS:** The Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority.
- 35) SEVERABILITY:** In the event that a court of competent jurisdiction holds that a provision or requirement of the Agreement violates any applicable law, each such provision or requirement shall be enforced only to the extent it is not in violation of law or is not otherwise unenforceable and all other provisions and requirements of the Agreement shall remain in full force and effect. All promises, requirement, terms, conditions, provisions, representations, guarantees and warranties contained herein shall survive the expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable federal or State statute, including statutes of repose or limitation.
- 36) CHANGES:** The Agreement and subsequent purchase order(s) is awarded subject to the provision of the specified Services and the shipment or provision of other Deliverables as specified herein. Any changes made to the Agreement or purchase order proposed by the Vendor are hereby rejected unless

accepted in writing by the Agency or State Award Authority. The State shall not be responsible for Services or other Deliverables delivered without a purchase order from the Agency or State Award Authority.

37) FEDERAL INTELLECTUAL PROPERTY BANKRUPTCY PROTECTION ACT: The Parties agree that the Agency shall be entitled to all rights and benefits of the Federal Intellectual Property Bankruptcy Protection Act, Public Law 100-506, codified at 11 U.S.C. 365(n), and any amendments thereto.

38) ELECTRONIC PROCUREMENT (Applies to all contracts that include E-Procurement and are identified as such in the body of the solicitation document): Purchasing shall be conducted through the Statewide E-Procurement Services. The State's third-party agent shall serve as the Supplier Manager for this E-Procurement Services. The Vendor shall register for the Statewide E-Procurement Services within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of the Agreement.

- a) **The successful Vendor(s) shall pay a transaction fee of 1.75% (.0175) on the total dollar amount (excluding sales taxes) of each purchase order issued through the Statewide E-Procurement Service.** This applies to all purchase orders, regardless of the quantity or dollar amount of the purchase order. The transaction fee shall neither be charged to nor paid by the State, or by any State approved users of the contract. The transaction fee shall not be stated or included as a separate item in the proposed contract or invoice. There are no additional fees or charges to the Vendor for the Services rendered by the Supplier Manager under the Agreement. Vendor will receive a credit for transaction fees they paid for the purchase of any item(s) if an item(s) is returned through no fault of the Vendor. Transaction fees are non-refundable when an item is rejected and returned, or declined, due to the Vendor's failure to perform or comply with specifications or requirements of the contract.
- b) Vendor, or its authorized Reseller, as applicable, will be invoiced monthly for the State's transaction fee by the Supplier Manager. The transaction fee shall be based on purchase orders issued for the prior month. Unless Supplier Manager receives written notice from the Vendor identifying with specificity any errors in an invoice within thirty (30) days of the receipt of invoice, such invoice shall be deemed to be correct, and Vendor shall have waived its right to later dispute the accuracy and completeness of the invoice. Payment of the transaction fee by the Vendor is due to the account designated by the State within thirty (30) days after receipt of the correct invoice for the transaction fee, which includes payment of all portions of an invoice not in dispute. Within thirty (30) days of the receipt of invoice, Vendor may request in writing an extension of the invoice payment due date for that portion of the transaction fee invoice for which payment of the related goods by the governmental purchasing entity has not been received by the Vendor. If payment of the transaction fee invoice is not received by the State within this payment period, it shall be considered a material breach of contract. The Supplier Manager shall provide, whenever reasonably requested by the Vendor in writing (including electronic documents), supporting documentation from the E-Procurement Service that accounts for the amount of the invoice.
- c) The Supplier Manager will capture the order from the State approved user, including the shipping and payment information, and submit the order in accordance with the E-Procurement Services. Subsequently, the Supplier Manager will send those orders to the appropriate Vendor on State Contract. The State or State approved user, not the Supplier Manager, shall be responsible for the solicitation, offers received, evaluation of offers received, award of Contract, and the payment for goods delivered.
- d) Vendor agrees at all times to maintain the confidentiality of its username and password for the Statewide E-Procurement Services. If a Vendor is a corporation, partnership or other legal entity, then the Vendor may authorize its employees to use its password. Vendor shall be responsible for all activity and all charges for such employees. Vendor agrees not to permit a third party to use the Statewide E-Procurement Services through its account. If there is a breach of security through the Vendor's account, Vendor shall immediately change its password and notify the Supplier Manager of the security breach by e-mail. Vendor shall cooperate with the state and the Supplier Manager to mitigate and correct any security breach.

39) PATENT, COPYRIGHT, AND TRADE SECRET PROTECTION:

- a) Vendor has created, acquired or otherwise has rights in, and may, in connection with the performance of Services for the State, employ, provide, create, acquire or otherwise obtain rights in various concepts, ideas, methods, methodologies, procedures, processes, know-how, techniques, models, templates and general-purpose consulting and software tools, utilities and routines (collectively, the "Vendor technology"). To the extent that any Vendor technology is contained in any of the Services or Deliverables including any derivative works, the Vendor hereby grants the State a royalty-free, fully paid, worldwide, perpetual, non-exclusive license to use such Vendor technology in connection with the Services or Deliverables for the State's purposes.
- b) Vendor shall not acquire any right, title and interest in and to the copyrights for goods, any and all software, technical information, specifications, drawings, records, documentation, data or derivative works thereof, or other work products provided by the State to Vendor. The State hereby grants Vendor a royalty-free, fully paid, worldwide, perpetual, non-exclusive license for Vendor's internal use to non-confidential deliverables first originated and prepared by the Vendor for delivery to the State.
- c) The Vendor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the Services or other Deliverables supplied by the Vendor, or the operation of such pursuant to a current version of vendor-supplied software, infringes a patent, or copyright or violates a trade secret in the United States. The Vendor shall pay those costs and damages finally awarded against the State in any such action; damages shall be limited as provided in N.C.G.S. 143B-1350(h1). Such defense and payment shall be conditioned on the following:
 - i. That the Vendor shall be notified within a reasonable time in writing by the State of any such claim; and,
 - ii. That the Vendor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise, provided, however, that the State shall have the option to participate in such action at its own expense.
- d) Should any Services or other Deliverables supplied by Vendor, or the operation thereof become, or in the Vendor's opinion are likely to become, the subject of a claim of infringement of a patent, copyright, or a trade secret in the United States, the State shall permit the Vendor, at its option and expense, either to procure for the State the right to continue using the Services or Deliverables, or to replace or modify the same to become noninfringing and continue to meet procurement specifications in all material respects. If neither of these options can reasonably be taken, or if the use of such Services or Deliverables by the State shall be prevented by injunction, the Vendor agrees to take back any goods/hardware or software, and refund any sums the State has paid Vendor less any reasonable amount for use or damage and make every reasonable effort to assist the state in procuring substitute Services or Deliverables. If, in the sole opinion of the State, the return of such infringing Services or Deliverables makes the retention of other Services or Deliverables acquired from the Vendor under the agreement impractical, the State shall then have the option of terminating the contract, or applicable portions thereof, without penalty or termination charge. The Vendor agrees to take back Services or Deliverables and refund any sums the State has paid Vendor less any reasonable amount for use or damage.
- e) Vendor will not be required to defend or indemnify the State if any claim by a third party against the State for infringement or misappropriation (i) results from the State's alteration of any Vendor-branded Service or Deliverable, or (ii) results from the continued use of the good(s) or services and other Services or Deliverables after receiving notice they infringe a trade secret of a third party.
- f) Nothing stated herein, however, shall affect Vendor's ownership in or rights to its preexisting intellectual property and proprietary rights.

40) UNANTICIPATED TASKS In the event that additional work must be performed that was wholly unanticipated, and that is not specified in the Agreement, but which in the opinion of both parties is necessary to the successful accomplishment of the contracted scope of work, the procedures outlined in this article will be followed. For each item of unanticipated work, the Vendor shall prepare a work authorization in accordance with the State's practices and procedures.

- a) It is understood and agreed by both parties that all of the terms and conditions of the Agreement shall remain in force with the inclusion of any work authorization. A work authorization shall not constitute a contract separate from the Agreement, nor in any manner amend or supersede any of the other terms or provisions of the Agreement or any amendment hereto.
- b) Each work authorization shall comprise a detailed statement of the purpose, objective, or goals to be undertaken by the Vendor, the job classification or approximate skill level or sets of the personnel required, an identification of all significant material then known to be developed by the Vendor's personnel as a Deliverable, an identification of all significant materials to be delivered by the State to the Vendor's personnel, an estimated time schedule for the provision of the Services by the Vendor, completion criteria for the work to be performed, the name or identification of Vendor's personnel to be assigned, the Vendor's estimated work hours required to accomplish the purpose, objective or goals, the Vendor's billing rates and units billed, and the Vendor's total estimated cost of the work authorization.
- c) All work authorizations must be submitted for review and approval by the procurement office that approved the original Contract and procurement. This submission and approval must be completed prior to execution of any work authorization documentation or performance thereunder. All work authorizations must be written and signed by the Vendor and the State prior to beginning work.
- d) The State has the right to require the Vendor to stop or suspend performance under the "Stop Work" provision of the North Carolina Department of Information Technology Terms and Conditions.
- e) The Vendor shall not expend Personnel resources at any cost to the State in excess of the estimated work hours unless this procedure is followed: If, during performance of the work, the Vendor determines that a work authorization to be performed under the Agreement cannot be accomplished within the estimated work hours, the Vendor will be required to complete the work authorization in full. Upon receipt of such notification, the State may:
 - a. Authorize the Vendor to expend the estimated additional work hours or service in excess of the original estimate necessary to accomplish the work authorization, or
 - b. Terminate the work authorization, or
 - c. Alter the scope of the work authorization in order to define tasks that can be accomplished within the remaining estimated work hours.
 - d. The State will notify the Vendor in writing of its election within seven (7) calendar days after receipt of the Vendor's notification. If notice of the election is given to proceed, the Vendor may expend the estimated additional work hours or Services.

41) STOP WORK ORDER The State may issue a written Stop Work Order to Vendor for cause at any time requiring Vendor to suspend or stop all, or any part, of the performance due under the Agreement for a period up to ninety (90) days after the Stop Work Order is delivered to the Vendor. The ninety (90) day period may be extended for any further period for which the parties may agree.

- a) The Stop Work Order shall be specifically identified as such and shall indicate that it is issued under this term. Upon receipt of the Stop Work Order, the Vendor shall immediately comply with its terms and take all reasonable steps to minimize incurring costs allocable to the work covered by the Stop Work Order during the period of work suspension or stoppage. Within a period of ninety (90) days after a Stop Work Order is delivered to Vendor, or within any extension of that period to which the parties agree, the State shall either:
 - i) Cancel the Stop Work Order, or
 - ii) Terminate the work covered by the Stop Work Order as provided for in the termination for default or the termination for convenience clause of the Agreement.

- b) If a Stop Work Order issued under this clause is canceled or the period of the Stop Work Order or any extension thereof expires, the Vendor shall resume work. The State shall make an equitable adjustment in the delivery schedule, the Agreement price, or both, and the Agreement shall be modified, in writing, accordingly, if:
 - i) The Stop Work Order results in an increase in the time required for, or in the Vendor's cost properly allocable to the performance of any part of the Agreement, and
 - ii) The Vendor asserts its right to an equitable adjustment within thirty (30) days after the end of the period of work stoppage; provided that if the State decides the facts justify the action, the State may receive and act upon an offer submitted at any time before final payment under the Agreement.
- c) If a Stop Work Order is not canceled and the work covered by the Stop Work Order is terminated in accordance with the provision entitled Termination for Convenience of the State, the State shall allow reasonable direct costs resulting from the Stop Work Order in arriving at the termination settlement.
- d) The State shall not be liable to the Vendor for loss of profits because of a Stop Work Order issued under this term.

42) TRANSITION ASSISTANCE Reserved

Section 2: Terms and Conditions Applicable to Software as a Service (SaaS)

1) DEFINITIONS:

- a) "Data" includes and means information, formulae, algorithms, or other content that the State, the State's employees, agents and end users upload, create or modify using the Services pursuant to this Agreement. Data also includes user identification information and metadata which may contain Data or from which the State's Data may be ascertainable.
- b) Reserved.
- c) Reserved.
- d) Reserved.
- e) "Support" includes provision of ongoing updates and maintenance for the Vendor online software applications, and as may be specified herein, consulting, training and other support Services as provided by the Vendor for SaaS tenants receiving similar SaaS Services.

2) ACCESS AND USE OF SAAS SERVICES:

- a) The Vendor grants the State a personal non-transferable and non-exclusive right to use and access, all Services and other functionalities or services provided, furnished or accessible under this Agreement. The State may utilize the Services as agreed herein and in accordance with any mutually agreed Acceptable Use Policy. The State is authorized to access State Data and any Vendor-provided data as specified herein and to transmit revisions, updates, deletions, enhancements, or modifications to the State Data. This shall include the right of the State to, and access to, Support without the Vendor requiring a separate maintenance or support agreement. Subject to an agreed limitation on the number of users, the State may use the Services with any computer, computer system, server, or desktop workstation owned or utilized by the State or other authorized users. User access to the Services shall be routinely provided by the Vendor and may be subject to a more specific Service Level Agreement (SLA) agreed to in writing by the parties. The State shall notify the Vendor of any unauthorized use of any password or account, or any other known or suspected breach of security access. The State also agrees to refrain from taking any steps, such as reverse engineering, reverse assembly or reverse compilation to derive a source code equivalent to the Services or any portion thereof. Use of the Services to perform services for commercial third parties (so-called "service bureau" uses) is not permitted, but the State may utilize the Services to perform its governmental functions. If the Services fees are based upon the number of Users and/or hosted instances, the number of Users/hosted instances available may be adjusted at any

time (subject to the restrictions on the maximum number of Users specified in the Furnish and Deliver Table herein above) by mutual agreement and State Procurement approval. All Services and information designated as “confidential” or “proprietary” shall be kept in confidence except as may be required by the North Carolina Public Records Act: N.C.G.S. § 132-1, *et. seq.*

- b) The State’s access license for the Services and its associated services neither transfers, vests, nor infers any title or other ownership right in any intellectual property rights of the Vendor or any third party, nor does this license transfer, vest, or infer any title or other ownership right in any source code associated with the Services unless otherwise agreed to by the parties. The provisions of this paragraph will not be construed as a sale of any ownership rights in the Services. Any Services or technical and business information owned by Vendor or its suppliers or licensors made accessible or furnished to the State shall be and remain the property of the Vendor or such other party, respectively. Vendor has a limited, non-exclusive license to access and use the State Data as provided to Vendor, but solely for performing its obligations under this Agreement and in confidence as provided herein.
- c) The Vendor or its suppliers shall at minimum, and except as otherwise agreed, provide telephone assistance to the State for all Services procured hereunder during the State’s normal business hours (unless different hours are specified herein). The Vendor warrants that its Support and customer service and assistance will be performed in accordance with generally accepted industry standards. The State has the right to receive the benefit of upgrades, updates, maintenance releases or other enhancements or modifications made generally available to the Vendor’s SaaS tenants for similar Services. The Vendor’s right to a new use agreement for new version releases of the Services shall not be abridged by the foregoing. The Vendor may, at no additional charge, modify the Services to improve operation and reliability or to meet legal requirements.
- d) The Vendor will provide to the State the same Services for updating, maintaining and continuing optimal performance for the Services as provided to other similarly situated users or tenants of the Services, but minimally as provided for and specified herein. Unless otherwise agreed in writing, Support will also be provided for any other (e.g., third party) software provided by the Vendor in connection with the Vendor’s solution herein. The technical and professional activities required for establishing, managing, and maintaining the Services environment are the responsibilities of the Vendor. Any training specified herein will be provided by the Vendor to certain State users for the fees or costs as set forth herein or in an SLA.
- e) Services provided pursuant to this Solicitation may, in some circumstances, be accompanied by a user clickwrap agreement. The term clickwrap agreement refers to an agreement that requires the end user to manifest his or her assent to terms and conditions by clicking an “ok” or “agree” button on a dialog box or pop-up window as part of the process of access to the Services. All terms and conditions of any clickwrap agreement provided with any Services solicited herein shall have no force and effect and shall be non-binding on the State, its employees, agents, and other authorized users of the Services.
- f) The Vendor may utilize partners and/or subcontractors to assist in the provision of the Services, so long as the State Data is not removed from the United States unless the terms of storage of the State Data are clearly disclosed, the security provisions referenced herein can still be complied with, and such removal is done with the prior express written permission of the State. The Vendor shall identify all of its strategic business partners related to Services provided under this contract including, but not limited to, all subcontractors or other entities or individuals who may be a party to a joint venture or similar agreement with the Vendor, who will be involved in any application development and/or operations.
- g) The Vendor warrants that all Services will be performed with professional care and skill, in a workmanlike manner and in accordance with the Services documentation and this Agreement.
- h) An SLA or other agreed writing shall contain provisions for scalability of Services and any variation in fees or costs as a result of any such scaling.
- i) Professional services provided by the Vendor at the request by the State in writing in addition to agreed Services shall be at the then-existing Vendor hourly rates when provided, unless otherwise agreed in writing by the parties.

3) **WARRANTY OF NON-INFRINGEMENT:**

- a) The Vendor warrants to the best of its knowledge that:
 - i) The Services do not infringe any intellectual property rights of any third party; and

- ii) There are no actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party.

- b) Reserved.
- c) Reserved.
- d) Reserved.

4) **ACCESS AVAILABILITY; REMEDIES:**

- a) The Vendor warrants that the Services will be in good working order, and operating in conformance with Vendor's standard specifications and functions as well as any other specifications agreed to by the parties in writing, and shall remain accessible 24/7, with the exception of scheduled outages for maintenance and of other service level provisions agreed in writing, e.g., in an SLA. The Vendor does not warrant that the operation of the Services will be completely uninterrupted or error free, or that the Services functions will meet all the State's requirements unless developed as Customized Services.
- b) The State shall notify the Vendor if the Services are not in good working order or inaccessible during the term of the Agreement. The Vendor shall, at its option, either repair, replace or reperform any Services reported or discovered as not being in good working order and accessible during the applicable contract term without cost to the State. If the Services' monthly availability averages less than 99.9% (excluding agreed-upon maintenance downtime), the State shall be entitled to receive automatic credits as indicated immediately below, or the State may use other contractual remedies such as recovery of damages, as set forth herein in writing, e.g., in Specifications, Special Terms or in an SLA, and as such other contractual damages are limited by N.C.G.S. § 143B-1350(h1) and the Limitation of Liability paragraph below. If not otherwise provided, the automatic remedies for non-availability of the Subscription Services during a month are:
 - 1. A 10% service credit applied against future fees if Vendor does not reach 99.9% availability.
 - 2. A 25% service credit applied against future fees if Vendor does not reach 99% availability.
 - 3. A 50% service credit applied against future fees or eligibility for early termination of the Agreement if Vendor does not reach 95% availability.

If, however, Services meet the 99.9% service availability level for a month but are not available for a consecutive 120 minutes during that month, the Vendor shall grant to the State a credit of a pro-rated one-day of the monthly subscription Services fee against future Services charges. Such credit(s) shall be applied to the bill immediately following the month in which the Vendor failed to meet the performance requirements or other service levels, and the credit will continue to be deducted from the monthly invoice for each prior month that Vendor fails to meet the support response times for the remainder of the duration of the Agreement. If Services monthly availability averages less than 99.9% (excluding agreed-upon maintenance downtime), for three (3) or more months in a rolling twelve-month period, the State may also terminate the contract for material breach in accordance with the Default provisions hereinbelow.

- c) Support Services. Reserved.

5) **EXCLUSIONS:**

- a) Except as stated above in Paragraphs 3 and 4, Vendor and its parent, subsidiaries and affiliates, subcontractors and suppliers make no warranties, express or implied, as to the Services.
- b) The warranties provided in Paragraphs 3 and 4 above do not cover repair for damages, malfunctions or service failures substantially caused by:
 - i) Actions of non-Vendor personnel;
 - ii) Failure to follow Vendor's written instructions relating to the Services provided to the State; or
 - iii) Force Majeure conditions set forth hereinbelow.
 - iv) The State's sole misuse of, or its own inability to use, the Services.

- 6) **PERFORMANCE REVIEW AND ACCOUNTABILITY:** N.C.G.S. § 143B-1340(f) and 09 NCAC 06B.1207 require provisions for performance review and accountability in State IT contracts. For this procurement, these shall include the holding a retainage of ten percent (10%) of the contract value and withholding the final payment contingent on final acceptance by the State as provided in 09 NCAC 06B.1207(3) and (4), unless waived or otherwise agreed, in writing. The Services herein will be provided consistent with and under these Services performance review and accountability guarantees.

- 7) **LIMITATION OF LIABILITY:** Limitation of Vendor's Contract Damages Liability: Reserved.

- 8) **VENDOR'S LIABILITY FOR INJURY TO PERSONS OR DAMAGE TO PROPERTY:** Reserved.
- 9) **MODIFICATION OF SERVICES:** If Vendor modifies or replaces the Services provided to the State and other tenants, and if the State has paid all applicable Subscription Fees, the State shall be entitled to receive, at no additional charge, access to a newer version of the Services that supports substantially the same functionality as the then accessible version of the Services. Newer versions of the Services containing substantially increased functionality may be made available to the State for an additional subscription fee. In the event of either of such modifications, the then accessible version of the Services shall remain fully available to the State until the newer version is provided to the State and accepted. If a modification materially affects the functionality of the Services as used by the State, the State, at its sole option, may defer such modification.
- 10) **TRANSITION PERIOD:**
a) Reserved.
- 11) **TRANSPORTATION:** Transportation charges for any Deliverable sent to the State other than electronically or by download shall be FOB Destination unless delivered by internet or file-transfer as agreed by the State, or otherwise specified in the solicitation document or purchase order.
- 12) **TRAVEL EXPENSES:** Reserved.
- 13) **PROHIBITION AGAINST CONTINGENT FEES AND GRATUITIES:** Reserved.
- 14) **AVAILABILITY OF FUNDS:** Reserved.
- 15) **PAYMENT TERMS (Applicable to SaaS):**
a) Payment may be made by the State in advance of or in anticipation of subscription Services to be actually performed under the Agreement or upon proper invoice for other Services rendered. Payment terms are Net 30 days after receipt of correct invoice. Initial payments are to be made after final acceptance of the Services. Payments are subject to any retainage requirements herein. The Purchasing State Agency is responsible for all payments under the Agreement. Subscription fees for term years after the initial year shall be as quoted under State options herein but shall not increase more than five percent (5%) over the prior term, except as the parties may have agreed to an alternate formula to determine such increases in writing. No additional charges to the State will be permitted based upon, or arising from, the State's use of a Business Procurement Card. The State may exercise any and all rights of Set Off as permitted in Chapter 105A-1 *et seq.* of the N.C. General Statutes and applicable Administrative Rules.
- b) Upon the Vendor's written request of not less than thirty (30) days and approval by the State, the State may:
i) Forward the Vendor's payment check(s) directly to any person or entity designated by the Vendor or
ii) Include any person or entity designated in writing by Vendor as a joint payee on the Vendor's payment check(s), however,
iii) In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Agreement obligations.
- c) For any third-party software licensed by the Vendor or its subcontractors for use by the State, a copy of the software license including terms acceptable to the State, an assignment acceptable to the State, and documentation of license fees paid by the Vendor must be provided to the State before any related license fees or costs may be billed to the State.
- d) An undisputed invoice is an invoice for which the State and/or the Purchasing State Agency has not disputed in writing within thirty (30) days from the invoice date, unless the agency requests more time for review of the invoice. Upon the Vendor's receipt of a disputed invoice notice, the Vendor will work to correct the applicable invoice error, provided that such dispute notice shall not relieve the State or the applicable Purchasing State Agency from its payment obligations for the undisputed items on the invoice or for any disputed items that are ultimately corrected. The Purchasing State Agency is not required to pay the Vendor for any Software or Services provided without a written purchase order from the appropriate Purchasing State Agency. In addition, all such Services provided must meet all terms, conditions, and specifications of this Agreement and purchase order and be accepted as satisfactory by the Purchasing State Agency before payment will be issued.
- e) The Purchasing State Agency shall release any amounts held as retainages for Services completed within a reasonable period after the end of the period(s) or term(s) for which the retainage was withheld.

Payment retainage shall apply to all invoiced items, excepting only such items as the Vendor obtains from Third Parties and for which costs are chargeable to the State by agreement of the Parties. The Purchasing State Agency, in its sole discretion, may release retainages withheld from any invoice upon acceptance of the Services identified or associated with such invoices.

16) **ACCEPTANCE CRITERIA:** Reserved.

17) **CONFIDENTIALITY:** Reserved.

