STATE OF HAWAII
DEPARTMENT OF HEALTH
DISEASE OUTBREAK CONTROL DIVISION
IMMUNIZATION BRANCH

LEGAL AD DATE: March 29, 2024

REQUEST FOR PROPOSALS
RFP No. HTH131-2024-01

IMMUNIZATION INFORMATION SYSTEM
MODERNIZATION

WILL BE RECEIVED UP TO 4:00 P.M. (HST) ON

APRIL 29, 2024

BY SUBMISSION TO THE STATE OF HAWAII'S
ePROCUREMENT SYSTEM ("HIePRO")

Note: *It is the Offeror's responsibility to check the Hawaii Awards and Notices Data System website ("HANDS") or the STATE's eProcurement website ("HIePRO") for any addenda issued to this RFP. The State shall not be responsible for any incomplete proposal submitted as a result of missing addenda, attachments or other information regarding the RFP.*

REQUEST FOR PROPOSALS

IMMUNIZATION INFORMATION SYSTEM MODERNIZATION
RFP No. HTH131-2024-01

The State of Hawaii Department of Health (“DOH”) is requesting proposals from qualified vendors to implement a new Immunization Information System (“IIS”.) Currently, Hawaii has an outdated IIS that is not compliant with current Centers for Disease Control and Prevention ("CDC") or industry standards and does not provide all required and desired functionality. The current IIS, Hawaii Immunization Registry ("HIR,") is a 24-hours a day, 7-days a week system that shares individual immunization data between authorized healthcare providers and public health. Public health uses this data to inform vaccination strategies which protect Hawai'i residents against vaccine preventable diseases. There is an IIS implemented in every state and territory and is essential to CDC federal grants received by Hawai'i's Immunization Branch. The initial contract term is expected to be from June 3, 2024, through June 2, 2026.

Proposals shall be submitted via HIePRO on or before the deadline listed on the solicitation. Proposals submitted after the submittal deadline shall be considered late and rejected. There are no exceptions to this requirement.

The deadline for submission of questions is 2:00 p.m., HST, on April 8, 2024. All questions shall be submitted through HIePRO. Questions not submitted via HIePRO will not be answered.

Any inquiries and requests regarding this RFP should be directed to Amber L. Wright, telephone: (808) 466-3686, e-mail: amber.wright@doh.hawaii.gov.

RFP Table of Contents

Section 1 Administrative Overview

Section 2 - Service Specifications: General Requirements

Section 3 - Service Specifications: Project Management Requirements

Section 4 – Service Specifications: DDI Requirements

Section 5 - Service Specifications: M&O and Enhancement Requirements

Section 6 – Scope of Work

Section 7 - Proposal Submission Instructions

Section 8 – Proposal Evaluation

Section 9 – Attachments

Section 1
Administrative Overview

Section 1
Administrative Overview

Offerors are encouraged to read each section of the RFP thoroughly. While sections such as the administrative overview may appear similar among RFPs, state purchasing agencies may add additional information as applicable. It is the responsibility of the Offeror to understand the requirements of *each* RFP.

1.1 Procurement Timetable

Note that the procurement timetable represents the State's best estimated schedule. If an activity on this schedule is delayed, the rest of the schedule will likely be shifted by the same number of days. Contract start dates may be subject to the issuance of a notice to proceed.

Activity	Expected Date
Public notice announcing Request for Proposals & RFP distribution	3/29/2024
Closing date for submission of written questions	4/8/2024 2:00 P.M. HST
State purchasing agency's response to Offeror's written questions	4/12/2024 4:00 P.M. HST
Proposal submittal deadline	4/29/2024
Proposal evaluation period	4/29/2024 - 5/12/2024
Best-and-final offer (BAFO) revised proposals (if needed)	As needed
Provider selection and posted notice of award	5/12/2024 - 5/18/2024
Contract start date	6/3/2024

1.2 Website References

	Item	Website
1	Procurement of Goods, Services, & Construction	https://spo.hawaii.gov/for-vendors/vendor-guide/methods-of-procurement/goods-services-construction/competitive-sealed-proposals-procurement-method/
2	RFP website	https://hiepro.ehawaii.gov/welcome.html?redirectContext=welcome.html
3	Hawaii Revised Statutes (HRS) and Hawaii Administrative Rules (HAR) for Competitive Sealed Proposals	https://www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/hrs0103D/HRS_0103D-.htm; https://spo.hawaii.gov/references/har/goods/
4	General Conditions, AG-103D	https://spo.hawaii.gov/wp-content/uploads/2014/02/103D-General-Conditions.pdf
5	Forms	https://spo.hawaii.gov/all-forms/
6	Cost Principles	http://spo.hawaii.gov Search: Keywords "Cost Principles"
7	Protest Forms/Procedures	https://spo.hawaii.gov/for-vendors/vendor-guide/protests-for-goods-services-construction/
8	Hawaii Compliance Express (HCE)	http://spo.hawaii.gov/hce/
9	Hawaii Revised Statutes	http://capitol.hawaii.gov/hrscurrent
10	Department of Taxation	http://tax.hawaii.gov
11	Department of Labor and Industrial Relations	http://labor.hawaii.gov
12	Department of Commerce and Consumer Affairs, Business Registration	https://cca.hawaii.gov/breg/
13	Campaign Spending Commission	http://ags.hawaii.gov/campaign/
14	Internal Revenue Service	http://www.irs.gov/
(Please note: website addresses may change from time to time. If a State link is not active, try the State of Hawaii website at http://hawaii.gov)		

1.3 Authority

This RFP is issued under the provisions of the Hawaii Revised Statutes ("HRS") Chapter 103D and its administrative rules, Hawaii Administrative Rules ("HAR") Chapters 3-120 to 3-132. All prospective Offerors are charged with presumptive knowledge of all requirements of the cited authorities. Submission of a valid executed proposal by any prospective Offeror shall constitute admission of such knowledge on the part of such prospective Offeror.

1.4 RFP Organization

This RFP is organized into nine sections:

Section 1, Administrative Overview: Provides Offerors with an overview of the procurement process.

Section 2, Service Specifications - General Requirements: Provides Offerors with a background and general description of the tasks to be performed, delineates Contractor responsibilities, and defines deliverables (as applicable).

Section 3, Service Specifications - Project Management Requirements: Provides Offerors with detailed project management requirements.

Section 4, Service Specifications – DDI Requirements: Provides Offerors with design, development, and implementation guidelines and requirements.

Section 5, Service Specifications - M&O and Enhancement Requirements: Identifies maintenance and operations support requirements for the implemented IIS.

Section 6, Scope of Work: Outlines system requirements, interoperability, data exchange, and implementation requirements, system maintenance and enhancement requirements, management requirements, and compensation and payment information.

Section 7, Proposal Submission Instructions: Describes the required format and content for the proposal submission.

Section 8, Proposal Evaluation: Describes how proposals will be evaluated by the state purchasing agency.

***Section 9, Attachments*:** Provides Offerors with information and forms necessary to complete the submission.

1.5 Contracting Office

The Contracting Office is responsible for overseeing the contract(s) resulting from this RFP, including system operations, fiscal agent operations, and monitoring and assessing provider performance. The Contracting Office is:

Department of Health
Disease Outbreak Control Division
Immunization Branch
1250 Punchbowl Street
Honolulu, Hawaii 96813

1.6 RFP Point-of-Contact

From the release date of this RFP until the selection of the successful Offeror, any inquiries and requests shall be directed to the sole point-of-contact identified below.

Amber L. Wright
Procurement Officer
Telephone: (808) 466-3686
Email: Amber.wright@doh.hawaii.gov

1.7 Submission of Questions

Offerors may submit questions to the RFP solicitation Q&A section. Written questions should be received by the date and time specified in Section 1.1, Procurement Timetable. The purchasing agency will respond to written questions to the RFP, as indicated in the subsection 1.1, Procurement Timetable.

1.8 Submission of Proposals

A. Forms/Formats - Forms, with the exception of program specific requirements, may be found on the State Procurement Office website referred to in Section 1.2, Website Reference.

1. **Proposal Identification Form (Form OF-1)**. Provides Offeror proposal identification. Form OF-1 is attached hereto as Attachment A.

2. **Proposal Submission Checklist**. The checklist provides Offerors specific program requirements, reference and location of required RFP proposal forms, and the order in which all proposal components should be collated and submitted to the state purchasing agency. Proposal Submission Checklist is attached hereto as Attachment B.

3. **Table of Contents**. The table of contents may vary depending on the RFP. A sample Table of Contents is attached hereto as Attachment C

4. **Proposal Offer Form (Form OF-2)**. Offeror shall submit a comprehensive cost/proposal budget to successfully deliver services required in this RFP. Form OF-2 is attached hereto as Attachment D.

5. **Completed IIS RTM**. Offeror shall submit a completed RTM, attached hereto as Attachment E.

6. **Reference Form**. Offeror shall submit a completed reference form as required by this RFP. Reference form is attached hereto as Attachment F.

B. Program Specific Requirements. Program specific requirements are included in Sections 2, 3, 4, 5, and 6 as applicable. Required Federal and/or State certifications are listed on the Proposal Submission Checklist.

C. Multiple or Alternate Proposals. Multiple or alternate proposals shall not be accepted unless specifically provided for in Section 2.

D. Offeror Compliance. All Offerors shall comply with all laws governing entities doing business in the State. The Offeror must be compliant at the time of award, or they shall be disqualified.

1. Tax Clearance. Pursuant to HRS §103-53, as a prerequisite to entering into contracts of $25,000 or more, providers are required to have a tax clearance from the Hawaii State Department of Taxation ("DOTAX") and the Internal Revenue Service ("IRS"). Refer to Section 1.2, Website Reference for DOTAX and IRS website address.

2. Labor Law Compliance. Pursuant to HRS §103-55, Offerors shall be in compliance with all applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety. Refer to Section 1.2, Website Reference for the Department of Labor and Industrial Relations ("DLIR") website address.

3. Business Registration. Prior to contracting, owners of all forms of business doing business in the state except sole proprietorships, charitable organizations, unincorporated associations and foreign insurance companies shall be registered and in good standing with the Department of Commerce and Consumer Affairs ("DCCA"), Business Registration Division. Foreign insurance companies must register with DCCA, Insurance Division. More information is on the DCCA website. Refer to Section 1.2, Website Reference for DCCA website address.

4. Offerors may register with Hawaii Compliance Express ("HCE") for online compliance verification from the DOTAX, IRS, DLIR, and DCCA. There is an annual registration fee (currently $12) for the service. The HCE's online "Certificate of Vendor Compliance" provides the registered offeror's current compliance status as of the issuance date and is accepted for both contracting and final payment purposes. Refer to Section 1.2, Website Reference, for HCE's website address.

5. Offerors not utilizing the HCE to demonstrate compliance shall provide paper certificates to the purchasing agency. All applications for applicable

clearances are the responsibility of the providers. All certificates must be valid on the date it is received by the purchasing agency. The tax clearance certificate shall have an original green certified copy stamp and shall be valid for six months from the most recent approval stamp date on the certificate. The DLIR certificate is valid for six months from the date of issue. The DCCA certificate of good standing is valid for six months from date of issue.

E. Wages Law Compliance. If applicable, by submitting a proposal, the offeror certifies that the offeror is in compliance with HRS §103-55, Wages, hours, and working conditions of employees of contractors performing services. Refer to Section 1.2, Website Reference for statutes and DLIR website address.

F. Campaign Contributions by State and County Contractors. HRS § 11-355 prohibits campaign contributions from certain State or county government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. Refer to Section 1.2, Website Reference for statutes and Campaign Spending Commission website address.

G. Confidential Information. If an offeror believes any portion of a proposal contains information that should be withheld as confidential, the offeror shall request in writing nondisclosure of designated proprietary data to be confidential and provide justification to support confidentiality. Such data shall accompany the proposal, be clearly marked, and shall be readily separable from the proposal to facilitate eventual public inspection of the non-confidential sections of the proposal.

Note that price is not considered confidential and will not be withheld.

H. Proposal Submittal. The State has established the Hawaii State eProcurement (HIEPRO) System to promote an open and transparent system for vendors to compete for State contracts electronically. Offerors interested in responding to this solicitation must be registered on HIEPRO. Registration information is available at the State Procurement Office website: http://spo.hawaii.gov/HIEPRO/; select HIEPRO Vendor Registration and then select HIEPRO Vendor Registration Guide.

All proposals shall be submitted via HIePRO at the date and time indicated in the solicitation, and in strict accordance with the instructions herein. The RFP Process, including issuance of the RFP, submission of Proposals, issuance of Addenda, and changes to the Procurement Timetable in Section 1.1 shall be conducted through HIEPRO. The State shall not be responsible for the failure of any Offeror to receive the RFP Process information.

The Contractor shall be subject to a one-time mandatory HIEPRO fee of .75% (.0075) of the award amount or $5,000, whichever is less. HIEPRO is administered by Tyler Technologies, Inc. Tyler Technologies, Inc. shall invoice the Contractor directly for payment of the HIEPRO fee. Payment must be made within thirty (30) days from receipt of invoice.

1.9 Discussions

A. Prior to Submittal Deadline. Discussions may be conducted with potential offerors to promote understanding of the purchasing agency's requirements.

B. After Proposal Submittal Deadline. Discussions may be conducted with offerors whose proposals are determined to be reasonably susceptible of being selected for award, but proposals may be accepted without discussions, in accordance with HAR §3-122-53.

1.10 HIePRO Special Instructions

Offeror shall view all special instructions located in HIePRO. Offerors are responsible for ensuring that all necessary files are attached to their proposal prior to the proposal deadline.

The maximum file size that HIEPRO can accept is 100MB. Files larger than 100MB must be reduced into two or more files.

Offerors must carefully examine this RFP, all addenda, required contract forms, and other documents, laws, and rules, as necessary, before submitting a proposal. The submission of a proposal shall be considered to be a warranty and representation that the Offeror has made a careful examination of the RFP and understands the work and the requirements of this RFP. Each qualified Offeror may submit only one (1) proposal.

Proposals must be detailed and concise. Each Proposal must be labeled and organized in a manner that is congruent with the requirements and terminology used in this RFP and must include a point by point response, structured in form and reference to the RFP, addressing all requirements and the Scope of Work elements.

The Offeror's proposal, including **all** of its required submission types as noted above, must be received through HIEPRO no later than the closing date and time specified for the receipt of proposals as specified in Section 1.1 Procurement Timetable. Any proposal received outside of HIEPRO, including faxed, emailed, or handwritten proposals, will not be considered.

1.11 Additional Materials and Documentation

Upon request from the state purchasing agency, each Offeror shall submit additional materials and documentation reasonably required by the state purchasing agency in its evaluation of the proposals.

1.12 RFP Amendments

The State reserves the right to amend this RFP at any time prior to the closing date for final revised proposals.

1.13 Best and Final Offer

DOH, in its sole discretion, may request each Priority Listed Offeror to submit its Best and Final Offer ("BAFO"). The request shall be issued in an Addendum which will provide guidance and additional instructions. BAFOs shall be submitted to the DOH RFP Contact Person via HIEPRO on or before the deadline provided in Section 1.1 Procurement Timetable. If a Priority Listed Offeror fails to submit a BAFO, its last submitted offer shall be deemed to be its BAFO. Procurement files shall be open to public inspection after a contract has been awarded and executed by all parties.

1.14 Cancellation of Request for Proposal

The RFP may be canceled and any or all proposals may be rejected in whole or in part, when it is determined to be in the best interest of the State pursuant to HAR §3-122-96 thru HAR §3-122-97.

1.15 Costs for Proposal Preparation

Expenses for the development and submission of proposals and other responses to the RFP are the sole responsibility of the Offeror whether or not any award results from this RFP. Travel and expenses to and from the State, outside of an award, are also the responsibility of the Offeror.

1.16 Rejection of Proposals

The State reserves the right to consider as acceptable only those proposals submitted in accordance with all requirements set forth in this RFP and which demonstrate an understanding of the problems involved and comply with the service specifications. Any proposal offering any other set of terms and conditions contradictory to those included in this RFP may be rejected without further notice.

A proposal may be rejected as authorized under HAR § 3-122 Subchapter 11.

1.17 Notice of Award

A Notice of Award of the Contract shall be made to the responsible Offeror whose Proposal is determined the most advantageous to the State, taking into consideration all the evaluation factors set forth in this RFP.

The Notice of Award shall be made available in HIePRO. Failure by the chosen vendor to accept the award within five days of the Notice of Award will be deemed a rejection of the award.

Any agreement arising out of this solicitation is subject to the approval of the Department of the Attorney General as to form, and to all further approvals, including the approval of the Governor, required by statute, regulation, rule, order or other directive.

1.18 Protests

Pursuant to HRS §103D-701 and HAR Chapter 3-126, an Offeror aggrieved by an award of a contract may file a protest. Refer to Section 1.2, Website Reference for website address. Only the following matters may be protested:

(1) A state purchasing agency's failure to follow procedures established by Chapter 103D of the Hawaii Revised Statutes;

(2) A state purchasing agency's failure to follow any rule established by Chapter 103D of the Hawaii Revised Statutes; and

(3) A state purchasing agency's failure to follow any procedure, requirement, or evaluation criterion in a request for proposals issued by the state purchasing agency.

Any protest shall be submitted in writing to the Procurement Officer identified in HIePRO, addressed to:

Amber L. Wright
Procurement Officer
Department of Health, Disease Outbreak Control Division
1000 Bishop Street, Suite 200
Honolulu, Hawaii 96813

1.19 Availability of Funds

The award of a contract and any allowed renewal or extension thereof, is subject to allotments made by the Director of Finance, State of Hawaii, pursuant to HRS Chapter 37, and in accordance with §103D-309, HRS, and subject to the availability of State and Federal funds.

1.20 General and Special Conditions of Contract

If an award is accepted, the successful OFFEROR will be required to enter into a formal written contract with the State. The Contract shall include or be deemed to incorporate this RFP, the Contractor's Proposal or BAFO, State AG General Conditions set forth in Attachment G, Special Conditions set forth in Attachment H, and any other terms as may be agreed to by the State and the Contractor. To the extent that the RFP and the successful proposal conflict, the terms of the RFP shall govern. By submitting a proposal, the Offeror certifies that they have read and agree to all General Conditions and Special Conditions attached hereto.

1.21 Cost Principles

To promote uniform purchasing practices among state purchasing agencies procuring goods, services, and construction under HRS Chapter 103D, state purchasing agencies will utilize standard cost principles as outlined on the SPO website. Refer to Section 1.2 Website Reference for website address. Nothing in this section shall be construed to create an exemption from any cost principle arising under federal law.

1.22 Contract Execution

The successful Offeror shall enter into a formal written contract with the State. In submitting a proposal, the Offeror will be deemed to have agreed to each provision set forth in Attachment G, General Conditions, Attachment H, Special Conditions, and Attachment I, Contract Form. The State shall have no obligation to accept terms and conditions that vary from those set forth in the aforementioned attachments.

Upon selection and award of the contract, the State shall send the formal contract to the successful Offeror via an electronic signature process. The State reserves the right to cancel any contract and request new proposals or negotiate with remaining Offerors if the State is not satisfied with the awarded Contractor's performance.

No work is to be undertaken by the Offeror awarded a contract prior to the contract commencement date. The State of Hawaii is not liable for any costs incurred prior to the official starting date.

No contract shall be considered binding upon the State until the contract has been fully and properly executed by all parties thereto.

