

STATE OF NORTH CAROLINA	REQUEST FOR PROPOSAL NO. 30-23189
Department of Health and Human	Offers will be publicly opened:
Services	Issue Date: June 27, 2023
Refer <u>ALL</u> inquiries regarding this	Commodity Number: 811118
<i>RFP to:</i> Maureen Salman	<b>Description:</b> DCDEE - Workforce Registry and NC Pre-K and Regulatory System Replacement
Contract Specialist Office of Procurements, Contracts and Grants maureen.salman@dhhs.nc.gov	<b>Purchasing Agency:</b> 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: Andrew J Wong Inc.			
STREET ADDRESS: 456 Montgomery St. Suite 1350		P.O. BOX:	zip: 94104
CITY, STATE & ZIP: San Francis	co, CA 94104	TELEPHONE NUMBER: 415.541.9020	TOLL FREE TEL. NO
PRINT NAME & TITLE OF PERSON SIGNING: Andrew Wong		FAX NUMBER:	
AUTHORIZED SIGNATURE: DATE: 08/14/2023		E-MAIL: ajw@ajwi.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

certification, by

Purchasing Agency Name

, as indicated on attached

(Authorized representative of



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#### c. Description of Vendor Submitting Offer Form (Attachment D)

Offeror's full name	Andrew J Wong Inc.
Offeror's address	456 Montgomery St., Ste1350 San Francisco, CA 94104
Offeror's telephone number	415.541.9020
Ownership	Public
	Partnership
	Subsidiary
	Other (specify)
	Privately owned C-Corp
Date established	April 2006
If incorporated, State of incorporation.	California
North Carolina Secretary of State Registration Number, if currently registered	
Number of full-time employees on January 1 <sup>®</sup> for the last three years or for the duration that the Vendor has been in business, whichever is less.	11
Offeror's Contact for Clarification of offer: Contact's name Title Email address and Telephone Number	Andrew Wong President ajw@ajwi.com/415.541.9020
Offeror's Contact for Negotiation of offer: Contact's name Title Email address and Telephone Number	Andrew Wong President ajw@ajwi.com/415.541.9020
If Contract is Awarded, Offeror's Contact for Contractual Issues: Contact's name Title Email address and Telephone Number	Andrew Wong President ajw@ajwi.com/415.541.9020
If Contract is Awarded, Offeror's Contact for Technical Issues: Contact's name Title Email address and Telephone Number	Jeannine Schumm Senior Supervisor jes@ajwi.com/415.541.9008



#### d. Vendor Response to Specifications and Requirements

AJWI's solution in response to the RFP is a SaaS product that draws from two existing configurations of our software platform DCAR<sup>™</sup>. The first product is our early childhood development system that includes family and individual child tracking. This includes intake, assessment, outcome, and closing tracking for services provided to the child and family. This system is in use by the state of California (My Child Care Plan) and the state of New York (Empire State Child Care Match). We also have plug-in systems that allow for expanding the breadth of coverage of services and subsidies.

	Find shild sare you can trust	×
	Find child care you can trust. Answer a few questions and create a plan that can grow as your child grows. Get Started	
Topics	All Resources	Local R&R
Choosing Child Care		Connect with local child care specialists
Families' Rights	Q Search for Resources	MAA66 B B
Family & Community Engagement		CHILDRER'S SERVICES OF ON
inancial Assistance	Featured Resources	Wu Yee Westington St Children's Services Chinatown - Rose
Licensing & Safety	Choosing Child Care	San Francisco   (844) 644-4300
Parenting & Child Development	Quality child care that offers safe and positive experiences can help support your	Child Care Service Willie Work Work Work Work Work Work Work Work
<mark>∛ mychildcare</mark> ♥ Log In	plan My	Child Care Plan Database: DEMO
	plan My	Child Care Plan Database: DEMO
	plan My	Child Care Plan Database: DEMO
Log In     Please Log In     User Name:		Child Care Plan Database: DEMO
Log In     Please Log In     User Name:     partneradmin@mychildcarep		Child Care Plan Database: DEMO
Log In     Please Log In     User Name:		Child Care Plan Database: DEMO
Log In     Please Log In     User Name:     partneradmin@mychildcarep     Password:		Child Care Plan Database: DEMO
Log In      Please Log In      User Name:     partneradmin@mychildcarep     Password:		Child Care Plan Database: DEMO
Log In      Please Log In      User Name:     partneradmin@mychildcarep     Password:	olan. org	Child Care Plan Database: DEMO
Log In      Please Log In      User Name:     partneradmin@mychildcarep     Password:	olan. org	Child Care Plan Database: DEMO
Log In      Please Log In      User Name:     partneradmin@mychildcarep     Password:	olan. org	Child Care Plan Database: DEMO



The second product, also based on the DCAR<sup>™</sup> platform, is our economic and workforce solution that can support a workforce registry and more.

Both systems are built on industry standard Microsoft products and AJWI also has expertise in building integrated data systems. This means integrating these systems with partner organizations to create data lakes of useful and actionable data to drive policy and service decision making.

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Home :: Client Home							
<ul> <li>Home</li> <li>Quick Client Processing</li> </ul>	Agency: All One Sto	ps 🔻 Program: BAG		Search	Client		
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<ul> <li>Log Client Activity</li> <li>Class Management</li> </ul>	🖾 Hide Clie	nt Details					
▼ <u>Client Home</u>							
<ul> <li>Contact Info</li> <li>Demographics</li> </ul>	Client Name: Last, CT	1					
Class Enrollment	Card ID: 11111						
<ul> <li>Enrolled Programs</li> <li>Application Wizard</li> </ul>	View/Print Client In	formation					
<ul> <li>Search Applications</li> <li>All Processes</li> </ul>							
<ul> <li>Advanced Client Features</li> </ul>							
<ul> <li>Case Management</li> <li>Case Notes</li> </ul>		Client ID	Intake Date	Card ID	Last Name	First Name	Middle Name
Service Plan	Select 3	09/24	/2008	11111	Last	СТ1	
<ul> <li>Client Referrals</li> <li>Agency Referrals</li> </ul>							
Incoming Referrals	Intake Date (	9/24/2008					
<ul> <li>Outgoing Referrals</li> <li>Steps To Success</li> </ul>	Card ID	1111					
One Stop Initial Assessment							
Compliance Tools     Class Management	First Name	DT1					
Reports	Middle Name						
<ul> <li>Program Administration</li> <li>Assign Users to Programs</li> </ul>	Last Name	.ast					
<ul> <li>Site Admin</li> </ul>							
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	elect 11/26/2012						10:00 AM
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	elect 10/15/2012						2:00 PM
	elect 09/24/2012						10:00 AM
	elect 09/10/2012						10:00 AM
	elect 08/20/2012						10:00 AM
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Because we have already built both products and existing expertise in both program areas (preK and workforce development) we believe we can be faster and more efficient in getting you to production. That is why we are very confident we can launch a system before your September 2024 timeline.

Some highlights related to your requirements and key needs include:

- Decades of experience in both early childhood development and workforce development aligns perfectly with your program needs.
- We are primarily a Microsoft shop that uses Microsoft Membership Services for user registration. This service is compatible with the SAML standard and can be integrated well with NCID for user authentication and management.
- DCAR<sup>™</sup> has a configurable workflow module that can be set for all your needs in both the requirements below and the workflow descriptions in attachments Q-MMM. This workflow capability is in use in our products to support time sensitive (8 hour, 16 hour, and 24 hour protocols, or on whatever schedule is required) work flow requirements that must meet a defined set of business rules and roles. With our built-in texting, email, and in-system communications capability we can ensure your workflows and business logic are built into the system logic. The workflow module is integrated with our rapid development forms module which allows for quick creation of forms and assessments that can be integrated with a specific workflow. This module will be available to the NC system admins.
- AJW Inc also has decades of experience in system integration. Pushing and pulling data based on AP interfaces, batch updates, or database to database functions. We have excellent extraction/transformation/load (ETL) services expertise. We have provided secure system integration based on state and federal privacy laws including FERPA and HIPAA. As an example, we are updating childcare vendor information twice a week for all licensed vendors in the state of California and then pushing this data to the State's Health and Human Services department to keep their data as close to real time as possible.
- Data reporting and analysis tools are built in that allow various ways to support program staff, management staff, and analysts with the highest level of security maintained based on group and role-based security protocols.
- Though we have not integrated it yet, there are Microsoft compatible OCR tools that can easily be added to our systems.
- For offline staff we can set up .pdf or Word documents that can be filled in and used to update data through a set of agreed upon protocols for where to place the files for automated upload and a set of indexing rules that staff will need to follow.
- We have decades of experience in meeting HIPAA guidelines and were recently vetted by a client health department. These HIPAA attestations can be shared with you upon request. We have also been in conversations with DOE on the use and applicability of FERPA guidelines. We have negotiated 7 different multi-agency data sharing agreements in New York and California. And we have been a consultant to the National League of Cities on how to best implement a data sharing model for local/state government.

Below is a response to the requirements identifying three categories of development for each requirement.

- 1. ABIS Already built into our system
- 2. ConFun Function exists in our system but must be configured
- 3. ToBeBuilt A Function or work flow component that must be built



# ATTACHMENT K: REGULATORY MODERNIZATION BUSINESS SPECIFICATIONS

Category	ID	AJWI response to Specification
Authentication	Auth_1	ConFun: We use Microsoft Services for managing user registration and authentication. This adheres to the SAML standard and can be integrated with the NCID services.
	LIC_1	ConFun: We already support a statewide information website for childcare providers in CA. We can configure a similar one for NC with all necessary information cited. Our systems can either configure our own event registration and payment options which we have done so before. Or we can integrate with whatever systems your are currently using.
License	LIC_2	<ul> <li>ConFun: To support all license workflow requirements we will configure our existing workflow engine to support your business rules as well as set a queuing process. We will address this requirement by:</li> <li>a. Using our existing workflow engine to match your business processes. We also have functions that allow for you to edit the workflow to address change legislation.</li> <li>b. We use email, texting, and in-system alerts to help follow the steps of the process and handoff the appropriate staff.</li> <li>c. Data validation can take the form of format validation (date, number, email, ph, etc), value limit lists, value specific lists, radio or checkbox formatting, calculation formatting, and more.</li> <li>d. By using a set of standard forms offline, consultants can record documentation and visit data to be uploaded and integrated once they return to their office. A very simple sync process can be configured for this that we have used previously.</li> <li>e. Depending on how you want to configure visit monitoring, we have existing capability to use scanner tech to register visit information easily and securely. In addition, we have over 15 years of experience in system integration with local and statewide systems for retrieving and pushing data. We can use AP interfaces, batch uploads, and database to database functions.</li> <li>g. As mentioned above we can set up automated systems to sync offline data. We currently use Automize (a 3<sup>rd</sup> party plugin) to sync a variety of out of system (including offline) data elements.</li> <li>h. Existing ability to upload jpeg, gif, .pdf, .docx, .xlsx, .txt files.</li> </ul>



Category	ID	AJWI response to Specification
		i. As mentioned we can produce text, email, or in- system alerts triggered by any step in the workflow and directed to a specific staff person based on the step in the workflow.
	LIC_3	<ul> <li>ConFun:</li> <li>a. We have existing capability to absorb data in uploaded document file or uploaded data file. Such data can either be read from the document (preferably .pdf) for data extraction and upload functions. Data files can be automated to upload as needed. However, if you rather keep documents available intact then meta data can be captured to allow users to see the actual document.</li> <li>b. Upload or data absorption can trigger alerts to specific staff.</li> </ul>
Compliance	COM_1	<ul> <li>ConFun: We already have a periodic update alert and tracking system that is set for twice weekly updates. This can be set for annual or quarterly updates. We even have a mobile interface being used by childcare providers. This configuration can include:</li> <li>a. Workflow and notices can be configured using our workflow engine and can be edited based on change legislation. Some changes can be done by your staff or be part of a maintenance contract. Our clients tend to choice the maintenance contract. Our clients tend to choice the maintenance contracting for this so that staff doesn't have to remember all the change protocols.</li> <li>b. Alerts can be configured to be triggered by any number of events. Data input, date, span of time, staff actions in-system, etc</li> <li>c. We have a myriad of data validation tools including tools that are based on algorithm or calculation criteria.</li> <li>d. We suggest using a set of either .pdf forms or .docx forms to work offline that can be synced into the system once a consultant returns to a location with online capacity.</li> <li>e. As mentioned above we can absorb data through integration in a variety of ways.</li> <li>g. Syncing functions already exist in our systems</li> <li>h. DCDEE can be alerted by our existing functions triggered by any facility operator activity.</li> </ul>



Category	ID	AJWI response to Specification
	COM_2	ConFun: Our existing systems can support any programmable function to calculate or algorithmically set recorded values. Depending on how complicated the calculation or algorithm, it can be set for staff to change constant values to support change legislation. If it is a change to the underlying logic then we will need to do that via our maintenance work.
	COM_3	ConFun: Our suggestion for all three evaluations is to make sure we group and define all assessments under each category. Then we will set the algorithm for evaluating each area (Program Standards, Staff Education, and quality points) in order to produce the star ratings for each facility.
	COM_4	ConFun: The workflow for processing grievances can be set with our workflow engine and all steps leading to citation or clearance can be set with alerts set to make sure that protocols are followed within the timeframe necessary.
	COMP_INC_1	ConFun: Our systems have a workflow engine that can be configured to any process. This can included staff alerts and handoffs, as well as step requirements that need to be me to accurately process the step. This can be integrated with a scheduling system to help manage visit requirements.
	COMP_INC_2	Confun: Depending on both privacy and management requirements we can make public facing interfaces available for logging a complaint. Depending on your privacy rules we can either set it for anonymous or identifiable logging.
Complaints and Incidents	COMP_INC_3	ConFun: Severity tags can be used to trigger escalation or clearance steps to help track and manage complaints correctly.
	COMP_INC_4	ConFun: Standardized responses will be set up and can be produced and sent to a facility. But our functions allow staff to edit and customize the response based on a set of standardized language. These can also be produced in multiple languages as needed.
	COMP_INC_5	ConFun: The standardized responses above can be set to sync with assessed penalties. These can be either processed through a payment vendor we integrate or we can integrate with you existing payment system. Alerts and reminders can also be set based on a preset schedule.



