Public Safety Notification System

Statement of Work

Version 1.5 • Date: March 17, 2020

SOW Document Change Control

Version	Change Description	Author	Date
1.0	Initial draft	MD	12/11/2019
1.1	Business Team Revision	MM/ KE	12/17/2019
1.2	SPIDR Revision	MD	01/13/2020
1.3	SPIDR Revision	MD	01/16/2020
1.4	SPIDR Revision – Mark43 RMS	MD	03/12/2020
1.5	Final Executable Version	MD	03/17/2020

Public Safety Notification System

SOW Signoff

DATE: March 17, 2020

Approval of the SOW indicates an understanding of the purpose and content described in this deliverable. By signing this deliverable, each individual agrees work should be initiated on this project and necessary resources will be committed as described herein.

Approver Name	Title	Signature	Date
Rahul Sidhu	Executive Sponsor – SPIDR Tech Chief Executive Officer	DocuSigned by: Rahul Sidhu 8936EAB08DCD4E3...	3/17/2020
Mandy Duffy	Executive Sponsor- SPIDR Tech Chief Revenue Officer	DocuSigned by: Mandy Duffy 3906864AAE19453...	3/17/2020

Table of Contents

1. Project Background

The City of San Antonio released an RFCSP for police communications. SPIDR Tech responded to the RFCSP with a proposal for the requirements.

2. Project Objectives

The San Antonio Police Department would like to provide enhanced customer service to their customers. This project's objectives include the following:

- Interface of the SPIDR Tech platform with San Antonio PD's Mark43 Records Management System (RMS)
- Interface of the SPIDR Tech platform with San Antonio PD's Computer Aided Dispatch (CAD)
- Launch of the SPIDR Tech platform, including the Patrol Module, Investigations Module, and the Insights Module.
    - The Patrol Module contains the following message types:
        - CAD Autoresponder Message: This message is sent via text message to a caller of pre-determined CAD Incident types. This message can contain the incident number and other helpful information.
        - Delayed Arrival Message: This message is sent by text message. This message can be configured to send after X minutes of a call being "in queue" but an officer has not yet marked themselves as "on scene." This message is designed to keep callers updated during busy call times.
    - The Investigations Module contains the following message types:
        - Victim Acknowledgement Message: This message is sent to the victim after a report has been approved. The message can be sent via text and/or email, and can contain variables such as the report number, officer's name, resources, and next steps.
        - Arrest Notification: This message is sent to the victim after an arrest has been made as it pertains to their report. This message is delivered via text and/or email, and can contain the date/time of arrest, the arrestee's name, and other relevant information.
        - Investigations Update Messages: These messages can be triggered based on pre-determined case status changes. The messages can be sent via text and/or email to the victim. These messages can contain the Detective's name and contact information, the report number, and important information about the next steps for that particular case status type.
    - The Insights Module contains the following message types:
        - CAD Caller Survey: The CAD Survey can be delivered by text message and is designed to ask questions regarding the caller's experience.
        - Victim Survey: This message can be delivered by text message and/or email and is designed to ask for feedback regarding the victim's experience.

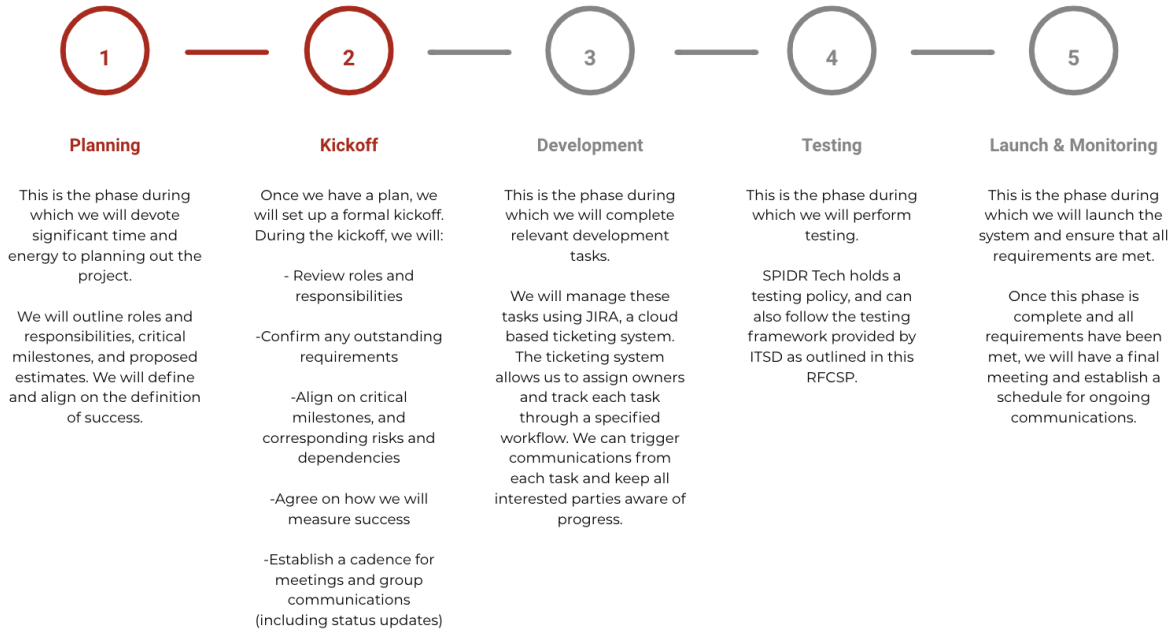
- On-going maintenance and support of the SPIDR Tech platform.