1.23 Terms and Acronyms Used Throughout the Solicitation

AART	= Aggregate Analysis Reporting Tool
AIRA	= American Immunization Registry Association
ACIP	= Advisory Committee on Immunization Practices
AG	= Department of the Attorney General
BAFO	= Best and Final Offer
BREG	= State of Hawaii Department of Commerce and Consumer Affairs Business Registration Division
COGS	= Certificate of Good Standing
CA	= Contract Administrator
CDC	= Centers for Disease Control and Prevention
CDSi	= Clinical Decision Support for Immunization
COI	= Certificate of Insurance
COTS	= Commercial-off-the-shelf system
CVC	= Hawaii Compliance Express Certificate of Vendor Compliance

DCCA	= Department of Commerce and Consumer Affairs
DDI	= Design, Development, and Implementation
DLIR	= State of Hawaii Department of Labor and Industrial Relations
DOD	= Department of Defense
DOH	= Hawaii Department of Health
DOTAX	= Hawaii State Department of Taxation
EHR	= Electronic Health Record
GC	= General Conditions, issued by the Department of the Attorney General
GET	= General Excise Tax
GP	= General Provisions
HAR	= Hawaii Administrative Rules
HCE	= Hawaii Compliance Express
HDOH	= Hawaii Department of Health
HIPAA	= Health Insurance Portability and Accountability Act (1996)
HIR	= Hawaii Immunization Registry
HST	= Hawaii Standard Time
HL7	= Health Level 7
HRS	= Hawaii Revised Statutes
HOPA	= Head of Purchasing Agency
IMB	= Hawaii Department of Health's Immunization Branch
IIS	= Immunization Information System
IRS	= Internal Revenue Service
IT	= Information Technology
MIROW	= Modeling of Immunization Registry Operations Workgroup
M&O	= Maintenance and Operations support
MS	=Microsoft
Offeror	= Any individual, partnership, firm, corporation, joint venture, or other entity submitting directly or through a duly authorized representative or agent, a bid for the good, service, or construction contemplated
OCM	= Organizational Change Management
OIP	= Office of Information Practices
PPC	= Pre-Proposal Conference
HANDS	= Hawaii Awards & Notices Data System
PO	= The Procurement Officer who is the contracting officer for the

	State of Hawaii, Department of Health, Disease Outbreak Control Division, Immunization Branch
QA/QC	= Quality Assurance/Quality Control
RSV	= Respiratory Syncytial Virus
RTM	= Requirements Traceability Matrix
RFP	= Request for Proposals
SaaS	= Software-as-a-Service, cloud hosted solution
SC	= Special Conditions
SDLC	= Systems Development Life Cycle
SPO	= State Procurement Office, State of Hawaii
State	= State of Hawaii, Department of Health, Disease Outbreak Control Division, Immunization Branch
UAT	= User Acceptance Testing
VA	= United States Department of Veterans
VFC	= Vaccines for Children Program
VPD	= Vaccine Preventable Disease
WIR	= Wisconsin Immunization Registry

Section 2
Service Specifications: General Requirements

Section 2
Service Specifications: General Requirements

2.1 Introduction

A. Overview, history, purpose or need

IISs are confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area. At the *point of clinical care*, an IIS can provide consolidated immunization histories for use by a vaccination provider in determining appropriate client vaccinations. At the *population level*, an IIS provides aggregate data on vaccinations for use in surveillance and program operations, and in guiding public health action with the goals of improving vaccination rates and reducing vaccine-preventable disease.

The State is soliciting proposals to provide a COTS IIS system for Hawai'i as implemented in a minimum of three (3) US jurisdiction providing all CDC IIS Functional Standards v4.1 to replace the current HIR. The Offeror and IIS solution must provide interoperability, technical and user support, data quality, training and education services, and system support for this statewide IIS. Data would need to be transferred from the legacy IIS, HIR cloud environment to a new SaaS cloud-based environment accessed by the new system

HIR development began in December 2007. The system was designed to conform to all the Immunization Registry Functional Standards as outlined by the CDC. The software used by HIR was developed by the State of Wisconsin and enhanced by the State of New York. This system is referred to as a WIR-based system. The State of Hawaii further enhanced the WIR-based system and currently participates in a national consortium of IIS users that utilize the WIR-based system. The current HIR serves over 220 VFC providers for routine public vaccine ordering, supports over 600 HL7 connections from various healthcare provider EHRs, and an additional 350 providers who manually enter data into HIR via web portal. There are almost 350 schools that utilize HIR, ensuring that their patient population is protected against vaccine preventable diseases. HIR also contains the majority of Hawai'i's population in its patient vaccine database.

B. Planning activities conducted in preparation for this RFP

Multiple planning activities occurred in the preparation of this RFP. Information was gathered from subject matter experts such as CDC and AIRA as well as from other jurisdictions. IT approval has been obtained and demos of a few different

vendors have been shown. A request for interest was issued via HANDS on February 21, 2024 to obtain a list of potential and interested vendors.

C. Description of the service goals

The Hawai'i Immunization Branch was authorized to create an IIS as a single statewide repository of immunization records to aid, coordinate and help promote efficient and cost-effective screening, prevention, and control of vaccine-preventable disease. The IIS is required for federal funding that supports the VFC activities. The overall service goal is to establish a cost-effective, CDC compliant IIS, that can engage healthcare providers statewide to provide and share vaccine information as well as order and account for vaccine inventory. This system would be accessed by authorized healthcare providers (to share individual patient vaccine administration amongst themselves), schools (to be able to determine vaccination rates), and the state of Hawai'i (to make strategic immunization decisions to protect the general population).

D. Description of the target population to be served

The target population served is potentially every person residing in the State of Hawaii allowing for their immunization information to stored. Healthcare providers will be the primary users of the system, transferring this data either manually or electronically (HL7 message) from the EHRs. EHR vendors, schools and other state agencies will be engaged for this project. Vaccine information will be gathered from mobile vaccine clinics, other CDC Immunization Awardees along with other branches of government (such as DOD and VA). Vaccine information will be shared through CDC's IZ Gateway with CDC and other jurisdictions along with other branches of government (such as DOD and VA). Vaccine information will be reported to CDC, and other government institutions.

E. Geographic coverage of service

Coverage of service is for the State of Hawaii. The Offeror is not required to have a physical presence in the State; however, in-person meetings may take place in Hawaii as required. The Offeror must be US based and registered and licensed to do business in the state of Hawaii.

F. Probable funding amounts, source, and period of availability

The DOH has budgeted approximately two million dollars ($2,000,000.00) for implementation over a twelve (12) month period and less than one million dollars ($1,000,000.00) in recurring costs, annually, for enhancements, operations and maintenance, as general expectations for this system and support. The contract is anticipated to be federally funded for an initial two-year contract period, with up to four (4) additional one-year optional extensions for a maximum six (6) year term (subject to availability of federal and/or state funding). The IIS project funds

are subject to federal and state funding availability. Hawaii would like to leverage GSA pricing to the extent possible.

G. Multiple or alternate proposals
(Refer to HAR §3-122-4)

☐ Allowed ☒ Unallowed

H. Single or multiple contracts to be awarded
(Refer to HAR §3-122-145)

☒ Single ☐ Multiple ☐ Single & Multiple

I. Single or multi-term contracts to be awarded
(Refer to HAR §3-122-149)

☐ Single term (2 years or less) ☒ Multi-term (more than 2 years)

Initial term of contract: Two (2) year initial contract
Length of each extension: One (1) year
Number of possible extensions: Four (4)
Maximum length of contract: Six (6) years

The initial period shall commence on the contract start date or Notice to Proceed, whichever is later.

Conditions for extension: After the initial contract period, both parties may mutually agree to extend the contract in one (1) year increments. Mutual agreement must be in writing and must take place prior to the expiration of the contract.

2.2 General Requirements

A. Specific qualifications or requirements, including but not limited to licensure or accreditation

1. The Offeror's system needs to be a COTS implemented system in at least three (3) US jurisdiction providing all CDC IIS Functional Standards v4.1. The Offeror must have been in business for at least 5 (five) years or more. Personnel need to meet the requirements listed below and described in detail in the Offeror's the Personnel Management Plan and key personnel must have their qualifications listed. Offerors should participate at a

national level with the appropriate IIS workgroups (for example CDC, AIRA, MIROW guidelines).

2. The Offeror shall submit at least three (3) references from separate jurisdictions where similar IIS systems have been successfully implemented. The reference form is attached hereto as Attachment F.

B. Technical Requirements

1. Collaborative Workspace Tools:

   The Offeror must use the DOH's web-based collaborative workspace, Microsoft ("MS") SharePoint, which will serve as a central project repository and contain all scopes of work submitted by the Offeror and all artifacts not otherwise stored in the ALM or SCM (e.g., work products, meeting minutes, status reports, schedules, draft documents, spreadsheets, calendar events, and task lists). The Offeror must document the approaches, processes, security, and roles and responsibilities related to use of the DOH's instance of MS SharePoint, along with its format, organizational structure, and user roles, and access rights in the Project Management Plan.

   The Offeror must use and maintain the collaborative workspace to perform both DDI and M&O tasks. The Offeror must ensure that the DOH's project team members retain access to the collaborative workspace. The Offeror must train the DOH's project team members on the use and functionality of the collaborative workspace, that must contain all project documents.

2. Supporting Tools requirements – Systems Development Life Cycle Tools:

   The Offeror must use industry standard tools to support the SDLC. The DOH expects that the Offeror will use, wherever possible, the tools the DOH currently uses. SDLC tools include, but are not limited to:

   a. Application Lifecycle Management ("ALM") toolset to support all DDI and M&O tasks and services. This must include requirements management tools to document each of the detailed requirements, any changes that adjust or expand each detailed requirement, and the IIS components required to implement each detailed requirement. Currently the DOH uses MS Azure DevOps Server for ALM. The Offeror is expected to load all RTM items into this DevOps instance and track all requirements and associated development work in the tool. The DOH expects that the Offeror will leverage an existing DOH instance of this tool for ALM. This is a predecessor element to beginning the discovery and design

process for the IIS activities. The Offeror and the DOH will use this ALM toolset to:

i. Track and provide the status of each requirement from definition through acceptance;
ii. Track test cases and test results linked to specific requirements;
iii. Track well-formed user stories in accordance with an agreed-upon template, method, and/or format; and
iv. Track known defects and defect statuses linked to specific requirements. The Offeror must document the approach, processes, and roles and responsibilities related to use of ALM tools in the Project Management Plan.

b. Ticket tracking tool to support user entry and monitoring of IIS defects and other identified IIS problems; the DOH is currently using an MS Dynamics-based help desk ticket tracking tool for user-reported problems, and the ALM tool for defect tracking and management.
c. Source Code Management ("SCM") tool to store and manage multiple versions of computer programs and files. Together, the ALM and SCM must contain the source code and technical documentation. The DOH prefers to use MS Azure DevOps Server for SCM. The DOH expects the Offeror to document the approach, processes, and roles and responsibilities related to use of the SCM tool in the Software Development Guide. An SCM in a format acceptable to the DOH must be provided for source code.
d. Database Management System ("DBMS") to manage IIS databases. The Offeror must leverage the DBMS for data retrieval, management, modification, and creation. Use of DBMS must be documented in the Configuration Management Plan.
e. Automated testing tools to execute test cases automatically and produce test results without any human intervention. Automated test tools must help ensure a new build or change does not affect previously working functionality. The Offeror must document the approach, processes, and roles and responsibilities related to use of automated testing tools in the Test Plan.
f. Configuration management tools to accurately manage configurations, configuration dependencies, and configuration changes, and automate deployments during the design, development, and testing phases of the project. The configuration management tool must control changes made to hardware, software, firmware, and documentation throughout the solution life cycle.

The Offeror must use and maintain the DOH-provisioned and licensed SDLC tools to perform DDI and M&O tasks. The Offeror must ensure the DOH's project team retains full access to all SDLC tools used. The Offeror

must train the DOH's project team members on the use and functionality of the SDLC tools.

Section 3
Service Specifications: Project Management Requirements

3.1 Project Management Requirements:

A. Methodology: The Offeror must provide separately identified key personnel to provide project management for the IIS project. The Offeror must develop, maintain, and execute a project management methodology that complies with the most current edition of "Guide to the Project Management Body of Knowledge" (PMBOK® Guide) standards and processes from the Project Management Institute® (PMI®). The Offeror must develop and provide the DOH with a detailed ***Project Management Plan (D1)*** describing the Offeror's overall methodology for providing project management services for the IIS project. At a minimum, the Project Management Plan must include the following subsidiary sections and subplans:
    1. Project Background and Objectives;
    2. Project Staffing Plan and Team Structure;
    3. Project Governance and Decision Making;
    4. Scope Management Plan;
    5. Schedule Management Plan;
    6. Budget Management Plan;
    7. Risk and Issue Management Plan;
    8. Action Item Management Plan;
    9. Change Control Plan;
    10. Quality Management Plan;
    11. Communications Management Plan;
    12. Requirements Management Plan; and
    13. Project Work and Milestones.

B. The Offeror must monitor project risks, issues, decisions, action items, and change requests, and maintain up-to-date logs for each throughout the project. In addition, the Offeror must maintain the Project Management Plan and update at least monthly or more as necessary to accurately reflect changes that occur over the course of the project.

3.2 Project Work Plan:

A. The Offeror must produce a detailed ***DDI Project Work Plan (D2)*** and ***M&O Project Work Plan (O2)*** in MS Project or similar software, including a Gantt chart, based on project scope of work and milestones. The schedule will include tasks, dependencies between tasks, start and completion dates for each task, associated resources, and project milestones. The Project Work Plan will include both high-level (rolled up) and detailed tasks to lead to project completion (e.g., a work breakdown structure), as well as the Offeror's planned on-site dates. The Project Work Plan must contain appropriate version control to establish the initial baseline and changed versions. Project Work Plan updates must include the original baseline, as well as the current start and finish dates and the percentage completed for the activities. The Offeror must provide a rationale for changes to

the baseline, and the DOH or its designee must approve changes using the formal change control process. The Offeror must maintain the Project Work Plan throughout the life of the project and update it as necessary (monthly at a minimum) to accurately reflect the status of the project. These documents must be maintained and shared weekly with the DOH on the MS SharePoint.

3.3 Project Kickoff:

A. The Offeror must provide a ***Kickoff Presentation (D3)*** that includes the following:
    1. Offeror key personnel introductions;
    2. Roles and responsibilities;
    3. High-level overview of the Project Work Plan;
    4. Overview of the project methodology and project management controls;
    5. Detailed description of the activities occurring over the next eight (8) weeks;
    6. Potential project risks, issues, constraints, and roadblocks;
    7. Expectations and task assignments for the DOH staff; and
    8. Next steps.

B. The Offeror must prepare an agenda, a presentation in MS PowerPoint (or similar format), and supporting materials (as necessary), and must distribute all materials to attendees at least two (2) days prior to the meeting. The Offeror must take minutes and distribute to attendees within two (2) business days after the meeting.

3.4 Weekly Project Status Reports:

A. The Offeror must provide written weekly ***Project Status Reports (D4)*** delivered to the DOH by the date and time mutually agreed upon by the Offeror and the DOH during project initiation. Weekly Project Status Reports must include, but not be limited to, the following:
    1. Overall project completion status in terms of the DOH-accepted Project Work Plan;
    2. Accomplishments completed during the reporting period;
    3. Activities in progress, and percentage complete and planned;
    4. Issues encountered and proposed/actual resolutions;
    5. Planned activities for the upcoming reporting period;
    6. Updated Project Work Plan showing percentage completed for each task;
    7. Critical path schedule slippage and strategy for resolution;
    8. Decisions and action items that the Offeror is waiting on to complete required activities;
    9. Risks and proposed mitigation strategies;

10. QA status;
11. Change management status;
12. Offeror staff assignment and availability changes; and
13. DOH resources required for activities in the upcoming reporting period.

B. The Offeror must facilitate project status meetings with the DOH project team. The Offeror and the DOH will hold the status meetings in conjunction with the delivery of written status reports. Attendance may be in person or via teleconference as agreed upon with the DOH. Project status meetings must follow an agenda mutually developed by the Offeror and the DOH. The agenda may include but is not limited to review and discussion of:
    1. Previous meeting minutes (including approval);
    2. Project status, including:
        a. Accomplishments;
        b. Off-schedule activities and plans for resolving off-schedule activities; and
        c. Upcoming activities and resource requirements.
    3. Action items closed since the last reporting period, including resolutions;
    4. New, in-progress, and past-due action items;
    5. Project risks and issues logs, including status of outstanding issues and their resolution;
    6. QA status;
    7. Change management status;
    8. Next meeting date; and
    9. Other issues or topics that either the Offeror or the DOH wish to add to the agenda.

C. The Offeror must take minutes and distribute to meeting participants via email and post on MS SharePoint within two (2) business days after the meeting.

3.5 Steering Committee Project Status Updates:

A. The Offeror must prepare monthly ***Project Status Updates (D5***) for the IIS Steering Committee, delivered to the DOH by the date and time mutually agreed upon by the Offeror and the DOH during project initiation. The primary purpose of the meeting is to review project progress and any issues affecting the project scope, schedule, budget, and quality, and to allow the Steering Committee to advise the project team on key project decisions.

B. The Offeror must prepare a presentation in MS PowerPoint (or similar format) and supporting materials (as necessary) and must distribute all materials to attendees at least two (2) days prior to the meeting.

3.6 Change Control Processes:

A. The Offeror must use the change control process managed by the Steering Committee and described in the Change Control Plan (a subsidiary of the Project Management Plan), to address requested changes in project scope, schedule, or budget. The Offeror and/or the DOH project team members must initiate change requests for review by the Steering Committee (which reviews and decides on the change requests) in compliance with the Change Control Plan. The change control process must provide a clearance process for resolving inconsistencies or incorporating refinements and scope changes to IIS and must document accepted changes.

3.7 Project Meeting Protocol:

A. The Offeror must follow the DOH's project meeting protocol for all formal meetings requiring an agenda, as follows:
    1. Each meeting must have a designated facilitator (or leader) and a note-taker.
    2. Meeting agendas must indicate invitees, topics, presenters, estimated time frames for each topic, and a review of outstanding tasks, as applicable, for recurring meetings.
    3. Each meeting must conclude with a review of new action items.

B. The Offeror must record and distribute brief meeting minutes to all attendees and other interested parties within forty-eight (48) hours, two (2) business days following the meeting. Meeting minutes must follow an Offeror-proposed standard format for DOH acceptance, including meeting time, place, purpose, attendees, discussion topics, decisions, and action items.

3.8 Activity and Artifact Management

A. The Offeror must develop activities and artifacts in the Scope of Work in accordance with established service-level agreements with established Service Level Agreements (SLA) as established in the Solution Architecture Document (D9) and the following requirements:
    1. Prior to beginning work on each activity or artifact, provide and obtain the DOH’s approval on an Activity Expectations Document (AED) describing the proposed activity or artifact format, content, and acceptance criteria (at a minimum).
    2. Submit activities and artifacts in the format and with the content as outlined in the appropriate AED and within the time frame agreed upon in advance with the DOH.

3. Proofread and perform quality review checks of all activities and artifacts prior to submission to the DOH for review; activities that do not meet this expectation may be rejected and returned to the Offeror for correction.
4. Submit activities and artifacts in the agreed-upon electronic format (e.g., MS Word, Project, Excel) to the designated DOH project manager(s) via the agreed-upon mechanism (e.g., uploading to MS SharePoint), as appropriate.
5. Accept notice of acceptance or rejection of the activity or artifact from the DOH.
6. Correct identified activities and artifacts deficiencies or nonconformities.
7. Resubmit activities and artifacts to the DOH for acceptance within the agreed-upon number of business days for the activities.

3.9 Coordination with Project Vendors

A. The Offeror must coordinate services with other project vendors, such as the Independent Verification and Validation vendor and/or project management vendor, should the DOH procure such services. Coordination includes, but is not limited to:
    1. Participating in meetings led by the vendors;
    2. Inviting participation of the vendors in meetings led by the Offeror;
    3. Sharing project information (e.g., project management documents, test cases, test results); and
    4. Contributing to documents developed by the vendors.

3.10 Organizational Change Management (OCM) Requirements

A. The Offeror must provide separately identified key personnel to provide OCM for the IIS project. The Offeror must develop, maintain, and execute an OCM methodology that complies with industry standards and best practices, such as those from Prosci®.