Category	ID	AJWI response to Specification
Provider Portal	PRO_PORT_1	ConFun: Profile creation and management can be set based on your schedule and guidelines. Creation can either be started by the provider or it can be set based on NC staff invitation. We have existing interfaces for managing hours, days, services, technical assistance, programs, etc. We even have a mobile interface to keep key data elements up to date on a closer to realtime basis. Providers are alerted to update availability and capacity data twice weekly and can update their data on a mobile device including smartphones. All interfaces use encrypted data and secure authorization.
	PRO_PORT_2	ConFun: We currently support document uploads of jpeg, gif, .pdf, .docx, .xlsx, .txt files but can expand the list depending on needs such as .mpeg files. Meta data can be set for each upload for administrative purposes.
	PRO_PORT_7	ABIS: Email, texting, and in-system communications are supported in our systems. Communications can be managed by individual or group send protocols.
	INT_1	ABIS: We currently send data to the CA Dept. of Health and Human Services on a biweekly basis so they can update their data lake. We also push data to the CA EDD on a weekly basis. We can push data via API, data file upload, or database to database secure functions. We also maintain a log on success and failure of record uploads to ensure accurate data is being pushed.
Integrations	INT_2	ConFun: You will see from our system diagrams that all these tables will be in on database. It will be critical to set up the correct indexing based on your data model to ensure sharing of data across facilities, individuals, and coding such as QRIS ratings.
	INT_3	ConFun: In CA we support the statewide search interface which we can demonstrate for you. We can either do backend integration with your existing Search Site from the Main DCDEE website or replace it with something we have found to be user friendly.
	INT_4	ConFun: As mentioned we have deep experience in pushing data to a state entity. We just need to know the requirements and can set this up. We currently push data to Health and Human Services and the Employment Development Department in CA.



Category	ID	AJWI response to Specification
	INT_5	ConFun: We also have the capacity to absorb data. We currently support every county in CA even though not every county uses our MCCP early childhood system. Based on agreements with the state of CA we absorb data from all counties in CA. In this same way we can configure integrating data from an outside partner in any standard format they can push the data.
	INT_6	ConFun: Our ETL and push data functions can be configured to both accept and push data as needed. This a set of configurable functions we can set to meet you every integration need.
	INT_7	ConFun: Since we have ETL and push data functions we can provide pass through services to accept and push data from one agency to another. This is a configurable set of functions.
	INT_8	ConFun: This will be another ETL function we can easily configure.
	INT_9	ConFun: This can be done either of two ways. Currently we use set state IDS to make a public call to a state licensing site to bring up a facilities record. So we can either do the same to make a call to the SOS public interface or we can absorb data from the via ETL protocols. However the former solution is simpler and faster.
	INT_10	ConFun: Like many of the above requirements we can use our ETL functions and push functions to share data with NC PreK. One security and privacy note, we will need to see the agreements with all agencies that outlines the data sharing agreement that cover all these requirements.
	INT_11	ConFun: Our ETL functions can set us up to absorb whatever data is required from registration and payment platforms you are using. On payment we can also integrate payment services as well.

## ATTACHMENT L: WORKFORCE REGISTRY BUSINESS SPECIFICATIONS

Category	ID	AJWI response to Specification
Administrative	ADM_1	ConFun: We have an existing Admin function that allows assignment of a system admin who will have access to manage groups, roles, and rules for users. This includes



Category	ID	AJWI response to Specification
		create/activate/deactivate/archive users. Access can be revoked both temporarily or permanently.
	ADM_2	ConFun: System admins can both set record and CRUD access. System admins can also manage groups and rules and rights based on that.
	ADM_3	ConFun: Our existing hierarchy is state agency management, initiative management, individual provider, and individual client. We have user groups and roles defined at each level. Partnership agencies are in a different category mainly maintained to push and pull data, indexed accordingly.
	ADM_4	ABIS: As is evident from your requirements we do not delete users but can archive them so that analyses on their roles and actions can be researched later. This is generally an annual function but can be updated to occur more often.
Workforce Registration	REG_1	ConFun: We currently have a public facing tablet or kiosk accessibility into our workforce registration services. This can be configured with identifying categories to control registration interfaces based on the 8 categories outlined here.
	REG_2	ABIS: When a registration is started the system will automatically search all records in the reg category to see if a similar record is in the system. Search algorithms consider misspellings and nicknames to produce a list of possible duplicates. This is most useful when staff are inputting registration information rather than the public itself for security and privacy reasons.
	REG_3	ABIS: One solution to the security and privacy issues for duplicate records is the functions we have for merging records that are found to be duplicates. This is reactive but can be managed by agency staff to clean up possible public input of duplicate records.
	REG_4	ToBeBuilt: There are a number of OCR solutions we can integrate into Microsoft based systems such as ours. One library and set of functions that would be easy to include is Tesseract. There are variations on this library wo we can look for the bet fit.



Category	ID	AJWI response to Specification
	REG_5	ConFun: All validation functions can be applied whether manual input, integrated data, or uploaded data via OCR or batch updates.
	REG_6	ConFun: All our alerts or prompts can be configured. In the workflow we can also prompt and require specific data input that can be validated in real time based on your requirements.
	REG_7	Valuated in real time based on your requirements.ConFun: Where possible we can either prepopulatefields that recur, we can prompt the correct inputof data, we can limit data input to multiple choices,and many more user-friendly help functions. Wewill work with you to configure the best possibleset of functions to help the user through theirprocess.
	REG_8	ConFun: As part of the workflow, we can set specific registrations to prompt alerts to specific staff for verification and approval. We can also identify fields that may need additional information to help with a staff persons verification process.
	REG_12	ConFun: The ability to sync a set of pre-uploaded documents to a registration will be easily configured. A set of documents that are not linked can be held in a queue with some meta data attached to help identify who they should be assigned to. Once registration is set then the document can manually be connected. If staff can index the preloaded documents this may be able to be automated as well by entering the correct index at registration creation time.
	REG_13	ConFun: Depending on the category of applicant, each one will have their own registration and login. They will be able to update their information once they login to the system via interfaces that can be tailored for them.
	REG_14	ABIS: Facilities or agencies are a specific category in our systems with the ability to associate staff or clients to that facility. We can configure hours and wage forms that can be updated by the staff at a facility and validated by a manager.
	REG_15	ConFun: Registering as a prospective provider or teacher is a matter of categorization. We can set up coding that will follow the individual through initial registration to be recategorized once they get their certifications. This also can be set up to



Category	ID	AJWI response to Specification
		be validated by a state or provider staff person with the appropriate rights and privileges.
Security	SEC_1	ConFun: We are using Microsoft services which allows us to configure roles, groups, and rights. Based on your specific requirements we can set up specific groups to associate with a set of rights. And we can set up the ability to assign rights to specific individuals. This also can be managed by a system administrator.
	SEC_2	ConFun: As mentioned above it will likely be the use of SAML protocol to integrate with NCID.
	SEC_3	We use Microsoft services which has multi-factor authentication capabilities-built in.
Workflow	WF_1	ConFun: Our workflow engine is capable of supporting a variety of workflow processes. Upon review of the documentation in Q-MMM we are confident that we can support any workflow you already have.
		Supporting the ability of a system administrator to create a workflow will be tricky. If you have specialists who have experience in workflow design and implementation, we can train them to build a set of forms that follow a workflow. We have a custom form module that you will have access to. A set of forms can be created under a specific workflow. However, this will require a higher level of training and experience and will only be assigned to someone with the knowledge and experience to do this.
	WF_2	ConFun: our workflows can be configured to be step by step for each of these user types that will exist in your system. The 7 specific workflows that exist for all categories can be automated as a process to be followed for all individuals. Prompts and alerts as well as schedules and validations can be set up to make sure that a specific process is followed for all.
		We will follow your lead on who gets assigned the ability to manage and follow these processes. As for e-signatures we have already integrated this function into our existing systems and will just



Category	ID	AJWI response to Specification
		need to configure the system to send the correct ask at the right time in the process.
	WF_3	ConFun: Our systems have the capability to assign tasks to specific staff and follow a workflow to facilitate moving the process along. We will need to rely on you to define all the roles and rights and configure the workflow to meet your requirements. Specific "cases" can be assigned to specific individuals and then reassigned as needed. Program administrators will need to be identified to assign the right to reassign.
	WF_4	ConFun: We will work with you to define all workflow status categories and configure the system to meet your specific requirements.
	WF_5	ConFun: We have established workflow dashboards to follow the processes of individuals through the steps. We will set up a dashboard so that staff can review where each case is in the process.
	WF_6	ConFun: We currently have a TA module that be configured for identifying what TA services are available and then assigning service providers to meet that TA needs.
	WF_7	ToBeBuilt: A function to automatically assign mandatory training or TA will need to be built out based on your specific requirements. We have the TA functions but to automate a specific TA workflow will need to be built.
	WF_8	ConFun: All status values can be updated/configured to meet NC requirements. As for the TA structure, we do have 1) registration of TA service offerings 2) scheduling TA services and 3) completing TA services.
		Configuring a workflow for mandatory or set TA services and trainings will need to be set based on NC requirements. However, our systems are flexible enough to meet whatever you require.
	WF_9	ConFun: Completion records can be uploaded by trainers and matched with attendance records. There can also be a workflow step set for approval of completion records.



Category	ID	AJWI response to Specification
	WF_10	ConFun: As long as other training platforms can output data in a standard format, we can absorb data from any third-party platform.
	WF_11	ConFun: Yes, training services can grouped by category and workflow. And yes, categories can be changed. As for historical data, we will need to configure some of the recording practices to preserve historical data.
	WF_12	ABIS: As with all our communications protocols we can make text, email, and in-system communications available between two system registered individuals.
	WF_13	ABIS: We have TA/training forms that can be made available for trainers and the like to register their offerings and associate them with a scheduling or sign-up function. This can also be associated with an attendance function and can even be associated with a scanner function to simplify recording of services rendered.
	WF_14	ConFun: Again this is a workflow configuration issue which our engine can manage and is editable later. In addition we have document uploading capacity that will need to configure to meet these requirements but the function is already available.
	WF_15	ConFun: This is a role and rights issue. Once you have identified the role and rights to assign mentors and evaluators, we can configure this process easily.
	WF_16	ConFun: We see these as workflow configurations that can be supported by our document upload and meta data input functions that already exist.
	WF_17	ConFun: We have a reporting engine that can be set for both canned reports to meet this requirement or ad-hoc reporting that can be managed by staff who are assigned report generating responsibilities.
	WF_18	ConFun: We will configure a dashboard to be available to the appropriate staff.
Grants	WF_19	ToBeBuilt: We have a flexible and configurable form system that can be built out to support any workflow. This will not take anymore time than many of the configurations we talk about in this RFP response. We will approach this as an additional workflow requirement.



Category	ID	AJWI response to Specification
Manual Document Generation Workflow	WF_MANU_DOC_1	ConFun: Our system already has the ability to house document templates that can be edited for various uses. This includes templates for emails, letters to clients, form letters, and more. These can then be set up to print in .pdf, .txt, .xlsx, or .docx formats. They can also be attached as a document for emails or in-system to other registered users. Delete and undelete functions can be configured as needed.
Automatic Document Generation Workflow	WF_AUTO_DOC_1	ConFun: As mentioned we have the capability to house templates including letters and certifications based on your formatting requirements. These can then be generated automatically and integrated in whatever workflow you require. We don't have experience in varying fonts so that is something we will need to investigate.
Job Listing		ConFun: We have the capacity to manage logs and will use these functions to manage job listings. We already have ETL capability and can set up absorption of job listings from any standard data source available to you.
Data Management	DAT_1	Security and privacy is a particular expertise of AJWI's. The first requirement will be to see all data sharing agreements between agencies that will be sharing data. This will define how we configure the access and edit rules. Our security models are mainly based on HIPAA and statewide privacy rules. We work to maintain the highest level of security for PII as possible. This includes all adherence to the State's Information Security policies.
	DAT_2	Role-based permissions are managed through Microsoft Services and can be configured to meet all NC requirements for access to all data managed in this solution. Field level differences will need to be handled based on NC direction.
	DAT_3	Our role-based and individual user-based rights can be set based on all NC requirements. These rights can handle data access in a number of ways, including each CRUD activity separately.
	DAT_4	Our systems log all CRUD activity including actions related to all PII. User and time stamps are included in administrative data. Logs for users that have been deactivated will be archived and



Category	ID	AJWI response to Specification
		available for research and analysis on a longitudinal basis.
	DAT_5	All actions are logged by individual users and can be aggregated by group categories.
	DAT_6	By integration with NCID we hope to maintain groups and roles consistent with the State's Security Plan. However, we have our own methods for protecting PII (mostly based on HIPAA guidelines though we have experience with CJIS data and FERPA guidelines) and will configure our security to meet all NC requirements and any guidelines outlined in all data sharing agreements.
	DAT_7	We plan to integrate with NCID and follow their guidelines on single sign on functions. In addition through use of Microsoft Services we can configure user and groups rights to meet all NC requirements.
	DAT_8	System administrators at the highest level (different from agency or provider level admin access) will have access to manage roles of users and edit as needed based on Regulatory and/or EEB guidelines.
	DAT_9	Our system can be configured to provide separate menus and interfaces based on roles. In this way increasing user-friendliness and streamlining workflows for specific users so they only see what they need to follow in terms of workflow.
	DAT_10	We have paid much attention to indexing and normalizing data so that we can track and eliminate duplicate data. This also allows for better pre-population of recurring data and reducing staff time for inputting information. However for reporting purposes we do suggest reformatting data for "flat file" access to speed reporting and analysis functions.
	DAT_11	We will need to understand the details for migrated historical data. For the most part, the new normalized system will have indices and structures that we will need to transform migrated data to fit. Our ETL experience in both data integration projects as well as legacy upgrades



Category	ID	AJWI response to Specification
		makes us confident that we will be able to do this well.
Dynamic Generation of document	ECM_1	Based on templates and formats that NC will need to provide we can generate such documents as .pdf, .docx, .xlsx, and in-system reports. Reports can also be produced as graphics. These operations can be set up to generate automatically. We have experience in generating required documentation automatically based on workflow requirements within time sensitive steps. In particular we work with the non-profit-law enforcement-courts to handle time sensitive protocols for assessment and judge decision making in a 16 hour time frame.
Integration and System Interfaces	INI_1	The NCID tech adheres to the SAML protocol and so does Microsoft Services. We will be using this standard to integrate with NCID.
	INI_3	Utilizing our ETL services we can absorb data for Licensed teachers as well as wage and licensure data from both the Public Instruction Licensure system and Human Resources systems. Sending data will be based on security and PII requirements. Email is not a secure method so either in-system via our document management workflow will need to be implemented.
	INI_4	Utilizing our third-party product, Automize, we can share encrypted documents via automated uploads. The names of adults flagged for maltreatment will need to be handled with privacy standards in place. These documents, preferably in .pdf format, can be read and data can be updated in-system.
	INI_5	By using our alert and communications functions we can maintain a free flow of information between the workforce and regulatory areas. Information can be kept current through automated alerts for facilities to update their data via secure mobile devices. We have done this in CA, and it has demonstrated higher rates of real time updates to capacity and service data.
	INI_6	Assuming Moodle, Voyage Sporis & Teaching Strategies have industry standard formats to export data we can use our ETL services to absorb this information.