3. Project Execution Approach and Methodology

Our project management approach for the Interface and implementation of the SPIDR Tech suite for SAPD will borrow from the Agile methodology, which is the guiding methodology we use internally to manage our in-house development process. The primary benefit of the Agile methodology is that it is iterative and collaborative. These are key characteristics of our approach because we believe that we can make the most significant progress working together and communicating frequently.

We will break down the engagement into five distinct project phases:

See overview here:



A project manager will be assigned to this engagement and they will be responsible for all communications to relevant stakeholders about progress, risks and/or blockers.

Background on the Project Manager

SPIDR Tech's Project Manager will be Mandy Duffy, SPIDR Tech's Chief Revenue Officer. Mandy is head of Sales and Customer Success for SPIDR Tech and has project managed all of SPIDR Tech's deployments, including the previous deployment of SPIDR Engage to the San Antonio Police Department. Mandy will also oversee the monthly analysis for SAPD, and will tailor the monthly report to SAPD's specific needs.

San Antonio will have access to a direct email address and phone number for Mandy Duffy, who will be the main point of contact for the project and for account management after the deployment has been completed and the service is live.

An example of a typical deployment for an agency of your size can be found below:

	Planning	Kickoff	Development	Testing	Launch & Monitoring
Action Items: Customer	Provide personnel and input on the project plan Participation in meetings from key stakeholders	Provide executive leadership for official project kickoff	Provide designated development resources to build integration between RMS/CAD <> SPIDR Tech Platform Develop templates, surveys, configuration details and default setup for the platform Enable white label domain Provide list of users, including email distribution list for reporting	Verify instance data is consistent with database records Verify messages are consistent with requirements	Review reports Provide feedback in quarterly meetings
Action Items: SPIDR Tech	Present all development options Provide guidance on best practices Facilitate all meetings and manage follow ups	Coordinate and facilitate kickoff to begin work	Provide designated development resources to support and build the integration Configure the instance according to customizations in the spec Host template workshop meetings to facilitate content development Complete and verify action items. Host weekly check-in meetings	Verify instance data Address open issues, as needed End to end testing of messaging system	Verify instance data Address open issues, as needed End to end testing of entire messaging system
Milestones	Project plan is created and approved	Kickoff meeting is completed	Integration is complete and SAPD has access to finalize content.	Acceptance criteria is reached and we are launch-ready	Launch is successful Availability is met

Communications

We will have a weekly (or bi-weekly) check in call with relevant stakeholders. We will send relevant documentation before the call and will use this time to make sure that all stakeholders understand progress and can provide any updates to the team.

4. Project Scope

SPIDR Tech was recently selected as the provider for the Public Safety Notification System. SPIDR Tech shall install, develop, configure, customize, test and deploy the software or System.

4.1 In Scope

The scope of this engagement includes all activities required to support the deliverables and activities including: Professional Services, Discovery or Design workshops, Project Management, Software Installation, Customization, Configuration, Testing, Training, Knowledge Transfer, Interface with third party systems, and Technical Support. Anything that is included in the

Request for Competitive Sealed Proposal (RFCSP), Requirements Traceability Matrix (RTM) and Proposal document is considered in scope.

4.1.1 Professional Services

SPIDR Tech will provide Project management activities for the entire project from initiation to close.

The City of San Antonio will provide a single point of contact for coordination of effort required by San Antonio employees.

4.1.2 Discovery and Design Sessions or Workshops

SPIDR Tech will rely on the City of San Antonio to provide its "As-Is" process documentation for a SPIDR Tech Business Consultant to review. Upon review, SPIDR Tech will conduct discovery sessions with representatives from each division and the project team to develop the "To-Be" processes to be implemented in the system, including any Interfaces with the Records Management System and Computer Aided Dispatch System.

4.1.3 Software Installation

The following tasks will be completed as a part of the Implementation effort:

Example:

1. Begin sending test data to SPIDR Tech from the Mark43 RMS testing instance. In an agile methodology, move this forward into Acceptance Testing as soon as possible.
2. SPIDR Tech and COSA, in collaboration, will install an Interface (examples: PowerShell script, XML export, JSON file export directly to SPIDR Tech's API) to export the required data from San Antonio Police Department's CAD to SPIDR Tech's Restful API. Cannot be developed against production. Will need to be tested in the training environment.
3. Using SPIDR Tech's examples, COSA will develop and approve all message content.
4. Using SPIDR Tech's examples, COSA will determine configuration details and desired setup for the configurable portions of the platform.
5. Using SPIDR Tech's provided CNAME records, COSA will enable the white labeled domain.
6. COSA will provide list of users (divisionally or otherwise), including email distribution lists for reporting.

7. SPIDR Tech will provision the San Antonio Police Department's instance of the SPIDR Tech platform.
8. SPIDR Tech will create all user accounts for the list of staff provided by COSA.
9. SPIDR Tech will perform the remaining portions of the "Extract, Transfer, Load" (ETL) in order to utilize the integrated CAD & RMS data to power the SPIDR Tech platform.
10. SPIDR Tech and COSA will perform Quality Assurance checks on data.