B. The Offeror must develop and provide the DOH with a detailed ***OCM Plan (D6)***. The OCM Plan must align with other project activities and timelines (e.g., the Communications Management Plan in the Project Management Plan and the Training Plan), and include at a minimum, the following subsidiary sections:
    1. OCM Methodology;
    2. OCM Roles and Responsibilities;
    3. Organizational Change Readiness Assessment Plan;
    4. Communications Plan;
    5. Coaching Plan;
    6. Resistance Management Plan;
    7. Change Champion Plan;
    8. Success Measures; and

9. Supporting Tools.

C. The Offeror must implement the approved OCM methodology and the OCM Plan subsidiary sections, in collaboration with the DOH, including performing periodic readiness assessments using tools such as web surveys, as appropriate. The Offeror must monitor the success of OCM efforts and update the OCM Plan as necessary over the course of the project to reflect changes needed to ensure stakeholder buy-in and readiness for implementation and ongoing use of IIS. The Offeror OCM Plan and associated activities are anticipated to begin in the discovery and design phase. Selected activities in the OCM Plan must carry through all phases of development and implementation.

Section 4
Service Specifications: DDI Requirements

4.1 Task 1: Requirements Analysis and IT Solution Design

A. Overview:
Task 1 consists of reviewing, validating, and refining the IT solution requirements (e.g., functional, technical, and interface) and finalizing the baseline IIS specifications in accordance with the DOH business requirements across divisions. The Offeror must combine all refined requirements identified during Task 1 into the baseline design. Additionally, the Offeror must use detailed requirements as the blueprint for all development, configuration, testing, and implementation activities.

B. Objective:
The objective of Task 1 is to create IIS requirements, architecture, design, and integration documents that describe the functional, technical, and interface requirements the Offeror must use to develop and configure IIS. Artifacts created through this task will form the baseline for the IIS design. The Offeror and the DOH will use the formal change control process outlined in the Project Management Plan for subsequent changes to the DOH-accepted baseline requirements.

C. DOH Responsibilities
The DOH's responsibilities for Task 1 include:

1. Provide an initial RTM for functional, technical, and interface requirements;
2. Provide a list of all known interfaces and current file exchange formats and design specifications if available;
3. Provide clarification on requirements, current technology infrastructure, integration points, and program business processes;
4. Respond to the Offeror's inquiries related to requirements, business rules, integration points, and program policies and procedures;
5. Review and approve the schedule and locations for JAD and Joint Technical Design (JTD) sessions;
6. Participate in design sessions and use case creation;
7. Schedule appropriate DOH program staff and subject matter experts to attend design sessions, and an associated DOH staffing plan;
8. Provide the Offeror with comments and revisions to documentation from JAD and JTD sessions;
9. Participate in IIS walkthrough sessions;
10. Provide policy, regulation, forms, and procedural reference materials and interpretations as needed; and
11. Review and approve work

D. Offeror's Responsibilities

Offeror's responsibilities for Task 1 include:

1. Understand and address information and analyses presented in other project artifacts (such as the RTM), the DOH processes, business requirements, data requirements, and integration points.
2. Develop an ***IIS Software Development Guide (D7)*** that describes how the Offeror will plan, design, develop, test, and deploy IIS. The guide must define the protocols and methodology that the Offeror will use when designing and developing IIS. The guide must include these items:
    a. Describe the Offeror's methods and process for using a systematic, documented approach for all project software development activities, addressing the following elements:
        i. Description of the software development and configuration methods that the Offeror must use on the project, including descriptions of manual and automated tools and procedures the Offeror must use in support of these methods; and
        ii. Description of the standards the Offeror will follow for design, development, configuration, and testing.
    b. Document the Offeror's processes for:
        i. Requirements collaboration;
        ii. Functional design;
        iii. Technical design;
        iv. Roadmap creation;
        v. Development and unit testing;
        vi. Code review/technical review;
        vii. Testing;
        viii. Documentation (internal and external);
        ix. Development of training materials; and
        x. Implementation and configuration management
    c. Document the Offeror's QA activities to ensure adherence to requirements from the IIS RTM and Solution Architecture Document, including:
        i. Program specifications;
        ii. File/database layouts and database names;
        iii. Program logic descriptions;
        iv. Use cases;
        v. State diagrams;
        vi. Sequence diagrams;
        vii. User interface and report layouts;
        viii. Application change specifications, in instances where the Offeror modifies IIS to meet requirements articulated in the IIS RTM;

ix. Changes in navigation, in instances where IIS achieves the desired results of the IIS RTM but in a manner that differs from the RTM description; and
x. Data validation and edit check rules and requirements.

d. Describe the Offeror's SCM tool, including:
   i. Summary of how source code integrity is effectively managed using chosen SCM;
   ii. Summary of SCM workflows;
   iii. Roles and responsibilities of Offeror staff member using SCM (An SCM in a format supplied by Offeror and subsequently deemed acceptable to the DOH will be provided for source code.)
e. Describe the functional and technical design standards, including but not limited to:
   i. Schema standards;
   ii. Coding conventions and standards; and
   iii. Naming conventions and data dictionary.
f. Identify and document the Offeror's team members responsible for QA and feedback on design documents for consistency and completeness.
g. Describe the unit test processes.
h. Identify existing standards the Offeror will employ. The Offeror must fully describe how the standards will be developed, by whom, and in what time frame. The Offeror must describe the standards the Offeror will apply in the following areas:
   i. Coding Conventions and Standards;
   ii. Internal documentation conventions and standards;
   iii. Object and module naming conventions and standards; and
   iv. Database naming conventions and standards.
i. Identify roles and responsibilities for data modeling and database management, including protocols for:
   i. Requesting database structure changes;
   ii. Analyzing database changes;
   iii. Implementing and communicating database changes; and
   iv. Managing data assets, "seed data," and test fixtures.
j. Identify how the Offeror will develop functional specifications;
k. Provide a template for technical specifications and along with a description of how the templates will be stored, and version-controlled in the technical documentation repository.

3. Develop a requirements refinement strategy in the Requirements Management Plan (a subsidiary section of the ***Project Management Plan [D1]***), documenting how the Offeror will identify new IIS requirements, review existing requirements, document and validate requirements,

analyze and refine the requirements, and adhere to industry standards for requirements management. The Requirements Management Plan must include the following content:

a. Methodology for the review and analysis of existing requirements;
b. Methodology for identifying and incorporating new requirements into design work and solution development tasks;
c. Methodology for refining requirements and incorporating feedback from the DOH;
d. Plan for creating, prioritizing, and updating a verified set of detailed requirements; and
e. Strategy and methods for maintaining traceability in all system documentation across project tasks and timelines.

4. Develop the development blueprint of the ***IIS RTM (D8)*** to include all functional, technical, and interface requirements IIS must meet. The Offeror will define requirements using various sources of input, including requirements identified in Attachment E, *DOH Drafted IIS RTM* provided by the DOH. The IIS RTM must show, to a relevant level of detail, the basis for each functional and technical feature of IIS. This deliverable must capture the detailed functional and technical requirements for IIS that are correct, complete, clear, consistent, verifiable, modifiable, and traceable.

5. Maintain the IIS RTM via the ALM tool throughout the implementation phases to ensure all entries conform to detailed requirements and maintain a clear correlation of the progress toward the established project goals and objectives. The Offeror will refine, expand, and complete requirements through JAD and JTD sessions and other forms of information collection identified in the Contract. As an outcome of design sessions, IIS may have changes dictated by the business needs and mandated by federal or State regulation. The Offeror must track any changes to IIS and integrate these changes into the IIS RTM.

6. Provide a requirements management tool as part of the ALM toolset, with access provided to designated DOH staff. The requirements management tool must:

a. Document each of the detailed requirements, any changes that adjust or expand each detailed requirement, and the IIS component(s) required to implement each detailed requirement;
b. Track and provide status for each requirement from definition through acceptance;
c. Any requirement that is not accepted must either be tracked as an issue, deferred, or cancelled;

d. Track test cases and test results, linked to specific requirements; and
e. Track known defects, along with defect status, linked to specific requirements

7. Employ configuration management software during the design, development, configuration, testing, and deployment phases of the project to accurately manage configurations, configuration dependencies, and configuration changes, and to automate deployments.

8. Coordinate and facilitate design review sessions as part of developing task work and report results. Review sessions must include recommended action items to the DOH project manager and other appropriate project participants and contractors, as identified by the DOH. The Offeror shall conduct JAD sessions to document functional aspects of the design, and JTD sessions to document technical aspects of the design. The Offeror's design session responsibilities include:
    a. Develop a meeting schedule and locations for design sessions in collaboration with the DOH project manager and other DOH-identified project staff;
    b. Provide training and coaching to the DOH and other project participants on the purpose, process, and expected results of the sessions;
    c. Document the design process, including:
        i. Capturing all designs decisions in the relevant design documents;
        ii. Documenting risks and issues in the project's risk/issue log, action items in the action item log, and decisions in the decision log; and
        iii. Grouping design presentations in a logical manner for clarity of Presentation.

9. Develop a ***Solution Architecture Document (D9)*** that describes the technical approach to developing the system, including a high-level architectural approach and the anticipated technologies, hardware, operating software components, programming aids, application programs, third-party products, and integration points. Elements of the technical approach might be modified prior to completion of the Technical Solution Design Document. Th Solution Architecture Document must include the following content:
    a. Description of the hardware and software components, including programming platforms and tools, which the Offeror must use for developing, configuring, testing, implementing, enhancing, operating, and maintaining IIS, and interfaces to contracted

services provider partners and other organizations with which the DOH has cooperative agreements;

b. The Solution Architecture Document must describe how IIS will integrate with the DOH's existing infrastructure and integration components;
c. Identification of the key technical requirements and constraints on IIS;
d. Development of a system capacity plan; and
e. Development of an ease-of-use management plan addressing how the Offeror will develop IIS to ensure a satisfying and productive user experience, including the user interface responsiveness, measurement, standards, and plans to reduce lag for end users. The Offeror will include plans for establishing and meeting SLAs for end-user experience. The plan must specify the ease-of-use principles that the Offeror will use to develop the system and the protocols to ensure the Offeror will apply these principles consistently.

10. Develop and maintain a ***Functional Solution Design Document (D10)*** to summarize how the Offeror will develop and configure IIS in accordance with the DOH's requirements. The document must at a minimum:
    a. Document the design process, including the following content:
        i. Summary of each design session; the summary must be responsive to the DOH's comments and revisions provided during design activities;
        ii. Functional design issues and decisions; and
        iii. Materials from design sessions, presented in a logical manner for clarity.
    b. Incorporate updates to the design work made during design sessions to accurately document detailed requirements so that the accuracy of the design is maintained;
    c. Incorporate and address information and analysis presented in project artifacts (such as the RTM);
    d. Establish traceability to RTM requirements by cross-referencing each functional design element or RTM category to the IIS RTM; and
    e. Describe, from a system user's perspective, the standard use cases of IIS functions and the interactions between DOH and associated system user staff and IIS, including:
        i. The goals and objectives of each function;
        ii. Addition of the DOH-provided citations to the relevant policy and statutory constraints, where applicable;
        iii. Business process workflows for common system functions;
        iv. Wireframes of proposed user interface layout;

v. Templates for all forms, letters, notices, reports, and input and/or output files; and
vi. A list of all user system alerts and messages.

11. Develop a ***Technical Solution Design Document (D11)*** that summarizes how the Offeror will configure and develop IIS in accordance with the DOH's requirements. The Technical Solution Design Document (D11) must:
    a. Document the technical design process, including:
        i. Capture all design decisions in the technical design documents;
        ii. Technical design issues, action items, and decisions; and
        iii. Materials from design sessions, presented in a logical manner for clarity.
    b. Provide a database design overview, including an initial Entity Relationship Diagram ("ERD") of the database tables together with the descriptions of all IIS tables and columns;
    c. Describe the security architecture, including how IIS will implement role-based security, ensure both at-rest and in-transit data security, and how IIS will segregate and protect more sensitive data (e.g., Personally Identifiable Information ["PII"]);
    d. Incorporate and address information and analysis presented in project artifacts (e.g.,IIS RTM);
    e. Establish traceability to the IIS RTM requirements for each technical design element to the required business process that it implements;
    f. Document IIS minimum requirements, including the following categories, of details not limited to:
        i. Hardware requirements;
        ii. Operating system requirements; and
        iii. Browser requirements.
    g. Summarize all system interfaces and data exchange methodology used for each interface.

12. Develop a ***Database Development Plan (D12)*** that reflects modifications made for IIS. The plan must:
    a. Establish the standards and methodology for database and data warehouse development, deployment, operations, and maintenance;
    b. Specify the methodology and rules for determining and documenting data entity relationships;
    c. Describe the procedures for developers to use to identify new database tables and new or revised columns on existing database

and data warehouse tables, and perform database maintenance activities; and

d. Employ an ERD that depicts a conceptual data model, the logical data model, and the physical data model for IIS; the Offeror must update the model throughout the project.

13. Develop a ***System Security Plan (D13)***. The plan must:
    a. Summarize how the Offeror will develop and configure IIS in accordance with federal and State requirements for information security.
        i. These will be independently reviewed by a separately DOH-procured security vendor.
        ii. The Offeror must be responsive to revising these plans to meet regulatory requirements.
        iii. Separate security and privacy sub-plans must be created to support each federal oversight agency and standards body, including but not limited to CDC and AIRA.
    b. Document details of the managerial, technical, privacy, and operational controls, documenting the current level of security implemented within the system and how the Offeror will meet the security controls and requirements specified by federal and State information security policies and standards based upon:
        i. State IT policies, standards, and procedures: https://ets.hawaii.gov/policies/;
        ii. National Institute of Standards and Technology ("NIST") guidance, and subsequent updates (Computer security: https://csrc.nist.gov/publications/sp; Cybersecurity: https://csrc.nist.gov/publications/sp1800; IT: https://csrc.nist.gov/publications/sp500); and
        iii. Federal Information Processing Standards ("FIPS"): https://csrc.nist.gov/publications/fips.
    c. Describe compliance with security, privacy, access, and confidentiality provisions of applicable regulations;
    d. Describe the Offeror's security policies and provide copies of the Offeror's security polices;
    e. Describe the Offeror's information security organization, not limited to:
        i. Organizational chart;
        ii. Named chief security engineer, and engineer assigned to the project;
        iii. Allocation of information security responsibility;
        iv. Use of confidentiality agreements (if any);

v. List of information security organizations the Offeror belongs; and
vi. How the information security organization is independently reviewed or audited.

e. Describe how assets are managed including how the Offeror determines and classifies different levels of information;
f. Describe human resources security, including screening of potential employees, information security training provided to employees, and how employees are briefed in terms of continued security awareness;
g. Describe physical and environmental security, including security controls at the data site, other Offeror facilities, and all off-site equipment, including any backup sites;
h. Describe the Offeror's policies on documentation of operating procedures, change management, segregation of duties, third-party service providers, protection against malicious code, backup, network security, media handling, and event/log monitoring, and how each part will be used with the project;
i. Describe the Offeror's access control policies, including policies for operating system access, computer room access, network access, password management system(s), and mobile computing policies, and how each part will be used with the project;
j. Describe how the Offeror validates data, uses cryptography, protects source code, inspects source code for potential security defects, and manages outsourced software development (if any), and how this will be applied and used with the project;
k. Describe how the Offeror manages and investigates information security incidents and how it uses information from security incidents to modify or improve security practices;
l. Describe the Offeror's use (if any) of DOH-authorized independent compliance auditors and how those auditors will be used within the project (e.g., SOC2 reporting);
m. Describe the Offeror's use of DOH-authorized independent third-party vulnerability and penetration testing and how vulnerability and penetration testing will be used in the project;
n. Describe the Offeror's security development life cycle plan for the project;
o. Describe the Offeror's system security planning, including how the Offeror plans security enhancements and upgrades, how it monitors current threats and plans to meet them, and how security planning fits in with its overall IT planning process for the project;
p. Describe the system security tools used within the project;

q. Describe the processes and procedures used to define and maintain system security;
r. Describe and list of all external system security dependencies (e.g., firewalls, Network Access Control ["NAC"]) required as part of IIS;
s. Describe the security infrastructure established (e.g., type and level of hardware, network, database, and software security) and overall features of the security system to satisfy federal and DOH's requirements;
t. Detail how the Offeror will regularly review IIS code throughout the project for security vulnerabilities, coding errors, and updates; this must include documentation for ongoing tracking, remediation, and testing; and
u. Prepare separate initial Information Solution Risk Assessment, Privacy Impact Assessment, and System Security Plan, in advance of the deployment to support each federal oversight agency, including establishing and maintaining a Plan of Actions and Milestones ("POAM") registry for each federal agency controlling data used by IIS.

14. Develop and submit a ***Business Continuity and Disaster Recovery Plan (D14)***. The plan must:
    a. Be consistent with the requirements in the initial IIS RTM and the DOH's current disaster recovery practices
    b. Describe the Offeror's plan to protect IIS and maintain critical business processes in the event of natural disasters, hardware and software failures, human error, or other contingencies that could interrupt services
    c. Address recovery of business functions, human resources, and technology infrastructure associated with IIS
    d. Include the following content:
        i. Threat considerations (including natural, technical, and human) with impact assessments, including:
            1. Strategies and related procedures for recovery of facilities, hardware, software, data, customer services, and key persons responsible for the strategies and related procedures;
            2. IIS data backup, retention, and restoration processes; and
            3. Testing procedures for the Business Continuity and Disaster Recovery Plan.
        ii. Protocols to provide immediate response to and subsequent recovery from any major unplanned business disruption,

such as loss of utility service, building evacuation, or a crisis event such as a major fire, flooding, earthquake, etc.;

iii. Hardware, software, data, and communications components needed to provide for alternative site operations for production and development;
iv. Process for duplicating IIS at the alternative site, specifying the retention period for all application and operating IIS components;
v. Documentation of Recovery Point Objectives and Recovery Time Objectives;
vi. Steps required for troubleshooting, replacing, reconfiguring, and restoring the IIS hosted platform, hardware, and software;
vii. Processes utilized to verify the health and accuracy of IIS backups;
viii. Conditions under which the DOH will use the alternative site;
ix. Procedures for testing the alternative site; and
x. Alignment with disaster recovery provisions set forth in SLAs.

15. Notify DOH in writing, upon completion of Task 1 and after work has been updated in accordance with the section above, that the IIS requirements analysis and IT solution design materially conform to the DOH's requirements and scope of work and IIS is ready for the next task.

4.2 Task 2: Solution Development and Configuration

A. Overview
Task 2 involves activities to develop and configure IIS, including integrating, enhancing, and modifying IIS.

B. Objective
The objective of Task 2 is to successfully establish IIS to meet the DOH's requirements by using the project approach and methodology contained in the Project Management Requirements, as well as Task 1: Requirements Analysis and IT Solution Design.

C. DOH Responsibilities
The DOH's responsibilities for Task 2 include:
1. Provide clarification on requirements and approve design option decisions;
2. Respond to Offeror inquiries related to requirements, business rules, and program policies and procedures;

3. Participate in configuration review, code review, and walkthrough sessions; and
4. Review and approve work.

D. Offeror Responsibilities

Offeror's responsibilities for Task 2 include:

1. Develop a ***Configuration Management Plan (D15)*** that describes the Offeror's established configuration management methodology, including approach, tools (ALM and SCM systems), hardware and software environments, methods, processes, standards, evaluation criteria, and terminology. The plan must address all components of IIS. The plan must include the following content:
    a. Description of configuration management processes and procedures,
    b. The roles and responsibilities of Offeror personnel responsible for configuration management
    c. Summary of storage and retention policies for configuration items
    d. Summary of configuration management tools to be used as part of the project
    e. Description of the software development and configuration activities the Offeror must perform and the environments in which the Offeror must complete this work
    f. Detailed description of the development and configuration environment the Offeror will use to support development through M&O of IIS.

2. As part of the Configuration Management Plan (D15), the Offeror must describe the Offeror's established database configuration management methodology. The plan must describe software the Offeror needs to develop, or tools the Offeror needs to acquire, to automate the database configuration management process. This task must also include DBMS for database creation and management. The plan must include the following content and descriptions of naming conventions used to create data element names:
    a. Control and update processes used to manage all database objects across the development, testing, training, and production environments
    b. Procedures developers will use to establish look-up tables
    c. Description of how the Offeror must manage database management scripts, with a description of the procedures developers must use to identify new database objects in IIS, including documentation of the object's purpose and the utilized object-naming conventions

d. Description of how an audit trail is utilized to maintain a full history of database objects for each environment
e. Mapping of all data elements in the existing legacy HIR system to data elements in the new IIS
f. Updated data dictionary

3. Implement separate development and test environments. The Offeror must provide documentation for each environment. The Offeror must support the timely acquisition, installation, and configuration of the hardware and software required to develop and host IIS.

