

**AMENDMENT NUMBER 6
TO
MANAGED SERVICES NETWORK,
VOICE, AND SECURITY
AGREEMENT BY AND BETWEEN
COUNTY OF ORANGE
AND
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION**

This Amendment Number 6 to the Managed Services Network, Voice and Security Agreement by and between County of Orange and Science Applications International Corporation ("Amendment 6") is made and entered into by and between the County of Orange, a political subdivision of the State of California ("County") and Science Applications International Corporation, ("Supplier"). All capitalized undefined terms in this Amendment 6 will be as defined in the Agreement.

RECITALS

WHEREAS, the Managed Services Network, Voice and Security Agreement was entered into by and between County of Orange and Science Applications International Corporation (the "Agreement"); and

WHEREAS, County and Supplier entered into the Agreement effective October 17, 2018 ("Reference Date"); and

WHEREAS, the parties have previously made the following amendments to the Agreement: Amendment 1, dated October 22, 2019 ("Amendment 1"); Amendment 2, dated June 24, 2020; Amendment 3, dated February 9, 2021 ("Amendment 3"); Amendment 4, dated May 26, 2021 ("Amendment 4"); and Amendment 5, dated March 8, 2022 ("Amendment 5").

WHEREAS, the Parties desire to enter into this Amendment 6 for the purposes of modifying (1) Exhibit A.1 (Integrated Requirements FSA) to update the preliminary value/and or maximum Charges applicable to Type 1 and Type 2 Work Orders to Section 2.2.1; (2) Exhibit D (Functional Service Area Matrix) to update the support services for JWA Complex Business Support; (3) Exhibit K (Key Personnel) to update the Supplier Key Personnel information for the Deputy Program Manager, SOC Program Manager, to delete the Transition Manager role, to add the SOC Senior Engineer and to update the County Key Personnel information; (4) Exhibit P.1.1 (Monthly Fixed Fee Payments) to reflect the increase in scope for the JWA Complex Business Support; (5) Exhibit P.2 (Pricing Limits) to update the Contract Sum; (6) Exhibit P.3 (Unit Pricing) to update the monthly per unit Charge for JWA Complex Business Support; and (7) Exhibit W (County Policies, Procedures and Guidelines) to incorporate the Levine Act Policy and Safety and Loss Prevention Policy and Procedure.

NOW, THEREFORE, for and in consideration of the mutual promises and covenants contained herein, the receipt, sufficiency and adequacy of which is hereby acknowledged, the Parties, intending to be legally bound, hereby contract and agree as follows:

AGREEMENT

A. The Parties hereby agree to amend the Agreement as follows:

1. Exhibit A.1 (Integrated Requirements FSA) – Revision 2 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit A.1 (Integrated Requirements FSA) – Revision 3, which is incorporated into the Agreement by this reference.
2. Exhibit D (Functional Service Area Matrix) – Revision 2 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit D (Functional Service Area Matrix) – Revision 3, which is incorporated into the Agreement by this reference.
3. Exhibit K (Key Personnel) – Revision 5 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit K (Key Personnel) – Revision 6, which is incorporated into the Agreement by this reference.
4. Exhibit P.1.1 (Monthly Fixed Fee Payments) – Revision 3 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit P.1.1 (Monthly Fixed Fee Payments) – Revision 4, which is incorporated into the Agreement by this reference.
5. Exhibit P.2 (Pricing Limits) – Revision 3 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit P.2 (Pricing Limits) – Revision 4, which is incorporated into the Agreement by this reference.
6. Exhibit P.3 (Unit Pricing) – Revision 2 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit P.3 (Unit Pricing) – Revision 3, which is incorporated into the Agreement by this reference.
7. Exhibit W (County Policies, Procedures, and Guidelines) – Revision 1 of the Agreement is deleted in its entirety from the Agreement and replaced with the attached Exhibit W (County Policies, Procedures, and Guidelines) – Revision 2, which is incorporated into the Agreement by this reference.

B. This Amendment 6 shall be effective upon the latest date it is executed by both Parties.

C. Order of Precedence When Interpreting Conflicting Terms

Except as otherwise expressly set forth and amended herein, all terms and conditions of the Agreement and its amendments/modifications remain unchanged and in full force and effect. Capitalized terms used in this Amendment and not defined herein have the meanings given to them or referenced in the Agreement and the prior modifications/amendments. In the event of any inconsistency or conflict between or among any provision of this Amendment 6 and any

provision of the original Agreement, and/or its amendments/modifications, other than this Amendment 6, the inconsistency or conflict shall be resolved by giving precedence to the language of amendments/ modifications, and the original Agreement in the following order:

1. Amendment 6;
2. Amendment 5;
3. Amendment 4;
4. Amendment 3;
5. Amendment 2;
6. Amendment 1;
7. The original Agreement.

(Signature Page Follows)

The Parties evidence their entire agreement to the terms of this Amendment 6 as evidenced below by the signature of each Party's legally authorized representative on the dates indicated below.

VENDOR: SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Vincent R. Magaña
Print Name

Contracts, Senior Principal
Title


Signature

April 25, 2023
Date

**COUNTY OF ORANGE,
a political subdivision of the State of California**

KC Roestenberg
Print Name

County Chief Information Officer
Title

Signature

Date

**APPROVED AS TO FORM
COUNTY COUNSEL**


David Obrand, Deputy County Counsel

Approved by Board of Supervisors on: _____



EXHIBIT A.1 (INTEGRATED REQUIREMENTS FSA) – REVISION 3
TO THE
MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

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EXHIBIT A.1**INTEGRATED REQUIREMENTS FSA**

This Exhibit A.1 (Integrated Requirements FSA) (sometimes referred to in this document as the “**FSA**” or “**Integrated Requirements FSA**”) is an attachment and addition to the Agreement dated as of the Reference Date (hereinafter “**Agreement**”) entered into by and between the County of Orange (“**County**”) and Science Applications International Corporation (SAIC) (“**Supplier**”) and is incorporated into the Agreement by reference hereof. In the event of conflicting terms between the Agreement and this FSA, the terms of the Agreement shall prevail and nothing in this FSA shall modify or amend any provisions of the Agreement (including all components such as FSAs, Service Level Requirements, Exhibits, etc.) unless such modifications or Amendments and the provisions of the Agreement which they modify or amend are specifically identified in this FSA and are Approved. This FSA includes any attachments hereto. Unless otherwise expressly defined herein, the capitalized terms used herein shall have the meaning assigned to them in the Agreement or in Exhibit X (Definitions).

1. INTEGRATED REQUIREMENTS OVERVIEW AND OBJECTIVES**1.1 Integrated Requirements Overview**

This FSA sets forth the roles and responsibilities of Supplier for the integrated requirements that apply to Supplier’s provision, delivery, and Management of all Services under this Agreement (“**Integrated Requirements**”). Supplier will perform and fully comply with the Integrated Requirements across all Services, include all other FSAs under the Agreement as of the Reference Date, and all future FSAs that may be added to this Agreement, using Best Practices and continuous improvement methodology.

All of the tasks, subtasks, Deliverables, goods, and other services required or requested by County and described in this FSA are included as part of the Services. This FSA aggregates tasks and subtasks that are a subset of both the broad definition of Services set forth in Exhibit X (Definitions) to the Agreement, the specific Services associated with this FSA, and the specific Services, activities, and responsibilities described in each Functional Service Area under the Agreement, including Exhibits A.2 (Converged Network FSA), A.3 (Voice Communications FSA), and A.4 (Security Operations Center FSA), and all such Services are included within the Charges for each FSA specified in Exhibit P (Pricing) to the Agreement. The Requirements of this FSA are included as part of the Requirements of, and incorporated by reference into, each FSA. The FSAs provide a description of the nature of the work required, but do not provide an exhaustive list of every task or subtask necessary for completion of this FSA or the FSAs. Whether or not additional Services, not specifically included in any FSA, are needed to successfully deliver the Integrated Requirements as required under the Agreement, such Services are required to be delivered by Supplier and are included in the Charges set forth in Exhibit P (Pricing).

The completion of any tasks or subtasks in a period of time shorter or longer than as may be specified below or in the FSAs shall not increase the Charges. Supplier: (A) is responsible for the performance of the Integrated Requirements detailed in this FSA, and (B) shall be held responsible for the performance of the Integrated Requirements without regard to the use by Supplier of third party products or suppliers. Supplier shall provide the Services as an integrated service offering in accordance with this Agreement and without regard to Supplier lines of business (e.g. IT services, hardware integration and logistics, and training), Affiliate relationships, or geographic locations within Supplier’s organization from which such Services are offered, or the internal profit center within Supplier’s organization to which the financial accounting for a Service is ultimately attributed.

1.2 Maintenance and Changes

The Services shall be performed by Supplier to ensure the County Systems are dedicated to County, Eligible Customers, and Authorized Users, with the entire usable bandwidth Available for the benefit of County, Eligible Customers, and Authorized Users, twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days a year, except for planned preventative or emergency Maintenance undertaken within Maintenance Windows. All regular Maintenance and planned system Changes for all County Systems will be performed by Supplier in accordance with the Change Control Process referenced in Exhibit W (County Policies, Procedures, and Guidelines) to the Agreement. Maintenance Windows are scheduled for every [REDACTED] of each month from [REDACTED] pacific time as of the Reference Date, and are subject to Blackout Periods and modification identified or required by County. All Maintenance performed during the Maintenance Windows must be Approved by the Change Advisory Board and the Outage must be limited to the number of Approved hours and specified beginning and end times. All County Systems Changes shall be performed by Supplier during the Maintenance Windows, or as otherwise scheduled and Approved by County, and Supplier Personnel must be [REDACTED] as required to complete Changes during the Maintenance Windows or as otherwise scheduled with County Approval.

Tasks which require an Outage outside of the Maintenance Windows must be Approved by County through the Change Control Process and shall be scheduled to minimize business impacts and disruptions. Any Outages arising out of planned preventative or emergency Maintenance undertaken within a Maintenance Window shall be excluded from SLR calculations only if undertaken with the prior written Approval of County and in accordance with County's Approval as to the Change and the length of the Outage. Even if a Change takes place during the Maintenance Window, the amount of time allowed for the particular Change to occur is determined by the Approved Change Request, not by the available Maintenance Window. An email from County or an Approved, written Change Request is sufficient to document that written Approval was obtained. Any Outages resulting from planned Changes that take place outside of the Maintenance Window Approved by County and undertaken pursuant to County's instructions shall also be excluded from SLR calculations unless such Maintenance outside of the Maintenance Window was necessitated by an act, or failure to act, by Supplier that is inconsistent with Supplier's obligations under this Agreement. All Outages that occur without County's prior written Approval (email or Change Request Approved in writing by County is sufficient) shall be included in the SLR calculations.

Due to the complexity of the County Systems, there are some production Changes that require emergency Changes to the environment. Emergency Maintenance that must be undertaken outside of the Maintenance Windows shall be limited in scope and duration to that which is reasonably necessary to address the emergency condition. County shall notify Supplier of such Changes and any related scheduling limitations, or required timing, and all emergency Changes shall be performed in accordance with the County emergency Change Control Process attached to the Agreement as Exhibit U.2 (Emergency Change Control Process).

Outages caused by emergency Maintenance will be included in the SLR calculation (i.e., treated like any other non-Maintenance-related Outage) unless the emergency Maintenance is undertaken with the prior written Approval of County with express written confirmation that the Approved emergency Maintenance Window, with specified beginning and end times as set forth in County's written Approval, will be deemed to be an additional Maintenance Window for that month, provided, however, that the foregoing exception to the SLR calculation shall not apply where such emergency Maintenance outside of Maintenance Windows was necessitated by an act, or failure to act, by Supplier that is inconsistent with Supplier's obligations under this Agreement. The total hours of Approved planned preventative or

emergency Maintenance undertaken within the Maintenance Windows, plus deemed additional Maintenance Windows Approved by County in accordance with this FSA, constitute the “**Maintenance Hours**” for the SLR calculations for the relevant Measurement Interval.

In addition, due to the business activities conducted by County, there are [REDACTED] [REDACTED] in accordance with the Change Control Process and County instruction where Supplier shall not make production Changes on certain County System components (e.g., [REDACTED], [REDACTED]) (each a “**Blackout Period**”). County shall notify Supplier of such Blackout Periods and County Systems components to which the Blackout Period applies.

1.3 Business Objectives

The Parties agree that the strategic and business objectives to be accomplished through this Agreement include:

- (A) providing secure, reliable, and scalable County converged network, voice communication, security, integrated, and other Services to the County’s end users that meet the County’s ongoing and evolving network, voice, and security requirements;
- (B) supporting County programs and the end-to-end delivery of the Services through Supplier’s coordination and interaction with third parties;
- (C) reducing County’s overall costs for Services;
- (D) providing County with increased visibility and variability with respect to its cost of receiving the Services and achieving best market value;
- (E) improving County’s ability to manage its cost of Services, leverage its technology investments, and reduce recurring Service costs;
- (F) providing the Services to meet or exceed County’s Service Level Requirements and deliver continuous improvement in price and performance through Supplier Best Practices as to the Services;
- (G) gaining access to a strong bench of skill sets to support future growth and to provide high-quality Services at a competitive cost;
- (H) gaining access to resource flexibility to meet changing County business needs;
- (I) improving proactive management of the Converged Network, Voice communications, and security operations as demonstrated by continuous reductions in Incidents and the analysis and prevention of Problems and improvement of performance, availability and reliability;
- (J) aggressively improving and standardizing existing, and creating new, processes to increase efficiencies and performance, and reduce costs without major disruption to County’s business or increasing County’s investment and/or payment obligations;
- (K) realizing significant and tangible savings and efficiencies from standardization and process improvements during the Term of the Agreement and demonstrate the ability to consistently and timely provide the right resources needed to efficiently and effectively address the Service delivery needs;
- (L) obtaining flexibility to timely expand and contract the Services to meet County’s business requirements;
- (M) increasing the level of customer service and satisfaction;

- (N) adhering to, and as Approved by Customer, improving data privacy and information security protections; and
- (O) complying with statutory and regulatory obligations and orders that are applicable to County

(clauses (A) – (O) are collectively referred to herein as the “**Business Objectives**”).

2. SERVICE AND DELIVERABLE REQUIREMENTS

2.1 Deliverable Development and Approval Process

This Section provides the repeating process for developing Deliverables across all FSAs and under the Agreement. Supplier shall develop each Deliverable in accordance with the following process and Requirements, which shall each be subtasks to each individual Supplier task relating to specific Deliverables set forth throughout the Agreement:

- (A) Develop all Deliverables in the form and format Approved by County;
- (B) Develop agendas, and Coordinate scheduling with County, for all necessary events (e.g., workshops, meetings) for the production of the Deliverables;
- (C) Facilitate events (e.g., workshops, meetings) as required for the development of each Deliverable;
- (D) Record and analyze the input received from all events (e.g., workshops, meetings, and all online or remote events, sessions, and workshops) and distribute results or minutes for review to event participants;
- (E) Prepare drafts of the Deliverables for County review;
- (F) Provide a structured process for County to provide feedback on drafts, including events, as appropriate;
- (G) Compile and incorporate County feedback to the draft Deliverables and prepare revised Deliverables;
- (H) Distribute the revised Deliverables to County for review, obtain and analyze County feedback as above, and repeat if necessary; and
- (I) Complete a final version of the Deliverables including, prior to distribution for Approval by County, validation by Supplier that each Deliverable conforms to the Requirements and meets the Acceptance Criteria.

After receipt of a Deliverable from Supplier, the County lead or designee shall notify the Supplier Project Manager and/or Supplier Personnel, as applicable in writing as to any specific changes requested (together with a reasonably detailed explanation of the reasons why the Deliverable should be modified) in as expeditious a time frame as possible given the nature of the Deliverable and the schedule of any Services or Project. Unless a County-requested change is disputed, Supplier shall make all County-requested changes in a timely manner so as to not adversely impact County operations or the schedule of any Services or Project. Upon completion of all County-requested changes, Supplier shall provide the Deliverable to County with a request for Approval. County shall notify Supplier of its Approval or rejection in a timeframe that is practical and reasonable given the nature, criticality, and complexity associated with the Acceptance Testing and Deliverable.

2.2 Work Orders

2.2.1 Work Orders Required

Under no circumstances shall any Projects, Non-Recurring Initiatives, or Optional Work commence without Supplier first obtaining County Approval and the Parties executing a Work Order (No Charge, Type 1, or Type 2, as applicable). No Charge Work Orders are for Business as Usual activities Managed as a Project.; Type 1 Work Orders have a preliminary value to County of less than or equal than the amount listed in the then current County Contract Policy Manual (CPM) §3.3-102(1)(a) (currently \$200,000); and Type 2 Work Orders have a preliminary value to County of greater than the amount listed in the then current CPM §3.3-102(1)(a) as requiring Board of Supervisors approval. There is no additional cost or fees chargeable to County for Supplier's preparation of a Work Order or other budgets, estimates, or proposals related to the same and all such costs are included in the Charges under Exhibit P (Pricing). All Work Orders will be subject to County's review, input, and Approval. The pricing model applicable to Non-Recurring Initiatives and Optional Work shall be described in the Work Order and a single Work Order may use multiple pricing models (e.g., Fixed Fee and Time and Materials with a Not to Exceed) for segments of Services applicable to that Work Order. There are no additional costs or fees chargeable to County for Business as Usual that is Managed as a Project and described in a Work Order.

2.2.2 Work Order Development

County may request that Supplier perform a Project, complete a Non-Recurring Initiative, or provide Optional Work through a Service Request or by submitting a request to Supplier in writing. After receipt by Supplier of a request to perform a Project, complete a Non-Recurring Initiative, or provide Optional Work, Supplier shall provide such detailed Work Order for County's request in accordance with the following process. Within ten (10) Business Days after receiving County's request, unless otherwise agreed to in writing by the Parties, Supplier will prepare the detailed Work Order that includes the (A) timetable for performing the Project, completing the Non-Recurring Initiative, or providing the Optional Work, and, (B) with respect to Non-Recurring Initiatives and Optional Work, the cost, and deliver such detailed Work Order to County.

If upon receipt of County's request, Supplier determines that the request does not have sufficient detail to provide an accurate detailed Work Order, Supplier will have one (1) opportunity to provide County with a request for clarification detailing specification requirements that are missing or unclear in the original request and that are required for Supplier to provide an accurate estimate. These missing or unclear specification requirements will be documented by Supplier and delivered to County within three (3) Business Days after Supplier's receipt of the original County request. County shall provide to Supplier a response to Supplier's request for clarification. The deadline for Supplier to deliver a Work Order to County shall be extended by one (1) Business Day for each Business Day between the Business Day upon which Supplier requested the additional information or clarification and the Business Day upon which Supplier received the County's response to Supplier's request for additional information or clarification; provided, however, that the deadline shall not be extended if Supplier does not request additional information or clarification within three (3) Business Days after Supplier's receipt of the original County request.

If upon receipt of County's request, Supplier identifies a potential significant impact on the Services, Supplier shall notify the County of the potential impact within three (3) Business Days after receiving the County's request.

If County elects to have Supplier perform the Project, complete the Non-Recurring Initiative, or provide the Optional Work, County and Supplier shall execute a Work Order. Supplier shall not begin performing any work until a Work Order has been executed by County. County will set the priority for the Projects,

Non-Recurring Initiatives, and Optional Work.

2.2.3 Work Order Provisions

County and Supplier shall utilize the form of Work Order applicable to the Work Order type and attached to the Agreement as Exhibit B.2 (Form of Type 1 Work Order), Exhibit B.3 (Form of Type 2 Work Order), and Exhibit B.4 (Form of No Charge Work Order). Each Work Order must contain at least the following provisions:

- (A) A written description of the work to be provided;
- (B) A written description of the resources to be provided by Supplier (including the location at which such resources are to be provided and, if applicable, the names and positions for all Supplier Personnel to be used and an affirmative statement that all Supplier Personnel have passed the County background checks applicable to the County Location where the Supplier Personnel will perform Services under the Work Order);
- (C) The Deliverables, Requirements, Acceptance Criteria, Service Levels, Assets, timeline and Milestones, Acceptance Testing period, and gate review process that are subject to the Work Order;
- (D) A description of the responsibilities of County, including any facilities, Assets, personnel, or other support to be provided by County;
- (E) A list and schedule of periodic reporting;
- (F) In all Type 2 Work Orders, and if requested by County in the Work Order request for a Type 1 Work Order or No Charge Work Order, a detailed report describing the impact the Work Order will have on any other Services, Assets, or the County Systems;
- (G) In all Type 2 Work Orders, and if requested by County in the Work Order request for a Type 1 Work Order or No Charge Work Order, an assessment and description of potential risks associated with the requested Project, Non-Recurring Initiative, or Optional Work, including Supplier recommendations to mitigation of such risks;
- (H) With respect to Non-Recurring Initiatives and Optional Work, Supplier shall provide County with the option of paying on a (i) Fixed Fee, (ii) Not to Exceed, (iii) Time and Materials basis, or (iv) a combination of the above foregoing. If the Parties agree that Supplier shall complete the Work Order on either a Fixed Fee, Not to Exceed, or a Time and Materials basis, the Work Order shall include an estimated percentage allocation of the Fixed Fee, Not to Exceed amount, or, as applicable, a Charges estimate for each Milestone. Supplier shall not perform Services (or services other than those specified in the Agreement) in connection with the Work Order in excess of the Charges amount allocated to a Milestone in the Work Order without first obtaining prior written Approval to exceed the Charges amount allocated to the Milestone in the Work Order. If Supplier provides Services (or services other than those specified in the Agreement) in connection with the Work Order in excess of the Charges amount allocated to a Milestone in the Work Order without first obtaining prior written Approval, such Services (or other services) shall be unapproved work that is subject to Section 3 (Unapproved Work) of the Agreement; and
- (I) Any additional information applicable to the Project, Non-Recurring Initiative, or Optional Work, including that information that is required by the Agreement to be addressed in a Work Order or that is not otherwise set forth in the FSAs.