4.1.4 Software Configuration

The following components or configuration will be provided after successful installation of the base software components:

- Configure the SPIDR Tech platform to reflect the required COSA configuration requirement
- COSA approves Mark43 to provide SPIDR Tech with an API key to test RMS data.
- SPIDR Tech configure Interface to RMS
- Collaboratively configure the PowerShell or JSON Interfaces to include the necessary CAD data.
- Configure all message templates to include COSA messaging.
- Configure the branding of messages to include COSA colors and badge.
- Define and upload the initial dataset from COSA/SAFD. This will require data mapping and verification.
- Define and create divisional boundaries within the data sets, including divisional staff and contact numbers.
- Provision user accounts as specified by COSA

4.1.5 Software Customization

The following component's customization will be provided after successful installation of the base software components:

There is no customization of the SPIDR Tech platform planned for this Interface.

4.1.6 Interface

SPIDR Tech to conduct discovery Interface sessions and will result in an Interface document deliverable, which will detail the design of the Interfaces.

1. Interface with required Records Management System data, including Case Management data
2. Interface with required Computer Aided Dispatch data

4.1.7 Testing

City of San Antonio to perform quality assurance testing of data. SPIDR Tech to perform Unit, Interface, System and User Acceptance testing for this project. Testing is further defined in section 6.

4.1.8 Training

SPIDR Tech to provide knowledge transfer sessions in a train-the-trainer and administrative training method. Training is further defined in section 7.

4.1.9 Reports

SPIDR Tech to develop 12 platform performance "Digest" reports, delivered on a monthly basis.

After the platform goes live, ad-hoc reporting will be available to COSA in the following methods:

"Spotlight" dashboard with ad-hoc spreadsheet data download available. A user with the proper permissions can download data in a spreadsheet format at any time via the dashboard. Spotlight also allows for time-based reporting and is interactive within the platform. A user with the proper permissions can utilize this dashboard anytime.

4.1.10 Data Transfers, Migration, Conversion and mapping

1. SPIDR Tech will receive a secure API key from Mark43 to export the required data from San Antonio Police Department's Mark43 RMS. SPIDR Tech will use this API key to send data to SPIDR Tech's RESTful API.
2. SPIDR Tech or COSA will install an Interface (examples: PowerShell script, XML export, JSON file export directly to SPIDR Tech's API) to export the required data from San Antonio Police Department's CAD to SPIDR Tech's RESTful API.

4.1.11 Go live technical support and Warranty

SPIDR Tech to provide a 90-day warranty of the platform after go-live.

SPIDR Tech to provide 365 days of post go live technical support after go-live, and this support will be outlined in the SLA.

4.1.12 System Security Plan

SPDIR Tech shall assist COSA in the development of the system security plan and where identified will assist in security testing.

4.1.13 Service Level Agreement

SPIDR Tech provides SLA to the COSA prior to Go-live. The SLA will be completed and signed at the earliest opportunity during the project. SLA is further defined in section 14.

4.1.14 Proposal and SOW discrepancies

Throughout the project milestones, SPIDR Tech and the City of San Antonio (COSA) will reconcile the requirements to the actual application or system. Should it be determined that a discrepancy, or discrepancies, exist between the SOW and the proposal, COSA will retain the privilege of determining which solution best meets the requirements. Any work associated with this decision would thereby be considered 'in scope' of the project.

4.2 Out of Scope

Anything not included in the Request for Competitive Sealed Proposal (RFCSP), Requirements Traceability Matrix (RTM), Proposal document, and SOW is considered out of scope. This may change based on meetings when additional functionality is identified. Any future changes or additional functionality not represented in the RFP, response, and this SOW will result in a Change Request (CR) with potential additional costs.

5. Project Management

5.1 SPIDR Tech Responsibilities

SPIDR Tech's Project Manager is the City of San Antonio's (COSA) primary point of contact for this engagement. The SPIDR Tech Project Manager is accountable for ensuring resource availability, managing communications across project teams, monitoring project progress against the project timeline and ensuring that the work deliverables are appropriately developed based on the scope and requirements of the project.

SPIDR Tech Project Manager and other key personnel shall support overall project objectives and work effectively with the COSA's Project Manager, Project Team and Stakeholders (as required) and shall function as the liaison between the COSA's Project Manager and SPIDR Tech on all matters relating to the project.

If SPIDR Tech employees are located on-site, SPIDR Tech shall provide its own hardware, computer equipment and software to fully satisfy all operational requirements of the Contract. SPIDR Tech's equipment and software must be compatible with the system and software used by the COSA, including the appropriate Microsoft Office and Microsoft Project systems.

COSA, at its sole discretion, shall have the right to remove any of SPIDR Tech's employees or subcontractors. Upon written notifications, SPIDR Tech shall remove and replace any employee or subcontractor without affecting stated timelines, deliverables, or service levels.

SPIDR Tech employees must adhere to CJIS compliance and training prior to accessing SAPD systems and facilities.

SPIDR Tech shall have sole responsibility to coordinate SPIDR Tech's work to meet project requirements and to notify COSA of all conflicts that cannot be accommodated through proper coordination of the project.

SPIDR Tech shall submit copies of each major deliverable for review and evaluation by the COSA Project Manager.

Submitted deliverables found unsuitable, rejected or returned for revision by COSA, shall be reworked by SPIDR Tech and resubmitted. Payment will not be made until submitted items are found suitable and accepted by COSA.

Contract deliverable shall be submitted for a minimum of one round of review and comments by COSA. SPIDR Tech shall be responsible for incorporating all comments and resubmitting as directed by COSA.

Unless noted otherwise, one (1) electronic copy of all deliverables shall be provided.

SPIDR Tech shall provide any applicable test plans, test cases and test scripts to COSA for review.

SPIDR Tech shall perform agreed upon tests to validate that the system meets the requirements.