4. Employ configuration management software during the design, development, configuration, and testing phases of the project to accurately manage configurations, configuration dependencies, and configuration changes, and to automate deployments.

5. Develop, configure, and manage system configuration and source code in accordance with functional, technical, and other requirements (e.g., security) articulated in the Configuration Management Plan, including developing and configuring IIS to meet requirements, in accordance with the current DOH-accepted scope of work and other associated design and development tasks, including:
    a. Configuration and modification of the software components to meet requirements;
    b. Configuration, modification, or building of State-specific integration components;
    c. Coding of all new or modified program modules to meet requirements;
    d. Preparing the IIS components for integration;
    e. Facilitating additional design review sessions with DOH-designated staff and other project participants;
    f. Updating tasks to reflect refinements or additional requirements identified during development and configuration, in accordance with the project's change control process; and
    g. Providing the DOH access to source code written by the Offeror within one week of a written request.

6. Schedule incremental demonstrations of the IIS tested code with the DOH's project staff and stakeholders identified by the DOH prior to beginning UAT of the new functionality. The purpose of the demonstrations is to showcase the development and configuration progress, solicit feedback, and validate the accuracy of functionality in accordance with the DOH's requirements.

7. Develop and deliver monthly ***Defect Remediation Reports (D16)*** outlining open and resolved defects throughout DDI UAT and M&O tasks. The report must include the following content.
    a. Number of resolved and unresolved (not fixed in UAT or production) defects for each defect category;
    b. Offeror assigned date for each defect;
    c. Closed date for each defect; and
    d. Number of defects that exceeded the aging performance standards for resolution in the reporting period.

8. Notify the DOH in writing, upon completion of Task 2 and after work has been updated in accordance with the section above that IIS materially conforms to requirements and scope of work and IIS is ready for the next task.

4.3 Task 3: Data Conversion and Migration specific to IIS

A. Overview
Task 3 involves data conversion and migration activities from legacy systems. The Offeror must ensure this task results in the accurate conversion and migration of data to IIS. Task 3 includes, but is not limited to, planning, coding, extracting, transforming, loading, testing, and validating the data conversion and migration processes.

B. Objective
The objective of Task 3 is to ensure accurate, thorough, and complete conversion and migration of data from the existing HIR system to IIS.

C. DOH Responsibilities
The DOH's responsibilities for Task 3 include:
1. Provide input during the development and refinement of conversion and migration deliverables, including:
    a. Procedures for handling missing data, data exceptions, and default values;
    b. Management of conditions when two (2) or more existing records are to be treated as one (1) record (e.g., merging records); and
    c. Explanation of the level of manual effort required to complete the task.
2. Provide information in response to Offeror inquiries related to data mapping, data conversion and migration requirements, and the DOH's policies and procedures.
3. Provide existing legacy HIR system data dictionaries, existing data structure information (e.g., coded fields, combinations of codes, history of changes), and business rules that affect data conversion or migration.

4. Provide definition and parameters of data to be migrated, including applicable technical parameters.
5. Provide access to source data sets for conversion and migration.
6. Assist the Offeror with cleanup of data to be migrated in accordance with the Offeror's detailed instructions.
7. Assist the Offeror with resolution of data conversion and migration problems.
8. Review and approve work.

D. Offeror Responsibilities

Offeror's responsibilities for Task 3 include:

1. Develop a data conversion and migration strategy that describes the Offeror's strategy for converting and validating all existing data into IIS. The strategy must reflect the Offeror's and the DOH's lessons learned, as documented in RTM design sessions, from conversions of data for other projects of similar scope and size, addressing the type and amount of data to be converted and the treatment of any data that is not being converted. The strategy must include the following:
    a. Description of the general approach to be used to extract, transform, cleanse, and load data from source to target destinations during the conversion and migration process to IIS;
    b. Approach for converting all current active records and those records that have been closed within one (1) year from start of implementation. This transition might require that both the legacy system and IIS run for a short migration period, until the DOH is satisfied that complete migration will not negatively impact programs or patients;
    c. Approach to convert a skeleton structure for records in a category of closed beyond one (1) year. The approach can be handled within a separate repository where the IIS system user has the ability to access records and transfer required elements of the record(s) using an automated script on an on-demand basis to IIS;
    d. Approach to integrating data conversion and migration go-live strategy with the planned implementation and rollout. The strategy must address all data conversion and migration requirements and must include the following content:
        i. Go-live approach, including an explanation of whether parallel runs of the legacy systems and IIS will be necessary during the conversion process, or if a one-time cutover to IIS will occur;
        ii. If an incremental or parallel strategy is proposed, the Offeror must describe the approach for ensuring that the IIS data is continually updated with changes from the

interfaced systems and the legacy systems, until all components of IIS have been implemented;

iii. Description of whether the Offeror must implement the conversion process in phases or stages and, if so, identify which components must undergo conversion in each phase;
iv. Description of automated data conversion tools that the Offeror must use (e.g., Extract, Transform, and Load tools);
v. Description of any part of the conversion process that the Offeror must perform manually;
vi. Description of any custom-developed conversion programs that will be needed, and associated performance tuning;
vii. Description of staffing approach;
viii. Describe whether data availability and use should be limited during the conversion process;
ix. Security and privacy controls required for the conversion process;
x. Description of the disposition of obsolete or unused data that is not converted;
xi. Retention policy for the data that has been converted to facilitate rerunning the conversion process if necessary;
xii. Process for normalization of data to be converted; and
xiii. Approach to ensure data quality before and after all data conversions.

2. Develop a ***Data Conversion and Migration Plan (D17)*****,** inclusive of the data conversion and migration strategy and conduct all data conversion and migration activities in accordance with the plan. The DOH requires Offeror to leverage conversion tools and provide sufficient data to support development, UAT, and implementation tasks. The plan must align with requirements identified in the IIS RTM and describe the preparation and specifications for converting data from legacy systems to IIS. This plan must include in detail the overall approach and processes used in the data conversion, including data conversion objectives, assumptions, and constraints. The plan shall include, but is not limited to, the following content:
    a. Inventory and cross-reference of source and target data elements, including mandatory and required data elements, schema, metadata, and all self-describing files;
    b. Description of the process for data ETL for each data source;
    c. Description of the tools needed to execute the conversion and migration;
    d. Description of data conversion objectives;
    e. Description of any assumptions or dependencies regarding the data conversion effort;

f. Description of how missing data (i.e., data needed by IIS but not available from existing systems) will be managed, including procedures for handling missing data, exceptions, and default values;
g. Description of constraints that the Offeror and the DOH must take into consideration prior to the data conversion and migration progress;
h. List of stakeholders and their roles and responsibilities in the conversion process;
i. Schedule of conversion activities to be accomplished in accordance with the plan;
j. The schedule must include the required tasks in chronological order with beginning and ending dates of each task, key personnel responsible for each task, and task dependencies and milestones. Tables or graphics, or both, may be used to present the schedule;
k. Description of the strategy for data QA and control including:
    i. Identification of any prerequisites;
    ii. Description of the general backup strategy; and
    iii. Description of the data restoration process plan.
l. Identification and remediation plan for records deemed to be duplicates;
m. Identification, description, and migration plan for potential data quality problem types;
n. Description of the expected conversion impact on the existing infrastructure, and how the conversion impact was determined;
o. Description of the remediation plan to address any adverse impacts the conversion might create for the existing infrastructure, and protocols for implementing the remediation plan; and
p. Description of risks associated with the proposed data conversion and migration strategy that could affect conversion feasibility, technical performance of the converted system, and the conversion schedule, costs, and backup and recovery procedures.

3. Develop a ***Data Conversion and Migration Test Plan (D18)*** that includes:
    a. Details on which data elements from the legacy systems the Offeror must convert and migrate to IIS schema (e.g., legacy HIR, Excel files, and associated data);
    b. Map of the codes for each data element within the legacy systems to the corresponding codes for each data element within IIS;
    c. Determination of which records in the legacy systems should be converted and migrated to IIS, and what the initial status of each should be;
    d. Schedule for the data conversion and migration activities tied to development and configuration, testing, and implementation tasks;

e. Criteria for IIS conversion readiness;
f. Testing criteria to determine when data elements are deemed converted and migrated successfully for a given record, and whether all records the DOH intended to convert and migrate were converted and migrated to the correct status;
g. Definition of test data structure;
h. Test scripts, including testing against intentional errors; and
i. Definition of dedicated testers.

4. Develop ***Data Conversion and Migration Test Results Reports (D19)*** to document the results of executing the data conversion and migration activities, and the testing performed to validate that data conversion and migration programs are working correctly. The report must include:
    a. Scope of the testing the Offeror performed for data conversion and migration and interfaces;
    b. A narrative overview of the test results;
    c. Summaries of unexpected results; and
    d. Detailed results of conversion, migration, and interface testing.

5. Document any known defects uncovered in Task 3 in the monthly Defect Remediation Report.

6. Provide the converted data from the legacy system to IIS with acceptable and agreed-upon quality by the DOH. In addition, the Offeror must provide a sufficient amount of converted data in environments such as development, testing (including UAT), and training.

7. Provide issues encountered and lessons learned that can be applied in future data conversions.

8. Notify the DOH in writing, upon completion of Task 3 and after work has been updated in accordance with the section above, that the IIS data materially conforms to the DOH's requirements and scope of work, and IIS is ready for the next sequential task.

4.4 Task 4: Testing/QA for IIS

A. Overview

Task 4 involves several types of testing to confirm IIS meets detailed requirements in the IIS RTM, is in compliance with IIS documentation (e.g., Solution Architecture Document, Functional Solution Design Document, and Technical Solution Design Document), and adheres to the System Security Plan. The Offeror may test individual system components, as they are ready, and shall test all system components or features as a whole. The continuous integration and

continuous deployment (CI/CD) pipeline must leverage automated regression testing after the M&O stabilization period. The Offeror must test the compatibility and integration of all components within the entire IIS as a complete system when all system components have been completed, including IIS interfaces and data exchanges.

B. Objective

The objective of Task 4 is to confirm the operations, hardware, software, data conversion and migration, and network communications aspects of IIS are functioning in accordance with requirements and relevant scope of work. Successful completion of system testing must demonstrate that IIS is ready for UAT in accordance with this Scope of Work.

C. DOH Responsibilities

The DOH's responsibilities for Task 4 include:

1. Review the Solution Test Documentation and Results Report;
2. Participate in UAT activities;
3. Monitor testing; and
4. Review and approve work.

D. Offeror Responsibilities

Offeror's responsibilities for Task 4 include:

1. Develop a ***Test Plan (D20)*** that describes the Offeror's processes for end-to-end testing across all project phases. The Test Plan must include the following content:
    a. Summary of processes for differing test types, including but not limited to:
        i. Unit testing;
        ii. Integration testing;
        iii. Solution testing;
        iv. Data conversion and migration testing;
        v. Interface testing;
        vi. Americans with Disabilities Act (ADA) 508 testing;
        vii. Performance load/stress testing (to the extent SaaS components permit);
        viii. Security testing (role-based, penetration, and vulnerability);
        ix. Disaster recovery testing;
        x. Regression testing;
        xi. UAT;
        xii. Operational Readiness Testing (ORT); and
        xiii. Pilot testing.
    b. Documentation of a testing approach that includes but is not limited to:
        i. Roles and responsibilities of all entities involved in testing

ii. Orientation and kickoff plan
iii. Test techniques and methods
iv. Test standards
v. Test phases
vi. Description of the planned test environments
vii. Types of automated testing tools depending on type of testing
viii. Verification that testing tools work as designed
ix. Configuration management of the test environment(s) and tools
x. Test data, including use of sanitized test data
xi. Test documentation, including test cases, test scripts, and test conditions that examine each functional objective of IIS, and the expected test results to verify that each IIS component has achieved its functional objective
xii. Approach to map traceability from each test case to the detailed requirement it addresses in the IIS RTM
xiii. Test schedule and work plan
xiv. Test metrics and measurements
xv. Test preparations
xvi. Test execution
xvii. Test monitoring
xviii. Test status meetings and reporting
xix. Go/no-go decisions or checkpoint decisions
xx. Test pass/fail criteria
xxi. Test closure criteria
xxii. Test closure evaluation criteria and wrap-up
xxiii. Archiving, lessons learned, etc., to better promote continual process improvement
xxiv. IIS testing knowledge transfer

2. Develop multiple test environments (i.e., System Test, Conversion/Interface Test, Solution Integration Testing [SIT], and UAT) and associated documentation to perform IIS testing. The test environments must support all testing needs of IIS to occur without disruption to any other DOH computing activities. The Offeror must make the test environments available to designated DOH staff team members. Test environments must include:
    a. Detail of all components the production environment must contain, including copies of all software, database, tables, and files loaded with sanitized test data (no PII in test environments), appropriately configured to adequately emulate IIS production use;

b. Copies of other systems' files and/or software involved in the interfaces in order to adequately test system-to-system interfaces; and
c. Documentation of associated test environment containing the following:
    i. Inventory of the hardware, software, network communication, and data storage components necessary to support the ongoing testing needs of IIS;
    ii. Procedures for creation, maintenance, and rebuilds of the test environment, and description of controls required to maintain the integrity of test data;
    iii. List of configurations, security, and change management processes;
    iv. Location of system passwords, license keys, and maintenance contract information;
    v. Outbound and inbound data exchange connections; and
    vi. Platform architecture schematic illustrating the technology components of IIS.

3. Employ configuration management software during the design, development, configuration, and testing phases of the project to accurately manage configurations, configuration dependencies, configuration changes, and automated deployments.

4. Execute testing in accordance with the DOH-accepted Test Plan, including use of a full-size database and simulated loads of concurrent DOH staff users and provider staff users. IIS testing must continue until performance requirements (developed during JAD and JTD sessions and approved by the DOH) are met under full operational conditions.

5. Document and report testing results in a ***Solution Test Documentation and Results Report (D21)***. The Offeror must document and maintain IIS test documentation, results reports, test cases, and test scripts for the DOH, and other approved entities to review and audit. The report must include the following content:
    a. Recommended improvements in the design, operation, and testing of IIS and the impact on IIS functions;
    b. Detailed test results for each test, including:
        i. Test number;
        ii. Summary of test results;
        iii. Problems encountered;
        iv. Identification of test procedure step(s) where problems occurred;
        v. Reference to backup material as appropriate;

vi. Deviations from test cases/procedures; and
vii. An assessment of the impact of deviations.

c. Test log with a chronological record of test events covered by the report, including:
   i. Dates, times, locations, and testers of the tests performed
   ii. Hardware and software configuration used for each test
   iii. Record of the DOH's signoff on the completed and successful tests

d. An overall assessment of IIS's operation including:
   i. An overall assessment of IIS's operations as demonstrated by test results in the report;
   ii. Identification of remaining deficiencies, limitations, or constraints detected by the testing performed (problem/change reports may be used to provide defect information); and
   iii. For each remaining defect, limitation, constraint, or anomaly, describe:
      1. Impact on IIS performance, including identification of requirements not met
      2. Impact on IIS design
      3. Recommended solution/approach for corrections
      4. Identified resources needed to make corrections

6. Update related work to reflect refinements or additional requirements identified during IIS testing, in accordance with the project's change control process.

7. Document known defects uncovered in testing in the monthly Defect Remediation Report.

8. Notify the DOH in writing, upon completion of Task 4 that IIS contains no Severity One ("S1") or Severity Two ("S2"), defects, the Offeror attests that IIS materially conforms to requirements and scope of work and IIS is ready for the next task.

4.5 Task 5: UAT

A. Overview

Task 5 involves validation of IIS by means of UAT to ensure the Offeror has developed and configured the system in accordance with the DOH's requirements (as articulated in the IIS RTM), and fully complies with the IIS scope of work. The DOH must validate that IIS components work together and approve operational readiness prior to production go-live. UAT must include detailed tests of all requirements, features, and IIS operations. The DOH will use the Offeror's

IIS test scripts and may modify them to provide additional test coverage during UAT. In parallel with UAT, the Offeror must provide the tools and SaaS platform approvals necessary to test IIS under maximum operational load conditions to verify production capabilities to meet agreed-upon SLAs. Additionally, the Offeror and the DOH must include all IIS interfaces and data exchanges in UAT. UAT will continue without additional Offeror deliverable completion and compensation until the agreed-upon UAT exit criteria have been achieved. A DOH subject matter expert team will perform UAT activities; however, the Offeror must lead certain activities and participate in others as required by the DOH to ensure successful completion of UAT. In parallel with the UAT effort, the Offeror must conduct load and performance testing using Offeror-provided load and performance evaluation tools. The Offeror must remediate all defects identified during UAT, modify the associated work before the DOH's approval, and sign-off on Task 5.

B. Objective

As a prerequisite to UAT, the Offeror must ensure all requirements and related IIS functions have undergone unit and solution testing. The Offeror must ensure all operational components (hardware, software, and network communications) of IIS are functioning in accordance with requirements, and IIS is ready to process inputs, meet reporting requirements, and use the State data communication networks.

C. DOH Responsibilities

The DOH's responsibilities for Task 5 include:

1. Identify and schedule staff for UAT activities.
2. Attend UAT orientation and training.
3. Execute testing according to the UAT Plan.
4. Monitor and record testing results.
5. Report failed tests and log defect reports.
6. Review documentation and participate in correction of problems, including re-testing.
7. Review and provide feedback on the UAT Results Report.
8. Assist the Offeror in providing help desk support to UAT team members.
9. Review and approve work.

D. Offeror Responsibilities

The Offeror's responsibilities for Task 5 include:

1. Develop a ***UAT Plan (D22),*** accepted by the DOH prior to UAT initialization. The plan must include the following content:
    a. Test preparations, comprising:
        i. Test environment preparation plan
        ii. Security and privacy requirements
        iii. Testing location

iv. Unique tests by test identifier and a brief description of each test scenario
v. Hardware preparation plan
vi. Software preparation plan

b. Training on UAT processes and testing tool(s);
c. Other pre-test preparations, e.g., description of other pre-test personnel actions, preparations, or procedures necessary to perform UAT;
d. Schedule of Offeror personnel to support the DOH's testing;
e. Test descriptions to simulate workflow and validate that IIS meets functional requirements. Test descriptions shall comprise:
    i. Unique identifier for each test case;
    ii. Prerequisite conditions;
    iii. Test inputs/outputs;
    iv. Expected test results;
    v. Criteria for evaluating results;
    vi. Testing procedure (step-by-step); and
    vii. Assumptions and constraints.
f. Error reporting and remediation plan;
g. IIS documentation update plan;
h. Traceability from each test case to the detailed requirement it addresses and mapped back to the IIS RTM. If a test case addresses multiple requirements, then traceability from each set of test procedure steps to the requirement(s) shall be addressed; and
i. A summary of the tools and environments required for UAT to ensure the test environment is ready for use in UAT. This task must include:
    i. Verification the test environment is populated with the latest version of code and contains all components the production environment requires, and copies of all software and database tables;
    ii. Connection of UAT tools and the environment to the DOH network, appropriately configured, to appropriately emulate production IIS use; and
    iii. Inclusion of applicable third-party and test partner files in order to appropriately test system-to-system interfaces.

2. Provide an interface and logins to allow the DOH test participants access to the test environment.

3. Deliver the test environment and ensure:
    a. The test environment is prepared with test data that mimics production environment data;

b. Test data is refreshed and managed as required by the DOH; and
c. The IIS is configured to the most current version of all underlying software, tools, and databases, unless otherwise approved by the DOH.

4. Provide training and documentation for UAT, including training to the DOH's staff and other test participants on any automated testing tool(s). This might include versions of user materials that the Offeror must deliver under Tasks 6: ORT and 7: User Training.