18) **SECURITY OF STATE DATA:**

- a) All materials, including software, Data, information and documentation provided by the State to the Vendor (State Data) during the performance or provision of Services hereunder are the property of the State of North Carolina and must be kept secure and returned to the State. The Vendor will protect State Data in its hands from unauthorized disclosure, loss, damage, destruction by natural event, or other eventuality. Proprietary Vendor materials shall be identified to the State by the Vendor prior to use or provision of Services hereunder and shall remain the property of the Vendor. Derivative works of any Vendor proprietary materials prepared or created during the performance or provision of Services hereunder shall be provided to the State as part of the Services. The Vendor shall not access State User accounts, or State Data, except (i) during data center operations; (ii) in response to service or technical issues; (iii) as required by the express terms of this contract; or (iv) at the State's written request. The Vendor shall protect the confidentiality of all information, Data, instruments, studies, reports, records and other materials provided to it by the State or maintained or created in accordance with this Agreement. No such information, Data, instruments, studies, reports, records and other materials in the possession of Vendor shall be disclosed in any form without the prior written agreement with the State. The Vendor will have written policies governing access to and duplication and dissemination of all such information, Data, instruments, studies, reports, records and other materials.
- b) The Vendor shall not store or transfer non-public State data outside of the United States. This includes backup data and Disaster Recovery locations. The Service Provider will permit its personnel and contractors to access State of North Carolina data remotely only as required to provide technical support.
- c) Protection of personal privacy and sensitive data. The Vendor acknowledges its responsibility for securing any restricted or highly restricted data, as defined by the Statewide Data Classification and Handling Policy (<https://it.nc.gov/document/statewide-data-classification-and-handling-policy>) that is collected by the State and stored in any Vendor site or other Vendor housing systems including, but not limited to, computer systems, networks, servers, or databases, maintained by Vendor or its agents or subcontractors in connection with the provision of the Services. The Vendor warrants, at its sole cost and expense, that it shall implement processes and maintain the security of data classified as restricted or highly restricted; provide reasonable care and efforts to detect fraudulent activity involving the data; and promptly notify the State of any breaches of security within twenty-four (24) hours of confirmation as required by N.C.G.S. § 143B-1379.
- d) The Vendor will provide and maintain secure backup of the State Data. The Vendor shall implement and maintain secure passwords for its online system providing the Services, as well as all appropriate administrative, physical, technical and procedural safeguards at all times during the term of this Agreement to secure such Data from Data Breach, protect the Data and the Services from loss, corruption, unauthorized disclosure, and the introduction of viruses, disabling devices, malware and other forms of malicious or inadvertent acts that can disrupt the State's access to its Data and the Services. The Vendor will allow periodic back-up of State Data by the State to the State's infrastructure as the State requires or as may be provided by law.
- e) The Vendor shall certify to the State:
 - i) The sufficiency of its security standards, tools, technologies and procedures in providing Services under this Agreement;
 - ii) That the system used to provide the Subscription Services under this Contract has and will maintain a valid third-party security certification not to exceed one (1) year and is consistent with the data classification level and a security controls appropriate for low or moderate information system(s) per the National Institute of Standards and Technology NIST 800-53 revision 4. The State reserves the right to independently evaluate, audit, and verify such requirements.

iii) That the Services will comply with the following:

- (1) Any DIT security policy regarding Cloud Computing, and the DIT Statewide Information Security Policy Manual; to include encryption requirements as defined below:
 - (a) The Vendor shall encrypt all non-public data in transit regardless of the transit mechanism.
 - (b) For engagements where the Vendor stores sensitive personally identifiable or otherwise confidential information, this data shall be encrypted at rest. Examples are social security number, date of birth, driver's license number, financial data, federal/state tax information, and hashed passwords. The Vendor's encryption shall be consistent with validated cryptography standards as specified in National Institute of Standards and Technology FIPS140-2, Security Requirements. The key location and other key management details will be discussed and negotiated by both parties. When the Service Provider cannot offer encryption at rest, it must maintain, for the duration of the contract, cyber security liability insurance coverage for any loss resulting from a data breach. Additionally, where encryption of data at rest is not possible, the Vendor must describe existing security measures that provide a similar level of protection;
 - (2) Privacy provisions of the Federal Privacy Act of 1974;
 - (3) The North Carolina Identity Theft Protection Act, N.C.G.S. Chapter 75, Article 2A (e.g., N.C.G.S. § 75-65 and -66);
 - (4) The North Carolina Public Records Act, N.C.G.S. Chapter 132;
 - (5) Applicable Federal, State and industry standards and guidelines including, but not limited to, relevant security provisions of the Payment Card Industry (PCI) Data Security Standard (PCIDSS) including the PCIDSS Cloud Computing Guidelines, Criminal Justice Information, The Family Educational Rights and Privacy Act (FERPA), Health Insurance Portability and Accountability Act (HIPAA); and
 - (6) Any requirements implemented by the State under N.C.G.S. §§ 143B-1376 and -1377.
 - (7) Any requirements implemented by the State under N.C.G.S. §§ 20-309.2(d).
- f) Security Breach. "Security Breach" under the NC Identity Theft Protection Act (N.C.G.S. § 75-60ff) means (1) any circumstance pursuant to which applicable Law requires notification of such breach to be given to affected parties or other activity in response to such circumstance (e.g., N.C.G.S. § 75-65); or (2) any actual, attempted, suspected, threatened, or reasonably foreseeable circumstance that compromises, or could reasonably be expected to compromise, either Physical Security or Systems Security (as such terms are defined below) in a fashion that either does or could reasonably be expected to permit unauthorized Processing (as defined below), use, disclosure or acquisition of or access to any the State Data or state confidential information. "Physical Security" means physical security at any site or other location housing systems maintained by Vendor or its agents or subcontractors in connection with the Services. "Systems Security" means security of computer, electronic or telecommunications systems of any variety (including data bases, hardware, software, storage, switching and interconnection devices and mechanisms), and networks of which such systems are a part or communicate with, used directly or indirectly by Vendor or its agents or subcontractors in connection with the Services. "Processing" means any operation or set of operations performed upon the State Data or State confidential information, whether by automatic means, such as creating, collecting, procuring, obtaining, accessing, recording, organizing, storing, adapting, altering, retrieving, consulting, using, disclosing or destroying.
- g) Breach Notification. In the event the Vendor becomes aware of any Security Breach due to Vendor acts or omissions other than in accordance with the terms of the Agreement, the Vendor shall, at its own expense, (1) immediately notify the State's Agreement Administrator of such Security Breach and perform a root cause analysis thereon; (2) investigate such Security Breach; (3) provide a remediation plan, acceptable to the State, to address the Security Breach and prevent any further incidents; (4) conduct a forensic investigation to determine what systems, data and information have been affected by such event; and (5) cooperate with the State, and any law enforcement or regulatory officials, credit reporting companies, and credit card associations investigating such Security Breach. The State shall make the final decision on notifying the State's persons, entities, employees, service providers and/or the public of such Security Breach, and the implementation of the remediation plan. If a notification to a customer is

required under any Law or pursuant to any of the State's privacy or security policies, then notifications to all persons and entities who are affected by the same event (as reasonably determined by the State) shall be considered legally required.

- h) Notification Related Costs. The Vendor shall reimburse the State for all Notification Related Costs incurred by the State arising out of or in connection with any such Security Breach due to Vendor acts or omissions other than in accordance with the terms of the Agreement resulting in a requirement for legally required notifications. "Notification Related Costs" shall include the State's internal and external costs associated with addressing and responding to the Security Breach including, but not limited to, (1) preparation and mailing or other transmission of legally required notifications; (2) preparation and mailing or other transmission of such other communications to customers, agents or others as the State deems reasonably appropriate; (3) establishment of a call center or other communications procedures in response to such Security Breach (e.g., customer service FAQs, talking points and training); (4) public relations and other similar crisis management services; (5) legal and accounting fees and expenses associated with the State's investigation of and response to such event; and (6) costs for credit reporting services that are associated with legally required notifications or are advisable, in the State's opinion, under the circumstances. If the Vendor becomes aware of any Security Breach which is not due to Vendor acts or omissions other than in accordance with the terms of the Agreement, the Vendor shall immediately notify the State of such Security Breach, and the parties shall reasonably cooperate regarding which of the foregoing or other activities may be appropriate under the circumstances, including any applicable Charges for the same.
- i) The Vendor shall allow the State reasonable access to Services security logs, latency statistics, and other related Services security data that affect this Agreement and the State's Data, at no cost to the State.
- j) In the course of normal operations, it may become necessary for the Vendor to copy or move Data to another storage destination on its online system, and delete the Data found in the original location. In any such event, the Vendor shall preserve and maintain the content and integrity of the Data, except by prior written notice to, and prior written approval by, the State.
- k) Remote access to Data from outside the continental United States including, without limitation, remote access to Data by authorized Services support staff in identified support centers, is prohibited unless approved in advance by the State Chief Information Officer or the Using Agency.
- l) In the event of temporary loss of access to Services, the Vendor shall promptly restore continuity of Services, restore Data in accordance with this Agreement and as may be set forth in an SLA, restore accessibility of Data and the Services to meet the performance requirements stated herein or in an SLA. As a result, Service Level remedies will become available to the State as provided herein, in the SLA or other agreed and relevant documents. Failure to promptly remedy any such temporary loss of access may result in the State exercising its options for assessing damages under this Agreement.
- m) In the event of disaster or catastrophic failure that results in significant State Data loss or extended loss of access to Data or Services, the Vendor shall notify the State by the fastest means available and in writing, with additional notification provided to the State Chief Information Officer or designee of the contracting agency. Vendor shall provide such notification within twenty-four (24) hours after Vendor reasonably believes there has been such a disaster or catastrophic failure. In the notification, Vendor shall inform the State of:
 - (1) The scale and quantity of the State Data loss;
 - (2) What Vendor has done or will do to recover the State Data from backups and mitigate any deleterious effect of the State Data and Services loss; and
 - (3) What corrective action Vendor has taken or will take to prevent future State Data and Services loss.
 - (4) If Vendor fails to respond immediately and remedy the failure, the State may exercise its options for assessing damages or other remedies under this Agreement.

The Vendor shall investigate the disaster or catastrophic failure and shall share the report of the investigation with the State. The State and/or its authorized agents shall have the right to lead (if required by law) or participate in the investigation. The Vendor shall cooperate fully with the State, its agents and law enforcement.

- n) In the event of termination of this contract, cessation of business by the Vendor or other event preventing the Vendor from continuing to provide the Services, the Vendor shall not withhold the State Data or any other State confidential information or refuse, for any reason, to promptly return to the State the State Data and any other State confidential information (including copies thereof) if requested to do so on such media as reasonably requested by the State, even if the State is then or is alleged to be in breach of the Agreement. As a part of the Vendor's obligation to provide the State Data pursuant to this Paragraph 18) n), the Vendor will also provide the State any data maps, documentation, software, or other materials necessary, including, without limitation, handwritten notes, materials, working papers or documentation, for the State to use, translate, interpret, extract and convert the State Data.
- o) Secure Data Disposal. When requested by the State, the Vendor shall destroy all requested data in all of its forms (e.g., disk, CD/DVD, backup tape, and paper). Data shall be permanently deleted and shall not be recoverable, in accordance with National Institute of Standards and Technology (NIST) approved methods, and certificates of destruction shall be provided to the State.

Section 3: Terms and Conditions Applicable to Information Technology Goods and Services

- 1) **SOFTWARE LICENSE FOR HARDWARE, EMBEDDED SOFTWARE AND FIRMWARE:** Reserved.
- 2) **LICENSE GRANT FOR APPLICATION SOFTWARE, (COTS):** This paragraph recites the scope of license granted, if not superseded by a mutually agreed and separate licensing agreement, as follows:
 - a) Vendor grants to the State, its Agencies and lawful customers a non-exclusive, non-transferable and non-sublicensable license to use, in object code format, Vendor's software identified in the solicitation documents, Vendor's Statement of Work (SOW), or an Exhibit thereto executed by the parties ("Software"), subject to the restrictions set forth therein, such as the authorized computer system, the data source type(s), the number of target instance(s) and the installation site. Use of the Software shall be limited to the data processing and computing needs of the State, its Agencies and lawful customers. This license shall be perpetual or for the term of the contract (pick one, delete the other), unless terminated as provided herein. The State agrees not to distribute, sell, sublicense or otherwise transfer copies of the Software or any portion thereof. For purposes of this Agreement, a State Entity shall be defined as any department or agency of the State of North Carolina, which is controlled by or under common control of the State or who is a lawful customer of the State pursuant to Article 3D of Chapter 147 of the General Statutes.
 - b) Vendor shall provide all encryption or identification codes or authorizations that are necessary or proper for the operation of the licensed Software.
 - c) The State shall have the right to copy the Software, in whole or in part, for use in conducting benchmark or acceptance tests, for business recovery and disaster recovery testing or operations, for archival or emergency purposes, for back up purposes, for use in preparing derivative works if allowed by the solicitation documents or statements of work, or to replace a worn copy.
 - d) The State may modify non-personal Software in machine-readable form for its internal use in merging the same with other software program material. Any action hereunder shall be subject to uses described in this paragraph, the restrictions imposed by Paragraph 3), and applicable terms in the solicitation documents or statements of work.
- 3) **WARRANTY TERMS:** Notwithstanding anything in the Agreement or Exhibit hereto to the contrary, Vendor shall assign warranties for any Deliverable supplied by a third party to the State.
 - a) a) Vendor warrants that any Software or Deliverable will operate substantially in conformity with prevailing specifications as defined by the current standard documentation (except for minor defects or errors which are not material to the State) for a period of ninety (90) days from the date of acceptance ("Warranty Period"), unless otherwise specified in the Solicitation Documents. If the Software does not perform in accordance with such specifications during the Warranty Period, Vendor will use reasonable efforts to correct any deficiencies in the Software so that it will perform in accordance with or substantially in accordance with such specifications.

- b) Vendor warrants to the best of its knowledge that:
 - i) The licensed Software and associated materials do not infringe any intellectual property rights of any third party;
 - ii) There are no actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party;
 - iii) The licensed Software and associated materials do not contain any surreptitious programming codes, viruses, Trojan Horses, "back doors" or other means to facilitate or allow unauthorized access to the State's information systems.
 - iv) The licensed Software and associated materials do not contain any timer, counter, lock or similar device (other than security features specifically approved by Customer in the Specifications) that inhibits or in any way limits the Software's ability to operate.
- c) UNLESS MODIFIED BY AMENDMENT OR THE SOLICITATION DOCUMENTS, THE WARRANTIES IN THIS PARAGRAPH ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OR WHETHER ARISING BY COURSE OF DEALING OR PERFORMANCE, CUSTOM, USAGE IN THE TRADE OR PROFESSION OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NO OTHER REPRESENTATIONS OR WARRANTIES HAVE FORMED THE BASIS OF THE BARGAIN HEREUNDER.

4) RESTRICTIONS: State's use of the Software is restricted as follows:

- a) The license granted herein is granted to the State and to any political subdivision or other entity permitted or authorized to procure Information Technology through the Department of Information Technology. If the License Grant and License Fees are based upon the number of Users, the number of Users may be increased at any time, subject to the restrictions on the maximum number of Users specified in the solicitation documents.
- b) No right is granted hereunder to use the Software to perform Services for commercial third parties (so-called "service bureau" uses). Services provided to other State Departments, Agencies or political subdivisions of the State is permitted.
- c) The State may not copy, distribute, reproduce, use, lease, rent or allow access to the Software except as explicitly permitted under this Agreement, and State will not modify, adapt, translate, prepare derivative works (unless allowed by the solicitation documents or statements of work,) decompile, reverse engineer, disassemble or otherwise attempt to derive source code from the Software or any internal data files generated by the Software.
- d) State shall not remove, obscure or alter Vendor's copyright notice, trademarks, or other proprietary rights notices affixed to or contained within the Software.

5) SUPPORT OR MAINTENANCE SERVICES: This paragraph recites the scope of maintenance Services due under the license granted, if not superseded by a separate licensing and maintenance agreement or as may be stated in the solicitation documents. Subject to payment of a Support Service or Maintenance Fee stated in the solicitation documents for the first year and all subsequent years, if requested by the State, Vendor agrees to provide the following support Services ("Support Services") for the current version and one previous version of the Software commencing upon delivery of the Software:

- a) **Error Correction:** If the error conditions reported by the State pursuant to the General Terms and Conditions are not corrected in a timely manner, the State may request a replacement copy of the licensed Software from Vendor. In such event, Vendor shall then deliver a replacement copy, together with corrections and updates, of the licensed Software within 24 hours of the State's request at no added expense to the State.
- b) **Other Agreement:** This Paragraph 5 may be superseded by written mutual agreement provided that: Support and maintenance Services shall be fully described in such a separate agreement annexed hereto and incorporated herein
- c) **Temporary Extension of License:** If any licensed Software or CPU/computing system on which the Software is installed fails to operate or malfunctions, the term of the license granted shall be temporarily extended to another CPU selected by the State and continue until the earlier of:
 - i) Return of the inoperative CPU to full operation, or

- ii) Termination of the license.
 - d) **Encryption Code:** Vendor shall provide any temporary encryption code or authorization necessary or proper for operation of the licensed Software under the foregoing temporary license. The State will provide notice by expedient means, whether by telephone, e-mail or facsimile of any failure under this paragraph. On receipt of such notice, Vendor shall issue any temporary encryption code or authorization to the State within twenty-four (24) hours; unless otherwise agreed.
 - e) **Updates:** Vendor shall provide to the State, at no additional charge, all new releases and bug fixes (collectively referred to as "Updates") for any Software Deliverable developed or published by Vendor and made generally available to its other customers at no additional charge. All such Updates shall be a part of the Program and Documentation and, as such, be governed by the provisions of the Agreement.
 - f) **Telephone Assistance:** Vendor shall provide the State with telephone access to technical support engineers for assistance in the proper installation and use of the Software, and to report and resolve Software problems, during normal business hours, 8:00 AM - 5:00 PM Eastern Time, Monday-Friday. Vendor shall respond to the telephone requests for Program maintenance service, within four (4) hours or eight (8) hours or next business day, etc. *(edit this time to what you want your response time to be)*, for calls made at any time
- 6) **STATE PROPERTY AND INTANGIBLES RIGHTS:** The parties acknowledge and agree that the State shall own all right, title and interest in and to the copyright in any and all software, technical information, specifications, drawings, records, documentation, data and other work products first originated and prepared by the Vendor for delivery to the State (the "Deliverables"). To the extent that any Vendor Technology is contained in any of the Deliverables, the Vendor hereby grants the State a royalty-free, fully paid, worldwide, perpetual, non-exclusive license to use such Vendor Technology in connection with the Deliverables for the State's internal business purposes. Vendor shall not acquire any right, title and interest in and to the copyrights for goods, any and all software, technical information, specifications, drawings, records, documentation, data or derivative works thereof, or other work products provided by the State to Vendor. The State hereby grants Vendor a royalty-free, fully paid, worldwide, perpetual, non-exclusive license to non-confidential Deliverables first originated and prepared by the Vendor for delivery to the State.

Section 4: Terms and Conditions Applicable to Personnel and Personal Services

- 1) **VENDOR'S REPRESENTATION:** Vendor warrants that qualified personnel will provide Services in a professional manner. "Professional manner" means that the personnel performing the Services will possess the skill and competence consistent with the prevailing business standards in the information technology industry. Vendor agrees that it will not enter any agreement with a third party that might abridge any rights of the State under the Agreement. Vendor will serve as the prime Vendor under the Agreement. Should the State approve any subcontractor(s), the Vendor shall be legally responsible for the performance and payment of the subcontractor(s). Names of any third-party Vendors or subcontractors of Vendor may appear for purposes of convenience in Contract documents; and shall not limit Vendor's obligations hereunder. Such third-party subcontractors, if approved, may serve as subcontractors to Vendor. Vendor will retain executive representation for functional and technical expertise as needed in order to incorporate any work by third party subcontractor(s).

- a) Intellectual Property. Vendor represents that it has the right to provide the Services and other Deliverables without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party. Vendor also represents that its Services and other Deliverables are not the subject of any actual or threatened actions arising from, or alleged under, any intellectual property rights of any third party.
 - b) Inherent Services. If any Services or other Deliverables, functions, or responsibilities not specifically described in the Agreement are required for Vendor's proper performance, provision and delivery of the Services and other Deliverables pursuant to the Agreement, or are an inherent part of or necessary sub-task included within the Services, they will be deemed to be implied by and included within the scope of the Contract to the same extent and in the same manner as if specifically described in the Contract.
 - c) Vendor warrants that it has the financial capacity to perform and to continue to perform its obligations under the Contract; that Vendor has no constructive or actual knowledge of an actual or potential legal proceeding being brought against Vendor that could materially adversely affect performance of the Agreement; and that entering into the Agreement is not prohibited by any Contract, or order by any court of competent jurisdiction.
- 2) **SERVICES PROVIDED BY VENDOR:** Vendor shall provide the State with implementation Services as specified in a Statement of Work ("SOW") executed by the parties. This Agreement in combination with each SOW individually comprises a separate and independent contractual obligation from any other SOW. A breach by Vendor under one SOW will not be considered a breach under any other SOW. The Services intended hereunder are related to the State's implementation and/or use of one or more Software Deliverables licensed hereunder or in a separate software license agreement between the parties ("License Agreement"). (Reserve if not needed)
- 3) **PERSONNEL:** Vendor shall not substitute key personnel assigned to the performance of the Agreement without prior written approval by the Agency Contract Administrator. The individuals designated as key personnel for purposes of the Agreement are those specified in the Vendor's offer. Any desired substitution shall be noticed to the Agency's Contract Administrator in writing accompanied by the names and references of Vendor's recommended substitute personnel. The Agency will approve or disapprove the requested substitution in a timely manner. The Agency may, in its sole discretion, terminate the Services of any person providing Services under the Agreement. Upon such termination, the Agency may request acceptable substitute personnel or terminate the Contract Services provided by such personnel.
- a) Unless otherwise expressly provided in the Contract, Vendor will furnish all of its own necessary management, supervision, labor, facilities, furniture, computer and telecommunications equipment, software, supplies and materials necessary for the Vendor to provide and deliver the Services and other Deliverables.
 - b) Vendor personnel shall perform their duties on the premises of the State, during the State's regular workdays and normal work hours, except as may be specifically agreed otherwise, established in the specification, or statement of work.
 - c) The Agreement shall not prevent Vendor or any of its personnel supplied under the Agreement from performing similar Services elsewhere or restrict Vendor from using the personnel provided to the State, provided that:
 - i) Such use does not conflict with the terms, specifications or any amendments to the Agreement, or
 - ii) Such use does not conflict with any procurement law, regulation or policy, or
 - iii) Such use does not conflict with any non-disclosure agreement, or term thereof, by and between the State and Vendor or Vendor's personnel.
 - d) Unless otherwise provided by the Agency, the Vendor shall furnish all necessary personnel, Services, and otherwise perform all acts, duties and responsibilities necessary or incidental to the accomplishment of the tasks specified in the Agreement. The Vendor shall be legally and financially responsible for its personnel including, but not limited to, any deductions for social security and other withholding taxes required by state or federal law. The Vendor shall be solely responsible for

acquiring any equipment, furniture, and office space not furnished by the State necessary for the Vendor to comply with the Agreement. The Vendor personnel shall comply with any applicable State facilities or other security rules and regulations.

- 4) **PERSONAL SERVICES:** The State shall have and retain the right to obtain personal Services of any individuals providing Services under the Agreement. This right may be exercised at the State's discretion in the event of any transfer of the person providing personal Services, termination, default, merger, acquisition, bankruptcy or receivership of the Vendor to ensure continuity of Services provided under the Agreement. Provided, however, that the Agency shall not retain or solicit any Vendor employee for purposes other than completion of personal Services due as all or part of any performance due under the Agreement.
- a) Vendor personnel shall perform any duties on the premises of the State during the State's regular workdays and normal work hours, except as may be specifically agreed otherwise, established in the specification, or statement of work.
 - b) The State has and reserves the right to disapprove the continuing assignment of Vendor personnel provided by Vendor under the Agreement. If this right is exercised and the Vendor is not able to replace the disapproved personnel as required by the State, the parties agree to employ best commercial efforts to informally resolve such failure equitably by adjustment of other duties, set-off, or modification to other terms that may be affected by Vendor's failure.
 - c) Vendor will make every reasonable effort consistent with prevailing business practices to honor the specific requests of the State regarding assignment of Vendor's employees. Vendor reserves the sole right to determine the assignment of its employees. If one of Vendor's employees is unable to perform due to illness, resignation, or other factors beyond Vendor's control, Vendor will provide suitable personnel at no additional cost to the State.
 - d) The Agreement shall not prevent Vendor or any of its personnel supplied under the Agreement from performing similar Services elsewhere or restrict Vendor from using the personnel provided to the State, provided that:
 - i) Such use does not conflict with the terms, specifications or any amendments to the Agreement, or
 - ii) Such use does not conflict with any procurement law, regulation or policy, or
 - iii) Such use does not conflict with any non-disclosure agreement, or term thereof, by and between the State and Vendor or Vendor's personnel.

ATTACHMENT C: DEPARTMENT OF HEALTH AND HUMAN SERVICES TERMS AND CONDITIONS

C.1 NCDHHS PRIVACY AND SECURITY OFFICE (PSO) TERMS

C.1.1 COMPLIANCE WITH APPLICABLE LAWS

The Vendor shall comply with all electronic storage standards concerning privacy, data protection, confidentiality, and security including those of federal, state, and DHHS having jurisdiction where business services are provided for accessing, receiving, or processing all confidential information.

STATE AND NC DEPARTMENT OF HEALTH AND HUMAN SERVICES PRIVACY AND

The Vendor shall implement internal data security measures, and other industry security best practices utilizing appropriate hardware and software necessary to monitor, maintain, and ensure data integrity in accordance with all applicable federal regulations, state regulations, DHHS privacy and security policies. The Vendor will maintain all Privacy and security safeguards throughout the term of this agreement. In addition, the Vendor agrees to maintain compliance with the following:

- a) NC DHHS Privacy Manual and Security Manual, both located online at:

<https://policies.ncdhhs.gov/departamental/policies-manuals/section-viii-privacy-and-security>

C.1.2 HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

If the DHHS Division or Office determines that some or all the activities within the scope of this contract are subject to the Health Insurance Portability and Accountability Act of 1996, P.L. 104-91, as amended (HIPAA), or its implementing regulations, the Vendor agrees to comply with all HIPAA requirements and will execute such agreements and practices as the Division or Office may require ensuring compliance.

