

ATTACHMENT A.1

TASKS AND DELIVERABLES

FOR

AUTOMATED BIOMETRIC IDENTIFICATION SYSTEM (ABIS)

REVISED UNDER BULLETIN #6

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TASKS AND DELIVERABLES

Unless specified otherwise, all Tasks and SubTasks described in this Attachment A.1 (Tasks and Deliverables) to Exhibit A (Statement of Work), must be performed by Contractor. Contractor must prepare and deliver all Deliverables described in this Attachment, using the Deliverable numbers and titles indicated. The process for receiving, reviewing, and accepting the Deliverables is provided in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work).

1.0 Task 1 Project Planning - Project Control Document (PCD)

Each Task to be performed by both Contractor and County staff must be specifically addressed in a Project Control Document (PCD). The PCD must include the general order in which the Tasks and Subtasks must be performed (some Tasks may be conducted in parallel) and the order in which the Deliverables must be produced.

1.1 Develop Project Control Document

Contractor must develop a PCD and submit it to County Project Manager within two weeks following the Contract Effective Date, unless an alternative timeline is agreed upon by both parties. Unless otherwise specified by the parties, or required by the County, the contents of the PCD must include at a minimum the following:

1.1.1 Project Scope, Objective, and Critical Success Factors

Contractor must develop a brief statement of the scope, objectives, and critical success factors of the Project. Contractor must review the Project scope, objectives, and critical success factors with County Project Manager, and subsequently make any agreed upon updates/revisions.

1.1.2 Project Organization, Roles, and Responsibilities

Contractor must develop a hierarchical structure depicting the organization of the Project team (including both Contractor and the County), and their reporting relationships, including a description of the primary roles and responsibilities of the Project team members and any relevant organizational relationships. Contractor must review the Project organization, roles, and responsibilities with County Project Manager, and subsequently make any agreed upon updates/revisions.

1.1.3 Documentation Requirements

The final form and format of all Documentation and certifications required by Contractor in this Attachment A.1 must be as directed by County Project Manager. Contractor must review the Documentation requirements with County Project Manager and make any agreed upon updates/revisions.

1.1.4 Contractor Assumptions, Updated

All Contractor assumptions specified in Contractor's business proposal, or otherwise agreed to by the parties, must be updated by Contractor and reviewed and approved by County Project Manager. Notwithstanding the above, County Project Manager will have sole authority to clarify the County's position regarding Contractor's assumptions. Contractor's revised assumptions must be documented and approved by County Project Manager.

1.1.5 County Assumptions, Updated

All County assumptions specified in the Contract or otherwise agreed-to by the parties must be reviewed by Contractor. Any issues documented by Contractor will be reviewed by County Project Manager. Notwithstanding the above, County Project Manager will have sole authority to clarify the County's position regarding the County's assumptions. Contractor must document the County's revised assumptions.

1.1.6 Communications Plan

Contractor must develop a communication plan which describes the primary means of communication that will be used throughout the Project among team members. In addition, the plan must discuss document sharing and management. Contractor must review the Communications Plan with County Project Manager and make any agreed to updates/revisions.

1.1.7 Staffing Plan

Contractor must develop a staffing plan which describes how they will meet staffing needs throughout the entire Term of the Contract, as specified in Exhibit A (Statement of Work). The County's expectation is that Contractor's staffing during the various stages of Project implementation and Maintenance & Support (M&S) will differ, excluding Contractor's Project Director, Project Manager and other key management positions.

1.1.8 Risk Identification and Management Plan

Contractor must develop a Risk Identification and Management Plan which must include a description of the risk management process, including a tracking mechanism for potential Project risks, the probability of those risks occurring, potential impact of those risks and risk mitigation strategies. Contractor must review the risk identification and management plan with County Project Manager and make any agreed to updates/revisions.

1.1.9 Quality Control / Management Plan

Contractor must develop a quality control and management plan to assure the County a consistent high level of Service throughout the

entire Term of the Contract. Contractor must review the quality control and management plan with County Project Manager and make any agreed to updates/revisions.

1.1.10 Detailed Work Plan

- a. Contractor must develop a Detailed Work Plan for all Tasks detailed in this Attachment A.1 up to Final System Acceptance, including:
 - i. A detailed narrative description of Project Tasks with roles and responsibilities of Project team members (Contractor and the County) by Task, Subtask, and timeframe to complete each Task and any dependencies on other Tasks,
 - ii. Locations of Work, if applicable, and
 - iii. Work Breakdown Structure (WBS) and Project schedule - The WBS and Project schedule must be constructed in Microsoft Project (Tracking Gantt Chart format) and include, at a minimum, the following:
 - Tasks,
 - Subtasks,
 - Deliverable number,
 - Description,
 - Due date,
 - Milestones achieved,
 - Pay points,
 - Task relationships including where applicable finish to start (FS), start to start (SS), finish to finish (FF), start to finish (SF), and critical path,
 - Associated or dependent Deliverable,
 - Timeline, and
 - Any other items reasonably required by the County under the Contract.
- b. Contractor must prepare the WBS so that every Task's start/end dates are calculated by Task duration and Task predecessor(s). Work breakdown of Tasks must include the County's review and approval process of all Contractor's Documentation.
- c. Once approved by County Project Manager, the Detailed Work Plan must be baselined, with two additional 'actual start' and 'actual end' date columns for monitoring each Task/Subtask's progress.

- d. Contractor must provide the WBS as both a Microsoft Project file and PDF file.

1.1.11 Implementation Assessment Document, Draft

The Implementation Assessment Document (IAD), as delivered with the PCD, is considered a draft document that will be updated upon completion of Task 5 (Implementation Assessment Document) of this Attachment A.1. The IAD must include Contractor's draft baseline strategies covering the following topics:

- a. Software Strategy – Configuration/Customization approach,
- b. Hardware Strategy – Contractor's approach to deploying workstations and integrating with cloud infrastructure,
- c. Test Strategy,
- d. System Interface Strategy,
- e. Security Strategy,
- f. Data Conversion Strategy,
- g. Report Design Strategy,
- h. Business Continuity Strategy,
- i. Documentation Strategy,
- j. Training Strategy, and
- k. Transition to Production Strategy.

1.1.12 Preventive Maintenance Services

Contractor must develop the Preventive Maintenance Services in consultation with County Project Manager. The program must, at a minimum, address the requirements outlined in Paragraphs 3.1 (System Environments) of Exhibit C (Service Level Agreement) to assure the County a consistently high level of Software and Hardware operations throughout the entire Term of the Contract.

1.1.13 Technology Refresh Implementation Strategy

Contractor must develop a Technology Refresh Implementation Strategy in consultation with County Project Manager. The strategy must be designed to minimize disruption to County operations. The strategy must also address Technology Refresh and updates associated with Evergreen components, as necessary.

For hardware, the strategy must include detailed plans for upgrading hardware, such as workstations and peripheral devices, ensuring minimal downtime.

For Evergreen components, including but not limited to, System and Application Software and algorithms, the strategy must outline a

continuous update process that ensures the Solution remains current, secure, and optimized for performance without causing operational disruptions.

Deliverable 1 - Completed Project Control Document

- a. Project Control Document – DRAFT
- b. Project Control Document – FINAL

Deliverable 1, the Project Control Document, including all attachments, must be reviewed, and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

2.0 Task 2 Ongoing Project Management

Throughout the entire Term of the Contract, under the direction of County Project Manager, Contractor must apply requisite technical and management skills and techniques to assure satisfactory, timely completion of Project Tasks and Deliverables, and establish a Project control and reporting system which will provide routine and realistic assessments of progress against the approved PCD's Detailed Work Plan. Contractor must competently manage Project activities and resources, and track Project status, including:

2.1 Project Initiation

2.1.1 Project Kick-off

Within two weeks following the Effective Date of the Contract, Contractor must review with County Project Manager the Project governance structure (e.g., Project management team, executive steering committee, and advisory committee, etc.), as well as planning and conducting Project kick-off presentations for:

- a. The County's Administration,
- b. Project team and stakeholders, and
- c. Executive steering committee (if requested by County Project Director).

Contractor Project Director and Contractor Project Manager must conduct the Project kick-off meeting in-person. Contractor must plan for and conduct all other meetings, as applicable. County Project Manager will advise Contractor if subsequent meetings after the Project kick-off are required (e.g., executive steering committee).

Contractor must create and provide tailored presentation slides and handouts, as directed by County Project Manager. Contractor must provide County Project Manager with presentation materials three Business Days prior to each scheduled meeting, and update the materials as directed by the County. Contractor must document the outcome of each Project meeting for County Project Manager's

review and approval and incorporate any new and County-approved information into the PCD.

2.2 Project Meetings and Reporting

2.2.1 Weekly Status Meetings

- a. Contractor Project Manager must attend and participate in weekly status meetings with County Project Manager and other stakeholders. Unless otherwise approved by County Project Manager, the weekly status meetings will be held in-person. Contractor technical staff may attend the weekly status meeting via video conference. County Project Manager may decide to cancel a particular week's meeting at his or her discretion.
- b. Contractor must prepare agendas for the weekly status meetings, with the advice and consent of County Project Manager. Contractor must provide County Project Manager the meeting agenda and handouts at least two Business Days prior to the scheduled meetings, and make any updates as directed by the County. Contractor must be prepared to discuss, in detail, the status of the Project and any major issues.
- c. Contractor must document meeting minutes of major discussion points, action items decisions, and the rationale for each. The document must be in a form and format as approved by County Project Manager.

Contractor must deliver the meeting minutes document to County Project Manager no later than two Business Days after each meeting.

County Project Manager will review and approve the minutes.

2.2.2 Monthly Director's Meetings

Contractor Project Director and Project Manager must attend monthly Director's meetings in-person. Contractor's Project Director must submit a Monthly Status Report as detailed below:

- a. Contractor Project Manager must draft meeting agendas for all monthly meetings, with the advice and consent of County Project Manager, including a written status report summarizing progress against the approved Detailed Work Plan (Paragraph 1.1.10 Detailed Work Plan above), together with the most current version of the Issue Tracking Log (refer to Paragraph 2.3.1 Issue Tracking Log (ITL) Documentation, Escalation, and Resolutions below). Contractor must provide County Project Manager the meeting agenda and handouts at least two Business Days prior to the scheduled meetings and update them as directed by the County.
- b. Contractor must provide progress briefings at these meetings.

The report must cover all activities for the preceding month. The first monthly report is due one calendar month following the Contract's Effective Date, unless prior approval for an extension is granted by County Project Manager.

- c. Contractor must take and maintain minutes of major discussion points, decisions, action items, and the rationale for each.
- d. Contractor must submit the monthly status report to County Project Manager for review and approval, three Business Days prior to distribution. County Project Manager will review and approve all monthly status reports.