3. SUPPLIER INTEGRATED REQUIREMENTS RESPONSIBILITIES

3.1 General Integrated Requirements

Supplier’s general Integrated Requirements responsibilities include those tasks, subtasks, and Deliverables set forth in Table 1 (General Integrated Requirements Responsibilities) below. Where Assets are referenced throughout this FSA, the other FSAs, and the Agreement, County shall own all such Assets unless otherwise specified. Supplier will be responsive to the current and future requirements of County by proactively anticipating needs and adjusting Services accordingly, within the Charges set forth in Exhibit P (Pricing). Throughout this FSA, the other FSAs, and the Agreement, where Supplier is required to provide its recommendations and inputs for practices, processes, tools, procedures, Changes, Assets, or any other recommendations and inputs related to the Services to County, Supplier recommendations and inputs are required Deliverables under the Agreement. Supplier shall provide all recommendations and inputs in writing and shall Implement its recommendations and inputs only where and as Approved by County. County may Approve or reject Supplier recommendations and inputs in whole or in part. To the extent County elects not to Approve any Supplier recommendation and inputs, Supplier shall continue to perform the Services using the County-provided or Approved practices, processes, tools, procedures, Changes, and Assets. Supplier recommendations and inputs as to savings under this FSA, the other FSAs, and the Agreement, shall be only as to Sustainable Savings, unless otherwise specifically requested by County. Additionally, throughout this FSA, the other FSAs, and the Agreement, where specific time for Supplier’s performance is not stated, the Requirement is that Supplier do the task on an ongoing basis as appropriate to deliver the Services in accordance with the Agreement, including the SLRs, provided that County may make ad hoc requests for more frequent performance as deemed appropriate by County, and Supplier shall comply with such requests. In the event the ad hoc requests are of such frequency that they are creating a burden to Service delivery, Supplier will escalate the issue to County in accordance with Exhibit G (Governance Model).

Table 1. General Integrated Requirements Responsibilities

General Integrated Requirements Responsibilities	
(1)	Provide an overall Services solution that meets all County Requirements, including all business, technical, Eligible Customer, and Authorized User Requirements, and business processes described in this FSA and the other FSAs.
(2)	Provide continuous improvement for the Services.
(3)	Document and deploy a set of processes to enable and provide consistent Management of process-driven Services seamlessly across a variable number of suppliers, including Third Party Vendors.
(4)	Design processes to enable the effective monitoring and reporting of the Services in a multi-supplier environment through the appropriate deployment of relevant tools and procedures across the Services.
(5)	Coordinate the execution of all processes across Supplier, County, and all Third Party Vendors such that all the individual components that make up the Services and County’s information technology environment are Managed by Supplier in an end-to-end manner.
(6)	Comply with all County Policies, Procedures, and Guidelines, including those related to information, information systems, personnel, and physical and technical security.

General Integrated Requirements Responsibilities	
(7)	Manage and Coordinate with Subcontractors, Managed Vendors, and other Third Party Vendors in order to ensure Service Requirements and SLRs are achieved or exceeded.
(8)	Complete all tasks, subtasks, reporting, and other Services and Deliverables set forth in Exhibit H (Service Level Requirements) and Exhibit H.1 (Service Level Requirements Table).
(9)	Measure performance against SLRs.
(10)	Provide County with performance reports of Supplier performance against SLRs.
(11)	Manage all Changes to the Services and County Systems that may affect the SLRs of any other component of the Services or County Systems, Third Party Vendor, or Managed Vendor in a manner that minimizes the impact of the Changes on County operations.
(12)	Utilize County-Approved secure collaboration web portal for delivery of all Documentation related to the Services and/or described in this FSA, the other FSAs, and the Agreement.
(13)	Deliver Services and fulfill Integrated Requirements.
(14)	Provide all resources, Documentation, information, Supplier Personnel, and other access necessary to facilitate and support all County, Third Party Vendor, and other third party assessment activities conducted in the County environment, including external audits, internal audits, infrastructure assessments, regulatory oversight, and all other financial, technical, compliance, and performance assessments.
(15)	Understand and comply with all current and future County business continuity and disaster recovery plans and participate in testing, activating, and supporting of all such County plans.
(16)	Create a comprehensive disaster recovery and business continuity plan for the Services that interoperates with any other business continuity and/or disaster recovery plan of County's, for County review and Approval.
(17)	Implement, Manage, Operate, and Maintain the Approved comprehensive disaster recovery and business continuity plan for the Services, including testing and directly providing support to County and complying with the disaster recovery and business continuity plan during any government disaster declarations that affect Eligible Customers, Authorized Users, or the Services.
(18)	Provide written recommendations describing Supplier's Best Practices for each of the Service components described in this FSA that are applicable to all Services throughout the FSAs and the Agreement for County review.
(19)	Develop an operations manual describing operational procedures for each FSA consistent with Best Practices for the Services for County Approval (the "Operations Manual").
(20)	Implement, Manage, Operate, and Maintain the Approved Operations Manual.
(21)	Fully support and participate in the County cyber incident response team ("CIRT") when and as requested or required by County.

General Integrated Requirements Responsibilities	
(22)	Provide all relevant resources, Documentation, Supplier Personnel, data, access, and information to support CIRT activity including time, date, logs, entry method, local/global, Security Incident history, Tickets, escalations, communications, prior minutes, and Incident management material, including next tasks, owners, dates, and status changes, as defined by the CIRT, upon County’s request.
(23)	
(24)	Develop, Manage, and Maintain an inventory of spare Assets in the County-identified Asset tracking repository.
(25)	Monitor, test, and Maintain spare Assets to confirm that spare Assets are ready for production use.
(26)	Manage the spare Asset inventory and Maintain a level of spare Assets required to meet or exceed SLRs.
(27)	Subcontract components of the Services where Supplier does not have sufficient expertise to perform the Services in accordance with the Requirements, without any increase or addition to the Charges set forth in Exhibit P (Pricing).
(28)	Own, provide, use, and Maintain vehicles and other transportation as necessary to perform the Services. Vehicles and all associated costs and expenses are the responsibility of Supplier and are not chargeable to County.

3.2 Value Added Services and Savings Opportunities

Supplier agrees that throughout the course of this Agreement, and at least once every six (6) months, it will identify in writing Sustainable Savings opportunities available to County. Upon Approval by County, Supplier shall follow the Change Control Process and Implement such Sustainable Savings opportunities.

3.3 Project Management Services

Projects will generally fall into two categories: (A) Non-Recurring Initiatives and (B) BAU activities that are Managed as a Project. All categories of Projects, except Non-Recurring Initiatives, are included in the Charges set forth in Exhibit P (Pricing) and shall not be separately chargeable to County. Supplier will provide Project Management for all Services provided by Supplier to County pursuant to the Agreement and associated with Projects using the Project processes and methodology specified below, regardless of whether the applicable Project is a Non-Recurring Initiative or part of BAU (“**Project Management**” and such services, the “**Project Management Services**”). Supplier’s responsibilities for Project Management Services include (i) maintaining a Project Management Office; (ii) providing oversight of the Supplier’s Project Management Office and Project managers as necessary; (iii) conducting Project initiation; (iv) providing support through the Project life cycle; and (v) completing Project close out tasks, as further detailed in this Section 3.3 (Project Management Services). All Projects shall comply with the Project Management procedures described in this Section 3.3 (Project Management Services), and the gate review process and exit gate review process as set forth in the applicable Work Order.

3.3.1 Project Management Office and Oversight

Supplier will create, Implement, Manage, Operate, and Maintain a Supplier Project Management office

(“**Project Management Office**”) to provide, plan, and monitor all Project Management Services provided by Supplier to County pursuant to the Agreement. Supplier’s Project Management Office will work with County’s Project Management Office to ensure that Supplier’s methodology, processes, and tools: (A) are consistent with County’s methodology, processes, and tools; (B) deliver the outputs, reports, and other Deliverables and Documentation required by County’s methodology; and (C) are Approved by County. The complete Project Management life cycle (initiation phase, planning phase, executing phase, controlling phase, and closing phase) must be covered by Supplier’s Project Management methodology, processes, and tools and Managed by the Supplier’s Project Management Office. Supplier shall utilize consistent methodologies and tools to plan, monitor, and control Projects throughout the Project lifecycle. Supplier’s Project Management Office shall staff adequate Project Managers with Project Management Professional certifications as necessary to provide the Services and as otherwise required by County. Supplier Personnel and Project Managers shall be experienced with Supplier’s Project Management methodology, processes, and tools, and have a proven track record of success in using them to Manage Projects. Supplier’s Project Management Office responsibilities include those tasks, subtasks, and Deliverables set forth in Table 2 (Project Management Office and Oversight Responsibilities) below.

Table 2. Project Management Office and Oversight Responsibilities

Project Management Office and Oversight Responsibilities	
(1)	Submit Project Management methodology, processes, and tools utilized by Supplier for County Approval within by the time set forth in Exhibit T.3 (Transition-In Plan), but no later than the completion of all Transition-In tasks
(2)	Attend and participate in County meetings and events to review technology or business plans, and recommend appropriate Services and Projects in support of such plans.
(3)	Maintain Supplier Personnel, including Project Managers, with leading industry knowledge in County’s business and the Services to support Projects and recommend appropriate solutions for County review and Approval.
(4)	Create and Maintain an up-to-date list of Supplier-supported Projects, work activities, and prioritization of Projects in the County-provided portfolio management system.
(5)	Implement, Manage, Operate, and Maintain an overall Project Management oversight process that includes the following: <ul style="list-style-type: none"> (a) Project integration Management processes designed to properly Coordinate the elements of the Project, such as Project plan development, Project plan execution, and the Change Control Process; (b) Project Management Services processes designed to validate that all the work required, and only the work required, is included to complete the Project successfully and efficiently, such as initiation, Project planning, Project definition, Project verification, and Project Change Control Processes; (c) Project issues Management processes designed to identify, record, track, evaluate, and mitigate the issues completely, expeditiously, and without impact to the Project. For the purposes of this Section, an “issue” has one or more of the following characteristics: (i) any matter that is presently impeding the progress of a Project; (ii) anything that is happening or has happened and has not been resolved; or (iii) the work to resolve the impediment is diverting resources away from the tasks as

Project Management Office and Oversight Responsibilities

- identified in the Project plan;
- (d) Project time Management processes designed to complete the Project in accordance with the applicable FSA, the Project Work Order, and the Agreement, including activity definition, activity sequencing, activity duration estimating, schedule development, and schedule control;
 - (e) Project cost Management processes designed to complete the Project within the applicable budget Approved by County (to the extent applicable to the Project), including resource planning, cost estimating, cost budgeting, and cost control;
 - (f) Project quality Management processes designed to validate that the Project satisfies County operational needs and requirements for which it is undertaken, including quality planning, quality assurance, and quality control;
 - (g) Project human resources Management processes designed to most effectively use the people involved in the Project, including organization planning, staff acquisition, and team development;
 - (h) Project communications Management processes designed to timely generate, collect, disseminate, store, and ultimately dispose of Project information to County and other third parties appropriately, including communications planning, information distribution, performance reporting, and administrative closure;
 - (i) Project risk and dependency Management processes relating to identifying, analyzing, and responding to Project risk and plans to overcome or mitigate the impact of unexpected events, including risk identification, risk qualification, risk response development, risk response control, mitigation plans, and probabilistic analysis;
 - (j) Project procurement Management processes and timelines required to acquire goods and services from outside County or Supplier's organization to support the Project, including procurement planning, solicitation planning, solicitation source selection, control administration, and contract closeout, subject to County procurement procedures and Approval; and
 - (k) Project Implementation and transition Management processes designed to successfully launch and transition Projects to ongoing operations, including Implementation planning, launch failure contingency planning, transitional procedures, operational procedures, and knowledge transfer.

3.3.2 Project Manager

For each Project, Supplier will designate a Supplier Project manager to whom all County communications may be addressed and who has the authority to represent and commit Supplier in connection with all aspects of the Project Management Services related to that Project (each a "**Project Manager**"). The Project Manager is responsible for ensuring that the Services and Deliverables described throughout this Section 3.3 (Project Management Services) are performed and completed for each Project in accordance with this FSA and the Agreement. The Supplier Project Manager's obligations also include those tasks, subtasks, and Deliverables set forth in Table 3 (Supplier Project Manager Responsibilities) below.

Table 3. Supplier Project Manager Responsibilities

Supplier Project Manager Responsibilities	
(1)	Establish and Maintain communications with the County Project lead through the Project governance structure.
(2)	Create and Maintain communication plans for County review and Approval and Implement Approved communication plans to notify all Authorized Users of upcoming Changes and Maintenance activity.
(3)	Comply with County's Project Management framework, tools, and reporting requirements, including providing a quarterly information technology report for the County Board of Supervisors, to be delivered in accordance with the County Program Manager's sole direction, and twice weekly status updates on all Projects, and using County's Project tracker tool.
(4)	Manage the delivery of Services and interdependencies between Services components related to Project activities.
(5)	Notify County of any Supplier focal point or contacts for specific Project activities or tasks.
(6)	Create and Maintain a Project plan that includes all Project details set forth in Section 3.3.3 (Project Planning and Project Initiation) below and use Microsoft Project to track progress against the Project plan or such other similarly detailed tracking method that is acceptable to County.
(7)	Maintain the Project plan as up-to-date, follow through on the tasks set forth in the Project plan, and provide County and all relevant stakeholders with the updated Project plan on a weekly basis, or more frequently as requested by County.
(8)	Measure, track, and evaluate progress against the Project schedule, budget (as applicable), and Work Order requirements.
(9)	Work with the County Project lead to resolve deviations, if any, from the Project schedule, budget (as applicable), and Work Order requirements.
(10)	Manage all Supplier tasks and resources associated with the Project, including Supplier Personnel, and Coordinate Project activities with County, Authorized Users, Eligible Customers, Third Party Vendors, and other third party stakeholders involved in or impacted by the Project.
(11)	Report to the County Project lead problems and issues impacting Supplier's provision of the Services that require County's attention and resolution.
(12)	Coordinate resolution of all Service issues, including those raised by the County Project lead and, as necessary, escalate such issues within the Supplier organization.
(13)	Document progress and risks related to the Project and review weekly, or more frequently as required by County, with the County Project lead.
(14)	Conduct regularly scheduled Project status meetings, governance meetings, and all other Project related meetings and events as required by County or set forth in the Work Order or Project plan, and prepare weekly status reports for the Project.
(15)	Assist in the preparation and conduct of monthly steering committee updates on all ongoing Projects.

Supplier Project Manager Responsibilities

- (16) Make any and all County Approved Changes associated with the Project in compliance with the Change Control Process and the Agreement.

3.3.3 Project Planning and Project Initiation

Supplier will assist County in its annual planning and budgeting, quarterly planning reviews, and exception review processes for County’s overall Project planning, including providing recommendations for planning and budgeting for County review. The overall goal of the Project planning process is to provide consistency and to align the actions taken with County’s strategic objectives, and Supplier shall provide information and relevant industry data to assist County to prioritize and obtain County Approval for all Projects. Supplier shall engage in planning activities related to individual scheduled or proposed Projects following County’s Approval of a Project or otherwise upon County’s request in advance of County Approval. Upon County’s Approval of a Project related to the Services, Supplier shall employ Project Management methodology, processes, and tools that shall be used to consistently plan, initiate, control, and Implement all Projects for all Services, all in accordance with the FSAs, the Agreement, Supplier’s Project Management responsibilities set forth in this FSA, and the user requirements, specifications, high-level schedule, and prioritization of Projects, as provided by County. Supplier’s Project planning and initiation responsibilities include those tasks, subtasks, and Deliverables set forth in Table 4 (Project Planning and Project Initiation Responsibilities) below.

Table 4. Project Planning and Project Initiation Responsibilities

Project Planning and Project Initiation Responsibilities	
(1)	Upon County’s request, participate in County’s long-range business planning meetings to review operations and business plans and recommend Services and Projects to support plan execution for County review.
(2)	Maintain levels of industry knowledge in County’s business to provide support and recommendation of Projects as required under the Agreement and the FSAs. Supplier shall obtain and Maintain such industry knowledge through, among other activities, participation in industry meetings, forums, and conferences at Supplier’s sole cost and expense.
(3)	For each County-Approved Project, prepare proposals and detailed Project plans responsive to County’s initial high-level business requirements for County review and Approval. Each detailed Project plan will include the following: <ul style="list-style-type: none"> (a) Deliverables, tasks, and subtasks to be provided and performed by Supplier; (b) Associated dependencies among Deliverables, tasks, and subtasks for the Project and across all related work streams; (c) Technical approach and solution; (d) Key personnel assigned, including level of commitment by resource (on-site and off-site); (e) For Time and Materials hourly based Non-Recurring Initiatives, including Not to Exceed Work Orders, resources (effort, hours, and roles) estimated to be required for each Deliverable, task, and subtask, and for Fixed Fee based Non-Recurring Initiatives, total project hours (including hours by Milestone), resource types, and a blended rate (Fixed Fee information must be sufficiently detailed to enable County to validate that the

Project Planning and Project Initiation Responsibilities	
	<p>Charges as set forth in Exhibit P.4 (Supplier Rate Card) are being applied);</p> <p>(f) Start and completion dates for each Deliverable, task, and subtask;</p> <p>(g) Acceptance Criteria for each Deliverable;</p> <p>(h) Equipment, Software, data, or other materials required for the Project and ongoing support;</p> <p>(i) Milestones;</p> <p>(j) Overall Project phasing and completion schedule that is realistically achievable with reasonable effort as determined by County;</p> <p>(k) Total cost of the Project (including Charges paid to Supplier under Exhibit P (Pricing) for Projects that are not BAU, as well as any County-retained expenses);</p> <p>(l) Ongoing annual cost of the Project post-Implementation to County (including Charges paid to Supplier under Exhibit P (Pricing) for Projects that are not BAU, as well as any County-retained expenses); and</p> <p>(m) Any Deliverables, tasks, and subtasks required from County, Third Party Vendors, or other third parties.</p>
(4)	Review initial Project plan draft with County Project Management and leadership for additional guidance and feedback from County.
(5)	Update and present a final Project plan that incorporates and is consistent with County guidance and feedback as initial baseline and submit to County for further review and Approval.
(6)	Maintain the Project plan throughout the duration of the Project and hold regular Project plan review sessions, or incorporate the Project plan into ongoing Project meetings.
(7)	Identify all applicable stakeholders, including Authorized Users, Eligible Customers, Third Party Vendors, the County Project sponsor, and the County product or business owner, and all County Assets, components of the County Systems, and County processes and Documentation that will be impacted by the Project and/or who are required for Project staffing and resource Management.
(8)	<p>Create a Project staffing and resource management plan for all Project steps for County including:</p> <p>(a) Resources and staffing levels required for the Project;</p> <p>(b) For Time and Materials hourly based Non-Recurring Initiatives, including Not to Exceed Work Orders, fully loaded Supplier resource staffing commitments estimate (e.g., identification of FTE equivalent or hours for all resources), and for Fixed Fee based Non-Recurring Initiatives (Type 2 Work Orders), total Project hours by Milestone, resource types, and a blended rate (Fixed Fee information must be sufficiently detailed to enable County to validate that the Charges as set forth in Exhibit P.4 (Supplier Rate Card) are being applied);</p> <p>(c) Reporting relationships;</p>

Project Planning and Project Initiation Responsibilities	
(d)	Description of other resources such as conference rooms, training rooms, connectivity, calendars, etc.;
(e)	Education tracker to monitor training received or required for specific Project staff/roles; and
(f)	Guidelines for knowledge transfer between Project personnel as they change roles, leave, or join the Project.
(9)	Review initial Project staffing and resource management plan draft with County key stakeholders for review and feedback.
(10)	Update and present a final Project staffing and resource management plan that incorporates, and is consistent with, County feedback and submit a final version to County for Approval.
(11)	Conduct a kickoff event to provide an introduction to each Project to County leadership and County Personnel required to complete the Project tasks, which event will include discussion of the timelines, dependencies, and nature of the work effort that will be required to Implement the Project.
(12)	<p>Prior to the kickoff event for each Project:</p> <ul style="list-style-type: none"> (a) Work with County to identify all Supplier Personnel and County Personnel required to complete the Project tasks; (b) Jointly review and finalize participant list no later than four (4) weeks prior to the kickoff event; (c) Develop an agenda and schedule for the kickoff event; and (d) Review and finalize materials for the kickoff event with County no later than five (5) Business Days prior to the kickoff event.
(13)	<p>Conduct the kickoff event as follows:</p> <ul style="list-style-type: none"> (a) Provide background and overview of the Project, including any possible challenges and anticipated success criteria; (b) Review tasks, subtasks, Deliverables, and Milestones for the Project; and (c) Provide training on the tools, processes, and methodologies, along with Best Practice recommendations, that will be used to accomplish the Project activities.
(14)	Following the kickoff event, prepare a kickoff event summary report and a report documenting the Project dependencies for review and Approval by County, and prepare and provide County with meeting minutes and a list of County participants who attended the kickoff event.

3.3.4 Project Support

Supplier will conduct ongoing Project Management activities for the duration of each Project. Supplier’s Project Management support responsibilities include those tasks, subtasks, and Deliverables set forth in Table 5 (Project Support Responsibilities) below.

Table 5. Project Support Responsibilities

Project Support Responsibilities	
(1)	Employ a Project Management methodology that conforms to and/or complements County’s established Project Management methodology to initiate, plan, execute, control, and close Projects, in accordance with Best Practices, the FSAs, the Agreement, County Policies, Procedures, and Guidelines, and other processes and methodologies as directed by County or set forth in the Work Order.
(2)	Manage Supplier tasks and resources associated with the Project, and Coordinate activities with County and any Third Party Vendors.
(3)	Make any Changes related to the Project in accordance with the Change Control Process and obtain required Approvals.
(4)	Identify Changes and propose alternatives to County and, if necessary, provide appropriate Change Documentation for County review and Approval.
(5)	Use County-Approved Project Management tools and methodologies, which employ a regular reporting mechanism to identify tasks, develop and present status reports, and identify potential risks and issues.
(6)	Communicate Project status as part of standard Project Management meetings, or other such meetings as requested by County.
(7)	Develop, Maintain, and Manage Project schedules by Deliverable.
(8)	Monitor and report Project progress.
(9)	Institute corrective action against the Project plan, if needed.
(10)	Monitor, track, and report actual results versus forecasted results for each Project Deliverable.
(11)	Identify, log, and follow defined processes for risk and issue mitigation.
(12)	Identify, log, and follow defined processes for Change Management.
(13)	Create Project Documentation and submit to County’s electronic document management system or such other system agreed to by both Parties.