C.1.3 CONFIDENTIALITY

- a) The Vendor shall adhere to DHHS privacy and security policies, as well as those in the federal regulations including Rule at 45 C.F.R. Parts 160 and 164, subparts A and E , Security Standards at 45 C.F.R. Parts 160, 162 and 164, subparts A and C (“the Security Rule”), and the applicable provisions of the Health Information Technology for Economic and Clinical Health Act (HITECH).
- b) **DUTY TO REPORT:** In addition to any DHHS Privacy and Security Office (PSO) notification requirements in a Business Associate Agreement (BAA) with a DHHS Division or Office pr om the North Carolina Department of Information Technology Terms and Conditions, the Vendor shall (1) report all suspected and confirmed privacy/security incidents or privacy/security breaches involving unauthorized access, use, disclosure, modification, or data destruction to the DHHS Privacy and Security Office at <https://www.ncdhhs.gov/about/administrative-divisions-offices/office-privacy-security> within twenty-four (24) hours after the incident is first discovered. (2) If the privacy or security incident involves Social Security Administration (SSA) data or Centers for Medicare and Medicaid Services (CMS) data, the vendor shall report the incident within

one (1) hour after the incident is first discovered. At a minimum, such privacy and security incident report will contain to the extent known: the nature of the incident, specific information about the data compromised, the date the privacy or security incident occurred, the date the Vendor was notified, and the identity of affected or potentially affected individual(s). (3) During the performance of this contract, the vendor is to notify the DHHS Privacy and Security Office of any contact by the federal Office for Civil Rights (OCR) received by the vendor. In addition, the Vendor will reasonably cooperate with DHHS Divisions and Offices to mitigate the damage or harm of such security incidents.

C.1.4 CONTINUOUS MONITORING

- a) The Vendor shall maintain compliance with the State Chief Information Officer's (CIO) Continuous Monitoring Process mandate, requiring that Vendors hosting state-owned data outside of NC DIT's infrastructure environment work with state agencies to implement a risk management program that continuously monitors risk through the performance of assessments, risk analysis, and data inventory.
- b) Based upon NIST 800-137, "Information Security Continuous Monitoring (ISCM) for Federal Information Systems and Organizations", the Vendor shall perform security/risk assessments on its information systems using the latest NIST 800-53 controls to assess its compliance with enterprise security standards as outlined below.

Security Assessment:

- i. Vendors providing Infrastructure as a Service, Platform as a Service and/or Software as a Service for the state agency are required to obtain approval from the DHHS Privacy and Security Office to ensure their compliance with statewide security policies.
- ii. To obtain such approval, the Vendor shall annually provide both a written attestation to its compliance and an industry recognized, third party assessment report, such as the Federal Risk and Authorization Management Program (FedRAMP) certification, SOC 2 Type 2, HITRUST CSF and ISO 27001. State agencies will be required to review these security assessment reports, assess the risk of each vendor, ensure completion of all findings using a Corrective Action Plan (CAP), and provide an annual certification to the Vendor's compliance to the State CIO.

The Vendor shall work with the state agency to provide a data inventory of all cloud hosted services, by assisting the state agency with completing a Privacy Threshold Analysis (PTA) documenting the data classification and the data fields hosted within the cloud, offsite, or Vendor-hosted environment. The Vendor shall review a Privacy Threshold Analysis (PTA) with the NC DHHS Privacy and Security Office annually and assist with updating the PTA when changes to the data being hosted occur.

DHHS Privacy & Security office may perform periodic independent security assessments of Vendor hosted applications on the public/private/hybrid cloud or On-Prem data centers. The Vendor must provide access to their applications' hosting environment and their key resources to DHHS designated resources and DHHS engaged vendors to perform a privacy & security risk assessment that includes vulnerability analysis, penetration testing,

and risk analysis based on the latest NIST 800-53, Federal, State and DHHS requirements.

C.1.5 OVERSIGHT

- a) **RECORD RETENTION:** Records shall not be destroyed, purged, or disposed of without the express written consent of the DHHS Division or Office. State basic records retention policy requires all grant records to be retained for a minimum of five years or until all audit exceptions have been resolved, whichever is longer. If the contract is subject to federal policy and regulations, record retention may be longer than five years. Records must be retained for a period of three years following submission of the final Federal Financial Status Report, if applicable, or three years following the submission of a revised final Federal Financial Status Report. Also, if any litigation, claim, negotiation, audit, disallowance action, or other action involving this Contract has been started before expiration of the five-year retention period described above, the records must be retained until completion of the action and resolution of all issues which arise from it, or until the end of the regular five-year period described above, whichever is later. The record retention period for Temporary Assistance for Needy Families (TANF) and MEDICAID and Medical Assistance grants and programs is a minimum of ten years. The record retention period for the Health Insurance Portability and Accountability Act (HIPAA) is six years. For the Internal Revenue Service (IRS) and the Social Security Administration (SSA), the record retention period is seven years.

C.1.6 FLOW-DOWN

In addition to the subcontracting requirements in Paragraph 4) of the NCDIT Terms and Conditions, Attachment B, Section 1: (1) if a sub-contractor is used in the performance of this contract, written approval of the NC DHHS PSO (Privacy and Security Office) is also required; and (2) Vendor must include without modification all the security and privacy terms and conditions in this Attachment C, Department of Health and Human Services Terms and Conditions in each sub-contract.

C.2 TRANSITION ASSISTANCE

If the Contract is not renewed at the end of this term, or is canceled prior to its expiration, for any reason, the Vendor must provide for up to three (3) months after the expiration or cancellation of the Contract ("Transition Period"), all reasonable transition assistance requested by the Agency, to allow for the expired or canceled portion of the Services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such Services to the Agency or its designees. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of the Contract, (notwithstanding this expiration or cancellation) except for those Contract terms or conditions that do not reasonably apply to such transition assistance. The Agency shall pay the Vendor for any resources utilized in performing such transition assistance at the most current rates provided by the Agreement for Contract performance. If the State cancels the Agreement for cause, then the Agency will be entitled to offset the cost of paying the Vendor for the additional resources the Vendor utilized in providing transition assistance with any damages the Agency may have otherwise accrued as a result of said cancellation.

- a. In the event transition assistance becomes necessary, the Parties will meet to discuss transition, including turnover procedures, the transition meeting schedule, and any risks, barriers, assumptions, and mitigation strategies for transition.
- b. During the Transition Period, the Vendor will continue to provide services to the Agency without cessation or alteration. The Transition Period may be modified as agreed upon in writing by the parties in a Contract amendment, including adding additional transition services.
- c. The Vendor will provide a draft of its Transition Plan to the Agency within ninety (90) calendar days after Contract award. The Transition Plan will describe how the Vendor will transition responsibility to the Agency or its designees if a Transition Event occurs. The Transition Plan must adhere to the requirements included in Attachment J. MINIMUM CONTENT FOR PROJECT AND O&M DELIVERABLES.
- d. Within thirty (30) calendar days of receiving/providing notice of intent to terminate or of Contract expiration and no later than ninety (90) calendar days prior to termination or expiration of the Contract, the Vendor will develop and deliver to the Agency an updated Transition Plan. The updated Transition Plan will document the steps required to transition the Confidential Information from the Vendor to the Agency or its designee. The Vendor will obtain the Agency's approval of its updated Transition Plan and will be required to update and obtain the Agency's approval of revisions to its plan as revisions are made.
- e. If the Solution is Vendor-Hosted, the Vendor will be required to perform both the tasks included above in paragraphs 12) a)-d) and the additional tasks listed below:
 - i. During the Transition Period, the Vendor will extract and/or transition to the Agency a full backup of all Agency's Confidential Information/State Data collected, stored, and maintained by the Solution in an agreed upon usable format, at no cost to the Agency. The Agency's Confidential Information/State Data will be delivered to the Agency no later than sixty (60) calendar days after the start of the Transition Period, at no cost to the Agency. At the request of the Agency, the Vendor will be required to provide technical support for at least thirty (30) calendar days after delivering the Agency's Confidential Information/State Data to the Agency for the purpose of assuring the format and contents of the Agency's Confidential Information/State Data are accurate and meet the needs of the Agency. The Agency's Confidential Information/State Data must be organized by Entity Relationship Diagram (ERD) and accompanied by the following documentation unless this documentation is being maintained by State technical staff:
 - 1. Diagram of all the Solution tables and databases;
 - 2. Data dictionaries for all tables/databases; and
 - 3. Related reference files and coding guides.
 - ii. Upon receiving written notice from the Agency, the Vendor will destroy or purge any Confidential Information provided by or for the Agency during the Contract term, from all Vendor or hosting service provider databases, electronic files, or paper files (including backups). This destruction or purge should only occur following both the Vendor's receipt of the Agency's written request and the Agency's confirmation that the Agency's Confidential Information/State Data has been delivered and received in a usable,

archivable format. When the Agency directs the Vendor to destroy or purge all Confidential Information/State Data within its and its hosting service provider's infrastructure and possession, in electronic or paper form, the Vendor and the hosting service provider will be required to certify in writing within thirty (30) calendar days of the Vendor receiving such written notice that all Confidential Information/State Data referenced above has been destroyed or purged.

- iii. The Vendor will be required to ensure that its hosting service provider, if any, also complies with the Transition Period obligations in this section.
- iv. Until the Vendor has certified the completion of the data destruction or purge, the Vendor will continue to comply with all data security sections within this RFP even after the resulting Contract has terminated or expired.

C. 3Stablization

During the Project Execution Phase, Vendor will provide support until the Solution has been stabilized. The Solution will be deemed "stable" when it is available and has been operating continuously for ninety (90) consecutive Calendar Days following Deployment so that users can successfully log into the Solution and perform their daily work 24x7x365 (excluding scheduled maintenance periods) without frequent system lockups, freezes, or shutdowns. If a Category 1, 2 or 3 Defect or issue occurs during the 90-day Stabilization Period, the Vendor must resolve the Defect/issue in accordance with the table below and the Defect/issue must remain resolved by the end of the 90-day Stabilization Period or resolved within the Defect resolution time outlined below for Defects that occur at the end of the Stabilization Period and the resolution time extends beyond the 90-day Stabilization Period. Any Defect that is not resolved within the specified timeframe is subject to the Liquidated damages outlined below. These Severity 1, 2, or 3 Defects do not include any issues that may arise that are outside of Vendor responsibility, which are also summarized below. The Severity Levels are defined in the following table and will be included in the Service Level Agreement.

Liquidated Damages. The State and the Vendor agree to the specific standards set forth in this Contract. Vendor shall maintain and follow the Service Level Agreement below. It is agreed between the Vendor and the State that the failure to meet the Service/Performance Levels identified in the Service Level Agreement below would cause damages to the State that would be difficult or impossible to determine with accuracy. The Vendor agrees that its failure to meet the Service/Performance Level may or will affect the delivery of (goods/services, etc.), either directly or indirectly and may or will result, directly or proximately, in monetary damages to the State; therefore, the actual amount of such injury and damage will be impossible or extremely difficult to calculate. The State and the Vendor therefore agree that the liquidated damages set out in the table below shall be a reasonable approximation of the damages that shall be suffered by the State.

- 1) Vendor agrees that the Vendor shall pay liquidated damages to the State in the instances and in the amounts set forth in the below table. The Parties also agree that the stated liquidated damage amounts are reasonable and not punitive. Accordingly, in the event of such damages, at the written direction of the State, the Vendor shall pay the State the indicated amount as liquidated damages, and not as a penalty.
- 2) Amounts due the State as liquidated damages, if not paid by the Vendor within fifteen (15) days of notification of assessment, may be deducted by the State from any money payable to the Vendor pursuant to this Contract. The State will notify the Vendor in writing of any claim for liquidated damages pursuant to this paragraph on or before the date the State deducts such sums from money payable to the Vendor. No delay by the State in assessing or collecting liquidated

damages shall be construed as a waiver of such rights. The imposition and payment of liquidated damages shall not affect or waive any other rights of the State to enforce or terminate this Contract. In cases where actual damages can be determined, liquidated damages shall not apply.

3) If the State elects not to impose liquidated damages in a particular instance, this decision shall not be construed as a waiver of the State's right to pursue future assessment of performance standards and associated liquidated damages; nor construed to limit any additional remedies available to the State.

4) The Vendor shall not be liable for liquidated damages when, in the opinion of the State, incidents or delays result directly from causes beyond the control and without the fault or negligence of the Vendor. Such causes may include, but are not restricted to, acts of God, fires, floods, epidemics, labor unrest, and third-party carrier matters outside the control of Vendor; but in every case the delays must be beyond the control and without the fault or negligence of the Vendor.

The Service performance Levels and liquidated damage for each are as follows:

Category	Description	Response Time	Diagnosis Time	Resolution Time	Remedy
Category 1 (Major Problem)	An outage that results in the unavailability of the Solution or the Solution's hosting environment or a Defect that has persisted at the Severity 2 level for more than 48 hours.	1 hour	1 hour	24 hours	1. \$100 per minute beyond the resolution time
Category 2 (Critical Problem)	An outage where the Solution or the Solution's hosting environment is available but one or more of the Critical Functions provided by the Solution is not operational, and a Workaround does not exist, or a Severity 3 problem that has persisted for more than five (5) business days.	1-2 hours	24 hours	48 hours	1. \$75 per minute beyond the resolution time
Category 3 (Minor Problem)	Degradation of Non-Critical System Functions that has persisted for more than eight (8)	1 business day	3 business days	5 business days	1. \$35 per minute beyond the resolution time

Category	Description	Response Time	Diagnosis Time	Resolution Time	Remedy
	business hours.				
Category 4 (Changes)	Request for Changes to the Solution.	3 business days	5 business days	N/A	N/A
Category 5 (General Requests)	General questions or informal contacts.	3 business days	5 business days	2 business weeks	N/A

ATTACHMENT D: DESCRIPTION OF OFFEROR

Provide the information about the offeror.

Offeror's full name	
Offeror's address	
Offeror's telephone number	
Ownership	<input type="checkbox"/> Public <input type="checkbox"/> Partnership <input type="checkbox"/> Subsidiary <input type="checkbox"/> Other (specify)
Date established	
If incorporated, State of incorporation.	
North Carolina Secretary of State Registration Number, if currently registered	
Number of full-time employees on January 1 st for the last three years or for the duration that the Vendor has been in business, whichever is less.	
Offeror's Contact for Clarification of offer: Contact's name Title Email address and Telephone Number	
Offeror's Contact for Negotiation of offer: Contact's name Title Email address and Telephone Number	
If Contract is Awarded, Offeror's Contact for Contractual Issues: Contact's name Title Email address and Telephone Number	
If Contract is Awarded, Offeror's Contact for Technical Issues: Contact's name Title Email address and Telephone Number	

HISTORICALLY UNDERUTILIZED BUSINESSES

Historically Underutilized Businesses (HUBs) consist of minority, women and disabled business firms that are at least fifty-one percent owned and operated by an individual(s) of the categories. Also included as HUBs are disabled business enterprises and non-profit work centers for the blind and severely disabled.”

Pursuant to N.C.G.S. §§ 143B-1361(a), 143-48 and 143-128.4, the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled. This includes utilizing subcontractors to perform the required functions in this RFP. Contact the North Carolina Agency of historically Underutilized Businesses at 919-807-2330 with questions concerning NC HUB certification. <http://ncadmin.nc.gov/businesses/hub>

Respond to the questions below.

1. Is Vendor a Historically Underutilized Business? ☐ Yes ☐ No
2. Is Vendor Certified with North Carolina as a Historically Underutilized Business? ☐ Yes ☐ No

If so, state HUB classification:

ATTACHMENT E: COST FORM

Cost Table 1: Project Execution					
Item	Cost Category	Per Unit Cost	Extended Cost (All Units)	Optional Cost	Project Subtotal
1	Software and Licensing Fees for Year 1				
2	Additional Modules required/proposed for Year 1				
3	Third-party Software for Year 1				
4	Installation/configuration/integration/ transition costs				
5	Customization required or proposed addressing specifications (itemize in an attachment)				
6	Conversion and migration of Legacy Data				
7	Project Deliverables (excluding Data Conversion, Training Materials, Training, and Escrow agreement)				
8	Training and Training Materials				
9	Customer Support to include Help Desk and Technical Support, if not included in Software License				
10	Escrow				
11	Change Hours (400 hours) for Year 1				
12	Other Costs (itemize in an attachment)				
Project Execution Subtotal					
13.a	Annual Maintenance and State Hosting Option (Contract Year 1)				

Cost Table 1: Project Execution					
Item	Cost Category	Per Unit Cost	Extended Cost (All Units)	Optional Cost	Project Subtotal
13.b	Annual Maintenance and Vendor Hosting Option if not included in License fees (Contract Year 1)				
Project Execution Total – Vendor Hosting					
Project Execution Total – State Hosting					

a) Cost Table 2: Operations and Maintenance

Provide the firm, fixed O&M cost, inclusive of all O&M tasks and the Software License cost for each year during O&M. If a cost category (or column) is not relevant for the proposed Solution, indicate with “N/A” in the appropriate row/column. The cost for partial years of O&M will be prorated.

Cost Table 2: Operations and Maintenance: Initial Contract Years 1-3 and Optional Contract Years 4 and 5							
Item	Cost Category	Year 1	Year 2	Year 3	Year 4	Year 5	O&M Sub-total
1	Software and Licensing Fees	list in Cost Table 1					
2	Additional Modules	list in Cost Table 1					
3	Third-party Software	list in Cost Table 1					
4	Installation/ configuration/ integration/ transition costs addressing Priority 2 specifications (itemize in an attachment)	list in Cost Table 1					

Cost Table 2: Operations and Maintenance: Initial Contract Years 1-3 and Optional Contract Years 4 and 5

Item	Cost Category	Year 1	Year 2	Year 3	Year 4	Year 5	O&M Sub-total
5	Customization required or proposed addressing Priority 2 specifications (itemize in an attachment)	list in Cost Table 1					
6	Conversion and migration of Legacy Data	list in Cost Table 1	N/A	N/A	N/A	N/A	
7	Project Deliverables (excluding Data Conversion, Training Materials, Training, and Escrow agreement)	list in Cost Table					
8	Training and Training Materials	list in Cost Table 1					
9	Customer Support to include Help Desk and Technical Support, if not included in Software License	list in Cost Table 1					
10	Escrow	list in Cost Table					
11	Change Hours (200 hours)	list in Cost Table					
12	Other Costs (itemize in an attachment)	list in Cost Table					

Cost Table 2: Operations and Maintenance: Initial Contract Years 1-3 and Optional Contract Years 4 and 5

Item	Cost Category	Year 1	Year 2	Year 3	Year 4	Year 5	O&M Sub-total
O&M Subtotal		list in Cost Table					
13.a	Annual Maintenance and State Hosting Option						
13.b	Annual Maintenance and Vendor Hosting Option if not included in License fees						
O&M Total – Vendor Hosting		N/A – list in Cost Table 1					
O&M Total – State Hosting		N/A – list in Cost Table 1					

b) Cost Table 3: Total Cost of Contract

Cost Table 3 provides a summary of the Total Cost of the Contract for five (5) years.

Cost Table 3: Total Cost of Contract				
Item	Cost Category	Project Execution Total	O&M Total	Grand Total
1	Software and Licensing Fees			
2	Additional Modules			
3	Third-party Software			
4	Installation/ configuration/ integration/ transition costs			

Cost Table 3: Total Cost of Contract				
Item	Cost Category	Project Execution Total	O&M Total	Grand Total
5	Customization required or proposed addressing Priority 2 specifications (itemize in an attachment)			
6	Conversion and migration of Legacy Data			
7	Project Deliverables (excluding Data Conversion, Training Materials, Training, and Escrow agreement)			
8	Training and Training Materials			
9	Customer Support to include Help Desk and Technical Support, if not included in Software License			
10	Escrow			
11	Change Hours			
12	Other Costs (itemize in an attachment)			
O&M Subtotal				
13.a	Annual Maintenance and State Hosting Option			
13.b	Annual Maintenance and Vendor Hosting Option if not included in License fees			
O&M Total – Vendor Hosting				
O&M Total – State Hosting				

c) Cost Table 4: Professional Services Hourly Rate

List the hourly rate for value-added services provided by the Vendor upon request by the Division for each Contract year.

Cost Table 4: Professional Services Hourly Rate							
Item	Cost Category	Year 1	Year 2	Year 3	Optional Year 4	Optional Year 5	Total
1	Professional Services Hourly Rate						

ATTACHMENT F: VENDOR CERTIFICATION FORM

1) ELIGIBLE VENDOR

The Vendor certifies that in accordance with N.C.G.S. §143-59.1(b), Vendor is not an ineligible vendor as set forth in N.C.G.S. §143-59.1 (a).

The Vendor acknowledges that, to the extent the awarded contract involves the creation, research, investigation or generation of a future RFP or other solicitation; the Vendor will be precluded from bidding on the subsequent RFP or other solicitation and from serving as a subcontractor to an awarded vendor.

The State reserves the right to disqualify any bidder if the State determines that the bidder has used its position (whether as an incumbent Vendor, or as a subcontractor hired to assist with the RFP development, or as a Vendor offering free assistance) to gain a competitive advantage on the RFP or other solicitation.

2) CONFLICT OF INTEREST

Applicable standards may include: N.C.G.S. §§143B-1352 and 143B-1353, 14-234, and 133-32. The Vendor shall not knowingly employ, during the period of the Agreement, nor in the preparation of any response to this solicitation, any personnel who are, or have been, employed by a Vendor also in the employ of the State and who are providing Services involving, or similar to, the scope and nature of this solicitation or the resulting contract.

3) E-VERIFY

Pursuant to N.C.G.S. § 143B-1350(k), the State shall not enter into a contract unless the awarded Vendor and each of its subcontractors comply with the E-Verify requirements of N.C.G.S. Chapter 64, Article 2. Vendors are directed to review the foregoing laws. Vendors claiming exceptions or exclusions under Chapter 64 must identify the legal basis for such claims and certify compliance with federal law regarding registration of aliens including 8 USC 1373 and 8 USC 1324a. Any awarded Vendor must submit a certification of compliance with E-Verify to the awarding agency, and on a periodic basis thereafter as may be required by the State.

4) CERTIFICATE TO TRANSACT BUSINESS IN NORTH CAROLINA

As a condition of contract award, awarded Vendor shall have registered its business with the North Carolina Secretary of State and shall maintain such registration throughout the term of the Contract.

Signature: _____

Date:

Printed Name: _____

Title:

ATTACHMENT G: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with N.C.G.S. §143B-1361(b), Vendor must identify how it intends to utilize resources or workers located outside the U.S., and the countries or cities where such are located. The State will evaluate additional risks, costs, and other factors associated with the Vendor's utilization of resources or workers prior to making an award for any such Vendor's offer. The Vendor shall provide the following:

- 1) The location of work to be performed by the Vendor's employees, subcontractors, or other persons, and whether any work will be performed outside the United States. The Vendor shall provide notice of any changes in such work locations if the changes result in performing work outside of the United States.
- 2) Any Vendor or subcontractor providing support or maintenance Services for software, call or contact center Services shall disclose the location from which the call or contact center Services are being provided upon request.

Will Vendor perform any work outside of the United States?

☐ YES ☐ NO

ATTACHMENT H: REFERENCES

REFERENCES:

The Vendor shall provide three (3) references of customers utilizing the proposed solution fully implemented in a setting similar to this solicitation's scope of work. References within like North Carolina communities / industries are encouraged.

The Vendor should have implemented the respective proposed service within the last three (3) years. Customer references whose business processes and data needs are similar to those performed by the Agency needing this solution in terms of functionality, complexity, and transaction volume are encouraged.

For each reference, the Vendor shall provide the following information:

- a. Customer name.
- b. Customer address.
- c. Current telephone number of a customer employee most familiar with the offered solution implementation.
- d. Customer email address
- e. Time period over which each offered solution implementation was completed.
- f. Brief summary of the offered solution implementation.
- g. List of offered solution products installed and operational.
- h. Number of vendor or technical staff supporting, maintaining and managing the offered solution
 - i. Number of end users supported by the offered solution.
 - j. Number of sites supported by the offered solution.

The information obtained will be considered in the evaluation of the proposal.

ATTACHMENT I: FINANCIAL REVIEW FORM

Vendor shall review the Financial Review Form, provide responses in the gray-shaded boxes, and submit the completed Form as an Excel file with its offer. Vendor shall not add or delete rows or columns in the Form or change the order of the rows or column in the file.