SPIDR Tech shall assist COSA in user acceptance testing.

5.2 SPIDR Tech's team:

SPIDR Tech's team shall consist of the following:

- Aaron Crow – VP of Engineering
- Kenaniah Cerny – Chief Deployments Officer
- Kristen Sowatsky – Customer Success Manager
- Mandy Duffy – Project Manager and Chief Revenue Officer
- Marissa Rosemblat – Director of Product Management
- Rahul Sidhu – Chief Executive Officer

5.3 COSA Responsibilities

COSA will designate a COSA Project Manager, responsible for all SPIDR Tech coordination activities. COSA will provide a full time Project Manager and a Business Analyst for this project and access to technical personnel. SPIDR Tech will work with the COSA Project Manager to provide all necessary information required for satisfactory performance of their tasks. SPIDR Tech will direct all communication to and take direction from the COSA Project Manager.

Project meetings will be scheduled on a regular basis and will serve as a means of identifying emerging issues and reporting on progress. The COSA Project Manager and Project Team will be responsible for contributing to and reviewing weekly progress reports, reporting project issues and contributing to updates of the project plan and schedule.

COSA will make available the necessary technical, business, testing and training personnel to support the deployment throughout the project. COSA will be responsible for ensuring that all discovery, discussion, workshop and training sessions are attended by COSA personnel, as scheduled.

COSA if required will provide necessary access to the SPIDR Tech personnel working on this project, including remote privileges (VPN), network and systems access. SPIDR Tech agrees to follow any applicable COSA policies and/or guidelines for appropriate use of COSA infrastructure (Ex: internet, network, etc)

COSA will provide the following in support of SPIDR Tech's system implementation:

1. Access to IT staff to support the implementation
2. Access to business staff for configuration testing
3. Timely approval of technical design
4. Review and approval of system tests
5. Assistance in scheduling staff for testing and training
6. Access to Workspace if required

COSA will schedule and perform User-Acceptance Testing (UAT).

5.4 COSA Team:

Name	Role	Title	Sign-Off Authority	Change Control Board
D.C. Robert Blanton	Executive Sponsor	Chief of Staff / Division Commander	Yes	Yes
Craig Hopkins	Executive Sponsor	Chief Information Officer	Yes	Yes
CPT. Karen Falks	Engagement Management	CET Commander	Yes	Yes
LT. Brian Sullivan	Project Team	Special Projects	No	Yes
SGT. David Bacarreza	Project Team	Special Projects	No	Yes
Madison Mai	Project Manager	IT Project Manager	No	Yes
Igor Negovetic	Project Team	Business Relationship Manager	No	Yes
Kathy Esquivel	Project Team	Lead Business Analyst	No	Yes
Ted Manganello	Project Team	Application Solutions Lead	No	No
Erik Mayville	Project Team	Systems Administration Engineer	No	No
Gracy Alvarez	Project Team	Web Applications Lead	No	No
Jonathan Becker	Project Manager	IT Project Manager	No	Yes

5.5 Project Kickoff Meeting

This project will begin with an onsite kickoff meeting designed to introduce the teams from SPIDR Tech to COSA, review project responsibilities, review the project schedule and provide a foundation for communications and collaboration. The meeting agenda will be set by SPIDR Tech, and approved by the COSA. SPIDR Tech shall submit a draft agenda to COSA at time of notification of the meeting, at least one week prior to kick-off meeting date. Status meeting communication methods, templates, agendas and call schedules are also discussed and agreed upon during the project kickoff meeting. SPIDR Tech shall coordinate with COSA for the scheduling of the kickoff meeting after issuance of contract award.

5.6 Discovery Workshops or Design Sessions

SPIDR Tech will set up discovery working or design sessions to discuss, gather, and understand the project requirements, the City's vision of the project outcomes, and understand project challenges and opportunities. This session clarifies the goals of the project and establishes the foundation for SPIDR Tech to develop project deliverables that meet client expectations. These sessions help the vendor to understand COSA's as-is processes and to develop To-be processes.

5.7 Project Status Reporting Meeting

SPIDR Tech and COSA project managers will agree on a template in order to provide project status to the project sponsorship. Project status meetings will be held on a regular basis, as scheduled, and agreed upon. This will ensure that all project staff is up to date on the current

project status, possible issues, risks, accomplishments, challenges and planned activities in the coming weeks. The Project Team attends this meeting along with various staff from both teams who are involved in that week's activities. This meeting generally lasts no longer than an hour. SPIDR Tech Project Manager and COSA's Project Manager are responsible to set this meeting. Meeting minutes for review and approval after each status meeting will be distributed.

Project status meetings shall be used to:

1. Discuss and review status of Action Items from previous meetings.
2. Review items of significance that could affect project progress.
3. Include topics for discussion as appropriate to the status of the project.
4. Review the project schedule for progress since the last meeting.
5. Determine where each activity is in relation to the project schedule, whether on time, ahead or behind schedule.
6. Determine how activities behind schedule will be expedited and secure commitments from parties involved.
7. Discuss whether scheduled revisions are required to ensure that current and subsequent activities will be completed within the project schedule.

5.8 Project Status Reports

SPIDR Tech will prepare and deliver a bi-weekly Project Status Report using COSA's Project Status Report template that will include, but is not limited to, updates to risks, issues, status of current activities and any project-related items. The Project Status Report will also include a current status of the project schedule including the percentage of work completed, a description of the progress achieved during the period, plans for the forthcoming period, problem areas and proposed solutions, delaying factors and their impacts, an explanation of corrective actions taken or proposed, and other analyses necessary to compare actual performance with planned performance.