3.3.5 Project Close

Supplier shall be responsible for Project close-out activities. The purposes of these activities are to resolve any outstanding Project issues, obtain formal agreement from the Project governance processes to officially close out the Project, ensure that there is an official hand over from the Project team to the maintenance and operations team, and conduct a thorough review of the Project. Supplier’s Project close-out responsibilities for each Project include those tasks, subtasks, and Deliverables set forth in Table 6 (Project Close Responsibilities) below.

Table 6. Project Close Responsibilities

Project Close Responsibilities	
(1)	Develop a draft Project close-out checklist for each Project.
(2)	Complete review of the draft Project close-out checklist with key County stakeholders, as

	designated by County.
(3)	Incorporate County feedback into the draft Project close-out checklist and submit a final Project close-out checklist for County Approval.
(4)	Develop a Project close-out cost and key learning report that includes the Project estimated cost and final actual cost, including Charges paid to Supplier in accordance with Exhibit P (Pricing) and the Work Order for Projects that are not BAU, County-retained costs, an analysis of the factors contributing to increases or decreases to overall Project costs, and a summary of key lessons learned.
(5)	Complete review of the draft Project close-out cost and key learning report with key County stakeholders, as designated by County.
(6)	Incorporate County feedback into the draft Project close-out cost and key learning report and submit a final Project close-out cost and key learning report for County Approval.
(7)	Close-out each Project by completing the following tasks: <ul style="list-style-type: none"> (a) Conduct all of the activities defined in the Project close-out checklist; (b) Conduct a solution turnover meeting; (c) Review all aspects of Project close-out with County; and (d) Address all outstanding issues and activities.

3.4 Information Technology Life Cycle and Operations Services

Supplier shall perform the Services described in the following Sections for all current and future County environments (e.g., Assets and Third Party Vendor services). Supplier shall Implement, Operate, Manage, and Maintain all County Systems life cycle activities in accordance with the following common life cycle and operational Services set forth in this Section 3.4 (Information Technology Life Cycle and Operations Services) and the Agreement. Supplier shall develop, document, Implement, Manage, and Maintain Service-specific activities and procedures associated with these common life cycle and operations Services in the Operations Manual.

3.4.1 Planning and Analysis

Supplier shall perform planning and analysis activities associated with:

- (A) Researching new technical trends, products, and services, such as hardware components, system Software, Equipment, Network Components, and Networks that offer opportunities to improve the efficiency and effectiveness of the Services;
- (B) Investigating methods to improve the quality of the Services (e.g., productivity and operational improvements, defect reduction);
- (C) The introduction of major Changes, enhancements, and new County Asset programs; and
- (D) Continuously improving the County technical environment

(collectively, “**Planning and Analysis Services**”). Supplier’s responsibilities for Planning and Analysis Services include the tasks, subtasks, and Deliverables set forth in Table 7 (Planning and Analysis Services Responsibilities) below.

Table 7. Planning and Analysis Services Responsibilities

Planning and Analysis Services Responsibilities	
(1)	Provide technical, operational, resource, and financial inputs in response to the County's initial high-level business requirements and request for input to assist County in further defining requirements at the enterprise level for all Services (e.g., business, technology strategy, functional, Availability, capacity, performance, backup, and business continuity) for County review.
(2)	Provide technical, operational, resource, and financial inputs to County in connection with its development and updating of the annual and long-range, comprehensive plan for County's technical environment, processes, technology architecture, and standards (such plan, the " Annual Plan " and such planning, the " Annual Planning ").
(3)	Provide technical, operational, resource, and financial inputs to County in connection with its development and updating of the long-range, comprehensive plan for County's information technology systems, processes, technical architecture, and standards (" Long-Range IT Plan "). The Long-Range IT Plan will be developed on an annual basis, and will include a rolling three (3) year projection of anticipated Changes (subject to County business and planning requirements).
(4)	As part of each annual planning cycle, providing updates on short-term Milestones to be completed and schedules for Projects, Non-Recurring Initiatives, and Changes expected to occur within the first twelve (12) months of each plan.
(5)	Providing access to specialists within Supplier's organization to assist County to develop and update its Annual Plan.
(6)	Assist in projecting future volume, technology, and geographic changes that could impact County's systems and technical architecture.
(7)	In connection with a County provided request, provide technical, operational, resource, and financial inputs and analysis for new infrastructure, Assets, and third party services for County's review and Approval.
(8)	Identify available information and data across County's technical environment and operations for Planning and Analysis Services (e.g., business capacity reports, roll out plans).
(9)	Proactively seek to automate manual tasks associated with the Services and advise County of such opportunities.
(10)	Monitor industry and technical trends and submit a report to County on a quarterly basis describing industry and technical trends, forecasts, analysis, and other intelligence and including products and third party services with potential use for County, and proposed solutions to facilitate County's ability to understand alternatives in terms of features, functions, costs, and risks, in alignment with County's business and technology strategy.
(11)	Perform twice yearly assessments for the Implementation of new technologies that best meet County requirements and cost objectives.
(12)	Participate in twice yearly technical and business planning sessions to establish standards, architecture, and Project initiatives.

Planning and Analysis Services Responsibilities	
(13)	Conduct regular planning and conduct twice yearly planning meetings with County for technology refreshes and upgrades.
(14)	At County’s request, support and participate with County in the discussion and presentation of potential new technology product and service offerings to County management, Eligible Customers, and Authorized Users.
(15)	Facilitate and encourage active cross-functional, cross-group, and cross-location coordination and communication within County related to new technology and automation.
(16)	Conduct and provide to County for County’s consideration written twice yearly technical reviews and provide options for improvements that increase efficiency and effectiveness at no cost to County or reduce costs per the planning and analysis results.
(17)	Gather and report to County on data and lessons learned from the operating environment that may impact County’s Annual Plan and/or Long-Range IT Plan.

3.4.2 Requirements Support

Based on the County’s initial high-level business requirements, Supplier shall perform technical, operational, and staffing requirements definition activities to assist County in its development of technology requirements (e.g., performance, disaster recovery, security requirements) that also comply with regulatory requirements and County Policies, Procedures, and Guidelines (“**Requirements Support Services**”). Supplier shall perform Requirements Support Services to drive the technical design and operations for the Services. Supplier’s responsibilities for Requirements Support Services include the tasks, subtasks, and Deliverables set forth in Table 8 (Requirements Support Services Responsibilities).

Table 8. Requirements Support Services Responsibilities

Requirements Support Services Responsibilities	
(1)	Provide County with inputs for requirements Documentation format and content, for County review and Approval.
(2)	Provide technical support staff with expertise and experience relevant to the County’s initial high-level business requirements to participate in technical requirements development with the County team (e.g., County, Supplier, and Third Party Vendors).
(3)	Provide technical and operational input and document infrastructure requirements with County stakeholders (e.g., system interface, performance, Availability, disaster recovery).
(4)	Conduct requirements gathering activities from County Personnel or as directed by County (e.g., focus groups, interviews) and participate in County’s requirements gathering activities.
(5)	Document requirements necessary to deliver Services for review and Approval by County using Approved artifact standards (e.g., system specifications, data models, upgrade requirements, conversion requirements, Network design schematics).
(6)	Provide technical and operational input and document required County Systems component upgrade, replacement, and/or conversion requirements (e.g., Assets, Networks).

Requirements Support Services Responsibilities	
(7)	Ensure inputs provided and requirements gathered comply with all applicable County Policies, Procedures, and Guidelines, including those Policies, Procedures, and Guidelines related to security.
(8)	Identify integration requirements across the Services and throughout the County Systems.
(9)	Conduct workshops for validation of requirements with County subject matter experts.
(10)	Provide County with recommended testing requirements and criteria (e.g., performance, regression, requirements traceability, security, and user acceptance testing) for County review and Approval.
(11)	Upon County request and pursuant to the County’s initial high-level business requirements, provide infrastructure cost estimates for ad hoc initiatives, in accordance with County Policies, Procedures, and Guidelines.

3.4.3 Design Specifications

Based on a design specifications request provided by County, Supplier shall perform technical, operational, and project design specifications activities to assist County in the development and design of the specifications for the Services, and complete all Deliverables associated with the Services, including translating County-developed information system standards and requirements (e.g., architectural, business, security, performance, availability, regulatory) into detailed technical designs and specifications for County review and Approval (“**Design Specifications Support Services**”). County will establish the reference architecture design criteria and requirements, and Supplier shall provide the architecture design and Implementation based on County’s design criteria and requirements. Supplier’s responsibilities for Design Specifications Support Services include the tasks, subtasks, and Deliverables set forth in Table 9 (Design Specifications Support Services Responsibilities) below.

Table 9. Design Specifications Support Services Responsibilities

Design Specifications Support Services Responsibilities	
(1)	Work according to County’s input and direction to develop Documentation pertaining to the design specifications in sufficient detail to enable creation of the appropriate technical designs to meet County’s needs.
(2)	Conduct site surveys for design efforts to deliver design specifications and plans for review and Approval by County.
(3)	Document and deliver site surveys to County.
(4)	Document and deliver design specifications to meet County’s requirements, including integration and interdependent specifications across the Services and throughout the County Systems, for County’s review and Approval.
(5)	Provide infrastructure cost estimates based on design results to support County budgeting purposes.
(6)	Ensure inputs provided and created design specifications comply with all applicable County Policies, Procedures, and Guidelines, including those Policies, Procedures, and Guidelines related to security.

Design Specifications Support Services Responsibilities	
(7)	Conduct workshops for validation of design specifications with County subject matter experts.

3.4.4 Integration and Testing

Based on County’s needs Supplier shall perform integration and testing activities, as further described below, that are associated with ensuring that each individual County System component (e.g., Assets, Interfaces, Network) configured with or added to the environment work together cohesively to achieve the intended results and meet County developed requirements (“**Integration and Testing Services**”). Supplier’s responsibilities for Integration and Testing Services include the tasks, subtasks, and Deliverables set forth in Table 10 (Integration and Testing Services Responsibilities) below.

Table 10. Integration and Testing Services Responsibilities

Integration and Testing Services Responsibilities	
(1)	Evaluate and test Assets, Services, and related products or third party services prior to use or deployment in County’s environment, with County retaining final Approval for any use or deployment.
(2)	Benchmark new types of Assets (including testing of various configurations and combinations of Assets) that may be considered for deployment within County, as authorized by County, document benchmarking results, and report on the same to County.
(3)	Develop technical test plans and criteria (e.g., unit, system, integration, regression) for review and Approval by County.
(4)	Implement, Manage, Operate, and Maintain test tools pursuant to the County’s requirements.
(5)	Conduct and report to County on testing of Changes in County-provided non-production environments as requested by County and in accordance with County operational procedures.
(6)	Assist and support County by providing technical, operational, and Project Management input to design test environments and processes to Manage testing in the environments.
(7)	Prepare technical and operational test plans for any proposed Changes to the Services and County Systems components and configurations for County review and Approval.
(8)	Conduct integration and security testing (using Approved test plans) for all new configurations and upgraded County System components (e.g., Assets, middleware, Interfaces, Networks), Services, or third party services to include unit, system, integration, and regression testing based on requirements defined in requirements and design Documentation.
(9)	Evaluate all new and upgraded County System components, configurations, Services, or third party services for compliance with County Policies, Procedures, and Guidelines including those Policies, Procedures, and Guidelines related to security.
(10)	Assess and communicate to County in writing the overall impact and potential risk to County System components prior to implementing County Approved Changes.

Integration and Testing Services Responsibilities	
(11)	Determine interoperability and performance measures for specific configurations of Assets identified by County, including unit testing, systems integration testing, connectivity testing, load testing, and applications integration testing.
(12)	Based on County’s requirements and to support County’s needs, identify, support, and Coordinate as necessary with other County information technology functions and Third Party Vendors, to identify and obtain any specific Assets and/or telecommunications required for interoperability and performance testing.
(13)	Provide County with test results and input for Changes to Services and County System components and configurations for County review and Approval.
(14)	Stage new and upgraded Assets and third party services to smoothly transition to all existing infrastructure environments based on requirements defined by County in County-Approved requirements and design Documentation.
(15)	Perform modifications and performance enhancement adjustments to County Systems and utilities as a result of Changes to architectural standards, additions, and upgrades to the environment, or configuration changes.
(16)	Test new releases of Assets to ensure required performance and functionality is maintained and in conformance with the Requirements and the SLRs.
(17)	Implement, Manage, Operate, and Maintain middleware based on County requirements to integrate Assets and Interface with Third Party Vendors.
(18)	In coordination with County, provide Configuration Management Services and Change Management Services related to Integration and Testing Services to support County’s Configuration Management plan and Change Management plan.
(19)	In the event County, in its sole discretion, determines Supplier has not utilized appropriately qualified Supplier Personnel or, as applicable, appropriate Supplier Assets and Supplier Software to perform the Services under this Section 3.4.4 (Integration and Testing), Supplier shall, upon County request, Subcontract with a Subcontractor to conduct or to review the test findings and recommendations.
(20)	Cooperate with any Third Party Vendor conducting integration and testing activities at County’s request.

3.4.5 Implementation and Migration

3.4.5.1 Implementation and Migration Services

Supplier shall perform all Implementation and migration activities associated with the installation of new and upgraded Assets, including Implementation of and Revisions to Software and Implementation and disposal of Equipment and Network Components (“**Implementation and Migration**” and such Services the “**Implementation and Migration Services**”).

Supplier shall perform all Implementation and Migration Services in accordance with the County Approved Change Control Process. Supplier’s responsibilities for Implementation and Migration Services include the tasks, subtasks, and Deliverables set forth in Table 11 (Implementation and Migration Services Responsibilities) below.

Table 11. Implementation and Migration Services Responsibilities

Implementation and Migration Services Responsibilities	
(1)	Draft Implementation and Migration plans and schedules for County's review and Approval.
(2)	Coordinate with County to provide technical, operational, resource, and financial inputs on Implementation and Migration plans and schedules, in accordance with the Change Control Process and County Policies, Procedures, and Guidelines including those Policies, Procedures, and Guidelines related to security.
(3)	Conduct pre-installation site surveys as required to meet County Approved Implementation requirements.
(4)	Perform engineering functions required to Implement County Approved design plans for additional or new Assets or third party services that are selected by County for Implementation.
(5)	Provide technical and operational input and develop engineering plans to County and identify and document in such plans where there is a potential impact on County Locations, County Systems, County Eligible Customers, Authorized Users, and Third Party Vendors.
(6)	Perform engineering tasks and functions required to Implement, Manage, Operate, and Maintain the Services at County Locations.
(7)	Implement, Manage, Operate, and Maintain enhancements to technical architecture that are selected by County for Implementation.
(8)	Implement, Manage, Operate, and Maintain new and enhanced County Systems components (e.g., Assets, middleware, utilities, Networks, peripherals, configurations) that are selected by County for Implementation.
(9)	Upgrade County System components as a result of new and enhanced applications, architectures, and upgrade plans and County requirements (e.g., Assets, middleware, utilities, Networks, peripherals, configurations) that are selected by County to upgrade the County System.
(10)	Coordinate County Approved Implementation and Migration Services activities with County and Third Party Vendors
(11)	Based on County's requirements and to support County's needs, coordinate and support data migration and conversion by electronic or manual methods as a result of Implementation and Migration (e.g., databases).
(12)	Perform appropriate tests on all IMACs in accordance with County-defined requirements.
(13)	Based on County requirements, develop and document recommended user acceptance testing requirements and user acceptance testing exit criteria for County review and Approval.
(14)	Conduct testing to meet County-Approved or provided user acceptance requirements and document results.
(15)	Provide user acceptance testing plans and results to County for review and Approval.
(16)	Ensure that all County Approved user acceptance testing exit criteria have been met.

Implementation and Migration Services Responsibilities	
(17)	Maintain test cases and scripts to enable incremental fall back capability in accordance with County Policies, Procedures, and Guidelines.
(18)	Maintain all County standard operating procedures, the CMDB, the Operations Manual, and all other relevant Documentation to track and ensure that all state changes to Assets and operations are documented and current.

3.4.5.2 Software Installation, Upgrades, and Changes

Supplier's responsibilities for Software installation, upgrades, and Changes include the tasks, subtasks, and Deliverables set forth in Table 12 (Software Installation, Upgrades, and Changes Responsibilities) below.

Table 12. Software Installation, Upgrades, and Changes Responsibilities

Software Installation, Upgrades, and Changes Responsibilities	
(1)	Implement, including Implementing Revisions and Changes, Manage, Operate, and Maintain County Approved Software as required and in accordance with County technical architecture standards.
(2)	Communicate with County and Third Party Vendors to ensure the compatibility of Software with the County environment.
(3)	Unless otherwise directed by County and subject to the Change Control Process, Implement, Maintain, and Change Software to prescribed release levels.
(4)	Coordinate Implementation of Eligible Customer or Authorized User-specific Software as requested by County with other County-identified parties and Third Party Vendors.
(5)	Implement Third Party Vendor-supplied Revisions and corrections for County Approved Third Party Vendor Software.
(6)	Thirty (30) Calendar Days prior to the start of each calendar quarter, give written notice to County of all Software Revisions and Changes that are planned to occur in the upcoming quarter, subject to County's Approval of the timing of all Changes.
(7)	Coordinate Implementation, customization, Management, Operation, and Maintenance of Software with appropriate County Personnel, Authorized Users, and Third Party Vendors as required by County.
(8)	Follow the Change Control Process and County Maintenance schedules while Implementing Changes, Revisions, or enhancements to Software.
(9)	For any Changes, Revisions, or enhancements to Software, advise County of any additional Asset, Network, environmental, or other requirements needed during integration testing and/or otherwise known to be necessary for the Implementation, Management, Operation, or Maintenance.
(10)	Prior to Implementation or Changes to Software, provide technical and operational input to County and Third Party Vendors with information and constraints related to other Assets and Network requirements.
(11)	Coordinate production testing and Implementation activities for Software with County and Third

Software Installation, Upgrades, and Changes Responsibilities
Party Vendors as required in order to successfully promote Software into the production environment.

3.4.5.3 Redeployment and Disposal of Equipment

Supplier’s responsibilities for redeployment and disposal of Equipment, including Network Components, include the tasks, subtasks, and Deliverables set forth in Table 13 (Redeployment and Disposal of Equipment Responsibilities) below.

Table 13. Redeployment and Disposal of Equipment Responsibilities

Redeployment and Disposal of Equipment Responsibilities	
(1)	Perform de-installation and/or redeployment of Equipment in accordance with the Change Control Process, including: <ul style="list-style-type: none"> (a) Complying with backup requirements; and (b) Providing permanent removal of any County Software or County Data that may exist on storage media (either fixed, removable, or shared).
(2)	Upon redeployment or disposal of Equipment, make the necessary changes in the CMDB.
(3)	Prior to a new purchase or lease of any Equipment as Approved by County, advise County in writing of any possibility of re-deploying existing Equipment.
(4)	To the extent Equipment is owned or leased by County, Supplier’s responsibilities include: <ul style="list-style-type: none"> (a) Returning the Equipment to a central County Location or immediately redeploying Equipment as requested by County; (b) If the Equipment is to be disposed of and is in usable condition, picking up and delivering Equipment to be disposed of to the County designated disposal location (e.g. County data center) in accordance with all applicable County Policies, Procedures, and Guidelines or otherwise dispose of Equipment as directed by County; (c) Dispose of unusable Equipment in an appropriate, environmentally responsible manner, erase all data and configuration information residing in the computer system, storage components, and/or devices in such a manner that makes the data irretrievable prior to disposing of Equipment, confirm erasure to County in writing, prepare unusable Equipment for disposal by removing all cables and de-racking, if necessary, and placing in a temporary storage area until Supplier, County, or a Third Party Vendor responsible for disposal can accommodate removal of Equipment; and (d) Complete all paperwork and reporting required by or related to disposal of Equipment in accordance with County Policies, Procedures, and Guidelines.
(5)	Supplier is responsible for disposal of all Equipment to which Supplier has title in compliance with County standards and Requirements.

3.4.6 Training and Knowledge Transfer

Supplier will provide the following two (2) types of training and knowledge transfer Services:

- (A) Training of Supplier Personnel, Subcontractors, and Managed Vendors, for the

improvement of skills through education and instruction, whereby Supplier is responsible for ensuring that all Supplier Personnel, Subcontractors, and Managed Vendors are up-to-date on County business and technical environments, industry standards, and Best Practices related to the Services, and Supplier will participate in any initial and on-going training provided or directed by County to support County’s evolving technical environment and/or that would provide a learning opportunity about County’s business; and

- (B) Training of and knowledge transfer to County staff regarding the Services and County Systems (e.g., Supplier Services delivery processes, technical configurations)

(collectively, “**Training and Knowledge Transfer Services**”). Supplier is responsible for all costs associated with training Supplier Personnel. Supplier’s Training and Knowledge Transfer Services responsibilities include those tasks, subtasks, and Deliverables set forth in Table 14 (Training and Knowledge Transfer Services Responsibilities) below.