1. Vendor Name:
2. Company structure for tax purposes (C Corp, S Corp, LLC, LLP, etc.):
3. Have you been in business for more than three years? ☐ Yes ☐ No
4. Have you filed for bankruptcy in the past three years? ☐ Yes ☐ No
5. In the past three years, has your auditor issued any notification letters addressing significant issues? If yes, please explain and provide a copy of the notification letters. ☐ Yes ☐ No
6. Are the financial figures below based on audited financial statements? ☐ Yes ☐ No
7. Start Date of financial statements:
End Date of financial statements:
8. Provide a link to annual reports with financial statements and management discussion for the past three complete fiscal years:
9. Provide the following information for the past three complete fiscal years:

	Latest complete fiscal year minus two years	Latest complete fiscal year minus one year	Latest complete fiscal year
BALANCE SHEET DATA			
a. Cash and Temporary Investments			
b. Accounts Receivable (beginning of year)			
c. Accounts Receivable (end of year)			
d. Average Account Receivable for the Year (calculated)			
e. Inventory (beginning of year)			
f. Inventory (end of year)			
g. Average Inventory for the Year (calculated)			
h. Current Assets			
i. Current Liabilities			
j. Total Liabilities			
k. Total Stockholders' Equity (beginning of year)			
l. Total Stockholders' Equity (end of year)			
m. Average Stockholders' Equity during the year (calculated)			
INCOME STATEMENT DATA			
a. Net Sales			
b. Cost of Goods Sold (COGS)			
c. Gross Profit (Net Sales minus COGS) (calculated)			
d. Interest Expense for the Year			
e. Net Income after Tax			
f. Earnings for the Year before Interest & Income Tax Expense			
STATEMENT OF CASH FLOWS			
a. Cash Flow provided by Operating Activities			
b. Capital Expenditures (property, plant, equipment)			

ATTACHMENT J: MINIMUM CONTENT FOR PROJECT AND O&M DELIVERABLES

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
Kick-Off Meeting Delivery Provision: Within ten (10) State Business Days of the Contract Award.	<p>Purpose/Description: The Kick-Off Meeting is held to formally notify all team members, clients, and Stakeholders that Vendor engagement on the project has begun and to make sure everyone has a common understanding of the project and their roles. The State Project Manager will facilitate this meeting and will work with Vendor to set the meeting agenda.</p> <p>Minimum Content:</p> <p>The agenda of the meeting will include, at a minimum:</p> <ul style="list-style-type: none"> • Project Execution Phase scope, approach and timeline; • Introduction of management and technical Vendor resources assigned to the Project Execution Phase; • Review of Vendor, NCDHHS, and State Project Management Methodology to be used for the Project Execution Phase; • Status reporting mechanisms and timeframes; • Deliverable review process; • Lines of communication and reporting relationships; • Identify schedule for upcoming meetings related to the Vendor's Deliverables required by key dates after Contract award; • Identify high-risk or problem areas; and • Project assumptions, dependencies and constraints.
Project Kick-Off Meeting Report Delivery Provision: Within three (3) State Business Days of the Project Kick-Off Meeting.	<p>Purpose/Description: The Project Kick-Off Meeting Report summarizes the Vendor's understanding of the State and NCDHHS Methodology and Project management process expectations, Deliverables, Project Execution Phase details and all understandings and action items resulting from the Meeting.</p> <p>Minimum Content: As described in Purpose/Description for this Deliverable.</p>
Executed Escrow Agreement and Escrowed Solution Source Code (if COTS product(s) are included in proposals) Delivery Provision: Within thirty (30) State Business Days of the Effective Date of the Contract. The final	<p>Purpose/Description: The Escrow Agreement is a contractual agreement between the Agency, Vendor and a third-party Escrow Agent that has data storage hardware physically located within the State of North Carolina. The Escrow Agreement will specify the delivery schedule an ongoing management of Vendor's delivered Base Product in escrow. The Vendor will then Escrow the Base Product(s), and certify the escrowed Changes made to create the Solution (i.e., Solution Source Code).</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Escrow Agreement will be executed ten (10) days after Agency approval, and the Base Product(s) escrowed. Escrow Updates: Contract duration.</p>	<p>Minimum Content:</p> <ul style="list-style-type: none"> • Subject and scope of the escrow; • Obligation of the licensor to put updated versions of the software in escrow at specific intervals; • Conditions that must be met for the Escrow Agent to release the source code to the licensee; • Rights obtained by the licensee with respect to the source code after the release of the software; • Services provided by the Escrow Agent beyond a simple custody of the source code; • Non-compete clauses in the license agreement as appropriate; and • Fees due to the Escrow Agent for its services.
<p>Vendor Project Schedule</p> <p>Delivery Provision: Draft submitted as part of the Vendor Proposal and reviewed with Agency within fifteen (15) days of Contract award. Final schedule due within twenty (20) State Business Days of the Contract award. Schedule Baseline is due once the Agency accepts the final Vendor Project Schedule. Project Execution Contract Phase Duration, updated weekly two (2) days prior to next scheduled Project Status Meeting; and ad hoc as requested by the Agency.</p>	<p>Purpose/Description: The Vendor Project Schedule defines all the tasks necessary for the Vendor proposed project delivery method, associated interdependencies, and task resource assignments to execute the project.</p> <p>Vendor Project Schedule will: be developed with Microsoft Project™ or a Microsoft Project compatible product.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Clearly map to the State's and NCDHHS's Project Management Stages, and Sprint Cycles/Modules/Milestones and Deliverables outlined in this RFP; • Sub-divide all tasks until no more than eighty (80) hours are allocated to each task; • Identify each Sprint Cycles/Modules/Milestones/ Deliverables cycle • Identify capability/functionality developed by the Sprint Cycles/Modules/Milestones/ Deliverables • The expected duration of the Sprint Cycles/Modules/Milestones/ Deliverables • The order of the Sprint Cycles/Modules/Milestones/ Deliverables • Projected task start and end dates; • Major business decision points and Deliverables defined in this RFP; • Projected Sprint Cycles/Modules/Milestones/decision point due dates; • Task dependencies;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • WBS references for each task and Sprint Cycles/Modules/Milestones; • Resource task assignments and usage for all NC NCDHHS staff, Vendor staff, and project team staff from any other organizations; and • When allocating work to Agency or other State personnel, the Vendor Project Schedule must: <ul style="list-style-type: none"> ○ Be based upon a forty-hour (40) week (8:00 a.m. through 5:00 p.m., Monday through Friday Eastern Time); and ○ Accommodate that many of the Agency or other State personnel will not be assigned full time to this project and will not complete work on North Carolina State Government holidays (https://oshr.nc.gov/state-employee-resources/benefits/leave/holidays).
<p>Vendor Project Management Plan</p> <p>Delivery Provision: Draft plan submitted as part of the Vendor Proposal. Final plan submitted in accordance with the date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, as needed, if staffing levels change, provide a revised Organization Chart.</p>	<p>Purpose/Description: The Vendor Project Management Plan describes how the Vendor's engagement during the Project Execution will be executed, monitored, and controlled.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Project background; • Project objectives; • Project success criteria and contingencies; • Project assumptions and constraints; • Project scope; • Project high-level timeline; • Project Deliverables; • Project management methodology and approach; • Entrance and exit criteria for specific project Sprint Cycles/Modules/Milestones; • Status reporting requirements and mechanisms, including update of Vendor Project Schedule progress; • Monitoring and control mechanisms and corrective plan notification; • Technical approach, including transition management; • The organizational information, including organizational chart that reflects roles and responsibilities for Vendor and subcontractors (if applicable);

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Knowledge transfer strategy; and • Documentation Deliverable and record management approach
<p>Vendor Project Staffing Plan</p> <p>Delivery Provision: Submitted as part of the Vendor Proposal. Final plan within twenty (20) State Business Days of the Contract award. Project Execution Contract Phase Duration, updated weekly two (2) days prior to next scheduled Project Status Meeting; ad hoc as requested by the Agency.</p>	<p>Purpose/Description: The Vendor Project Staffing Plan contains the amounts of Vendor labor resources needed to accomplish the project tasks.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • A list of all labor resources (i.e., staffing); • The roles and responsibilities of all staffing resources; • The percentage of each staffing resource's time needed in each phase/stage; • Specification of how long each resource will be needed for each stage of the project; • Definition of skills required of each staffing resource; and • Plan for resource turnover.
<p>Project Communication Plan and Communications Matrix</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Agency responsibility for Project Execution Contract Phase Duration; Vendor provides updates as needed.</p>	<p>Purpose/Description: The Project Communication Plan describes the processes required to ensure the timely generation, collection, dissemination, storage, and disposition of project information to project Stakeholders. The Project Communication Plan also provides a method to identify planned and typical methods of exchanging information both within the project and with Stakeholders and interested parties external to the project. The plan will include or be accompanied by a Communications Matrix that identifies current individuals in each communication group, contact information. Vendor will work with the Agency to define and document the Project Communication Plan and Communication Matrix.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Project Communication Plan: <ul style="list-style-type: none"> ○ Stakeholder communication requirements; ○ Information to be communicated, including language, format, content and level of detail; ○ Reason for the distribution of information; ○ Timeframe and frequency for the distribution of required information and receipt of acknowledgement of response, if applicable; ○ Roles and responsibilities regarding the creation, approval/authorization, and transmission of communications;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> ○ Person or groups that will receive the information; ○ Methods and technologies used for communications (e.g., email, reports, memos, SharePoint, newsletters, website, press releases, etc.); and ○ Escalation procedures identifying timeframes and the management chain (i.e., individuals) for escalation of issues for resolution; • Communication Matrix: <ul style="list-style-type: none"> ○ A list of all Stakeholder groups and members of each group with contact information; ○ Project meeting schedule and attendees; and ○ A project documentation list to include the document name, the distribution frequency/schedule, the documentation format, the archival location, the distribution list, and the distribution method.
<p>Project Risk and Issues Management Plan, Project Risk Watch List Matrix, and Project Issues Log</p> <p>Delivery Provision: The date defined in the Agency's Project Schedule. Agency responsibility for Project Execution Contract Phase Duration; risks and issues identified by Vendor will be reported on Vendor Status Reports and other communication mechanisms as Defined in the Project Risk and Issues Management Plan.</p>	<p>Purpose/Description: The Project Risk and Issues Management Plan identifies the process, procedures and tools utilized to identify, mitigate, resolve, and manage risk/issues for Project Execution Phase through a systematic and controlled process. The Project Risk and Issues Management Plan also includes a Project Risk Watch List Matrix to document and track the mitigation of risks identified during the project, and a Project Issues Log that provides a detailed description of the issues for the Project and how those issues will be addressed and resolved.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • The Project Risk and Issues Management Plan: <ul style="list-style-type: none"> ○ Processes for identifying and assessing risks/issues; ○ Determining effective risk mitigation/resolution actions; ○ Monitoring and reporting progress in mitigating/resolving risks/issues; ○ Definition of risk/issue categories ○ Budget; ○ Quality; ○ Resource; ○ Schedule; ○ Scope; and

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> ○ Technical; ○ Definitions and rating scale of risk/issue severity; ○ For risks, definitions and rating scale of risk probability; ○ Escalation procedures; and ○ Tools used for the risk/issue management process. ● The Project Risk Watch List: <ul style="list-style-type: none"> ○ Unique identification number; ○ Description of the risk; ○ Date risk was identified; ○ Escalation procedures; ○ Person assigned to take actions to mitigate the risk and date of assignment; ○ Area(s) impacted by the risk; ○ Risk category; ○ Signs and symptoms of the risk; ○ Probability of the risk occurring; ○ Severity of impact if the risk were to occur; ○ A risk score based on probability and severity; ○ Mitigation strategy with a complete history of all actions taken; ○ Date risk closed; and ○ Comments. ● Project Issues Log: <ul style="list-style-type: none"> ○ Unique ID; ○ Description of the issue; ○ Date received or identified; ○ Person assigned to resolve the issue and date of assignment; ○ Issue category; ○ Issue severity; ○ Final resolution with a complete history of all activities and the resolution date; and ○ Comments.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Vendor Software Quality Assurance Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Review and update each time the plan is impacted.</p>	<p>Purpose/Description: The Vendor Software Quality Assurance Plan (SQAP) establishes the goals, processes, and responsibilities required to implement effective quality assurance functions for the Project Execution Phase. In addition, the plan outlines the verification and validation (V&V) processes that Vendor uses to determine how Vendor products conform to their requirements and fulfill their intended use and user expectations.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • The purpose and scope of the quality assurance effort; • The QA methodology; • The QA organization; • The QA staff roles and responsibilities; • QA estimated resources; • The QA tasks for the Project Execution Phase; • The entrance and exit criteria for the QA tasks; • Applicable federal, State, departmental, and Vendor standards, policies and procedures to include coding, design, data documentation, user interface, security, disaster recovery, and commentary standards; • Applicable practices, conventions, and metrics; • A description of evaluation criteria and results reporting requirements and mechanisms; • Minimum documentation required for QA review and audit; • QA tools, methods and techniques; • Controls for media, security, disaster recovery, and suppliers; • V&V methodology to include approach, scope of work products, V&V techniques, roles, responsibilities, estimated resources, tasks for Project Execution Phase, and results reporting; • Records collection, maintenance and retention; • Identification and implementation of corrective action plans; and • Quality Assurance reporting.
<p>Project Change Management Plan, Project Change Request Form, and</p>	<p>Purpose/Description: The Project Change Management Plan is the formal document that establishes requirements and processes for documenting, managing and controlling changes within a project. The</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Project Change Request Log</p> <p>Delivery Provision: The date defined in Agency's Project Schedule. Agency responsibility for Project Execution Contract Phase Duration; Vendor to submit Change Request Form when required or upon Agency request. The Agency will maintain the Project Change Request Log and provide updates to The Vendor and Project Team at each Project Status Meeting</p>	<p>Project Change Management Plan also includes a Project Change Request Form and a Project Change Request Log.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Project Change Management Plan: <ul style="list-style-type: none"> ○ Change control process; ○ Roles and responsibilities for Change Management; ○ Change request review turnaround times; ○ Change request evaluation criteria; ○ Change priority definitions; ○ Change approval process – amendment or CR only; and ○ Change payment process. • Project Change Request Form: <ul style="list-style-type: none"> ○ Unique ID; ○ Date created; ○ Requestor name and contact information; ○ Type of change; ○ Project name; ○ Severity of impact; ○ Priority for change; ○ Description of the change; ○ Justification for the change; ○ Schedule impact; ○ Scope impact; ○ Estimated Cost of change; ○ Person hours associated with change; ○ Type and number of resources needed; and ○ Approvals (approval or rejection) and date approved/rejected. • The Project Change Request Log: <ul style="list-style-type: none"> ○ Unique ID; ○ Description of the change; ○ Requestor;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> ○ Date submitted; ○ Priority for change; ○ Estimated Cost; ○ Target Completion Date; ○ Decision (Approval or rejection); ○ Date approved/rejected; and ○ Comments.
<p>Security Plan.</p> <p>Delivery Provision: Submitted as part of the Vendor Proposal with final submission as defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, reviewed at a minimum every six (6) months, and updated after the system infrastructure requirements and design are finalized.</p> <p>Contract Duration in O&M Contract Phase, assist the Agency to update at a minimum every six (6) months or by a change or Solution Change.</p>	<p>Purpose/Description: The Security Plan details the types of computer security required for the Solution based on the type of information being processed and the degree of sensitivity needed. The Security Plan will meet or exceed all State and federal security requirements.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • The security categorization of the Solution including supporting rationale; • Full descriptive name of the information system including associated acronym; • Unique information system identifier (typically a number or code); • Solution owner, Data Steward/Custodian, and authorizing official including contact information; • Information on the organization(s) that manages, owns and controls the Solution; • Location of the Solution and environment in which it operates; • Version or release number of the Solution; • Purpose, functions, and capabilities of the Solution and details of the essential functions or business processes supported; • Technical security architecture; • Status of the Solution with respect to acquisition or life cycle; • Applicable laws, directives, policies, regulations, or standards affecting the security of the Solution; • Describes the security controls in place or planned for meeting data security requirements including a rationale for the tailoring and supplementation decisions; • Types of data processed, stored, and transmitted by the Solution;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Boundary of the Solution for risk management and security authorization purposes; • Architectural description of the Solution including network topology; • Hardware and firmware devices included within the Solution; • Solution and applications software resident on the Solution; • Hardware, software, and system interfaces (internal and external); • Subsystems (static and dynamic) associated with the Solution; • Data flows and paths (including inputs and outputs) within the Solution; • Cross domain devices/requirements; • Network connection rules for communicating with systems (both internal and external); • Interconnected systems and identifiers for those systems; • Encryption techniques used for information processing, transmission, and storage; • Cryptographic key management information, (e.g., public key infrastructures, certificate authorities, etc.); • End user types including organizational affiliations, access rights, privileges, citizenship (if applicable); • Ownership/operation of the Solution, (e.g., government-owned, government-operated; government-owned, contractor- operated; contractor-owned, contractor-operated; federal [state and local governments, grantees]); • Security authorization date and authorization termination date; • Incident response outline with points of contact; • Other information as required by the organization; • For Vendors proposing Vendor-Hosted Solutions, the schedule for submission of the SOC 2 Type 2 or equivalent Third-Party Security/Risk Assessment Report; and • Site Security Plan (SSP) as required. <p>NIST Special Publication 800-18 provides guidance and can serve as a basis for the development of the Solution security plan.</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Technical Architecture Diagrams (TAD)</p> <p>Delivery Provision: The Conceptual, Preliminary and Detailed TAD Documents: The date defined in approved Vendor Project Schedule. Duration of Project Execution updated after the Operations and Maintenance Planning is complete.</p> <p>Contract Duration in O&M Contract Phase, assist the Agency to update at a minimum every twelve (12) months or whenever impacted.</p>	<p>Purpose/Description: The Technical Architecture Diagrams Architecture Diagrams describe the design of the technical architecture on which Solution will reside when deployed for production use, and the functional components that make up Solution. These deliverables are progressively refined as the Solution is designed, developed and implemented. At a minimum, the Vendor must provide Network and Technology Stack Architecture Diagrams listed on https://it.nc.gov/services/vendor-engagement-resources. These diagrams may be refined by the Vendor during development of the Solution.</p> <p>There may be additional architectural diagrams requested of the Vendor after award. This will be communicated to the vendor by the Agency as needed during the Project. Templates for any additional diagrams will be provided to the Vendor after award.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Network and Technology Stack Architecture Diagrams listed on https://it.nc.gov/services/vendor-engagement-resources.
<p>Configuration and Release Management Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, review and update each time the plan is impacted. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.</p>	<p>Purpose/Description: The Configuration and Release Management Plan explains the methodology for identifying and controlling the functional and physical design characteristics of configurable items throughout the software development life cycle (SDLC). It also will describe version control for all technical environments.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • List of all functional and physical items (configuration items) included in the scope of configuration management, which includes hardware, software and design; • Method and procedure for controlling changes to configuration items; • Configuration management activities; • Configuration management roles and responsibilities; • Change status reporting method for configuration items; • Method for ensuring that control will be maintained over design, development, production, installation and support configuration items; • Method for ensuring that Vendor inspections demonstrate acceptability to the Agency of material and services will be performed; • Evidence of a disciplined integrated systems development approach; and