5. Develop a weekly ***UAT Results Report (D23)*** to include a summary and details on the overall progress and status of UAT, including:
    a. Documentation of each problem, including the following content:
        i. Problem statement
        ii. Tester name
        iii. Expected result
        iv. Actual result
        v. Date
        vi. Resolution provided
        vii. Name of person assigned to resolve the defect
        viii. Plan for further testing
        ix. Summary of problems found
        x. A weekly report of problem resolution progress and status to include:
            1. Problems open;
            2. Problems resolved;
            3. New problems logged; and
            4. Progress against the UAT Plan.
        xi. A detailed list of defects and status including:
            1. Defects opened in the last week;
            2. All defects open;
            3. Defects closed;
            4. Details on all tests performed during the week; and
            5. The DOH's acceptance status of defects that are closed.
    b. Summary of UAT risks and risk status

6. Develop and update the content of the ALM and SCM tools in the collaborative workspace based on changes made because of UAT. The tools must reflect IIS code as of UAT completion, including:
    a. Project source code (where applicable);
    b. Project tools (source code for nonproduction artifacts, e.g., conversion programs);
    c. Related code documentation;

d. "Seed Data," which is data that needs to be loaded into IIS for base operations (e.g., lookup tables, rate tables, workflow rules); and
e. Maintenance of binary artifacts (these may be kept externally but must be maintained in a repository that is available to DOH-designated members of the project team), including:
    i. Libraries and third-party software components;
    ii. Frameworks;
    iii. Software binaries; and
    iv. Other associated artifacts as needed to build, maintain, and deploy IIS.

7. Assist with UAT as defined in the UAT Plan. The Offeror's UAT activities must:
    a. Provide IIS help desk support, in coordination with DOH staff;
    b. Correct defects in accordance with SLAs;
    c. Assist the DOH in identifying and resolving problems discovered during UAT;
    d. Report on UAT activities via UAT Results Report; and
    e. Conduct rework on Tasks 1 through 4 and update the associated work.
8. Update work to reflect refinements or additional requirements identified during UAT.

9. Submit the updated IIS documentation and update the ALM and SCM tools as required.

10. Document known defects uncovered in UAT in the monthly Defect Remediation Report.

11. Notify the DOH in writing, upon completion of Task 5 that IIS contains no S1 or S2 defects, that the Offeror attests that IIS materially conforms to requirements and scope of work, and that IIS is ready for the next task.

4.6 Task 6: Operational Readiness Testing (ORT)

A. Overview

Task 6 involves a methodical verification process performed in the pre-production (staging) environment prior to proceeding to production implementation. This test occurs after UAT and is designed to ensure the Offeror, the DOH, the DOH's partners, and IIS are adequately prepared for production operations. ORT shall also include a demonstration and verification of physical security, data security, user profiles setup, and overall IT solution security. The ORT must allow up to four (4) weeks for testing. Any problems or defects in the application software

will be addressed through the problem reporting process (as detailed in the UAT Plan) followed for all IIS testing activities.

1. Testing activities to be performed include:
    a. Converting legacy data;
    b. Processing all inputs;
    c. Determining eligibility;
    d. Distributing correct benefits;
    e. Generating correspondence;
    f. Exchanging data with the DOH's partners;
    g. Executing batch processes;
    h. Meeting all reporting requirements; and
    i. Ensuring functional components fully demonstrate backup capacity.

2. The ORT is designed to confirm the following:
    a. The IIS adequately supports the most common business processes (e.g., application processing, benefit issuance, document management, and correspondence generation);
    b. All necessary IT solution components are installed and operating correctly;
    c. All known risk elements have been assessed, mitigated, transferred, deferred, or accepted;
    d. Personnel are capable of using and operating the IT solution;
    e. Support staff are prepared and sufficiently numbered to provide timely response to users;
    f. Converted data is clean, accurate, and does not create software performance or functional problems;
    g. Real-time and batch interfaces are operational and functioning correctly;
    h. Performance monitoring tools are installed and functioning correctly;
    i. Reports are accurate;
    j. Security profiles are correct; and
    k. Backup and recovery procedures are functioning correctly.

B. Objective

The objective of Task 6 is to confirm that IIS and all parties that use and rely on the solution are ready for production operations. Successful completion of the ORT is required prior to adoption of IIS within a production environment and commencement of M&O tasks.

C. DOH Responsibilities

The DOH's responsibilities for Task 6 include:

1. Identify and schedule staff for ORT activities.
2. Prepare all necessary standard work descriptions and desk aids.
3. Prepare program bulletins and public news releases.
4. Select test cases and prepare test data to support the test scenarios.
5. Conduct conversion data extracts.
6. Inform, confirm, and coordinate interface partner participation.
7. Attend ORT orientation and training.
8. Execute online user and worker test scenarios according to the ORT Playbook.
9. Monitor and record testing results.
10. Review test results.
11. Report failed tests and log defect reports.
12. Review documentation and participate in correction of problems, including re-testing.
13. Review and provide feedback on the ORT Operational Readiness Test Results and Readiness Assessment.
14. Assist the Offeror in providing help desk support to ORT team members.
15. Review and approve work.

D. Offeror Responsibilities

The Offeror's responsibilities for Task 6 include:

1. The Offeror must develop an ***ORT Playbook (D24)*****,** which describes the testing activities, schedule, and responsibilities for all parties. All participants will follow this document in the execution of the ORT. The ORT Playbook must, at a minimum, contain the following content:
    a. ORT summary and overview. The ORT must include a full conversion data load to verify the capability of IIS to accommodate a production capacity of the system. The ORT will only use a subset of converted cases. ORT rounds must simulate two (2) months of production operations. The two (2) ORT rounds will be spaced to allow development-related fixes before proceeding to the next round. (Note: Each planned set of two [2] weeks of testing is representative of a one [1]-month of data time frame.) Although the DOH and Offeror will mutually agree upon the specific timing and functionality to be included in each simulation prior to ORT, the following is an example simulation structure:
        i. ORT Round 1: The first two (2)-week testing period for core functionality. It will iteratively add on interfaces.
        ii. ORT Round 2: The second two (2)-week testing period will continue ORT activities for core testing, added interfaces, and introduce monthly processes, quality management reviews, reporting and analytics dashboards, and other support functions.
    b. ORT scope shall include the following:

i. Conversion of legacy data;
ii. Processing of all inputs;
iii. Determination of client eligibility for services;
iv. Determination of service plan/service authorization;
v. Generation of notifications and alerts (to customers, providers, and internal workers) and work tasks;
vi. Bidirectional exchange of data with the DOH's partners and provider agencies and other State systems;
vii. Execution of batch processes;
viii. Validation of reporting requirements;
ix. Use of a properly functioning data communications network;
x. Demonstration of backup and restoration capacity; and
xi. Access by both provider and customer users (via portal).

c. Documentation of a testing approach that includes:
i. Participants, stakeholders, and roles;
ii. List of reference documents;
iii. Assumptions;
iv. Constraints;
v. Risks;
vi. Testing approach;
vii. Participant training;
viii. Test preparation;
ix. Test schedules, including ORT Simulation; ORT Simulation 2;
x. Test execution steps;
xi. Cross-team collaboration methodology;
xii. Entrance and exit criteria;
xiii. Backup and recovery;
xiv. Security;
xv. Conversion approach;
xvi. Interfaces coordination and execution; and
xvii. Reporting.

2. Develop the ***ORT Results and Readiness Assessment (D25)*** to evaluate the outcome of the ORT and assess IIS, the DOH organization, and the Offeror's capability to implement the system and subsequently provide M&O support services.

3. Prepare the IIS environment for ORT, at minimum shall include:
a. Preparing and configuring the test environment;
b. Setting up and configuring security;
c. Building and deploying ORT software;
d. Training participants on ORT processes and testing tools;

    e. Conducting conversion transformation, load, and confirmation; and
    f. Preparing third-party and test partner files in order to adequately test interfaces.
4. Provide training and documentation for ORT, including training to the DOH's staff and other test participants, such as contracted service providers.

5. Provide updates to the Weekly Project Status Reports, to summarizes the progress and status of ORT, including the following content:
    a. Any significant problems (S1 and S2 defects);
    b. Problems open;
    c. Problems resolved;
    d. Progress against the ORT Playbook; and
    e. Status of ORT risks and risk status.

6. Assist with ORT as defined in the ORT Playbook. The Offeror's ORT activities must include:
    a. Providing IIS help desk support;
    b. Correcting defects in accordance with SLAs;
    c. Assisting the DOH in identifying and resolving problems discovered during ORT; and
    d. Correcting reported defects in accordance with SLAs.
7. Document known defects uncovered in ORT in the resolution of those problems.

8. Execute batch processes and interfaces.

9. Report ORT activities via ORT Results and Readiness Assessment.

10. Conduct rework on Tasks 1 through Tasks 4 as needed, updating relevant work.

11. Update IIS documentation and ALM and SCM tools as required.

12. Document known defects uncovered in ORT in the monthly Defect Remediation Report.

13. Provide an ***ORT Solution Demonstration (D26)*** session showing full IIS functionality and verification of IIS performance and security.

14. Notify the DOH in writing, upon completion of Task 6, that IIS contains no S1 or S2 defects, and that the Offeror attests that IIS materially conforms to requirements and work, and that IIS is ready for the next task.

4.7 Task 7: User Training

A. Overview

Task 7 involves training designated DOH stakeholders (such as DOH staff and providers sending data) on IIS in preparation for production launch (user training on all M&O items is the responsibility of DOH, with Offeror documentation). Educating users on new IIS functionality, the updated user interface, and modified data entry processes is imperative for a smooth transition to the use of the IIS.

The DOH requires the Offeror to begin work on this training task and the associated scope of work prior to the start of Task 5 and provide training materials in the M&O period. The DOH requires that the Offeror will conduct most of the user-training activities immediately prior to implementation, while making training available to the DOH's stakeholders after Task 5 and throughout the contract term. The DOH requires that the Offeror complete materials for DOH staff to use the initial version of training materials during UAT to verify the accuracy, comprehensiveness, understandability, and usability of the materials. The Offeror must update the materials after UAT in response to the DOH's feedback and must modify the materials as needed to support changes during implementation.

The DOH expects the Offeror OCM resources to recommend an optimal training model to ensure effective use and adoption of IIS. This might include a combination of direct training provided by the Offeror OCM staff and contracted service providers, and a train-the-trainer approach to ensure all users receive multiple opportunities for training. The training model must cover both initial and ongoing training, using a combination of on-site, web-based and on-demand (video tutorial, etc.) trainings. The Offeror will recommend for DDI the appropriate ratio of Offeror and DOH staff trainers to the expected number of solution users.

B. Objective

The objective of Task 7 is to ensure all IIS users have an adequate level of knowledge, skill, and ability to perform their job functions using IIS. The Offeror must develop a Training Plan and Training Materials. Training materials should include handouts, instructions or training outlines, classes, presentations, and on-demand videos. The DOH requires that trainings will include a combination of on-site classes (held in DOH offices),, and online-based classes. The Offeror must provide IIS training, in accordance with Role-Based-Access-Controls (RBAC) and permissions, to the DOH's trainers (should an additional train-the-trainer approach be recommended by the Offeror), and directly to DOH's IIS-using staff and associated provider users.

C. DOH Responsibilities

The DOH's responsibilities for Task 7 include:

1. Supply policies and procedures as needed.
2. Designate the DOH's staff for train-the-trainer trainings (if recommended by the Offeror).
3. Provide subject matter experts to assist with training development.
4. Assist the Offeror during training with program staff.
5. Schedule program and partner staff to attend training sessions and manage attendance.
6. Arrange training facilities, including physical locations for statewide training.
7. Provide partner training using the Training Materials developed by the Offeror.
8. Review and approve work.

D. Offeror Responsibilities

The Offeror's responsibilities for Task 7 include:

1. Develop a ***Training Plan (D27)*** with subsequent updates to the plan no less than quarterly throughout the project duration. The Offeror must obtain written DOH approval before implementing the plan or any of its subsequent revisions. The Offeror must deliver training in accordance with the approved plan, which must include the following content:
    a. Training objectives;
    b. Identification of key personnel and other staff responsible for the work;
    c. Identification of trainee roles and applicable training content, inclusive of web-based training tools, and resource guides (e.g., wiki sites);
    d. Identification of necessary training scripts and content;
    e. Identification of training approach and various training formats;
    f. Explanation of how the Offeror will use computer-based training, classroom training, and the combination of the two (2) modalities to provide training;
    g. Estimation of the number of trainees via each modality;
    h. Description of training session logistics, including where and when the sessions must take place;
    i. Inclusion of a strategy and plan for ongoing training for:
        i. Training new staff
        ii. Training to address refinements to services and new services, as the outcome of additional IIS configuration and/or development
    j. Explanation of essential knowledge and skills users must have to make full use of IIS functionality, accompanied by a description of the following materials:
        i. Technical and user training materials;

ii. User quick-reference guides;
iii. On-demand training videos;
iv. Online help;
v. Release notes;
vi. Test/training scenarios and scripts; and
vii. Other documentation necessary to use and operate IIS.

2. Develop and maintain ***Training Materials (D28)*** for user training through a process that includes gathering input from program subject matter experts to conduct course-specific design sessions. The materials might include visuals, handouts, workbooks, manuals, computerized display (graphics or videos), quick-reference guides, frequently asked question ("FAQ") guides, demonstrations, and online help. The Offeror must make DOH-specified materials available online through the Project's assigned DOH SharePoint site, such as a user's manual to supplement the State's policies and procedures. The user's manual must be made available in a trainer's version and in a student's version. Training staff must use the trainer's version to deliver training to IIS users. The Offeror must design Training Materials for hands-on use in a classroom, lab situation, online training repository (e.g., IIS Wiki site) and/or for future reference by users when IIS is operational. All Training Materials shall become the property of the DOH, and the DOH must review and accept the materials before use. DOH will assume responsibility for maintaining training materials after IIS implementation and M&O phase start. Materials must be appropriate for adult learners of all levels, conducted in compliance with standards for security and training (including ADA 508 compliance).
    a. Training Materials must include:
        i. Training objectives;
        ii. Training scenarios;
        iii. Tools to evaluate if trainees have effectively acquired the skills and understanding necessary to carry out their job functions;
        iv. Training manuals that parallel the content of user and procedure manuals;
        v. User training manual and training materials;
        vi. Instructor guides;
        vii. Classroom exercises;
        viii. Glossary;
        ix. Descriptions or attachments of audio/visual presentations and tutorials;
        x. User manual contents and usage;
        xi. Online help; and
        xii. Other documentation necessary to use IIS.
    b. Training Materials must cover, at a minimum:

i. All IIS features and functions;
ii. Data entry and validation;
iii. Data correction and user help features;
iv. Record update procedures;
v. Data inputs, outputs, and reports generated; and
vi. Report contents and report generation, including ad hoc reporting, search, and inquiry features.

c. After Training Materials are developed, the Offeror must store materials in the collaborative workspace and apply the configuration management process used for all IIS documentation. The Offeror must keep Training Materials current with IIS functionality in DDI phase.

3. Develop a secure training environment and relevant documentation that the Offeror must use in executing the *Training Plan (D28)***.** The training environment must allow for training of users on IIS without disrupting production activities and must fully support all user-training needs. The Offeror must manage the training environment and make it available to the DOH throughout the life of the contract. The Offeror must configure the training environment to allow training data to be expeditiously refreshed between training sessions and as needed.

4. Provide ***Training Delivery (D29)*****,** including Train-the-Trainer Training, if proposed by the Offeror, on how to use IIS and on the associated Training Materials as specified.

5. Update Training Materials and release notes (all formats) to reflect IIS modifications and changes that result from all IIS enhancement activities no later than fifteen (15) business days from the time the change is made.

6. Develop a ***User Training Report (D30)*****,** which documents the satisfactory completion of the Training Plan tasks for training the DOH trainers. The report must include a description of the method for reporting, reviewing, and correcting discrepancies identified during trainings. The report must include the following content:
   a. Names of the persons trained;
   b. List of persons who were scheduled for training but did not attend;
   c. Training date;
   d. Length of training;
   e. Offeror's comments regarding the training session;
   f. Identification and resolution of training discrepancies;
   g. Training evaluation regarding the effectiveness of the training using industry standards; and

h. The Offeror's recommended changes to the approved Training Plan and Training Materials, inclusive of any changes requested by the DOH

7. Document any known defects uncovered in Task 7 in the monthly Defect Remediation Report.

8. Notify the DOH in writing, upon completion of Task 7, that the Offeror attests the user training for IIS materially conforms to requirements and scope of work and IIS is ready for the next task.

4.8 Task 8: Implementation Planning and Execution

A. Overview

Task 8 involves the Offeror implementing IIS functionality upon written notice to proceed from the DOH. At the conclusion of the implementation task and again at the end of the Contract, the Offeror must guarantee that IIS is fully implemented and operational and in alignment with State and federal requirements. The DOH must review the Implementation Plan to determine if and when the Offeror and the DOH must conduct additional activities prior to the rollout.

B. Objective

The objective of Task 8 is to develop the Implementation Plan and artifacts required to put the tested and operational IIS into production with minimal disruption to DOH staff, and clinical provider users.

C. DOH Responsibilities

The DOH's responsibilities for Task 8 include:

1. Participate in development of the Implementation Plan.
2. Communicate the implementation schedule and preparation activities to DOH staff.
3. Support the Offeror in performing an Implementation Readiness Assessment.
4. Review and provide feedback on the Implementation Report.
5. Provide help desk support across the divisions when IIS is fully implemented, operational, and training is complete.
6. Provide IIS oversight, subject matter expertise, and testing expertise when IIS is implemented, operational, and training is complete.
7. Coordinate activities with DOH partners.
8. Implement and support updated business processes, including internal documentation, that support IIS.
9. Review and approve work.

D. Offeror Responsibilities

The Offeror's responsibilities for Task 8 include:

1. Develop an ***Implementation Plan (D31)*** that details the Offeror's approach to implementing IIS functionality into production and incorporating all lessons learned during IIS testing. These actions are to be taken in alignment with approvals on the System Security Plan and the Data Conversion and Migration Plan. The plan must include the following content:
    a. Sequenced tasks and processes, the Offeror's staff and the DOH's staff responsible for each task and process, and the duration and schedule of each task/process necessary for:
        i. Initializing IIS;
        ii. Implementing and conducting a production pilot;
        iii. Post-pilot roll-back;
        iv. Post-pilot implementation rollout; and
        v. Post-pilot implementation roll-back.
    b. Description of an implementation coordination team, composed of Offeror and DOH staff, to coordinate and review the implementation preparation and execution; and
    c. Criteria for IIS production pilot and implementation rollout readiness.

2. Facilitate weekly implementation status meetings with the DOH and DOH partners that begin at least six (6) weeks prior to the planned implementation date. Implementation status sessions should at a minimum address the following:
    a. Implementation tasks and status;
    b. Action items status;
    c. Issues and decisions status;
    d. Status of any defects that have the potential of postponing implementation; and
    e. Active risks and mitigation strategies.

3. Perform an **Implementation Readiness Assessment (D32)** prior to production pilot and again prior to implementation. The Offeror must document and provide support information, data, and rationale, updated as necessary and appropriate, indicating that IIS is ready for production pilot and implementation and that the following activities are completed:
    a. Missed requirements are developed and functioning in the test environment and are ready to move to the production environment;
    b. IIS meets performance standards and functions in accordance with RTM requirement;
    c. DOH staff have been appropriately trained and prepared;
    d. DOH provider partners have been appropriately trained, notified, and prepared;

e. IIS is ready for the production pilot and statewide use by the DOH in the production environment; and
f. Any additional functionality required for federal certification is functioning in production, or is in development in accordance with the priority set by the governing entities (e.g., AIRA and CDC standards).

4. Deliver an ***Implementation Report (D33)*** at least once following rollout. The format and level of detail for this report must reflect input from the DOH. The report must include at minimum:
    a. Tasks accomplished to prepare for implementation, the IIS' and DOH's readiness; and
    b. Confirmation of satisfactory implementation of IIS, including documenting the significant data, events, and information related to the rollout of IIS to the DOH.