5.9 Project Management Plan (PMP) Documentation

Within fifteen (15) calendar days after execution of the Project kickoff meeting, a project management plan (PMP) will be reviewed by the COSA project management team. The PMP fully describes the Project, and Risk requirements for executing the work planned for each phase of the Project. It provides a comprehensive plan for assisting COSA to control, direct, coordinate and evaluates the work performed during each Project task. Within ten (10)

calendar days after receiving the Draft Project Management Plan, COSA will hold review sessions providing feedback to SPIDR Tech.

At a minimum, the PMP shall include the following:

1. Project Characteristics described in general terms that reflect the requirements of COSA
2. Change Management Plan
3. Communication Management Plan
4. Risk Management Plan
5. Work Breakdown Structure
6. Dependency Network Diagram
7. Project Schedule
8. Project Organization

5.10 Communications Management

5.10.1 Approach

This Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project. SPIDR Tech and COSA Project Managers will ensure effective communications on this project. The communications requirements are documented in the Communications Matrix (Table 1). The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it and to whom to communicate.

5.10.2 Constraints

All project communication activities will occur within the project's approved budget, schedule, and resource allocations. SPIDR Tech and COSA Project Managers are responsible for ensuring that communication activities are performed by the Project Team and without external resources which will result in exceeding the authorized budget. Communication activities should occur as detailed in the Communication Matrix.

5.10.3 Methods and Technologies

City of San Antonio's Information Technology Services Department (ITSD) maintains a SharePoint platform within the Project Management Office (PMO) and Innotas software which all projects use to provide updates, archive various reports, and conduct project communications. COSA's project manager shall update the Share Point and Innotas software respectively to post the project data at all times. This platform enables senior management, as well as stakeholders with compatible technology, to access project data and communications at

any point in time. SharePoint and Innotas Software also provide the ability for stakeholders and project team members to collaborate on project work and communication. For any stakeholders who do not have the ability to access SharePoint and Innotas software, separate documentation will be sent via email.

What?	When?	How?	Who?
Kick Off Meeting	At project initiation	In-person	SPIDR Tech and COSA team
Team Meeting	Bi-Weekly	WebEx and/or in-person	SPIDR Tech and COSA team
Bi-Weekly Status Report	Bi-Weekly	WebEx and/or in-person	SPIDR Tech and COSA team
Project Meetings	As required	WebEx and/or in-person	SPIDR Tech and COSA team

Table 1 –Communications Matrix

SPIDR Tech and COSA will coordinate on the required attendees for each meeting based on the topic and decisions. SPIDR Tech and COSA will work together to ensure that each meeting will include topics/agenda to be discussed and desired outcomes.

5.10.4 Escalation Process

Efficient and timely communication is the key to successful project completion. As such, it is imperative that any disputes, conflicts, or discrepancies regarding project communications are resolved in a way that is conducive to maintaining the project schedule, ensuring the correct communications are distributed, and preventing any ongoing difficulties.

In order to ensure projects stay on schedule and issues are resolved, the Project Team will use this standard escalation model to provide a framework for escalating communication issues. The table below defines the priority levels, decision authorities, and timeframes for resolution.

Priority	Definition	Decision Authority	Timeframe for Resolution
1	**Major** impact to project or business operations. If not resolved quickly there will be a significant adverse impact to budget and/or schedule.	Project Sponsor	Within 4 hours

2	**Medium** impact to project or business operations which may result in some adverse impact to budget and/or schedule.	Project Sponsor	Within one business day
3	**Minor** impact which may cause some minor scheduling difficulties with the project but no impact to scope, schedule, or budget.	Project Manager	Within two business days
4	**Insignificant** impact to project but there may be a better solution.	Project Manager	Work continues and any recommendations are submitted via the project change control process

Table 2 – Project Escalations

5.11 Risk Management

5.11.1 Approach

The purpose of the Risk Management Plan is to establish the framework in which the Project Team will identify risks and develop strategies to mitigate or avoid those risks. The approach taken to identify risks includes a methodical process by which the Project Team identifies scores and ranks the various risks. The most likely and highest impact risks can be added to the project schedule to ensure that assigned risk owners take the necessary steps to implement the mitigation response at the appropriate time during the schedule.

5.11.2 Qualification and Prioritization

In order to determine the severity of the risks identified, a Probability and Impact factor is assigned to each risk. This process allows the COSA Project Manager to prioritize risks based upon the effect or Risk Exposure they may have on the project.

		Impact of Risk				
		1	2	3	4	5
Probability of Risk Occurring	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

G	LOW Risk	The **Risk Exposure** in the matrix is determined by multiplying
Y	MED Risk	the **Impact of the Risk** x **Probability** that the risk will occur
R	HIGH Risk	

Table 3 –Risk Exposure Matrix

5.11.3 Risk Monitoring

The most likely and greatest impact risks can be added to the project plan to ensure that they are monitored during the time the project is exposed to each risk. At the appropriate time in the project schedule a Risk Owner is assigned to each risk. Each Risk Owner is responsible for tracking, providing status and managing the risk to resolution.

Risk monitoring is a continuous process throughout the life of this project. As risks approach on the project schedule the COSA Project Manager will ensure that the appropriate Risk Owner provides the necessary status updates, which include the risk status, identification of trigger conditions, and the documentation of the results of the risk response.