Table 14. Training and Knowledge Transfer Services Responsibilities

Training and Knowledge Transfer Services Responsibilities	
(1)	Develop and deliver an annual training program to instruct County and Authorized Users on the provision of Services and the County environment (e.g., “rules of engagement,” requesting Services).
(2)	Complete annual training for all Supplier Personnel on all requirements set forth in Exhibit J (Training and Certification Requirements).
(3)	Review Services and County environment training program with County sixty (60) Calendar Days prior to each annual training and incorporate County feedback into the training program for County Approval prior to the next training delivery.
(4)	Develop and deliver training on substantive and technical requirements within the Services, including annual training on security awareness, as required by County.
(5)	Schedule and provide proactive advanced training and education for individual, new, or replacement technology and products as part of Technology Refreshment and Replenishment Services, Implementation Projects of a new technology or product, Changes, or as otherwise requested from time to time by County.
(6)	Customize training, education, and knowledge transfer so that program contents and Documentation are specific to types of Authorized Users and Eligible Customers within County’s environment.
(7)	Develop and Implement, Manage, and Maintain knowledge transfer procedures that ensure that all Supplier Personnel working on County’s account understand key components of the County business and technical environment.
(8)	Attend and participate in County delivered instruction on the County business and technical environment.
(9)	Provide Supplier Personnel that are technically qualified and have sufficient professional experience to perform their role in order to meet or exceed the SLRs.

Training and Knowledge Transfer Services Responsibilities	
(10)	Train Supplier Personnel to enable efficient operations and communications with County, including on relevant County Policies, Procedures, and Guidelines (security, confidentiality, etc.), and County specific operational procedures and workflows.
(11)	Conduct all training necessary to ensure that Supplier Personnel meet County compliance, technical, and certification requirements.
(12)	Provide new hire training and on-going and refresher training to Supplier Personnel.
(13)	Develop technical training materials and a training plan for review and Approval by County when technological Changes (e.g., new systems, Assets, or functionality) are introduced into the County environment and provide training to County and Supplier Personnel.
(14)	Provide and Implement, Manage, and Maintain training plans and materials for the applicable Supplier Personnel and County Personnel on County business and technical environments, in a format that is acceptable to County.
(15)	Review business and technical environments training plans and material with County and incorporate County feedback into the training program for County Approval.

3.4.7 Documentation

Supplier shall perform all activities associated with developing, revising, Maintaining, reproducing, and distributing Documentation in hard copy and electronic form (“**Documentation Services**”). Supplier shall develop Documentation in accordance with County’s requests or to support County’s needs and Maintain Documentation in accordance with Best Practices, the applicable County Policies, Procedures, and Guidelines. Documentation will be made readily accessible to County, and all County information and Documentation, including all Network diagrams, configuration specifications, operational procedures, billing detail information, shall only be stored in a County-provided document repository location (e.g., SharePoint). Supplier’s Documentation Services responsibilities include those tasks, subtasks, and Deliverables set forth in Table 15 (Documentation Services Responsibilities) below.

Table 15. Documentation Services Responsibilities

Documentation Services Responsibilities	
(1)	Provide Documentation in County’s Approved format to document all refresh and replenishment activities throughout the life cycle of Services as described in each FSA.
(2)	Maintain comprehensive Documentation on all Operational procedures, Services, and Assets for which Supplier provides Services under the Agreement and provide a means of access to Documentation from Third Party Vendors or County staff that is acceptable to County.
(3)	Document, Implement, Manage, Operate, and Maintain a process for developing new or updating existing Documentation, provided that all Changes to Documentation shall comply with the Change Control Process under this FSA and the Agreement.
(4)	Document system specifications and configurations (e.g., interconnections, topology, configurations).

Documentation Services Responsibilities	
(5)	Maintain all standard operating procedures, the CMDB, the Operations Manual, and all relevant Documentation to track and ensure that all state changes to Assets and operations are up-to-date.
(6)	Document, and Maintain County operating procedures Documentation (e.g., boot, failover, batch processing, backup, systems operations and scheduling) as part of the Operations Manual for all operations procedures, Services, Assets, and County Systems.
(7)	Review County standard operating procedures Documentation with County and incorporate County feedback into final procedures Documentation for County Approval.
(8)	Document Maintenance schedules for County review and Approval.
(9)	Provide County with a copy of or access to any Supplier or Third Party Vendor-supplied Documentation (including updates thereto) relevant to the Services.
(10)	Provide Documentation to County electronically for access by Authorized Users and County.
(11)	Audit Documentation regularly, and on at least an annual basis, for completeness and accuracy, including: <ul style="list-style-type: none"> (a) verifying that all Documentation is complete, present, organized, readable, and up-to-date; (b) reporting the resulting audit findings to County on a regular basis; and (c) where it is determined that Documentation is inaccurate (for example, erroneous or out of date), providing corrections for County review and Approval and subsequently replacing such Documentation.
(12)	Track, Maintain, update, and back-up all County Asset information (e.g., fixed Asset number, Equipment type, model and serial number, location) in the CMDB.
(13)	Report monthly on life cycle Management of all County Assets (e.g., end of sale, end of support, end of life).

3.4.8 Break/Fix and Maintenance

Supplier shall perform all Break/Fix and Maintenance activities necessary to and associated with the Maintenance and repair of Assets and Networks (e.g., deploying emergency and standard Software Updates, Patches, hot packs) (“**Break/Fix and Maintenance Services**”). In addition, Supplier shall Maintain installed Software product [REDACTED], and any exceptions to the foregoing require County’s written Approval in each instance. Supplier’s responsibilities for Break/Fix and Maintenance Services include those tasks, subtasks, and Deliverables set forth in Table 16 (Break/Fix and Maintenance Services Responsibilities).

Table 16. Break/Fix and Maintenance Services Responsibilities

Break/Fix and Maintenance Services Responsibilities	
(1)	Develop for County Review and Approval Maintenance schedules for Changes and preventative Maintenance based on the Maintenance Window, and Implement and Manage such Maintenance schedules.

Break/Fix and Maintenance Services Responsibilities	
(2)	Maintain and perform Break/Fix on Assets and Networks in all County Locations, including dispatching repair technicians to the point-of-service location if necessary.
(3)	Perform diagnostics and Maintenance on County System components (e.g., Assets, peripherals, Networks, servers, and special purpose devices)
(4)	Comply with all instructions issued by, and complete all actions required by, the SOC in order to fix any issues identified by the SOC as related to security.
(5)	Immediately perform actions identified by the SOC as requiring immediate remediation due to an actual or suspected security threat or Security Incident.
(6)	Coordinate and Manage County's then existing Third Party Vendors that provide Maintenance-related support for Assets used in conjunction with the Services, regardless of the Party (Supplier or County) with financial responsibility for the underlying Asset and Maintenance expenses.
(7)	Implement Software Revisions, including manufacturer field change orders, service packs, firmware, etc.
(8)	Perform all Maintenance of Assets in accordance with Change Control Process, and schedule Maintenance to minimize disruption to County's operations.
(9)	Implement product patch, "bug fix," service pack, or Revisions to the current installed Software in accordance with the Services and Change Control Process.
(10)	Implement major Software Release upgrades.
(11)	Perform Maintenance related Software distribution and Version control (e.g., Software Updates, upgrades, emergency and standard Patches) using Software distribution and Patch Management tools and processes.
(12)	Develop and Maintain Software Release matrices across all County environments (e.g., production, sandbox, development, test) for validation and Approval by County.
(13)	Based on County's requirements and to support County's needs, coordinate with County and Third Party Vendors to develop each Software Release matrix.
(14)	Ensure proper Asset Implementation, Management, Operation, and Maintenance across all County environments including Maintaining each of those environments according to the prescribed County standards and requirements.
(15)	Perform Maintenance as necessary to keep the Assets in good operating condition and in accordance with the manufacturer's specifications, or other agreements as applicable, so that such Assets will qualify for the manufacturer's standard maintenance plan upon sale or return to a lessor.
(16)	Replace defective parts, including performing preventive Maintenance.
(17)	Conduct Maintenance and parts Management and monitoring during warranty and off-warranty periods.

Break/Fix and Maintenance Services Responsibilities	
(18)	Monitor Assets and advise County of Asset obsolescence conditions promptly and in any event within ten (10) Business Days of notification from the applicable OEM, Software developer, or Third Party Vendor.
(19)	Administer leases for Equipment upon Approved requests by County.
(20)	Provide lease expiration analysis, technology refresh notification, and document technical, operational, resource, and financial impacts regarding the same to County.
(21)	Implement, Manage, Operate, and Maintain Assets, Services, and spare parts to meet SLRs, minimize Outages, and minimize County Personnel requirements, and provide reporting on the same in accordance with County requirements and ad hoc requests.
(22)	Provide routine and ad hoc Break/Fix reporting in accordance with County requirements.

3.4.9 Backup and Recovery

3.4.9.1 Backup and Recovery Services

Supplier shall perform all backup and recovery activities associated with ensuring ongoing backup and recovery capabilities according to County schedules and requirements for all County System components and the Services (e.g., all Assets, whether on premise or in the cloud), including disaster recovery planning, testing, and activities (“**Backup and Recovery Services**”).

Supplier shall test its Backup and Recovery Services and otherwise demonstrate that it will consistently meet or exceed County’s ongoing and overall backup and recovery requirements. Supplier will perform Backup and Recovery Services consistent with the requirements of the Backup and Restoration SLRs set forth in Exhibit H (Service Level Requirements) and Exhibit H.1 (Service Level Requirements Table). Supplier shall ensure that all backups are encrypted. Supplier’s responsibilities for Backup and Recovery Services include the tasks, subtasks, and Deliverables set forth in Table 17 (Backup and Recovery Services Responsibilities) below.

Table 17. Backup and Recovery Services Responsibilities

Backup and Recovery Services Responsibilities	
(1)	Based on County’s requirements and to support County’s needs, develop, document, and Maintain in the Operations Manual all backup and recovery processes and procedures that meet County Requirements and adhere to County Policies, Procedures, and Guidelines, for County review and Approval including those Policies, Procedures, and Guidelines related to security.
(2)	Conduct review of Approved backup and recovery schedules and procedures with County and update backup and recovery schedules and procedures to incorporate County feedback.
(3)	Develop backup schedule in accordance with County requirements and Maintain backup schedule after County Approval.
(4)	Perform County System component backups and Manage backups to County required retention periods.
(5)	Backup data at County-provided location required to meet disaster recovery and backup restore service requirements and SLRs.

Backup and Recovery Services Responsibilities	
(6)	Ensure County encryption requirements are fulfilled.
(7)	Provide ongoing restoration testing in accordance with SLRs for ability to recover data.
(8)	Ensure ongoing capability to recover data from backup in accordance with County requirements and the SLRs.
(9)	Test [REDACTED] and [REDACTED] as appropriate in connection with Changes to ensure [REDACTED] is possible and ensure Services integrity or as otherwise required or requested by County.
(10)	Recover files, or other data required from backup, as required or requested by County.
(11)	Provide full backup, files, or other data on County-defined target (e.g., [REDACTED], [REDACTED], [REDACTED] [REDACTED]) as requested by County.

3.4.9.2 Disaster Recovery Planning

Supplier’s disaster recovery plans and activities in support of County shall be Approved by County in advance. Supplier’s responsibilities for disaster recovery planning related to the Services include the tasks, subtasks, and Deliverables set forth in Table 18 (Disaster Recovery Planning Responsibilities) below.

Table 18. Disaster Recovery Planning Responsibilities

Disaster Recovery Planning Responsibilities	
(1)	To meet County’s requirements, Implement, Operate, Manage, and Maintain the disaster recovery plans related to the Services, as they exist on the Reference Date and as may be modified, amended, or updated as set forth in the Agreement (“ County’s Disaster Recovery Plans ”).
(2)	Maintain County’s Disaster Recovery Plans throughout the Term. Maintenance may include updates to include Changes required due to the introduction and use of new technologies (e.g., Assets), processes, business functions, locations, and priorities.
(3)	Integrate the County’s Disaster Recovery Plans related to the Services with County’s business continuity plans in accordance with the Change Control Process.
(4)	Document the manner and procedures by which Supplier shall perform backups and provide Backup and Recovery Services.
(5)	Document County’s priorities for disaster recovery backups based on the priorities established by County and communicated to Supplier and methods and timeframes that allow County to modify priorities.
(6)	Maintain and update a list of key personnel contacts and notification procedures for County, Supplier, and Third Party Vendor personnel.
(7)	Provide a single point of contact for County’s Disaster Recovery Plans, related communications, and other Services activities that relate to disaster recovery and business continuity.
(8)	County must Approve all County’s Disaster Recovery Plans, and any modifications to such plans.

Disaster Recovery Planning Responsibilities	
(9)	With respect to County’s critical Assets, as determined by County, Supplier’s disaster recovery responsibilities include Coordinating with County and Third Party Vendors to to: <ul style="list-style-type: none"> (a) Document new and Maintain all County procedures to support disaster recovery; (b) Document and Manage a process that determines and modifies the list of critical Assets annually, subject to County’s Approval; (c) Support County in critical Asset disaster recovery testing [REDACTED], on all critical Assets in accordance with the Operations Manual and County’s Policies, Procedures, and Guidelines; and (d) Retest any unsuccessful critical Asset [REDACTED] disaster recovery test within [REDACTED] ([REDACTED]) of the failure.
(10)	Manage and Maintain all records for record retention requirements, compliance, and other audits, in accordance with the Agreement.

3.4.9.3 Disaster Recovery Testing

Supplier’s responsibilities for disaster recovery testing related to the Services include the tasks, subtasks, and Deliverables set forth in Table 19 (Disaster Recovery Testing Responsibilities) below.

Table 19. Disaster Recovery Testing Responsibilities

Disaster Recovery Testing Responsibilities	
(1)	Provide technical and operational input for County to establish test objectives with County designed to verify that County’s critical Assets shall be Available within established timeframes.
(2)	In coordination with County, Schedule and test the County’s Disaster Recovery Plans at least [REDACTED] in cooperation with County, its designees, any Third Party Vendors that are testing and recovery providers, and any other Third Party Vendors providing services to County. Supplier shall schedule testing dates with County Approval. County and its representatives may observe and participate in the County’s Disaster Recovery Plans tests.
(3)	Coordinate and Manage Subcontractors utilized by Supplier to provide the Services during County’s Disaster Recovery Plans testing in accordance with County’s Disaster Recovery Plans.
(4)	Continue to perform Services during disaster recovery tests in accordance with the Agreement.

3.4.9.4 Disaster Recovery Activities

Supplier’s responsibilities for disaster recovery activities related to the Services include the tasks, subtasks, and Deliverables set forth in Table 20 (Disaster Recovery Activities Responsibilities) below.

Table 20. Disaster Recovery Activities Responsibilities

Disaster Recovery Activities Responsibilities	
(1)	Report potential Disasters to County promptly upon identification based on parameters prescribed by County and in accordance with the County’s Policies, Procedures, and Guidelines, and the Operations Manual.
(2)	In the event a Disaster is declared, Supplier shall not discuss or otherwise disclose the

Disaster Recovery Activities Responsibilities	
	occurrence of such Disaster or any other information associated with the execution of any County's Disaster Recovery Plans with any third party, including news media.
(3)	Execute County's Disaster Recovery Plans as specified in County's Disaster Recovery Plans, including Operating the Equipment, restoring the Software, verifying that data is recovered to the time of the Disaster, and providing all other functions in connection with the Services.
(4)	In accordance with County's Disaster Recovery Plans, (a) determine what resources to deploy, conduct, supervise, and administer the Operation and Implementation of such resources, (b) make commercially reasonable attempts to provide additional resources to maintain provision of the Services for unaffected areas, and (c) re-align technical resources to maintain normal business operations.
(5)	In accordance with the County's Disaster Recovery Plans, Manage all Subcontractors to provide the Services.
(6)	Regardless of whether a formal disaster recovery plan relating to each SLR exists or not, attempt to restore Services within the timeframes specified in the SLRs.
(7)	Following the occurrence of any Disaster, participate in post-Disaster meetings with County to understand the cause of the Disaster and develop plans to eliminate or mitigate future occurrences.
(8)	Implement, Manage, Operate, and Maintain Disaster recovery activities in accordance with County's Policies, Procedures, and Guidelines, including those related to business continuity.
(9)	Train Supplier Personnel in Disaster recovery procedures and Implement, Manage, Operate, and Maintain a process for Supplier Personnel to obtain immediate access to such procedures in a Disaster situation.
(10)	With respect to all Services, provide and Maintain backups, file recovery capability, and historical files of data and critical Assets (including Source Material where available) utilized to process data in accordance with the County's Disaster Recovery Plans and: <ul style="list-style-type: none"> (a) Ensure that the time period required for backups and recovery in the Disaster Recovery plan is consistent with the Requirements of the Backup and Restoration SLRs set forth in Exhibit H (Service Level Requirements) and Exhibit H.1 (Service Level Requirement Table); (b) Regularly backup County Data and critical Assets, and ensure that backup data is Available for recovery in the event of data loss, corruption, or Disaster; (c) Ensure that backups are Maintained in a secure off-site environment; and (d) Perform the foregoing functions in accordance with the applicable County Disaster Recovery Plans.
(11)	In the event of a Disaster, establish and maintain connectivity for County Locations, from Supplier sites to County Locations, and between County Locations to deliver the Services in accordance with the County's Disaster Recovery Plans.

3.4.10 Technology Refreshment, and Replenishment

Supplier shall perform activities associated with modernizing the County information technology infrastructure on a continual life cycle basis to provide input to County to decide on how to Maintain County Systems components to stay current with evolving industry standard technology platforms based on County’s Asset replacement policy (“TR&R” and such Services the “**Technology Refreshment and Replenishment Services**”). Supplier’s responsibilities for Technology Refreshment and Replenishment Services includes:

- (A) As requested and Approved by County, upgrading and replacing Assets, as required, throughout the Term, for purposes that include meeting County’s business requirements; preventing technological obsolescence or failure; accommodating volume changes; increasing efficiency; lowering costs; and/or Maintaining required Third Party Vendor support; and
- (B) Implementing Assets associated with any refresh or replenishment in accordance with the standards of County’s Approved technical architecture and Long-Range IT Plan.

Supplier is responsible for TR&R, Software currency and Release levels, and TR&R planning. Supplier shall develop (with County input and Approval), Implement, Operate, Manage, and Maintain a TR&R schedule and plan for each of the Services by Service type and Asset ownership.

3.4.10.1 Refresh and Replenishment

Supplier’s responsibilities for TR&R include the tasks, subtasks, and Deliverables set forth in Table 21 (TR&R Responsibilities) below.

Table 21. TR&R Responsibilities

TR&R Responsibilities	
(1)	Where Supplier is financially responsible for Assets used in conjunction with the Services, Supplier’s responsibilities will include: <ul style="list-style-type: none"> (a) At no Charge to County, refresh the Assets during the Term, including responsibility for the Assets, the Implementation of Assets, and the ongoing Management, Operation, and Maintenance of Assets; and (b) At a minimum and/or in the absence of a defined TR&R timeframe, maintain technical currency in accordance with industry standards.
(2)	Where County is financially responsible for Assets used in conjunction with the Services, Supplier will Implement, Manage, Operate, and Maintain the new Assets provided by County in accordance with County’s direction.
(3)	Regardless of the ownership of underlying Assets, Supplier’s responsibilities will include: <ul style="list-style-type: none"> (a) Provide Supplier Personnel who are adequately trained in the use of the Assets to be deployed as part of the TR&R, and provide such training prior to the TR&R; (b) Provide minimal disruption to County’s business operations associated with TR&R; (c) Perform the necessary Services and tasks required to fulfill the TR&R plans; (d) Use Best Practices and effective automation tools during TR&R deployment; (e) Perform all Changes to Assets in accordance with Change Control Process; and (f) Implement, Manage, Operate, and Maintain TR&R plans and provide status reports regarding TR&R Implementation status as required by County.

3.4.10.1 Software Currency and Release Levels

Supplier’s responsibilities for Software currency and Release levels include the tasks, subtasks, and Deliverables set forth in Table 22 (Software Currency and Release Levels Responsibilities) below.

Table 22. Software Currency and Release Levels Responsibilities

Software Currency and Release Levels Responsibilities	
(1)	Provide support for all Software Versions and Release levels that exist as of the Reference Date until otherwise directed by County.
(2)	At no Charge to County, use commercially reasonable efforts to support Software that is no longer supported by the Third Party Vendor.
(3)	Maintain Software currency in accordance with County’s standards, including: <ul style="list-style-type: none"> (a) Test and evaluate the new Releases in preparation for upgrading the applicable County environment to the new standard level; (b) Build a deployment strategy and plan, obtain County Approval of that strategy and plan, and begin deployment in compliance with County’s Approved deployment strategy and plan; and (c) In partnership with the Software manufacturers, provide input on industry standard timing for adopting anticipated releases of major and minor Releases of Software.

3.4.10.2 TR&R Planning

Supplier’s responsibilities for TR&R planning include the tasks, subtasks, and Deliverables set forth in Table 23 (TR&R Planning Responsibilities) below.

Table 23. TR&R Planning Responsibilities

TR&R Planning Responsibilities	
(1)	Based on County’s requirements and to support County’s needs, develop, document, Implement, Manage, Operate, and Maintain an annual TR&R schedule and plans for each Service in accordance with County-provided schedule Requirements, including OEM end of support dates, including: <ul style="list-style-type: none"> (a) By the time set forth in Exhibit T.3 (Transition-In Plan), but no later than the completion of all Transition-In tasks, and then within sixty (60) Calendar Days prior to County’s Annual Planning process meetings, review the Asset inventory and produce a report that lists the Assets that are due to be refreshed in the upcoming plan year, and provide such report to County’s Annual Planning process; (b) Consider and provide technical and functional information to County on the usability of the Assets and alternatives to replace, re-lease, consolidate, or retain the Assets; (c) For Supplier-owned Assets, Supplier and County will mutually determine whether Supplier will replace an Asset (at no additional Charge to County) and the appropriate replacement date; (d) If Changes to related Assets are required due to replacement of certain Assets, Supplier, in consultation with County, will review alternatives for making such Changes

TR&R Planning Responsibilities	
	and such replacement of the Supplier-owned Assets will be at Supplier’s expense; and
(e)	Plan for and schedule TR&R for twenty percent (20%) of County Assets annually, subject to County’s requirements, prioritization, and Approval of Assets and scheduling.
(2)	Track completion progress and provide Management reports on the progress of the TR&R plans to the County.
(3)	Periodically review draft TR&R Implementation plan updates with County to ensure such plans properly support ongoing County business requirements and incorporate County feedback into final drafts of such plans for County Approval.
(4)	Update and archive Asset records after retirement.