Category	ID	AJWI response to Specification
	INF_7	Assuming CCSA can produce their lists and files we can use our ETL services to absorb this information.
	INI_8	We have mechanisms to automate sending data to any agency NC requires. We use a mix of database functions to produce the data, an embedded application to produce .pdfs and other formats, and Automize to send the information to any designated partner with a secure folder where we can drop the data. We can also work with any API to transfer the data based on that protocol.
	INI_9	Probably the most important thing about integrating with an external Health organization is to make sure the data sharing agreement is in place and that HIPAA rules are followed. Our ETL capabilities follow HIPAA and other standard privacy and security guidelines.
	INF_10	Real time integration tends to be more complicated. We will assume that CBC has an API for system-to-system integration which will make it fairly easy to ensure real time background checks.
	INI_11	We have integrated payment systems such as PayPal, Wells Fargo, and other payment solutions. We have also created payment solutions using these platforms. We are ready and able to either integrate or create an in-system solution.
	INI_12	A monthly file update can be automated using our ETL services and Automize.
	INI_13	Accepting transcripts can be automated using using our ETL services and Automize.
	INI_14	We hope that NCRLAP has an API that can be used to integrate required data. If not we will ask if we can build one for this requirement.
	INI_15	Depending on the need, if this can be done as a periodic batch update then our ETL services along with Automize can solve this need. However, if closer to real time is required then an API will need to be utilized or we can build that for this rquirement.
Dashboards	DS_1	We utilize Microsoft BI tools to create dashboards as well as custom built in-system dashboard for workflow.



Category	ID	AJWI response to Specification
SFTP	SFTP_REC_1	As mentioned above our ETL services have a few ways to accept files. This includes SFTP.
Search	SRC_1	All data fields are held in Microsoft SQL Server and therefore can be set up for search. The only caveat is to make sure that any search adheres to all privacy and PII regulations that need to be followed. In addition, we recommend that searches be more specific rather than broad in order to speed up results and burden the system less.
	SRC_4	Facilities is a primary index in our system so searches against any data associated with a Facility is possible.
	SRC_5	Partner search of data can be configured based on groups, roles, and rights as defined by NC. However, there will need to be a clear data sharing agreement in place to govern how this is configured. Who can search and when they can search will need to be clearly defined for our configuration of these functions.
	SRC_6	As mentioned, we are keeping the data in an SQL database. As such education data is searchable based on the coding configured based on NC's workflow requirements.
	SRC_7	Similarly, all training data can be coded, and these codes can be edited and updated as needed by your system admin. All training coded data can then be searched based on NC defined parameters.
Requirement	CMP_1	Yes, all Web content will be consistent with WCAG 2.0
Requirement	CMP_2	Yes, all protocols will meet FERPA guidelines. We have worked with school districts in California and New York. We even have done some advisory work for the US DOE on FERPA.
Requirement	CMP_3	Yes, we will comply with all state security requirements and have attached our VRAR response. We have also reviewed the IT Security Manual, IT Security Policies and Data Classification & Handling policies.
Requirement	CMP_4	AJWI has been vetted for HPAA polices and we can provide HIPAA attestations that should cover all NC Health and Human Services guidelines on security. HIPAA guidelines are the basis for most of our security and privacy model.



Category	ID	AJWI response to Specification
	CMP_5	<ul> <li>Privacy is critical to work as we work with health organizations, law enforcement, schools, and courts. We take privacy very seriously. Some specific methods for protecting privacy: <ul> <li>a. All information is transferred via encrypted methods.</li> <li>b. All rights and roles are assigned and managed according to federal and State guidelines.</li> <li>c. We require that all data sharing protocols are documented and that they are signed by the appropriate authorities. These will guide our sharing protocols.</li> <li>d. Data in our databases are encrypted at rest.</li> <li>e. All backup data is securely maintained.</li> <li>f. We do an annual security and privacy training course for all employees.</li> <li>g. All employees of ours sign privacy agreements and are subject to background checks.</li> <li>h. We have had law enforcement data validations for California and would be happy to do the same for NC.</li> </ul> </li> </ul>
	CMP_6	We archive records on an annual basis but can execute these functions more often depending on NC's need to access longitudinal data. In general we do not delete data or users but deactivate or obsolete these elements. They too are archived and accessible for analysis and research as needed.
Intake	WFR_INT_1	Because we use an SQL database all individuals, partnership agencies, facilities, TA's, state staff etc. are indexed and data is maintained in a normalized form for production use. A reporting database that mirrors the production database will be formatted to speed reporting burdens.
	WFR_INT_2	Because we index our data, all associated data can be edited and maintained in association with these indices.
	WFR_INT_3	Coding in our database is critical. NC system admin will have the ability to edit and create codes which will be associated with all data including trainings referred (as an example). Meta data associated with these coded trainings can then be searched, aggregated, and reported upon.



Category	ID	AJWI response to Specification
	WFR_INT_4	Employment and education data will be formatted into specific forms as defined by NC requirements.
	WFR_INT_5	Prompts and restrictions like stopping processes based on actions are tricky. We have had a lot of staff pushbacks where their culture is not ready to be constricted this way. Having cautioned on this, we can set restrictions however NC would like to.
	WFR_INT_6	As mentioned, data is normalized, and we are keeping all data in an SQL database. Data that is updated in one form can be read or distributed to ensure that it is consistent throughout our systems.
	WFR_INT_7	We can set up field validations, error/omission reports that a supervisor can use to alert staff when updates are needed. And even halt steps in a workflow based on errors/omissions. These can also be tracked either for periodic review or management review for policy making.
Agency services	AS_1	The program workflow will need to be defined but based on user rules and rights custom programs and services will be available for creation by the appropriate user.
	AS_2	Our systems support open text fields that can have grammar punctuation check plugins configured. Along with formatting tools as well.
Case management	Case_Mgt_S_1	Our system has a case management engine that can be configured for any data capture and reporting needs.
	Case_Mgt_S_2	Because we have deep experience with a myriad of workflows we have basic intake, treatment, progress, and closure structures available. Because we have the overall structure in place it will take less time to build the appropriate workflow to meet any of your case management needs.
	Case_Mgt_S_11	We can use a variety of methods to track financial data including automated calculations based on standard set pricing for services, and cost per attendance associated with attendance records. We will work with NC to set these functions and then we can produce any report as well as provide ways for specific users to create ad-hoc reports on this data.
System Administration	SA_1	Our security structure allows for the creation of groups and to assign users to groups. Groups are assigned rights and roles that then govern anyone



Category	ID	AJWI response to Specification
		assigned to that group. NC System Admins will have the management capability.
Reporting and Analytics	RA_1	Our systems have both canned reports and ad-hoc reporting functions. We will config all ongoing reports that can be defined by the NC design team for this project. In addition, designated system admins and research staff will have access to create and save ad-hoc reports.
	RA_2	Our systems are all longitudinal and as a rule our reporting will have a time span parameter so that reporting can be done with any defined time span selected. Canned reports will be programmed with this option and ad-hoc reporting can be set up by NC Sys Admins to do the same.

## ATTACHMENT M: NC PRE-K SPECIFICATIONS

Category	ID	AJWI response to Specification
Administrative	PK_ADM_1	We have an existing Admin function that allows assignment of a system admin who will have access to manage groups, roles, and rules for users. This includes create/activate/deactivate/archive users. Access can be revoked both temporarily or permanently.
	PK_ADM_2	User and group roles are managed by the system admin or our staff under maintenance contracting.
	PK_ADM_3	<ul> <li>We have existing 4 general roles-based categories which then can be broken down into admin, management, and staff roles within these four. The four are:</li> <li>1. State agency at the top of the hierarchy</li> <li>2. Research and aggregate analytics staff</li> <li>3. Local agency staff that may be a grantee of the state that manages numerous providers</li> <li>4. Providers</li> <li>Within each of these categories are individual user roles and groups. Clients of provider and their children are a data "child" of the providers or local agencies.</li> </ul>
	PK_ADM_4	As stated above, the primary State Agency has a set of users that can be configured above the local agency.



Category	ID	AJWI response to Specification
Registration	PK_REG_1	ConFig: We can configure public facing interfaces through identifiable or anonymous recording based on NC requirements. We can configure mobile, desktop, and tablet/kiosk interfaces for public use depending on the best way to create user- friendliness but enforce data integrity.
	PK_REG_2	User and group roles are managed by the system admin or our staff under maintenance contracting. This can be done for any user category.
	PK_REG_3	When creating a record, we have system functions to search for duplication. However, we will need to work with NC to follow all privacy rules in figuring out how to avoid duplication and protect privacy. What we mean is that staff will have a higher capability to stop duplication at the record creation level. However, the public may not and so duplication may have to be managed post creation at the staff level.
	PK_REG_4	Merging duplicate records is a built-in function.
	PK_REG_5	We have a form editing tool that is managed by a System Admin. This can allow for establishing and editing specific stakeholder profiles.
	PK_REG_6	As mentioned, we can establish interfaces that can be controlled by category of user allowing for specific workflows, such as CRUD actions for electronic applications. We also have built in document upload and management capability that can be configure for NC's specific requirements.
	PK_REG_7	Preferably we would be reading .pdf, .docx, or .xlsx text. From printed forms that are set we can use OCR capabilities to read these and insert data from recognizable fields into the right database fields and tables. Indexing will need to be built into any forms that are absorbed this way.
	PK_REG_8	The application process will be treated as a specific workflow that can be tracked and prompted for updates and needy materials.
	PK_REG_9	We use mobile text, email, and in-system alerts to prompt users. We can apply this to any workflow.
	PK_REG_10	As defined by the NC design team, we can configure manual verification of any form by specific designated staff or "group" of staff.
	PK_REG_11	For real time data entry, we have a set of methods to validate data, make sure they meet standard



Category	ID	AJWI response to Specification
		formats, and prompt users with methods to maintain valid input. For build updates, we can set standard review algorithms that can prompt staff when there is data missing, incorrectly entered, or needs some update. These alerts then can be a part of a report or used to prompt staff to follow up.
	PK_REG_12	All workflows, unless designated by the NC design team, have the capability of saving at all steps within a process.
Child Application	CHL_APP_1	ConFig: We can configure the system to absorb an application from external sources automatically. Our workflow interfaces can support manual input and can be set for whatever user input to create and complete an application.
	CHL_APP_2	Accepting a completed application can be triggered by an automated algorithm or a manual review by a staff person. We will configure this accordingly which will trigger the sending of confirmations of completion to the appropriate users.
	CHL_APP_3	Merging duplicate records is a built-in function.
	CHL_APP_4	We currently have the capability to upload jpeg, gif, .pdf, .docx, .xlsx, .txt files. We can configure accepting video files as well. Meta data can be captured at the upload time to help assign and manage these documents.
	CHL_APP_5	ToBeBuilt: We have a number of options to build out OCR functionality and a few specific options recommended for a Microsoft environment.
	CHL_APP_6	All our systems are configurable in an ongoing way. This is not a "build to spec" product. Specific System Admins will have the ability to edit and keep up to date various workflows as needed. Rules, policy, and legislative changes are all a part of our expectation, and the system is designed to absorb these easily.
	CHL_APP_7	Any field in our forms can be based on a calculation or algorithm. These will be configured based on NC design team direction.
	CHL_APP_8	Our systems are designed to be able to configure, add to, and update any workflow. Again, this is not a "build to spec" system. It has capabilities to create, edit, and obsolete workflows. Our alert functions can be set up to perform handoffs in the workflow process. Halting steps based on action triggers will need to be "fleshed out" with NC



Category	ID	AJWI response to Specification
		design staff since this can be a problem in
		managing user expectations and culture.
	CHL_APP_9	Tracking funding sources will just be a matter of configuring the forms for data tracking based on NC design direction. This includes what indices to attach this information to including individual, family, and/or facility/provider. Reporting from this and calculations based on this data can also be
		configured. But our systems are designed for rapid deployment of workflows and forms.
	CHL_APP_10	Our ETL services can handle any bulk upload. We also have ETL services that can handle record by record uploads. Individual record capture can also be manually inputted.
	CHL_APP_11	ConFig: We will need to understand the queueing priorities and hierarchies. But this can be configured based on NC design team direction. We can create a hierarchy in which the queue can automatically move priorities up and down based on algorithms established at design.
	CHL_APP_12	Eligibility criteria that define application priority can be established in an algorithm that automatically prioritizes application follow up and completion.
	CHL_APP_13	Automatically recalculating priorities for applications will just need to be set based on an acceptable schedule (hourly, nightly, weekly, etc) and whether it is trigger automatically, based on some action, or manually executed.
	CHL_APP_14	As part of the workflow configuration, status of documents can be tracked and part of the trigger process for prompting follow up.
	PK_WF_1	The moving or referral of forms at specific periods will just be a part of workflow logic. This can be set and even edited based on NC design staff's direction. Some of this can be done ad-hoc by a System Admin.
Workflow	PK_WF_2	All our workflow steps can be set to a schedule. Currently we already support a set of workflows that follow 8- and 16-hour step processes.
	PK_WF_3	The ability to push data to a solution such as PowerSchool is more about their ability to absorb data rather than our ability to send. We can support API integration, batch update protocols, or most



Category

ID	AJWI response to Specification
	standard protocols under which the third-party application absorbs data.
PK_WF_4	Workflows statuses are generally not pre-defined in the sense that no "one size fits all". Our systems are built to rapidly deploy customized status codes that can be edited and added to by a NC System Admin as needed.
PK_WF_5	We tend to establish dashboards so staff can see the status of a workflow for a group of applications or clients viewed at a glance. We will work with NC design staff to establish whatever dashboards are needed for supporting workflow success.
PK_WF_6	We can produce .pdf, .docx, .xlsx documents and can be sent via sftp, in-system, or even email if the data involved is not private.
PK_WF_7	Any appropriate field can be governed by automated calculation or algorithm.
PK_WF_8	We can produce documents as cited based on data in-system. We currently support workflows that package a set of data for application produced into .pdf documents that are then packaged with uploaded documentation and sent to the appropriate party for review and digital signature.
PK_WF_9	Designated NC staff will have access to and management capability for all data and documents kept in the system.
PK_WF_10	As mentioned above we can support any workflow and configure it quickly and easily. We would like to assign that capability to limited staff since there are so many things that can go wrong. As a result we will rely on NC design staff to let us know who, either individually or by category, can have this access.
PK_WF_11	Registering and scheduling classroom attendance is a configurable set of functions. Whether it is a classroom for children or training for employment development. We have utilized various methods for tracking including barcodes/qr codes for scanning attendance and service completion to online lists of registered students for manual verification of attendance and completion. This can support offline tracking as well.
PK_WF_12	Our administrative tools can be assigned to specific individuals which will allow them to create and edit portions of any workflow.



Category	ID	AJWI response to Specification
	PK_WF_13	Internal staff and external staff will be specific levels of user categories and governed by the appropriate roles and rights. These roles and rights will be determined with the help of the NC design staff.
	PK_WF_14	Workflows in our systems can be automated based on what is acceptable to the NC design team.
	PK_WF_15	Almost all pages are editable by System Admins assigned that capability.
	PK_WF_16	Many of the site attributes such as codes, dependent fields, business logic, and workflow steps will be available for specific System Admins to manage.
	PK_WF_17	Since we use a SQL database for data management CRUD capabilities will be available all users that are assigned that access.
	PK_WF_18	For internal system data such as the WorkForce Registry, PK data can interface with that data seamlessly. For partner data, the protocols for interfacing will need to be set based on data management agreements.
	PK_WF_19	Considerations for abstracted data fitting into specific timeframes will be dependent on the NC design team specifications. We would need to keep a baseline set of data and then assign values either based on algorithmic or calculated functions to set fields or parameterized by set designs. In this way data can be kept based on time frame.
	PK_WF_20	Programs will be indexed, and meta data can be assigned based on individual program. Our configurable system can establish all meta data capture forms quickly and easily.
	PK_WF_21	Our systems are set for annual archiving of data and made available for secure download as needed.
	PK_WF_22	System Administrators exist at different levels. The NC design team will need to define, based on data sharing agreements and state privacy protocols, who has admin access to what data. We can then configure that model and assign as needed.
	PK_WF_23	Our flexible forms will allow for updates of site operational/non-operational tracking. We then reporting mechanisms (canned and ad-hoc) that will allow to report out on these data elements based on parameterized schedules.