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Release management roles and responsibilities, practices/processes, and activities.
<p>Training Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, review and update each time the plan is impacted.</p>	<p>Purpose/Description: The Training Plan identifies the strategy, short- and long-term objectives, the work, requirements, and procedures to be carried out to achieve agreed objectives for training staff effectively. The Training Plan clearly describes the Vendor's strategy for performing role-based training and defines specifically how the training materials will be developed and how the Agency's requirements will be met.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Purpose and scope of the training effort; • Types of training to be delivered, including technical, system, train-the-trainer, and end user role-based training; • A description of training sessions by type of training and the different groups to be trained in each type of training, including: <ul style="list-style-type: none"> ○ Goals for training sessions; ○ Browser version compatibility; ○ User Profiles of users to be trained; ○ Prerequisites for users; ○ Business functions and processes covered in each training session; and ○ Hours required for each training session; • Delivery mechanism for each type of training (e.g., webinar, in-person, train-the-trainer, electronic documentation, CD/DVD); • Staffing, including roles and responsibilities to develop and deliver the training; • Training activities and tasks, including the timing of the training material development and training delivery; • Training planning and preparation, including training locations, tools, documentation, scheduling, pre-requisites, staffing, and other key training elements; • Hardware, software, data, and facilities or materials needed to support the training effort; and • Training feedback mechanism and training evaluation methods.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Test Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration and Duration of Contract, review and update each time the plan is impacted. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.</p>	<p>Purpose/Description: The Test Plan provides the Vendor's testing strategy that includes resources required, time requirements, entry and exit criteria, test activities and tasks, and tests to be performed.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Categories of testing to be conducted as appropriate to the technical Solution; at a minimum, Vendor will perform Unit Testing, System Testing (including error handling), Regression Testing, Integration Testing, Performance Testing, and Accessibility Testing; • Definitions of defect levels; • Defect management to include: <ul style="list-style-type: none"> ○ Processes for identifying, assessing, and prioritizing defects; ○ Determining effective defect remediation actions; ○ Monitoring and reporting progress in remediating defects; ○ Definition of defect categories; ○ Definitions and rating scale of defect severity; ○ Roles and responsibilities in defect management; ○ Tools used for the defect management process; ○ Defect testing and release for testing: and ○ Requirements for defect management status reporting, including report format; • For each test category: <ul style="list-style-type: none"> ○ Test scope; ○ Test goals; ○ Entry and exit criteria; ○ The acceptance criteria; and ○ Test data requirements; • Testing activities and tasks; • Roles and responsibilities to conduct testing and defect management; • Automated testing tools, if any (i.e., specific release and version of the product); • Test environment requirements and set up;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Tools and mechanisms to track and report test results and defect resolution status; and • Formats and information to be included in test results reports, and the frequency of reports. • Test strategies for the O&M Contract Phase will be defined in the Operations and Maintenance Plan; testing performance standards will be defined in the Service Level Agreement.
<p>Deployment Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule.</p> <p>Project Execution Contract Phase Duration, updated during the deployment preparation.</p>	<p>Purpose/Description: The Deployment Plan clearly defines the approach to deploy the Solution once it has been developed and fully tested or when a major software release occurs.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Purpose and scope of the deployment effort; • Strategy for phased deployment; • Processes and procedures that must be adopted by the Agency /State to deploy Solution/release; • Hardware and software acquisitions; • Approach and procedures to configure network, install hardware and software; • Deployment activities and tasks to include: deployment, updating end-user devices, training, Help Desk and defect reporting procedures, and communications; • Timing and scheduling of deployment activities and tasks; • Deployment planning and preparation, including site visits, site readiness verification; • Security considerations; • Hardware, software, facilities or materials needed to support the deployment; • Training of deployment staff; • Deployment risk factors; • Approach to transitioning staff to use the new system/new system release; • Deployment assurance and control; • Contingency plans if key implementation activities are not completed in the timeframe planned;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Software support during deployment; • Solution performance monitoring; • Post deployment support during the Stabilization Period; • Roles and responsibilities to conduct deployment; • Deployment schedule; • Actions that must be completed by the Agency and State to deploy the Solution; • Subset of Test Cases and Test Scripts to be used by Vendor and Agency to conduct a Validation Test to technically validate the deployment of the Solution; and • Subset of UAT Test Cases and Test Scripts to be used by the Agency to validate the deployment of the Solution.
<p>Gap Analysis Document</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, update as applicable; review at least once every six (6) months, final updates during Implementation.</p>	<p>Purpose/Description: The Gap Analysis Document provides a point-by-point comparison of each required system function to functions of the commercial off-the-shelf (COTS) solution(s) (i.e., Base Product(s)).</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Definition and description of each customization and configuration necessary to the COTS solution(s) to meet the Agency's specifications, including any associated costs for specifications identified during Gap Analysis that were not part of the Contract; and • List of Solution roles and access permissions.
<p>Solution Requirements Document</p> <p>Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration update as applicable after the detailed design is complete, final updates during Implementation.</p> <p>Contract Duration in O&M, review and update each time the document is impacted.</p>	<p>Purpose/Description: The Solution Requirements Document provides detailed requirements for the Solution, including Configurations and Customizations, needed to meet all Agency's technical specifications and requirements for the Solution.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Detailed requirements for all Solution configurations and/or customizations to include system functions, error handling, performance, interfaces, security, reports, queries and forms; • Each requirement should be understood by users, operators, or other external systems; and • Each requirement will contain: <ul style="list-style-type: none"> • Unique requirement tracking identifier; • Detailed and unique title;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Detailed description sufficient to enable design staff to design a solution to satisfy the Agency's technical specifications and requirements for the Solution, as defined in the Contract, and testers to test that the Solution satisfies the requirements; • Assumptions and dependencies; and • Prioritization of the requirement as either critical/essential, conditional, or optional.
<p>Solution/Sprint Backlogs (as appropriate or defined in the proposed project delivery method)</p> <p>Delivery Provisions: The dates defined in approved Vendor Project Schedule. Duration of Project Execution, update as applicable as needed for Sprint Planning, final updates during Implementation.</p> <p>Contract Duration in O&M, review and update each time the document is impacted.</p>	<p>Purpose/Description: The Solution and Sprint Backlog is a compiled prioritized list of User Stories and technical tasks that must be done to complete the whole project. The Backlog breaks down each of the User Stories/tasks on the list into a series of steps that guides the development team. There must be a duration, so the team knows when to start the task and how long they have until they must finish it. The Sprint backlog is a subset of the Solution backlog. The Sprint backlog comes from the Solution (i.e., Product) Backlog, but it contains only that item, or those items, that can be completed during each sprint. The Agency owns the Solution Backlog; the Vendor owns the Sprint Backlog.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Identifies the Sprint Cycle. • Identifies the specific tasks and User Stories. • Identifies who is assigned to the task/User Story. • Identifies the status of the task. • Identifies the timeframe it will take to complete the tasks/User Stories.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Use Case</p> <p>Delivery Provisions: The dates defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, continuously as each function is developed, refined after technical test execution, refined after UAT execution, final updates during Implementation. Contract Duration in O&M Contract Phase, review and update each time the document is impacted by a Change.</p>	<p>Purpose/Description: A Use Case captures the user's point of view while describing functional requirements of the system. They describe the step-by-step process a user goes through to complete that goal using a software solution. Use Cases may be included in the System Requirements Document.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Describes how the use case starts and ends • Describes what data is exchanged between the actor and the use case • Describes the flow of events, not only the functionality • Describes only the events that belong to the use case, and not what happens in other use cases or outside of the system • Details the flow of events—all "what's" should be answered. Remember that test designers are to use this text to identify test cases. • Describes a combination of the following elements: • Actor – anyone or anything that performs a behavior (who is using the Solution) • Stakeholder – someone or something with vested interests in the behavior of the Solution • Primary Actor – stakeholder who initiates an interaction with the Solution to achieve a goal • Preconditions – what must be true or happen before and after the use case runs. • Triggers – this is the event that causes the use case to be initiated. • Main success scenarios [Basic Flow] – use case in which nothing goes wrong. • Alternative paths [Alternative Flow] – these paths are a variation on the main theme. These exceptions are what happen when things go wrong at the system level.
<p>User Stories</p> <p>Delivery Provisions: The dates defined in approved State's Project Schedule.</p>	<p>Purpose/Description: A User Story provides a short simple description of a feature/function/requirement from the user perspective. Large User Stories or key functional areas may be identified as Epics, which will be broken down into User Stories.</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Project Execution Contract Phase Duration and refined as needed for each Sprint. Contract Duration in O&M Contract Phase, created for each Change requested by the State</p>	<p>Minimum Content:</p> <ul style="list-style-type: none"> • Describe who is performing the function(s) described in the User Story. This is typically a job role, customer or other type of user, also known as the user persona. • Describe the goal that the user wants the product to accomplish or implement. • Describe why the user needs the feature or functionality. • Lists acceptance criteria for use when testing the User Story. • May include any estimation and prioritization needed for Sprint planning purposes.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Requirements Traceability Matrix</p> <p>Delivery Provisions: The dates defined in approved Vendor Project Schedule.</p> <p>Project Execution Contract Phase Duration, continuously as each Sprint is completed, refined after UAT execution, and final updates during Implementation. Contract Duration in O&M Contract Phase, review and update each time the document is impacted by a Change</p>	<p>Purpose/Description: The Requirements Traceability Matrix (RTM) is used to ensure that each system specification (functional and non-functional) in the Contract is traced to a system requirement(s), detailed design specification(s), test cases, Test Scripts, testing results, and an indication whether it is prioritized for implementation in a Solution release. The RTM will cross-reference each desired system specification(s) listed in the Contract to a system function/feature and track each system specification in the Contract from development through implementation. Vendor will provide the Requirements Traceability Matrix in a format that is compatible with Micro Focus Quality Center.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Information on every testable system specification in the Contract; • Solution requirements for system specifications in the Contract and date accepted; • Design specification(s) for each system requirement and date accepted; • Epic and User Story(ies); • Technical test case(s) and Test Script(s) for each system requirement; • The date and results of all tests performed to verify that contractual specification and/or performance levels have been achieved or exceeded; and • User acceptance test case(s) and for each requirement, an indication of whether the testing for the requirement was accepted, and acceptance date; and • Date implemented.
<p>Data Model</p> <p>Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, final revisions Implementation Stage; Contract Duration, review at least once every six (6) months and update as needed. Contract Duration, review and update each time</p>	<p>Purpose/Description: The Data Model graphically illustrates Solution database objects and the relationships between those objects.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • All objects in the database; • Unique identifier for each object; • Attributes for each object; and <p>Relationship each object has with other objects.</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
the document is impacted by a change.	
Data Dictionary Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, final revisions Implementation Stage; Contract Duration, review at least once every six (6) months and update as needed. Contract Duration, review and update each time the document is impacted by a change.	Purpose/Description: The Data Dictionary will define the basic organization of the Solution database. The Solution Data Dictionary can be generated through automated means. Minimum Content: Name, type, range of values, source, origin, usage format, relationship to other data elements, and authorization for access for each data element in the database.
Detailed Design Specifications Document Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Phase, final revisions Implementation Stage and update as needed. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.	Purpose/Description: The Detailed Design Specifications Document describes how Solution is designed to satisfy the Solution requirements. The detailed design for Solution must comply with the NC Statewide Information Security Manual, the NCDHHS Security Manual, and the NC Statewide Architecture Frameworks requirements. After all components are designed, each technical specification and requirement will be traceable to one or more detailed design specifications. The Detailed Design Specification Document is a result of Design Review Sessions/Design Sprints the Vendor will conduct with the Agency to design the Solution collaboratively. Minimum Content: <ul style="list-style-type: none"> • Operating environment; • System and subsystem architecture; • Data model, including name, type, range of values, source, origin, usage format, relationship to other data elements, and authorization for access for each data element in the database; • Files; • Input formats; • Output layouts; • Graphical user interface(s) (GUIs); • Reports; • External interfaces;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Programming specifications; and • Report specifications.
Infrastructure Requirements Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution: Contract Duration in O&M Contract Phase, review and update each time the document is impacted.	<p>Purpose/Description: The Infrastructure Requirements specify the hardware and system software requirements necessary to host and run the Solution in the State technical environments if the Agency selects a State-hosting option.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Specific server requirements, including operating systems (OS); • Software (i.e., database, web server, etc.); • External web services (e.g., SOAP); • Programming languages; • Storage requirements; • Peripheral device (bar code scanners, printers, card readers, projector, etc.) requirements; • Virtual machine requirements; • Load balancers and switches; • Uninterrupted power supply (UPS) or coolant requirements; • WAN or LAN requirements; • Rack or wiring requirements; • Scalability; • Service availability; • Redundancy and failover metrics; • Monitoring; • System and information security features; and • Hosting service provider name and location.
Infrastructure Configuration Specifications Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Phase Duration. Contract Duration in	<p>Purpose/Description: The Infrastructure Configuration Specifications contains the detailed specifications needed to configure the State’s technical environments that will be used to host Solution.</p> <p>Minimum Content: Detailed instructions for setting up servers and other components of the technical environment the State will use to host Solution if the Agency selects a State-hosting option.</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
O&M Contract Phase, review and update each time the document is impacted.	
Vendor Recommendation for Technical Training for State IT Support Personnel Delivery Provisions: The date defined in approved Vendor Project Schedule	Purpose/Description: The Vendor Recommendation for Technical Training for State IT Support Personnel describes any technical training State staff will need to support the technical environment for hosting the Solution or to support the Solution in any way. Minimum Content: N/A
Configured State Technical Environments (for State-Hosting Option) Delivery Provisions: The date defined in approved Vendor Project Schedule	Purpose/Description: Vendor will assist the State to install and configure all hardware and software needed to set up the technical environments needed at the State for the purposes of hosting and supporting the Solution, including all environments needed to support Agency testing, training, production, reporting and disaster recovery technical environments for the Solution and reporting. The Vendor will provide this Deliverable if the Agency selects a State-hosting option. Minimum Content: N/A
Technical Skills Transfer Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, with final updates during the Implementation Stage.	Purpose/Description: Vendor will transfer any technical skills needed during the installation and configuration of the technical environments to State staff if any component of the Solution will be hosted at the State. Minimum Content: N/A
Base Product and Base Product Installation Instructions (if COTS products are included in proposals with State Hosting Option) Delivery Provisions: Within fifteen (15) State Business Days of the Contract award.	Purpose/Description: The Base Product and Base Product Installation Instructions provide the Agency with the Vendor's commercial off-the-shelf (COTS) product without any Customizations or Configurations, and directions on how to install the Base Product in a hosting environment. Vendor will provide this Deliverable if the Agency selects a State-hosting option. Minimum Content: <ul style="list-style-type: none"> • Base Product(s) will include all licensed products to provide the Agency with the Solution. • Base Product Installation Instructions will include: <ul style="list-style-type: none"> ○ Minimum requirements for the technical environment in which the installation will take place; and ○ Step-by-step instructions to install each Base Product.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
Assist the State to install the Base Product(s) (if COTS products are included in proposals with State-Hosting Option) Delivery Provisions: The date defined in approved Vendor Project Schedule, if the Agency selects the State-hosting option	Purpose/Description: If the Agency selects the State-hosting option, Vendor will Assist the State to install the Base Product(s) as required to install the Base Product(s) in the State's environment. Minimum Content: Vendor will provide onsite and/or offsite support to assist the State with the task of installing the Base Product(s) in the State's technical environment(s).
Design Review Sessions/ Design Sprint Delivery Provisions: The date defined in the approved Vendor Project Schedule. As needed to design Changes to the Solution.	Purpose/Description: During the Configuration of and any Changes to of the Vendor's product(s) to develop the Solution, the Vendor will conduct Design Review Sessions with the Agency as needed to reach agreement on design issues related to designing the solution. Minimum Content: N/A
Test Cases Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, review and update each time	Purpose/Description: Test Cases describe a set of conditions or variables under which a tester will determine whether Solution satisfies system requirements or works correctly. Test Cases are written for every type of testing that will occur for Solution. A system requirement will be mapped to one or more Test Case. Vendor will provide the Requirements Test Cases in a format that is compatible with Micro Focus Quality Center. Minimum Content: <ul style="list-style-type: none"> • Test Case identifier; • Test Case name; • Objectives; • Test conditions/setup; • Input data requirements; • Test steps/procedures; and • Expected results.
Test Scripts Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M	Purpose/Description: A Test Script is a set of instructions written in a programming language that are used to perform automated or manual tests on Solution. Test Scripts are developed to perform the testing specified by a Test Case. Vendor will provide the Requirements Test Scripts in a format that is compatible with Micro Focus Quality Center.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
Contract Phase, review and update each time	Minimum Content: N/A
Prepare and Demonstrate All Test Environments Delivery Provisions: The date defined in approved Vendor Project Schedule.	Purpose/Description: Vendor will set up its testing technical environments prior to conducting testing. If any component or all of the Solution is hosted at the State, the Vendor will also assist the State to set up the technical environment needed to conduct onsite testing of the Solution. The Vendor will demonstrate the testing environment. The Vendor is also responsible for setting up all test data in the technical environment necessary for Solution testing. Minimum Content: N/A
Unit Test Results Report Delivery Provisions: Upon the completion of Unit Testing by the date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, as required for changes. Contract Duration in O&M Contract Phase, review and update each time testing occurs.	Purpose/Description: Unit Test Results Report provides an executive summary and the detailed documented output of the execution of every Test Case used for Unit Testing by Vendor. The format of the Unit Test Results document will be agreed upon by Vendor and the Agency, for every Test Case, actual test results will be documented, including any necessary re-testing. Minimum Content: <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; and • Detailed results of the executed Test Cases.
System Test Results Report Delivery Provisions: Upon the completion of System Testing by the date defined in approved Vendor Project Schedule for the Vendor, and the Agency if the Agency selects a State-hosting option. Project Execution Contract Phase Duration, with final Test Results during the Implementation Stage if additional testing is needed. Contract Duration in O&M Contract Phase, review and update each time testing occurs.	Purpose/Description: System Test Results Report provides a summarized and detailed report to the Agency about the results of the Vendor's System Testing. Separate test results are provided for testing performed in the Vendor's Test environment and, if the Agency selects a State-hosting option or if any component is hosted by the State, the State's Test environment. The format of the Test Results document will be agreed upon by Vendor and the Agency, for every Test Case, actual test results will be documented, including any necessary re-testing. Minimum Content: <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; and • Detailed results of the executed Test Cases.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Regression Test Results Report.</p> <p>Delivery Provisions: During User Acceptance Testing by the completion of UAT by the date defined in approved Vendor Project Schedule for the Agency, Project Execution Contract Phase Duration, with final Test Results during the Implementation Stage if additional testing is needed. Contract Duration in O&M Contract Phase, review and update each time testing occurs.</p>	<p>Purpose/Description: Regression Test Results Report provides a summarized and detailed report to the Agency about the results of the Vendor's regression system testing to ensure that no changes happened to approved functionality as a result of a change to or defect remediation in the Solution. Testing will occur in the Vendor test environment. Testing will also occur in the State-hosting environment if the Agency selects a State-hosting option. The format of the Test Results document will be agreed upon by Vendor and the Agency, for every Test Case identified for regression testing, actual test results will be documented, including any necessary re-testing.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; and • Detailed results of the executed Test Cases.
<p>Integration Test Results Report</p> <p>Delivery Provisions: During User Acceptance Testing by the completion of UAT by the date defined in approved Vendor Project Schedule for the Agency, Project Execution Contract Phase Duration, with final Test Results during the Implementation Stage if additional testing is needed. Contract Duration in O&M Contract Phase, review and update each time testing occurs.</p>	<p>Purpose/Description: The Integration Test Results Report provides a summarized and detailed report regarding testing conducted by the Vendor and external system support staff (i.e., Agency /NCDHHS and/or other vendor) of all interfaces between the Solution and external systems. Testing will be performed in the Vendor's Test environment. Retesting is required when Defects are remediated, or Changes made to the Solution. The format of the Test Results document will be agreed upon by the Vendor and the Agency, for every Test Case, actual test results will be documented, including any necessary re-testing.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; and • Detailed results of the executed Test Cases.
<p>Accessibility Test Results Report</p> <p>Delivery Provisions: Upon the completion of Accessibility Testing by the date defined in approved Vendor Project Schedule.</p>	<p>Purpose/Description: The Accessibility Test Results Report provides a summarized and detailed report to the Agency about the results of the Vendor's testing of accessibility features in Solution. Testing will be performed in the State's Test environment. The format of the Test Results document will be agreed upon by Vendor and the Agency, for every Test Case, actual test results will be documented, including any necessary re-testing.</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
Project Execution Contract Phase Duration, with final Test Results during the Implementation Stage if additional testing is needed. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.	Minimum Content: <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; and • Detailed results of the executed Test Cases.
Demonstration of Tested System Delivery Provisions: The date defined in approved Vendor Project Schedule.	Purpose/Description: Vendor provides the Agency with a Demonstration of Tested System once the Solution is fully Configured/Customized, and all testing by Vendor has been completed (technical), i.e., prior to Performance Testing and UAT prior to each phased deployment. Minimum Content: NA.
General Backup and Recovery Plan Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration. Contract Duration in O&M Contract Phase, at a minimum review and update every twelve (12) months or when impacted.	Purpose/Description: The General Backup and Recovery Plan contains the strategy and plan to back up Solution at regular intervals, and to recover Solution from backups for normal operations. Minimum Content: <ul style="list-style-type: none"> • Back up procedures for all data, configuration and log files, and modules of Solution; • Schedules/frequency for all back-ups; • Restore procedures that provide the ability to restore lost data and bring failed IT services back to normal operation within a period specified in the SLA; • Plan to ensure minimal or no interference to regular business operation; • Scalability to meet growing data backup and recovery requirements; and • Data retention requirements for backups per State policy. Refer to: https://policies.ncdhhs.gov/departmental/policies-manuals/section-iv-general-administration/policies/record-retention
Disaster Recovery Plan Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, revise as applicable at least once every	Purpose/Description: The Disaster Recovery (DR) Plan details the processes and procedures used to recover Solution due to loss of service, whether due to unplanned events/interruptions, such as natural disaster, or malicious intent. The DR Plan covers all locations that host any component of the Solution. Minimum Content:

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>six (6) months; Contract Duration in O&M Contract Phase, at a minimum review and update every twelve (12) months or when impacted.</p>	<ul style="list-style-type: none"> • The recovery point objective (RPO) and the recovery time objective (RTO) for the Solution; • Summary of the Solution; • Technical support information; • Recovery strategies; • Detailed instructions on how to recover the Solution and its databases; • Notification process, contacts, chain of command, roles and responsibilities; • Test plan for the DR Plan; and • Test schedule/frequency.
<p>Performance Test Plan</p> <p>Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Phase, review and update each time the document is impacted. Contract Duration, O&M Contract Phase, review and update prior to performance testing.</p>	<p>Purpose/Description: The Performance Test Plan provides the Agency's load and stress testing strategy to test the performance of the Solution for the initial deployment, and subsequent for each remaining deployment phase. The Agency intends to test the Solution under full-load and no-load conditions during normal and peak performance periods.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Test scope; • Test goals; • Entry and exit criteria; • Acceptance criteria; • Test data requirements; • Preparation activities, including environment requirements and set up; • Testing activities and tasks; • Roles and responsibilities to conduct testing; • Automated testing tool (specific release and version of the product); • Tools and mechanisms to track and report test results; and • Formats and information to be included in test results reports, and the frequency of reports. The Vendor will work with the Agency to define the format of the Performance Test Results.
<p>Performance Test Cases</p> <p>Delivery Provisions: The date defined in approved</p>	<p>Purpose/Description: Performance Test Cases describe a set of conditions or variables under which a tester will determine whether Solution</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
Vendor Project Schedule. Project Execution Phase, review and update each time the document is impacted. Contract Duration, O&M Contract Phase, review and update prior to performance testing.	satisfies performance requirements. Each performance requirement will be mapped to one or more test cases. Minimum Content: <ul style="list-style-type: none"> • Test Case identifier; • Test Case name; • Objectives; • Test conditions/setup; • Input data requirements; • Test steps/procedures; and • Expected results.
Performance Test Scripts Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution, review and update each time the document is impacted. Contract Duration, O&M Contract Phase, review and update prior to performance testing.	Purpose/Description: A Performance Test Script is a set of instructions written in a programming language that is used to perform automated tests on Solution. Test Scripts are developed to perform the testing specified by a Test Case. Minimum Content: N/A
Performance Test Readiness Report Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Phase, review and update each time the document is impacted. Contract Duration, O&M Contract Phase, review and update prior to performing performance testing	Purpose/Description: The Performance Test Readiness Report validates that each Performance Test environment has been adequately prepared for performance testing for Solution, including set up of test data. Minimum Content: <ul style="list-style-type: none"> • Confirms set up of Performance Test environment per the Performance Test Plan; and • Confirms set up of data needed to perform the performance test; and • Confirms the setup of the tool(s) to be used for Performance Testing.
Performance Test Results Report Delivery Provisions: Upon the completion of	Purpose/Description: The Performance Test Results Report provides an executive summary and the detailed documented output of the execution of every test case for performance testing. For every test case, actual test results will be documented, including any necessary re-testing. The

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<p>Performance Testing by the date defined in approved Vendor Project Schedule. Execution and Build Stage and/or Implementation Phase review and update each time the document is impacted with pre-deployment performance test. Contract Duration, O&M Contract Phase, review and update during performance testing.</p>	<p>Performance Test Results Report generated for the Agency, Performance Testing will be done either the Vendor's or the State's technical environment depending on the hosting option the Agency selects,</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases; • Detailed results of the executed Test Cases; • Clarification on where stress boundaries on the Solution exist; and • Qualification of Solution performance in terms of meeting or exceeding the approved acceptance criteria.
<p>Agency Approval of Performance (Initial and incremental until complete for all deployment phases)</p> <p>Delivery Provisions: Upon the completion of System Testing by the date defined in approved Vendor Project Schedule. Implementation Stage, prior to each deployment phase, by the date defined in approved Vendor Project Schedule. Contract Duration, O&M Contract Phase, for performance testing prior to deploying a Change or new release</p>	<p>Purpose/Description: Vendor will gain Agency Approval of Performance to confirm that Solution is meeting or exceeding the performance requirements documented in the Contract. Performance Testing will be done prior to the first phase of deployment and revalidated for each deployment phase thereafter.</p> <p>Minimum Content: N/A</p>
<p>Data Conversion and Migration Plan</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, review and update each time the plan is impacted.</p>	<p>Purpose/Description: The Data Conversion and Migration Plan explains the methodology and strategy for converting and migrating data from the legacy system to the new Solution.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Data conversion strategies and approach; • Data conversion activities and milestones; • The roles and responsibilities to conduct data conversion; • Security considerations; • Hardware, software or facilities needed to support the conversion;

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	<ul style="list-style-type: none"> • Data quality assurance and control, including a description of how the data will be validated; • Conversion risk factors: <ul style="list-style-type: none"> ▪ Risks associated with the data conversion at the data element level; and ▪ Resolution of risks as agreed to by the State; • Applicable data cleansing rules; • Acceptable conversion error rates as agreed to by the State; and • Detailed data conversion specifications, including source, source data element, destination, target data element, transformation/cleansing rules, and any notes.
Data Map Delivery Provisions: The date defined in approved Vendor Project Schedule. Project Execution Contract Phase Duration, final revisions after completion of Data Conversion and Migration tasks	Purpose/Description: The Data Map crosswalks each legacy file/table from the Regulatory, NC Pre-K, and WORKS solutions to the new file/table in the Solution. Minimum Content: <ul style="list-style-type: none"> • For each legacy file/table to be converted, a crosswalk to the Solution file/table; • Crosswalk of each legacy data element to the Solution data element; and • Applicable business rules for data cleansing.
Data Conversion and Migration Software/Scripts Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, review and update each time the plan is impacted.	Purpose/Description: The Data Conversion and Migration Software/Scripts are used to convert and migrate data from Regulatory, NC Pre-K, and WORKS solutions to the Solution. These scripts may be automated. Minimum Content: N/A
Data Conversion and Migration Test Results Report Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, review and update each time the plan is impacted.	Purpose/Description: The Data Conversion and Migration Test Results Report provides an executive summary and the detailed documented output of the execution of every test case for data conversion and migration testing. For every test case, actual test results will be documented, including any necessary re-testing. The Data Conversion and Migration Test Results Report generated for the Agency, Minimum Content: <ul style="list-style-type: none"> • Executive summary of test results; • Executed Tests Cases;

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	<ul style="list-style-type: none"> • Detailed results of the executed Test Cases; • Clarification on where stress boundaries on the Solution exist; and • Qualification of Solution performance in terms of meeting or exceeding the approved acceptance criteria.
Agency Acceptance of the Converted and Migrated Data Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, review and update each time the plan is impacted.	Purpose/Description: Vendor will gain Agency Approval of Converted and Migrated Data to confirm that legacy data has been successfully converted and migrated to the new Solution. Minimum Content: N/A
User Acceptance Test Plan Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.	Purpose/Description: The UAT Plan describes the Agency's user acceptance testing strategy of the Solution and Solution Changes. Minimum Content: <ul style="list-style-type: none"> • Purpose and scope of UAT; • Preparation activities, including environment requirements and set up; • Test data requirements; • Testing activities and tasks; • Roles and responsibilities to conduct testing; • UAT schedule; • Stakeholder involvement and timeframes; • UAT entrance and exit criteria; • UAT acceptance criteria; • UAT procedures; • Defect reporting, tracking and resolution procedures; and • UAT support procedures.
UAT Test Cases and Test Scripts Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M	Purpose/Description: UAT Test Cases and Test Scripts describe a set of conditions or variables under which a UAT Tester will determine whether the Solution or Solution Changes satisfies the Agency's specifications or requirements and works correctly. A specification/requirement will be mapped to one or more test cases. Minimum Content:

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Contract Phase, review and update each time impacted.	<ul style="list-style-type: none"> • Test Case identifier; • Test Case name; • Objectives; • Test conditions/setup; • Input data requirements; • Test steps/procedures; and • Expected results.
UAT Training Materials Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, review and update each time impacted.	<p>Purpose/Description: Vendor will develop UAT Training Materials to provide the UAT Testers with the appropriate skills to use or operate the Solution during UAT. Training materials include role-based training guides, reference manuals, and evaluation materials.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Overview of Solution functions and navigation; • Test Case elements and instruction on how to conduct tests; • Instructions for documenting test results and reporting defects; and • Contact information for support during UAT.
UAT Training Delivery Provisions: The dates defined in approved Vendor Project Schedule for each deployment phase. Contract Duration in O&M Contract Phase, deliver as required based on Solution Changes and/or business need.	<p>Purpose/Description: Vendor will deliver role-based UAT Training to UAT Testers to ensure that they have the appropriate skills to conduct UAT.</p> <p>Minimum Content: N/A</p> <p>Miscellaneous Provisions: Vendor will:</p> <ul style="list-style-type: none"> • Conduct onsite training classes on time per the approved Vendor Project Schedule prior to each deployment phase; and • Ensure that evaluation surveys are made available to UAT Testers that attend training.
UAT Results Report Delivery Provisions: The date defined in approved Vendor Project Schedule. Implementation Stage, for a limited UAT to validate deployment. Contract Duration in O&M Contract Phase, review and	<p>Purpose/Description: The UAT Results Report documents the outcome of all UAT. This documentation may be generated by and/or recorded in an automated tool such as the State's Micro Focus Quality Center. The UAT Team identified by the Business Team performs UAT during the Execute and Build Stage and during the O&M Contract Phase for Solution Changes. Testing results are delivered in a report format required by the Agency.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Executive summary of test results;