3.5 Service Delivery

3.5.1 Capacity and Availability Management

Supplier shall perform capacity and availability Management activities, as further described below, which are necessary to ensure that the capacity and availability of infrastructure meets or exceeds the evolving demands of County business in a timely manner (“**Capacity and Availability Management Services**”). As part of the Capacity and Availability Management Services, Supplier will (A) provide input to support County’s assessment of the future business requirements (the required Service delivery), the County operation (the current Service delivery), and the information technology infrastructure (the means of Service delivery), (B) optimize the capability of the information technology infrastructure and the supporting organization to deliver a cost-effective and sustained level of Availability that enables County to satisfy its objectives, and (C) ensure that all current and future capacity and performance aspects of the County business requirements are provided for, in accordance with County’s request and Approval. Supplier will provide comprehensive capacity and availability Management for all Services. Supplier will minimize and mitigate Service degradation and Outages due to increases in utilization of Services and infrastructure. Additionally, Supplier will conduct proactive development, Maintenance, and communication of tactical and strategic technology plans to present to County for Approval, will Implement, Operate, and Manage such plans, and will accommodate County growth or changing business requirements.

Supplier’s responsibilities for Capacity and Availability Management Services include the tasks, subtasks, and Deliverables set forth in Table 24 (Capacity and Availability Management Services Responsibilities) below.

Table 24. Capacity and Availability Management Services Responsibilities

Capacity and Availability Management Services Responsibilities	
(1)	Design and document a comprehensive capacity and availability Management planning process for County’s review and Approval.
(2)	Formally review all capacity Requirements and report to County for review as part of County’s normal business planning cycle.

Capacity and Availability Management Services Responsibilities	
(3)	Designate a named Supplier Personnel resource as the key capacity planner. The resource will perform analysis of capacity information and provide information on application or infrastructure enhancements to County for review to maintain a stable infrastructure and act as a single point of contact for County on capacity planning topics.
(4)	Utilize County-provided tools to effectively Manage capacity and availability monitoring and trending and reporting of County-provided information technology infrastructure, applications, and County Systems components, and that integrate with the Service Management suite. The tools will contain data and information, including: <ul style="list-style-type: none"> (a) Service data (e.g., [REDACTED]); (b) Technical data (e.g., [REDACTED]); and (c) Utilization data (e.g., [REDACTED]).
(5)	Provide a mechanism for County to view and run reports on data from the tools.
(6)	Develop capacity and availability plans for the Services that meet County demand and SLRs.
(7)	Tune systems to achieve optimum use of all Asset and Network resources.
(8)	Respond to current and future County business requirements and identify how County business requirements may alter capacity and availability Requirements (e.g., strategic and operational plan, video conferencing, new site setup, ad hoc events) and provide information on available options to adjust capacity and availability of infrastructure accordingly.
(9)	Establish a schedule for and conduct capacity and availability planning reviews and provide all relevant Documentation to County and Supplier participants.
(10)	Verify that there is adequate capacity to meet the required levels of Services, including periodically (at least twice yearly) auditing the capacity Management information to ensure the correctness of the data contained therein.
(11)	Advise County of insufficient capacity, as appropriate.
(12)	Provide early warning to County of potential or actual Availability and reliability issues. Supplier will provide additional warnings and applicable information as the potential increases and as the threat becomes more imminent.
(13)	Work with County to achieve optimal utilization of capacity.
(14)	Coordinate with County and provide support to County to Manage Third Party Vendors to provide end-to-end Availability and reliability of the Services to Authorized Users.
(15)	Assess capacity and availability impacts to all technology and Eligible Customers when adding, removing, or modifying Services and Assets.
(16)	Continually monitor information technology resource usage to enable predictive identification of capacity and availability issues (e.g., SIP Trunk concurrent call volume, bandwidth utilization).
(17)	In support of County application development and Maintenance activities, estimate applicable resource requirements, including impact on the capacity of the Network, as required.

Capacity and Availability Management Services Responsibilities	
(18)	Capture capacity and availability trending information and forecast future County capacity and Availability Requirements based on County defined thresholds.
(19)	Assess and Resolve Incidents and Problems related to performance.
(20)	Apply capacity Management tools, data, reports, and disciplines, at no additional Charge to County, to Incidents and Problems relating to poor performance as an active member of teams working to resolve such Incidents and Problems.
(21)	Provide information to County on potential Changes to capacity to improve Service performance and/or reduce costs for County's review and Approval.
(22)	Assess and document impact and risk and cost estimate of capacity Changes.
(23)	Include capacity Management in the Change Control Process to assess all Changes for their impact on the capacity of the County Systems and provide appropriate feedback to those submitting Changes.
(24)	To the extent practicable, validate and verify that planned Changes affect only the expected resources.
(25)	Optimize capacity levels for the use of existing information technology resources to minimize County costs to deliver Services in accordance with the SLRs.
(26)	Provide timely reporting at a frequency required by County (could include daily reports with weekly or monthly summaries) to ensure adequate capacity and Availability exists within the information technology environment to meet SLRs taking into account daily, weekly, and new Services and cyclical business variations in capacity demands. Reports should include current usage of resources, performance trends and forecasts, and exceptions.
(27)	Monitor and report on Asset utilization and efficiency.
(28)	Perform ad hoc performance and capacity studies as requested by County, or as needed to deliver the Services.
(29)	Perform short-term demand Management as required to Maintain delivery of the Services during failures, spikes in demand, or other spontaneous events.

3.5.2 Performance Management

Supplier shall perform all activities associated with tuning Service components within and across all Services for optimal performance, including, proactive and predictive monitoring and Management of the County environment as it relates to the Services and performing quality assurance with respect to the Services as a whole ("**Performance Management Services**").

3.5.2.1 Proactive Performance Management

Supplier's responsibilities for proactive Performance Management Services include the tasks, subtasks, and Deliverables set forth in Table 25 (Proactive Performance Management Responsibilities) below.

Table 25. Proactive Performance Management Responsibilities

Proactive Performance Management Responsibilities	
(1)	Perform Service component tuning to maintain optimum performance in accordance with Change Control Process.
(2)	Monitor and Manage the County environment as it relates to the Services to predict, identify and Resolve Incidents and Problems where possible before they affect County.
(3)	Implement, Manage, Operate, and Maintain Service component resources to meet defined Availability requirements and SLRs.
(4)	Provide regular monitoring and reporting of Service component performance, utilization and efficiency, as formally prescribed by SLRs, Exhibit R (Required Reports), and the Agreement.
(5)	Upon County's request and at County's direction, or as otherwise provided for in the Services, evaluate, identify, and recommend configurations or changes to configurations that will enhance performance.
(6)	Perform predictive Incident and Problem detection and Incident and Problem Resolution.
(7)	Perform [REDACTED] on Assets.
(8)	Manage and Resolve error messages that allow for resumption of normal operational status.
(9)	Provide notification to County according to predetermined guidelines of any need for an unscheduled interruption and Coordinating that activity with designated County Personnel.
(10)	Detect, Manage, and Resolve exceeded thresholds for all Services.
(11)	Develop and deliver improvement plans for the Services as required to meet SLRs for review and Approval by County.
(12)	Implement, Operate, Manage, and Maintain County-Approved improvement plans and Coordinate with Third Party Vendors as required.
(13)	Provide technical advice to support County and Third Party Vendor technology maintenance and development.
(14)	Operate, Manage, and Maintain an up-to-date dashboard showing the operational status of the County environment as it relates to the Services.

3.5.2.2 Predictive Performance Management

Supplier's responsibilities for predictive Performance Management Services include the tasks, subtasks, and Deliverables set forth in Table 26 (Predictive Performance Management Responsibilities) below.

Table 26. Predictive Performance Management Responsibilities

Predictive Performance Management Responsibilities	
(1)	Analyze data collected while Implementing, Operating, Managing, and Maintaining the County Systems and evaluate the performance of the County Systems.
(2)	Report the results of Supplier's analysis and provide information to County on potential improvements to the performance of the County Systems on a monthly basis or more

Predictive Performance Management Responsibilities	
	frequently as reasonably requested by authorized County representatives.
(3)	Review the results of identified performance trends or trend analysis with County.
(4)	Work jointly with County, conducting monthly meetings (or more frequently as otherwise mutually agreed to in writing by the Parties) on potential Changes to the County environment based on performance trends or trend analysis.
(5)	Tune and refine the delivery of the Services based on the monitored data.
(6)	Employ County-provided Management system tools or other tools as agreed to by the Parties in writing to monitor events that exceed thresholds.
(7)	Define the actions to be taken in the event performance trends indicate that an Incident or Problem is likely to occur.
(8)	Assess and Implement alternate methods and procedures, as directed by County and subject to County Approval and the Change Control Process.

3.5.2.3 Quality Assurance

Supplier’s responsibilities for quality assurance with respect to the Services as a whole include the tasks, subtasks, and Deliverables set forth in Table 27 (Quality Assurance Responsibilities) below.

Table 27. Quality Assurance Responsibilities

Quality Assurance Responsibilities	
(1)	Develop a quality assurance program, subject to County review and Approval, and Implement, Operate, Manage, and Maintain such quality assurance program at County’s direction, in order to promote performance of the Services at a high level of quality, focusing on measuring and improving reliability, speed, cost effectiveness, and customer satisfaction.
(2)	Write and Implement, Operate, Manage, and Maintain procedures and measurements, subject to County review and Approval, on all quality assurance activities associated with the Services.
(3)	Employ quality metrics and procedures that are consistent with similar standards in County peer group and/or in the provision of professional services that are similar to the Services.
(4)	Comply with a published quality assurance program, with adequate internal controls and verification activities.
(5)	Allow County to perform audits that focus on Supplier’s adherence to its quality assurance procedures and standards; on the metrics gathered to support quality assurance activities; and on Supplier’s efforts to improve overall quality. Supplier shall cooperate fully and assist County with any such audits.

3.5.3 Service Level Monitoring and Reporting Services

Supplier shall perform all monitoring and reporting activities necessary to and associated with the monitoring and reporting of Service delivery with respect to SLRs in order to maintain and improve business-aligned Service quality through a constant cycle of monitoring, reporting, and reviewing Service achievements and through instigating County Approved actions to eradicate unacceptable levels of Service (“**Service Level Monitoring and Reporting Services**”). In addition, Supplier shall report system

Management information (e.g., performance metrics, system accounting information) to the designated County representatives in a format designated by County. Supplier’s responsibility for Service Level Monitoring and Reporting Services include the tasks, subtasks, and Deliverables set forth in Table 28 (Service Level Monitoring and Reporting Services Responsibilities) below.

Table 28. Service Level Monitoring and Reporting Services Responsibilities

Service Level Monitoring and Reporting Services Responsibilities	
(1)	Report on SLR performance and improvement results.
(2)	Upload and Maintain all SLR reporting into the County-designated shared site.
(3)	Provide an executive summary dashboard for SLR reporting as part of the County-designated shared site.
(4)	Coordinate SLR monitoring and reporting with relevant County representatives and Third Party Vendors to maximize accuracy.
(5)	Measure, analyze, and provide Management reports to County on SLR metrics, and Supplier and Third Party Vendor performance against SLRs.
(6)	Develop and deliver SLR improvement plans where required.
(7)	Review SLR improvement plans with County and incorporate County feedback into final SLR improvement plans for County Approval.
(8)	Implement, Manage, Operate, and Maintain SLR improvement plans, in accordance with County directions.

3.5.4 Security

Supplier shall conduct security Management activities associated with Maintaining physical and logical security of all Services, County Systems components (e.g., Assets and Networks), and County Data, malware protection, access protection, and other security Services in compliance with County security requirements and all applicable regulatory requirements (“**Security Services**”).

Supplier’s overall Security Services responsibilities include: (A) meeting the external-to-Supplier requirements according to security policies, contractual requirements, legislative requirements, and as expressed in the SLRs; (B) meeting the internal-to-Supplier security requirements according to internal security Policies, Procedures, and Guidelines, standard security baselines, and as expressed in the SLRs; (C) upon request, providing County and/or its representatives or designees access to all facilities, including the County Locations and Supplier Locations, and Assets used in providing the Services for audits, investigations, and compliance reviews; and (D) ensuring all County security Policies, Procedures, and Guidelines are enforced at all times.

3.5.4.1 Information Security Model

Supplier’s Security Services with respect to the overall County information security model responsibilities include the tasks, subtasks, and Deliverables set forth in Table 29 (Information Security Model Requirements) below.

Table 29. Information Security Model Requirements

Information Security Model Requirements	
(1)	Comply with all County security and safety Policies, Procedures, and Guidelines, as they may

Information Security Model Requirements	
	be revised or updated.
(2)	Implement, Manage, Operate, and Maintain security processes, subject to County review and Approval, that meet or exceed County’s security Policies, Procedures, and Guidelines.
(3)	Comply with County policies and standards, including security, data and records Management, and electronic records and data archiving.
(4)	Inform County immediately if Supplier becomes aware of any vulnerability or weakness in the Services or any Security Incident, and recommend a possible solution or mitigation.

3.5.4.2 Physical Security Administration

Supplier will provide physical security administration for Supplier’s data centers and facilities under Supplier’s control, which will include authorized access control. Supplier’s responsibilities for physical security administration Services include the tasks, subtasks, and Deliverables set forth in Table 30 (Physical Security Administration Requirements) below.

Table 30. Physical Security Administration Requirements

Physical Security Administration Requirements	
(1)	Communicate and provide reports on the physical and logical security Management processes to County and each Third Party Vendor as appropriate.
(2)	Provide information on potential supplemental physical security standards to increase the overall level of security as necessary in the locations and facilities used by Supplier, and implement such supplemental standards when requested and Approved by County.
(3)	Provide that proper segregation of duties exists where appropriate, including where processes span to Third-Party Vendors or other third parties.
(4)	If during the Implementation of Changes or Management of crises it is not feasible to observe a proper segregation of duties, immediately inform County of this fact and keep a written record of all actions performed. Discuss such record with County within two (2) Calendar Days after the Change or crisis.
(5)	Inform County immediately if Supplier becomes aware of any vulnerability or weakness in the Services or any Security Incident, and recommend a possible solution or mitigation.
(6)	Integrate Supplier’s physical security administration process with County’s and Third Party Vendors’ physical security administration processes, where the processes interact.
(7)	Perform all physical security functions (e.g., [REDACTED], and [REDACTED]) at facilities under Supplier’s control.

3.5.4.3 Logical Security Administration

Supplier will provide logical security administration Services to Maintain authorized access to information technology data. Supplier’s responsibilities for logical security administration include the tasks, subtasks, and Deliverables set forth in Table 31 (Logical Security Administration Requirements) below.

Table 31. Logical Security Administration Requirements

Logical Security Administration Requirements	
(1)	Establish and Maintain mechanisms to safeguard against the unauthorized access, destruction, loss, or alteration of County Data, with County review and Approval. Supplier will Implement, Manage, Operate, and Maintain safeguards that are consistent with County's Policies, Procedures, and Guidelines.
(2)	Conduct periodic user access control audits in accordance with County Policies, Procedures, and Guidelines.
(3)	Implement, Manage, Operate, and Maintain Network segmentation in accordance with County Policies, Procedures, and Guidelines.
(4)	Research and assist in and/or Implement the Resolution of system security Incidents, at the direction of and in Coordination with County (including the SOC team) and Third Party Vendors designated by County, as applicable.
(5)	<p>Manage, Operate, Maintain, and administer access to County Systems, Networks, Assets, and County Data, for which Supplier provides Services under this Agreement, to include the following:</p> <ul style="list-style-type: none"> (a) Allow County information technology security Approved access privileges related to County Systems regarding the Services, including full access to audit trails and logs; (b) County will retain authority for Approval of all data and system access requirements; (c) County will notify Supplier regarding the entities and personnel to be granted access to component of the County Systems and the level of security access granted to each; (d) Follow County's instructions and the procedures regarding such access as designated by County; and (e) Maintain security rules and access rights for the Services.
(6)	Review all documented information security procedures with County pertaining to the County Systems.
(7)	Develop, Implement, Manage, Operate, and Maintain security procedures, subject to County's review and in accordance with County Approval, including physical access strategies and standards.
(8)	Comply with County Policies, Procedures, and Guidelines on privacy protection and protective security for data, including security, data and records Management, and electronic records and data archiving.
(9)	Assist in the development and utilization of an action plan and escalation procedures for any potential and real Security Incidents and report any potential and real Security Incidents to County in accordance with the County's Security Incident response plan.
(10)	Monitor users of the County Systems and Services for authorized access, and monitor, review, and respond in a timely and appropriate manner to access violations.
(11)	Identify and report to County on security risks associated with the Services.
(12)	Notify County in the event of a security violation or unauthorized attempt to access or alter County Data, where the notification and escalation is made according to security Policies,

Logical Security Administration Requirements	
	Procedures, and Guidelines.
(13)	Conduct periodic reviews, as appropriate, to validate that individual employee access to programs and libraries is appropriate for the County Systems.
(14)	Ensure that processes, whether automated or manual, for disabling and/or deleting user accounts are followed.
(15)	Provide reports that identify to County those accounts that have been disabled or removed on County Systems on a regular basis, and in accordance with County requests.
(16)	Capture data regarding routine access and exceptions for audit trail purposes, and make such data available to County upon request.
(17)	Perform security audits, provide Incident investigation support, and initiate corrective actions to minimize and prevent Security Incidents.
(18)	Having obtained County Approval, Implement, Operate, Manage, and Maintain Software that will provide security monitoring, alarming, and access-tracking functionality for County Systems and Assets.
(19)	Provide and Implement or Manage, Operate, and Maintain existing security access control tools for County Data, Assets, and Networks in compliance with County security Policies, Procedures, and Guidelines, and Maintain such security and access control devices in proper working order.
(20)	Develop, Implement, Manage, Operate, and Maintain a set of automated and manual processes designed to enforce County’s Data access and security policies.
(21)	Communicate with Authorized Users regarding requests for system or data access.
(22)	Coordinate County System password changes and, subject to County’s Approval, Change and test all local passwords as required.
(23)	Perform backup and recovery procedures in response to security violations that result in lost or damaged information.

3.5.5 Asset and Life Cycle Management

Supplier shall perform all Asset and life cycle Management activities necessary for and associated with ongoing Management and tracking of new and upgraded Services and County System components (e.g., Assets) in the County-identified Asset repository (“**Asset and Life Cycle Management Services**”). Supplier’s responsibilities for Asset and Life Cycle Management Services include the tasks, subtasks, and Deliverables set forth in Table 32 (Asset and Life Cycle Management Services Responsibilities) below.

Table 32. Asset and Life Cycle Management Services Responsibilities

Asset and Life Cycle Management Services Responsibilities	
(1)	Conduct an initial, complete inventory of all Assets and related Services provided or supported by Supplier and deployed at County Locations or Supplier Locations; include all Assets, whether such Assets are owned or leased by either County or Supplier.
(2)	Schedule and complete the initial wall-to-wall Asset inventory in accordance with the Approved Transition-In Plan.

Asset and Life Cycle Management Services Responsibilities

(3)	As the initial Asset inventory is being conducted, enter the required information regarding the Assets into the County-provided Asset repository.
(4)	Once the initial Asset inventory is completed and Approved by County, provide an extract (either .csv or Excel format) of Asset inventory for update of County’s governance, risk management, and compliance Software.
(5)	Maintain Asset data in County-provided Asset repository on an ongoing basis and in a manner that meets County requirements and adheres to County Policies, Procedures, and Guidelines.
(6)	Manage life cycle of all Assets from installation, inventory, and preventative Maintenance to disposal according to County Policies, Procedures, and Guidelines.
(7)	Provide County with an annual Asset refresh list by no later than September 1 of each year of the Agreement to cover any refresh required in the subsequent eighteen (18) month period.
(8)	Provide input to County on recommended Asset type list to be included in the County-provided Asset repository for County review and Approval.
(9)	Maintain Asset types in the County-provided Asset repository.
(10)	Provide County with periodic updated Asset reports derived from the County-provided Asset repository for all Assets related to the Services and respond in a timely manner to queries and requests concerning the inventory data or supporting information.
(11)	Input, Manage, Maintain and report all Assets throughout the Asset life cycle (i.e., acquisition to retirement) via the County-provided tool.
(12)	Maintain the accuracy of the data of Assets in the County-provided Asset repository according to SLRs.
(13)	On a monthly basis, or more frequently in connection with TR&R, provide extracts (either .csv or Excel format) from County-provided Asset repository for County to update its governance, risk management, and compliance software.
(14)	<p>Implement, Manage, Operate, and Maintain Asset information in the Asset tracking database to include, at minimum, the Asset tracking information set forth in SLR 21 (Accuracy and Completeness of Data) of Exhibit H.1 (Service Level Requirements Table), and the following information for each Asset:</p> <p>(a) [REDACTED];</p> <p>(b) [REDACTED];</p> <p>(c) [REDACTED];</p> <p>(d) [REDACTED];</p> <p>(e) [REDACTED];</p> <p>(f) [REDACTED];</p> <p>(g) [REDACTED];</p> <p>(h) [REDACTED];</p>

Asset and Life Cycle Management Services Responsibilities

(i)	[REDACTED];
(j)	[REDACTED];
(k)	[REDACTED];
(l)	[REDACTED];
(m)	[REDACTED];
(n)	[REDACTED];
(o)	[REDACTED];
(p)	[REDACTED];
(q)	[REDACTED];
(r)	[REDACTED];
(s)	[REDACTED];
(t)	[REDACTED];
(u)	[REDACTED];
(v)	[REDACTED]; and
(w)	[REDACTED].
(15)	Track and inform County of warranty periods for all Assets.
(16)	Track and inform County of Maintenance contracts for Assets and alert County of expiration of any Maintenance contract for Assets at least six (6) months prior to expiration or earlier if required for County to exercise a renewal or non-renewal right under the applicable contract.
(17)	When performing Equipment and Network Component installations, validate and correct physical inventory information.
(18)	Update Asset records related to all Change activities (e.g., IMAC activities, Break/Fix activities, enterprise reorganization, and Change Control Process activities) in different target data sources (e.g., County configuration and Asset Management system, monitoring tool sets, third party OEM contract maintenance list).
(19)	Perform ongoing Asset inventories to validate that data in the County-provided Asset repository is accurate and current and that County has the data it requires. Asset information shall be updated at the time of refresh or when an IMAC is performed.
(20)	Develop, provide, and upon County Approval, Implement, Manage, Operate, and Maintain remediation plans for County-provided Asset repository deficiencies.