Category	ID	AJWI response to Specification
	PK_WF_24	ConFig: We have a function whereby in specific forms you can enter data once and then duplicate across a set of similar fields. For example, if you have a schedule you follow for Monday and it is the same for Tues-Fri, you can click a button and the same data will be distributed across the whole week.
	PK_WF_25	Merging of data will just need to be defined by the NC design team and can be configured for integration and access as needed.
	PK_WF_26	We have integrated digital signature capability for one of two of our applications. We basically have a workflow whereby we have to compile a package of documents including auto generated docs. These are sent to court Judge for review and digital signature.
	PK_WF_27	We have a robust form engine that can meet and bulk or induvial distribution needs you may have.
	PK_WF_28	ConFig: We will work with NC design staff to configuring reporting on the status of any form or form combination supporting workflow completion requirements.
System Administrators	SA_1	<ul> <li>Our configuration of Microsoft Services provides for any user roles and permissions that need to be defined by the NC design team. We have existing levels of:</li> <li>1. State agency at the top of the hierarchy</li> <li>2. Research and aggregate analytics staff</li> <li>3. Local agency staff that may be a grantee of the state that manages numerous providers</li> <li>4. Providers</li> <li>Then there are specific categories of users within these levels.</li> </ul>
	SA_2	Specific System Admins will have the right to lock/unlock access and specific user/group access to data.
	SA_3	Our systems support in-system chat capability and can work with screen sharing software as well.
Reporting and Analytics	RT_1	Reporting access is definitely defined by role. Who can see individual data, who can see aggregated data, and who can download large data sites for analysis in third party tools. This is all assigned by groups and roles including frontline staff who will have limited access to individual records. State staff who will likely only have aggregate data



Category	ID	AJWI response to Specification
		access. And research staff that may only have non- identifiable data access. There will also be aggregate and individual access for large set data downloads.
	RT_2	We maintain a longitudinal data system only interrupted by archived data. Depending on NC design staff direction, this archiving can be annually or maybe over a multi-year period in order to allow better real time longitudinal tracking. However, archived data can be integrated or accessible to the reporting server which can then allow for broad long-range analysis. This can be configured based on NC requirements.
	RT_3	We have an ad-hoc reporting tool that is integrated with the system which can be made available to the appropriate users.
	RT_4	Automated reporting just needs to be configured based on NC design team directions.
	RT_5	The best guidance tools for role-based ad-hoc reporting will be templates that can show what data elements a staff person has access to and edit capability to build off of those templated reports. Parameters and fields of access can be controlled likely by group rights.
	RT_6	We will work with the NC design team to establish all CRUD protocols for reporting.
	RT_7	We have some expertise in building predictive analysis reports mostly based on looking at linear experiences of your clients in the system. However, we like to work with researchers and analysts to refine your models.
	RT_8	We log all activity and can analyze audit trails both for users, system logs, and security logs.
	RT_9	Since each state is different, we will need to configure these based on working with the State's IT division to define this array of reporting.
	RT_10	We can support .pdf, .docx, .xlsx, jpeg, gif, csv, and .txt formats for report output.
	RT_11	We actually have a survey module that can be activated, and results can be accessed through our ad-hoc reporting tool.
Automated Processes	AUT_1	Real-time display and reporting is a balancing act between the burden of transactions and the complexity of needed reports. Simple reports can



Category	ID	AJWI response to Specification
		be set for real-time display but for more complex reporting we like to move those to a reporting server that could be set for updates during the day but not exactly real time. We do this so that we don't tie up resources needed for fast and efficient system response times and support the complexity that can arise with reports.
	AUT_2	As mentioned with have text, email, and in-system capabilities for alerts that can be triggered by any action (automated or manual) that can be configured in the system.
	AUT_3	Most fields can be automated for calculations or algorithm automated input.
Integration	PK_INT_1	Each external system will need to be assessed for integration. Some systems have API access, some systems have batch update capability, some systems have to be managed on a record-by-record basis (a CJIS issue we ran into in CA) and some systems will have proprietary tech (many EHR systems). We have experience in integrating all of these cases and will execute the correct protocol for the appropriate external partner.
	PK_INT_2	As mentioned, we have a survey module that can be activated for this system. Then all our communications and reporting options are available for distribution.
	PK_INT_3	We have an option to configure bidirectional email capabilities but have tended to be cautious since we are not a replacement for a client email application. If there are limited bidirectional email capabilities necessary, then we can configure those but if a robust set of functions that generally replaces an email client application is requested we would tend to recommend against this.
Security	PK_SEC_1	Utilizing Microsoft Services connected to NCID we believe we can support any user role-based requirements NC may have.
	PK_SEC_2	We expect to use the SAML standard for integration of our MS Services model with NCID.
	PK_SEC_ 3	Because we use MS Services we can set multi- factor authentication have provided the option to our clients for this function.
	PK_SEC_4	We have SFTP capabilities and already use this for batch update of sensitive data.



Category	ID	AJWI response to Specification
Document Management	PK_MANU_DOC_1	We have integrated grammar and spell check tools
		to open text fields. We use document templates for
		customization requirements. And we can configure
		document coding of meta data to help with
		management and assignment of resources.
	PK_AUTO_DOC_1	We have the capability to house templates
		including letters and certifications based on your
		formatting requirements. These can then be
		generated automatically and integrated in whatever
		workflow you require. We don't have experience in
		varying fonts so that is something we will need to
		investigate.
	PK_AUTO_DOC_2	All uploaded documents are indexed. These indices
		are used to maintain uniqueness and shareability
		across users. Documents will be grouped by
		workflow and kept in secure folders on our
		production servers. Access to these documents will
		be role-based and can be maintained for uniqueness
		and not duplicated across the system.
	PK_AUTO_DOC_3	Verification algorithms for identifying incomplete
		documentation will need to be established with the
		NC design team and configured appropriately.
		Status reports on completeness can be integrated
		into a report or a dashboard.
	PK_AUTO_DOC_4	Preferable scanned documents will be .pdf format
		and will be stored in secure folders categorized by
		workflow on our servers.
	PK_AUTO_DOC_5	ToBeBuilt: We don't have a robust document
		management protocol so we can either integrate
		document management third-party solutions or we
		can build on the basics that we have. Our basics
		does include logging meta data for each document
		and sharing across the system as needed. It also
		includes the ability to package documents for
		review and adding review data for workflow
		support.
	PK_AUTO_DOC_6	Document retrieval access will be assigned to the
		appropriate user based on roles and rights. Access
		will be over our encrypted Web connections.
Data Management	PK_DAT_1	Access and CRUD rights are role based in our
		system. We also adhered to HIPAA based privacy
		guidelines which will drive our security models as
		much as the NC design team will.



Category	ID	AJWI response to Specification
	PK_DAT_2	Our security model is all role-based and managed by the rights as assigned to user or group and controlled by user indexing.
	PK_DAT_3	We log al CRUD activity and can retrieve any of these logs based on individual executing the action or aggregated analyses of log data.
	PK_DAT_4	Our user logs record all data by time stamp and can be retrieved for analysis based on time range and individual or group of individual users.
	PK_DAT_5	Our user management functions index permission by user and can be analyzed by the changes made by any individual user and data permission.
	PK_DAT_6	Because we use Microsoft Services we can use SAML to support SSO, particularly with NCID.
	PK_DAT_7	User roles across business units will need to be defined by the NC design team and we will configure appropriately. Business units will likely be a cross-reference group to our hierarchy of user levels.
	PK_DAT_8	Landing pages and workflows can be controlled by assignment of individuals or groups to these interfaces and sets of business logic.
	PK_DAT_9	Since we are keeping our data in an SQL database, we utilized indexing and data relations as the method for normalization. Except in the case of our reporting database.
	PK_DAT_10	Normalization of migrated, historical data will be based on what we are allowed to manipulate of this data. In addition, this will only be normalized if it can be stored in our table structures. Indexing can be configurable.
Search functionality	PK_SRC_1	Data searches will be managed by rights and roles. Not all users can search all fields. However, since we uses a SQL database to store data any field has the capability of being searched.
Compliance	PK_CMP_1	Yes, the solution will comply with WCAG 2.0.
	PK_CMP_2	Yes, we will comply with FERPA and have worked with schools to handle student/family PII.
	PK_CMP_3	We have reviewed and will comply with all NC privacy and security rules and guidelines.



Category	ID	AJWI response to Specification
	PK_CMP_4	We serve health organizations and will comply with all HIPAA and HITECH guidelines. We can supply HIPAA attestation documents used in vetting us for a healthcare client.
	PK_CMP_5	We archive data on an annual basis in a SQL format that can be accessed for research at any time.

## ATTACHMENT N: SUBSIDY PROVIDER COMPLIANCE BUSINESS SPECIFICATIONS

Category/Area of Focus	ID	AJWI response to Requirements
	SPC_1	Whether through manual input or ETL services we can absorb any of the data formats identified here.
Random Visits Subsidy and Other	SPC_2	We recognize this checklist requirement as a specific workflow and can support each step in this process including adding prompts, data validation, step management, and automation.
Referrals Regulatory Actions Technical Assistance	SPC_3	We recognize this assignment requirement as a specific workflow and can support each step in this process including adding prompts, data validation, step management, and automation.
	SPC_4	We recognize this as a workflow triggered by actions and data frames. We can support the workflow and establish automated report generation as needed. We can also configure calculation and algorithm generation of data as needed.
		In addition, we are capable of reading data from a word document to then be inserted into a database structure and available for reporting and document generation needs.



Category/Area of Focus	ID	AJWI response to Requirements
	SPC_5	We recognize this Random Evaluation as a specific workflow and can support each step in this process including adding prompts, data validation, step management, and automation. The 10% error rate prompt can be programmed into an algorithm that can support the workflow in the appropriate way. Document creation can then be automated as needed.
	SPC_6	We have document generation for .pdfs and can then send via our existing function that supports digital signatures.
	SPC_7	Our basic document management functions can be set to log the cited data elements and required meta data at upload.
		Query results can be set up for canned reporting or ad-hoc reporting.

# ATTACHMENT O: BUSINESS AND TECHNICAL SPECIFICATIONS

Solution Functional Area(s)	ID	AJWI response to Specification
Workflow Management Data Management Usability	TSpec_1	This is a very tricky specification. We have had a lot of cases working with clients who are not clear on their workflow and business logic and trying to build workflows that staff then don't use. We can give a high level of configurable functions to create and edit a workflow including algorithmic and calculated business logic rules. However, it is our experience that it will take a lot of training and clarity to execute a good workflow. We will configure our systems as directed by the NC design team but we do caution unless we are involved in this kind of access that we cannot take an liability for failed system edits.
Workflow Management Data Management Document/Forms Management	TSpec_2	Workflows can include all sorts of calculations or algorithmic step controls. At the time of absorbing any third-party data, meta data will be assigned either automatically or manually. This meta data can be included in any field dependent automated input or prompted input. In addition, this meta data can be used in any reporting designs as needed.



Solution Functional	ID	AJWI response to Specification			
		AJWI response to specification			
Area(s) Workflow Management Data Management Document/Forms Management	TSpec_3	We have built in electronic signature functions that can be configured for any of NC design staff requirements.			
Workflow Management Data Management	TSpec_4	As long as external data values are either uploaded into database fields or readable from standardized documents, data from these sources can be used in assessing their values. All internal data will be available for review.			
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_5	All workflows can be tied to scheduling and step prompts. This can be enforced in a number of ways including escalation tactics and multiple reminders.			
Workflow Management Document/Forms Management Interface, Network, Security	TSpec_6	Any workflow can use manual prompts or automatic prompts either based on data input triggers or scheduling triggers. This includes timed schedules that may be initiated by a defined action such as input of a complaint.			
Workflow Management	TSpec_7	This will need to be defined by the NC design team, but it is a tricky set of functions that are dependent on what can be enforced by management staff. Frontline staff could push back on any enforcement of steps in a workflow. For AJWI we have had to edit and re-edit workflows because the cultural shift of enforced steps blocks staff abilities to do their jobs. However we can configure enforcement as directed by the NC design team.			
Workflow Management Communication (alerts, reminders, emails, text)	TSpec_8	We tend to used forms of a dash board to show real-time progress through a workflow set of steps.			
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_9	All workflows will be configured to use our text, email, and in-system alerts and reminders based on the requirements of each workflow.			
Workflow Management Scheduling Communication (alerts, reminders, emails, text) Interface, Network, Security	TSpec_10	Generally speaking, we create templates for workflow alerts and notifications that can be edited by staff and sent manually as needed. Either via email, text, or in-system.			



Solution Functional	ID	AJWI response to Specification
Area(s)		As writesponse to specification
Workflow Management Data Management Document/Forms Management	TSpec_11	Based on meta data assigned to specific documents along with workflow step definitions, document requirements can be tracked and trigger prompts. We currently package documents for passage from one step to another and ultimately for digital signature to complete the workflow process.
Workflow Management Documents/Forms Management	TSpec_12	Any form can be generated to either a document (.pdf, .docx, etc.) or to a prompt (to alert the need to fill out a form as a next step) and automated in a workflow as needed.
Workflow Management Documents/Forms Management	TSpec_13	Any field in a workflow can be action dependent. Meaning that it can be set to be required and even set a prompt to stop going forward without filling it in.
Data Management Interface, Network, Security	TSpec_14	We can configure any log or list for any workflow reason and can establish logs for any auxiliary application data integration.
Workflow Management Data Management Interface, Network, Security	TSpec_15	Any field can be calculation dependent. As long as external data can be read via OCR or from an uploaded field element it can be included in a calculation.
Interface, Network, Security Workflow Management Documents/Forms Management Report Management Administration	TSpec_16	All users can be managed by the NC System Admin and can be assigned access to any CRUD activity as needed. This could be assigned by organization, workflow, and even down to specific forms.
User Management Workflow Management Data Management	TSpec_17	As you will see from our hardware and software diagrams, we use a three-tier Web-based design that separates the application layer from the database layer. This allows for concurrent usage and for some control on hierarchical CRUD rights and roles. We will need some direction from the NC design team, but a hierarchical and queue- based set of data rules will help to control integrity of the data.
Interface, Network, Security Data Management	TSpec_18	The ability to exercise functionality within the auxiliary solution is all dependent on the integration available with that solution. The best would be some restful API but can also be set with batch updates. We have decades of system integration experience having been at the forefront of data sharing models. We are confident we can



Solution Functional Area(s)	ID	AJWI response to Specification
		solve any integration problem. But caution that most of the time our ability to create the ability to interact with auxiliary data in real time is dependent on the source rather than our limitations. A prime example is EHR's which generally use proprietary tech for managing data. We have had a lot of trouble with accessing their data in real time and even found security leaks in some EHR's that make it almost impossible to interact with their data securely. So we are confident we can make this happen but just want to caution on the risk management involved here.
Interface, Network, Security	TSpec_19	As long as the authentication method from the connecting organization uses some form of standard (OAUTH, SAML, etc) then we can create a secure interface for connecting to their systems.
Interface, Network, Security	TSpec_20	As mentioned NCID uses SAML and so does Microsoft Services. We will use this standard to coordinate with the NC state ID authentication system.
Interface, Network, Security Workflow Management Data Management	TSpec_21	We ae assuming that this means how we would use authentication data to ensure that a user only has the appropriate access. The ID integration will only be used for authentication and then our own user management functions will be used to maintain appropriate access. This can also be done by setting group rights to those that fall into a specific organization or code that is passed by NCID.
Interface, Network, Security	TSpec_22	A System Admin is assigned based on the NC design team's direction of who can be at each of the levels of access we have cited. Then these system admins will be able to manage user roles and rights, as well as groups roles and rights.
Data Management Interface, Network, Security	TSpec_23	Our ability to interact with government cloud data will all be dependent on the ways in which NC IT is willing to share this data. Standard protocols can include API access, batch access, or specialized database to database stored procedures that can control security. We have broad experience in both CA and New York in working with state data and are confident we can establish a secure connection to any available State cloud data.