5.11.4 Risk Mitigation and Avoidance

As more risks are identified, they will be qualified and the Project Team will develop avoidance and/or mitigation strategies. These risks will also be added to the Risk Log and the project plan to ensure they are monitored at the appropriate times and are responded to accordingly.

The risks for this project will be managed and controlled within the constraints of time, scope, and cost. All identified risks will be evaluated in order to determine how they affect this triple constraint. The COSA Project Manager will determine the best way to respond to each risk to ensure compliance with these constraints.

5.11.5 Risk Log

SPIDR Tech and COSA will collaboratively create the Risk Log. The Risk Log for this project is a log of all identified risks, their probability and impact to the project, the category they belong to, mitigation strategy, and when the risk will occur. The Risk Log also contains the mitigation strategy for each risk as well as when the risk is likely to occur.

Based on the identified risks and timeframes in the risk register, each risk can be added to the project plan. At the appropriate time in the plan—prior to when the risk is most likely to occur—the COSA Project Manager will assign a Risk Owner to ensure adherence to the agreed upon mitigation strategy. The COSA Project Manager and SPIDR Tech will track status and manage the risk to resolution collaboratively in a live document.

ID	Identified by	Priority	Issue Type	Date Identified	Issue Description	Impact Summary	Environment	Test Type	Assigned To	Current Status	Expected Resolution Date	Escalation Required (Y/N)?	Action Steps	Actual Resolution Date	Final Resolution & Rationale
1	John Doe	Critical	Informational	01/01/06	**EXAMPLE:** Issues raised by board members about the financial viability of the project are preventing the project from moving forward as planned.	**EXAMPLE:** Potential project stoppage	Ex: Test	System Test	John Doe	Open		Yes	**EXAMPLE:** Meet with board members to clarify the project finances		**EXAMPLE:** The project team met with board members to clarify the project finances, allowing the project to move forward as planned.
2	John Doe	High	Procedural	01/01/06	**EXAMPLE:** The project is short on a specific skill set.	**EXAMPLE:** Possibility of project work not completed on time	Ex: Test	System Test	John Doe	Open		No	**EXAMPLE:** Add staff to fill the skills gap.		**EXAMPLE:** Staff was added to the project to fill the skills gap.
3	John Doe	Medium	System	01/01/06	**EXAMPLE:** Negotiations with functional managers in an organization competing for scarce human resources are forecasted to delag project completion.	**EXAMPLE:** Possability of project work not completed on time	Ex: Production	Integration Test	John Doe	Closed		Yes	**EXAMPLE:** Additional negotiation		**EXAMPLE:** Negotiations ended satisfactorily before they caused project delays.

Table 4 – Sample Risk Log

5.12 Scope and Change Control

5.12.1 Scope Verification

Scope Verification is the responsibility of the Project Team. The original scope for this project is defined by the Statement of Work. Scope Verification within this document refers to the management of deliverables identified as the scope of the project. The COSA Project Manager will oversee the Project Team and the progression of the project to ensure that this scope control process is followed.

As this project progresses the COSA Project Manager and Project Team will verify project deliverables against the latest, approved scope and the Acceptance Criteria for that deliverable. Once verified that a deliverable meets the scope and acceptance criteria, the Project Manager and Sponsor (or designated representative) will meet for review and formal acceptance of the deliverable. The COSA Project Manager will present the deliverable Acceptance Criteria and the Sponsor will accept the deliverable via email or document signature.

5.12.2 Roles and Responsibilities

The COSA Project Manager, Sponsor and Project Team will all play key roles in managing the scope of this project. The table below defines the roles and responsibilities for the scope management of this project.

Role	Responsibilities
Project Manager	· Approve or deny scope change requests that have minimal project impacts to schedule, budget and/or scope · Facilitate scope change requests · Evaluate impact of scope change requests · Organize and facilitate change control meetings · Communicate outcomes of scope change requests
Sponsor	· Approve or deny scope change requests · Evaluate need for scope change requests · Review and accept/deny project deliverables
Project Team, Subject Matter Expert(s)	· Participate in defining change resolutions · Evaluate the need for scope changes and communicate them to the Project Manager, as necessary · Update project documents upon approval of all scope changes

Table 5 – Scope Management Roles and Responsibilities

5.12.3 Scope Change Control

Proposed scope changes are initiated with a scope change request by the COSA Project Manager, Sponsor, Project Team or Key Stakeholders. The Scope Change Control process will ensure that all proposed changes are defined, reviewed and agreed upon so they can be properly implemented and communicated to all stakeholders. All changes will be analyzed and evaluated for impact on:

- Timeline, including impact to other work, deliverables, and/or milestones
- Budgets
- Resource assignments and availability
- Technical architecture, application design and/or technical requirements
- Meeting client requirements and expectations
- Risks including any additional risks added or mitigated by the proposed change

5.12.4 Definitions of Change

There are several types of changes:

- **Schedule Changes** – changes which will impact the approved project schedule. These changes usually require re-baselining the schedule, depending on the significance of the impact.
- **Budget Changes** – changes which will impact the approved project budget. These changes may require additional funding and/or releasing funding no longer required.
- **Scope Changes** – changes which will impact the project's scope and are typically the result of adding or removing requirements which were not initially planned for. These changes may also impact the budget and schedule.

COSA may request scope changes in or additions to the services being provided hereunder by completing a Change Control Approval Request Form. If SPIDR Tech deems the changes feasible, SPIDR Tech will provide a quote for any increase or decrease in the cost of or time required for performance of the Services as amended. Once parties agree to the modified scope and related fees a representative of each party will sign the Change Control Approval Request Form. The Project Manager will communicate the scope change to all project team members and stakeholders and initiate update of the relevant project documents.