3.5.6 Asset License Management

Supplier shall perform all Asset license Management activities necessary for and associated with the acquisition and ongoing Management and tracking of Asset licenses (“**License Management Services**”). For all Assets under this Agreement, Supplier shall perform the Services described in Section 3.5.5 (Asset and Life Cycle Management) in addition to the activities described in this Section. Supplier responsibilities for the License Management Services include the tasks, subtasks, and Deliverables set forth in Table 33 (License Management Services Responsibilities) below.

Table 33. License Management Services Responsibilities

License Management Services Responsibilities	
(1)	Manage and Maintain all Asset license information through the Asset license life cycle in accordance with County’s asset license life cycle plan.
(2)	Provide required reporting and data to support County’s planning cycle for purchases.
(3)	Provide data necessary for County to Manage compliance of Asset licenses by monitoring and auditing all Asset use, regardless of financial responsibility for the Asset.
(4)	Continuously monitor the use of the Asset in order to maintain strict compliance, including: <ul style="list-style-type: none"> (a) Immediately notify and advise County of all Asset license compliance issues associated with the Services and Assets; (b) Where Supplier is financially responsible for Assets associated with the Services, provide the Asset and acquire the correct number of the licenses to be compliant with Third Party Vendor requirements; and (c) Where County is financially responsible for Asset, County will notify Supplier of the number of Authorized Users that are allowed to use the Asset, along with any other pertinent licensing and use information related to the Asset.
(5)	Use tools – such as an enterprise management system and remote monitoring agents – to assist in its monitoring efforts, in accordance with Best Practices, subject to County’s review and Approval of all such tools.
(6)	As requested by County, provide input on issues related to Third Party Vendor agreement negotiations between County and Third Party Vendors for County-administered contracts.
(7)	At County’s direction and with County input and monitoring, conduct Third Party Vendor agreement negotiations for non-County-administered contracts.
(8)	Track, Maintain, and provide to County OEM Asset renewal and end of support dates.
(9)	Develop and Implement, Manage, Operate, and Maintain inventory of all Asset licenses in a County-provided Asset license Management system that integrates with the Service Management suite and Asset Management.
(10)	Monitor Supplier, County, and Third Party Vendor compliance with, and report to County on any exceptions to compliance with, Third Party Vendor Asset terms and conditions.
(11)	Coordinate and conduct Asset license and Maintenance agreements reviews for operational and usage impacts and report on the same to County at least on a quarterly basis, or more frequently as necessary to allow for sufficient time prior to expiration for negotiations.

License Management Services Responsibilities	
(12)	Provide monthly recommendations to purchase additional license capacity, recommending alternatives, or curtailing usage where necessary and appropriate, to restore, or continue to maintain, license compliance taking into account County’s budget cycle.
(13)	Manage and perform annual license audits and reconcile the number of licenses to the number of installs.
(14)	Monitor, Maintain, and provide data necessary to enable County to conduct periodic reviews one hundred twenty (120) Calendar Days prior to expiration of all Asset license and Maintenance agreements.
(15)	Obtain Approval from County for any license change or replacement.

3.5.7 Financial and Chargeback Management and Invoicing

Supplier shall perform all financial and chargeback Management and invoicing activities necessary to and associated with providing any and all data that allows County to chargeback its internal business customers, including Authorized Users and Eligible Customers, for actual usage of information technology resources and to receive detailed and accurate invoices that meet County requirements (“**Financial and Chargeback Management and Invoicing Services**”). Supplier’s responsibilities for Financial and Chargeback Management and Invoicing Services include the tasks, subtasks, and Deliverables set forth in Table 34 (Financial and Chargeback Management and Invoicing Services Responsibilities) below, and any additional tasks, subtasks, or Deliverables that must be performed in order for County to meet state and federal regulatory reporting requirements.

Table 34. Financial and Chargeback Management and Invoicing Services Responsibilities

Financial and Chargeback Management and Invoicing Services Responsibilities	
(1)	Monitor Services, Maintain data, and provide chargeback reports to County or its designee(s) on a monthly basis, or more frequently as requested by County, and in accordance with County requirements, including with respect to accounting details and account billing codes.
(2)	Review chargeback reports with County.
(3)	Document and Maintain County invoicing requirements.
(4)	Monitor Services, Maintain data, and provide invoices and all supporting Documentation on a monthly basis, or more frequently as requested by County, and in accordance County requirements, including but not limited to billable staffing hours by Project work.
(5)	Review invoices with County.
(6)	Provide reconciliation reports in accordance with County requirements.

3.6 Service Support

3.6.1 Incident and Problem Management

3.6.1.1 Incident and Problem Management Services

Supplier shall perform all Incident and Problem Management activities necessary to and associated with restoring Normal Operations of Services as quickly as possible, to minimize the adverse impact on County business operations, and to ensure that the best possible levels of Service quality and Availability are

maintained (“**Incident and Problem Management Services**”).

Incident and Problem Management Services includes Supplier’s responsibility to minimize the adverse impact of Incidents and Problems on County business that are caused by errors in the Services and Assets and prevent the recurrence of Incidents related to those errors. In order to achieve this goal, Supplier shall get to the root cause of Incidents and then Implement actions to improve or correct the underlying cause.

Supplier’s responsibilities for Incident and Problem Management Services include the tasks, subtasks, and Deliverables set forth in Table 35 (Incident and Problem Management Services Responsibilities) below.

Table 35. Incident and Problem Management Services Responsibilities

Incident and Problem Management Services Responsibilities	
(1)	Implement, Manage, Operate, and Maintain operations and Service Management quality assurance, and control programs for review and Approval by County.
(2)	Track and Manage all Incidents and Problems that are assigned to Supplier, including those assigned by County’s Third Party Vendor’s service desk, County, a Service Request, or as otherwise automatically generated by the applicable tool.
(3)	Coordinate with County’s Third Party Vendor’s service desk, County, and other Third Party Vendors for Incident and Problem Management Services activities and take ownership of end-to-end Incident and Problem Resolution including by acting as a single point of contact across functions and Services performed and provided by Supplier, County’s Locations, and with other Third Party Vendors providing services to County.
(4)	Maintain regular communications of the status of an Incident or Problem between all parties and County Authorized Users until the Incident or Problem is Resolved by informing such parties and users of the Incident or Problem status on at least an hourly basis.
(5)	Monitor, control, and Manage each Problem and Incident arising from or relating to the Services until it is Resolved, and confirmed as Resolved with the Authorized User.
(6)	Provide Priority Level 2, Priority Level 3, and depot support.
(7)	Review and provide information to County on appropriate spare levels and update the County provided inventory system as required.
(8)	Develop Incident and Problem workflow, escalation, communication, and reporting processes that help to achieve SLRs based on existing County process, for review and Approval by County.
(9)	Utilize County-provided Incident and Problem Management Services tracking system to provide all County-required Incident and Problem monitoring and standard and ad hoc reporting (e.g., [REDACTED]).
(10)	Resolve all Incidents and Problems arising from or related to the Services.
(11)	Implement, Manage, Operate, and Maintain County’s Incident and Problem life cycle including detection, escalation, diagnosis, County status reporting, repair, and recovery.
(12)	Perform proactive, where possible, and reactive troubleshooting to identify and Resolve Incidents and Problems.

Incident and Problem Management Services Responsibilities	
(13)	Emphasize and promote the elimination or quick resolution of Incidents and Problems.
(14)	Ensure Incident Resolution activities conform to County-defined Service Management procedures.
(15)	Manage efficient workflow of Incidents including managing the involvement of Third Party Vendors (e.g., public carriers, ISP) and broadcast of Outages.
(16)	Periodically review the state of open Problems and the progress being made in addressing Problems with County, upon County’s request.
(17)	Maintain clear accountability within Supplier and to County.
(18)	Participate in Problem review sessions and provide listing and status of Problems categorized by Problem impact.
(19)	Implement, Manage, Operate, and Maintain measures to avoid unnecessary reoccurrence of Incidents and Problems.
(20)	Implement, Manage, Operate, and Maintain County Approved tools and enhance processes to proactively perform Incident and Problem Management, with the objectives of automating the Incident and Problem Management process, and on a proactive basis identify and Resolve potential Incidents and Problems before they occur.
(21)	Identify additional possible enhancement opportunities for improved operational performance and potential cost savings based on results of Incident Resolution and Problem Management activities, and report on the same to County.
(22)	Implement, Manage, Operate, and Maintain County-Approved Projects to Implement enhancement opportunities.
(23)	Provide information to County on changes to knowledge Management workflow, escalation, communication, and reporting processes that help to achieve SLRs based on existing County processes, for County review and Approval.
(24)	Populate and Maintain the County-provided knowledge base repository and utilize any County or Supplier developed articles to improve Operations, with County’s review and Approval.
(25)	On an annual basis, analyze knowledge base articles and create new, or modify existing, standard operating procedures, including in the Operations Manual, to enhance Service delivery and improve operations for County review and Approval.

3.6.1.2 Incident and Problem Management System

Supplier’s responsibilities with respect to the Incident and Problem Management system include the tasks, subtasks, and Deliverables set forth in Table 36 (Incident and Problem Management System Responsibilities) below.

Table 36. Incident and Problem Management System Responsibilities

Incident and Problem Management System Responsibilities	
(1)	Supplier shall use the County Incident and Problem Management Tracking system to track

Incident and Problem Management System Responsibilities	
	Incidents and Problems relating to the County environment.
(2)	Track information for each Incident and Problem submitted to (and originating from) the Supplier, to include those agreed to by County and Supplier. Such information shall include at a minimum: <ul style="list-style-type: none"> (a) The date and time the Incident or Problem was raised; (b) An Incident or Problem tracking number; (c) A description of the Incident or Problem; (d) Relevant information about County Authorized Users, Eligible Customers, and/or County Locations affected; (e) The Priority Level of the Incident or Problem; (f) The Incident or Problem status and next steps to be taken; and (g) The date and time the Incident or Problem was Resolved.
(3)	Regularly update the Incident and Problem Management Tracking system (including the knowledge database) in accordance with agreed to procedures by County and Supplier and Supplier Best Practices. Upon County’s request, Supplier shall provide County with periodic updates based on “lessons learned” and Incidents and Problems experienced by Supplier’s other customers.
(4)	Maintain current online knowledge base articles for users of the Incident and Problem tracking system.
(5)	Coordinate tracking efforts and notification to County Authorized Users through the service desk and other Third Party Vendors.
(6)	Implement, Manage, Operate, and Maintain communications with all parties and the County service desk regarding Incidents and Problems until the Incident or Problem is Resolved.
(7)	The communication shall commence upon identification of an Incident or Problem, through Resolution, and through any follow-up communication and work required post-Resolution, in accordance with the Policies, Procedures, and Guidelines and the Operations Manual.
(8)	Provide reports to County and Third Party Vendors regarding Incidents and Problems as relevant.

3.6.1.3 Additional Incident and Problem Communication and Notification Requirements

Supplier’s additional Incident and Problem communication and reporting responsibilities include the tasks, subtasks, and Deliverables set forth in Table 37 (Additional Incident and Problem Communication and Notification Requirements) below.

Table 37. Additional Incident and Problem Communication and Notification Requirements

Additional Incident and Problem Communication and Notification Requirements	
(1)	Provide prompt notification to County focal point of County System outages on critical Assets and system components and otherwise provide the County service desk with regular and timely

Additional Incident and Problem Communication and Notification Requirements	
	progress updates that clearly indicate the nature of the applicable Incident or Problem, the estimated time to Resolution, and potential short-term alternatives agreed to by County and Supplier.
(2)	Provide communications regarding the Incident or Problem to Authorized Users upon request to the County service desk.
(3)	At a minimum, Supplier’s notification and communications shall include: <ul style="list-style-type: none"> (a) The Priority Level of the Incident or Problem; (b) The location of the Incident or Problem and the name and/or number of affected County Authorized Users and Eligible Customers; (c) The elapsed time before a Problem is escalated to the next higher Priority Level; (d) The levels of involvement (and notification) of Supplier Management and County Management at each Priority Level.
(4)	Communicate the status of Priority Level 1 and Priority Level 2 Incidents and Problems on a timely basis appropriate to the impact of the Incident or Problem to County and agreed to by County and Supplier in accordance with the Policies, Procedures, and Guidelines.
(5)	Tracking and reporting any backlog of Incident and Problems that are not Resolved on at least a daily basis, or more frequently as requested by County.
(6)	If Supplier believes an Incident or Problem cannot be Resolved, Supplier shall communicate to County the nature of the Incident or Problem, the reason why Supplier believes it cannot be Resolved, and the efforts employed by Supplier to Resolve the Incident or Problem to the appropriate level within County as agreed to by County and Supplier.
(7)	In the event there is a recurrent Incident or Problem, Supplier shall, upon County’s request, conduct meetings with County and any required third parties to address Supplier’s Incident and Problem Resolution activities, including providing a root cause analysis report.
(8)	Providing County with regular (at a minimum, on a monthly basis) and ad hoc electronic reports on Incidents and Problems including: statistics on total number of Incidents and Problems; outstanding Incidents and Problems; Resolution time; chronic Outages; performance; and Incident and Problem trend analysis.
(9)	Providing Incident and Problem resolution exception reports.

3.6.2 Root Cause Analysis

Supplier shall perform all root cause analysis activities associated with and necessary to diagnosing and analyzing the root cause of Priority Level 1 or Priority Level 2 Incidents, Problem, and/or trends, and as requested by the County for Priority Level 3 and Priority Level 4 Incidents, Problems, and/or trends, and recommending and taking corrective measures to prevent the reoccurrence of such Incidents, Problems, and/or trends (“**RCA Services**”). Supplier’s responsibilities for RCA Services include the tasks, subtasks, and Deliverables set forth in Table 38 (RCA Services Responsibilities) below.

Table 38. RCA Services Responsibilities

RCA Services Responsibilities	
(1)	Conduct historical or predictive trend analysis of Incidents to identify potential and/or recurring Problems to identify areas for improvement and provide trend analysis and improvement opportunity reporting to County at least on a quarterly basis or more frequently as required by County.
(2)	Track and report on all Priority Level 1 and Priority Level 2 Incidents and provide associated event correlation, preventative measures taken, and corrective actions. Root cause analysis reports shall include a description of the failure, root cause analysis performed, proposed actions (with timing and the party responsible to implement such actions) to eliminate or reduce the likelihood of a recurrence of the failure, and confirmation that proposed actions addressed the Problem.
(3)	Develop corrective action solutions to address recurring Problems or failures for County review and Approval.
(4)	Implement Approved corrective solutions to address Problems or failures.
(5)	Identify root cause of Priority Level 1 and Priority Level 2 Incidents and develop Resolution action for County review and Approval.
(6)	Review recommended solutions to address Priority Levels 1 and Priority Level 2 Incidents with County.
(7)	Provide status report detailing the root cause of and procedure for correcting recurring Problems and Priority Levels 1 and Priority Level 2 Incidents until closure as determined by County.
(8)	Identify root cause of Priority Level 3 and Priority Level 4 Incidents at County’s request and complete a root cause analysis report of the same.
(9)	Provide daily updates on status of open Problems (e.g., Problem aging, reoccurrence, timelines, estimated time to respond, estimated time to Resolve).

3.6.3 Configuration Management

Supplier shall perform all configuration Management activities associated with and necessary to providing a logical model of the Services by identifying, documenting, controlling, Maintaining, and verifying the installed Service environment (e.g., Assets, middleware, Interfaces, Networks) (“**Configuration Management Services**”). As part of the Configuration Management Services, Supplier will: account for all Assets and configurations; provide accurate information on configurations; provide a sound basis for Incident and Problem Resolution and Change and Release Management Services; verify configuration records against the infrastructure; and correct any inaccuracies. Supplier’s responsibilities for Configuration Management Services include the tasks, subtasks, and Deliverables set forth in Table 39 (Configuration Management Services Responsibilities) below.

Table 39. Configuration Management Services Responsibilities

Configuration Management Services Responsibilities	
(1)	Update, validate, Manage, Operate, and Maintain County-provided CMDB as changes occur, including Service dependency mapping and Asset refresh, in accordance with County

Configuration Management Services Responsibilities	
	requirements and processes.
(2)	Facilitate, on a semi-annual basis per Contract Year, a review of the CMDB of County selected Asset groupings for validation and County Approval of the CMDB.
(3)	Enter, upload, and Maintain configuration data into the CMDB as changes occur.
(4)	Leverage automated updates of the CMDB where applicable.
(5)	Recommend an event Management process for County review and Approval that interfaces to configuration and Asset Management processes, Incident and Problem Management, Change Management, disaster recovery, technical support, and Maintenance.
(6)	Execute authorization controls for modifying configuration items and verify compliance with Asset licensing based on County requirements.
(7)	Recommend guidelines for physical and logical separation between environments (e.g., development, test, and production) and the process for deploying and back out of configuration items.
(8)	Facilitate County's review of recommended guidelines for physical and logical separation between environments (e.g., development, test, and production) and the process for deploying and back out of configuration items and incorporate feedback into guidelines for County Approval.
(9)	Utilize County-provided Asset configuration repository to store baseline configurations as reference points for rebuilds, and provide ability to revert to stable configuration states.
(10)	Ensure Configuration Management processes are consistent across all environments per County direction (e.g., development, test, and production).
(11)	Establish, Implement, Manage, Operate, and Maintain process for verifying the accuracy of configuration items, adherence to Configuration Management process and identifying process deficiencies.
(12)	Provide County configuration Management reports and device configuration files as required and defined by County.
(13)	Track and flag configurations that are not in conformance (e.g., exceptions list) with County-defined standards and requirements (e.g., County-Approved and unapproved non-standard configurations), and remediate configuration exceptions.
(14)	As requested, provide information to County on any continuous improvement opportunities to configuration Management standards, processes, and tools.

3.6.4 Change and Release Management

In connection with County's requirements, Supplier shall be solely responsible for and conduct all Change and Release Management activities associated with ensuring that standardized methods and procedures are used for efficient and prompt handling of all Changes and Software Releases in the County environment (e.g., Assets, middleware, Interfaces), in order to minimize the impact of Change upon County operations, improve Service quality, and consequently to improve the day-to-day operations of the County environment ("**Change Management**" and such services "**Change Management Services**").

Supplier’s responsibility for Change Management covers all aspects of Managing the introduction and Implementation of all Changes affecting all Services and in utilizing any of the Management processes, tools, and methodologies designed to support the Services and County System components. Although the County may from time to time submit Change Management requests through service tickets, ultimate responsibility for Change and Release Management will remain with Supplier.

Supplier shall conduct all Release Management activities associated with providing a holistic view of a Change to an existing Service or addition of new Services to ensure that all aspects of a Release, both technical and non-technical, are considered together by County and the appropriate stakeholders; and to plan and oversee the successful rollout of technologies, and design and Implement efficient procedures for distribution and installation of Changes (“**Release Management**” (and together with Change Management, “**Change and Release Management**”) and such services “**Release Management Services**” and together with Change Management Services, “**Change and Release Management Services**”). Supplier shall protect the production environment and its Services in its performance of Change and Release Management Services. All Changes must be carried out in a planned and Approved manner, including identifying the specific configuration items and Services affected by the Change, validating County’s Approval for the Change, Implementing the Change, testing the Change, and having a back-out plan should the Change result in an unexpected state of the Service. Supplier’s Change and Release Management Services activities shall ensure that only correct, authorized, and tested Revisions are installed and that Changes are traceable and secure.

3.6.4.1 Change and Release Management Processes and Procedures

Supplier Change Management process will comprise an end-to-end solution to be Approved by County, and will be designed to minimize risk, cost, and business disruption to County and the County environment. All Changes will be made in accordance with the Change Control Process. Change Management includes the following process steps:

- (A) Request process;
- (B) Recording and tracking process;
- (C) Prioritization process;
- (D) Responsibility and assignment process;
- (E) Impact and risk assessment process;
- (F) Review and Approval process;
- (G) Implementation process;
- (H) Verification (test) process;
- (I) Release process; and
- (J) Closure process.

Supplier’s responsibilities for processes and procedures related to Change and Release Management Services include the tasks, subtasks, and Deliverables set forth in Table 40 (Change and Release Management Process and Procedures Responsibilities) below.

Table 40. Change and Release Management Process and Procedures Responsibilities

Change and Release Management Process and Procedures Responsibilities	
(1)	Participate in Change meetings. Supplier’s representative in Change meetings shall have the

Change and Release Management Process and Procedures Responsibilities	
	requisite authority to make commitments on behalf of Supplier.
(2)	Submit all proposed Changes in advance to County for Approval. Unless otherwise mutually agreed, all proposed Changes shall be submitted to County, at a minimum, on a three (3) month rolling calendar, with special notice for major Changes proposed on a longer term but requiring more preparation and Coordination.
(3)	At a minimum, each submitted proposed Change shall include all standard applicable information to provide effective Change and Release Management and Supplier shall include in each submission a schedule of potential Implementation dates for determination of any existing conflict with business events communicated to Supplier by County, including: <ul style="list-style-type: none"> (a) A description of the proposed Change; (b) A statement of purpose and justification for the proposed Change; (c) A list of Services and a communication plan for Authorized Users, Eligible Customers, and Third Party Vendors potentially affected by the proposed Change; (d) The proposed schedule, including Implementation dates and approximate times; (e) The proposed Implementation process; and (f) A statement of the potential risk, business impact, and/or complexity of the proposed Change.
(4)	Additionally, for all proposed Changes, Supplier shall include: a comprehensive end-to-end test plan (including clear Change acceptance criteria); notification and escalation lists per agreement of County and Supplier; and work-around plans and a comprehensive contingency plan, including a back-out plan and procedures (with specific criteria to initiate the execution of the back-out plan).
(5)	Review proposed Changes and schedules with County, obtain all necessary Approvals, and coordinate all Change and Release Management activities with County and all affected third parties to minimize disruption of normal business process.
(6)	Report the status of scheduled Changes including Maintaining a comprehensive list of Projects and dates.
(7)	Provide regular progress updates to County and other known affected third parties.
(8)	Verify compliance of the proposed Change with County's Policies, Procedures, and Guidelines.
(9)	Test Changes to the County environment and Resolve Incidents and Problems prior to production Implementation, including inter-operability testing.
(10)	Implement Changes to systems and activities required by moves, upgrades, replacements, and migrations.
(11)	Collect data and report to County on a weekly basis on every Change attempted, including the cause of any related Incidents and Problems, the measures taken to prevent recurrence, and whether the Change satisfied the documented Acceptance Criteria.
(12)	Maintain records of any and all Changes to both the production and test environments within County's environment.