5. Configure the production environment and necessary documentation the Offeror must rollout during the implementation task. The production environment must:
    a. Meet mandatory functional requirements;
    b. Meet mandatory technical requirements;
    c. Comply with the Solution Architecture Document and the System Security Plan;
    d. Meet performance objectives as documented in the SLAs;
    e. Be fully maintainable, integrated, and secure, and contain all of the hardware, software, network communications, data storage and associated components necessary for ongoing operations of IIS that meet all program needs; and
    f. Allow M&O enhancement of IIS without disruption of any other DOH computing activities. This is inclusive of subsequent releases off hours and minimizing disruptions of DOH operations. The production environment and documentation must include the following content:
        i. Inventory of the hardware, software, network communication, and data storage components necessary to support ongoing operations of IIS;
        ii. List of configurations, security, and change management processes;
        iii. Outbound and inbound data exchange connections; and
        iv. Platform architecture schematic that illustrates the technology components of IIS.

6. Document any known defects uncovered in Task 8 in the monthly Defect Remediation Report.

7. Notify the DOH in writing, upon completion of Task 8, the Offeror attests that IIS materially conforms to requirements and scope of work and is ready for the next task.

4.9 Task 9: DDI Closeout

A. Overview
Task 9 involves completion of project closeout activities for DDI, including reviewing lessons learned and developing closeout documentation for each phase.

B. Objective
The objective of Task 9 is to ensure all lessons learned are shared with the project team, including M&O stakeholders, and that all IIS artifacts are archived and stored in the original format in a DOH-owned document repository (e.g., DOH SharePoint).

C. DOH Responsibilities
DOH's responsibilities for Task 9 include:
1. Participate in lessons learned meetings.
2. Provide a DOH document repository for archiving project documents.
3. Review and accept work.

D. Offeror Responsibilities
The Offeror's responsibilities for Task 9 include:
1. Conduct project closeout responsibilities and develop a ***DDI Closeout Report (D34)*****.** The report must consist of the following:
    a. Major accomplishments;
    b. Scope of work checklist; and
    c. Performance to schedule, including:
        i. Lessons learned; and
        ii. Outstanding risks or issues that the DOH and M&O stakeholders must address.

2. Conduct lessons learned sessions with the DOH's project stakeholders and document the lessons learned with findings and recommendations.

3. Confirm the DOH's acceptance of all required projects.

4. Finalize updates to and provide copies of all project documents in their native formats (MS Word, PowerPoint, Excel, and Project).

5. Ensure IIS artifacts are archived in the DOH-owned repository.

Section 5
Service Specifications: M&O and Enhancement Requirements

5.1 M&O

A. Overview

The Offeror must provide M&O for the IIS after release of the solution into production, and implement IIS enhancements to better support the programs, as described in Section 5 M&O and Enhancement Requirements, and the M&O requirements provided in the Attachment E, IIS RTM.

The M&O table below provides a summary of the DOH's business needs for the M&O base and optional additional contract years.

B. Table: Summary of M&O Business Needs

Area of Need	Description of Offeror Services
Perform M&O for IIS	The Offeror must provide combined M&O services in adherence with M&O requirements and SLAs. These M&O activities are focused on IMB business needs on an annual basis. The M&O transition for the IIS is expected once associated DDI activities are complete, in or after Summer 2025. The Offeror shall estimate volume and velocity of activities for IIS M&O based on similar IIS projects the Offeror has implemented in other jurisdictions. This is anticipated to comprise all aspects of development work (e.g., items as tracked in the ALM tool). This should include all aspects of M&O: requests, design, planning, development, testing, bug fixes, re-testing, and associated project management. The DOH technical team is anticipated to provide resources needed for base level (Tier-1) system support and configuration. These deployment services include responsibility for the Offeror to perform all IIS M&O deployments into production. These production deployments are to be planned based on DOH team involvement in non-production deployment activities. The Offeror shall estimate the cadence of regular production M&O releases based on similar IIS projects they have performed in other jurisdictions.
Ensure Compliance with State and Federal Policies and Requirements	IIS updates and fixes to the current functionality to ensure compliance with all federal and State requirements, inclusive of system, interface, and security regulations (e.g., CDC IIS Functional Standards v4.1, HL7 interface standards, and subsequent evolutions).
Increase Effectiveness, Performance,	IIS updates and fixes to the initially implemented functionality to increase effectiveness and efficiency of the HIR and IMB operations.

and Efficiency	
Improve Integration with Internal and External Systems	All real-time and batch interfaces operate proficiently without human interaction, interruption, or data corruption. Interfaces include external systems (e.g., hospitals and healthcare systems EHRs), and DOH internal systems (e.g., Rhapsody integration engine, MAVEN electronic disease surveillance system).
Improve Reporting Capabilities	Reporting and dashboard capabilities, integrated with the IIS solution components, and viewable outside the system for export for administrative management, State, and federal reporting. These information views are to allow the DOH user-friendly, flexible, and robust reporting tools to address quick response requests for information. Reports and dashboards may be produced within the solution or via external tool integration (e.g., Tableau or PowerBI).

C. Objective

M&O and enhancements serve to ensure the Offeror provides the proper level of M&O services, including meeting the SLAs and other performance standards identified in the contract. This comprises identifying an appropriate level of Offeror staffing resources, and ensuring that they are available to reliably maintain, operate, update, and enhance IIS. The DOH's goals and objectives for implementation of each increment are to first stabilize each increment, and then work with the Offeror to develop plans for addressing deficiencies and implementing enhancements.

A two (2)-month (60-calendar day) stabilization period will follow implementation of the IIS full solution go-live. During the stabilization period, the DOH will only authorize enhancements required by State or federal mandates. Stabilization allows Offeror M&O staff to focus on achieving performance requirements and remediation of defects that impact the use of IIS by the DOH's workers and clients. The Offeror's monitoring, reporting, and response to IIS availability, defects, response times, and other performance problems will be the basis upon which the DOH will consider acceptance of SLA failures during the stabilization period. Stabilization is only achieved once the system and Offeror are in compliance with the associated SLAs. If the final month of the stabilization period results in IIS availability, defect remediation, or response time penalties, then IIS would be considered not sufficiently stable to proceed into the regular M&O phase for enhancements. Therefore, the stabilization period would then extend on a month-to-month basis until stabilization is achieved. The DOH will not release the ten (10) percent holdback for the Offeror's DDI final payment until after IIS stabilization is achieved. During the stabilization period, the DOH and the Offeror will continue parallel DDI tasks on backlog and prioritized Solution Requests ("SR") planning.

D. DOH Responsibilities

The DOH'S responsibilities for M&O include:

1. Monitor and approve all work performed by the Offeror.
2. Assess the Offeror's performance and IT solution stabilization.
3. Participate in regular defect review meetings and assist with defect identification and management.
4. Review all SRs and participate in regular SR prioritization meetings.
5. Provide final approval of all SRs.
6. Escalate issues and contract disputes to the Steering Committee for resolution.
7. Review completed work within the agreed-upon time frame.
8. Review release notes and perform UAT of defect fixes, SRs, and other updates resulting from scheduled maintenance.
9. Provide access to DOH facilities, personnel, documentation, and other items under DOH control, and provide access to third parties, as necessary.
10. Provide the necessary policy training, updates, and clarification to enable successful interpretation of new policies or requirements.
11. Provide IIS user training, as agreed to in the Training Plan.
12. Monitor Offeror and IIS compliance with the contract and SLAs.

E. Offeror Responsibilities

1. Warranty of Work
    a. The Offeror will warrant that the System will operate in accordance with applicable Specifications and contract requirements for the term of the contract. A Warranty Period shall apply to each system implementation Release Deliverable (e.g., Go-Live). Each Warranty Period shall be the one (1) year period following Acceptance of each Deliverable and following Go-Live of each Release, during which Offeror shall provide Warranty Services at no charge. The Warranty Period shall also apply for one (1) year after Acceptance of each Release. The Warranty Period shall also apply for one (1) year following Acceptance of the System, including all Modules in it. Warranty Services include the requirement that the Offeror shall correct all Deficiencies at no cost. After the Warranty Period, corrections of Deficiencies shall be performed as part of the Maintenance and Operations Services. Effort spent on making corrections during the Warranty Period shall not be counted as M&O Services.

2. Solution Maintenance and Operations Approach
    a. This section and the State General Conditions attached hereto as Attachment G and made a part hereof, and to the Contract, describe how M&O services will be provided by the Offeror. The Offeror's Proposal should align with these guidelines and requirements. Any deviations should be addressed in the Proposal. The M&O services to be provided by the Offeror are defined in

detail in the IIS Scope of Work and Requirements Traceability Matrix. The Offeror is responsible for maintaining all end-user functionality developed and configured to perform as required in the Contract for the IIS Project.

3. Break-Fix Approach
    a. DOH acceptance criteria require that the IIS Solution will be free from Deficiencies, malicious software, software access loopholes, or "back doors," failures to meet performance standards, and similar Deficiencies. These Deficiencies, problems, failures, and other issues must be resolved by the Offeror. There are also other circumstances where the Software and converted data may not function according to the specification or requirement. The Offeror must provide "break fix" services as part of the Contract. This obligation for: break fix" includes:
        i. Analysis, design, and development of remedies for issues;
        ii. Perform unit testing of fixes;
        iii. Coordinate integration and IIS testing of fixes; and
        iv. Coordinate migration of changes to production version of IIS software with the DOH's change and release procedures where applicable. DOH will consult on and install any of these changes with assistance from the Offeror as required.

4. Enhancements Approach
    a. As with any solution, DOH requires enhancements and modifications during the DDI implementation and M&O phases. There shall be a freeze on modifications when UAT begins.

        The Offeror shall track all enhancement requests and submit to the DOH Change Control Board for review, prioritization, and Acceptance. The Offeror shall be responsible for analyzing the requested change, providing a cost estimate, and timing for implementing the changes should it be approved. In developing the proposed cost, the Offeror shall provide a formal mechanism and use standardized best practice tools such as experience-based costs, function points or a similar mechanism. Once approved the hours are fixed and applied to the M&O pool of hours.

        The Offeror shall provide a set bank of hours per contract year for enhancements to functionality that has been implemented. If all hours are not used in a contract year, the remaining hours shall "rollover" or be carried over to be used in the next contract year. In the next contract year, the rollover/carry over hours shall be added to the next year's hours. These rollover/carry over hours shall be cumulative through the initial term of the contract and applied to any renewal terms if not used during the initial term. These hours

must be included in the cost proposal for M&O. This pool of hours shall not be used for changes to the IIS as a result of new standard versions of the IIS software as developed by the Offeror. The Offeror must also update documentation including technical solution documentation, training materials, and testing scripts/automated regression tests with all changes resulting from all the enhancements performed within the regular activities of delivering the functionality.

F. Offeror's responsibilities for M&O include:
    1. Develop, maintain, and implement ***M&O Plan (O1)*** that documents how the Offeror will address M&O requirements. The first year's M&O plan must identify and describe the Offeror's strategy and approach to providing the required M&O support for IIS (in the first full 12-month period of system use in M&O phase). The Offeror must update the plan in full, at minimum, annually with monthly revisions, and as requested by the DOH to reflect evolving services, priorities, and resources. The plan must also describe how the Offeror will coordinate M&O and other tasks leading up to M&O. The plan must include:
        a. Processes and procedures needed for day-to-day IIS operations, including the following:
            i. IIS troubleshooting, and tuning procedures and features;
            ii. Processes and procedures for implementing common types of IIS enhancements (e.g., adding a workflow, building a new notice template, changing the valid values for a lookup, adding document types, and changing database objects);
            iii. Software management functions, such as building code and code management;
            iv. Solution interface processing, including API documentation and data exchanges with other systems;
            v. Online and batch processing procedures;
            vi. Maintenance of cloud-based infrastructure;
            vii. IIS backup and recovery procedures;
            viii. Security procedures, scans, logs, and automated security tools;
            ix. Setting and changing IIS passwords and user IDs;
            x. Managing user permissions and roles;
            xi. IIS processing procedures;
            xii. IIS menu structures;
            xiii. Job scheduling;
            xiv. Job cycles (daily, weekly, monthly, quarterly, annually, special);
            xv. Database maintenance and performance optimization management;

xvi. Log management;
xvii. Third-party software upgrades and maintenance; and
xviii. Error recording, reporting, and troubleshooting procedures.

b. Tasks necessary to maintain the IIS solution deployments across separate non-production and production environments
    i. The plan must account for entirely separate instances for multiple IIS development and production environments.
    ii. The Offeror must provide staffing and support for IIS production deployments on a schedule contained and updated in the comprehensive M&O Plan.
c. Batch job standards and online technical support standards;
d. Tools and methods to capture, report on SLAs, and facilitate tracing/observability of the system health of IIS components and environments;
e. Tasks necessary to establish the technical support team for equipment and data communications problem solving;
f. IIS technical support help desk management plan;
g. Processes for the Offeror to deliver IT solution documentation updates, including the methodology for updating and reviewing documentation, the schedules on which the Offeror will update documentation, tool(s) used, staffing allocated for storing and updating documentation, and how the Offeror will ensure compliance with version control protocols;
h. Security management plan, with a comprehensive overview of the approach to IIS and data security (specifying the standards and methodology for securing and managing access to IIS, the software, and the data); to be written as updates to the System Security Plan; and
i. Standards for the security components of services

2. Develop, maintain, and implement an ***M&O Work Plan and Schedule (O2)*****,** including schedule dates for all M&O procedures scheduled for the next six (6) months. The plan must be updated, at minimum, monthly, and include all tasks for preparation (e.g., ordering, installation, and testing), and milestones that show when execution will be complete. The plan must be comprehensive of IIS development and testing workstreams, and deployment tasks to production conducted by the Offeror.

3. Develop a monthly ***M&O Status Report (O3)*** to report on IIS support activities. The report must consist of the following:
    a. Status of SLAs and performance standards;
    b. Status of operational activities;
    c. Help desk reporting;

d. Status of tasks, staff assignments, and schedule of work for the upcoming month;
e. Status of the work underway;
f. List of tasks completed in the prior month; and
g. List of IT solution operation problems.

4. Provide M&O services in accordance with the agreed-upon service levels included in the SLAs and other M&O requirements. This includes:
    a. Performing system deployments to production separately for the IIS production environments;
    b. Setting up and executing batches and interfaces;
    c. Running and distributing electronic reports;
    d. Performing data backup and restores (when necessary);
    e. Monitoring and tuning performance;
    f. Providing critical incident response; and
    g. Maintaining all IIS documentation (e.g., third-party products, version, licensing costs, and expiration dates, and IIS custom software inventory with current version and change logs). The Offeror must update and save all IIS documentation changes to the collaborative workspace within thirty (30) days of modification.

5. Develop a monthly ***Batch Jobs Exceptions Report (O4)*** that reports on batch processes, including interfaces that experienced execution and data exception errors. All batch processes that fail to meet performance standards specified in SLAs must be listed on the report. The report must include a list of the fixes implemented and any Offeror recommendations for fixing the problems in the future.

6. Monitor performance, including providing performance-monitoring software or Software as a Service (SaaS) tools, management, and reporting in accordance with SLAs. The Offeror must report the following information regarding IIS availability in the monthly M&O Status Report:
    a. Each segment of downtime minutes by day during the scheduled availability period;
    b. Components affected by each segment of downtime;
    c. Environments involved in downtime (e.g., test, train, and stage);
    d. Weekly total of downtime minutes occurring during scheduled availability periods; and
    e. Cause of downtime.

7. Develop, maintain, and implement an ***Infrastructure and Solution Software Support Plan (O5).***

8. Resolve defects as prioritized by the DOH and in accordance with the SLA timelines for remediation by severity level, and work with the DOH to review and validate the identified defects and other problems in production and all other environments. The Offeror must provide level of effort estimates for all assigned defects, other than S1. At the request of the Offeror, the IIS Steering Committee may allow temporary waiving or acceptance of the defect remediation SLA in the event one (1) or more SRs require allocation of a portion of the M&O staff to meet critical business needs. The Offeror must however maintain M&O staff to meet all other operational service levels for S1 and S2 defects, IT solution availability, and performance at all times. Prior to beginning work on S2, S3, or S4 defects (defined under section 5.8), the DOH will review the level of effort estimates and defect descriptions. The DOH may request that some defects are given resolution order preference, but the Offeror is ultimately responsible for determining the most efficient and effective approach for resolving all defects to comply with the SLA.

9. Develop and provide a monthly ***Defect Remediation Report (O6)*****,** including a summary of the defects reported, fixed, and backlogged. The DOH will use this report to determine compliance with the defect remediation SLA.

10. Maintain DDI-related work (e.g., Software Development Guide, Test Plan, and UAT Plan). The Offeror will perform DDI for approved SRs, work with the DOH to review and validate requested and approved SRs, and develop an implementation schedule for each SR. The DOH will prioritize SRs in accordance with the approved change control process. The IIS Steering Committee will review and approve requested enhancement funding and the implementation schedule. DDI-related work will be compliant with federal conditions and standards.

11. Provide annual updates at a minimum to the ***System Security Plan (O7)*** and associated documentation. The production solution and any environments that contain unmasked production data must accommodate State and federal security requirements. The Offeror must maintain and update security documents to reflect new requirements from federal partners, and any remediation actions required due to independent security assessment findings.

12. Provide ongoing security management for IIS and performing an annual ***Security Test (O8)*****,** which includes penetration and vulnerability testing by a third party.

13. Address and resolve risks related to cloud hosting and SaaS-based system components.

14. Provide cloud-based infrastructure to support business continuity and disaster recovery services in accordance with the disaster recovery SLA.

15. Provide options for alternative regions of virtualized server-based infrastructure to support business continuity and disaster recovery services in accordance with the disaster recovery SLA. This is to provide continuity of operations for clinical services that may be conducted 24/7.

16. Maintain a ***Business Continuity and Disaster Recovery Plan (O9)*****,** to include a disaster recovery testing plan.

17. Perform a ***Disaster Recovery Test (O10)*****,** as an annual test of the capability to transfer the production environment to the disaster recovery environment and proceed with production processing with no or minimal loss of data.

18. Update ***Training Materials (O11)*** and system reference documentation based on implemented SRs and other IIS solution changes as they are implemented into production.

19. Develop an ***IIS Functional Standards Review Management Plan (O12)*** for achieving certification of IIS and provide associated ***IIS Functional Standards Review Documentation (O13)*** to support alignment of the system with the CDC IIS Functional Standards (e.g., version 4.1 or updated current version). The plan must include Offeror and DOH review tasks and schedule and utilize in part the Aggregate Analysis Reporting Tool ("AART") to provide proof of meeting these federal requirements. The Offeror must manage the system-related documentation tasks through successful completion of this process. The Offeror must meet with the DOH regularly and collaborate to discuss compliance problems and associated service delivery changes.

20. Conduct a post-implementation audit to evaluate the project's goals and achievements, including:
    a. Validation and confirmation that the implemented IIS meets the DOH's vision and original project objectives and budget;
    b. Determination of satisfaction of the DOH's stakeholders;
    c. Validation and confirmation of successful completion of final work;

d. Creation of an action plan for any gaps identified during the post-implementation audit;
e. Identification of areas for further development, along with benefits and risks, for
f. future consideration;
g. Identification of lessons learned for potential DOH utilization in future projects; and
h. Documentation of findings and recommendations

21. Collaborate with the DOH's divisions, partners, and other state agencies to address integration problems, changes in laws and business practices, potential risks, and other factors that impact service delivery and compliance.

22. Assist the DOH in interpreting future federal and State laws, policies, and requirements and estimating their impact on IIS and the DOH's DOCD Immunization Branch model as it impacts the technical system.

5.2 Defect Remediation

A. The Offeror may choose to follow the existing the DOH defect remediation process, propose changes, or submit an alternative approach in their proposals to this RFP. The current defect remediation process is as follows:
    1. The Offeror or any IIS user, which includes help desk staff, submits a ticket. The Offeror documents tickets in the ticket/bug tracking tool as a bug or request with an SR number.