2.2.3 Project Review Point Meetings

Contractor's Project Director and Project Manager must attend all Project Review Point meetings in-person, as determined by County Project Director and the Department's Office of Technology Planning (OTP).

2.3 Issues and Change Management

2.3.1 Issue Tracking Log (ITL) Documentation, Escalation, and Resolutions

Contractor must develop an ITL for tracking Project issues, as follows:

- a. The ITL, like the PCD, is a living document requiring maintenance and frequent updates. Contractor must ensure that the ITL is updated as needed. Authorized members of the County and Contractor Project teams will have access to and be able to print information from the ITL.
- b. Contractor must submit all updates to the ITL to County Project Manager for review and approval prior to distribution to Project team.

2.3.2 Amendments and Change Notices

Any modifications affecting Project administration, Project scope, cost, timing, or risk may require County approval via Amendments and/or Change Notices as set forth in Paragraph 10.0 (Amendments and Change Notices) of the Contract. Contractor, at County Project Manager's direction, must develop required components (e.g., quotations, specifications) of the Amendment and/or Change Notice, as applicable, at no cost to the County.

2.4 Project Control Documentation

2.4.1 Maintain the PCD

Contractor must timely update and maintain the PCD, including the Detailed Work Plan in Microsoft Project as Tasks and Deliverables

are completed and/or modified.

2.4.2 Failure to Maintain PCD

County Project Director, with sole discretion, may suspend all Work and initiate a formal Project Review Meeting for Contractor's failure to maintain the PCD. The Project Review Meeting will be conducted by the Department's OTP in consultation with County Counsel and County Project Director, in accordance with Paragraph 6.0 (Project Review) of Exhibit A (Statement of Work).

2.5 General Requirements

- 2.5.1 Contractor's preparation for and attendance at all required meetings, including all travel related expenses, will be provided at no additional cost to the County.

Deliverable 2 - Ongoing Project Management

Deliverable 2, Contractor is responsible for Project management throughout the entire Term of the Contract, as part of their business commitment and activities to/with the County. All Project management Documentation under this Task must be reviewed, approved, and accepted by County Project Manager.

3.0 Task 3 Requirements Review and Demonstration / Gap Analysis

The Functional and Technical Requirements (Requirements) review and resultant gap analysis determines the degree of "fit" between Contractor's Proposed COTS software and the County's Requirements. The County will provide the facilities for conducting the Requirements review, demonstration, and gap analysis sessions.

3.1 Subtask 3.1 - Review Requirements with Key Users

The Solution Requirements will be reviewed by Contractor in conjunction with County Project Manager and key Users identified by County Project Manager.

- 3.1.1 Contractor must conduct no less than six 4-hour User sessions, and no less than eight 4-hour technical feedback sessions to ensure the accuracy and completeness of Contractor's proposed COTS software specifications. Participants for these sessions will be identified and provided by County Project Manager.
- 3.1.2 Inconsistencies in the Requirements resulting from the feedback sessions must be documented by Contractor in a Requirements review report that will be reviewed by County Project Manager. The requirements review report must:
- a. List all Requirements where there is an issue/incongruence,
 - b. Document the discussion about each issue,
 - c. Document the resolution for each issue and where applicable, the updated Requirement, and
 - d. Provide a detailed impact statement for each issue.

- 3.1.3 Inconsistencies that impact the Project must be identified by Contractor and County Project Manager and reviewed by County Project Director.
- 3.1.4 Inconsistencies that change the Scope of Work or increase cost must be reviewed by County Project Director, OTP, County Chief Information Officer (CIO), Department's Contracts Unit, and County Counsel to determine the severity of the impact.
- 3.1.5 Inconsistencies, at the discretion of OTP, may trigger a Project Review of the Solution Requirements.
- 3.1.6 Upon resolution of the inconsistencies, Contractor must create an updated Solution Requirements document, as determined by County Project Manager.

Deliverable 3.1 – Requirements Review Report

- a. Requirements Reviewed
- b. Updated Requirements Document – DRAFT
- c. Updated Requirements Document – FINAL DRAFT

Deliverable 3.1, (Requirements Review Report) will be reviewed and approved in accordance with the document review process described in Exhibit A (Statement of Work) to the Contract.

3.2 Subtask 3.2 – Demonstration and Gap Analysis

Contractor must conduct a gap analysis, including prototyping where applicable, to assess the fit between Contractor's proposed COTS software baseline functionality and the Updated Requirements Document – FINAL DRAFT in Deliverable 3.1 above.

3.2.1 Establish a Demonstration Environment

Contractor must create and configure a demonstration environment. Contractor must provide all virtual hardware and software at no cost to the County, configured at the LACRIS Norwalk office, Contractor's data center, or CJIS-compliant Cloud. Contractor must be prepared to accommodate a minimum of six subject-matter-expert (SME) gap-analysis participants during the demonstration. Demonstration environment components may include, but are not limited to, the following:

- a. Virtual hardware (Central Server),
- b. Software (Operating System, database management system (DBMS), Contractor's Proposed COTS software, and any Third-Party Software),
- c. Client software and access to the service for the Project team and stakeholders,

- d. A representative sample of County data (NIST format) to support the demonstration and gap analysis, as agreed to by the parties,
- e. Audio/visual tools, as necessary,
- f. Network connections, as applicable, and
- g. User manuals and training materials.

3.2.2 Conduct Product Training

Contractor must provide hands-on training on Contractor's proposed COTS software, for a minimum of 24 Users, which will be the basis of this Gap Analysis Task. County Project Manager will identify the gap analysis participants, including subject-matter experts (SMEs), receiving hands-on product training. The purpose of the product training is to familiarize Solution Requirements reviewers and gap-analysis participants with the general navigation, terminology, and functionality of Contractor's Proposed COTS software. Hands-on training must include at a minimum:

- a. Solution overview and navigation,
- b. System concepts and terminology,
- c. Functional overview of each Solution module to be reviewed, and
- d. Training materials and exercises.

3.2.3 Develop Demonstration / Gap Analysis Scripts

3.2.3.1 Three weeks prior to the gap analysis, the County will provide Contractor with the County's business scenarios (refer to Paragraph 3.2.1(d) above). Contractor must prepare for the gap analysis sessions by developing detailed demonstration/gap analysis scripts.

Contractor must draft an accompanying script summary document which:

- a. Describes County-provided business scenarios,
- b. Describes the script(s) for each business scenario,
- c. Describes how the scripts are organized into functional areas,
- d. Briefly describes each functional area, and
- e. Provides a numbering convention used for the scripts.

3.2.3.2 The demonstration / gap analysis scripts Documentation must be designed to:

- a. Facilitate a detailed step-by-step walkthrough of the County's business scenarios using Contractor's

proposed COTS software,

- b. Demonstrate how Contractor's proposed COTS software will be used to support the County's detailed business scenarios,
- c. Confirm and validate the County's business, Interface, reporting, and Data Conversion requirements, and
- d. Identify any additional functional gaps, if any, resulting from the step-by-step walkthrough of the County's business scenarios.

3.2.3.3 Contractor's demonstration session script meetings, with accompanying agenda(s), may be divided by the ABIS Solution's Requirements categories (e.g., Tenprint, Latent, Archive, LCMS, etc.), as mutually agreed-upon by Contractor and the County. Multiple demonstrations may be conducted to cover all of the ABIS Solution's functionality. County Project Manager and Contractor Project Manager will mutually agree upon each session's demonstration content and duration, covering at minimum, the following:

- a. Introductory overview and high-level navigation of the COTS software features and functions,
- b. Solution Requirements overview,
- c. How the proposed COTS software will meet the County's Requirements and the County's business scenarios,
- d. Contractor concepts and terminology,
- e. Functional overview of each software module to be reviewed, as applicable,
- f. Contractor's solution for closing each identified gap between the proposed COTS software and the County's Solution Requirements,
- g. Contractor concepts and vision for each Interface to be developed, and
- h. Gap analysis participants' written feedback on issues, concerns, and recommendations.

3.2.3.4 At least three Business Days prior to the scheduled demonstration and gap analysis meeting(s), Contractor must provide County Project Manager the draft agenda, presentation scripts and any other handouts, and if necessary, update documents as directed by the County.

3.2.4 Conduct Contractor's Proposed COTS Software Demonstration/ Gap Analysis Sessions

Contractor must plan and conduct the ABIS Solution's demonstration/ gap analysis sessions, which includes hands-on use by the designated gap analysis participants. Contractor must document session results and submit the results to County Project Manager no later than three Business Days after completion of each session. Upon completion of all sessions, Contractor must leave the installed demonstration environment intact, for a minimum of one month, to assist County SMEs with further Requirements verification.

3.2.4.1 Documentation for each session must be comprised of the following:

- a. Requirements matrix indicating whether each Requirement represents a:
 - i. Fit – Contractor's baseline proposed COTS software is demonstrated to fully meet the County's requirement out-of-the box. Contractor must document how Contractor's Proposed COTS software is used to meet the requirement, or
 - ii. Partial Fit – Contractor's baseline proposed COTS software can be demonstrated to meet only part of the County's requirement. Contractor must document how Contractor's proposed COTS software is used to meet the requirement and describe the functional gap and means for resolution, or
 - iii. Gap – Contractor's baseline proposed COTS software cannot be demonstrated to meet the County's requirement. Contractor must document the gap, to identify alternatives [e.g., configuration, software development, business process change, or a combination of alternatives (as approved by County Project Manager)].
- b. Recommended Solution Configurations (e.g., table-driven, User Interface, security, and workflow) to support the County's requirements,
- c. Recommended Programming Modifications to support the County's requirements (e.g., Configuration, Customization development / programming, System Interfaces),
- d. Impacts of recommended business process changes,

as applicable (e.g., new policies / procedures need to be developed, changes to business processes, etc.), and

- e. Updated ITL [refer to Paragraph 2.3.1 (Issue Tracking Log (ITL) Documentation, Escalation, and Resolutions) above] that includes a brief description, target date for resolution, action plan, and party responsible.

All Documentation will be reviewed and approved by County Project Manager in accordance with the process outlined in Exhibit A (Statement of Work) to the Contract.

- 3.2.5 The Gap analysis report must be fully documented by Contractor, and must, at a minimum, include:
 - a. County business scenarios,
 - b. Demonstration/gap analysis scripts,
 - c. Demonstration/gap analysis session Documentation,
 - d. Description of each gap identified, alternatives and/or a recommendation for addressing each identified gap,
 - e. Concept description for each required software Customization resulting from the gap analysis, that describes the functionality of the Customization,
 - f. Impacts to business operations – Describe each impact and recommended course of action for each, and
 - g. Recommendations for successfully proceeding with the Project.