Change and Release Management Process and Procedures Responsibilities	
(13)	Conduct post-implementation reviews on Changes, if requested by County.
(14)	Provide County with the ability to pre-Approve certain types of routine operational Changes. Such Approvals shall be documented in the Operations Manual.
(15)	Supplier shall not make any Changes that: <ul style="list-style-type: none"> (a) Adversely affects the function, performance, or efficiency of any of the Services; (b) Increases County’s fees, costs, expenses, or Charges of any kind in any manner not authorized under Exhibit P (Pricing); or (c) Exceeds the CIO’s approval authority under Section 40.11 (Delegated Authority) of the Agreement or would require an Amendment of the Agreement.

3.6.4.2 Change Advisory Board

A change advisory board (“**Change Advisory Board**” or “**CAB**”) will be comprised of representatives from both County and Supplier. The purpose of the CAB is to ensure all Asset and environmental configuration Changes are planned, analyzed, Implemented, tested, Approved, and seamlessly transitioned to a production support state. The CAB will meet on a regularly scheduled basis to discuss and Approve planned Changes. County has an established County-wide CAB process based upon industry Best Practices. Supplier will participate in County’s CAB process and present all Changes occurring and related to the Services. Supplier will also participate on an as requested basis with County on all other Changes occurring outside of Services under the direction of the County CAB.

Supplier shall track and integrate Changes with configuration Management, with Changes requiring routine review and configurations audited for accuracy. County will provide a Change Management system that Supplier shall use to provide a high degree of control and minimize disruptions caused by Change Implementation. County’s Change Management system will be used for all Changes to the County environment initiated by Supplier and/or County personnel.

Supplier responsibilities with respect to the CAB include the tasks, subtasks, and Deliverables set forth in Table 41 (CAB Responsibilities) below.

Table 41. CAB Responsibilities

CAB Responsibilities	
(1)	Coordinate Change and Release Management activities across all functions, County Locations, regions, and Third Party Vendors that provide services to County.
(2)	Use a central repository that contains all Change Management information (e.g., [REDACTED]).
(3)	Make any Changes necessary to provide the Services and to meet all required SLRs, based on County-Approved Change and Release Management procedures.
(4)	In an emergency, gain Approvals from the County CAB emergency committee, according to Change and Release Management procedures.
(5)	Designate and maintain clear ownership for individual Changes throughout the process.

3.6.4.3 Change and Release Management

Supplier will provide Change and Release Management Services with respect to, but not limited to, the following components of the County environment:

- (A) Equipment — All installations, decommissions, replacements, or other Changes, and re-location of machines in the data center, Network, and Service locations;
- (B) System Software — All system Software Changes, including modifications to the system operating code, access methods, program products, or common system support modules;
- (C) Infrastructure Software — All infrastructure Software Changes including modifications to database, web server, middleware, and Network;
- (D) Application Systems — All application system Changes (including Changes to Software used by Supplier to fulfill the Services);
- (E) Environment — Environmental Changes involving the facilities associated with the County Locations. This includes items such as power, air conditioning, chilled water, raised flooring, security, motor generator, and Voice and data telecommunications; and
- (F) Network/Security – All security Changes including switches, routers, data, and Authorized User access, and related policy changes.

Supplier’s responsibilities for Change and Release Management Services include the tasks, subtasks, and Deliverables set forth in Table 42 (Change and Release Management Responsibilities) below.

Table 42. Change and Release Management Responsibilities

Change and Release Management Responsibilities	
(1)	Utilize the County-provided Change Management system.
(2)	Update and Maintain Asset information as defined by County within the Change Management, CMDB, and Asset Management systems (dependency mapping), and the Service Management suite.
(3)	Participate in the regularly scheduled CAB meetings and represent upcoming Changes related to the Services.
(4)	Track and document the Version control as it relates to Release Management of infrastructure and tools Managed by Supplier.
(5)	Document potential Changes to the CAB, where required, including providing documentation on risk, impact, and back-out plans of those Changes and establish Release Management plans for major Changes.
(6)	Maintain a () schedule of planned updates, modifications, Projects, and Work Orders that may become Changes to the infrastructure within the Services.
(7)	Determine and identify all operational impacts to County Systems and County Systems availability associated with a Change.
(8)	Adhere to the County-provided framework to communicate and Coordinate impacts of the recommended Changes with all affected parties (e.g., site, agency, system, and device layer).
(9)	At County’s direction, schedule and conduct Change and Release Management meetings with affected parties to include review of planned Changes and results of Changes other than successful.

Change and Release Management Responsibilities	
(10)	Provide Change Documentation for each Change.
(11)	Enforce Documentation standards, task lists, and run sheet updates.
(12)	Provide Project Management Services and technical expertise to optimize available resources.
(13)	Comply with County's authorized and Approved scheduled Changes, or alteration of the schedule of Changes by County as requested.
(14)	Review Release Management details with County for Approval and alter as appropriate (e.g., back out plan, go/no go decision).
(15)	Notify County, Supplier's own organization, and other Third Party Vendors of Change timing and impact.
(16)	Facilitate and participate in information exchange between and among Supplier and the Third Party Vendors in order to drive an effective end-to-end Change Management Process.
(17)	Ensure Change and Release Management Services processes are utilized across all environments.
(18)	Implement Changes in accordance with the Change and Release Management processes and procedures and the Change Control Process.
(19)	Modify and update systems and Documentation impacted by Implemented Changes (e.g., CMDB, Asset Management system, cabling plan, Service catalog, disaster recovery plan)
(20)	Verify that Change met objectives and Resolve negative impacts from the Change.
(21)	Manage aggregate Changes and report results of aggregate Changes and impacts.
(22)	Review Change detail to ensure conformity to Change and Release Management process and all applicable County Policies, Procedures, and Guidelines.
(23)	Provide an audit trail of any and all Changes to the production environment to determine the Change made and the authorization to make the Change.
(24)	Integrate Change and Release Management processes with all other Service Management processes, including Incident Management, Problem Management, and configuration Management.
(25)	Secure and maintain Software images for Assets in a secured Software library and update CMDB per Change and Release Management process.
(26)	Document and justify out-of-CAB-cycle Changes related to Assets (e.g., emergency Changes) in accordance with County requirements and subject to County Approval.

3.7 Non-Recurring Initiatives and Business as Usual

3.7.1 Non-Recurring Initiatives

County may require Supplier to provide skilled resources on a Non-Recurring Initiative ("NRI") basis for various County initiatives. All Non-Recurring Initiatives shall be Managed by Supplier as Projects in accordance with Section 3.3 (Project Management Services) of this FSA, and require County direction and

Approval in accordance with Section 3 (Unapproved Work) of the Agreement and a Work Order in accordance with Section 2.2.1 (Work Orders Required) of this FSA. For Approved Non-Recurring Initiatives, County shall pay Supplier the amounts as set forth in the applicable Work Order. The rates specified in the rate card set forth in Exhibit P.4 (Supplier Rate Card) shall apply to all Non-Recurring Initiatives billed on a Time and Materials basis. All costs and fees related to preparing and delivering Work Orders, budgets, estimates, and other proposals related to Non-Recurring Initiatives are included in the Charges and shall not be separately chargeable to County. For Time and Materials hourly based Non-Recurring Initiatives, including Not to Exceed Work Orders, Supplier shall provide a fully loaded Supplier resource staffing commitments estimate (e.g., identification of FTE equivalent or hours for all resources), and for Fixed Fee based Non-Recurring Initiatives (Type 2 Work Orders), Supplier shall provide total project hours by Milestone, resource types, and a blended rate (Fixed Fee information must be sufficiently detailed to enable County to validate that the Charges as set forth in Exhibit P.4 (Supplier Rate Card) are being applied).

To the extent BAU Services or resources are required to support the Non-Recurring Initiative, such BAU Services or resources will not be separately charged as part of the Non-Recurring Initiative. Supplier’s responsibilities for Non-Recurring Initiatives include the tasks, subtasks, and Deliverables set forth in Table 43 (NRI Responsibilities) below.

Table 43. NRI Responsibilities

NRI Responsibilities
1. Present suitable candidates that meet the resource requirements in terms of background checks, roles, skills, task descriptions, timeframe, and locations provided by County for review and Approval by County.
2. Prepare proposed Project Staffing and Resource Management Plan for Work Orders for resources according to roles and rates on the rate card set forth in Exhibit P.4 (Supplier Rate Card).
3. Provide Approved resources at County-specified locations.
4. Communicate and ensure compliance with County Policies, Procedures, and Guidelines including Change Control Processes, Incident and Problem Management, operations, timing, and reporting, to Supplier-Managed resources.
5. Provide weekly reporting on resource performance and progress against the Approved Project plan.
6. Provide additional reports as set forth in the Work Order and as otherwise required by County.

3.7.2 Business as Usual

3.7.2.1 Service Requests

Activities that are an express or inherent, necessary, or a customary part of the Services (“**Business as Usual**” or “**BAU**”) are included in the Charges. Supplier shall perform the Services as identified in the Agreement, including the tasks, subtasks, and Deliverables described in FSAs, on an ongoing and continuous basis and as otherwise may be specifically requested by County, Authorized Users, Eligible Customers, Supplier Personnel, or Third Party Vendors from time to time through a Service Request and in accordance with County Policies, Procedures, and Guidelines. Service Requests shall be submitted to Supplier in and through the then-current process, system, and form designated by County from time to time and Supplier shall natively utilize County’s then-current Service Request system. The form of Service Request in place as of the Reference Date is attached hereto as Exhibit B.1 (Form of Service Request).

3.7.2.2 BAU Characteristics

Supplier and County anticipate that from time to time there will be work efforts that will arise for which guidance may be needed to differentiate between the status of such work as either BAU or a Non-Recurring Initiative. The characteristics and examples below are designed to assist the Parties in making those determinations.

Typically, BAU has some or all of the following characteristics:

- (A) Routine in nature;
- (B) Limited resources and duration that does not require a material delay or deferment of the performance of the existing Services;
- (C) Skill sets are a part of Supplier Personnel supporting the Services;
- (D) Is needed to maintain ongoing reliable and secure systems operations;
- (E) Is needed to maintain performance in accordance with the SLRs; and/or
- (F) Not a part of an agreed-upon effort that has been otherwise identified as a Non-Recurring Initiative.

Examples of activities that are BAU and those that are not include the following:

BAU	Not BAU
Adding or removing a switch, router, WAP, or other Network Component to an existing building to which Supplier is currently providing Services.	Designing and Implementing the infrastructure for a new building or adding a switch, router, WAP, or other Network Component to a floor or part of a floor that was not previously occupied by County and requires new Network Components.
Move users within the same building (move on the same floor or move from one floor to another)	Move users to a new County Location
Providing estimates for the infrastructure (e.g. Network Equipment, power and environmental, Circuit provisioning, wireless, security, structured cabling) for a new building.	The complete design and configuration work for a new building’s infrastructure.
Doing initial research, design, and sizing for a new business initiative (pre-initiation work, firm quote generation) in response to the County’s initial high-level business requirements as needed to develop a complete and executable Work Order.	Doing the complete design and requirements documents for a new initiative.
Replace/refresh current [REDACTED] with a new model from the same manufacturer.	Replace [REDACTED] with another manufacturer’s device.
Assist County team with a proof-of-concept as to a new technology or service prior to an appropriate new written authorization by the County to procure or acquire such new	Implementing a new production system.

BAU	Not BAU
technology or service, not to exceed ten (10) such efforts in each Contract Year.	
Provide and update Asset and configuration information about then-current environment.	Implement a new Asset Management database.
Extend already implemented [REDACTED] by enabling features on existing devices.	Implement [REDACTED] using new equipment.
Create heatmaps and WAP design for sites.	Implement WAPs for sites.
Provide Project Managers and Project Management for BAU Projects (e.g. refresh/upgrade of VPN remote access solution from the same manufacture).	Provide Project Managers and Project Management for NRI Projects (e.g. replace VPN remote access solution from a different manufacturer).
Coordinate and communicate with County Eligible Customers on Services, tasks, and activities, including Changes and obtaining Approvals. Communications to Authorized Users on Changes performed by Supplier.	N/A
Monitor RSS feeds and/or subscribe to notifications from cloud service providers on services and IP address changes and update firewall/Network configurations accordingly to avoid service disruptions.	N/A
Implement new firewall rules or Network Component configurations to enable new features, functions or capabilities, including new VLAN or new DMZ.	N/A
Clean up or consolidate firewall rules for Network performance optimization.	Port firewall rules to a new firewall solution from a different manufacturer, or Project to clean up and consolidate firewall rules to address systemic problem of firewall rules across the County enterprise existing as of the Commencement Date.
Clean up or consolidate web proxy policies for Network performance optimization.	Port web proxy policies to a new web proxy solution from a different manufacture, or Project to clean up and consolidate web proxy policies to address systemic problem of web proxy policies across the County enterprise existing as of the Commencement Date.
Provide training to Supplier Personnel on new technologies and solutions Approved by County that will be Implemented, Managed, Operated, or Maintained by Supplier.	N/A

BAU	Not BAU
Coordinate and Implement Circuit upgrade or new Circuit on existing devices, e.g. [REDACTED].	N/A
Document all Circuits in CMDB for County Locations. Must include site addresses, carrier, Circuit ID, Circuit type, and capacity.	N/A
Remove and retain County Asset tag from defective device, work with manufacturer on RMA, and re-apply County Asset tag on the replacement device. Keep track of serial number changes in CMDB.	N/A
Document County fixed Asset tag from end of live devices removed from production. Track location and status of end of life devices through County surplus process. Document device serial number, fixed Asset tag, and status in the CMDB.	N/A
Update switch port name and description as the device connected to the port changes.	N/A
Update switch port and floor plan with the work area (building, floor, and quadrant) or other agreed identifying information for input and upload into the E911 location database.	N/A
Coordinate and provide oversight for circuit provider dispatch, Third Party Vendors, and County Personnel to access County Locations in connection with Services.	N/A
Departmental penetration test [REDACTED].	[REDACTED] penetration test or application or web application penetration test not resulting from an Incident arising from a Supplier act or omission.
[REDACTED] vulnerability scan.	[REDACTED] vulnerability scan.
Threat intelligence briefing weekly and as necessary in connection with a Security Incident.	N/A
Work with Third Party Vendors to provide interoffice wire and cabling estimates and quotes in Approved County format.	Designing and Implementing the cabling plan for a new building.
Manage and Maintain the CMDB to ensure all items are accurately described.	N/A

3.7.2.3 BAU Projects

County may determine that certain BAU activities are best Managed as a Project. In the event County desires to have BAU activities Managed by Supplier as a Project, regardless of whether the activities have been submitted to Supplier through a Service Request, County shall inform Supplier of its intent to have Supplier Manage such activities as a Project. Examples of BAU activities that may be Managed as a Project include the following:

- (A) Process improvements/best practice Implementation;
- (B) Technology Refresh and Replenishment;
- (C) Asset Management; and
- (D) A campus bandwidth upgrade.

4. SERVICE ENVIRONMENT

4.1 Service Management and Life Cycle Services Tools

A listing and description of all Service Management tools is provided in Exhibit C (Service Management and Life Cycle Services Tools). Supplier is required to utilize the full functionalities and capabilities of the Service Management tools in connection with the Services and as directed by County. Supplier is required to provide a document to County describing functionalities and capabilities of the Service Management tools utilized by it in connection with Service delivery. Supplier shall update the functionality and capabilities document on a quarterly basis throughout the Term.

4.2 County Network and Voice Listing

A listing of current County Network and Voice communications site information is provided in Exhibit L.1 (County Locations and Location Tiers). Supplier shall update the County Network and Voice communications site information document after every Change and the County Network and Voice communications site information shall be jointly reviewed on a quarterly basis throughout the Term by Supplier and County.



EXHIBIT D (FUNCTIONAL SERVICE AREA MATRIX) – REVISION 3
TO THE
MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT D

FUNCTIONAL SERVICE AREA MATRIX

The responsibility matrix set forth below represents the Eligible Customers that shall be supported by Supplier as part of the Services.

Agency Code	Eligible Customer Name	Various Integration Requirements	Converged Network Services	Converged Network Services (Non-Standard)	Voice Communication Services	Voice Communications Services (Non-Standard)	Separate Cabling Voice Network Services
AC	Auditor - Controller						
ASR	Assessor						
BOS	Board of Supervisors						
CEO	County Executive Office						
CEO	Risk Management						
CEO	County Procurement Office						
OCIT	OC Information Technology						
CFCOC	Children & Families Commission of Orange County						
COB	Clerk of the Board						
COCO	County Counsel						
CREC	Clerk-Recorder						
CSS	Child Support Services						
DA	District Attorney						
DA	District Attorney Public Administrator						
DA	District Attorney Domestic Violence						
DPHD	Dana Point Harbor Department						
GJ	Grand Jury						
HCA	Health Care Agency						
HCA	Public Guardian						
HRS	Human Resource Services						
IA	Internal Audit						
JWA	John Wayne Airport						
OCCR	OC Community Resources						
OCEthics	Office of Campaign Finance and Ethics Commission						
OCIT	Data Center						
OCLL	Public Law Library						
OCPW	OC Public Works						

Agency Code	Eligible Customer Name	Various Integration Requirements	Converged Network Services	Converged Network Services (Non-Standard)	Voice Communication Services	Voice Communications Services (Non-Standard)	Separate Cabling Voice Network Services
OCS	OC Sheriff's Department						
OCS	OC Sheriff's Department Communications						
OCS	OC Sheriff's Department Court Operations						
OCWR	OC Waste & Recycling						
OIR	Office of Independent Review						
PROB	OC Probation Department						
PUBDEF	Public Defender						
ROV	Publishing Services						
ROV	Registrar of Voters						
SSA	Social Services Agency						
TTC	Treasurer-Tax Collector						

* **“WAN HAND OFF”** in the table above denotes that Supplier will provide Wide Area Network Services (e.g., voice and data Network Services and connectivity between (1) The core Network point of presence located at the [REDACTED] and [REDACTED]; and (2) The Eligible Customer specific sites for the designated Eligible Customer) but shall not be responsible for providing data Local Area Network connectivity. “WAN HAND OFF” occurs when data leaves the Eligible Customer’s edge device (the last device in the Network that is managed by the Eligible Customer) and is transported through the County WAN to the Internet or to another Eligible Customer (the same or different Eligible Customer) edge device. When “WAN HAND OFF” is indicated in the table above, the applicable Eligible Customers are responsible for all data LAN infrastructure (e.g., cabling, circuits, routers, switches, etc.) and management of their data LAN infrastructure within that specific facility.

Following initial design, installation, and configuration of the Converged Networks of the [REDACTED] ([REDACTED]), which as of the Reference Date include the [REDACTED],

[REDACTED], shall manage, maintain, operate and administer the Network on the [REDACTED] side of the Network demarcation. Supplier will manage enterprise WAN segments on the County side of the demarcation for the [REDACTED] agencies as part of the Services under Exhibit A.2 (Converged Network FSA) and otherwise under the Agreement.

**** “JWA COMPLEX BUSINESS SUPPORT” –**

Supplier shall, from [REDACTED] of each calendar day of a calendar year, provide the applicable Services specified in Exhibits A.1 (Integrated Requirements FSA), A.2 (Converged Network FSA) and A.4 (Security Operations Center FSA) of the Agreement to support JWA’s new Local Area Network components within JWA’s airport infrastructure that are or were implemented by Supplier pursuant to Work Order #NCY2-001, as amended (“NCY2-001”) and Work Orders #NCY3-020, NCY3-021, and NCY3-022, as amended.

As each of NCY2-001’s milestones one through four (each individually an “NCY2-001 Milestone”) receives Final Acceptance by County, Supplier shall commence providing the above Services applicable to the new Local Area Network components associated with each NCY2-001 Milestone. On July 1, 2023, Supplier shall

commence providing the above Services applicable to the new Local Area Network components implemented pursuant to Work Orders #NCY3-020, NCY3-021, and NCY3-022.

Notwithstanding any conflicting provisions of the Agreement the Parties agree as follows:

1. The above-described Services shall only be subject to the following SLRs and such SLRs shall only be subject to the Business Hours and Business Days measurement periods defined by the Agreement: (i.e., the extended support hours provided to JWA shall not apply to SLR calculations.)
 - a. SLRs 1 through 21; SLRs 26 through 44; and SLRs 54 through 58
2. It is agreed that for the thirty (30) calendar day period after the County's Final Acceptance of each Milestone in NCY2-001, if an RCA's findings are that an SLR failure arose from a JWA production environment issue or NCY2-001 related implementation for the new Local Area Network technology, a Charge Reduction shall not be applied.
3. The provisions of Section 3.4 (Consumption Governance) of Exhibit P (Pricing), Exhibit P.5 (Use Reconciliation), and Exhibit P.5.1 (Use Reconciliation Examples) of the Agreement are not applicable to the above described JWA Services. The Parties agree that if either Party notifies the other of a substantive modification to the business requirements of JWA or JWA's Supplier supported infrastructure, the Parties shall negotiate in good faith, adjustments to the JWA Services Charges before any modification is made.