Solution Functional Area(s)	ID	AJWI response to Specification				
Usability	TSpec_24	Any field can be set up for standard field types,				
Security		coded prompts, controlled lists, and more.				
	TSpec_25	User error can be mitigated by validation controls,				
		calculated and dependent fields, code lists, format				
Error Checking		prompts, value lists that limit range of input, and				
Data Management		NC defined limitations on field input values.				
0	TSpec_26	Whether internal or external, if electronic records				
Interface, Network,		reside in our system, then users with the				
Security		appropriate rights can execute CRUD activity.				
Workflow Management		External data will have another layer of security				
Data Management		based on data sharing agreements and the rights				
Document Management		available for manipulating that data.				
<u>_</u>	TSpec_27	Any form that we have access to can be generated				
		into a document (.pdf for example) and distributed				
		via in-system to users of our systems, via sftp to				
		secure folders, via encrypted transfer via the Web.				
Interface, Network,		Data that is not sensitive can be distributed via				
Security		email. This can be aggregated reports and non-				
, Document Management		identifiable data.				
•	TSpec_28	Automated updates just need to be configured for				
Communication (alerts,		any workflow. Because we use a SQL database				
reminders, emails, text)		backend, we can set stored procedures and batch				
Interface, Network,		update packages to run at schedule or triggered				
Security		times. This is a common aspect of any workflow				
Usability		we configure.				
	TSpec 29	We have a series of reporting options. We will have				
		a set of "canned" reports designed based on NC				
		design team input that can be generated in Web,				
		.pdf, and even image formats. We can also set up				
Document Management		automated ways to generate standard and preset ad-				
Report Management		hoc documents as needed by any workflow.				
	TSpec_30	We have the ability to set "canned" reports,				
		dashboards, and have an ad-hoc reporting module				
		that allows NC staff to create their own reports				
Report Management		from the appropriate data.				
Report Management	TSpec_31	Our ETL services can handle any schedule data				
		integration needed. We use Automize for the				
		scheduling and encryption and can be integrated				
		with SFTP functions.				
Report Management	TSpec_32	Our ad-hoc reporting tool can allow the appropriate				
		staff to edit report templates as needed.				
Report Management	TSpec_33	Canned reports are the best way to limit staff				
		ability to edit a report. But also, the user roles and				
		rights can control who has report editing access.				



Solution Functional	ID	A WAII response to Specification			
Area(s)	ID	AJWI response to Specification			
Report Management Data Management File Management Document Management	TSpec_34	Reports can be produced in a Web interface (this includes formatted data, as a spreadsheet, as a interactive dashboard, or interactive spreadsheet, etc), or exported as a .pdf, .docx, .xlsx, or an image file.			
Data Management File Management Interface, Network, Security	TSpec_35	Since we use a SQL database backend we would just need direction by the NC design team as to where data needs to be "pushed."			
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_36	For data exports that are pushed to external entities we use stored procedures to automate the setup and can use whatever interface available for distribution (sftp, API, etc).			
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_37	Any workflow can include automated import functions. We use a mix of stored procedures and Automize for secure ETL services. We can pretty much absorb any external data source depending on whether the sources use standard formatting and access. Proprietary systems can be a problem.			
Interface, Network, Security Data Management	TSpec_38	We use the lates TLS protocols for data in transit and encrypt our database data at rest.			
Interface, Network, Security Data Management	TSpec_39	We suggest a set of standardized .pdf forms to be used for consultants offline. These can be easily uploaded (either manually or through automation) and used to batch update the system data.			
Workflow Management Data Management File Management Document Management Interface, Network, Security	TSpec_40	We suggest batch updates nightly for offline data and can automate this process. Syncing will be dependent on accurate use of indices.			
Search and Filter	TSpec_41	We will configure searches as defined by the NC design team. We use parameterized searches to limit and filter results. External data search capability will be dependent on whether we can upload the data into fields in our system or are in OCR readable standardized document formats.			
User Editability	TSpec_42	We manage text to help support repetitive staff needs by creating templates that are editable by the user. This can include document, email, and texting formats. This can also be set up to support multiple			



Solution Functional Area(s)	ID	AJWI response to Specification				
		languages if dealing with public facing documentation.				
Forms Management	TSpec_43	Almost all our forms are creatable and editable. However, we will work with the NC design team to identify where forms need to be standardized and therefore not editable. In our experience you will want about 30% of your forms to be non-editable because of state and federal data requirements. However, we can edit those in collaboration with the NC design team as needed if legislation or rules change.				
Data Management File Management Document Management	TSpec_44	Standard file types such a .pdf, .docx, .jpg, and .png are already included in our designs. Because mp4 and other video files can be very large we have to configure this specifically for NC design team specifications.				
User Management Workflow Management Data Management Interface, Network, Security Document Management Usability User Editability	TSpec_45	We can configure dashboard or reports that are available to staff from internal and external data available to the system. The reports in particular can be set to be editable by the appropriate user.				
Usability Workflow Management Data Management	TSpec_46	We have a form customization tool that can be used by the appropriate system admin. They will have the ability to create, edit, and obsolete forms and the fields in that form. The only limitation will be standardized fields that are state or federal compliant.				
Workflow Management Administration	TSpec_47	As part of the business logic of any workflow, fields can be automatically limited and algorithm, calculation, or trigger event controlled.				
Workflow Management Data Management File Management Document Management	TSpec_48	All forms and workflows can be saved at any point in their process steps.				
Interface, Network, Security Data Management File Management Document Management	TSpec_49	ToBeBuilt: There are a few ways that access to external data elements can be managed. Probably the easiest would be via API. We can help in building this out if it does not exist for the external partner system or use what they have in place.				



Solution Functional Area(s)	ID	AJWI response to Specification				
Interface, Network, Security Audit Log Report Management	TSpec_50	We already log all user activity in the system with a set of meta data. We can review these to make sure we are capturing all necessary data. Any of this data is available for analysis and reporting.				
Help	TSpec_51	We have a built-in help set of functions that can provide aid for a specific field, workflow, or page. In addition, we use prompts to aid input staff.				
Training Testing	TSpec_52	We have a standard training program and ongoing desk help support (all in the U.S.) that is accessible via in-system, email, and phone. Most of our training will only take an hour to get frontline staff using our systems. However, system admins will take longer to train.				
Print Document Management	TSpec_53	Since we use standard Web technology and standardized document generation, print functions follow all standards set by these formats and browsers.				
Usability	TSpec_54	<ul> <li>We have built mobile interfaces that are both secure or can be public facing. Currently we use mobile interfaces for providers to update their capacity data on a regular basis. This is done securely and based on user authentication.</li> <li>However, we can configure more public facing interfaces as needed.</li> </ul>				
Payment Processing	TSpec_55	We have integrated payment options, mostly by using PayPal tools. However, we have integrated bank tools as well. But we can just integrate with existing payment systems as needed. We have integrated with services such ActBlue and Stripe.				
Geo-mapping Usability	TSpec_56	We use GoogleMaps functions for most of our mapping integration. However we have found some low cost and simpler third party mapping applications we can use if the needs are simple. We have integrated the tech into our search capabilities and currently support the ability to search anywhere in CA for childcare and then map the results for the family client.				
Accessibility Usability	TSpec_57	For standardized pages we can translate and code for those. However, for ad-hoc text and editing we integrate a translation function and are limited in special characters and language preferences based on the third party application.				
Usability Security	TSpec_58	ToBeBuilt: We would need to build our redacting capabilities.				



Solution Functional Area(s)	ID	AJWI response to Specification				
Self-Service Workflow Management	TSpec_59	We use tablet or kiosk approaches to public facing registration and data maintenance. This can be tied to a barcode/qr code made available to the user to manage and edits or updates necessary for their records. Queuing or FIFO restrictions will be based on time stamping the registration or queuing based on hierarchies defined by the NC design team.				
Administration Security File Management	TSpec_60	All CRUD activity and workflow management will be based on user access defined by the user rights and rules assigned by NC system admins.				
Document Management Report Management File Management	TSpec_61	We will work with the NC design team to configure a set of document templates, email templates, and texting templates that can be used for managing standardized language and formats. These will be editable and available to the appropriate staff.				
Document Management File Management	TSpec_62	ToBeBuilt: Document transformation services can be integrated. Once transformed we can use OCR or upload functions to manage the readable data.				
Security	TSpec_63	In our collaboration with the NC design team, we will identify and review all security vulnerabilities and execute the best practices to eliminate or minimize those items. However, if some arise postproduction then we will work within our Service Level Agreement and Escalation Protocols to address these as needed. We also follow state and HIPAA guidelines on solving any vulnerabilities or breaches that may occur.				
Accounting and Budgeting	TSpec_64	ToBeBuilt: We will need to understand the various accounting and budget management functions that are required and build those into our systems.				
Branding	TSpec_65	We have several branding support protocols including making upload of logos and images for document formatting. As well as color choices and header designs that may help.				
Analytics	TSpec_66	We support data analysis in two ways. We have an ad-hoc reporting tool that can be used by the appropriate staff in the appropriate way (researchers may have only aggregate non- identifiable access) that can support building analysis reports for review. We also have a batch data download function that can help staff and researchers download large datasets including				



Solution Functional Area(s)	ID	AJWI response to Specification
		archived data for upload into third part statistical analysis tools.
Classroom Management	TSpec_67	Scheduling, registration, attendance, and meta data attached to individuals registering for a class are included in our systems.
Survey Management	TSpec_68	We have a survey module which we can demonstrate to you. This allows for creation of a survey, sending it to targets of individuals or groups of individuals, logging results and making them available for report generation.

#### e. Security Vendor Readiness Assessment Report (VRAR)

1. VENDOR System Information

#### Table 2-1. System Information

VENDOR Name: AJW Inc.

Solution/System Name: DCARTM

Service Model: SaaS

FIPS PUB 199 System Security Level: High-Impact

Fully Operational as of: MCCP/2018, Workforce Central/2015

Number of Customers (State/Others): DCARTM systems: >150

Deployment Model: Government-Only Cloud

System Functionality: DCARTM is a SaaS product configured and deployed for a number of program areas including Early Childhood Development, Workforce Development, Integrated Data Systems, and in healthcare. The system provides 24/7 availability in supporting government and nonprofit segment client management, performance tracking, and outcome tracking requirements. The system is customizable and has a serious of functions and modules that makes time of deployment much shorter than any "build to spec" project.



#### 2. Relationship to Other Vendors or CSPs

**IMPORTANT:** If there is a leveraged system, be sure to note below every capability that partially or fully leverages the underlying system. When doing so, indicate the capability is fully inherited or describe both the inherited and non-inherited aspects of the capability.

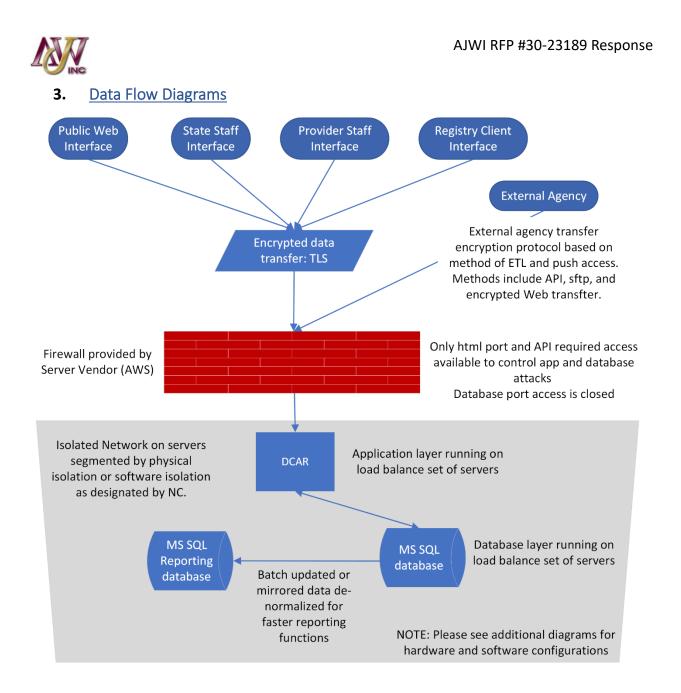
Table 2-2. Leveraged Systems

#	Question	Yes	No	N/A	If Yes, please describe.
1	Is this system leveraging an underlying provider?	X			For this project we suggest using the AWS environment for maintaining the production servers. We control software security measures while AWS will control hardware and physical location security.

*List all services leveraged. The system from which the service is leveraged must be listed in Table 2-2 above.* 

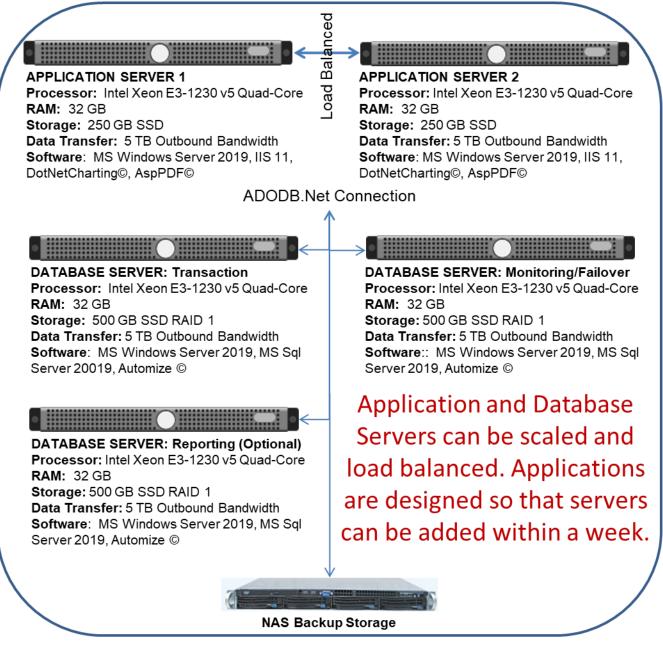
#### Table 2-3. Leveraged Services

#	Service	Service Capability	System
1	Physical Servers	Firewalls, network security,	AWS
		separation, and server	
		maintenance.	
2	Web server and Database	Licenses to Microsoft suite of Web	AWS
	server software	server and database server	
		software.	
3	Backup services	Maintain a backup of all activity.	AWS





Software configuration managing security and data transfer relationships.