The gap analysis report must be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

3.2.6 Programming Modifications/Changes Document

Based on the gap analysis report, Contractor must produce a Programming Modifications document which includes a recap of Programming Modifications needed to meet the Requirements, as well as any additional Customizations, Configurations, and Interfaces identified in the gap analysis report (Paragraph 3.2.5 above) that were not previously identified by Contractor.

3.2.6.1 Contractor and County Project Manager will verify and assess impacts to business operations and the Detailed Work Plan based on the findings within this report.

3.2.6.2 Additional Programming Modifications not previously identified by Contractor, if any, must be executed by Contractor at Contractor's sole expense, and are not

billable to the County.

3.2.6.3 Notwithstanding the foregoing, additional requirements identified by the County that were not part of the County's original published Requirements which result in additional implementation costs, will require a formal executed Change Notice to the Contract issued by the County to Contractor for Optional Work, utilizing Pool Dollars, in accordance with Paragraph 10.3 (Change Notice) and Paragraph 3.3.4 (Optional Work), of the Contract.

3.2.6.4 Contractor must update the PCD and corresponding Detailed Work Plan to reflect the revised Requirements.

3.2.7 Final Requirements Document

As a result of this Task, Contractor must submit to County Project Manager an appended draft Solution Requirements document for review and subsequent approval. Contractor must make any revisions specified by County Project Manager. Once approved, the appended Requirements document will become the Final Requirements document.

The Final Solution Requirements document replaces all previous versions. Notwithstanding, Contractor must maintain a document catalogue of all approved prior versions of the Requirements document.

Deliverable 3.2 – Completed Requirements Review and Demonstration/Gap Analysis

- a. Demonstration/Gap Analysis Environment,
- b. Product Training,
- c. Script Summary Document Draft,
- d. Script Summary Document Final,
- e. Gap Analysis Scripts,
- f. Solution Demonstration/Gap Analysis Sessions,
- g. Gap Analysis conducted,
- h. Gap Analysis Report – Draft,
- i. Gap Analysis Report – Final,
- j. Proposed Changes Document – Draft,
- k. Proposed Changes Document – Final,
- l. Final Requirements Document – Draft, and
- m. Final Requirements Document – Final.

Deliverable 3.2, Completed demonstration and gap analysis Documentation

will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

3.3 Project Review Point – Requirements and Gap Analysis

At this point, at the direction of County Project Director, as reviewed in conjunction with OTP, a Project Review of the results of Task 3 (Requirements Review and Demonstration/Gap Analysis) may be conducted at the County's sole discretion.

4.0 Task 4 Infrastructure and Technical Assessment

Contractor must perform a comprehensive assessment of the County's readiness to implement Contractor's proposed Solution in a fully Cloud environment.

4.1 Subtask 4.1 - Infrastructure Readiness Assessment

Contractor must evaluate the County's readiness in terms of network, system management, software, and operational readiness (e.g., human resources, facilities, etc.) for the implementation of a fully Cloud Solution.

4.1.1 Technical Requirements and Solution Components

Contractor must detail the type of technical information required from the County for the implementation of Contractor's proposed Solution. This includes, but is not limited to, details about the County's current IT infrastructure, network capabilities, software systems, data volumes, security requirements, and operational readiness.

Contractor must also provide a detailed description of their proposed Solution, this includes at minimum, Contractor's proposed COTS software, Data Conversion storage, hardware, and all other components that will comprise the ABIS Solution. Contractor must outline in detail their implementation strategy, including the systematic process of integrating computing solutions, and any specific requirements or considerations related to technology.

4.1.2 Contractor must develop an Infrastructure Readiness Assessment Document that:

- a. Assesses the County's network readiness and connectivity to ensure seamless integration with the Cloud-based services,
- b. Identifies incompatibilities that may affect the timely and successful implementation of the ABIS Solution, including Contractor's ability to meet the System Performance Requirements [refer to Schedule C.1 (Solution Response-Time Requirements) to Exhibit C (Service Level Agreement) to the Contract]. Incompatibilities may include, but not be limited to, any issues associated with hardware, LAN/WAN, software, desktop devices (e.g., workstations, laptops, etc.), operations management, and the help desk, and

- c. Recommends corrective actions or site modifications required by the County.

The Infrastructure Readiness Assessment document will be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

4.2 Subtask 4.2 - Technical Architecture Document

4.2.1 Contractor must develop a comprehensive technical architecture document (TAD) that provides a clear, detailed description of the various technical environments required to support the implementation of Contractor's proposed COTS software. The TAD must align with the County's decision to implement the Solution in a fully in the Cloud environment for both the Primary and Secondary sites. The document must include, but not be limited to, the following technical environments:

- Development Environment: Installing Contractor's base COTS ABIS software and developing software Programming Modifications (Configurations, Customizations, Interfaces), System reports, and dashboard monitoring.
- Pre-Production Environment: Performing the System performance load test, and applying and testing all patches, updates, and upgrades to the baseline software, prior to Go-Live.
- Disaster Recovery/Backup Environment: Ensuring business continuity through regular backups and disaster recovery setups.
- Production Environment: The live environment where the COTS ABIS software will be used by end-users.
- Post-Production Test Environment: Testing of patches, updates, and upgrades, interface modifications, and other Solution modifications prior to migrating them to the Production Environment.
- Training Environment: Dedicated environment for user training, allowing users to familiarize themselves with the System and practice using it without affecting the production or testing environments. This environment must include enough test data to ensure test results reflect real-world situations.

4.2.2 Production Software and Cloud Infrastructure Configuration and Specifications

Using Exhibit 11 (Solution Environment and Software Delivery List and Specification Sheet) to Exhibit B (Required Forms) to the Contract, Contractor must use the TAD, if necessary, to resize and

define the software configuration, Cloud infrastructure, and specifications that will be established for Production Use, as applicable. This task must be completed in conjunction with the Cloud and infrastructure readiness assessment described in Paragraph 4.1 above. The configuration and specifications must be updated as the Production criteria are fully established.

4.2.3 Database Management System

The TAD must include information about the database management system underlying Contractor's proposed COTS software.

4.2.4 Contractor's Quality Control, TAD

Contractor must describe their approach for monitoring System performance and administration, including business continuity (e.g., backup and recovery, failover/failback), dashboard monitoring, incident tracking, and Contractor's User support.

Contractor must submit the TAD draft to County Project Manager for review and approval. Contractor must make any revisions specified by County Project Manager.

Deliverable 4 – Completed Infrastructure and Technical Assessment

- a. Infrastructure Readiness Assessment Document – DRAFT
- b. Infrastructure Readiness Assessment Document – FINAL
- c. Technical Architecture Document – DRAFT
- d. Technical Architecture Document – FINAL

Deliverable 4.1 and 4.2, Completed Infrastructure and Technical Assessment documentation must be reviewed and approved in accordance with the document review process described in Exhibit A (Statement of Work) to the Contract.

5.0 Task 5 Implementation Assessment Document (IAD)

This Task 5 includes the strategies for Contractor's customized COTS Solution's implementation and transition to Production, which are based on the findings of the Final Solution Requirements document (Task 3), and the Infrastructure and Technical Assessment (Task 4). These implementation strategies form a critical component of the PCD (Task 1). The implementation strategies must take into consideration the County's organizational and Project constraints, while addressing the County's Final Solution Requirements. Contractor must submit a draft of each of the implementation strategies (Paragraphs 5.1.1 through 5.1.11 below) for County review and approval as they are prepared.

This Task 5 culminates with the creation of a comprehensive final IAD. The final IAD must open with an executive summary that includes key findings and recommendations, and must include the following strategies and plans:

5.1 Implementation Strategy, Updated

5.1.1 Software - Contractor's COTS Software Programming Modifications

- Customization / Configuration Approach, Updated

Contractor must specify and document the approach and processes for designing and developing the Programming Modifications identified in the gap analysis report (see Paragraph 3.2 above), and must include:

- a. The County's verification of software Programming Modifications,
- b. Design approach,
- c. Development methodology,
- d. Software version control,
- e. Quality assurance, and
- f. Phasing/sequencing considerations.

5.1.2 Cloud Infrastructure – Contractor's Cloud Deployment Approach, Updated

Contractor must specify and document their approach and processes for:

- a. The set-up and configuration of all cloud components, as applicable.
- b. Establishing network connectivity for the ABIS environments to and from the Department's Data Center, itemized in the TAD, including the dedicated communication line and secondary VPN line.

5.1.3 Test Strategy, Updated

Contractor must specify and document the strategy, approach, and processes for testing the customized Solution during Task 11 [see Paragraph 11.2.1 (Final Testing of Completed Production Solution: Setup and Certification) below], including:

a. Unit Component Test

Conducted during the development process by Contractor to ensure all the Solution's unit components function as specified.

b. Data Conversion Test

Ensures all data converted from the legacy system complies with Contractor's proposed Data Conversion routines, as well as to assure the County that no County data was "dropped" or lost during the conversion process.

c. Integrated System Test

Ensures all the components/ modules/interfaces work together and are complete, integrated, error free and meet the final

Requirements and specifications. If a modification or correction is needed, Contractor must conduct regression testing to all affected components to ensure there is no adverse impact on other components or modules [refer to Subtask 9.1 (Final Test Plan) below] and provide a roll-back feature to guard against System failure.

d. Operational Readiness Test, Updated

Performed at the final stage of testing at the LACRIS Norwalk office in conjunction with the County LACRIS team together with not more than seven ABIS agency locations designated by County Project Manager. These tests will also confirm the Solution's readiness for production including software installation and Configuration, database backup, database recovery, database syncing, rollback, failover, scalability, reliability, System performance, security, and where necessary, perform regression testing. It also tests the County's Business Continuity Strategy (Disaster Recovery) [refer to Subtask 9.1 (Final Test Plan) below].

e. User Acceptance Test (UAT)

Ensures that Contractor's Solution meets all Final Solution Requirements. These tests are generally performed by County stakeholders after ABIS training (refer to Task 10 Training and Documentation below), and during Transition to Production (refer to Task 12 Solution Go-Live below). Contractor must observe and document all bugs, offer proposed remedies, as well as identify any discovered enhancements. UAT will occur centrally at the LACRIS Norwalk office, together with not more than seven ABIS agency locations, as designated by County Project Manager.

f. Performance Test

i. Tests the performance of Contractor's Customized COTS Solution in relationship to the County's Final Solution Requirements. This test should ensure that Contractor's proposed COTS Solution meets all response-time Requirements when deployed to all Users and its use during peak workloads [refer to Attachment C.1 (Solution Response- Time Requirements) to Exhibit C (Service Level Agreement) to the Contract].

ii. Contractor must specify the configuration(s) and load performance tools that will be used for verifying System Performance Standards [refer to Subtask 9.1 (Final Test Plan) below].

iii. In addition, performance testing must include Cloud-

specific metrics such as latency, throughput, and the ability to handle peak loads in the Cloud environment.