    2. The DOH staff perform initial review of all new bugs for consistency and accuracy. The DOH staff review the assigned category, severity, and problem description fields to verify the problem is sufficiently documented. The DOH and Offeror jointly diagnose the defect and options for resolution.

    3. The Offeror addresses bugs in severity and priority order as determined by the DOH.

    4. The Offeror and the DOH assign each bug to a target build based on the most likely target release to production.

    5. The Offeror researches the problem, and if resolution requires programming changes, fixes the software and unit and solution tests the changes. DOH staff may assist with the resolution, for example to open and manage bug tickets.

6. Data fixes, requests for assistance, hard breaks, etc., may be fixed without programming, testing, and inclusion in a software build (e.g., mid-sprint deployment ["MSD]). These fixes are more typically tested and deployed in a scheduled Agile release.

7. The Offeror updates the configuration management tool with the anticipated release date for each fix.

8. Offeror testing occurs before DOH testing unless the fix is urgent. For urgent items, the Offeror moves the fix to the UAT environment for the DOH and the Offeror to test concurrently in separate environments.

9. After the fix is moved into the UAT environment, the Offeror and the DOH will discuss how to test the fix.

10. The DOH conducts testing. If testing identifies additional defects, the DOH will submit a new bug for the new problems and associate it with the appropriate build tracker item.

11. Once testing is conducted and the ticket receives the DOH approval, approval for the release is confirmed.

5.3 System Requests (SR)

A. The Offeror may choose to follow an existing example DOH SR process or submit an alternative approach in their proposals to this RFP. The current preferred DOH SR process is:
    1. The Product Owners review the SRs. The SRs are gathered via DOH internal requirements-gathering JAD sessions. Typically, requirements are gathered over several JAD sessions, the first of which is conducted internally by the DOH. The subsequent joint sessions are collaborative for the DOH and the Offeror to develop and finalize SR requirements.

    2. The SRs in totality including all open backlog items that are not deployed to production must be reviewed twice annually. The State expects the Offeror to propose a process for conducting complete backlog reviews every six months throughout the life of the contract, during both DDI and M&O phases. This backlog should comprehensively review and prioritize all remaining work items in the development queue. The backlog review shall conclude with the prioritization of work items into ongoing development.

    3. The SR is expected by DOH to proceed as follows:
        a. The DOH initially drafts the SR requirements and any potential business-facing draft design.

b. The Offeror and the DOH finalize the draft SR, which includes the requirements, design documentation, and business rules needed to describe the change.
c. The Offeror provides a rough order-of-magnitude estimate.
d. The DOH reviews and approves development in weekly issues meetings, associated with a scheduled Agile release.
e. The Offeror creates a schedule for each Agile release including development start date, testing dates, UAT dates, soft code freeze date, hard code freeze date, regression testing dates, and deployment date.
f. The Offeror conducts development, unit testing, and system testing. The DOH team may participate as needed.
g. The Offeror migrates SR changes to the UAT environment on regular cycles (e.g., three to four times a month).
h. The DOH conducts acceptance testing on regular cycles (e.g., four times a month), and, if successful, gives approval to implement. If acceptance testing fails, the SR is moved back to development and unit/system testing.
i. Migration to production and the training environment occurs according to the Agile release schedule.
j. After an SR's requirements have been drafted, approvals are required prior to finalizing the execution of the SR.

4. The DOH tentatively assigns the SR into a scheduled Agile or MSD release. This is approval for the Offeror to develop a not-to-exceed estimate of the level of effort and time and materials costs required to complete each SR.

5. Approval for the Offeror to complete the SR.

B. The Offeror must resolve all defects discovered during Offeror unit and system testing prior to migration to UAT. The DOH team may participate in unit and system testing on an as-needed basis to support complex test cases development. The Offeror must provide documentation in the tracking tool of all development tasks, unit tests, and system and regression tests conducted prior to migration to UAT. The DOH is not responsible for identifying or paying for defects introduced during development and maintenance and missed during the Offeror's and the DOH's testing. The purpose of UAT is to confirm that all SR requirements are met and that tickets are resolved. The DOH will report defects encountered during UAT as new tickets, which might prevent or delay the migration of tickets, SRs, or an entire build to production. Defects missed during Offeror testing and UAT and then migrated into production will be added to the defect log and counted against the monthly SLA backlog standards. For test cycles to be executed by the DOH, the Offeror must provide all test cases and associated test data.

5.4 Security Requirements

A. The Offeror is responsible for the following aspects of IIS security protection:
    1. Maintaining all system-level accounts as defined by the DOH.
    2. Maintaining adherence to currently enforced IT standards.
    3. Maintaining adherence to currently enforced federal standards.
    4. Monitoring overall security of the IIS and resolving security deficiencies as they are identified.
    5. Conducting third-party vulnerability and penetration tests of IIS.
    6. Preparing and annually updating the System Security Plan and all required security documents.

5.5 Production Support

A. The Offeror is responsible for the following aspects of IIS production support:
    1. Tracking and reporting progress on all SRs and tickets in the ALM tool;
    2. Monitoring daily jobs and reporting errors and failures;
    3. Managing the defect remediation process;
    4. Refreshing the test and training environments as requested by the DOH;
    5. Overseeing automated IIS reporting;
    6. Designing and making available ad hoc production reports at the DOH's request;
    7. Coordinating with the DOH to generate new queries and reports; and
    8. Overseeing automated IIS reporting.

5.6 Help Desk Support

A. The DOH and the Offeror will share IIS help desk support. Each organization will provide a different tier of help desk support to users. The DOH help desk will field business and policy questions, as well as provide Tier 1 help desk support (such as responding to account management requests and basic system usability questions). Together, the DOH and the Offeror will provide Tier 2 help desk support, in which the DOH and the Offeror will work together to determine appropriate action for the request. The Offeror will be responsible for Tier 3 help desk support, managing technical problems the DOH cannot resolve. Problems the Offeror cannot resolve, and items identified in Tier 1 and 2 for further resolution, will be logged as tickets and follow the ticket resolution process.

5.7 Defect Severity and Priority Levels and Descriptions

A. Tables 1 and 2 describe the severity and priority levels used with DOH defects (including help desk support tickets). The severity levels are used to categorize defects, and the priority levels are used to facilitate the sequencing of development tasks and the system upgrade schedule.

Table 1: Defect Severity Levels and Description

Defect Severity Levels and Description		
S1	Critical	S1 defect is a catastrophic defect that causes total failure of the software or unrecoverable data loss. There is no workaround. A Severity 1 defect would prevent the product from being released. • Example: Defects that cause the system to crash, corrupt data files, cause denial of access for authorized users, or create complete disruptions of the service. • Example: Clicking on the report button causes a system crash
S2	High	S2 defect results in severely impaired functionality. A workaround may exist but the use is unsatisfactory. • Example: Incorrect core functionality is produced, and a workaround exists, but this is difficult to implement and would be confusing to users. • Example: A broken system workflow causes lookups of prior vaccines to be inaccessible to users.
S3	Medium	S3 defect causes failure of non-critical aspects of the system. There is a reasonable satisfactory workaround. The product may be released if the defect is documented, but the existence of the defect may cause user dissatisfaction. Defects with a severity level of 3 could be resolved by moving the fix to a later release. • Example: A search query is not recognizing an option correctly, but if a filter is set, it can be generated with the proper output.
S4	Low	S4 defect is of minor significance. A workaround exists or, if not, the impairment is slight. Generally, the product could be released, and most users would be unaware of the defect's existence or only slightly dissatisfied. Defects with a severity level of 4 may be resolved by moving the fix to a later release. • Example: A button or button set is slightly off center on a data screen, or the problem is purely cosmetic and not easily recognizable. • Example: Defects affecting system usability, or look and feel.

Table 2: Ticket Priority Levels and Description

Ticket Priority Levels and Descriptions	
P1	The issue has caused a critical application function to become unusable or unavailable, and no workaround exists. A fix is required immediately for go-live or ongoing operations.
P2	The issue has caused a critical application function to become unusable or unavailable, but a workaround exists. A fix is required for first (hot fix or mid-sprint-deployment) update after go-live.
P3	The issue has diminished critical or important application functionality or performance, but the functionality still performs as specified in the user documentation. A fix is required for the first scheduled release after go-live.

P4	The issue has diminished supportive application functionality or performance. A proposed fix is added to the parking lot or next scheduled Iteration as identified by DOH.

5.8 Software Upgrades

A. The Offeror must upgrade and test any applicable third-party software in all IIS environments. The DOH requires the Offeror to maintain all third-party software and plug-in code not managed by the DOH and ensure all third-party software and plug-in code use appropriate release versions.

Section 6
Service Specifications: Scope of Work

6.1 Scope of Work

The scope of work encompasses the following tasks and responsibilities:

A. System Requirements

1. The IIS used to replace the legacy HIR shall meet all CDC functional standards in the version 4.1 and be a fully developed COTS system that has been similarly implemented in other jurisdictions. The Offeror shall establish this IIS software as fully developed by evidence of the IIS deployment in other state, local, or territorial health departments meeting these standards. The State requires there should be no or very minimal custom software development to make the system compliant with these functional standards. Offerors shall identify in written proposals the percentage of system configuration versus expected minimal amount of system development in order to successfully deploy the complete IIS for Hawaii. Vendor proposals may not exceed five-to-ten percent (5-10%) of system custom development in these written proposals.

2. The Offeror shall provide the cloud hosting services in a secure environment and may elect to provide these hosting services directly or subcontract with a separate cloud hosting services provider as identified in proposals. The hosting services must be compliant with industry standards, and the Offeror shall provide an annual SOC2 compliance report for State review.

3. This data shall be backed up and protected under industry standards. The Offeror shall perform biennial Disaster Recovery testing to the State's specifications and shall submit all results to the State for approval and formal sign-off. The Offeror shall perform security evaluations, including annual security reviews, and bi-annual assessments and shall submit all reports and findings to the State prior to the end of the contract period.

4. The system must be able to meet the technical requirements listed on the IIS RTM, attached hereto as Attachment E. The Offeror shall identify that they can provide the specified functionality via configuration, custom code, or not at all. This artifact is required to assess the percentage of the IIS that can be delivered for Hawaii with minimal custom code.

B. Interoperability and Data Exchange Requirements

1. Production Data

A priority of the State is to expand the number of providers utilizing HIR's data exchange capabilities and moving current data exchange providers to real-time, bi-directional data exchange utilizing HL7 2.5.1 messaging.

a. The Offeror shall assist the State in supporting data exchanges from providers and other partners. The Offeror shall either support all aspects of data exchange from providers or teach HIR personnel how to perform these functions. The Offeror shall develop and implement an interoperability and or data exchange plan to include:
   i. Working with EHR software vendors regarding HIR system requirements for developing interfaces;
   ii. Working with the Hawaii Health Information Exchange ("HHIE") regarding HIR system requirements for developing interfaces;
   iii. Assisting providers/partners in understanding HIR system requirements, and completing onboarding processes, data exchange procedures, and data quality testing protocols for sample messages;
   iv. Assisting the State in processing initial provider data exchange files in testing environment for data quality verification;
   v. Documenting EHR vendor and provider meetings, status of data exchange testing, and readiness for implementing real-time, automatic, bi-directional HL7 data exchange in HIR production environment;
   vi. Monitoring data exchange post-implementation, including data quality verification by comparing EHR and HIR data for patient records in HIR production environment;
   vii. Reporting on errors and/or failed data exchange submissions;
   viii. Investigating cause(s) for errors/failed data exchange submission; and
   ix. Providing technical assistance as needed to EHR vendors and immunization providers.

2. Interoperability and Data Exchange Deliverables

a. Interoperability and Data Exchange Plan;
b. Interoperability and Data Exchange reports; and
c. Ensuring offeror's system provides latest version of HL7 (currently HL7 2.5.1) and has the capability of modifying for updated versions.

C. Implementation Requirements

1. The Offeror will be able to transfer legacy data from the previous WIR Based HIR to the new COTS system including, but not limited to, vaccine inventory, business information for healthcare providers and their parent systems, and individual vaccine records and establish the new HIR within a twelve (12) month implementation timeframe.

2. The Offeror will assist in re-establishing HL7 messaging with all current healthcare vendors and educate Hawaii Immunization Branch Staff training on how to establish HL7 connections with healthcare providers. The Offeror will create, with input from the Hawaii Immunization Branch, an HL7 onboarding and maintenance protocol. Refer to the section 4.7 User Training for requirements around the content and structure for this training curriculum.

D. System Maintenance

1. Offeror shall ensure HIR production environment's security and reliability. Updates to software should require minimal testing by the immunization team with thorough beta testing already being conducted prior to evaluation by the Hawai'i Immunization Branch. The Offeror shall ensure that the system is always available to its users other than scheduled back-ups, maintenance, and application upgrades necessary to sustain the system operations.

2. Production outages for back-ups, maintenance, and application upgrades shall be pre-approved by the State and the Offeror shall provide notice at a minimum of five (5) working days prior to the scheduled outage. Hardware or software issues requiring correction within a shorter time period shall be allowed only if mutually agreed upon by the State and the Offeror. The Offeror shall report urgent or emergency system outages through the escalation procedures specified in Section 5.5 of this RFP.

3. System support shall include but not be limited to:
    a. Create, submit, and execute jobs, processes, programs and screens required for automated functions;
    b. Identify, analyze, and correct all application defects, prioritized by impact level and urgency;
    c. Correct or update data, files, databases, and tables for data loads, correction, and testing;
    d. Perform system analysis on a scheduled basis and document in writing the review and findings;
    e. Manage all files and all utility scripts;

f. Identify and document requests for any Operating system patches or upgrades that will improve system performance to ensure optimal benefit;
g. Maintain and update all interfaces, including changes necessary to support the requirements of a sending or receiving system;
h. Provide operations and maintenance support, including but not limited to fixing system interrupts, monitoring online and after-hours processes, testing and implementing to their IIS system as well as with the cloud hosting environment.
i. Make changes required to meet Federal or State statutes, regulations or rule changes or more than one of these, and reporting requirements for organizations, including but not limited to the CDC, Office of the National Coordinator for Health Information Technology ("ONC"), Advisory Council on Immunization Practices ("ACIP"), HDOH's Health Information Systems Office ("HISO"), State of Hawaii Office of Enterprise Technology Services ("ETS"), and HHIE;
j. Keep vaccine forecasting software up to date with CDC ACIP recommendations using CDC's CDSi; and
k. Ensure HIR's operating system and software meets the State IT standards and adheres to Center for Internet Security ("CIS") controls for system security. The Offeror shall:
    i. Maintain documented, standard security configuration standards for all authorized operating systems and software;
    ii. Ensure operating systems are running the most recent security updates;
    iii. Ensure users with administrative account access use a dedicated or secondary account (only used for administrative activities) for elevated activities; and
    iv. Enable local logging.

4. Offeror is responsible for monitoring system up-time, conducting performance tuning to ensure optimal performance as it relates to hardware utilization, data storage and processing, and query response times, and meeting or exceeding the required performance expectations as specified in an Operations Metrics Table to be maintained by the Offeror and aligned to the Service Level Agreements.

5. The Offeror shall prepare performance reports at a minimum bi-annually to include:
    a. System availability (including scheduled and unscheduled down times during the previous six-month period);
    b. Current and projected capacity analysis and system monitoring to ensure enough resources are available for present and future data storage and processing needs; and

c. All data collected in the Operation Metrics Table.

E. System Enhancements

1. The Offeror shall develop and execute a detailed implementation plan for enhancement(s) of HIR, when needed or asked for by Hawai'i Immunization Branch, to maintain the systems' compliance with all applicable CDC, Federal, State of Hawaii and HDOH rules, regulations and laws. HIR shall meet or exceed Federal and national standards and specifications for IIS functionality and security.

2. HIR enhancements may be derived from sources including but not limited to:
    a. AIRA;
    b. CDC; and
    c. ACIP.

3. The Offeror shall conduct load, regression, and stress testing to ensure that the enhancement works as intended and does not adversely affect existing functionality. The Offeror shall adhere to the test plan. Testing shall not be considered complete until approved by the State.

4. The Offeror shall maintain a fully functional development-environment. Once testing in the development-environment has been approved by the State, the Offeror shall apply the enhancement to UAT, training, and production to maintain functionality in all environments.

5. Revised user and system documentation shall be produced concurrent with the distribution of new software releases.

6. The short list below is meant to provide the Offeror an idea of the types of enhancements that may be requested by the State during the Contract period but is not to be considered comprehensive or complete.
    a. IQIP Reporting feature for providers;
    b. Auto-reminder (tickler/pop-up) to submit annual enrollment;
    c. Give/calculate recommended number of doses for providers placing orders, based on their recorded inventory;
    d. Electronic re-enrollment via HIR;
    e. Create a "gender identify as" field in addition to gender at birth;
    f. Race values;
    g. Pregnancy and the connection between mother and child for appropriate decision making around RSV and other immunization products; and
    h. Capture Patient's telephone type (i.e. cell or landline.

F. Management Requirements (Minimum and/or mandatory requirements)

1. Personnel

a. The Offeror shall include a description of its ability to provide experienced, qualified personnel to meet the performance requirements of their proposal. Assigned staff shall possess the education and experience appropriate to the requirements of the positions to which they are assigned.

b. The Offeror shall submit a Project Staffing Plan as a component of the Project Plan within the agreement. The plan shall detail the staffing responsibilities, including time commitments, qualifications, and specific relevant experience required of their staff. The names and resumes of proposed personnel assigned to this agreement shall be submitted in the proposal.

c. The Offeror shall describe in detail, the following:
   i. Project Staffing Plan detailing staffing responsibilities, including time commitments, qualifications, and specific relevant experience required of proposed staff;
   ii. Proposed organization chart (staffing) for the proposal;
   iii. Description of Coordinator responsibilities;
   iv. Time commitments expected of State staffing and resource allocation requirements;
   v. Timeline of activities under the M&O agreement.

d. The personnel assigned to fill the terms of the agreement by the Offeror shall not be employees of, nor have individual contractual relationships with the State. The Offeror shall designate, prior to commencement of work under this agreement, a Coordinator for its personnel who shall interface with the State.

e. The State shall have the right to request and the Offeror shall comply with the request to remove and replace personnel for unsatisfactory service immediately, upon written notification, from the premises and from all work under this agreement.

f. If a change in personnel occurs during the contract period, new personnel shall meet the specifications detailed in this RFP. Substitute or additional personnel shall not be assigned until a resume' is received and approved by the State. The Offeror shall submit a list of tasks and the duration of appointment for each personnel assigned to the agreement.

g. Use of subcontractor(s) shall be subject to paragraph six (6) of the General Conditions attached as Attachment. The Offeror shall receive prior written approval from the State to subcontract any portion of this project and shall be liable for any costs or errors incurred by the subcontractor(s). If subcontractor(s) are used, a statement from each subcontractor shall be included in the

proposal, signed by an individual authorized to legally bind the subcontractor, and stating:

i. The subcontractor's name, mailing address, telephone number, fax number, email address, and contact person.
ii. The scope of work to be performed by the subcontractor.
iii. The subcontractor's willingness and ability to perform the work indicated.

h. All personnel assigned to this project are required to sign the HIR Confidentiality and Security Statement and submit copies to HDOH Immunization Branch. In addition, all personnel shall comply with HIR, Federal, and State confidentiality and security policies and procedures and be based in the United States.

2. Administrative

a. The project requires strong team leadership and communication skills. The Offeror shall staff the project with a Coordinator and support staff authorized to interact with the State. In addition, the Offeror shall ensure that the project schedules and deliverables are being met and the Offeror's team is available during State of Hawai'i work hours (7:45AM-4:30PM HST). The Coordinator shall have a minimum of two (2) years of technical and two (2) years of managerial experience maintaining, enhancing, and providing interoperability, technical and user support, and data quality services for a CDC compliant IIS.
b. The Offeror shall provide information related to understanding of the Scope of Services and detail how the Offeror is qualified to meet the requirements of the M&O agreement. The Offeror shall include ability to manage a Hawaii Contract (e.g. location, complexity of program).