# 4. <u>Separation Measures [AC-4, SC-2, SC-7]</u>

Currently we use a physical separate set of servers in an isolated network within a production server farm that meets all Federal and state requirements for security. We have provided an SOC 2 type 2 report on our existing systems. For This contract we plan to provide a production environment at AWS. This is because AWS has both physical and software separation protocols that meet all Federal and State requirements on security. We will coordinate with NC on whether to use physical, software, or combination of both for separation security at AWS.



All user, admin, and external system relationships with the NC pre-K/workforce registry system will be managed by AJWI software and services. These are highlighted by use of encryption protocols for data transfer including sftp services and API security review and enforcement. User interaction will be over encrypted data transfer protocols.

We have been using our physical separation protocols for over 20 years without breach or data loss. As mentioned, our third-party vendor has independent reviews and documentation on how they meet all Federal and State security and separation requirements. We have had our systems reviewed by health organizations and law enforcement certification processes.

In addition, tenants, administration, and operations are all separated using user rights and rules as managed by our system security. Administrators are special cases that have higher access but whose access can also be controlled based on both legal guidelines and data sharing agreements.

# 5. <u>System Interconnections</u>

A System Interconnection is a dedicated connection between information systems, such as between a SaaS/PaaS and underlying IaaS.

The Vendor must complete the table below. If the answer to any question is "yes," please briefly describe the connection. Also, if the answer to the last question is "yes," please complete Table 2-5 below.

#	Question	Yes	No	If Yes, please describe.
1	Does the system connect to the	Х		Through vendor (AWS) managed
	Internet?			firewall application and database
				layers are connected to the Internet.
				Only through encrypted methods.
2	Does the system connect to a		Х	
	corporate or state			
	infrastructure/network?			
3	Does the system connect to external		Х	There are no ongoing external
	systems?			agency connections. We will only
				connect to outside systems as
				directed by NC.

Table 2-4. System Interconnections

# Table 2-5. Interconnection Security Agreements (ISAs)

		Does ISA E	-	
#	External System Connection	Yes	No	Interconnection Description. If no ISA, please justify below.
1	None			
2				



# 6. Capability Readiness

# 7. <u>State Mandates</u>

#### Table 3-1. State Mandates

		Fully		
#	Compliance Topic	Comp	liant?	
		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?	Y		
2	Transmission, Remote Access: Are FIPS 140-2/-3 Validated or National Security Agency (NSA)-Approved cryptographic modules consistently used where cryptography is required?	Y		
3	Can the VENDOR'S solution integrate with the State's NCID solution?	Y		
4	Does the VENDOR utilize security boundary/threat protection devices to protect the network, system, applicatione.g., firewalls intrusion detection/ prevention systems, end point protection etc.? [SC-7] [SI- 3/SI-4]	Y		
5	Does the VENDOR have the ability to consistently remediate High risk vulnerabilities within 30 days and Medium risk vulnerabilities within 60 days? [SI-2]	Y		
6	Does the VENDOR and system meet Federal Records Management Requirements, including the ability to support record holds, National Archives and Records Administration (NARA) requirements, and Freedom of Information Act (FOIA) requirements?	Y		
7	Does the VENDOR store, process or transmit <u>State data</u> only in the continental US and is that data backed up in only US locations?	Y		
8	Does the VENDOR have a process to securely dispose of State data from its systems upon request that is in accordance with the National Institute for Standards and Technology (NIST) Special Publication 800-88 revision 1 <u>and</u> will provide to the State a certificate of data destruction? [MP-6]	Y		
9	All operating systems (OS) <u>AND</u> major application software components (e.g., Microsoft SQL, Apache Tomcat, Oracle Weblogic, 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?	Y		
1 0	Does the vendor have a current 3 <sup>rd</sup> party attestation certification <u>and</u> is it regularly renewed? The State requires an independent 3 <sup>rd</sup> party attestation (e.g., FedRAMP, SOC 2 Type 2, ISO 27001, or HITRUST) <b>prior</b> <b>to</b> contract award for systems containing Restricted/Highly Restricted data. <b>Note:</b> SaaS vendors cannot use IaaS/PaaS certification unless the	Y		



	application is explicitly covered as part of the IaaS/PaaS assessments.		
	[CA-7, RA-3, SA-9]		
1	Does the VENDOR's staff have appropriate background checks for	Y	
1	unprivileged and privileged access and accounts according to Federal		
	and/or State designation procedures for those systems that require it?		
	[AC-2, PS-3]		

# 8. <u>State Requirements</u>

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.

#### 9. Data at Rest and Authentication [SC-13]

#### Table 3-2a. Data at Rest & Authentication

	Cryptographic Module Type				PS 140-2 NSA		Describe Any Alternative Implementatio ns (if applicable)	Describe Missing Elements or N/A Justification
		Yes	No	Yes	No			
1	Data at Rest [SC-28]	Y		Y				
2	Authentication [IA-5, IA-7]	Y		Y				

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

#### Table 3-2b. Transport Encryption

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

The Vendor must identify all protocols in use. The Vendor may add rows to the table if appropriate, but must not remove the original rows.

#### Table 3-3. Transport Protocol

#	The Cryptographic Modul	USEZ	If "yes," please describe use for both internal and external communications
	Туре	Yes No	internal and external communications



1	SSL (Non-Compliant)		Ν	
2	TLS 1.0 (Non-Compliant)		N	
3	TLS 1.1 (Non-Compliant)		N	
4	TLS 1.2 (Compliant)	Y		
5	TLS 1.3 (Compliant)	Y		

#### 11. 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

#				Describe capability, supporting
	Question	Yes	No	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]	Y		Full Inheritance
2	Does the system require multi-factor authentication (MFA) for administrative accounts and functions? [IA-2, IA-2 (1), IA-2 (2)]	Y		Full Inheritance
3	Is role-based access used, managed, and monitored? [IA-4, IA-5]	Y		Full Inheritance
4	Does the system restrict non-authorized personnel's access to resources? [AC-6, AC-6 (1), AC-6 (2)]	Y		Full Inheritance
5	Does the system restrict non-privileged users from performing privileged function? [AC-6, AC-6 (1), AC-6 (2), AC-6 (10)]	Y		Full Inheritance
6	Does the system ensure secure separation of customer data? [SC-4]	Y		Through a combination of physical and software separation techniques we ensure all customer data is kept securely separate.



ш				Describes as a bility survey survives
#				Describe capability, supporting
	Question	Yes	No	evidence, and any missing
				elements
7	Does the system ensure secure	Y		The capability description is not
	separation of customer processing			required here, but must be
	environments? [SC-2]			included in Section 2.3, Separation
				Measures.
8	Does the system restrict access of	Y		The capability description is not
	administrative personnel in a way that			required here, but must be
	limits the capability of individuals to			included in Section 2.3, Separation
	compromise the security of the			Measures.
	information system? [AC-2]			
9	Does the remote access capability	Y		Full Inheritance
	include VENDOR-defined and			
	implemented usage restrictions,			
	configuration guidance, and			
	authorization procedure? [AC-17]			
1	How will the State's password policy be	Y		The format for passwords can be
0	enforced? State requires minimum 14-			enforced and configured as
	character complex passwords (Upper,			required by NC.
	Lower, Special Character & Numerical)			
	[IA-5]			

#### 12. Audit, Alerting, Malware, and Incident Response

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

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the system have the capability to detect, contain, and eradicate malicious software? [SI-3]	Y		
2	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]	Y		
3	Does the VENDOR have the capability to detect unauthorized or malicious use of the system, including insider threat and external intrusions? [SI-4, SI-4 (4), SI-4 (5), SI-7, SI-7 (7)]	Y		
4	Does the VENDOR log and monitor access to the system? [SI-4]	Y		



#				Describe capability, supporting
π	Question	Yes	No	evidence, and any missing
				elements
5	Does the VENDOR have an Incident	Y		
	Response Plan and a fully developed			
	Incident Response test plan? [IR-3, IR-8]			
6	Does the VENDOR have a plan and	Y		If the system contains no custom
	capability to perform security code			software development, do not
	analysis and assess code for security			answer Y or N. Instead, state "NO
	flaws, as well as identify, track, and			CUSTOM CODE" here.
	remediate security flaws? [SA-11]			
7	Does the VENDOR implement	Y		
	automated mechanisms for incident			
	handling and reporting? [IR-4, IR-4 (1),			
	IR-6]			
8	Does the VENDOR retain online audit	Y		
	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]			
9	Does the VENDOR have the capability to	Y		
	notify customers and regulators of			
	confirmed incidents in a timeframe			
	consistent with all legal, regulatory, or			
	contractual obligations? The State of			
	NC's requirement for security breach			
	reporting is 24 hrs. of incident			
	confirmation. [IR-6]			
1	If the VENDOR's solution provides email			Not applicable
0	"send as" capabilities, does it support			
	DMARC and DKIM for email protection?			



#### 13. <u>Contingency Planning and Disaster Recovery</u>

#### Table 3-6. Contingency Planning and Disaster Recovery

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the VENDOR have the capability to recover the system to a known and functional state following an outage, breach, DoS attack, or disaster? [CP-2, CP-9, CP-10]	Y		Full Inheritance
2	Does the VENDOR have a Contingency Plan and a fully developed Contingency Plan test plan in accordance with Statewide Information Security Manual? [CP-2, CP-4]	Y		Full Inheritance
3	Does the system have alternate storage and processing facilities? [CP-6, CP-7]	Y		Full Inheritance
4	Does the system have or use alternate telecommunications providers? [CP-8]		N	We contract with a second or third provider if necessary.
5	Does the system have backup power generation or other redundancy? [PE- 11]	Y		Full Inheritance
6	Does the VENDOR have service level agreements (SLAs) in place with all telecommunications providers? [CP-8]	Y		Full Inheritance

#### 14. Configuration and Risk Management

Table 3-7.	Configuration and Risk Mana	gement
------------	-----------------------------	--------

#	Question	Yes	No	Describe capability, supporting evidence, and any missing
	Question	163	NO	elements
1	Does the VENDOR maintain a current, complete, and accurate baseline configuration of the information system? [CM-2]	Y		Full Inheritance
2	Does the VENDOR maintain a current, complete, and accurate inventory of the information system software, hardware, and network components? [CM-8]	Y		Full Inheritance
3	Does the VENDOR have a Configuration Management Plan? [CM-9]	Y		Full Inheritance



#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
4	Does the VENDOR follow a formal change control process that includes a security impact assessment? [CM-3, CM-4, CM-4 (2)]	Y		Full Inheritance
5	Does the VENDOR employ automated mechanisms to detect inventory and configuration changes? [CM-2, CM-2 (2), CM-6, CM-8]	Y		Full Inheritance
6	Does the VENDOR prevent unauthorized changes to the system? [CM-5]	Y		Full Inheritance
7	Does the VENDOR establish configuration settings for products employed that reflect the most restrictive mode consistent with operational requirements? [CM-6, CM- 7]	Y		We use the "most restrictive [configuration] consistent with operational requirements."
8	Does the VENDOR ensure that checklists for configuration settings are Security Content Automation Protocol (SCAP)-validated or SCAP-compatible (if validated checklists are not available)? [CM-6]		Ν	We would need to set up this compatibility.

9	Does the VENDOR perform authenticated operating system/ infrastructure, web, and database vulnerability scans at least monthly, as applicable? [RA-5, RA-5 (5)]	Y	We use third party tools and automated reporting from our server vendor to review this on a monthly basis
10	Does the VENDOR demonstrate the capability to remediate High risk vulnerabilities within 30 days and Moderate risk vulnerabilities within 60 days? [RA-5, SI-2]	Y	This is part of our SLA and escalation policies which can be provided during contract negotiations
11	When a High risk vulnerability is identified as part of continuous monitoring activities, does the VENDOR consistently check audit logs for evidence of exploitation? [RA-5]	Y	As part of the HIPAA protocol this is a guideline we follow.



12	Does the VENDOR have a Supply Chain Risk Management (SCRM) plan and processes to identify and address	N	This is not really applicable to our configuration and SaaS products
	weaknesses or deficiencies in the supply chain elements and processes of information systems?		

#### 15. Data Center Security

#### Table 3-8. Data Center Security

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the VENDOR restrict physical system access to only authorized	Y		Fully Inherited
	personnel? [PE-2 through PE-6, PE-8]			
2	Does the VENDOR monitor and log physical access to the information system, and maintain access records? [PE-6, PE-8]	Y		Fully Inherited
3	Does the VENDOR monitor and respond to physical intrusion alarms and surveillance equipment? [PE-6, PE-6 (1)]	Y		Fully Inherited

#### 16. Policies, Procedures, and Training

The Vendor must indicate the status of policy and procedure coverage for the NIST 800-53 Rev 5 families listed in Table 3-9 below.

**To answer "yes" to a policy**, it must be fully developed, documented, and disseminated; and it must address purpose, scope, roles, responsibilities, management commitment, coordination among organizational entities, and compliance. A single policy document may address more than one family provided the NIST requirements of each "-1" are fully addressed.

**To answer "yes" to a procedure**, it must be fully developed and consistently followed by the appropriate staff. List all applicable procedure documents for each family.

VENDORs must establish their own set of Policies and Procedures (P&Ps). They cannot be inherited from a leveraged system, nor can they be provided by the customer. Any exceptions and/or missing policy and procedure elements must be explained in Table 3-10 below.