5.1.4 System Interface Strategy, Updated

Contractor must specify and document the strategy, approach, and processes (and toolsets, if applicable) for designing, developing, testing, and certifying inbound and/or outbound System Interfaces to meet the final draft Requirements specified in Exhibit B (Solution Requirements) to the Contract. The System Interface Strategy [refer to Subtask 9.1 (Final Test Plan)] must include:

- a. An inventory of System Interfaces that identifies whether it is inbound only, outbound only, bi-directional, or link with no data integration,
- b. The mode (real-time update vs. batch file),
- c. The frequency at which the Interface needs to be run,
- d. Toolsets to be used, if applicable,
- e. Standards and formats for Interface designs,
- f. The type of data that is being interfaced,
- g. A listing of the target or source systems and whether testing prior to Go-Live is achievable, based on each source system's testing capability,
- h. The approach to source system modifications if necessary and known, where Contractor must work with the source system proprietor,
- i. Data Conversion Process and/or routines built into the Interface for converting inbound and/or outbound data, as applicable,
- j. Certification Process, and
- k. Acceptance Criteria.

5.1.5 Security Strategy, Updated

Notwithstanding the County's and Department's security requirements specified in Attachments C.1 – C.5 to Exhibit C (Service Level Agreement), Contractor must specify a strategy to implement the security requirements stated in sub-section "Technical" of Exhibit B (Solution Requirements). The strategy must include the recommended Acceptance Criteria to validate the implementation.

5.1.6 Data Conversion Strategy from Legacy System, Updated

The system being replaced is identified in Paragraph 3.0 (Legacy System(s) to be Replaced) of Exhibit A (Statement of Work) to the Contract. This Paragraph provides details to Contractor's industry best-practices approach to cleansing and converting legacy data

using the Extract-Transform-Load (ETL) process.

Contractor must identify the following:

- a. Review data cleansing requirements identified in the TAD, and provide written cleansing recommendations to the County on how the unnecessary or damaged records/data will be handled during the conversion,
- b. The approach and processes (and toolsets, if applicable) for designing, developing, testing and certifying conversion routines to meet the Data Conversion processes required to capture all legacy system data and audit history,
- c. Standards and format for conversion designs,
- d. Data types,
- e. Estimated volume and extent of historical information to be converted,
- f. The approach for the following processes:
 - i. Data mapping,
 - ii. Data extraction methodology and specifications/preparation,
 - iii. Data extraction,
 - iv. Data staging,
 - v. Data cleansing, and
 - vi. Data validation,
- g. Inventory and description of Data Conversion reports to be developed,
- h. Data Conversion catch-up before Go-Live protocols,
 - i. Certification process, and
 - j. Acceptance Criteria.

5.1.7 Test Data Purge Strategy, Updated

Contractor must specify and document the strategy, approach, and processes for the purging of test data from the ABIS Solution Environment. This strategy must ensure that all test data generated during the pre-production phase, including data used for training, development, and testing, is completely removed from both the primary and secondary data centers before the Go-Live event. The strategy must include:

- a. Identification of Test Data,
- b. Purge Execution Plan, and
- c. Validation and Verification.

5.1.8 Report Design Strategy, Updated

Contractor must specify and document:

- a. The approach and processes for addressing the County's reporting requirements, hard copy and electronic, for all applicable requirement categories,
- b. The approach for modifying predefined COTS ABIS reports or designing/developing new System reports not in the COTS ABIS, all as part of the ABIS Solution. This approach must include the steps necessary for report testing necessary to meet the Solution Requirements,
- c. Toolsets used, if any,
- d. An inventory of pre-defined reports that identifies whether the report exists in the COTS software, if it exists with modifications, or new, on-demand or scheduled during non-peak hours, the frequency that the report needs to be generated, the type of information to be provided, the target audience/distribution list, and a brief description of how the report will be used, and
- e. Methods for User to save a report design with established parameters.

5.1.9 Business Continuity Strategy (Disaster Recovery), Updated

The ABIS Solution is a mission-critical System requiring 24/7 operations. Contractor must update, if necessary, the Business Continuity Strategy (BCS) (Disaster Recovery) from the PCD [refer to Paragraph 1 (Project Planning-Project Control Document (PCD) above], in consultation with County Project Manager. The BCS must address the Solution Requirements outlined in Paragraph 4.4 (Business Continuity Strategy (Disaster Recovery) of Exhibit C (Service Level Agreement) to the Contract. The BCS at minimum must include, but not be limited to, the following:

- a. Full System including site redundancy at primary and secondary cloud sites,
- b. Cloud site management, including high availability and fault-tolerance,
- c. Network management for local and wide-area networks,
- d. System management by means of a dashboard, including the operation, monitoring and management of the systems and equipment required for operations,
- e. Cloud database redundancy, management, and administration,
- f. Cloud system backup, including restoring Software tools and procedures, and

- g. Communication tools for notifications (automatic and manual) to the LACRIS help desk and Users, and guidelines.

5.1.10 Training and Documentation Strategy, Updated

Contractor must specify and describe:

- a. The approach and processes for technical and User training, including:
 - i. Targeted training groups,
 - ii. Number of courses, and
 - iii. Estimated maximum number of participants per course.
- b. Procedures, roles, and responsibilities between Contractor and the County for administering the training environment,
- c. Cloud specifications for the training environment, as applicable,
- d. Logistics that the County will need to organize training courses (e.g., classrooms, material distribution, User list),
- e. The development of the Systems administration and operations manual, including cloud-specific operations and management,
- f. The development of the User reference manual, training materials and exercises,
- g. A preliminary training curriculum based on the County's final draft Solution Requirements document, also incorporating cloud-specific scenarios and use cases,
- h. Certification process, and
- i. Acceptance criteria.

5.1.11 Transition to Production: Production Cutover Strategy, Updated

This strategy outlines the approach for data migration from the legacy system to the Pre-Production environment. It details the deployment and integration of the Solution, including interactions with external systems and data, if applicable. Additionally, it covers the processes for communicating and facilitating the transition to Contractor's customized Solution in Production operations. This strategy must first be utilized for the Operational Readiness Testing and then for the full-scale Production cutover after successful User Acceptance Testing.

Utilizing the TAD and Infrastructure Readiness Assessment [Deliverable 4 (Completed Infrastructure and Technical Assessment)], Contractor must create a comprehensive Solution Migration Strategy document which includes a work breakdown structure and master timeline for migrating the legacy system to Contractor's Customized Solution, which must include, but is not limited to:

- a. Cloud infrastructure setup requirements for the primary and secondary Cloud environments, as identified in the TAD, refer to Exhibit 11 (Solution Environment and Software Delivery List and Specification Sheet) of Appendix B (Required Forms),
- b. Migration strategy: Activities, events, and resources required to migrate from the legacy system to Contractor's proposed COTS Solution,
- c. A readiness checklist (which, at a minimum, includes all items listed in Paragraphs 5.1.1 – 5.1.11 above) and final Implementation Assessment which must include the following processes and checklists for implementation:
 - i. Software readiness checklist,
 - ii. Cloud infrastructure readiness checklist,
 - iii. External/Internal Interface readiness checklist,
 - iv. Security readiness checklist,
 - v. Data Conversion readiness checklist,
 - vi. Report design readiness checklist,
 - vii. Business Continuity (Disaster Recovery) readiness checklist,
 - viii. Training and Documentation readiness checklist,
 - ix. System Configuration checklist,
 - x. Transition to Production readiness checklist, and
 - xi. Organizational readiness checklist.
- d. Cutover Strategy

Contractor must propose a detailed cutover strategy to ensure minimal disruption to County operations. Contractor must submit final cutover strategy to County Project Manager for review and approval.
- e. A fallback plan to return to the legacy system in case rollout causes major Deficiencies that Contractor cannot remediate timely, and a redeployment plan after resolving major Deficiencies [as specified in Exhibit C (Service Level Agreement) to the Contract],
- f. Approach to configuring User roles (e.g., mapping specific functions to specific roles, and specific roles to individuals),
- g. An approach for User support during Production Cutover,
- h. Certification process, and
- i. IAD Acceptance Criteria.

The implementation assessment document will be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

Deliverable 5 – Completed Implementation Assessment Document

- a. Implementation Assessment Document – Draft
- b. Implementation Assessment Document – Final

Deliverable 5, Completed Implementation Assessment Document will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

5.2 Project Review Point – Technical Architecture and Assessment

At this point, at the direction of the County Project Manager, a Project review of the results of Task 4 (Infrastructure and Technical Assessment) and Task 5 (Implementation Assessment Document) may be conducted by the County.

6.0 Task 6 Design Review of Contractor's Customized COTS Solution, Final Design

6.1 Update the Review / Demonstration Environment

Contractor must update the Review / Demonstration Environment COTS software installed for the gap analysis [Subtask 3.2 (Demonstration and Gap Analysis) above], as applicable, and load an additional sample of legacy system data [see Paragraph 5.1.6 (Data Conversion Strategy from Legacy System) above] as necessary, to support the design review.

6.2 Contractor's Customized COTS Solution Design Review

Contractor must conduct a design review of the proposed Programming Modifications to Contractor's COTS software with key Users, based on the identified gaps. The design review will be with County Project Manager as well as key Users identified by the County. A minimum of three User feedback sessions and four technical feedback sessions of four hours each must be presented by Contractor at a County-determined location to ensure the accuracy and completeness of Contractor's proposed Programming Modifications. County Project Manager reserves the sole right to cancel or reduce the number of feedback sessions needed at any time.

These feedback sessions must include:

- a. A review of the COTS software data model (pre-Customization),
- b. A live demonstration of Contractor's COTS cloud software, where available; Contractor must provide all hardware and software for this demonstration, at no cost to the County,
- c. A review of the mockup or storyboard design drawing of the proposed data model post-Customization (if no live demonstration is available),
- d. A review of the mockup or storyboard design drawing of the proposed

User Interface(s) (if no live demonstration is available),

- e. A review and discussion of the Data Conversion plan and timing, including a discussion on audit information conversion,
- f. A review of the County's System performance requirements, including Contractor's affirmation as to how the performance requirements will be met in the Cloud environment, and
- g. A review of the proposed Cloud deployment strategy, including considerations for security, scalability, redundancy, and performance.