3. Quality Assurance and Evaluation Specifications

a. The Offeror shall develop a detailed Quality Assurance and Quality Control plan for evaluating the effectiveness of the project including output, performance, and outcomes measurements. Furthermore, the Offeror shall conduct additional analysis as necessary to recommend any performance enhancements.
b. The Quality Assurance and Quality Control plan shall be submitted to the State for approval prior to implementation.
c. Quality Assurance and Quality Control reports shall be provided to the State on a quarterly basis.

4. Cyber Liability Protection

a. The Standards for Security Categorization of Federal Information and Information Systems document provides security categories applicable to immunization information systems. It specifies the categories of vulnerability risk impact based on Confidentiality

risk, Integrity risk and Availability risk of the user information and systems information. Those definitions are applied hereto and made a part hereof as stated below:

i. **Confidentiality**: Preserving authorized restrictions on information access and disclosure, including means for protecting personal privacy and proprietary information. [44 U.S.C. SEC., 3552]
ii. **Integrity**: Guarding against improper information modification or destruction and includes ensuring information non-repudiation and authenticity. [44 U.S.C., SEC. 3552]
iii. **Availability**: Ensuring timely and reliable access to and use of information. [44 U.S.C., SEC. 3552]

b. The Hawaii State Risk Management Office, State Security Office and ETS determined the HIR data risk factors for Confidentiality to be moderate (medium) risk, Integrity to be low risk and Availability to be moderate (medium) risk. Referencing the NASPO ValuePoint cloud solutions master agreements, the Professional Liability Insurance Tables for each vendor posted on the NASPO site and the corresponding definitions for low, moderate, and high-risk data impact at https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.199.pdf, the insurance liability coverage for HIRs risk factors were identified with the corresponding cost linked to the associated data risk factors.
c. The Offeror shall obtain and maintain in full force and effect, the insurance and protection described in this section. Offeror shall provide verification of cyber-liability insurance coverage as described herein prior to contract award of this RFP. Offeror shall acquire such insurance from an insurance carrier or carriers licensed to conduct business in the state of Hawaii (or meeting Section 431: 8-301, Hawaii Revised Statutes, if utilizing an insurance company not licensed by the State of Hawaii), United States of America and having a rating of A-, Class VII or better, in the most recently published edition of Best's Reports. The insurance shall be maintained in full force and effect for the duration of this contract in the amount of ten million ($10,000,000) dollars as protection in the event of a data breach of public or non-public data, disabling code, privacy or cyber liability attack to HIR, its system or other user data transmitted electronically via an interface or other type of electronic connection or manual entry into the HIR system.
d. Also included shall be Offeror created programming, coding, technical development or other inclusions not specified here that have been or are performed in or to the HIR for the systems' operation that could result in the system being compromised.

Offerors' liability shall apply to any work performed by Offeror in or on the WIR-based system utilized in HIR.

e. The following definitions specify the type of event(s) against which cyber liability insurance should protect:
    i. **Data Breach** means any actual or reasonably suspected non-authorized access to or acquisition of computerized Non-Public Data or Personal Data that compromises the security, confidentiality, or integrity of the Non-Public Data or Personal Data, or the ability of HIR user(s) to access the Non-Public Data or Personal Data.
    ii. **Disabling Code** means computer instructions or programs, subroutines, code, instructions, data or functions, (including but not limited to viruses, worms, date bombs or time bombs), including but not limited to other programs, data storage, computer libraries and programs that self-replicate without manual intervention, instructions programmed to activate at a predetermined time or upon a specified event, and/or programs purporting to do a meaningful function but designed for a different function, that alter, destroy, inhibit, damage, interrupt, interfere with or hinder the operation of HIRs software, applications and/or its end users processing environment, the system in which it resides, or any other software or data on such system or any other system with which it is capable of communicating.
    iii. **Non-Public Data** means High Risk Data and Moderate Risk Data that is not subject to distribution to the public as public information. It is deemed to be sensitive and confidential by **HIPAA** because it contains information that is exempt by statute, ordinance and or administrative rule from access by the general public as public information.
    iv. **Personal Data** means data alone or in combination that includes information relating to an individual that identifies the individual by name, identifying number, mark or description can be readily associated with a particular individual and which is not a public record. Personal Information may include the following PII: government-issued identification numbers (e.g., Social Security, driver's license, passport); Medicare/Medicaid number, health insurance number, or Protected Health Information ("PHI") relating to a person as protected under the HIPAA.
    v. **Protected Health Information** (PHI) means individually identifiable health information transmitted by electronic media, maintained in electronic media, or transmitted or maintained in any other form or medium. PHI includes demographic information collected from an individual and

health-related information that is created or received by a health care provider, health plan, employer or health care clearinghouse and relates to the past, present or future physical or mental health or condition of an individual which identifies the individual or there is a reasonable basis to believe the information can be used to identify the individual.

f. Failure of the vendor to show proof of coverage at the time of contract award will result in disqualification and withdrawal of the award to said vendor.

5. Problem Response

a. All problems and requests for service received by the Help Desk shall be categorized by the support tiers according to the impact level and urgency level, as follows:

Impact Level of Request	1	Extensive or Widespread
	2	Significant or Large
	3	Moderate and Limited
	4	Minor and Localized

Urgency Level of Request	1	Critical	An outage that results in the unavailability of the production-environment or a problem that has persisted at Urgency Level 2 for more than eight (8) business hours
	2	High	An outage where the production-environment is available but one or more of the critical functions provided by the system are not operational
	3	Medium	Degradation of non-critical system functions
	4	Low	General questions or informal contacts

b. The Offeror shall submit with their proposal a plan for responding to Production or Training environment outages and significant performance issues, or both, including but not limited to:
   i. Timing and method for notifying the State;
   ii. Documentation, including:
      1) Impact and Urgency Levels;
      2) Cause of outage;
      3) Solution (Fix);
      4) Amount of downtime relevant to each component of HIR;
      5) Number of help desk calls received and answered due to the outage; and
      6) Deadline for resolution and restoration of system operations.

iii. Follow-up and ongoing communication with the State until resolution is achieved.

c. Problems that result in the unavailability of the HIR Production or Training environments, or both, or that cause significant performance issues to users, which the Help Desk personnel cannot resolve, the Offeror shall immediately escalate the problem by telephone to the Coordinator.
d. The Offeror shall resolve production-environment outages and significant performance issues by the deadline(s) outlined in the Offeror's plan and agreed upon by both parties. The State shall be entitled to prorate maintenance monthly fee by days in service.
e. The Offeror shall submit a Production, Training, or both, Outage and Significant Performance Issue Report, documenting the issue(s) and resolution for all production or training environment outages and significant performance issues, to the State no later than two (2) weeks from the outage or performance issue(s).
f. The Offeror shall provide a detailed support service plan to include but not be limited to the following:
    iv. Support services to be provided for end-users and State staff;
    v. Method for documenting problem response;
    vi. Offeror's personnel intended to provide technical support;
    vii. Schedule of technical support services (including ability to support HST hours);
    viii. Customer support process;
    ix. Flow diagrams;
    x. Service level response times;
    xi. Target response times;
    xii. Support ticket prioritization; and
    xiii. Support ticket escalation.

6. Experience

a. The Offeror shall have a minimum of five (5) years of experience in successfully maintaining and enhancing an IIS application for a geographically diverse, complex State or locality and providing interoperability, technical and user support, and data quality services and a minimum of three (3) CDC immunization grantee jurisdictions (state, city or territory) it has implemented an IIS in. Remote working experience is acceptable for consideration if applicable.

7. **Reporting requirements for program and fiscal data**
    a. The Offeror shall submit monthly fiscal reports which details billed and unbilled deliverables, as well as a detailed description of work completed in accordance with deliverables.

6.2 Compensation and Method of Payment

A. Any contract resulting from this RFP shall be based on a firm fixed price structure. The Offeror shall propose a reasonable estimate for services to be provided.

B. Payments shall be made according to the scheduled deliverables upon submission by the Contractor of invoices for the services provided.

C. Invoices shall be certified by the Contractor and accompanied by progress reports describing the services performed in providing the deliverables under the contract.

D. Each deliverable shall be reviewed by the State and shall be subject to the State's preliminary determination of appropriateness and acceptance of each deliverable. Should a deliverable be unacceptable, the State shall notify the Contractor within ten (10) working days from receipt of the deliverable. The Contractor shall make all recommended changes and edits and re-submit the revised deliverable to the State within ten (10) working days.

E. Final settlement of any contract resulting from this RFP shall include submission and acceptance of all reports and other materials to be submitted by the Contractor to the State, resolution of all discrepancies in the deliverables received or performance of services, and completion of all other outstanding matters under the contract.

Section 7
Proposal Submission Instructions

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Proposal Submission Instructions

General instructions for completing submissions:

- *Proposals shall be submitted to the state purchasing agency using the prescribed format outlined in this section.*
- *Page numbering of the Proposal Submission should be consecutive, beginning with page one and continuing through for each section.*
- *Offerors must also include a Table of Contents with the Proposal which shall coincide with the order of this RFP. A sample Table of Contents is attached hereto as Attachment C.*
- *A written response is required for **each** item unless indicated otherwise. Failure to answer any of the items will impact upon an Offeror's score.*
- *Offerors are **strongly** encouraged to review evaluation criteria in Section 8, Proposal Evaluation when completing the proposal.*

The Proposal Submission is comprised of the following sections:

- *Proposal Identification Form (OF-1)*
- *Proposal Submission Checklist*
- *Table of Contents*
- *Program Overview*
- *Experience and Capability*
- *Project Organization, Schedule, and Staffing*
- *Completed IIS RTM*
- *Service Delivery*
- *Proposal Offer Form (OF-2)*
- *Reference Form*
- *Sample Project*
- *Other*

7.1 Proposal Identification Form

A. The Offeror shall submit the Proposal Identification Form (OF-1) to allow evaluators to properly identify the organization submitting the proposal. The proposal identification form shall be attached to the Proposal Submission in the order indicated in Section 7

7.2 Proposal Submission Checklist

A. The Offeror shall complete the Proposal Submission Checklist and include it in the proposal submission packet. The Offeror shall read the checklist instructions

carefully and complete the form in its entirety. The proposal submission checklist shall be attached to the Proposal Submission in the order indicated in Section 7

7.3 Table of Contents

A. Offeror shall provide a table of contents to inform evaluators where to locate required information. The Table of Contents shall be attached to the Proposal Submission in the order indicated in Section 7

7.4 Program Overview

A. Offeror shall give a brief overview to orient evaluators as to the program/services being offered. The program overview shall be attached to the Proposal Submission in the order indicated in Section 7

7.5 Experience and Capability

A. Necessary Skills

1. The offeror shall demonstrate that it has the necessary skills, abilities, and knowledge relating to the delivery of the proposed services. The offeror shall provide a proposed staffing plan composed of business analysts, systems analysts, engineers, testers, and project management skilled professionals. The offeror shall propose all team members based on similar skills and abilities as employed to demonstrate successful IIS system implementation in other jurisdictions.

B. Experience

1. The Offeror needs to meet the minimum requirements outlined in Section 2.2.

C. Quality Assurance and Evaluation

1. The offeror shall describe its own plans for quality assurance and evaluation for the proposed services, including methodology.

D. Coordination of Services

1. The offeror shall demonstrate the capability to coordinate services with other agencies and resources in the community. The Offeror shall demonstrate the ability to work with CDC to connect with both the IZ gateway and Vtrks systems along with exchange of information for ongoing data requests. The Offeror shall also demonstrate their system's HL7 capabilities with an anticipated immediate transfer of approximately 1000 HL7 connections to local medical providers.

2. Future connections that the Offeror's system should be capable of are:
    a. MAVEN or equivalent (Hawai'i's infectious disease case reporting system);

b. Vital Records;
c. Hawai'i's Health Information Exchange ("HHIE"); and
d. Medicaid's Information System (API query).

7.6 Project Organization, Schedule, and Staffing

A. Staffing

1. Proposed Staffing
    a. The offeror shall describe the proposed staffing pattern, client/staff ratio and proposed caseload capacity appropriate for the viability of the services. (Refer to the personnel requirements in Section 2, Service Specifications, as applicable.)

2. Staff Qualifications
    a. The offeror shall provide the minimum qualifications (including experience) for staff assigned to the program. (Refer to the qualifications in Section 2, Service Specifications, as applicable)

B. Project Organization

1. Supervision and Training
    a. The offeror shall describe its ability to supervise, train and provide administrative direction relative to the delivery of the proposed services.

2. Organization Chart
    a. The offeror shall reflect the position of each staff and line of responsibility/supervision. (Include position title, name and full-time equivalency) Both the "Organization-wide" and "Program" organization charts shall be attached to the Proposal Submission.

C. Schedule

1. The offeror shall provide the project schedule and workplan in sufficient detail to identify key activities, resources, and alignment to deliverables. The workplan shall describe at a high level these activities, and their expected outcomes.

7.7 IIS RTM

A. The Offeror shall complete the IIS RTM in its entirety and include the form in the proposal submission packet. The IIS RTM shall be attached to the Proposal Submission in the order indicated in Section 7

7.8 Service Delivery

A. Offeror shall include a detailed discussion of the Offeror's approach to applicable service activities and management requirements from Section 2.1, Scope of Work,

including (if indicated) a work plan of all service activities and tasks to be completed, related work assignments/responsibilities and timelines/schedules.

7.9 Financial

A. Pricing Structure

1. Offeror shall submit a cost proposal (OF-2) utilizing the pricing structure designated by the state purchasing agency. The cost proposal shall be attached to the Proposal Submission in the order indicated in Section 7.

7.10 Reference Form

A. The Offeror shall provide a reference list, attached hereto as Attachment F, with a minimum of 3 references that are clients where the Offeror's fully functional IIS has been implemented and a sample project IIS implementation project in which they have implemented their IIS in a US jurisdiction.

7.11 Sample Project

A. The offeror shall provide a sample project demonstrating a typical IIS project deployment, on a twelve (12) month inception to go-live schedule. This shall be based in large part on an anonymized sample project for IIS deployment in another local health jurisdiction form within the most recent five years. This idealized project shall provide all relevant details of project definition, scoping, schedule, staffing resources, and example deliverables documentation. The sample project shall be provided in the form of an attached exhibit to the proposal, and is not subject to any page limitations.

7.12 Other

A. Litigation

1. The offeror shall disclose and explain any pending litigation to which they are a party, including the disclosure of any outstanding judgment.

Section 8
Proposal Evaluation

Section 8
Proposal Evaluation

8.1 Introduction

The evaluation of proposals received in response to the RFP will be conducted comprehensively, fairly and impartially. Structural, quantitative scoring techniques will be utilized to maximize the objectivity of the evaluation.

8.2 Evaluation Process

An evaluation committee of designated reviewers selected by the head of the state purchasing agency or procurement officer shall review and evaluate proposals. The committee will be comprised of individuals with experience in, knowledge of, and program responsibility for program service and financing.

The evaluation will be conducted in three phases as follows:

- Phase 1 - Evaluation of Proposal Requirements
- Phase 2 - Evaluation of Proposal Documents
- Phase 3 - Recommendation for Award

Evaluation Categories and Thresholds

A. Administrative Requirements

Pre-screening for required items and minimum qualifications.

B. Proposal Document Submission

Evaluation Categories	**Possible Points**
Experience and Staffing	60
Project Approach - Methodology	65
Project Approach - System	50
Cost	45
Total Possible Points	**220**

8.3 Evaluation Criteria

A. Phase 1 - Evaluation of Proposal Requirements

1. Administrative Requirements

a. A pre-screening of proposals will be conducted using the Proposal Submission Checklist (See Attachment B.) Offeror must submit all required items and meet all qualifications listed.
b. Offeror's proposal needs to submit all the required items. If Offeror does not submit all required items, they may be determined ineligible.
c. An Offeror that does not meet the minimum qualifications for experience and provided sample projects may be determined ineligible.

2. Proposal Document Requirements

a. *Proposal Identification Form (OF-1)*
b. *Proposal Submission Checklist*
c. *Table of Contents*
d. *Program Overview*
e. *Experience and Capability*
f. *Project Organization, Schedule, and Staffing*
g. *IIS RTM*
h. *Service Delivery*
i. *Proposal Offer Form (OF-2)*
j. *Reference Form*
k. *Sample Project*
l. *Other*

B. Phase 2 - Evaluation of Proposal Submission (220 Points)

Offerors' proposals that meet the Phase I criteria are deemed "acceptable" or "potentially acceptable" and will be evaluated on their Approach to Project, Experience, and Cost.

Offeror's responses will be scored based on the completeness of the response and the perceived ability to meet the specifications and requirements. A proposal that exceeds the timeline, requires custom coding, a large amount of beta testing, provides inadequate resources or whose price exceeds the budgeted amounts will result in disqualification.

Offerors are encouraged to review the proposal evaluation worksheets, attached hereto as Attachment J, to ensure they are meeting the requirements of this RFP and addressing the proposal evaluation criteria.

No points are assigned to Program Overview. The intent is to give the Offeror an opportunity to orient evaluators as to the service(s) being offered.

1. **Approach to Project**
    a. The approach to the project will be graded on completeness of proposal addressing all deliverables and requirements, or providing appropriate substitutes, the details demonstrating the quality of the IIS product, project management, as well as the sample project. Greater points will be awarded to those who share a detailed picture of how the system meets required functionality and how the Offeror would manage this project evidenced in the sample project.

2. **Experience and Capabilities**
    a. Background of the company
    b. Profiles of the principals of the company
    c. Company size & resources
    d. Experience & knowledge relevant to this project
    e. Organizational & financial stability
    f. Offeror's proven track record with the proposed product for this project
    g. The Offeror's ability to provide the requested goods and services with the proposed product
    h. Past performance on similar projects
    i. Reference checks
    j. Any past or present litigation

Evaluation of this section will use the following range finders for evaluation guidance in each area:

100% = Exceeds the requirements of this RFP and the goals and objectives of the project.
75% = Meets all of the requirements of this RFP and the goals and objectives of the project.
50% = Meets half of the requirements of this RFP and the goals and objectives of the project.
25% = Does not meet the requirements of this RFP and the goals and objectives of the project.
0% = Not addressed

3. **Cost**
    a. The Offeror's cost will be evaluated for the following areas:
        i. Cost proposal (Offeror's narrative budget expenditures for the proposed work plan and requirements/deliverables of the RFP); and
        ii. Cost calculation.
    b. The Offeror submitting the lowest cost proposal with CDC Functional Standards v4.1 will automatically receive the maximum number of points allocated to cost calculation, thirty (30) points.

The point allocations for cost calculation on the other proposals will be determined through the following method:

$$\frac{\text{[Lowest Price x 30 points (maximum)]}}{\text{[Offeror's Proposal]}}$$

c. Priority Listed Offerors will be selected based on a final calculation of the proposal scores from Phase II.

C. Phase 3 - Recommendation for Award

A. Reference checks for Priority Listed Offerors will be conducted.

B. A final calculation of the proposal scores from Phase II will be performed.

C. The final selection will represent the Offeror that is determined to be the most advantageous to the State based on the evaluation criteria listed in Section 8.

D. The State may rate any Offeror's proposal as unacceptable, regardless of total score, if any element of that proposal is deemed unacceptable. Examples of this include, but are not limited to:
   1. Substantiated feedback from references indicating a history of failure to achieve promised results.
   2. Inability or unwillingness to comply with Contract terms
   3. Proposed costs that are inadequately supported by the proposed solution.

E. An Offeror may be disqualified from any evaluation or award if the Offeror or any key personnel proposed has previously failed to perform satisfactorily during the performance of any Contract with the State or violated rules or statutes applicable to public bidding in the State.

F. Each notice of award shall contain a statement of findings and decision for the award or non-award of the contract to each Offeror.

Section 9
Attachments

A. Proposal Identification Form (OF-1)
B. Proposal Submission Checklist
C. Sample Table of Contents
D. Proposal Offer Form (OF-2)
E. DOH Drafted IIS RTM
F. Reference Form
G. General Conditions
H. Special Conditions
I. Contract Form
J. Evaluation Worksheet