If the scope change request is NOT approved, no further action is required.

5.12.5 Change Control Board

The CCB is the approval authority for all proposed scope change requests. The purpose of the CCB is to review scope change requests, impacts on the project risk, scope, cost, and schedule, and to approve or deny each change request. The CCB is comprised of the Sponsor, Project Team and Key Stakeholders.

5.12.6 CCB Roles and Responsibilities

The following are the roles and responsibilities for all change management efforts related to the project:

Role	Responsibilities
Project Sponsor	· Review and approve/deny scope change requests to budgets, schedules and/or project deliverables
Project Manager	· Receive and log all scope change requests received · Work directly with vendors, appropriate ITSD technical resources and client SMEs to collect information needed to estimate and complete the request · Maintain Change Request Log · Approve/deny changes that have minimal impact to scope, cost and/or schedule · Update the Change Control Board as needed
Project Team, Subject Matter Expert(s)	· Originate change requests based on project needs · Provide all applicable information and detail on change request forms · Be prepared to address questions regarding any submitted change requests · Provide feedback as necessary on impact of proposed changes · Requests from team members should be discussed with the Project Manager and/or Team Lead prior to submitting an official change request · Review change requests pending approval and provide input as needed / requested

Table 6 – Change Management Roles and Responsibilities

5.13 Work Breakdown Structure and Schedule

5.13.1 Schedule Management Approach

SPIDR Tech Project Manager is responsible for scheduling the contract Scope of Work. SPIDR Tech's management personnel shall actively participate in the development of the project schedule so that the intended sequences and procedures are clearly understood by SPIDR Tech's organization. The COSA Project Manager will review and approve the final tasks that appear in SPIDR Tech project schedule.

Project schedules are created using Microsoft Excel (or equivalent software) starting with the deliverables and milestones identified in the project's Work Breakdown Structure (WBS). Activity definition identifies the specific work packages which must be performed to complete

each deliverable and milestone. Activity sequencing is used to determine the order of work packages and assign relationships between project activities. Activity duration estimating is used to calculate the number of work periods required to complete work packages. Resource estimating is used to assign resources to work packages in order to complete schedule development.

The project schedule shall identify detailed activities, scheduling, and show relationships between activities and similar milestone activities. Once a preliminary schedule has been developed, it is reviewed by the Project Team. The Project Team and resources must agree to the proposed work package assignments, durations, and schedule. Once this is achieved the COSA Project Manager will baseline the schedule.

5.13.2 Schedule Control

The project schedule is reviewed and updated as necessary on a weekly basis with actual start, actual finish, and completion percentages. The COSA Project Manager is responsible for holding weekly schedule updates/reviews, determining impacts of schedule variances, processing schedule changes and reporting schedule status in accordance with the project's communications plan.

The Project Team is responsible for participating in weekly schedule updates/reviews, communicating any changes to actual start/finish dates to the project manager and participating in schedule variance resolution activities as needed.

5.13.3 Schedule Changes and Thresholds

If a schedule change is necessary, the COSA Project Manager and Project Team will review and evaluate the change. They must determine which tasks are impacted, variance as a result of the potential change and any alternatives or variance resolution activities they may employ to see how it would affect the scope, schedule, and resources. If, after this evaluation is complete, the COSA Project Manager determines that any change will exceed the established boundary conditions, then a schedule change request must be submitted.

Submittal of a schedule change request to the project sponsor for approval is required if either of the two following conditions is true:

- The proposed change is estimated to increase the duration of an individual work package by 10% or more.
- The change is estimated to increase the duration of the overall baseline schedule or deliverable.

When agreement has been reached on the number of days to be included in an overall time extension or an extension to an intermediate milestone, the COSA Project Manager will take the Change Request to the CCB. Upon the CCB approval, the revised project schedule with the extensions will become the basis for any future approved changes.

The SPIDR Tech's Project Manager shall incorporate activities representing the total value of approved change orders as each is approved. Change order activities shall be assigned unique activity codes such that they can be segregated in the project schedule.

6. Testing

A well-defined risk based testing approach is a mandatory part of any COSA project. At a minimum the following testing levels will be performed as a part of this project.

At a high level, testing should cover the following items:

- COSA Responsibility:
  - Verify instance data is consistent with database records.
  - Verify messages are consistent with requirements.
  - Review the acceptance criteria documentation.
  - Verify subdomain CNAME records are properly installed.
- SPIDR Tech Responsibility:
  - Verify instance data.
  - Address open issues, as needed.
  - Provide end-to-end testing of messaging system.
  - Prepare the acceptance criteria documentation for review prior to launch.
  - Confirm subdomain CNAME records are properly installed.

6.1 Unit Testing:

Definition: Testing of individual hardware or software components, modules or units. COSA will provide SPIDR Tech with an example Unit Testing Plan. The Business and the Vendor will determine collaboratively the plan. The plan will be written on a COSA-provided template.