6.3 Final Design document

As a result of these feedback sessions, Contractor must:

- a. Update Contractor's proposed Programming Modifications to Contractor's COTS software and create a final design document which provides design details for the ABIS Solution specifications, processes, functional hierarchy, and data models. The final design will serve as the foundational document for Contractor's actual Customization effort (refer to Task 7 below).
- b. Provide detailed narrative descriptions of processes, and mockups or storyboard drawings of the User Interface(s) and all applicable User Interface(s) actions.
- c. Additionally, document:
 - i. Contractor's COTS existing software components that require Customization (e.g., programming required),
 - ii. New Solution components (non-existent in the COTS software) that need to be Customized (e.g., programming required),
 - iii. Contractor's proposed COTS Solution's areas that require Configuration only (e.g., table-driven access to application areas, User Interface Configurations, security and User ID Configuration, and workflow Configuration), and
 - iv. Any additional requirements identified by the County during the gap analysis or during the design review feedback sessions, that were not part of the County's original published Requirements which may result in additional implementation costs. [These Programming Modifications may require a formal executed Change Notice to the Contract issued by the County to Contractor for Optional Work, utilizing Pool Dollars, in accordance with Paragraphs 10.3 (Change Notices) and 3.3.4 (Optional Work) of the Contract].
- d. Document the Solution Requirements that are impacted by:
 - i. All proposed Programming Modifications,
 - ii. Proposed Interface, identifying the Interface(s),

- iii. Federal, state, or other compliance standards, identifying the standard(s),
- iv. The System Performance Standards [refer to Schedule C.1 (Solution Response-Time Requirements) to Exhibit C (Service Level Agreement) to the Contract], identifying the standard(s).
- e. List each Licensed Software product used to implement the ABIS Solution which is not listed on Exhibit 11 (Solution Environment and Software Delivery List and Specification Sheet) of Appendix B (Required Forms) to the Contract, including any Cloud services or platforms. Identify each product as 'proprietary' or by Third-Party Software's name. Identify each product's software version number and manufacturer,
- f. Include complete workflows which include the new functionalities for all User and administrative functions,
- g. Include details on the ABIS Solution's database design, Interface design, and Cloud equipment installation drawings, and
- h. Include a Cloud deployment strategy, including considerations for security, scalability, and performance as part of the final design document.

The updated Final Design Document will be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

6.4 Define and Evaluate Changes to Contractor's Proposed COTS Solution Design

- 6.4.1 Contractor must document the differences and changes between Contractor's original proposed COTS Solution design, shown in the gap analysis report and the final design document, as applicable. Documentation must include detailed information by item, including itemizing any additional costs Contractor asserts for the ABIS Solution.
- 6.4.2 Any agreed upon changes impacting costs may result in a formal Change Notice issued in accordance with the change process specified in Paragraph 10 (Amendments and Change Notices) of the Contract, in the County's sole determination.
- 6.4.3 Contractor must remove from the final design document any changes to the ABIS Solution requiring additional costs that County Project Director, in his sole discretion, does not agree to. Contractor must submit the revised final design document to the County Project Manager for review and approval.
- 6.4.4 The PCD must be updated to reflect the revised final draft Solution Requirements and corresponding Project plan.

Deliverable 6 - Completed Customized COTS Solution Design Review and Final Design

- a. Final Design Document – Draft
- b. Final Design Document – Final

Deliverable 6, Completed Customized Solution Design Review and Final Design will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

6.5 Project Review Point – Customized COTS Solution / Design and Final Design

At this point, at the direction of County Project Manager, a Project review of the results of Task 6 may be conducted by the County.

7.0 Task 7 Pre-Production Environment and COTS Solution Programming Modifications (Customization/Configuration)

While the County is not responsible for the Programming Modifications effort (e.g., Customizations, Configurations, etc.), the purpose of this Task is to assist Contractor in ensuring that the Program Modifications effort is timely completed in satisfaction of the Requirements specified in Contractor's Customized COTS Solution, and the agreed upon final design.

7.1 Subtask 7.1 – Establish the Pre-Production Environment

Contractor must establish the Pre-Production environment based on the specifications in the TAD (refer to Paragraph 4.2 Technical Architecture Document above) and IAD (refer to Paragraph 5.1 Implementation Strategy, Updated above), and more specifically, the Performance Testing configuration recommendations contained in the TAD (refer Paragraph 4.2 Technical Architecture Document above).

As agreed upon by the parties, the pre-Production environment will be used to execute the Solution Programming Modifications and will later serve as the Production Environment. County Project Manager and the County's Data Center manager, with the concurrence of Contractor's Project Manager, will specify the roles and responsibilities of the parties to deliver, install, and configure all components and network protocols for the pre-Production environment, which includes, as applicable:

- a. Cloud infrastructure,
- b. Operating Software, database management system, network, and virtualization,
- c. Network connectivity required within the scope of this Project,
- d. Access controls as appropriate for authorized Contractor and County Project team members to install, configure, maintain, and use the Application Software and middleware,

- e. Baseline Customized COTS Solution,
- f. Baseline Configuration,
- g. Installation and configuration of Biometric Algorithms,
- h. Any required Third-Party Software or toolsets,
- i. Establishing and testing ABIS System Interfaces,
- j. Security administration setup including, if necessary, applicable integration with network security, security groups, and workstation sign-on,
- k. Processes and mechanisms for integration and change control, including controlled migration of software, data, User profiles, etc. from one environment to another, and change-control procedures,
- l. Processes for database administration,
- m. Backup and recovery operations,
- n. Processes for performance monitoring,
- o. Processes and mechanisms for incident tracking and troubleshooting,
- p. Scheduled offline processes, and
- q. Loading and configuring data and components, including:
 - i. Converted data,
 - ii. Entering initial User ID's,
 - iii. User Profiles, and
 - iv. Security,

Contractor must regularly review and update the pre-production environment setup in line with any changes in the TAD and IAD.

Deliverable 7.1 – Pre-Production Environment Established

Deliverable 7.1, Pre-Production environment configuration and Documentation will be reviewed and approved in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

7.2 Subtask 7.2 – Execute COTS Solution Programming Modifications

- 7.2.1 Contractor must customize the COTS Solution. The Customization process must be based on the agreed upon (by Contractor and County Project Manager) Final Requirements Document [Paragraph 3.2.7 (Final Requirements Document) above] that incorporates:
 - a. Completed Requirements review and gap analysis (refer to Subtasks 3.1 and 3.2);
 - b. TAD [refer to Paragraph 4.2 (Technical Architecture Document)]

above];

- c. Final Implementation Assessment Document (Task 5), including:
 - i. System Interface Strategy, Updated (refer to Paragraph 5.1.4 above),
 - ii. Security Strategy, Updated (refer to Paragraph 5.1.5 above),
 - iii. Data Conversion Strategy from Legacy System, Updated (refer to Paragraph 5.1.6 above),
 - iv. Report Design Strategy, Updated (refer to Paragraph 5.1.8 above); and
- d. Completed Contractor's Customized COTS Solution Design review and Final Design (refer to Task 6 above).

- 7.2.2 All Solution modifications must be made as part of this Subtask 7.2. The Customization process must transform Contractor's proposed COTS software into Contractor's Customized COTS Solution which must meet the County's Final Solution Requirements and Contractor's final design document (refer to Paragraph 6.3(a) above).
- 7.2.3 The integration of tools and algorithms, as applicable, is part of this Subtask along with any applicable development.
- 7.2.4 Contractor must develop the specified System Interfaces as provided in the System Interface Strategy [refer to Paragraph 5.1.4 (System Interface Strategy, Updated) above].
- 7.2.5 Contractor must conduct regression testing of all software versions with updates incorporated into Contractor's Customized COTS Solution during implementation.
- 7.2.6 The County and Contractor must review, as required in the PCD, the Customization effort at predetermined checkpoints that will be agreed upon by County Project Manager and Contractor's Project Manager. These checkpoint reviews will be used to determine if Contractor's Customization effort is on schedule and meets the User requirements as specified in final Requirements.
- 7.2.7 This Subtask must result in a fully functional ABIS Solution (Contractor's Customized COTS Solution) that meets the Requirements, and is ready for User Acceptance Testing, all as specified in the final Requirements and final design.

Deliverable 7.2 – Contractor's Customized COTS Solution Completed

Deliverable 7.2, Contractor's Customized Solution must be reviewed and accepted by County Project Manager in accordance with the review process

described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

7.3 Subtask 7.3 – Contractor’s Customized COTS Solution Review

7.3.1 At the sole discretion of County Project Manager, all identified issues, must be resolved as specified in Paragraph 5.8 (Dispute Resolution Process) of the Contract, and documented in the ITL (refer to Paragraph 2.1.5 above).

7.3.2 Upon resolution of all issues, Contractor must submit the completed Customized Solution to County Project Manager and the Project team for review. At County Project Manager’s direction, Contractor must initialize the approved Customized COTS Solution on the pre-Production environment.

Deliverable 7.3 – Contractors’ Customized COTS Solution Reviewed/Approved/Certified

Deliverable 7.3, Contractor’s Customized COTS Solution is approved by County Project Manager as ready for testing by the County in accordance with the process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

8.0 Task 8 Data Conversion

Upon completing Contractor’s Customized COTS Solution, Contractor must extract, cleanse, transform, and load the legacy system data into the pre-Production Environment.

The legacy system being replaced contains data that requires Data Conversion. A general description of the legacy system is provided in Paragraph 3.0 (Legacy System(s) to be Replaced) of Exhibit A (Statement of Work) to the Contract. The County’s Data Conversion requirements are identified in the ‘Data Conversion’ category of Exhibit B (Solution Requirements) to the Contract.

The County will continue its use of the legacy system until Go-Live is successfully completed. Contractor must conduct an initial Data Conversion, to be followed by successive runs to capture new and/or modified data from the legacy system.