Table 3-9. Policies and Procedures

#	Family	Po	licy	Proce	edure	Title Version and Date
#	Family	Yes	No	Yes	No	The version and Date
1	Access Control [AC-1]	Y		Y		Policy:
						•
						Procedure(s):
						•
2	Awareness & Training [AT-1]		N	Y		Not fully documented
3	Audit & Accountability		N	Y		Not fully documented
5	[AU-1]					
4	Security Assessment & Authorization [CA-1]		N	Y		Not fully documented
5	Configuration Management [CM-1]		N	Y		Not fully documented
6	Contingency Planning [CP-1]		N	Y		Not fully documented
7	Identification & Authentication [IA-1]		N	Y		Not fully documented
8	Incident Response [IR-	Y		Y		Policy:
	1]					• SLA v3
						Procedure(s):
						• SLA v3
9	Maintenance [MA-1]		N	Y		Not fully documented
10	Media Protection [MP-1]		N	Y		Not fully documented
11	Physical & Environmental		N	Y		Partially documented
12	Protection [PE-1] Personnel Security	Y		Y		Policy:
12	[PS-1]					<ul> <li>Personnel Policies v5</li> </ul>
						Procedure(s):
						<ul> <li>Training v3 and Personnel Policies v5</li> </ul>
13	Risk Assessment [RA- 1]		N	Y		Not fully documented
14	System & Services Acquisition [SA-1]		N	Y		Not fully documented
15	System & Communications Protection [SC-1]		N	Y		Not fully documented



#	Family	Pol	icy	Procedure		Title Version and Date
#	Failing	Yes	No	Yes	No	The version and Date
16	System & Information		Ν	Y		Not fully documented
	Integrity [SI-1]					
17	Planning [PL-1]		Ν	Y		Not fully documented
18	Supply Chain Risk		Ν		Ν	Will need to document where
	Management [SR-1]					applicable. Since we do not handle any supplies for our SaaS offering we have
						very limited risk.

For any family with a policy or procedure gap, please describe the gap below.

#### Table 3-10. Missing Policy and Procedure Elements

Missing Policy and Procedure Elements
---------------------------------------

We have procedures in place for all elements above, however we do not have documentation consistent with NIST 800-53 Rev 5. We do follow those guidelines but will need to produce the documentation being asked here.

The Vendor must answer the questions below.

Table 3-11. Security Awareness Training

Question	Yes	No	Describe capability, supporting evidence, and any missing elements
Does the VENDOR train	Y		This is part of our client, state, and HIPAA security
personnel on security			requirements.
awareness and role-based			For NC personnel, we also do staff training on
security responsibilities? [AT-2]			these subjects.



## 17. Additional Capability Information

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

#### 18. <u>Staffing Levels</u>

In the table below, the Vendor must describe the VENDOR's organizational structure, staffing levels currently dedicated to the security of the system, as well as any planned changes to these staffing levels. This description must clearly indicate role and number of individuals as well as identify which staff is full-time dedicated, and which are performing their role as a collateral duty. **Note**: It is not necessary to include specific names of individuals, but rather their roles/titles.

#### Table 3-12. Staffing Levels

Staffing Levels
Project Lead – 33% time on this project
Project Supervisor – 66% time on this project
Account Manager – 33% time on this project
Lead programmer – 100% time on this project
Secondary programmers (3) – 33% time on this project
Training staff – Time as needed by training sechule
IT Manager – 33% time on this project
Desk Help (2 one on West Coast, one on the East Coast) – 50% time on this project

#### 19. Change Management Maturity

The Vendor must answer the questions below.

#### Table 3-13. 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)?		N	This is managed by the project leads (lead + supervisor + IT Manager)
2	Does the VENDOR have and use development and/or test environments to verify changes before implementing them in the production environment?	Y		



#### 20. Vendor Dependencies and Agreements

Table 3-14. Vendor Dependencies and Agreements

#	Question	Yes	No	Instructions
1	Does the system have any dependencies on other	Y		The server vendor (AWS)
	vendors such as a leveraged service offering,			
	hypervisor and operating system patches, physical			
	security and/or software and hardware support?			
2	Within the system, are all products still actively	Y		If any are not supported,
	supported by their respective vendors?			answer, "No."
3	Does the VENDOR have a formal agreement with	Y		If "yes," please complete
	a vendor, such as for maintenance of a leveraged			Table 3-16. Formal
	service offering?			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 3-15. Vendor Dependency Details

			Still Suppo	rted?
#	Product and Vendor Name	Nature of Dependency	Yes	No
1	ActiveReports/Grape City	To create ad-hoc reports	Y	
2	Email/MailGun	To send emails	Y	
3	Texting/Plivo	To send texts	γ	

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 3-16. Formal Agreements Details

#	Organization Name	Nature of Agreement
1	Liquid Web (or AWS)	Subscription Contract and SLA
2		

#### 21. <u>Continuous Monitoring Capabilities</u>

#### Table 3-17. Continuous Monitoring Capabilities

#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
1	Does the VENDOR have a lifecycle management plan that ensures products are updated before they reach the end of their vendor support period?	Y		24 years



#	Question	Yes	No	Describe capability, supporting evidence, and any missing elements
2	Does the VENDOR have the ability to scan all hosts in the inventory?	Y		24 years
3	Does the VENDOR have the ability to provide scan files in a structure data format, such as CSV, XML files?	Y		16 years
4	Is the VENDOR properly maintaining their Plan of Actions and Milestones (POA&M), including timely, accurate, and complete information entries for new scan findings, vendor check-ins, and closure of POA&M items?	Y		16 years

#### Table 3-18. Continuous Monitoring Capabilities – Additional Details

Continuous Monitoring Capabilities – Additional Details
Yes, we can. We will work with our server vendor looking to produce SOC 2 Type 2 independent reports explicitly reviewing our software in use by NC.

#### 22. Status of System Security Plan (SSP)

*In the table below, explicitly state whether the SSP is fully developed, partially developed, or non-existent. Identify any sections that the VENDOR has not yet developed.* 

#### Table 3-19. Maturity of the System Security Plan

#### Maturity of the System Security Plan

We are a small business attempting to make the leap to a larger organization. We do not have a fully fleshed out SSP. We have portions of it covering our user access and external partner access protocols. The security plans of our server vendor. And documentation on our hardware and software configurations. But we have not assembled all of it into one SSP.

In the table below, state the number of controls identified as "Not applicable" in the SSP. List the Control Identifier for each, and indicate whether a justification for each has been provided in the SSP control statement.

Table 3-20.	<b>Controls Designated</b>	"Not Applicable"
-------------	----------------------------	------------------

<x> Controls are Designated "Not Applicable"</x>
None

*In the table below, state the number of controls with an alternative implementation. List the Control Identifier for each.* 

<x> Controls have an Alternative Implementation</x>
None



#### Organization's Security Representative or designee

Andrew Wong PLEASE PRINT NAME

SIGNATURE

August 17, 2023

Date

As an example of independent assessments and reviews of our server environment we have attached an SOC 2 Type 2 report for our current LiquidWeb production environment. We will work with our server vendor to provide a specific report naming our systems in the review in order for us to be VRAR ready.

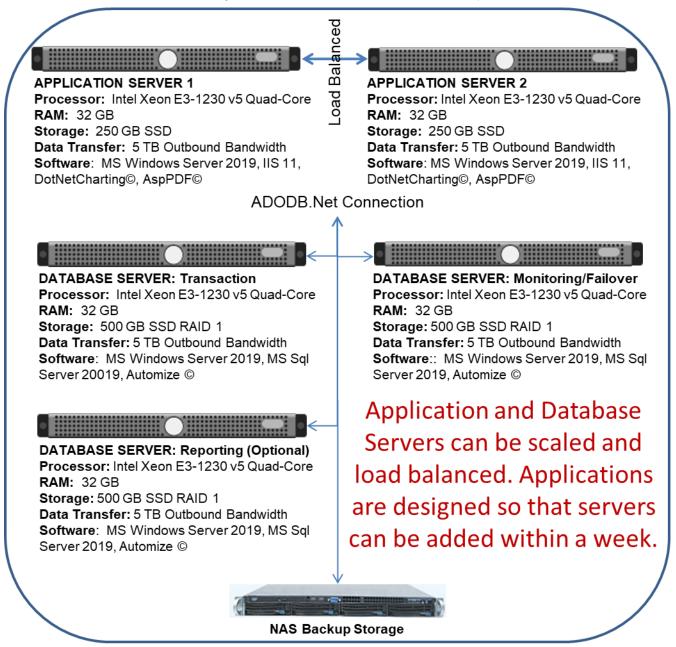
Please see Appendix A in the attachments



#### f. Architecture Diagrams

Based on HIPAA guidelines we have generally run an isolated network within our vendors (currently LiquidWeb but looking to use AWS for NC project) hardware environment. We manage all software on the isolated servers and have software security functions such as limited port access and data encryption to secure the data.

The server software we are using is the latest stable and vendor supported environment we have tested. We will comply with any NC state requirements for latest and best practice software versions, but we recommend using the most stable environment for our systems.





# Software Overview

This software environment is configured for hosting by AJWI and its server vendor. For this project we plan to use AWS services. 100% of our clients (100s) have choosen our hosted SaaS services.

Product and release	Product location	Business purpose of component
Microsoft Windows Server 2008/2012	All Servers	Microsoft's operating and network operating system to manage network and server operations
Microsoft IIS Server 7	Application Servers only	Microsoft's Internet Application Server software used to manage the website(s)
Microsoft .Net framework	Application Servers only	Microsoft's coded library platform upon which PNI system code will run
Microsoft SqlServer 2008/2012	Database Servers only	Used as the database platform to house all data input, meta data about upload documentation, and all converted data associated with the PNI system
Microsoft SqlServer Management Studio 2008/2012	Database Servers only	For database administrators to access the databases locally on db servers
ActiveReports	Application Servers	Provides reporting and charting functions for the $DCAR^{TM}$ implementation.
AspPDF©	Application Servers	Provides .pdf generation function from html for the $DCAR^{TM}$ system.
Docusign©	Application Servers	Provides digital signature functionality
Automize©	Application Servers	Allows for automated encryption/decryption and upload of 3 <sup>rd</sup> party files needed for integration.
Mailgun	Application Servers	Email integration
Plivo	Application Servers	Texting integration
Internet Explorer 6.0+, Netscape 7.0+ or Mozilla/Firefox 9.0+ And more recent	All user machines	For testing user group to access the Client specific DCAR <sup>™</sup> implementation.



# g. Cost Form for Vendor's Offer (Attachment E)

Cost	Cost Table 1: Project Execution							
ltem	Cost Category	Per Unit Cost	Extended Cost (All Units)	Optional Cost	Project Subtotal			
1	Software and Licensing Fees for Year 1	\$100,000.00			\$100,000.00			
2	Additional Modules required/proposed for Year 1	\$0.0			\$0.0			
3	Third-party Software for Year 1	\$0.0			\$0.0			
4	Installation/configuration/ integration/ transition costs	\$225,000.00			\$225,000.00			
5	Customization required or proposed addressing specifications (itemize in an attachment)	\$675,000.00			\$675,000.00			
6	Conversion and migration of Legacy Data	\$90,000.00			\$90,000.00			
7	Project Deliverables (excluding Data Conversion, Training Materials, Training, and Escrow agreement)	\$0.0			\$0.0			
8	Training and Training Materials	\$2,000.00	\$24,000.00		\$24,000.00			
9	Customer Support to include Help Desk and Technical Support, if not included in Software License	\$0.0			\$0.0			
10	Escrow	\$0.0			\$0.0			
11	Change Hours (400 hours) for Year 1	\$90.000.00			\$90.000.00			
12 Other Costs (itemize in an attachment)		\$132,000.00		\$300,000	\$132,000.00			
	Project Execution Subtotal							
Annual Maintenance and 13.a State Hosting Option (Contract Year 1)		\$0.0			\$0.0			



-

Cost Table 1: Project Execution							
ltem	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)	\$0.0			\$0.0		
Proj	ect Execution Total – Vendor Hosting						
Pr	oject 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	\$25,000	\$25,000	\$0.0	\$0.0	\$50,000	
2	Additional Modules	list in Cost Table 1	\$100,000	\$75,000	\$50,000	\$50,000	\$275,000	
3	Third-party Software	list in Cost Table 1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
4	Installation/ configuration/ integration/ transition costs addressing Priority 2 specifications	list in Cost Table 1	\$90,000	\$90,000	\$45,000	\$45,000	\$270,000	

-



	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
	(itemize in an attachment)						
5	Customization required or proposed addressing Priority 2 specifications (itemize in an attachment)	list in Cost Table 1	\$225,000	\$225,000	\$150,000	\$150,000	\$750,000
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	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
8	Training and Training Materials	list in Cost Table 1	\$24,000	\$24,000	\$24,000	\$24,000	\$96,000
9	Customer Support to include Help Desk and Technical Support, if not included in Software License	list in Cost Table 1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
10	Escrow	list in Cost Table	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
11	Change Hours (200 hours)	list in Cost Table	\$45,000	\$45,000	\$45,000	\$45,000	\$180,000



	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	
12	Other Costs (itemize in an attachment)	list in Cost Table	\$132,000	\$99,000	\$66,000	\$66,000	\$363,000	
	O&M Subtotal	list in Cost Table	\$641,000	\$583,000	\$380,000	\$380,000	\$1,984,000	
13.a	Annual Maintenance and State Hosting Option							
13.b	Annual Maintenance and Vendor Hosting Option if not included in License fees		\$100,000	\$100,000	\$100,000	\$100,000	\$400,000	
O&M Total – Vendor Hosting		N/A – list in Cost Table 1	\$741,000	\$683,000	480,000	480,000	\$2,384,000	
(	O&M Total – State Hosting							

# 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						
ltem	Cost Category	Project Execution Total	O&M Total	Grand Total		
1	Software and Licensing Fees	\$100,000.00	\$50,000	\$150,000		
2	Additional Modules	\$0.0	\$275,000	\$275,000		

Cost Table 3: Total Cost of Contract								
Item	Cost Category	Project Execution Total	O&M Total	Grand Total				
3	Third-party Software	\$0.0	\$0.0	\$0.0				
4	Installation/ configuration/ integration/ transition costs	\$225,000.00	\$270,000	\$495,000				
5	Customization required or proposed addressing Priority 2 specifications (itemize in an attachment)	\$675,000.00	\$750,000	\$1,425,000				
6	Conversion and migration of Legacy Data	\$90,000.00		\$90,000				
7	Project Deliverables (excluding Data Conversion, Training Materials, Training, and Escrow agreement)	\$0.0	\$0.0	\$0.0				
8	Training and Training Materials	\$24,000.00	\$96,000	\$120,000				
9	Customer Support to include Help Desk and Technical Support, if not included in Software License	\$0.0	\$0.0	\$0.0				
10	Escrow	\$0.0	\$0.0	\$0.0				
11	Change Hours	\$90.000.00	\$180,000	\$270,000				
12	Other Costs (itemize in an attachment)	\$132,000.00	\$363,000	\$495,000				
	O&M Subtotal			\$1,984,000				
13.a	Annual Maintenance and State Hosting Option							
13.b	Annual Maintenance and Vendor Hosting Option if not included in License fees		\$400,000	\$400,000				
	O&M Total – Vendor Hosting	\$1,336,000	\$1,984,000	\$\$3,720,000				
	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	\$225	\$225	\$225	\$250	\$250				

### h. Schedule of Offered Solution

**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.

Vendor **Project Schedule** will: be developed with Microsoft Project<sup>™</sup> or a Microsoft Project compatible product.

Here is a draft of a schedule workplan. This is sample of a normal development and deployment plan for one of our existing case management solutions. We expect that we will expand this timeline to 9 months targeting launch of priority 1 functionality by the end of July, 2024.