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update each time the UAT is performed for Changes.	<ul style="list-style-type: none"> • Executed Tests Cases; and • Detailed results of the executed Test Cases.
Agency Acceptance of Tested Solution (for all releases or deployment phases) Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, required each time the UAT is performed for Changes.	Purpose/Description: Vendor is responsible to ensure that Agency Acceptance of Tested Solution is formally documented. Agency acceptance indicates that the Solution and changes made to the Solution have been tested and found to meet the agreed upon acceptance criteria. Deployment of the release/Solution cannot occur until Agency acceptance of the Tested Solution has been documented. User Acceptance Testing will be done prior to the first release or phase of deployment and revalidated for each deployment phase thereafter. Minimum Content: N/A – acceptance documentation formats are used.
User Guides, Quick Reference Guides, and Online Help Documentation Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration, Project Execution, final revisions during Implementation Contract Duration in O&M Contract Phase, review and update each time the document is impacted by a Change; at a minimum review at least annually and update as needed or per the SLA.	Purpose/Description: The User Guides, Quick Reference Guides, and Online Help Documentation includes any printed and displayed material that explains the functionality of the Solution in language that can be understood by a non-technical user of the software. An online version of this documentation will be created as Online Help that displays in the Solution. Minimum Content: <ul style="list-style-type: none"> • Unique identification data including documentation title, documentation version and date published; product and version; and the issuing organization; • Separate set of documents for each specific audience and/or role as defined in the Training Plan; • Critical information placed in a prominent location in the documentation; • General warnings or cautions that apply throughout the use of the documentation will appear in the beginning of the documentation; • Specific warnings and cautions will appear on the same page or screen and immediately before the procedure or step that requires care. • FAQs; and • An alphabetized glossary of terms. Miscellaneous Provisions: Vendor will provide User Guides and Quick Reference Guides to the Agency in the formats specified in the Contract. The Online Help will be integrated into the Solution and provided in any additional formats specified in the Contract.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Technical and System Administration Documentation</p> <p>Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration, Project Execution Phase, final revisions during Implementation.</p> <p>Contract Duration in O&M Contract Phase, review and update each time the document is impacted by a Change; at a minimum review at least annually and update as needed or per the SLA.</p>	<p>Purpose/Description: Technical and System Administration Documentation provides details about the Solution as necessary to provide technical support and to perform system administration tasks. Documentation will be used by State Technical Support Staff, Operations Support Staff, System Administrators (State and External Agency), and Trainers.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> Detailed technical information and procedures necessary to perform technical and administrative support functions for the Solution.
<p>Service Level Agreement(s)</p> <p>Delivery Provisions: Submitted as part of the Vendor Proposal. Contract duration, at no cost to the Department, review and update each time the SLA is impacted by a change in the service level requirements. If no changes in service level requirements, review with State Contractual Point of Contact at a minimum of every twelve (12) months.</p>	<p>Purpose/Description: The SLA is the portion of a service contract where the level of service is formally defined between Vendor and the Agency for the delivered product(s) and/or services. The SLA will define the minimum performance and availability commitments throughout this Contract and during any renewals. The SLA will address all elements specified in RFP and will be governed by the terms and conditions in this RFP.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> Commitment statements and associated performance measures pertaining to the Solution setup, testing, maintenance, uptime, response time, redundancy/failover, and Vendor support availability requirements in this RFP for the demonstration, development, testing, UAT, role-based training, maintaining production environments, and expectations for tracking and reporting; Commitment statements and associated performance measures regarding the turnaround times for software application fixes, maintenance, and modifications during deployment, maintenance and support, and during and after the introduction of any modifications, enhancements, and new releases, and expectations for maintenance of technical architecture and system design documentation, role-based training materials, technical and user documentation, and online help; testing; tracking; and reporting; If applicable, commitment statements and performance measures ad hoc reports, queries, and/or file extracting;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Commitment statements and performance measures pertaining to the Help Desk support to include a description and definition of Help Desk Support, including definitions for Tier 1, Tier 2 and Tier 3 level of support; expected hours of support; expected response times; Help Desk procedures and escalation; Help Desk Roles and Responsibilities; the mechanisms for receiving service requests; and expectations for tracking and status reporting; • Commitment statements and performance measures to assist the State with scheduled maintenance, changes to schedule maintenance, hardware refresh, operating system (OS) updates, enterprise-level software updates, security, audits, incident response, disaster recovery (including maximum restore time and maximum fail-over time), and expectations for tracking and reporting; • Commitment statements and performance measures to assist the State with Solution performance and availability, including hours of normal operations, maintenance windows, online backup time ranges, batch time ranges, maximum planned downtime per week, maximum unplanned downtime during normal business hours per month, hours of Solution availability, state of emergency hours of operation, average retention period for online data, and offline backup time range, and expectations for tracking and reporting; • Definitions of service requests and problem categories; • Escalation procedures for each problem category; • A description of the procedures, monitoring tools, and reports used to ensure compliance with these commitments. The report will use a format agreed upon by the State; • Penalties for noncompliance with the terms of the SLA.
<p>Training Materials</p> <p>Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in Project Execution, final revisions Implementation Stage. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.</p>	<p>Purpose/Description: Vendor will develop Training Materials for approval by the Agency prior to delivering training to users, State trainers, and technical support groups. Training Materials will be role-based and targeted to the following types of users and support groups: end users (including super users), System Administrators, State trainers, and IT support personnel. Training material will cover the functionality supported by the Solution for the Agency and External Agencies, to include but not limited to, accessing the functions, security features, and detailed explanations of the screens and functions provided by the Solution. Training Materials will include a high-level function summary sheet that will be given to each trainee to facilitate knowledge transfer.</p> <p>Minimum Content:</p>

Project Deliverable and Delivery Provisions	Project Deliverable Purpose and Content
	<ul style="list-style-type: none"> • Training materials for each identified role; • Using generally accepted adult education principles, for each type of training and user group provide: <ul style="list-style-type: none"> ○ Course outline with time allocations for each topic; ○ Methods by which training will be conducted; ○ Training aids; ○ Any special training accommodations; ○ Examples of practical exercises to be used during each training session; and ○ A high-level function summary sheet to facilitate knowledge transfer during training; • Training-the-Trainer training materials that include role-play scripts and training exercises that can measure a Trainer's understanding of the Trainers' materials: • Training metrics and feedback survey sheet for measuring effectiveness of overall training. <p>Miscellaneous Provisions: Training guides and aids will be provided in an editable softcopy format and paper copy as determined by the Training Plan.</p>
<p>Training Delivery</p> <p>Delivery Provisions: The dates defined in approved Vendor Project Schedule for each deployment phase. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.</p>	<p>Purpose/Description: Vendor will deliver Training based on roles to end users (including super users), System Administrators, State trainers, and IT support personnel in advance of deployment. The State will perform training registration, and update Vendor on the number of registered attendees for each training session.</p> <p>Minimum Content: N/A</p> <p>Miscellaneous Provisions: The Vendor will:</p> <ul style="list-style-type: none"> • Conduct training sessions on time per the approved Vendor Project Schedule; • Conduct training sessions using the State-approved Training Materials; and • Assist the State in ensuring that training feedback surveys are made available to training attendees.
<p>Operations and Maintenance Plan</p> <p>Delivery Provisions: The date defined in approved</p>	<p>Purpose/Description: If the DHHS DSOHF Division selects a State-Hosting option, the Vendor will document an O&M Plan to define the roles and responsibilities of each party involved in the support of Solution and making Changes and defines the transition from Project Execution Phase to the</p>

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Vendor Project Schedule. Contract Duration, review at least once every 12 months and update each time the document is impacted.</p>	<p>O&M Contract Phase for Solution support. The O&M Plan will conform to the terms defined in the Agency -approved SLA.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Organization Chart of the Vendor's Support Team that identifies lines of communication and aligns with the Vendor O&M Staffing Plan; • Organization Chart of the Agency and State's Support Team that identifies lines of communication; • O&M communications plan and matrix; • Description of each support function, resource, and role mapped to each support team and Help Desk; • Staffing levels for each function for O&M; • Support transition and activities; • Description of O&M Kick-Off; • Rules governing the interaction and the responsibilities of each organization and their staff members to include: <ul style="list-style-type: none"> ○ The issue/defect severity level handled by the Agency Help Desk, the criteria, the severity and the point in the process where an issue/defect is transferred to the Vendor Help Desk; ○ The Agency Help Desk issue interface, logging and Vendor issue/defect resolution procedure; and ○ Descriptions of access methods, Agency Help Desk resource permissions, access keys and access credentials, and password reset for identified Agency Help Desk personnel: • Schedule of meetings between Vendor and Agency /State staff members for support, issue/problem resolution, and Change and test results walkthroughs; • Description of the Defect management process; • Description of the O&M release management process; • Description of the Vendor support library/repository; • Description of the on-going training requirements for Vendor and Agency and State support staff; • System administration; • Solution architecture, if additional information is needed beyond what is in the Detailed Design Specification Document and the TASD;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Approach to Change requirement definition, design, and development; • Test strategies and approaches for O&M; • Asset management; • Availability management; • Build management; • Capacity management; • Change management; • Configuration and release management; • Database administration; • Network administration; • Security management as needed to support or supplement the Security Plan for the Solution; • Service level management; • Storage management; • System administration; • References to the General Backup and Recovery Plan and the Disaster Recovery Plan for the Solution for those procedures; Requirements for Vendor support during deployment readiness and deployment, and whether Vendor support is required to be onsite or could be provided remotely; • Documentation management (all documentation defined as required in Section V. 5) Deliverables and this Attachment); and • Status reporting.
Release/Deployment Readiness Checklist Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, review and update each time the document is impacted.	Purpose/Description: The Deployment Readiness Checklist validates that deployment preparation activities are complete prior to deployment of a release. Minimum Content: <ul style="list-style-type: none"> • All Testing and State Acceptance of Tested Solution Tasks; • Training; • Communication tasks identified in the Deployment Plan and coordination with all technical teams to ensure engagement during deployment;

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	<ul style="list-style-type: none"> • Tasks to ensure that the Production environment is ready for install; • Creation of install and configuration scripts as needed; • Disabling of debugging and testing code from the Solution software (including disabling assertions); • Vulnerability scans and security assessments; • Creation of releasable software media (CD-ROM, downloadable JAR file, etc.) required to perform the deployment; • Virus scan of all release media; • Tagging and branching the source code repository; • Assurance of empirical evidence that the release criteria have been met; • Verify that all user documentation (User Guides, Quick Reference Guides, and Online Help) and Technical and System Administrator Documentation matches current release; • Contingency/rollback plans defined; • Disaster Recovery Plan and Business Continuity Plan developed; • O&M Plan developed; • "ReadMe" text file with installation instructions created; • "Known Issues" list documented; and • All other tasks required to prepare for deployment.
<p>Completed Deployment Readiness Checklist (For all releases or deployment phases)</p> <p>Delivery Provisions: The date defined in approved Vendor Project Schedule for each deployment phase. Contract Duration in O&M Contract Phase, complete the Deployment Readiness Checklist for each release deployed.</p>	<p>Purpose/Description: Vendor and the Agency will work together to document the Completed Deployment Readiness Checklist, thereby validating that deployment preparation activities are complete for each deployment phase. Agency approval of the Completed Deployment Readiness Checklist is required prior to the first release or phase of deployment and revalidated for each release/deployment phase thereafter.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Verification that each checklist task has been completed or not applicable for the current deployment; • Date each task was completed; and • Name of the individual that completed the task.

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Onsite Assistance during Release/Deployment Readiness (State-Hosted Solutions only) Delivery Provisions: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase, Vendor to provide Deployment Readiness Assistance as required per the O&M Plan.	Purpose/Description: Vendor will provide Onsite Assistance during Deployment Readiness to assist the Agency with deployment readiness tasks. Minimum Content: N/A
Vendor Operations and Maintenance Staffing Plan Delivery Provisions: Submitted as part of the Vendor Proposal with final plan submitted during Project Execution, as part of Operations and Maintenance Plan. Project Execution Contract Phase Duration updated weekly two (2) days prior to next scheduled Project Status Meeting; ad hoc as requested by the Agency, updated as needed during Contract Duration in O&M Contract Phase	Purpose/Description: The Vendor O&M Staffing Plan contains the amounts of Vendor labor resources needed to accomplish tasks during the O&M Contract Phase of the Contract. Minimum Content: <ul style="list-style-type: none"> • Identify each person who will be assigned during the O&M Contract Phase as required to ensure SLA requirements can be met, including any subcontractors; • Roles and responsibilities for Vendor and subcontractors; • Vendor organizational information, including an organizational chart (if different from organization information submitted with the Vendor Project Staffing Plan); • The number of dedicated FTEs and the percentage of each resource's time during the O&M Contract Phase; • The estimated hours per resource; • How long each resource will work during the O&M Contract Phase; • A matrix of required skills/roles for each resource; • Vendor's specifications for State resources and the duration and type of each State resource requirement; • Other Vendor resources available to the Agency during O&M.
Onsite Assistance during Release/Deployment (State-Hosted Solutions only) Delivery Provisions: The date defined in approved Vendor Project Schedule for	Purpose/Description: Vendor will provide Onsite Assistance during Deployment to assist the Agency and State with deployment tasks during the Project Execution. During the O&M Contract Phase, the Agency may opt to allow the Vendor to provide deployment assistance remotely (i.e., offsite). Minimum Content: This support will include:

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the duration of each deployment phase and up to two (2) days after deployment. Contract Duration in O&M Contract Phase, assist the Agency as stated in the O&M Plan.	<ul style="list-style-type: none"> Identifying Defects to the Solution; and Resolving Defects to the Solution consistent with diagnosis and resolution times stated in body of RFP.
Validation Test Results Report Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase for each deployment.	Purpose/Description: Validation Test Results Report provides a summarized and detailed report to the Agency about the results of the Vendor's testing to ensure that the deployed system is functioning as expected in the Production environment for the Agency, Vendor will use an approved subset of system Test Cases/Scripts identified as necessary to test key functions. Minimum Content: <ul style="list-style-type: none"> Executive summary of test results; Executed Tests Cases; and Detailed results of the executed Test Cases.
Deployment UAT Results Report Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase for each deployment.	Purpose/Description: Vendor will assist the Agency in producing a Deployment UAT Results Report that summarizes and details the results of the Agency's UAT conducted to ensure that the deployed Solution is functioning as expected in the Production environment for the Agency, The Agency will use a subset of System Test Cases/Scripts deemed necessary to test key functions. The Agency will perform Validation Testing for each deployment phase. Minimum Content: <ul style="list-style-type: none"> Executive summary of test results; Executed Tests Cases; and Detailed results of the executed Test Cases.
Agency Acceptance of Deployment UAT Results Delivery Provision: The date defined in approved Vendor Project Schedule. Contract Duration in O&M Contract Phase for each deployment.	Purpose/Description: Vendor is responsible to ensure that Agency Acceptance of Deployment UAT Results is formally documented for each deployment phase in the Project Execution Phase, and for any deployment that occurs during the O&M Contract Phase. The Agency's final acceptance during the Project Execution Phase indicates that the Solution has been deployed for the Agency and is ready to enter the Stabilization Period. The Agency's acceptance during the O&M Contract Phase indicates that Solution Changes have been deployed. Minimum Content: N/A

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Vendor Support during the Stabilization Period Delivery Provisions: When Solution is in the Stabilization Period as defined by the Contract	Purpose/Description: Vendor will provide Vendor Support during the Stabilization Period during the Stabilization Period defined by the Contract. Solution will be deemed “stable” when it has been operated continuously during any block of 90 consecutive days following Deployment without any Severity 1 or Severity 2 defects, as defined by the Contract, so that users can successfully log into Solution and perform their daily work without frequent Solution lockups, freezes, or shutdowns. Minimum Content: <ul style="list-style-type: none"> • Defect resolution and tracking; • Regression Testing; and • Assisting the Agency with UAT of remediated defects.
Agency Acceptance of the Stabilized Solution Delivery Provisions: The date defined in approved Vendor Project Schedule.	Purpose/Description: Vendor is responsible to ensure that Agency Acceptance of the Stabilized Solution is formally documented. The Agency’s acceptance indicates that Solution has been stabilized and is ready to enter the O&M Contract Phase of the Contract. Minimum Content: N/A
Lessons Learned Agency Acceptance of the Stabilized Solution Delivery Provisions: The date defined in approved Vendor Project Schedule.	Purpose/Description: Lessons Learned are detailed statements (positive or negative) captured after completion of a project or for a portion of a project. The statements describe in a neutral way what did or did not work well, along with a statement regarding the risk of not heeding the lesson. Vendor will assist the Agency in identifying Lessons Learned . Minimum Content: Causes of variances to defined and approved project plans and the reasoning behind corrective actions chosen.
Project Status Meetings Delivery Provisions: Bi-weekly for the Project Execution Contract Phase Duration, starting the week after the Project Kick-Off Meeting. Due two (2) days before Project Status Meeting. Ad hoc Project Status Reports may be requested, and reporting schedules may be increased upon request by the Agency and may be reduced by the	Purpose/Description: The Project Status Meeting is held bi-weekly, or as needed, to discuss status and plans with all team members and external stakeholders when requested (e.g., for a project peer review). The State Project Manager will facilitate this meeting. Minimum Content: The agenda of the meeting will include, at a minimum: <ul style="list-style-type: none"> • Status of each pending Deliverable including, but not limited to, any changes to the time, quantity, or quality of that Deliverable; • Accomplishments during the reporting period; • Problems encountered and proposed/actual resolutions; • Work to be accomplished during the next reporting period; • Issues and Risks to be addressed, including contractual;

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Agency during the Closeout Stage.	<ul style="list-style-type: none"> • Status of changes and/or enhancements; • Status of release management; and • Strategy discussions.
Project Status Reports Delivery Provisions: Bi-weekly for the Project Execution Contract Phase Duration, starting the week after the Project Kick-Off Meeting. Due two (2) days before Project Status Meeting. Ad hoc Project Status Reports may be requested, and reporting schedules may be increased upon request by the Agency and may be reduced by the Agency	<p>Purpose/Description: The Project Status Report provides the Agency with information concerning the Vendor's progress on the project, planned activities, and any items identified as risks or issues.</p> <p>Minimum Content:</p> <p>Status reports contain information as defined by the Agency using a format that is approved by the Agency,</p> <ul style="list-style-type: none"> • Weekly status reports will contain the following: <ul style="list-style-type: none"> ○ Overall completion status of the Project in terms of the Agency -approved Project Management Plan and Project Schedule; ○ Status of each pending Deliverable including, but not limited to, any changes to the time, quantity, or quality of that Deliverable; ○ Accomplishments during the reporting period; ○ Problems encountered and proposed/actual resolutions; ○ Work to be accomplished during the next reporting period; ○ Status of existing issue resolution and risk management assigned, as well as new risks and issues to be addressed, including contractual; ○ Quality Assurance status; ○ Change Request status; ○ Identification of schedule slippage and strategy for resolution; ○ Agency resources required for activities during the next time period; and ○ Resource allocation percentages including planned versus actual by Project Sprint Cycles/Modules/Milestones. • Ad hoc status reports contain status information requested by the Agency using a format that is approved by Agency.

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
<p>Sprint Reports</p> <p>Delivery Provisions: At the end of each Sprint for the Contract duration.</p>	<p>Purpose/Description: The Sprint Report provides the Agency with information concerning the Sprint that has just been completed</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Sprint number; • Goal of the Sprint; • Number of User Stories planned for the Sprint; • List of User Stories and tasks completed in the Sprint, to include for each: <ul style="list-style-type: none"> ○ ID number; ○ Description; and ○ Number of Points assigned; • List of tasks completed during the Sprint with an ID number and description; • List of User Stories or tasks not completed, including: <ul style="list-style-type: none"> ○ ID number; ○ Description; and ○ Reason why the User Story or task was not completed; • Notes from Sprint Retrospective ceremony and resulting action items; • List of Defects encountered during testing; • Plans for the next Sprint; • Sprint Burn-Down Chart; and Velocity Chart.
<p>Operations and Maintenance Status Reports</p> <p>Delivery Provisions: As determined by the SLA for the O&M Contract Phase. O&M status reporting schedules may be altered upon request by the Agency.</p>	<p>Purpose/Description: The O&M Status Report provides the Agency with information concerning the Vendor's progress on O&M activities, Changes, and any items identified as risks or issues during the O&M Contract Phase.</p> <p>Minimum Content: Status reports contain information as defined by the Agency using a format that is approved by the Agency, Status reports will contain the following:</p> <ul style="list-style-type: none"> • Status of each pending Deliverable including, but not limited to, any changes to the time, quantity, or quality of that Deliverable; • Accomplishments during the reporting period; • Problems encountered and proposed/actual resolutions; • Work to be accomplished during the next reporting period;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Issues and risks to be addressed, including contractual; • Status of changes and/or Changes; • Status of release management; • Availability reporting; and • Metrics on all service requests such as number of tickets opened/closed, current status, Response Time, Diagnosis Time, Resolution Time, and other appropriate statistics as requested by the Agency. • Ad hoc status reports contain status information requested by the Agency using a format that is approved by Agency.
<p>Transition Plan</p> <p>Delivery Provisions: Vendor will provide a draft of its Transition Plan to the State within thirty (30) calendar days after notification of pending transition.</p> <p>The Agency will review the Transition Plan, and offer revisions, if necessary. If the Agency submits revisions, Vendor will make such revisions. The parties will then finalize the Transition Plan before the transition activities begin.</p>	<p>Purpose/Description: The Transition Plan documents the steps that would need to be followed if the Agency or the Vendor decides to terminate the Contract, or the Contract end date is reached. This allows for an orderly transition of Vendor activities to another Vendor or to Agency /State staff. The Vendor will draft the plan and submit for Agency review and approval.</p> <p>Minimum Content:</p> <ul style="list-style-type: none"> • Scope of the transition; • Hardware, software, data, facilities, or materials needed to fulfill the transition training effort; • Personnel resources to complete the transition; • Training needed to complete the transition; • All archived documentation to be transferred from Vendor to the Agency or its designee; • Procedures for Vendor's delivery of Escrow Deposit Materials in the event of a Release Condition; • Process for producing, on a weekly basis, tracking reports that indicate the tasks and time frames, which have been agreed upon by Vendor and the Agency, Status reports will be prepared and reviewed at regularly scheduled status meetings (determined by the Agency to occur in the event a Transition Event occurs); • Defined sequence of steps when terminating the Contract: <ul style="list-style-type: none"> ○ Start date and time of each step; ○ End date and time of each step; and ○ Responsible Party for each step;

<i>Project Deliverable and Delivery Provisions</i>	<i>Project Deliverable Purpose and Content</i>
	<ul style="list-style-type: none"> • Rollback or contingency; and • Related communications.
Project Peer Review Delivery Provisions: As requested by the Agency at any point during the Project Execution Phase	Purpose/Description: The Project Peer Review can involve review of any project Deliverable or project management plan and may require an interview or meeting. Any Federal or State Stakeholder may request a Project Peer Review. Minimum Content: N/A – defined by the State.

ATTACHMENT K: REGULATORY MODERNIZATION BUSINESS SPECIFICATIONS

Category	ID	Specification
Authentication	Auth_1	Describe how the proposed solution will externalize identity management utilize the North Carolina Identity Service (NCID) for the identity management and authentication related functions. NCID is the State's enterprise identity management (IDM) service. It is operated by the North Carolina Department of Information Technology.
	LIC_1	Describe how the proposed solution informs or educates prospective childcare provider with North Carolina Child Care Laws, Child Care Rules and licensing process for different types of facilities; Direct the prospective childcare provider to register for pre licensing workshop and pay appropriate fee. Describe the capabilities of solution to integrate with event registration and payment application.
License	LIC_2	Describe how the proposed solution supports configurable automation of initial license, license renewal, Star Rated license, change of license status, permit change, NC religious sponsored programs (notice of compliance), Summer Day Camp etc. application from initial submission through approval, incomplete application, withdrawal, reapply or denial using workflow management and queuing process. Include in your response the ability of the system to support, <ul style="list-style-type: none"> a. Configuration of workflows to meet the business process and change in legislation b. Alerts and notifications for each step of the process for next person in the queue; Mention what are the methods used for notification c. All data validation capabilities within the system prior to submission of application d. Ability for a consultant to access system offline during a visit to a facility; document visit summary, print visit summary, schedule visits and follow up visits where needed e. System support capabilities to pull visit monitoring results as part of system integration and provide outcomes during consultant monitoring visits. g. Ability to sync up offline data periodically to minimize loss of data h. Ability to upload documents; Mention file types supported i. Notify DCDEE staff of any online activity by facility operator for any activity
	LIC_3	Describe how the proposed solution will facilitate, <ul style="list-style-type: none"> a. state staff to receive inspection reports for Building, Fire, Sanitation and other compliance reports from external agencies b. automatically alert each childcare provider to obtain new fire, sanitation inspection or any other records that are required to be completed annually before it is due.

Category	ID	Specification
Compliance	COM_1	Describe how the proposed solution will facilitate configurable workflow to support Annual Compliance (AC) and other announced and unannounced visits to Facilities (all types of Facilities) by Regulatory staff , a. Configuration of workflows to meet the business process and change in legislation b. Alerts and notifications for each step of the process for next person in the queue. Alerts of upcoming visits due date and tracking compliance of violations cited during visits; including flexibility to schedule, suspend, repeat, edit, delete alerts c. All data validation capabilities within the system d. Ability for a consultant to access system offline during a visit to the facility; document visit summary, print visit summary, and follow up visits where needed e. System support capabilities to pull visit monitoring results for compliance as part of system integration and provide outcomes during monitoring visits g. Ability to sync up offline data periodically to minimize loss of data h. Ability to upload documents; What are the supported formats i. Notify DCDEE staff of any online by facility operator for any activity
	COM_2	Describe how the proposed solution will facilitate user's ability to Automatically calculate and award visit compliance score and compliance history for 18 months based on ending date, items, types of facilities, types of programs, violations cited, etc... ; Ability to configure the change in business process and/ or legislation
	COM_3	Describe how the proposed solution will facilitate the following for evaluating the star rating for efacilities, 1. Evaluate and assess the Program Standards 2. Evaluate and assess Staff Education 3. Evaluate and assess quality points for rated licensed facilities.
	COM_4	Describe how the proposed solution will handle grievance from a childcare provider to violation/citation
Complaints and Incidents	COMP_INC_1	Describe how the proposed solution will facilitate configurable workflow to support the following, a. Receive and process incident reports b. Receive and process complaint reports c. Manage and document summary of investigation d. Schedule follow up visits if required.