8.1 Subtask 8.1 – Initial Data Conversion

8.1.1 Contractor must develop conversion routines using the pre-Production Environment established in Subtask 7.1 (Establish the Pre-Production Environment). The conversion routines must be based on the Data Conversion strategy (Task 5), and include, but not be limited to:

- a. Details about the data to be converted (e.g., source system, data types, etc.),
- b. Conversion toolsets that are utilized,
- c. Conversion mapping and data transformation, and

- d. Cleansing and preparation processes required by the County, if any, for conversion.
- 8.1.2 Contractor must run and test the developed Data Conversion routines and test Data Conversion jobs based on the Data Conversion routines specifications in the IAD (Task 5). [The pre-Production Environment may also be used to stage data that is being prepared for conversion during the Testing (refer to Paragraph 5.1.3 Test Strategy, Updated above) and Production Cutover (refer to Paragraph 5.1.11) Tasks].
- 8.1.3 If required, Contractor must modify the Data Conversion routines for data catch ups required to achieve successful completion of Go Live and test those Data Conversion jobs.
- 8.1.4 Sample Data Conversion Test

Contractor must plan, test, and perform at least one conversion of a small representative set of data, including audit trail data, to verify the conversion routines, and the quality of the converted data. The County and Contractor must mutually agree upon the sample data set. The County will verify that the sample data set was successfully converted into the ABIS Solution. Upon successful completion, Contractor must incorporate the conversion routines into the Final Data Conversion Plan [refer to Paragraph 8.1.7 (Updated Conversion Plan) below].
- 8.1.5 Data Conversion

Contractor must coordinate with the County to incrementally extract all legacy system data (initial retrieval and data catchup).
- 8.1.6 Contractor must conduct iterative data cleansing and preparation efforts through periodic conversion (transform and load) runs to identify data issues and to determine the degree to which the data is ready for Production including, but not limited to, the following:
 - a. Executing scheduled conversion runs to identify data issues and to determine the degree to which data is ready for Production,
 - b. Generating conversion reports,
 - c. Performing data cleansing/preparation steps,
 - d. Using selected toolsets for issue identification and data verification, and
 - e. Track and resolve issues related to Data Conversion routines.
- 8.1.7 Updated Data Conversion Plan

Contractor must update the Data Conversion Strategy (Task 5) and develop a Final Data Conversion Plan for executing the conversion and validating the converted data including data catch ups. The Final

Data Conversion Plan must be incorporated into the Production Cutover Strategy [refer to Paragraph 5.1.11 (Transition to Production: Production Cutover Strategy, Updated) above].

Deliverable 8.1 – Initial Data Conversion Completed and Certified

- a. Conversion routines – Draft and Final
- b. Sample Data Conversion and Tests executed
- c. Final Data Conversion Plan – Draft and Final

Deliverable 8.1, Initial Data Conversion will be reviewed and approved in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

Additionally, Contractor must certify, and County Project Manager will validate, all converted data is ready for Production operations. The County will provide Contractor with a summary of issues for resolution, as applicable, within a timeframe as directed and approved by County Project Manager.

8.2 Subtask 8.2 – Ongoing Data Conversion and Cleaning

Contractor must provide ongoing Data Conversion and cleansing activities as required by the County up to Final Acceptance.

Deliverable 8.2 – Ongoing Data Conversion and Cleansing

Deliverable 8.2, Ongoing Data Conversion and cleansing activities must be approved by County Project Manager in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.0 Task 9 Pre-Production Testing of Contractor’s Customized COTS Solution

Pre-Production testing process ensures that all components of Contractor’s Customized COTS Solution required at Go-Live are thoroughly tested and that the implemented Solution consists of high-quality, reliable software. The testing process must take into account the unique testing requirements of the Solution that is based upon a customized version of the originally proposed Contractors’ COTS software. NOTE: The testing of individual components must be conducted by Contractor as part of the Programming Modification effort. To the extent possible, the County will participate in testing. Based upon the testing results and the County’s input, Contractor must make all changes required and resolve all issues.

9.1 Subtask 9.1 - Final Test Plan

Contractor must update the Testing Strategy and create a Final Test Plan. The Final Test Plan must identify the specific testing activities to occur, and which testing will be performed with County oversight. The Final Test Plan must be comprised of the following:

- a. Integrated System test approach,
- b. Updated System Interface strategy test approach,

- c. Operational Readiness test approach,
- d. Business Continuity Strategy (Disaster Recovery) test approach,
- e. Performance testing approach that includes a test schedule, test criteria (including transaction profiles, data volumes and User loads), performance targets, and toolsets to be used,
- f. User Acceptance Test approach,
- g. Test scenarios:
 - i. Business functionality scenarios (provided by the County), and
 - ii. Technical functionality scenarios (Integrated System test, Interfaces with external data sources, operational readiness including recovery procedures after a System failure, and performance) that must be developed by Contractor,
- h. Contractor-developed test scripts that map to each scenario,
- i. Organization of test scripts,
- j. Incident log for describing reported software incidents, date resolved, and nature of resolution, and
- k. A test plan that must be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

Deliverable 9.1 – Pre-Production Test Plan Finalized

Deliverable 9.1, Pre-Production Test Plan will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.2 Subtask 9.2 – Conduct System Interface Testing

- 9.2.1 Contractor, with County oversight, must conduct tests of all Interfaces with external data sources/systems to the extent possible, in accordance with the System Interface Strategy document [see Paragraph 5.1.4 (System Interface Strategy, Updated) above], and analyze and document results.
- 9.2.2 Based upon these tests and County input, Contractor must make any changes required (e.g., updates to Interface coding, structure, etc.), and re-test to confirm these changes have been completed successfully.
- 9.2.3 Contractor must certify in writing that testing for each Interface has been successfully completed, and that Contractor has successfully completed all required corrective action(s). County Project Manager must approve the successful completion of each Interface test.

Deliverable 9.2 – System Interfaces Tested and Certified

Deliverable 9.2, System Interface tests, test results (analysis and Documentation), and Contractor certification will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.3 Subtask 9.3 - Conduct Integrated System Test

9.3.1 Contractor must conduct all the activities associated with preparing for and conducting System and integration testing. This Subtask follows the Final Test Plan [refer to Subtask 9.1 (Final Test Plan) above]. The Integrated System Test includes, but is not limited to, the following:

- a. Integration testing of all components of Contractor's Customized COTS Solution in the specified hardware (as applicable), operating System, and network environment, and includes Interfaces with other systems, to the extent possible based on other systems' Interface testing capabilities,
- b. Contractor's use of test scenarios [refer to Paragraphs 9.1.1(g) and (h) above] provided by the County for the purpose of creating test scripts, conducting the tests, and documenting test results, and
- c. Regression testing after the correction of any identified defects, to which Contractor must make any changes required, and re-test to confirm these changes have been completed successfully.

9.3.2 Contractor must certify in writing that all integration tests have been successfully completed, and that Contractor has successfully completed all required corrective action.

Deliverable 9.3 – Completed Integration Tests and Certification

Deliverable 9.3, Test results and Contractor certification will be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.4 Subtask 9.4 – Conduct Initial Operational Readiness Tests and Certification

9.4.1 Contractor must execute and analyze the Operational Readiness Tests against the pre-Production Environment, according to the Final Test Plan (see Subtask 9.1 above), and document the test results. Note: This Operational Readiness Test process will also occur prior to Go Live when the pre-Production Environment transitions to the Production Environment.

9.4.2 Based upon these findings, Contractor must:

- a. Document recommended modifications to County business

operations, including the County's Business Continuity Strategy.

- b. As necessary, optimize the pre-Production Environment at the primary site and document optimization performed.
- c. Conduct retesting if necessary to confirm that Contractor has successfully conducted the operational readiness testing, and that the County's business operations, as applicable, have been modified to remedy any County-responsible Operational Readiness Test failures.

9.4.3 Contractor must certify, in writing, that all Operational Readiness Tests have been successfully completed, that Contractor has successfully completed any required corrective action, that Contractor has successfully modified Contractor's customized COTS Solution, and that Contractor's customized COTS Solution is ready for User Acceptance Testing

Deliverable 9.4 – Completed Initial Operational Readiness Tests and Certification

- a. Operational Readiness Tests completed
- b. Operational Readiness Test Certification

Deliverable 9.4, Completed initial Operational Readiness Tests and certification must be reviewed and approved in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.5 Subtask 9.5 - Performance Testing

The performance test ensures that the pre-Production Environment and Contractor's customized Solution meet the Solution's performance requirements. Note: This performance testing process will also occur prior to Go-Live when the pre-Production Environment transitions to the Production Environment.

- 9.5.1 Contractor must execute the performance tests in accordance with the Final Test Plan (refer to Subtask 9.1 above) and document and analyze results.
- 9.5.2 Based upon these tests, Contractor must make any Configuration changes required, and re-test to confirm these changes have been completed successfully.
- 9.5.3 Contractor must certify, in writing, that all performance tests have been successfully completed.
- 9.5.4 Contractor must have successfully completed all required corrective action to the County's satisfaction.

Deliverable 9.5 – Completed Performance Tests and Certification

- a. Performance Tests completed.

b. Performance Test Certification.

Deliverable 9.5, Completed performance tests and certification must be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

9.6 Subtask 9.6 – User Acceptance Test and Certification (Consists of Contractor supporting the UAT team)

9.6.1 Conduct Product Training - Contractor must provide hands-on training for approximately 15 County-assigned UAT participants. The purpose of the product training is to familiarize UAT participants with the general navigation, terminology, and functionality of the Customized Solution. Hands-on training must include at a minimum:

- a. Application overview and navigation,
- b. System concepts and terminology,
- c. Functional overview of each Solution component to be reviewed, and
- d. Training materials and exercises.

Training must be tailored to the specific needs of the County's UAT participants. Additionally, a method for participants to provide feedback on the training should be included to facilitate continuous improvement.

9.6.2 Contractor must be on-site during UAT and monitor County-designated participants. The Project team in conjunction with specified Users will execute the UAT scenarios [see Paragraphs 9.1.1(g) and (h) above] with Contractor's oversight.

9.6.3 The roles and responsibilities of both Contractor and County participants during UAT must be clearly defined to avoid confusion. All observations and issues must be well-documented for future reference.

9.6.4 Contractor must combine their identified documented defects with all defects documented by each UAT participant, including any System performance values, and maintain one comprehensive defect list, regardless of who identified the defect. Contractor must correct all defects within a reasonable time specified by County Project Manager (based on circumstance), documenting results achieved.

9.6.5 A defect prioritization system should be implemented to address critical issues first. Clear communication channels between Contractor and County Project Manager regarding defect statuses must be maintained.

- 9.6.6 Contractor must update the UAT scenarios and scripts, as applicable.
- 9.6.7 After Contractor corrects all defects, Contractor must notify the County and UAT participants. Contractor will again conduct that portion of the UAT, taking into consideration any software regression issues. Contractor must perform the necessary corrections to remedy all identified defects. The UAT participants will retest as required, until the County in its sole determination concurs with Contractor that all the defects have been resolved. Contractor and County Project Manager will certify, in writing, that the Acceptance Tests have been completed to the satisfaction of the County, and that Contractor's Customized COTS Solution is transformed into the ABIS Solution in the pre- Production Environment.

Deliverable 9.6 – Completed and Certified Acceptance Tests and Certification

- a. UAT completed
- b. Acceptance Test Certification

Deliverable 9.6, Completed and certified Acceptance Tests must be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

10.0 Task 10 Training and Documentation

Contractor must design the Training and Documentation process to ensure successful planning and delivery of training before Final System Acceptance. This involves creating a comprehensive training and documentation plan based on the strategies outlined in Paragraph 5.1.10 (Training and Documentation Strategy, Updated) above. The plan must include the development of training materials and the provision of training for end-users, system administrators, and application administrators. Additionally, Contractor must prepare documentation to support system operation, user desk references, and application administration.