ONE	P E-PA	GE	- 1		ject Manager: Jeannine Schumm ject Objective: Complete work on the new WIN DCAR system	-	ect Na	ime:	New	WIN E	CAR	Ho	me St	retch								Rep	ort Da	ate: 5	/12/20
Sub-(	Obje	ctive	5		Major Tasks									Schedul	e								Ow	ners an	d Helpe
•					print form functionality		I	I		<u> </u>			•	٠					<u> </u>						
•	+	-			QA security										0	0	0	0					•		
•	+	-			QA general functionality												0	0	0	0			•		
•	•		_		print WIN and AIT referral forms	٠	٠	٠	٠																
•	•			5	convert legacy data										0	0	0	0	0						
•	•				build Outreach section	٠	٠	٠	٠														•		
•	•			7	send updates to child quarterly update forms to AJWI	•																		•	
•	•				update child quarterly update forms				٠														•		
	•			9	configure for partner agency users						٠	٠											•		
		•			implement Activities data transfer with iHOMS					٠	٠	٠				0							•		•
		•			new Activities Admin role		٠	٠															•		
					report specifications for 24 canned reports										0	0									
					feedback on report spec											0	0								
					24 canned reports												0	0	0						
					custom reporting + data downloads													0	0						
•	•				user testing families module										0	0	0	0	0	0	0	0			
			٠	_	user testing reports													0	0	0	0	0			
•					transition to new system																0	0			
					implement Families data transfer with iHOMS											0	0								
					implement reminders and task list												0	0							
				21																					
				22																					
					Risks, Qualitatives, Other Metrics				Green	=Adequa	te, Yello	w=Worr	isome, F	Red=Dan	igerous										
				1	Delayed feedback from WIN																				
				2	Limited resources																				
				3																					
			_	4																					
			_	5																					
			_																						
					# Internal People assigned to the project:																				
amilias modula		activities module	reports module		Major Tasks and Risks P-Objectives	3/8/2021	3/15/2021	3/22/2021	3/29/2021	4/5/2021	4/12/2021	4/19/2021	4/26/2021	5/3/2021	5/10/2021	5/17/2021	5/24/2021	5/31/2021	6/7/2021	6/14/2021	6/21/2021	6/28/2021	MUA	NIM	Kyle
		a			Costs and Metrics Summary & Forecast functions have been added for the forms throughout the system. We are working	g on tes		Hours	nting se	curity in i	the Fami	lies moo	dule.									۵Đ	rpended	226 0Bu	idgeted



### i. Signed Vendor Certification Form (Attachment F)

## 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: August 17, 2023

Printed Name: Andrew Wong

Title: President/CEO



### J: LOCATION OF WORKERS UTILIZED BY VENDOR (ATTACHMENT G)

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



# k. References (Attachment H)

Service Type:	SaaS – Early childcare resource and referral tracking system supporting all counties in California and application backend for the State's Consumer Education Website. Offers public and internal staff search interfaces and pushes data to the state's department of human services on a weekly basis. This is a DCAR <sup>™</sup> configured product.
	Modules included: Security, Custom Forms, Survey, Technical Assistance, case management, communications integration, Admin and user management, reporting.
	40 sites are using this solution with hundreds of staff users, over 57,000 provider users, and thousands of public users.
Contract Term: (Include start and end dates)	January 2019 - ongoing
Contract Amount:	\$1 million year one; \$450K annually 2020 ongoing
Staffing	5 staff maintaining and upgrading this solution
Agency/Dept:	California Child Care Resource and Referral Network and 36 county partners 1 Polk St, San Francisco, CA 94102
Contact:	Linda Asato, Executive Director
Telephone:	415.882.0234
Email:	lasato@rrnetowrk.org
Service Type:	SaaS – Workforce development system supporting all SF County contractors providing workforce services including tracking training and placement. This system pushes data and monitors success/failure/cause of upload to the state's EDD. This is a DCAR <sup>™</sup> configured product.
	Modules included: Security, Custom Forms, Technical Assistance, case management, communications integration, barcode/qr code tracking of service, Admin and user management, reporting.
	This system supports 70 sites, hundreds of service provider staff, and 25 workforce department staff.
Contract Term: (Include start and end dates)	July 2017 – ongoing
Contract Amount:	\$250K annually



Staffing	4 staff maintaining and upgrading this solution						
Agency/Dept:	SF Office of Economic and Workforce Development						
	1 S Van Ness Ave Ste 5, San Francisco, CA 94103						
Contact:	Charlie MacNulty						
Telephone:	415.701.4895						
Email:	alfredo.fajardo@sfgov.org						
Service Type:	SaaS – Integrated data system supporting mental health, probation, human services, and schools. The shared data lake was used for predictive analytics and improving service delivery, eliminating duplication of services, and improving service outcomes.						
	Modules included: Security, Custom Forms, case management, ETL services, privacy protocols for securing PII, Admin and user management, reporting.						
	This system supported 15 sites and 15 multi-agency staff and decision-makers.						
Contract Term: (Include start and end dates)	August 2009 – June 2022						
Contract Amount:	\$158,932 Year One; \$55K current annually						
Staffing	3 staff maintained and upgraded this solution						
Agency/Dept:	SF Behavioral Health; Dept of Human Services; Juvenile Probation; Unified School District						
	760 Harrison St, San Francisco, CA 94107						
Contact:	Chief Katherine Miller, SF Juvenile Probation						
Telephone:	415.753.7556						
Email:	katherine.miller@sfgov.org						



### I. Financial Statements (Attachment I)

ATTACHMENT I: FINANCIAL REVIEW FORM

### REDACTED

All financial documents are redacted.

Please find our CPA Affirmation Statement signed .pdf as Appendix I in the attachments.



### m. Errata and Exceptions, if any

None.

n. Vendor's License and Maintenance Agreements, if any, and Third-Party License Agreements, if any.

None.

o. Supporting material such as technical system documentation, training examples, etc.

Please see section f. Architecture Diagram for technical system documentation.

Please see Appendices K-M in the attachments for sample training examples.

# 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.

Please review AJWI's cover letter in Appendix H where we outline some of our most important unique products and capabilities.

Appendix H: Cover letter

Appendix G: Harvard article about AJWI's integrated data sharing models and success.

Appendix O in attachments: Marketing material on our Early Childhood Development Products and service.

### q. All pages of this solicitation document (including Attachments A, B, and C).

Included by reference from our attachment files are:

Appendix C – the original solicitation document

Appendix D – Attachment A

Appendix E – Attachment B

Appendix F – Attachment 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.

### **Draft Management Plan**

We have reviewed and responded to all first-year requirements and reviewed all O&M deliverables in section 2 under Vendor Project and O&M Deliverables. Below is a description of how we will ensure completion of all deliverables in a timely and efficient fashion. We have a standard management approach which integrates day to day AGILE frameworks with an Evolutionary Development approach which will support the Priority 1 and Priority 2 system development requirements.

- 1. We begin with setting up a management team to meet with the NC design team on a regular basis, at least every other week. This team will consist of the Project Lead (Andrew Wong principal at AJWI), the Project Supervisor (Jeannine Schumm, VP of projects and with AJWI for 20 years) and the Account Manager (Ronnie Cho director of accounts management).
- 2. We develop a set of design documents that include workflow diagrams, business logic documents, security framework, functional specifications, data dictionary, wireframe mockups, report mock-ups, and help menu guidelines.
- 3. All documentation needs to be accepted by the designee of NC but work may commence as different pieces are deemed finished.
- 4. Are coding teams will be using a Scrum approach for day-to-day check-ins and follow up management of time and skills.
- 5. We will work with the NC design team to establish priority lists for each development area so we can ensure we can launch with Priority functionality and compliance.
- 6. Once coding is done for unit functions then testing will happen internally to AJWI. A separate set of testers from the programming staff will execute the QA protocol.
- 7. Once internal testing is done then the functions will be made available in a development environment for testing by NC beta testers. This will generate and bug list which AJWI will work to fix within an agreed amount of time. Generally, we will try and finish a bug list in a week's time.
- 8. At the same time coding is happening our legacy data upload plan will be developing and we will shoot to have a successful upload consistent with the defined data dictionary from the design phase as soon as possible. At the latest we should have this done about 6 weeks from launch.



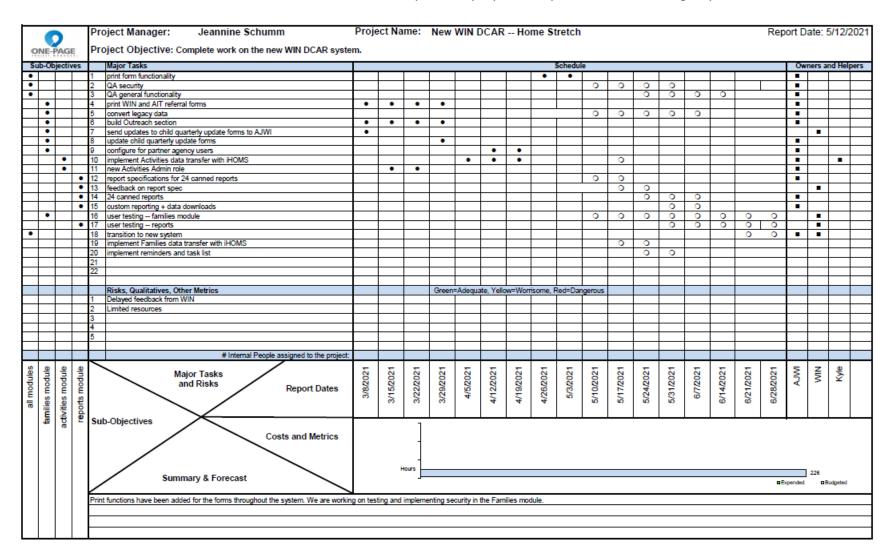
- 9. Once coding is finished and the legacy data uploads are successful, we will move to bringing up a complete draft version of the system. At this point we will start with internal testing to make sure all functions are working and there are not conflicts between system units or data uploads whether that is legacy or external data sources.
- 10. Once we have completed internal testing, we provide the complete system with a QA testing guide for NC beta testers to test for bugs. At this point we are not testing to see what functions are missing or some would like but to only test for bugs. AJWI will then work to fix any bugs that are reported at this point within a week's time. At this time, we will also include the help prompts and documents in draft form for finalization.
- 11. Once the bugs are fixed, we will move for Acceptance by the appropriate NC designee.
- 12. Deployment usually begins with legacy data uploads starting on Friday and over the weekend. External data sets will likely wait till the system is up and running. Once the legacy data is uploaded then the system should run in production the following Monday.
- 13. Starting two months out before launch we will begin our training program which usually is cover by a one-hour session for data input staff and two hours for system administrators.
- 14. We then move into the O&M phase of the project.

Our evolutionary approach us built into all DCAR<sup>™</sup> systems. This means that we have tools that allow us to continually enhance and develop our applications. We have built the system so that any number of partners and external data sources can be added. Changes can be made in minutes to mirror legislative, data, or best practice changes. User management allows for an ever-changing staff. And our desk help has a long reputation of being helpful in both day-to-day issues and problems but in ongoing training as well.



### **Draft Project Schedule**

Here is a sample deployment schedule we have used in a smaller engagement but generally follows our approach and can be extended to the 9-10 months we believe it will take to develop and deploy the NC pre-K/Workforce Registry solution.



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# Project Lead – Andrew Wong

Founder and developer for AJW Inc. Has served as designer and programmer for AJWI's early products. 20 years of experience with Microsoft products. Currently maintains role of managing client relations for AJWI's biggest clients. Background in civil engineering and applied math.

### Project Supervisor – Jeannine Schumm

20-year veteran supervising AJWI projects. Was the main designer of the early childhood suite of products including MCCP. She has been working with our California and New York state partners for the last 5 years. She has a project management certification which includes training in the Agile management framework.

### Account Manager – Ronnie Cho

The newest member of our team as we begin to grow our business. Ronnie worked in the White House under Barack Obama and was a VP of MTV for a time. He comes to us as our lead in building out our business and making sure that keep our biggest clients satisfied.

### Lead programmer – Ismael Rizo

He is an eight-year veteran working with AJWI code and has been a programming lead for five years. He will be full-time on this project and was one of the main programmers behind our childcare systems for CA and NYC.

Secondary programmers (3) – This will be a larger team than we usually assign for a project like this. We have experience in a few statewide projects in CA and one in NYS. Because our systems can be configured and we have a lot of the security and business logic functions available, we believe this will be more than enough to launch this product.

### IT Manager – Vinay Patel

He has been our IT manager for more than 15 years and is an expert at managing our systems currently housed at LiquidWeb. He also manages are development environments and maintains our security protocols in conjunction with Andrew Wong.

Desk Help (2 one on West Coast, one on the East Coast) – Diana Li in California and Pamela Stockwell in New York lead our desk help staff. They will be able to provide as much support as needed based on our history of need.

Training staff – To be assigned as needed by training schedule





### **Appendix A: Service Level Agreement**

We commit to abide by the following procedural requirements:

- Priority 1 = System is inaccessible or severely disabled
  - Tech Support hours of operation are: 8:30am to 5pm.
    - Level 1: Hardware Malfunction
      - ServePath (AJWI's collocation) will replace hardware and reconfigure software to get back up within 1-5 business hours depending on which hardware malfunctioned and severity.
    - Level 2: Software Malfunction
      - 1-4 business hours during a business day. An after-hours software problem will be handled as soon as 1 hour or next business morning – depending on severity.
    - Breach: Client shall be notified within 24 hours of data breach awareness.
- Priority 2 = System is malfunctioning in a way that severely impedes productivity or data is lost AJWI categorizes Priority 1 and Priority 2 as the same scenario:
  - Tech Support hours of operation are: 8:30am to 5pm.
  - Level 1: Hardware Malfunction
    - ServePath (AJWI's collocation) will replace hardware and reconfigure software to get back up to speed within 1-5 business hours depending on which hardware malfunctioned and severity.
  - Level 2: Software Malfunction
    - 1-4 business hours during a business day. An afterhours software problem will be handled as soon as 1 hour or next business morning – depending on severity
- Priority 3 = System is malfunctioning in a way that is inconvenient; workaround is possible Tech Support hours of operation are: 8:30am to 5pm.
  - Level 1: System is slow
    - System is slow but no data loss. 1-5 Hours depending on tech support priorities.
  - Level 2: Certain functions/pages are not working
    - Certain functions/pages are not working but there is an alternative to get work done. 1-5 Hours – depending on tech support priorities.
- Priority 4 = Cosmetic fix requested or an enhancement
  - There will be a periodic review of the system where new enhancements and schedule for rollout can be determined.



### Draft Vendor O&M Phase Staffing Plan

Please see more details about each staff person in the staffing section Draft Staffing Plan above.

Project Supervisor – Jeannine Schumm Account Manager – Ronnie Cho Lead programmer – Ismael Rizo Secondary programmers (1) – To be assigned IT Manager – Vinay Patel Desk Help (2 one on West Coast, one on the East Coast) – Diana Li in California and Pamela Stockwell in New York Training staff – To be assigned as needed by training schedule