EXHIBIT K (KEY PERSONNEL) – REVISION 6

TO THE

MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT K
KEY PERSONNEL

No.	Key Personnel Role	Resource / Title	Contact
Supplier Key Personnel			
1.	Program Manager	Donald Perrier Program Manager	Telephone: 619-719-6807 Email: donald.perrier@saic.com
2.	Deputy Program Manager	Phil Nguyen Deputy Program Manager	Telephone: 949-870-0223 Email: Phillip.T.Nguyen@saic.com
3.	SOC Program Manager	Kathy Heaton SOC Program Manager	Telephone: 714-450-0040 Email: katherine.heaton@saic.ocgov.com
4.	SOC Senior Engineer	Guido Solares* SOC Senior Engineer *By the agreement of the Parties, Guido Solares is exempt from the requirement to work Full Time on the County account.	Telephone: 949-288-3728 Email: Guido.Solares@saic.ocgov.com
5.	Network	Eric Whitten Network Services/Service Delivery Manager	Telephone: 714-714-9673 Email: eric.whitten@saic.com
6.	Voice	Kevin Adkins Voice Services/Service Delivery Manager	Telephone: 949-299-5639 Email: kadkins@burwood.com
County Key Personnel			
7.	County IT Services Governance Manager	Ed Althof Assistant CIO and Chief Technology Officer	Telephone: 714-834-3069 Email: ed.althof@ocit.ocgov.com



EXHIBIT P.1.1 (MONTHLY FIXED FEE PAYMENTS) – REVISION 4
TO THE
MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT P.1.1

MONTHLY FIXED FEE PAYMENTS

All Charges stated in this Exhibit P.1.1 (Monthly Fixed Fee Payments) include the Charges for the Integrated Requirements Services as set forth in Exhibit A.1 (Integrated Requirements FSA). The year to year price improvements required under Section 4 (Year on Year Improvement) of Exhibit P (Pricing) and described in Exhibit P.6 (Year to Year Price and Performance Improvements) are reflected as reductions in the Monthly Fixed Fees set forth in this Exhibit P.1.1 (Monthly Fixed Fee Payments).

Month No.	Month	Converged Network Services (with Integrated Requirements Services)	Voice Communication Services (with Integrated Requirements Services)	Security Operations Center Services (with Integrated Requirements Services)	Total (Monthly Fixed Fee)
Contract Initiation					
1.	October 2018				
2.	November 2018				
3.	December 2018				
4.	January 2019				
5.	February 2019				
Commencement Date: March 17, 2019 for Converged Network and Security Operations Center Services					
6.	March 2019	\$233,362	\$336,000*	\$136,955	\$706,317
7.	April 2019	\$466,724	\$336,000*	\$273,910	\$1,076,634
8.	May 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
9.	June 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
Commencement Date: May 15, 2019 for Voice Communications Services					
10.	July 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
11.	August 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
All Transition-In Tasks Complete and Final Acceptance by County					
12.	September 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
13.	October 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
14.	November 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
15.	December 2019	\$466,724	\$377,772	\$273,910	\$1,118,406
16.	January 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
17.	February 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
18.	March 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
19.	April 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
20.	May 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
21.	June 2020	\$466,724	\$377,772	\$273,910	\$1,118,406
Contract Year 1 Total		\$7,234,222	\$5,960,808	\$4,245,605	\$17,440,635
22.	July 2020	\$458,943	\$371,664	\$273,516	\$1,104,123
23.	August 2020	\$458,943	\$371,664	\$273,516	\$1,104,123

Month No.	Month	Converged Network Services (with Integrated Requirements Services)	Voice Communication Services (with Integrated Requirements Services)	Security Operations Center Services (with Integrated Requirements Services)	Total (Monthly Fixed Fee)
24.	September 2020	\$458,943	\$371,664	\$273,516	\$1,104,123
25.	October 2020	\$458,943	\$371,664	\$273,516	\$1,104,123
26.	November 2020	\$458,943	\$371,664	\$273,516	\$1,104,123
27.	December 2020	\$458,943	\$371,664	\$273,516	\$1,104,123
28.	January 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
29.	February 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
30.	March 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
31.	April 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
32.	May 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
33.	June 2021	\$458,943	\$371,664	\$273,516	\$1,104,123
Contract Year 2 Total		\$5,507,316	\$4,459,968	\$3,282,192	\$13,249,476
34.	July 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
35.	August 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
36.	September 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
37.	October 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
38.	November 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
39.	December 2021	\$479,484	\$382,189	\$267,964	\$1,129,637
40.	January 2022	\$479,484	\$382,189	\$267,964	\$1,129,637
41.	February 2022	\$479,484	\$382,189	\$267,964	\$1,129,637
42.	March 2022	\$479,484	\$382,189	\$267,964	\$1,129,637
43.	April 2022	\$479,484	\$382,189	\$267,964	\$1,129,637
44.	May 2022	\$479,484	\$382,189	\$267,964	\$1,129,637
45.	June 2022	\$479,480	\$382,189	\$267,964	\$1,129,633
Contract Year 3 Total		\$5,753,804	\$4,586,268	\$3,215,568	\$13,555,640
46.	July 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
47.	August 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
48.	September 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
49.	October 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
50.	November 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
51.	December 2022	\$475,156	\$391,374	\$267,642	\$1,134,172
52.	January 2023	\$475,156	\$391,374	\$267,642	\$1,134,172
53.	February 2023	\$475,156	\$391,374	\$267,642	\$1,134,172
54.	March 2023	\$475,156	\$391,374	\$267,642	\$1,134,172
55.	April 2023	\$475,156	\$391,374	\$267,642	\$1,134,172
56.	May 2023	\$475,156	\$391,374	\$267,642	\$1,134,172

Month No.	Month	Converged Network Services (with Integrated Requirements Services)	Voice Communication Services (with Integrated Requirements Services)	Security Operations Center Services (with Integrated Requirements Services)	Total (Monthly Fixed Fee)
57.	June 2023	\$475,152	\$391,374	\$267,642	\$1,134,168
Contract Year 4 Total		\$5,701,868	\$4,696,488	\$3,211,704	\$13,610,060
58.	July 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
59.	August 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
60.	September 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
61.	October 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
62.	November 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
63.	December 2023	\$496,729	\$392,095	\$270,005	\$1,158,829
64.	January 2024	\$496,729	\$392,095	\$270,005	\$1,158,829
65.	February 2024	\$496,729	\$392,095	\$270,005	\$1,158,829
66.	March 2024	\$496,729	\$392,095	\$270,005	\$1,158,829
67.	April 2024	\$496,729	\$392,095	\$270,005	\$1,158,829
68.	May 2024	\$496,729	\$392,095	\$270,005	\$1,158,829
69.	June 2024	\$496,723	\$392,095	\$270,005	\$1,158,823
Contract Year 5 Total		\$5,960,742	\$4,705,140	\$3,240,060	\$13,905,942
70.	July 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
71.	August 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
72.	September 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
73.	October 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
74.	November 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
75.	December 2024	\$580,028	\$410,475	\$278,829	\$1,269,332
76.	January 2025	\$580,028	\$410,475	\$278,829	\$1,269,332
77.	February 2025	\$580,028	\$410,475	\$278,829	\$1,269,332
78.	March 2025	\$580,028\$559,143	\$410,475	\$278,829	\$1,269,332
79.	April 2025	\$580,028\$559,143	\$410,475	\$278,829	\$1,269,332
80.	May 2025	\$580,028	\$410,475	\$278,829	\$1,269,332
81.	June 2025	\$580,028	\$410,475	\$278,829	\$1,269,332
Contract Year 6 Total		\$6,960,336	\$4,925,700	\$3,345,948	\$15,231,984
82.	July 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
83.	August 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
84.	September 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
85.	October 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
86.	November 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
87.	December 2025	\$596,509	\$412,605	\$288,115	\$1,297,229
88.	January 2026	\$596,509	\$412,605	\$288,115	\$1,297,229

Month No.	Month	Converged Network Services (with Integrated Requirements Services)	Voice Communication Services (with Integrated Requirements Services)	Security Operations Center Services (with Integrated Requirements Services)	Total (Monthly Fixed Fee)
89.	February 2026	\$596,509	\$412,605	\$288,115	\$1,297,229
90.	March 2026	\$596,509	\$412,605	\$288,115	\$1,297,229
91.	April 2026	\$596,509	\$412,605	\$288,115	\$1,297,229
92.	May 2026	\$596,509	\$412,605	\$288,115	\$1,297,229
93.	June 2026	\$596,509	\$412,605	\$288,115	\$1,297,229
Contract Year 7 Total		\$7,158,108	\$4,951,260	\$3,457,380	\$15,566,748
Seven (7) Year Initial Term Total		\$44,276,396	\$34,285,632	\$23,998,457	\$102,560,485
94.	July 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
95.	August 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
96.	September 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
97.	October 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
98.	November 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
99.	December 2026	\$613,200	\$414,762	\$297,518	\$1,325,480
100.	January 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
101.	February 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
102.	March 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
103.	April 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
104.	May 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
105.	June 2027	\$613,200	\$414,762	\$297,518	\$1,325,480
Contract Year 8 Total		\$7,358,400	\$4,977,144	\$3,570,216	\$15,905,760
106.	July 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
107.	August 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
108.	September 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
109.	October 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
110.	November 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
111.	December 2027	\$630,424	\$416,988	\$307,222	\$1,354,634
112.	January 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
113.	February 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
114.	March 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
115.	April 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
116.	May 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
117.	June 2028	\$630,424	\$416,988	\$307,222	\$1,354,634
Contract Year 9 Total		\$7,565,088	\$5,003,856	\$3,686,664	\$16,255,608
Two (2) Year Extended Term Total		\$14,923,488	\$9,981,000	\$7,256,880	\$32,161,368
Nine (9) Year Term Total		\$59,199,884	\$44,266,632	\$31,255,337	\$134,721,853

* Voice Communications Services (with Integrated Requirements Services) Charges for this month represent Charges for migrated Voice County Locations and County Authorized Users in production. Exhibit T.3 (Transition-In Plan) sets forth the County Locations migration schedule.



EXHIBIT P.2 (PRICING LIMITS) – REVISION 4 TO THE
MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT P.2

PRICING LIMITS

1. CONTRACT SUM

Absent an Amendment to the Agreement Approved by the Board in accordance with the terms of the Agreement (including an Amendment to extend the Term of this Agreement pursuant to Section 1.2 (Extended Term) of the Agreement), the maximum monetary amount payable by County under this Agreement, as specified in Section 1 (Introduction) of Exhibit P (Pricing), shall be the Contract Sum amount set forth below. The Contract Sum includes the Reserved Dollars set forth in Section 2 (Reserved Dollars) below and all other Charges set forth under the Agreement.

Item	Amount
Monthly Fixed Fees (Initial Term Total)	\$102,560,485
Two Year Extended Term Total	\$32,161,368
Sheriff Voice Refresh Charges	\$657,900
Fixed Transition-In Fees	\$6,235,000
Reserved Dollars for Optional Work	\$10,500,000
Contract Sum	\$152,114,753

2. RESERVED DOLLARS

Absent an Amendment to the Agreement Approved by the Board in accordance with the terms of the Agreement, the maximum monetary amount payable by County under this Agreement in connection with the provision of Optional Work, as specified in Section 7 (Optional Work) of Exhibit P (Pricing), shall be the Reserved Dollars amount set forth below.

Reserved Dollars
\$10,500,000



EXHIBIT P.3 (UNIT PRICING) – REVISION 3

TO THE

MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT P.3

UNIT PRICING

The per unit costs and rates stated in this Exhibit P.3 (Unit Pricing) are effective during the Term and are only for use in the calculation of unit based pricing in connection with pricing by Supplier for Optional Work (e.g., Work Orders), Benchmarking as provided under the Agreement, and in the event a Service or part of a Functional Service Area is terminated. For the avoidance of doubt, the unit pricing in this Exhibit P.3 (Unit Pricing) has no relevance to or impact on the Monthly Fixed Fees for the Services under the Agreement set forth in Exhibit P.1.1 (Monthly Fixed Fee Payments) and the calculation of any Use Reconciliation as described in Exhibit P.5 (Use Reconciliation).

No.	Resource Unit	Unit of Measure	Initial Units (July 2018 Actual)	Current Units (As of February 2022)	Monthly Per Unit Pricing for Converged Network Services (with Integrated Requirements Services)	Monthly Per Unit Pricing for Voice Communication Services (with Integrated Requirements Services)	Monthly Per Unit Pricing for Security Operations Center Services (with Integrated Requirements Services)	Total Per Unit Monthly Pricing
1.		Qty of Circuits			\$40	\$7		\$47
2.		Qty of routers			\$355	\$0		\$355
3.		Qty of switches			\$234	\$0		\$234
4.		Qty of devices			\$300			\$300
5.		Qty of Access Points			\$40			\$40
6.		Qty of VPN users			\$7			\$7
7.		Qty of devices			\$450			\$450
8.		Qty of P-to-P VPNs			\$375			\$375
9.		Fixed					\$242,875	\$242,875
10.		Qty of firewalls			\$1,000			\$1,000
11.		Qty of proxy servers			\$450			\$450
12.		Qty of IPS/IDS devices					\$400	\$400
13.		Qty of devices			\$750			\$750
14.		Qty of devices			\$600			\$600
15.		Qty of devices			\$750			\$750
17.		Qty of Monthly IMACs			\$250	\$0	\$0	\$250
18.		Qty of Monthly IMACs			\$700	\$0	\$0	\$700
19.		Qty of UPSs			\$75	\$0		\$75
20.		Qty of IP-PBX handsets				\$7		\$7
21.		Qty of Softphone				\$20		\$20
22.		Qty of Voicemail				\$4		\$4
23.		Qty of Auto Attendants				\$100		\$100
24.		Qty of Sites				\$750		\$750
25.		Qty of Agency				\$500		\$500
26.		Qty of Queues				\$100		\$100
27.		Qty of Agents				\$5		\$5

ATTACHMENT H

No.	Resource Unit	Unit of Measure	Initial Units (July 2018 Actual)	Current Units (As of February 2022)	Monthly Per Unit Pricing for Converged Network Services (with Integrated Requirements Services)	Monthly Per Unit Pricing for Voice Communication Services (with Integrated Requirements Services)	Monthly Per Unit Pricing for Security Operations Center Services (with Integrated Requirements Services)	Total Per Unit Monthly Pricing	
28.	[REDACTED]	Qty of Systems	[REDACTED]	[REDACTED]		\$500		\$500	
29.		Qty of Systems				\$500		\$500	
30.		Qty of Agents				\$10		\$10	
31.		Qty of devices				\$13		\$13	
32.		Qty of devices				\$700		\$700	
33.		Qty of devices				\$15		\$15	
34.		Qty of routers				\$275		\$275	
35.		Qty of Monthly IMACs				\$0	\$25	\$0	\$25
36.		Qty of Monthly IMACs				\$0	\$30	\$0	\$30
37.		JWA Complex Business Support			Fixed		\$55,385	\$0	\$0
38.	[REDACTED] Focused Support	Fixed		\$0	\$21,600	\$0	\$21,600		



EXHIBIT W (COUNTY POLICIES, PROCEDURES, AND GUIDELINES)

REVISION 2

TO THE

MANAGED SERVICES NETWORK, VOICE, AND SECURITY AGREEMENT

EXHIBIT W**COUNTY POLICIES, PROCEDURES, AND GUIDELINES**

No.	Name	Document Reference
1.	Cyber Security Policy	County Cybersecurity Policy
2.	Cyber Incident Reporting	County Cyber Incident Reporting Policy
3.	Information Technology Usage	Information Technology Usage Policy
4.	Patch Management	County Patch Management Policy
5.	Security Review and Approval Process	County Security Review and Approval Process
6.	Use of Administrative Accounts	Use of Administrative Accounts by System Administrators and End User
7.	User Provisioning	User Provisioning Policy
8.	Variance Review and Approval Process	County Variance Review and Approval Process Policy
9.	Vulnerability Management	County Vulnerability Management Policy
10.	Alcohol and Drug-Free Workplace	County Code of Conduct
11.	Employee Lactation Accommodation	Employee Lactation Accommodation Policy
12.	Equal Employment Opportunity (EEO) and Anti-Harassment	EEO and Anti-Harassment Policy and Procedure
13.	Health Insurance Portability and Accountability Act (HIPAA)	HIPAA Policies Manual
14.	Legal Hold	Legal Hold Policy
15.	Levine Act Policy	Levine Act Policy
16.	Record Retention Policy	County Records Management Policy
17.	Safety and Loss Prevention Policy and Procedure	<ul style="list-style-type: none"> • 306 County Safety and Loss Prevention Policy and Procedure • High Risk Categories
18.	Safety Procedures	Safety and Loss Prevention
19.	Social Media Use Policy and Procedure	County Social Media Participation Guidelines
20.	Surplus Policy	County Surplus Personal Property
21.	Telecommuting	Telecommuting Policy
22.	Ad Hoc Report Requests	I-AHR-Ad Hoc Report Requests PROD; V-OPS-Reports Requests PROC
23.	Document Management	I-CM-Portfolio Document Management Prod
24.	Service Level Management	I-SLR-Service Level Requirement Management Procedure
25.	Incident Management	I-IM-Incident Management Proc; I-IM-Major Incident Handling Prod
26.	Problem Management	I-PRB-Problem Management Proc; I-PRB-Problem Management Prod; I-PRB-Root Cause Analysis Prod

No.	Name	Document Reference
27.	Change Management	I-CHM-Change Management Proc; I-CHM-Change Management Prod
28.	Release Management	I-RM-Release Management Process
29.	Capacity Management	I-CAPM-Capacity Management Proc; I-CAPM-Capacity Management Prod
30.	Configuration Management	I-CM-Configuration Management Proc; I-CM-Configuration Management Prod
31.	Availability Management	I-AM-Availability Management Proc; I-AM-Availability Management Prod
32.	Asset Life Cycle Management	I-ASSM-Asset Management Proc; I-ASSM-Asset Management PROD
33.	On-Boarding / Off-Boarding / Building Access Procedures	I-PPS-User Enrollment Procedure; I-PPS-User Disenrollment Procedure; IS-OASA-Onboarding and Additional Site Access
34.	Semi-Annual Customer Satisfaction Survey Review Process	I-CSAT-Semi-Annual Customer Satisfaction Survey Review PROC
35.	IT Service Continuity Management	SAIC SOC Business Continuity and Disaster Recovery Plan; V-DR-Disaster Recovery Testing and Failover
36.	Project Management	P-PM-Work Order Proc
37.	Work Order / Service Request Handling Procedure	I-SROIT_Management_PROD
38.	Network: Monitoring and Alerting	N-NS-Network Monitoring and Performance Tools-PROD
39.	Network: Diagram and Documentation Standards	N-ND-Network Drawing N-CS-Cabling Standards
40.	Network: Load Balancer	N-LB-Load Balancer-PROD
41.	Network: IP & Domain Services	N-IPAM-IP Address Management-PROD; N-DHCP-Dynamic Host Configuration-PROD; N-DNS-Domain Name System-PROD
42.	Network: Configurations Standards and Management	N-NS-Network Device Standards; N-NTP-Network Time Protocol-PROD
43.	Network: Wireless Networking & Configuration	N-WLAN-Wireless LAN Management-PROD
44.	Network: Security Services Configuration	N-SSC-[REDACTED] Allocation-PROD; N-SSC-[REDACTED]-PROD; N-SSC-[REDACTED] Removal of Users-PROD; N-SSC-[REDACTED] Monthly Billing-PROD
45.	Network: Firewall Rule Configuration	N-FC-Firewall Rule Request
46.	Network: Security Appliance Management (NDLP / HDLP, IDS / IPS)	N-SAM-General Security Appliance Management-PROD
47.	Network: Remote Access	N-RA-[REDACTED] Appliance Upgrade-PROD; N-RA-[REDACTED] PROD; N-RA-[REDACTED]

No.	Name	Document Reference
		RDP-PROD; N-RA- -PROD
48.	Network: Engineering tools access and standards	N-ETAS-Engineering Tools Access and Standards
49.	Voice: Backup – Strategy, Periodicity, Storage Retention, Storage Responsibility, and Testing	V-DR-Backup Strategy PROC
50.	Voice: Logging - Strategy, Periodicity, Storage Retention, Storage Responsibility, and Testing	V-OPS-Logging PROC
51.	Voice: Capacity Management/Contact Center Capacity Management	V-OPS-Capacity Management PROC
52.	Voice: Request Management	V-OPS-Request Fulfillment PROC; V-OPS-Request Fulfillment – IMAC PROC
53.	Voice: Escalation Procedure	V-OPS-Monitoring and Alerting-PROC
54.	Voice: Management of Contact Center Services	V-OPS-Management of Contact Services PROC
55.	Voice: Assignment of DIDs / Maintaining Dial Plans	V-OPS-Voice Assignment of DIDs PROC
56.	Voice: Management of Voicemails / Messages / Storage / Retention / Retrieval Process	V-OPS-Management of Voicemails PROC
57.	Voice: Building Turn up Process	V-MIG-Voice Migration and Building Turn Up PROC
58.	Voice: Password Reset and Delivery Process	V-VM-Password Reset PROC
59.	Voice: Patch Management	V-OPS-Patch Management PROC
60.	Voice: QA Process	V-QA-Quality Assurance PROC
61.	Voice: Start of Shift/End of Shift Procedures	V-OPS-Voice Services Operations Management PROC
62.	Security Operations Center (SOC): Information Security Management (Concept of Operations Manual (ConOps), SOC System Security Procedure)	SOC Security Plan
63.	Security Operations Center (SOC): Cyber Threat Management Communication Mechanisms	Cyber Threat Management Communication Mechanisms
64.	Security Operations Center (SOC): SOC Playbook	SAIC SOC Playbook
65.	Security Operations Center (SOC): Vulnerability Management	SAIC-County Vulnerability Management Program; SECOPS-CVAP- County Vulnerability Advisory Process
66.	Security Operations Center (SOC): Digital Forensics and Chain of Custody	Forensics Laboratory Processes and Procedures
67.	Security Operations Center (SOC): Teleworking Guidelines	Place of Performance, teleworking guidelines