10.1 Subtask 10.1 – Establish the Test/Training Environment

Contractor must utilize the Test/Training environment, as outlined in Paragraph 11 below, to facilitate training activities for the customized Solution. The test / training environment must be configured according to the specifications in the TAD and IAD, ensuring it meets the requirements for training County Users. Details of the environment setup are provided in Paragraph 11 (Establish the Production, Test, and Failover Environments) below.

The roles and responsibilities for furnishing, installing, and configuring the training environment will be specified by County Project Manager, with the concurrence of Contractor's Project Manager.

Deliverable 10.1 – Test/Training Environment Established

Deliverable 10.1, Test/Training environment must be reviewed and approved by County Project Manager in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

10.2 Subtask 10.2 – Develop A Final Training Plan

Contractor must review and update the Training Strategy document (refer to Paragraph 4.2.1 above) in the TAD (refer to Paragraph 4.2 Technical Architecture Document above), and prepare a Final Training Plan which must include, but not be limited to:

- a. Training objective, approach (i.e., methods employed) to technical and User training,
- b. Training course descriptions and curriculum – by course subject, purpose and topics covered,
- c. Target training groups and class sizes,
- d. A comprehensive plan for new user training post implementation, ongoing new user training to be conducted at least once per year, and regular end-user refresher training,
- e. Training facilities, Contractor and County staffing resources, and test data,
- f. Training logistics and administration (e.g., registration, evaluation questionnaire, training handouts, sign-in sheet, nameplate IDs, etc.),
- g. Training materials and exercises,
- h. Documenting software glitches found by Users during training for tracking,
- i. Training schedule (just-in-time training) which must coincide with Production cutover [refer to Paragraph 5.1.11 (Transition to Production: Production Cutover Strategy, Updated) above],
- j. Inclusion of on-demand eLearning materials and the use of training virtual machines (VMs) and mock transactions for hands-on learning experiences,
- k. Provision for in-person classroom training with training VMs and mock transactions to facilitate hands-on learning, and
- l. Procedures for administering the training environment.

The final training plan must be reviewed and approved by County Project Manager. Contractor must make any revisions specified by County Project Manager.

Deliverable 10.2 – Final Training Plan

Deliverable 10.2, Final training plan must be reviewed and approved in

accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

10.3 Subtask 10.3 – Solution and User Documentation

Contractor must update the Documentation Strategy document in the TAD, as necessary. Contractor must prepare User and Application Administration Documentation, including on-line help features. Contractor must modify existing documentation to include all ABIS Customizations, in support of User and System Administration operations (online and manuals).

10.3.1 Training Documentation – Contractor must develop complete User documentation, all of which must be formatted for copying and distributing in a Training course, and available in the Solution's online feature. Documentation for each ABIS component must include:

- a. User Reference Manual – step-by-step desk procedures for performing business operations,
- b. Quick Reference Guides – a condensed informational pamphlet, highlighting how to perform common key operations within the ABIS Solution, and
- c. Training Instructor Guide – an instructor's end-user training guide for designated County train-the-trainer staff.

10.3.2 User Manual – Contractor must develop an online User Manual which may be converted to a printable document by the User. Additionally, the online User's manual must be context-sensitive for all aspects of the Solution [refer to Exhibit B (Solution Requirements) to the Contract]. The manual must include a troubleshooting index of common User errors, accompanied by recommended remedial actions.

10.3.3 Application Administration Manual – Contractor must develop an Application Administration manual which includes detailed technical functions and operations for each Solution component, as well as a troubleshooting guide for all error conditions. The Application Administration manual must include, at minimum, the following:

- a. User management,
- b. ABIS Solution security,
- c. Application of Software patches and upgrades,
- d. Data table maintenance and configuration,
- e. Entity Relationship Diagram
- f. Offline processing,
- g. Interfaces,

- h. Report development and maintenance,
- i. Offline schedules – Jobs and dependencies (daily, weekly, monthly, annual), and
- j. Problem-solving help desk reference for use by both the Contractor's and the County's respective Help Desks.

10.3.4 On-Demand eLearning Materials – Contractor must develop comprehensive on-demand eLearning materials that are easily accessible and User-friendly. These materials must include interactive online manuals, video tutorials, and step-by-step guides that cater to different learning styles. The materials must cover all aspects of the cloud-based ABIS Solution, including System navigation, functionality, troubleshooting, and best practices for security. The eLearning materials must be regularly updated to reflect System updates or changes. Additionally, Contractor must ensure that these resources are available 24/7 to accommodate the varying schedules of Users.

Deliverable 10.3 – Solution and User Documentation Completed

- a. Training Documentation
- b. User Manual
- c. System Administration Manual
- d. On-Demand eLearning Materials

Deliverable 10.3, Completed solution and user documentation must be reviewed and approved in accordance with the document review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

10.4 Subtask 10.4 – Training

10.4.1 Application Administration Training

This training will cover the Solution management functions performed by Application Administrators, providing a comprehensive overview and hands-on technical experience with the System.

10.4.1.1 Application Administration Training

- a. Core Administration Functions:
 - Table-driven configuration,
 - User-Interface configuration,
 - Security configuration,
 - Workflow configuration,
 - User ID setup and management,

- System configuration,
 - Interface management,
 - Management of Solution's Third-Party Software,
 - Assistance with custom reports, and
 - Audit trail research and data.
- b. Advanced System Management:
- Database administration,
 - Dashboard configuration, and
 - Cloud solution management.
- c. Advanced Management Functions:
- Accessing and printing statistical reports at the Law Enforcement (LE) agency level,
 - Assigning roles and permissions to user accounts,
 - Conducting audit trail queries for LE agency assigned users, and
 - Handling other management inquiries.

10.4.1.2 Training Format and Duration

a. Duration

- The course must be held four times, with each session having a duration of at least four hours to provide a comprehensive understanding of all aspects of the Solution.

b. Participants

- The course must accommodate approximately 12 participants per session, ensuring an interactive and hands-on learning experience.

c. Methodology

- The training must be conducted through hands-on sessions, enabling participants to directly interact with the ABIS Solution components and tools.

10.4.1.3 Contractor Responsibilities

a. Qualified Instructors

- Contractor is responsible for providing qualified trainers who have in-depth knowledge of the ABIS Solution and practical experience in System

administration.

b. Training Materials

- All necessary training materials and resources must be provided by Contractor.

c. Customized Content

- The training content must be tailored to cover all aspects of the Solution, including all Customization, as outlined in the objectives, ensuring that application administrators are prepared for real-world scenarios.

10.4.2 System Administration Training

This course will cover ABIS Solution management functions performed by the ABIS System administrators. The course will provide hands-on instruction on using the tools provided in the ABIS Solution for accessing/printing statistical reports at the Law Enforcement (LE) agency level, assigning roles and permissions to User accounts, conducting audit trail queries for LE agency assigned Users, and other management inquiries. The course must also include training on managing the ABIS Solution in a cloud environment, if applicable. The course must be conducted a minimum of four times, with each session lasting no less than four hours, and accommodating approximately 30 participants per session.

10.4.3 ABIS Help Desk Training

This course must provide a technical overview to the LACRIS help desk staff of the ABIS Solution's overall functionality and provide methods in managing/resolving incidents quickly and effectively. The course must be conducted a minimum of two times, with each session lasting no less than four hours, and accommodating approximately 12 participants per session.

10.4.4 End-user Training

This course must provide comprehensive training for end-users of the ABIS Solution, including, but not limited to, application navigation, operational tasks, reporting, dashboards, customizations, configurations, tools, and troubleshooting. The course must be conducted a minimum of eight times, with each session lasting at least eight hours and accommodating up to 25 participants.

Deliverable 10.4 – Training Completed

Deliverable 10.4, Completed training must be reviewed and approved in accordance with the review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

11.0 Task 11 Establish the Production, Test, and Failover Environments

Contractor must establish the Production, Test/Training, and Failover Environments based on the specifications in the TAD [refer to Paragraph 4.2 (Technical Architecture Document) above] and IAD [refer to Paragraph 5.0 (Implementation Assessment Document) above]. Contractor must ensure that the Cloud-based services are appropriately configured and managed to support these deployments.

11.1 Subtask 11.1 – Establish Cloud-Based Environments

11.1.1 Establish the Production Environment

Contractor must convert the Pre-Production Cloud Environment to the Production Cloud Environment, ensuring alignment with the finalized TAD and IAD. This includes, but is not limited to, provisioning and configuring Cloud resources, network setups, and security measures per the Project's Cloud deployment strategy.

- a. Based on the Performance Test Strategy [Paragraph 5.1.3 (Test Strategy, Updated) above], Contractor must optimize the production environment to handle expected operational loads efficiently. This includes, but is not limited to, configuring load balancers, scaling policies, and resource allocation to meet performance targets.
- b. Contractor must conduct a final operational readiness test to confirm the production environment's capability to support the ABIS Solution effectively. This includes, but not limited to, verifying software installation, System configuration, database backup and recovery procedures, and overall System performance.
- c. Contractor must update all relevant documentation to reflect the production environment's setup accurately.
- d. Contractor must conduct a final review with County Project Manager to obtain approval for the production environment setup.

11.1.2 Purge Training Records and Update with Legacy System's Data

- a. Contractor must purge all test data from the entire Solution based on the Test Data Purge Strategy, Updated (Task 5.1.7 above) and confirm and document results.
- b. Following the purging of test data, Contractor must update the Solution with data from the legacy systems based on Task 5.1.6 (Data Conversion Strategy from Legacy System, Updated) above, ensuring the production environment reflects the most current operational state. Contractor must:
 - i. Implement the data migration plan [Task 5.1.6 (Data Conversion Strategy from Legacy System, Updated)]

above], which includes, but is not limited to, extracting, transforming, and loading legacy system data into the new Solution.

- ii. Ensure the integrity and accuracy of the migrated data through validation processes [Task 5.1.6 Data Conversion Strategy from Legacy System, Updated) above]. This includes, but is not limited to, reconciling data post-migration to confirm its completeness and correctness.