Category	ID	Specification
	COMP_INC_2	Describe how the proposed solution will enable anyone to report a complaint online that occurred in the childcare facility
	COMP_INC_3	Describe how the proposed solution will facilitate regulatory section staff to track complaint depending on their severity including the closure of facility
	COMP_INC_4	Describe how the proposed solution will handle issuance and correction of notice of administrative action following queuing process; Include in your response the ability of the system to support, a. Ability to configure the administrative action b. Ability to accept, reject the supporting documents uploaded by provider
	COMP_INC_5	Describe how the proposed solution will facilitate system to assess civil penalties and collect dues integrating with approved payment system
Provider Portal	PRO_PORT_1	Describe how and when the proposed solution will facilitate childcare provider to perform the following, a. Create and manage their profile b. Create and manage hours, days of operation, services, programs etc.
	PRO_PORT_2	Describe how the proposed solution will facilitate childcare provider to upload any supporting documents; What are the supported formats.
	PRO_PORT_7	Describe how the proposed solution will facilitate communication between childcare provider and state staff
Integrations	INT_1	Describe how the system integrates with CSDW to push all Regulatory data periodically
	INT_2	Describe how the system shares data between workforce table and Facility table with Registry to get data for Facility information, Teacher Qualification, Training, QRIS, etc....
	INT_3	Describe how the proposed solution will maintain Search Site from Main DCDEE website
	INT_4	Describe how the system integrates with NC Pre K and SSRS to send Regulatory data to SSRS
	INT_5	Describe how the system integrates with NCRLAP to get Environmental Rating assessment data from NCRLAP
	INT_6	Describe how the system integrates with ABCMS to get data for CMR (Child Maltreatment Registry) and CBC qualification letter information and send Regulatory data

Category	ID	Specification
	INT_7	Describe how the system integrates with NCFast for following activities, a. Send Facility data from Regulatory to NC FAST b. Send Out of State Data from Regulatory to NCFast c. Get Subsidy Data from NCFast to Regulatory
	INT_8	Describe how the system integrates with CCSA to send Facility, Owner, Admin, Permit data from Regulatory periodically
	INT_9	Describe how the system integrates with Secretary of State Corporation (SOS) to get Corporation Id and Corporation status updates
	INT_10	Describe how the system integrates with NC Pre-K to – Send Facility information to NC PreK and NC Pre-K field in Regulatory to update based on the info in the NC Pre-K system
	INT_11	Registration and Payment System – Integration with State approved Registration and payment platform(s) for collection of licensing fees and civil penalties, and pre-licensing registration.

ATTACHMENT L: WORKFORCE REGISTRY BUSINESS SPECIFICATIONS

Category	ID	Requirement
Administrative	ADM_1	Describe the capabilities of the Administrator roles within the solution, at a minimum to assignee user roles and permissions, modify roles, delegate permission, create/activate/deactivate/archive users, temporary revoke access, create and modify workflows.
	ADM_2	Describe the Solution's account administrative functions for creating and managing user roles.
	ADM_3	Describe how the Solution defines the different levels of a multi-level organization (i.e., state, providers, partnership agencies) and how each level can have its own administrator
	ADM_4	Describe the solutions ability to archive/delete users.
Workforce Registration	REG_1	Describe self-service capabilities that allow end users to log into the system, fill out registration application, complete registration, upload documentation(s) and submit for further processing. Describe what documentation types are supported by the solution. At a minimum, the solution should provide the capability for the following user types to enroll and register in the system - <ol style="list-style-type: none"> 1. Mentors & Evaluators 2. Teachers (both Lead and Assistants) 3. Technical Assistance Providers 4. Early childhood and school age administrators 5. Students training in early education 6. Program Coordinator 7. Prospective Childcare owners and Facility Owners/Directors 8. Prospective Teachers
	REG_2	Describe the solutions capability to identify duplicate registration records
	REG_3	Describe the solutions capability to merge identified duplicate registration records and unmerge records. What checks and balances are in place for approvals prior to merging or separating records
	REG_4	Describe the solutions OCR capabilities.
	REG_5	Describe the solutions capability to validate data in real time at all points of entry, including manual and bulk upload entry.

Category	ID	Requirement
	REG_6	Describe the solutions capability to handle incomplete registration including prompting users to complete registration or removing application after a certain period of time.
	REG_7	Describe the solutions capabilities to assist applicants complete registration and provide a confirmation to the applicants upon completion. Your response should registration completion for all types of end users described above .
	REG_8	Describe the solutions ability for manual verification and approval of registrations.
	REG_12	In instances where the business receives supporting documentation (ex: electronic/hard copy transcripts) for an applicant prior to creating their account, describe the solutions capability for enabling state staff to stage and manage such documents, including the capability to integrate the documents with the appropriate account, manually and/or automatically, when the corresponding account is subsequently created.
	REG_13	Describe how applicants can update and maintain their profile in the system and how the system allows applicants to upload additional credentials as their skills are enhanced.
	REG_14	Describe how the solution would allow applicants / facility owners and directors to associate the applicant with facility(ies). Describe how the solution provides the ability for applicant or their supervisor to indicate hours of work and wages at each facility and the start and end dates
	REG_15	Describe the ability for prospective like Childcare owners, Teachers to enroll with the workforce registry.
Security	SEC_1	Describe how the Solution provides role-based access
	SEC_2	Describe how the Solution integrates with the North Carolina Identity Management System (NCID) (https://it.nc.gov/vendor-engagement-resources#dit-services)for authentication and authorization services.
	SEC_3	Describe the Solution's native user authentication and authorization features, including whether multi-factor authentication is available.
Workflow	WF_1	Describe the capability of the system to configure existing workflows to meet DCDEE's needs and build new workflows, where required. Provide details about which user roles will have the capability to configure workflows in the system and build new workflows.

Category	ID	Requirement
	WF_2	<p>DCDEE would like configurable workflows to support the following activities for all user types. Describe the capabilities of automated workflows within the system to support -</p> <ol style="list-style-type: none"> 1. Registration for new and returning users 2. Education evaluation 3. Background check 4. Initial licensure approvals and renewals including verification of education and training completion. 5. Grants application evaluation 6. Trainer approval - initial and recurring 7. Survey distribution and circulation <p>Include in your response workflow triggers, roles that could create the workflows and deploy them, alerts and notification for pending reviews, e-signature capabilities and reporting capabilities.</p>
	WF_3	Describe the capability to support workflow queueing (sequential, conditional and parallel); capability to expedite requests in a queue; reassigning requests and redirect workflow for further assistance.
	WF_4	Describe all the pre-defined workflow status and the ability to customize and add new status fields.
	WF_5	Describe the capability of the system to provide visibility on the status of workflow to the various stakeholders based on their roles
	WF_6	Describe how the solution supports assignment of training or technical assistance (TA) by self and others. Include in your response the ability for participants to select training/technical assistance based on services/ type of delivery, location, dates, availability, cost etc.
	WF_7	Describe how the solution allows automatic assignment of mandatory training at a pre-determined frequency
	WF_8	Describe all the status to track training and TA services including and not limited to completion, overdue, pending assignment etc. Can the status values be updated to meet NC needs.
	WF_9	Describe how the training completion records be uploaded to track completion. Where required, does the solution support workflows to enable approval of self-uploaded records. Describe the workflow when records are received from authorized trainers
	WF_10	Describe how the system can integrate with other training platforms for digital transaction of training records.

Category	ID	Requirement
	WF_11	Does the solution provide the capability for the State to group trainings by category. Based on legislative changes can the training category be renamed, and new category be added. Describe how the system maintains integrity of data for reporting purposes.
	WF_12	Does the solution support trainee to communicate with trainer or technical assistance provider prior to and after training / technical assistance
	WF_13	Describe how the solution supports trainers, technical assistance providers and training center administrators to create their profile or company profile, services covered and submit their credentials.
	WF_14	Describe how the solution supports configurable workflows for trainer/technical assistance provider approval and annual renewals. Include the capability the solution offers for upload of credentials and documentation.
	WF_15	Describe how the system supports assigning mentors and evaluators with whom the participant can work with.
	WF_16	Describe how the Plans of Study and Licensure only plan and supporting documents can be managed and tracked for participants.
	WF_17	Describe how the system supports aggregating and accruing overall training and TA hours towards professional development.
	WF_18	Describe the Solution's capability for displaying, to state staff, eligibility/ineligibility status, past and/or present as defined by the business, in real time or at the point in time when the applicant's record is viewed.
Grants	WF_19	Describe the solutions ability to allow eligible enrollees to apply for grants and track educational scholarships within the system
Manual Document Generation Workflow	WF_MANU_DOC_1	Describe the solutions ability to provide spell check, grammar check, free form text, document customization, printing options, email options, delete/undelete documents, option to reuse captions, audit documents, annotate within the documents as needed and serve as a document repository.

Category	ID	Requirement
Automatic Document Generation Workflow	WF_AUTO_DOC_1	Describe the solutions ability to automatically generate letters and certifications. Describe the solutions ability to print, update fonts, letterheads and signatures, delete/undelete and save automatically generated documents.
Job Listing		Describe the solutions ability to support job listings from multiple sources.
Data Management	DAT_1	Describe how the Solution uses role-based access models and previously described security requirements for protected data as outlined in NC State Security Plan and any other relevant security documents to control access to and edit capacity for records that includes citizen data and associate PII data that may be shared between agencies.
	DAT_2	Describe how the Solution grants role-based permissions to access program data which may or may not be stored in a common set of tables depending on any field level differences identified during discovery.
	DAT_3	Describe how the Solution's role-based permissions will define CRUD transactions with the program data, as most users will not have full access to both programs specific data.
	DAT_4	Describe how the Solution records changes to user data (PII), including specific user info and time frame, existing for four levels of change, as well as other restrictions and recordings as required by State Security plan/legal concerns/Federal regulations for data protection and security.
	DAT_5	Describe how the Solution records permissions by roles as changes by a specific user in a specific time frame existing for two levels of change.
	DAT_6	Describe how the Solution ensures user access is governed by the security plan of the State and any other identified regulations/policies or requirements for systems governing Personally Identifying Information, or greater if discovered.
	DAT_7	Describe how the Solution uses a single sign on for user authentication and identifies the user with a specific role-base set of permissions.
	DAT_8	Describe how the Solution allows administrative roles for both Regulatory and EEB, which allows user roles to be defined by either Regulatory, EEB or both.
	DAT_9	Describe how the Solution allows for separate landing pages or zones for users based on their roles.
	DAT_10	Describe how the Solution normalizes data within the system, proactively avoiding duplicate records and citizens.

Category	ID	Requirement
	DAT_11	Describe how the Solution normalizes migrated, historical data.
Dynamic Generation of document	ECM_1	Describe the solutions capability to dynamically generate documents.
Integration and System Interfaces	INI_1	DIT- Describe the solutions ability to Integrate with the State agencies authentication platforms.
	INI_3	DPI- Describe the solutions ability to receive file/real time information about Licensed teachers & send information on enrollee's (teacher's) training from Department of Public Instruction Online Licensure System. Describe the solutions ability to receive wage and Licensure file; send new approved lead NC Pre-k teacher from Department of Public Instruction Human Resource Management System.
	INI_4	Describe the solutions ability to receive file containing the names of adults flagged for maltreatment from the Child Maltreatment Registry.
	INI_5	Describe how the solution shares facility and workforce qualification data between workforce and regulatory areas and keeps information current.
	INI_6	Describe the solutions ability to integrate or receive data from Training platforms such as Moodle, Voyage Sporis & Teaching Strategies for enrollees.
	INF_7	Describe the solutions ability to integrate with partnership agencies application to receive and provide information to end users. CCSA-Receive a list of bonus approval administered. CCSA Grants System – (T.E.A.C.H., WAGE\$, AWARD Plus and AWARDS) Receive files with enrollee grant and wage information.
	INI_8	North Carolina Institute for CDP – Send a list of EEC certifications granted.
	INI_9	Describe the solution ability to integrate with external agencies to receive Health and Safety trainers' information
	INF_10	CBC/ABCMS-Real time integration with CBC for background check of enrollees
	INI_11	Describe the ability of the solution to Integrate with state approved payment platforms for training payments

Category	ID	Requirement
	INI_12	Describe the solutions ability to Integrate or receive monthly file from Vital Records application
	INI_13	Describe the solutions ability to integrate with Clearing houses to receive Official Transcripts.
	INI_14	Describe the solutions ability to integrate with NCRLAP to view, assign, or participate in trainings
	INI_15	Describe the solutions ability to integrate with NC Pre-K's application to route change requests for appropriate approvals by EES and Workforce Education Unit.
Dashboards	DS_1	Describe the solutions ability to provide Dashboard capabilities for users based on their requirements.
SFTP	SFTP_REC_1	Describe the solutions ability to receive SFTP, Batch Job, integrate with other solutions to receive data. May include Job boards, Grants or any places where secured SFTP is required.
Search	SRC_1	Describe the solution's ability to support and search for all data fields within the solution.
	SRC_4	Describe the solutions ability to support users to search by facility association and data elements pertaining to facilities.
	SRC_5	Describe the solutions ability to support Partnership agencies ability to search for data as per their requirements
	SRC_6	Describe the solutions ability to support users to search by Education information
	SRC_7	Describe the solutions ability to support users to search by Training information (Training type, location, cost etc.)
Requirement	CMP_1	The solution complies with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) for accessibility.
Requirement	CMP_2	The solution must be Family Educational Rights and Privacy Act (FERPA) compliant (20 U.S.C. § 1232g; 34 CFR Part 99)
Requirement	CMP_3	The solution complies with the North Carolina State Government security requirements (https://it.nc.gov/vendor-engagement-resources#security).
Requirement	CMP_4	The solution complies with the North Carolina Department of Health and Human Service's Privacy and Security policies and manuals (https://policies.ncdhhs.gov/departmental/policies-manuals/section-viii-privacy-and-security).
	CMP_5	Describe how the Solution protects user privacy via user access levels and masking of social security numbers, to include restricting read/write access to user SSN by unauthorized staff.

Category	ID	Requirement
	CMP_6	Describe how the Solution archives records and/or to designate inactive users for reason e.g., death, migration out of area, no longer eligible, achieved self-sufficiency.
Intake	WFR_INT_1	Describe how the Solution maintains data for individuals, partnership agencies, facilities, TA's, state staff etc. at any point in time. During and after changes or updates.
	WFR_INT_2	Describe the process the Solution utilizes to link individuals to programs, agencies, facilities etc.
	WFR_INT_3	Describe how the proposed Solution can track reference-from source for example trainings referred.
	WFR_INT_4	Describe how the Solution captures employment and education.
	WFR_INT_5	Describe how the Solution gives "real time" prompts and not move forward if certain required data is not entered
	WFR_INT_6	Describe how the Solution will allow the user information changed by one component updated across the entire database.
	WFR_INT_7	Describe how the Solution's error/omission tracking is handled for user intake or updating.
Agency services	AS_1	Describe how the Solution will allow custom program/service creation.
	AS_2	Describe how the Solution enters narratives of user progress, developments, concerns, etc. for the overall facility record.
Case management	Case_Mgt_S_1	Describe how the Solution initiates and facilitates case management by staff, to record detailed case notes, and to follow-up on user.
	Case_Mgt_S_2	Describe how the Solution tracks users' goals, progress, and outcomes professional development, trainings, education update etc.
	Case_Mgt_S_11	Describe how the Solution provides financial reports, including how it tracks training costs and provides a report by paid training taken by users.
System Administration	SA_1	Describe how the Solution ability to separate users based on user groups.
Reporting and Analytics	RA_1	Describe all aggregate and individual level operational reports available to support the following areas in the Workforce Registry for the various roles including administrators, State users, partnership agencies, facility owners and operators, enrollees, trainers, general public etc. - a. Information about workforce registrant including reports on their demographic, qualification, training, technical assistance, licensure, place of employment, wages etc.

Category	ID	Requirement
		b. Information about trainers including hours of training provided, training feedback etc. c. Information and characteristics of the childcare facilities. d. Staff turnover and students in pipeline e. Required training by role f. Capabilities that exist to support correlation report g. Information about customer service provided (issue history, issue frequency, etc.) h. Others, as applicable
	RA_2	Using the data in the system describe the reports that support longitudinal analysis of enrollees and facilities to establish the correct sequence of events and identify changes over time.

ATTACHMENT M: NC PRE-K SPECIFICATIONS

Category	ID	Specification
Administrative	PK_ADM_1	Describe the solution's capabilities to manage the Administrator roles, at a minimum to assign user roles and permissions, modify roles, delegate permission, create/activate/deactivate/archive users, temporarily revoke access, create and modify workflows by identified stakeholders at state and local level.
	PK_ADM_2	Describe the solution's capabilities for account administrative functions to create and manage user roles.
	PK_ADM_3	Describe the solution's capabilities to define the different levels of a multi-level organization (i.e., state, providers, partnership/contracting agencies) and how each level can have its own administrator capabilities.
	PK_ADM_4	Describe the solution's ability to create a user role above the local administrators.
Registration	PK_REG_1	Describe the solution's self-service capabilities that allow end users to log into the system, fill out registration application, complete registration, and upload documentation(s) for further processing. Describe the types of documentation types that are supported by the solution.
	PK_REG_2	Describe the solution's ability to create user groups and associate users with them.
	PK_REG_3	Describe the solution's ability to identify duplicate records for users.
	PK_REG_4	Describe the solution's ability to merge user records in case of duplicates.
	PK_REG_5	Describe the solution's ability to allow management of stakeholder specific profiles.
	PK_REG_6	Describe the solution's ability to enable stakeholders to create an account to submit electronic applications and supporting documentation.
	PK_REG_7	Describe the solution's ability to read text and convert it to the data fields.
	PK_REG_8	Describe the solution's ability to track electronic application updates.
	PK_REG_9	Describe the solution's ability to enable communications between stakeholders and present alerts as needed.

	PK_REG_10	Describe the solution's capability for manual and automatic verification and approval of registrations records.
	PK_REG_11	Describe the solution's capability to validate data in real time at all points of entry, including manual and bulk upload entry.
	PK_REG_12	Describe the solution's ability to save incomplete applications or registrations.
Child Application	CHL_APP_1	Describe the solutions ability to accept electronic applications automatically and manually.
	CHL_APP_2	Describe the solutions ability to provide a confirmation of successful completion of application.
	CHL_APP_3	Describe capability to identify duplicate stakeholder records and merge them.
	CHL_APP_4	Describe the solution's capabilities to upload (import and export) supporting documents and management of those documents.
	CHL_APP_5	Describe the solution's Optical Character Recognition (OCR) capabilities, including abilities to scan postal application and supporting documents as well as automated text extraction to tables.
	CHL_APP_6	Describe the solution's ability to support updating child application based on the legislation, childcare rules, and policies. This should be table driven to support updates of the eligibility criteria.
	CHL_APP_7	Describe the solution's ability to perform automated calculations to inform business processes specified by the business.
	CHL_APP_8	Describe the solution's ability to support configurable workflows in support of processes specified by the business, including capability that enables and enforces process steps where approvals are required that are informed by data from internal and external interfaces with ancillary solutions (ex: Workforce Registry).
	CHL_APP_9	Describe the solution's ability to track all funding sources for relevant stakeholders.
	CHL_APP_10	Describe the solution's ability to support processing of data in bulk or individually.
	CHL_APP_11	Describe the solution's capability to support workflow queueing (sequential, conditional, and parallel) including the capability to expedite requests in a queue, reassign queued requests, and redirect queued requests for further assistance.
	CHL_APP_12	Describe the solution's capability to support assigning a priority value to applications based on the eligibility criteria met.
	CHL_APP_13	Describe the solution's capability to automatically recalculate priorities for all applications.
	CHL_APP_14	Describe the solution's ability to track and report the status of documents for internal and external stakeholders.

Workflow	PK_WF_1	Describe the solution's ability to provide workflows that enable the moving and removal of forms at periods specified by the business.
	PK_WF_2	Describe the solution's ability to provide workflows that support scheduling requirements.
	PK_WF_3	Describe the solution's ability to provide workflows to enable seamless data entry from it into ancillary applications (ex: PowerSchool).
	PK_WF_4	Describe all the pre-defined workflow statuses and the ability to customize and add new status values.
	PK_WF_5	Describe the capability of the system to provide visibility into the status of stakeholder entries in various workflows based on their roles.
	PK_WF_6	Describe the solution's ability to support document generation and distribution to individual and multiple internal and external stakeholders.
	PK_WF_7	Describe any automated calculation features of the solution.
	PK_WF_8	Describe the solution's ability to produce documentation from calculations in formats prescribed by the business.
	PK_WF_9	Describe the solution's capability for enabling management of specified content directly by the business.
	PK_WF_10	Describe the capability of the solution to configure existing workflows to meet DCDEE's needs and build new workflows, where required. Provide details about which user roles will have the capability to configure workflows in the system and build new workflows.
	PK_WF_11	Describe the solution's ability to enable designated stakeholders to view and reserve classroom seats for children.
	PK_WF_12	Describe the solution's ability to enable specified users to configure portions of it.
	PK_WF_13	Describe the solution's role-based security capability for managing internal day-to-day operations for internal and external stakeholders.
	PK_WF_14	Describe the solution's ability to support automation of prescribed workflows.
	PK_WF_15	Describe the solution's ability to enable stakeholders to create and manage stakeholder specific site pages and tailored content.
	PK_WF_16	Describe the solution's capability to support maintenance of site and associated data attributes in the system.

	PK_WF_17	Describe the solution's ability to support creation, review, update, deletion, and recreation of forms.
	PK_WF_18	Describe the solution's ability to interface with ancillary solutions (ex: Workforce Registry) to compile stakeholder records per prescribed business processes.
	PK_WF_19	Describe the solution's ability to transition configurations and data from a point in time to stand corresponding abstractions in preparation for the subsequent periods while keeping the data for current and previous periods intact.
	PK_WF_20	Describe the solution's ability to configure program type, application, priorities, NC Pre-K score, appointment schedule, distance calculator, and assignment of sites to a program.
	PK_WF_21	Describe the solution's ability to archive data for the past year and export it as needed.
	PK_WF_22	Describe the solution's authorization and permissions model supporting security and administration capability.
	PK_WF_23	Describe the solution's ability to add site operational/non-operational days for specified reporting periods, apply them to subsequent reporting periods, and edit as needed.
	PK_WF_24	Describe the solution's ability to manually add records for reporting periods and duplicate their additions in subsequent reporting periods.
	PK_WF_25	Describe the solution's ability to merge content as prescribed by the business.
	PK_WF_26	Describe the solution's electronic signature capabilities.
	PK_WF_27	Describe the solution's ability to support distribution of forms individually and in bulk.
	PK_WF_28	Describe the solution's ability to support workflows that track and provide updates on the status of forms.
System Administrators	SA_1	Describe the solution's support for hierarchical implementation of user roles and permissions.
	SA_2	Describe the solution's ability lock and reopen functionalities.
	SA_3	Describe the solution's capability to aid the business in delivering effective and efficient end user support through use of screenshare and chat functionality.
Reporting and Analytics	RT_1	Describe the solution's role-based reporting capability. Include all aggregate and individual level operational reports available for all roles.
	RT_2	Describe the solution's longitudinal analysis and related reporting capabilities using data accessible to the system.

	RT_3	Describe the solution's capability for enabling stakeholders to configure and tailor reports to meet their needs.
	RT_4	Describe the solution's ability to schedule automatic report generation (single and batch).
	RT_5	Describe the solution's capability for guiding ad-hoc report generation, including capabilities for role-based access to relevant data elements to build and save reports.
	RT_6	Describe the process and related role/permissions model for managing (create, read, update, and delete) production level reports.
	RT_7	Describe the proposed solution's predictive analytics capabilities to enable DCDEE to better allocate resources and improve customer satisfaction. Include in your response the various analytic reports provided for various stakeholders to support analytics informed decision making.
	RT_8	Describe the solution's audit trail capabilities, including audit logging and associated reporting.
	RT_9	Describe the security reports the solution offers to support State security requirements.
	RT_10	Describe supported report output formats (CSV, TXT, etc.) and methods for delivering them.
	RT_11	Describe the solution's ability to enable stakeholders to generate reports from survey data.
Automated Processes	AUT_1	Describe the solution's capability for accurate real-time display and reporting of data.
	AUT_2	Describe the solution's automated communications capability (alert, email, etc.), including communications management functionality and triggers.
	AUT_3	Describe the solution's capability for supporting automatic calculations defined by the business.
Integration	PK_INT_1	Describe the solution's ability to interface with multiple internal and external systems (ex: NCID, Registry, Regulatory, Open Windows, CSDW, PowerSchool, Microsoft Outlook, etc.) to inform functionality it provides in supporting business processes.
	PK_INT_2	Describe the solution's capability for managing surveys, including distribution, tracking, and reporting.
	PK_INT_3	Describe the solution's ability to support bidirectional email communications for authorized users.
Security	PK_SEC_1	Describe the solution's capability for managing role-based user access.

	PK_SEC_2	Describe the solution's capability for integrating with the North Carolina Identity Management System (NCID) to meeting authentication and authorization requirements.
	PK_SEC_3	Describe the solution's native user authentication and authorization features, including multi-factor authentication if available.
	PK_SEC_4	Describe the solution's ability to transmit and receive data securely, including SFTP.
Document Management	PK_MANU_DOC_1	Describe the solution's ability to provide spell check, grammar check, free form text, document customization, printing options, email options, delete/undelete documents, option to reuse captions, audit documents, and annotate within the documents as needed.
	PK_AUTO_DOC_1	Describe the solution's ability to automatically generate letters and certifications. Describe the solution's ability to print, update fonts, letterheads and signatures, delete/undelete and save automatically generated documents.
	PK_AUTO_DOC_2	Describe the solution's ability to receive and store documents (for example, when digital transcripts are received or when attachments are sent by postal mail and scanned) to be shared among authorized users. Describe in detail how the documents are indexed, stored, and not duplicated when it is shared among users.
	PK_AUTO_DOC_3	Describe the solution's support for flagging documents that might be incomplete.
	PK_AUTO_DOC_4	Describe how the solution allows scanned documents to be stored.
	PK_AUTO_DOC_5	Describe the solution's ability to support document management processes including and not limited to indexing, version control, audit trail, check in-check out, preview documents, upload of files and images, annotation capabilities etc.
	PK_AUTO_DOC_6	Describe the solution's search capabilities for document retrieval.
Data Management	PK_DAT_1	Describe how the solution uses role-based access to satisfy state security requirements for protected data as outlined in the NC State Security Plan and any other relevant security documents. Describe its ability to control access to and editing of records that includes citizen data and associate PII data that may be shared between agencies.
	PK_DAT_2	Describe how the solution manages role-based permissions for accessing program data which may or may not be stored in a common set of tables.

	PK_DAT_3	Describe how the solution's role-based access and permissions functionality influence its data management capability (create, read, update, and delete), as most users will not have full access to all data.
	PK_DAT_4	Describe how the solution records changes to user data (PII), including specific user info and time frame and other restrictions and recordings as required by State Security plan/legal concerns/Federal regulations for data protection and security.
	PK_DAT_5	Describe how the solution records permissions by roles as changes by a specific user in a specific time frame.
	PK_DAT_6	Describe the solution's support for single sign-on user authentication and the application of user access based on assigned roles and permissions.
	PK_DAT_7	Describe the solution's capability for managing administrative roles within and across business units. (Ex: for both Regulatory and EEB, which allows user roles to be defined by either Regulatory, EEB or both.)
	PK_DAT_8	Describe the solution's support for provisioning landing pages or zones for users based on their roles.
	PK_DAT_9	Describe how the solution normalizes data within the system, proactively preventing duplicate records.
	PK_DAT_10	Describe how the solution normalizes migrated, historical data.
Search functionality	PK_SRC_1	Describe the solution's ability to support and search for all data fields within the solution.
Compliance	PK_CMP_1	The solution complies with Web Content Accessibility Guidelines 2.0 (WCAG 2.0) for accessibility.
	PK_CMP_2	The solution must be Family Educational Rights and Privacy Act (FERPA) compliant (20 U.S.C. § 1232g; 34 CFR Part 99)
	PK_CMP_3	The solution complies with the North Carolina State Government security requirements (https://it.nc.gov/vendor-engagement-resources#security).
	PK_CMP_4	The solution complies with the North Carolina Department of Health and Human Service's Privacy and Security policies and manuals (https://policies.ncdhhs.gov/departmental/policies-manuals/section-viii-privacy-and-security).
	PK_CMP_5	Describe how the solution archives records and/or inactivates users (for reasons such as death, migration out of area, no longer eligible, achieved self-sufficiency.)

ATTACHMENT N: SUBSIDY PROVIDER COMPLIANCE BUSINESS SPECIFICATIONS

Category/Area of Focus	ID	Requirements
Random Visits Subsidy and Other Referrals Regulatory Actions Technical Assistance	SPC_1	Describe how the solution enables the following: A method to accept, store, retrieve and manipulate data related to Provider Compliance work. This includes the Checklist, Report, Letters, and Documentation Logs
	SPC_2	Describe how the solution enables the following: For each random evaluation a checklist is created. The checklist will be automated in the new system. The Checklist will: <ul style="list-style-type: none"> o Prefill the selected format with the following information in response to entry of the license number: <ul style="list-style-type: none"> Facility Name Owner Administrator Address Phone number Email address License Number Capacity by shift (1, 2, 3) (These field will be searchable once the checklists are completed.) <ul style="list-style-type: none"> o Add standard comments to checklist from a library using a keyword search (these comments must be user maintained so they can be changed when items change within DCDEE) o Comment field for consultant to place free-from text (this field needs to be large – like 7000 characters and needs to be format-able with bullets, numbering, and paragraph breaks) o Allow selection of types of Technical Assistance from a drop down multiselect (include the types of TA on page 3 of the flowchart along with a comment field of 7000 characters) o Assurances (electronic signature) o Closing (standard language that must be user maintained) o Insert phone number and email address of consultant upon selection of the consultant’s name or dropdown (must be user maintained)

Category/Area of Focus	ID	Requirements
	SPC_3	<p data-bbox="579 183 1163 215">Describe how the solution enables the following:</p> <p data-bbox="579 256 2022 321">Upon assignment of the providers the consultants create a documentation log. This log is maintained throughout the life cycle of the provider's evaluation and follow-up.</p> <p data-bbox="579 329 926 362">The Documentation Log will:</p> <ul style="list-style-type: none"> <li data-bbox="579 370 1604 751">o Create documentation log upon entry of the license number (Regulatory Interface) <ul style="list-style-type: none"> <li data-bbox="625 402 793 435">Facility Name <li data-bbox="625 443 716 475">Owner <li data-bbox="625 483 800 516">Administrator <li data-bbox="625 524 800 557">Email address <li data-bbox="625 565 814 597">Phone Number <li data-bbox="625 605 730 638">Address <li data-bbox="625 646 751 678">Star Level <li data-bbox="625 686 764 719">Consultant <li data-bbox="625 727 764 760">Supervisor <li data-bbox="625 768 848 800">Regional Manager <li data-bbox="579 760 1247 993">o Screens to enter data (this is currently a Word table) <ul style="list-style-type: none"> <li data-bbox="625 792 688 824">Date <li data-bbox="625 833 701 865">Event <li data-bbox="625 873 793 906">Contact Type <li data-bbox="625 914 785 946">Contact with <li data-bbox="625 954 2022 993">Narrative fields (must 7000 characters and be able to accept paste from other Word documents and screenshots and snips from NC FAST, or other related documents.

Category/Area of Focus	ID	Requirements
	SPC_4	<p>Describe how the solution enables the following:</p> <p>When the error rate for attendance or other violations are cited, an Investigations Findings Report is created. Refer to Page 1 of flowchart. This portion is part of the actions listed.</p> <p>The report will:</p> <ul style="list-style-type: none"> o Select report type to create format Investigation Findings o Prefill the selected format with the following information in response to entry of the license number: Facility Name Owner Administrator Address Phone number Email address License Number Capacity by shift (1, 2, 3) o Insert standard language upon request for “Summary of Findings” (self-maintained) o Insert a table with the data from the spreadsheet (This can be a field where the data from the spreadsheet created outside the system is pasted in). <p>Also, a field for entry for the below fields that will create a table in the report. This is currently a Word table within the Word document.)</p> <ul style="list-style-type: none"> Month(s) (with one line for each month) Number of Entries per month Number of Unsupported Attendance Days per month Total Unsupported Attendance Days for period assessed Unsupported days error rate Insert the consultant’s name and title from a drop down (also self-maintained) Included a heading: Service Months Evaluated and insert the service months assessed from a drop down this is multiselect from a calendar and must allow for unlimited selections.

Category/Area of Focus	ID	Requirements
	SPC_5	<p>Describe how the solution enables the following:</p> <p>Following the Random Evaluations with error rate greater than 10% for attendance or for violations of other parts of requirements for participation or Investigations Findings, a letter is created (this includes the Investigations Findings on a separate page). The Letters will:</p> <ul style="list-style-type: none"> o Create a letter from a template in response to selection of letter type <ul style="list-style-type: none"> No error Error 1st Non-Comp 2nd Non-Comp 3rd Non-Comp Ineligibility o Store all template information needed for letter types (must be self-maintained) o Include the following information in response to a license number entry <ul style="list-style-type: none"> Facility Name Owner Administrator Address License Number o Insert phone number and email address of consultant upon selection of the consultant's name (dropdown) o Insert names for cc line from license number <ul style="list-style-type: none"> Tables Regulatory Services Managers (from Regulatory system) Other names by a list (include Andrea Lewis, etc. Could be a field to add names) Subsidy Staff (from a table self-maintained. Select from list. Have titles there but can delete lines) <ul style="list-style-type: none"> Managers Lead Worker Technical Assistance Consultants Data Manager Others Interface with Regulatory Data Base Consultant Supervisor Regional Manager o Add pages for <ul style="list-style-type: none"> Appeal Rights Applicable Authority

Category/Area of Focus	ID	Requirements
	SPC_6	Describe how the solution enables the following: All documents must generate a pdf for use in the “send for signature” functionality within the Adobe application
	SPC_7	Describe how the solution enables the following: Other functions: Document repository attached to license number by date of occurrence <ul style="list-style-type: none"> o Attendance Evaluation o Letters o Reports These would be the pdf documents and must be available on demand by license number. On Demand query results for parameters currently filtered from existing excel logs <ul style="list-style-type: none"> o Standard o Ad Hoc This includes at least consultant, license number, type of action and we need to think of other parameters we need.

ATTACHMENT O: BUSINESS AND TECHNICAL SPECIFICATIONS

Solution Functional Area(s)	ID	Specification
Workflow Management Data Management Usability	TSpec_1	Explain the solution's capability to enable stakeholders to manage and tailor workflows (create, edit, delete). Describe the degree of workflow complexity the solution will enable the state to manage. Describe its ability to evaluate data values internal and external to it in directing its workflows.
Workflow Management Data Management Document/Forms Management	TSpec_2	Explain the solution's ability to use metadata in exercising its functionality, including creating, reading, updating, and deleting it. Explain its capability of doing so for digital data internal and external to it. Explain its ability to assess metadata in informing conditions required for exercising specific workflows.
Workflow Management Data Management Document/Forms Management	TSpec_3	Describe the solution's support for electronic signatures, including its ability to assess them in informing the execution of workflows defined in the solution.
Workflow Management Data Management	TSpec_4	Describe the solution's capability for assessing internal and external data values as conditions for executing specified workflows.
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_5	Describe the solution's use of scheduling capability in exercising and enforcing specified workflows involving internal and external stakeholders.
Workflow Management Document/Forms Management Interface, Network, Security	TSpec_6	Describe the solution's ability to manually and automatically route documents and packets of documents through specified workflows.
Workflow Management	TSpec_7	Describe the solution's ability to enforce the sequence of steps in workflows.
Workflow Management Communication (alerts, reminders, emails, text)	TSpec_8	Describe the solution's ability to visually illustrate real-time progress through defined workflows.
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_9	Describe the solution's automatic alerting, notification, reminder, reply, emailing, and messaging capabilities, triggered by events and conditions defined by the business, as part of supporting enforcement of specified workflows. Describe the solution's ability to exercise those capabilities in ways tailored for specific workflows involving various internal and external stakeholder groups.

Solution Functional Area(s)	ID	Specification
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_10	Describe the solution's capability for manual alerting, notification, reminder, emailing, and messaging in supporting enforcement of specified workflows. Describe the solution's ability to exercise those capabilities in ways tailored for specific workflows involving internal and external stakeholder groups.
Workflow Management Data Management Document/Forms Management	TSpec_11	Describe the solution's capability to assess the status of documents and field values as conditions informing workflow paths of execution.
Workflow Management Documents/Forms Management	TSpec_12	Describe the solution's capability for manual and automatic generation of electronic forms as inputs to and as outputs of specified workflows.
Workflow Management Documents/Forms Management	TSpec_13	Describe the solution's capability to require specified fields be populated within its various workflows.
Data Management Interface, Network, Security	TSpec_14	Describe the solution's capability to manage lists or support interface with an auxiliary application to that end.
Workflow Management Data Management Interface, Network, Security	TSpec_15	Describe the solution's capability to automatically perform calculations per formulas provided by the business. The source of data used to perform the calculations may be internal and/or external to the solution. Describe the solution's ability to assess calculation results as conditions informing execution of specified workflows. Describe the solution's ability to report on the calculations.
Interface, Network, Security Workflow Management Documents/Forms Management Report Management Administration	TSpec_16	Describe the solution's capability for managing user access (add, remove, suspend, archive, permissions, roles, etc.) including hierarchical implementation capabilities and organizational associations, and the levels to which the solution supports their application in workflows, forms, fields, and reports.
User Management Workflow Management Data Management	TSpec_17	Describe the solution's ability to support simultaneous use of it by multiple stakeholders. Describe how it manages simultaneous access to the same data while ensuring data integrity .
Interface, Network, Security Data Management	TSpec_18	Describe the solution's model(s) for interfacing with auxiliary systems and solutions. Discuss all types that are feasible with the solution and the levels of effort to implement them. Describe the solution's capability to enable stakeholders to exercise functionality within the auxiliary systems/solution with and without leaving the environment of your solution. Describe associated data exchange capabilities.

Solution Functional Area(s)	ID	Specification
Interface, Network, Security	TSpec_19	The solution will need to interface with multiple systems, some of which require authentication for access. Describe the solution's authentication model and explain how the solution minimizes the number of times stakeholders are required to enter user credentials to access each interfaced system/solution, including when the authentication models between solutions/systems differ.
Interface, Network, Security	TSpec_20	Explain the solution's capability to incorporate the state's authentication model for accessing it.
Interface, Network, Security Workflow Management Data Management	TSpec_21	Explain the solution's capability to assess data passed during authentication to inform workflows availed to the stakeholders.
Interface, Network, Security	TSpec_22	Describe the solution's authorization capability.
Data Management Interface, Network, Security	TSpec_23	Explain the solutions capability to interface with and manage data in the government cloud or on government premises.
Usability Security	TSpec_24	Describe the capabilities the solution offers to enable stakeholders to enter data via standard data types (ex: checkbox, radio button, textbox, etc.) and its ability to mask data on entry.
Error Checking Data Management	TSpec_25	Describe how the solution minimizes the opportunity for user errors during data entry and before data submission.
Interface, Network, Security Workflow Management Data Management Document Management	TSpec_26	Describe the solution's ability to support manual and automated management (create, update, view, delete) of electronic records and documents that comprise them. Explain its ability to manage data internal to it and external to it.
Interface, Network, Security Document Management	TSpec_27	Describe the solution's ability to upload/download and/or distribute documents and/or data from forms to internal and external stakeholders.
Communication (alerts, reminders, emails, text) Interface, Network, Security Usability	TSpec_28	Describe the solution's automatic, real-time update capability.
Document Management Report Management	TSpec_29	Describe the solution's capability for generating standard and ad-hoc documents, including reports.
Report Management	TSpec_30	Describe the solution's reporting capability, including its ability to generate standard and customized reports in output formats specified by stakeholders.
Report Management	TSpec_31	Describe the solution's capability for manual and/or scheduled individual and/or batch reporting.

Solution Functional Area(s)	ID	Specification
Report Management	TSpec_32	Describe the solution's capability to enable stakeholders to edit specified reports and documents it generates.
Report Management	TSpec_33	Describe the solution's capability to prevent stakeholders from editing specified reports and documents it generates.
Report Management Data Management File Management Document Management	TSpec_34	Describe the document and report formats the solution enables stakeholders to produce.
Data Management File Management Interface, Network, Security	TSpec_35	Describe the solution's ability to save data to stores internal and external to it.
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_36	Explain the solution's ability to, manually and automatically, create data records and documents and export them to specified data stores.
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_37	Explain the solution's ability to, manually and automatically, import data records and documents from external stores and consume them in exercising workflows managed within the solution.
Interface, Network, Security Data Management	TSpec_38	Explain how the solution secures data in transit and at rest.
Interface, Network, Security Data Management	TSpec_39	Describe the solution's capability for remaining useable when offline.
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_40	Describe the solution's ability to manage data while it is offline and automatically synchronize that data with all required internal and external data stores when it comes online.

Solution Functional Area(s)	ID	Specification
Search and Filter	TSpec_41	Describe the solution's capability for searching data internal and external to it. Include capabilities for constraining the search and filtering search results.
User Editability	TSpec_42	Describe how it enables the business to directly manage text as it needs to (ex: letterhead, signature line, legislative narrative, message text, notification text, alert text, email text, help text, etc.)
Forms Management	TSpec_43	Describe how the solution enables management (generation and customization) of form templates.
Data Management File Management Document Management	TSpec_44	Describe the solution's ability to enable stakeholders to view common file types (ex: pdf, doc, jpg, png, mp4, etc.)
User Management Workflow Management Data Management Interface, Network, Security Document Management Usability User Editability	TSpec_45	Describe the solution's capability to present information from internal and external sources to stakeholders tailored to their individual needs by role. Explain ways it enables stakeholders to tailor the way the information is presented.
Usability Workflow Management Data Management	TSpec_46	Describe the solution's capability for enabling stakeholders to define new fields needed to support business process.
Workflow Management Administration	TSpec_47	Describe the solution's ability to automatically enable, disable, and/or populate fields based on conditions defined by the business.
Workflow Management Data Management File Management Document Management	TSpec_48	Describe the solutions capability to enable stakeholders to save work at a point in time and resume that work from that point as needed.
Interface, Network, Security Data Management File Management Document Management	TSpec_49	Describe how the solution minimizes the need for stakeholders to leave the solution to access data/functionality in systems/solutions to which it interfaces.

Solution Functional Area(s)	ID	Specification
Interface, Network, Security Audit Log Report Management	TSpec_50	Describe the solution's audit logging capability. Describe opportunities for enabling the business to define information to be captured in the log and for creating customized logs. Explain how it enables stakeholders to view, query, filter, and report on its content.
Help	TSpec_51	Describe the solution's help capability.
Training Testing	TSpec_52	Describe provisions for testing changes to the solution and for training stakeholders.
Print Document Management	TSpec_53	Describe the solution's print capability.
Usability	TSpec_54	Describe how the solution is built to be mobile friendly and browser agnostic.
Payment Processing	TSpec_55	Describe the solution's payment processing capabilities and/or support for them.
Geo-mapping Usability	TSpec_56	Describe the solution's geo-mapping capability.
Accessibility Usability	TSpec_57	Describe the solution's capability to enable stakeholders to customize the user interface and corresponding correspondence and artifacts such that they conform to a selected language preference, including translation capability to and from selected language preference. Include in description support for special characters associated with language preference.
Usability Security	TSpec_58	Describe the solution's capability for redacting or supporting redaction of documents it generates and/or manages.
Self-Service Workflow Management	TSpec_59	Describe the solution's self-service capability (self-registration and/or enrollment functionality, profile maintenance, etc.). Include description of queueing capability in support of registration/enrollment process management (ex: FIFO). Include automatic registration/enrollment capability and handling of exception cases (ex: partial or incomplete registration/enrollment, purging dangling registration records, etc.)
Administration Security File Management	TSpec_60	Describe the solution's registration and/or enrollment record management capability (create, read, update, delete, suspend, merge, unmerge, confirmation, etc.)
Document Management Report Management File Management	TSpec_61	Describe the solution's capability for enabling stakeholders to manage libraries of standardized text and use it in managing (create, update) documents and reports it generates.

Solution Functional Area(s)	ID	Specification
Document Management File Management	TSpec_62	Describe the solution's ability to convert an image of text into a machine-readable text format or support for that functionality via interface with an auxiliary solution that does.
Security	TSpec_63	Describe your process detecting and minimizing security vulnerabilities resulting from solution development. Describe your process for resolving security vulnerabilities discovered after deployment to production.
Accounting and Budgeting	TSpec_64	Describe the solution's capability for supporting business processes requiring accounting and budget management.
Branding	TSpec_65	Describe the solution's ability to support stakeholder branding requirements.
Analytics	TSpec_66	Describe the solution's data analytics capabilities.
Classroom Management	TSpec_67	Describe the solution's classroom management capabilities, including functionality enabling the use of classroom relevant abstractions that support operations and future state preparation activities.
Survey Management	TSpec_68	Describe the solution's survey management capabilities.

ATTACHMENT P: LIST OF REPORTS

1. Security Report
2. Standard Reports
 - a. Alphabetical Listing Report
 - b. Statistical Analysis Report
 - c. Consultant Activity Report
3. Personal Reports
 - a. Administrative Actions
 - b. Administrative Actions Appeals
 - c. Compliance History Assessment
 - d. Compliance History Assessment Batch List
 - e. Complaint Tracking
 - f. Complaint Tracking 2
 - g. Delinquent Annual Compliance Visits
 - h. Facility Profile
 - i. Facilities Due for Annual Compliance
 - j. Status Activity
 - k. Violation Tracking
 - l. Visit Activity
4. Incident Report
5. Inactive Status Report
6. Illegal Summary by County
7. Illegal Summary by Cnty/Consult
8. Illegal Detail by Facility
9. Permit Type Report
10. Standard Violation Text – Center
11. Standard Violation Text – FCCH
12. Sex Offender Match Report
13. Compliance Batch Report
14. Bonus Report
15. Production Counts Report

Attachments Q – MMM: Workflow Diagrams

Instructions for Access to Attachments

Please contact the Contract Specialist listed on page one (1) of this RFQ for access to workflow diagrams associated with the processes within Business and Technical Requirements and Business and Technical Specifications. Workflow diagrams are available in an **electronic .pdf format**, but you must request electronic access by providing your Company name, name and e-mail address to the Contract Specialist.

Click on the link below to access Attachment Q through Attachment MMM. The list of associated follows.

WORKFLOW DIAGRAMS

Attachment Q: Regulatory Context Diagram (As-Is)

Attachment R: Regulatory workflow - Complaint Intake

Attachment S: Regulatory workflow - Complaint Visit Process (Centers and Family Child Care Homes)

Attachment T: Regulatory workflow - Issuance and Processing of Compliance Letters (FCCH and Centers)

Attachment U: Regulatory workflow - Drop-In providers

Attachment V: Regulatory workflow - Pre-Licensing Consultation Process for Child Care Centers

Attachment W: Regulatory workflow - Routine Unannounced Compliance Visit Process (Centers and Family Child Care Homes) – Licensing

Attachment X: Regulatory workflow - Unannounced Follow-Up Visit Process - Investigations (Centers and Family Child Care Homes)

Attachment Y: Regulatory workflow - Facility Changes

Attachment Z: Regulatory workflow - Incident Reports

Attachment AA: Regulatory workflow - out-of-state providers

Attachment BB: Regulatory workflow - Permit Changes

Attachment CC: Regulatory workflow - Pre-Licensing Workshop Registration Process for Child Care Center Operators

Attachment DD: Regulatory workflow - Summer Day Camp Close

Attachment EE: Regulatory workflow - Summer Day Camp open

Attachment FF: Regulatory context Diagram (to-be)

Attachment GG: Regulatory workflow - Administrative Action Follow-Up Visit Process (Centers and Family Child Care Homes)

Attachment HH: Regulatory workflow - Annual Compliance Visit Process for Child Care Centers – Licensing

Attachment II: Regulatory workflow - Annual Compliance Visit Process for Family Child Care Homes – Licensing

Attachment JJ: Regulatory workflow - Attempted Visit – FCCH and Center

Attachment KK: Regulatory workflow - Complaint Follow-Up Visit Process - Investigations (Centers and Family Child Care Homes)

Attachment LL: Regulatory workflow - Complaint Follow-up Visit Process (Centers and Family Child Care Homes) – Licensing

Attachment MM: DCDEE Workforce Registry context diagram

Attachment NN: WORKS Registration Workflow

Attachment OO: WORKS Evaluation workflow

Attachment PP: Subsidy Provider Compliance – Referrals process workflow

Attachment QQ: Subsidy Provider Compliance – Evaluation process Workflow

Attachment RR: Subsidy Provider Compliance – Exit process workflow

Attachment SS: Subsidy Provider Compliance – Random process workflow

Attachment TT: NC Pre-k To Be Context Diagram

Attachment UU: NC Pre-k APP High level process flow

Attachment VV: NC Pre-k kids High level process flow

Attachment WW: NC Pre-k plan High level process flow

Attachment XX: Add new classroom and cr generation

Attachment YY: Add children (add child screen)

Attachment ZZ: Customization of child application

Attachment AAA: Edit/update priorities

Attachment BBB: Create all forms hyperlink (create all forms screen)

Attachment CCC: Delete multiple forms hyperlink

Attachment DDD: Make forms in process hyperlink

Attachment EEE: Make forms ready to submit hyperlink (make all forms ready to submit screen)

Attachment FFF: Monthly submission tracking report

Attachment GGG: CR approvals by state staff

Attachment HHH: Place existing teacher (automatic assignment)

Attachment III: Place new teacher (automatic assignment)

Attachment JJJ: Proposed budget

Attachment KKK: Rates and children

Attachment LLL: Reimbursement rates button

Attachment MMM: Site change request screen