11.1.3 Establish the Test/Training Environment

a. Purpose of the Test/Training Environment

The test/training environment is crucial for validating system changes and conducting training. It will ensure that patches, Updates, Upgrades, and new features do not compromise System functionality, performance, or security.

b. Environment Configuration

The test/training environment must closely replicate the production environment to ensure that all tested changes and modifications will function correctly when deployed. This will provide a consistent and efficient platform for both testing and training activities. The environment must have access to adequate test data to simulate real-world scenarios effectively, ensuring comprehensive validation and training experiences. The environment setup may include, as applicable:

- i. Cloud infrastructure,
- ii. Operating software, database management system, network, virtualization,
- iii. Network connectivity,
- iv. Access controls for authorized Contractor and County Project team members,
- v. Backup and recovery,
- vi. Baseline Customized COTS Solution,
- vii. Baseline Configuration,
- viii. All required Third-Party Software or toolsets,
- ix. Installation and configuration of Biometric Algorithms,
- x. Establishing and testing ABIS System Test Interfaces,
- xi. Security administration setup, including integration with network security,
- xii. User profile setup for training users,

- xiii. A sampling of converted database records for training all ABIS components,
- xiv. Computer-based training tools,
- xv. Online computer-based training tools (e.g., streaming video) setup, and
- xvi. On-demand eLearning training tools.

11.1.4 Establish the Failover Environment

Contractor's environment build must include (as applicable):

- a. Virtual resources in a Cloud environment,
- b. Operating Software, database management system, network, virtualization,
- c. Secure and reliable Cloud network connectivity,
- d. Access controls as appropriate for authorized Contractor and County Project team members to install, configure, maintain, and use Application Software and middleware,
- e. Baseline/Customized COTS Solution,
- f. Baseline Configuration,
- g. Installation and configuration of critical algorithms,
- h. Any required Third-Party Software or toolsets,
- i. Establishing and testing ABIS System Interfaces,
- j. Processes and mechanisms for security administration, including applicable integration with network security, workstation sign-on, and data center security,
- k. Processes and mechanisms for integration and change control, including controlled migration of software, data, User profiles, etc. from one environment to another, and change-control procedures,
- l. Processes for database administration,
- m. Backup and recovery operations, including strategies for data backup and disaster recovery in a fully cloud environment,
- n. Processes for performance,
- o. Processes and mechanisms for incident tracking and troubleshooting,
- p. Installation and configuration of components monitoring including:
 - i. Converted data,

- ii. Entering initial User ID's,
- iii. Profiles,
- iv. Security,
- v. Testing User accounts, and
- vi. Scheduled offline processes,
- q. Connection to primary site from Deliverable 7.1 (Establish the Pre-Production Environment) above, using Contractor-provided dedicated communication line [refer to Paragraph 5.1.2 (Cloud Infrastructure-Contractor's Cloud Deployment Approach, Updated) above] and cloud services connectivity solutions.

Deliverable 11.1 – Cloud-Based Environment Established

- a. Production, Test, and Failover Environments established

Deliverable 11.1, Cloud-based environments and connectivity must be reviewed and approved in accordance with review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

11.2 Subtask 11.2 - Perform Final Testing

Prior to transitioning the pre-production environment into the production environment, Contractor must perform Solution final testing and preparedness for the County's authorization, assuring that the ABIS Solution is certified fully functional and ready for Production Use.

Final Testing of Completed Production Solution: Setup and Certification

- 11.2.1 Contractor must conduct a final test of the completed Production Solution System setup and infrastructure [refer to Paragraph 5.1.3 (Test Strategy, Updated) above], including a repeat of:
 - a. The Operational Readiness Test,
 - b. User Acceptance Test Review, and
 - c. Performance Test.
- 11.2.2 Defects identified and documented during the final testing of completed System setup and infrastructure must be corrected by Contractor in a reasonable time that will be specified by County Project Manager (based on the circumstances).
- 11.2.3 After all defects are corrected, Contractor must re-execute the System setup and pre-Production test to demonstrate readiness for certification by the County and Contractor. Contractor and County Project Manager will certify, in writing, that the tests have been completed, the results are acceptable, and that the Project is ready for cutover.

Deliverable 11.2 – Certification of Production Solution

Deliverable 11.2, Production System has been delivered, reviewed, approved, and certified in accordance with review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

12.0 Task 12 Solution Go-Live

12.1 Subtask 12.1 – ABIS Go-Live

Contractor must execute the approved cutover strategy as defined and presented in the IAD (Deliverable 5 – Completed Implementation Assessment Strategy). Contractor must update the IAD as necessary, or at the direction of County Project Manager. Contractor and the County will coordinate all the steps required for the ABIS Solution's Go-Live. All ABIS Interfaces [refer to Attachment A.4 (ABIS System Interfaces) to Exhibit A (Statement of Work) to the Contract] identified as required at Go-Live must be operational and Deficiency-free. During the phased Solution Go-Live, and until the County concurs with Final Acceptance Certificate [refer to Subtask 13.3 (Final Acceptance Criteria and Verification) below], Contractor must:

- a. Monitor the ABIS Solution while on-site by documenting/maintaining incident logs by Severity Level, and track the non-critical issues for future resolution,
- b. Analyze System performance and usage and, if necessary, promptly notify County Project Manager if problematic,
- c. Retrieve data entered by Users in the legacy system daily, and upload data into the ABIS Solution,
- d. Coordinate with the County all major Deficiency(ies), for Contractor's correction and testing/retesting by the County,
- e. Monitor and report all Solution regression issues discovered by either Contractor or the County, and
- f. Assist the County in verifying that the ABIS Solution meets Final Acceptance Criteria.

12.2 Subtask 12.2 - ABIS Go-Live Summary Report

Contractor must produce an ABIS Go-Live summary report that includes:

- a. The Production cutover process to Go-Live that occurred, identifying modifications made from the Production Cutover Plan,
- b. An evaluation of the cutover process, identifying which processes were successful as planned versus which processes were problematic,
- c. Problems and anomalies encountered and subsequently resolved during the cutover process, detailing the activities (including time, place and personnel) involved in identifying, communicating, troubleshoot and resolving these matters, and

- d. Remaining problems, Deficiencies by Severity Level, issues, and risks along with plans for their resolution, and the anticipated timetable for resolution. If Deficiencies are identified, Contractor may be required at, County Project Manager's sole discretion, to repeat all of this Task 12 (Solution Go-Live), to ensure successful cutover and Final Acceptance. Certification and County's Final Acceptance [refer to Subtask 13.3 (Final Acceptance Criteria and Verification) below] will be withheld until all Severity Level 1 and Severity Level 2 (refer to Paragraph 13.1.3 below) issues are resolved to County's satisfaction .

Deliverable 12 – ABIS Go-Live Completed

Cutover to Production process and Go-Live occurs, and Contractor provides the ABIS Go-Live Summary Report for County Project Manager's approval.

Deliverable 12.1 and 12.2, Completion of the ABIS Go-Live, which includes the cutover to Production process, and the Final ABIS Go-Live Summary Report, respectively, must be reviewed and approved accordance with review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

13.0 Task 13 Solution Warranty Period and Final Acceptance

13.1 Subtask 13.1 – Warranty Period, 90-Days: Maintain and Support the Production Solution

- 13.1.1 Contractor must maintain and support the ABIS Solution during the Warranty Period upon Go-Live. Contractor's maintenance and support Services during the Warranty Period must be for 90 consecutive days, in accordance with Subtask 12.1 (ABIS Go-Live) above and Exhibit C (Service Level Agreement) to the Contract.
- 13.1.2 The ABIS Solution must operate during the Warranty Period free from defects as specified in the Severity Level definitions listed in Exhibit C (Service Level Agreement) to the Contract.
- 13.1.3 Any identified Deficiency categorized as Severity Level 1 or Severity Level 2 must be corrected by Contractor within a reasonable time period agreed-to by Contractor and County Project Manager. Upon successful correction of all such Deficiency(ies), the Warranty Period will restart until the ABIS Solution functions Deficiency free for 90 consecutive days.

Deliverable 13.1 – Warranty Period: Maintenance and Support Completed

- a. Contractor maintains and supports the ABIS Solution as specified in Subtask 13.1 above.
- b. Warranty Period support will be reviewed and approved by County Project Manager on an ongoing basis.

13.2 Subtask 13.2 – Transfer of ABIS Solution Administration Responsibilities

From Project inception through the Warranty Period, Contractor maintains all responsibility for the ABIS Solution. During this period, Contractor must transfer all applicable Solution administration to County technical staff. Following the successful transition, the County will then take responsibility for Solution administration.

Deliverable 13.2 – Transfer of Solution Administration Responsibilities

Transfer of Solution administration responsibilities will be reviewed and approved by County Project Manager.

13.3 Subtask 13.3 – Final Acceptance Criteria and Verification

The County in its sole discretion will confirm Final Acceptance of the Solution, upon the County's:

- a. Certification of Deliverables 1 through 13,
- b. Contractor's completion of the two-week phased Implementation Period from the legacy system, and
- c. The successful execution of a consecutive 90-day Warranty Period, the County in its sole discretion will confirm Final Acceptance of the Solution.

County's Deliverable 13.3 – Final Acceptance Certificate

Final Acceptance Certificate - Upon the County's verification that Contractor's ABIS Solution has met all Final Acceptance criteria, County Project Manager will deliver Contractor's Final Acceptance certificate evidencing achievement of Final Acceptance in accordance with review process described in Attachment A.2 (Deliverable Acceptance Process) to Exhibit A (Statement of Work) to the Contract.

14.0 Task 14 Post-Implementation Maintenance and Support [Ongoing]

14.1 Contractor must provide post-implementation M&S Services as specified in Exhibit C (Service Level Agreement) to the Contract, for the valuable consideration specified in Exhibit I (Pricing Schedule) to the Contract.

14.2 At any time after Final Acceptance, a Technology Refresh may occur at the County's discretion. If the County elects to proceed with a Technology Refresh, Contractor must provide a refresh for all, or any subset of the Solution (virtual or physical) within the Production, Test, and Failover environments as determined by County Project Director. The Technology Refresh will be procured, delivered, and installed by Contractor as Optional Work, payable by the County utilizing Pool Dollars pursuant to Paragraph 3.3.4 (Optional Work) of the Contract.

The refresh must include:

- a. The latest advancements in Cloud technology and other emerging technologies that could improve system performance, security, and User experience.

- b. Evergreen components of the Solution to ensure all hardware, software, and associated operating Systems are fully supported and up-to-date.
 - c. Workstations and peripheral devices to prevent obsolescence and ensure compatibility with the refreshed technology.
- 14.3 Contractor must provide, at no cost to the County, annual registration for up to three County staff to attend Contractor's annual User conferences, which attendance must be for the entire event.

Deliverable 14 – Post-Implementation Support

Contractor's M&S Services will be monitored by County Project Manager on an ongoing basis.

15.0 Task 15 Post-Implementation Professional Services, As-Needed

Contractor must deliver as-needed Professional Services to provide Optional Work which may include, among other things, additional training. The Optional Work process is defined in Paragraph 3.3.4 (Optional Work) of the Contract.

Deliverable 15 – Post-Implementation Training Conducted