Level	Owner	Objectives	Typical Key areas of Testing	Environment

Unit Test	Developer (Vendor Developer)	Detect defects in code, module, product, system, program, component or a function in units to show that the performance of these individual components are correct per requirements	Unit level component Testing, Unit level functional testing	Development
Test the Investigations Module	Developer (Vendor Developer)	Detect defects in code, module, product, system, program, component or a function in units to show that the performance of these individual components are correct per requirements	Unit level component Testing, Unit level functional testing	Development
Test the Patrol Module	Developer (Vendor Developer)	Detect defects in code, module, product, system, program, component or a function in units to show that the performance of these individual components are correct per requirements	Unit level component Testing, Unit level functional testing	Development
Test the Insights Module	Developer (Vendor Developer)	Detect defects in code, module, product, system, program, component or a function in units to show that the performance of these individual components are correct per requirements	Unit level component Testing, Unit level functional testing	Development
Test the CNAME records are properly installed	Developer (Vendor Developer)	Detect defects in code, module, product, system, program, component or a function in units to show that the performance of these individual components are correct per requirements	Unit level component Testing, Unit level functional testing	Development

Unit Testing Roles and Responsibilities	Vendor	City
Unit Testing	L	A
Documentation of test results	L	A

6.2 Interface Testing:

Definition: Testing in which software, hardware or interface components combined and tested to evaluate the interaction among them. This term is commonly used for both the Interface of components and the Interface of entire systems. This project will entail an Interface with the San Antonio Police Department's Computer Aided Dispatch (CAD) and Records Management System (RMS).

During this stage, SPIDR Tech will provide COSA a copy of the tested items and the outcomes of each test.

Level	Owner	Objectives	Typical Key areas of Testing	Environment
Interface	Developer (Vendor Developer and ITSD, where required will include additional parties)	Detect defects in unit interfaces, systems Interface, components interactions and interfaces Developer testing in coordination with other interface partners	System interfaces, unit interoperability and compatibility	Development
Test the RMS Interface, Powershell or JSON script, and task	Developer (Vendor Developer and ITSD, where required will include additional parties)	Detect defects in unit interfaces, components interactions and interfaces Developer testing in coordination with other interface partners	System interfaces, unit interoperability and compatibility	Development
Test the CAD Interface, Powershell or JSON script, and task	Developer (Vendor Developer and ITSD, where required will include additional parties)	Detect defects in unit interfaces, components interactions and interfaces Developer testing in coordination with other interface partners	System interfaces, unit interoperability and compatibility	Development

Interface Testing Roles and Responsibilities	Vendor	City
Interface Testing	L	R,S
Testing scripts	L	R,S
Test schedule	L	R,S
Documentation of test results	L	R,S,A

6.3 System Testing:

COSA will provide SPIDR Tech with an example System Testing Plan. The Business and the Vendor will determine collaboratively the plan. The System Testing must be signed off by COSA prior to moving forward with the project plan.

Definition: A formal testing conducted on a complete integrated system to evaluate the system's compliance with its specified functional and technical requirements. This testing is conducted before moving into formal UAT testing for business operational readiness and acceptance. System Testing verifies that functional and non-functional requirements have been met. Load and performance testing, stress testing, regression testing, etc. are subsets of system testing. All critical and high defects are fixed prior to UAT testing. System test completion and certification along with a demo of core functionalities in COSA test environment is mandatory to move into User Acceptance Testing (UAT).

Level	Owner	Objectives	Typical Key areas of Testing	Environment
System	Quality Assurance – if independent team Exists Functional SMEs and Technical Teams (Vendor and COSA ITSD…where required will include additional parties)	Test for overall test coverage for an application. Helps the team catch critical and high defects that hamper an application's core functionalities before release to UAT. The whole application is tested for its functionality, interdependency and communication. System plan, test cases and test completion certification is mandatory to enter into UAT.	End-to-End Functional, non-functional, Interfaces, data quality, performance, Regression, reports, Security etc.	Test

System Testing Roles and Responsibilities	Vendor	City
Develop System Test Plan	L	R,A,S
Testing scripts	L	R,A,S
Test schedule	L	R,A,S
Documentation of test results	L	R,S,A
System Test Completion Certificate	L	R,S,A

6.4 User Acceptance Testing:

City of San Antonio (COSA) creates and conducts User Acceptance Testing (UAT) in coordination with SPIDR Tech technical support and end users. SPIDR Tech shall provide any test scripts used for UAT so that COSA can review and customize these to conduct our user acceptance testing. A formal UAT shall be conducted by the City of San Antonio's business end user to determine acceptance of the system for operational use. SPIDR Tech shall support the UAT and fix any defects found during the testing. UAT completion and certification is mandatory to move the implementation into production.

Level	Owner	Objectives	Typical Key areas of Testing	Environment
Acceptance	Business End Users (Vendor, COSA ITSD, and COSA Business Users)	Demonstrate readiness for end user business deployment. UAT verifies that delivered system meets business user's requirements and system is ready for operational use in real time.	End user operational business processes, workflows and functionality and functional Requirements, permission levels, product usage meets the requirements.	Test

UAT Roles and Responsibilities	Vendor	City
Develop UAT Test Plan	S	L,R,A
Test scripts	S	L,R,A
Test schedule	S	L,R,A
Documentation of test results	S	L,R,A
User Acceptance Test Completion Certificate	S	L,R,A

6.5 Test Plan, Test Cases and Test Scripts:

SPIDR Tech shall provide System and UAT test plan, test cases and test scripts.

6.6 Test Coverage, Defect and Resolution Logs:

SPIDR Tech shall maintain and provide the test coverage, Defect and Resolution logs. COSA will provide the appropriate template for Test Coverage, Defect and Resolution Logs.

6.7 Test Completion Certification

SPIDR Tech shall provide System Test completion certification and assist COSA in UAT. COSA shall provide an example System Test completion certification. UAT completion certification is mandatory in order to move the implementation into production.

7. Training

SPIDR Tech will provide SPIDR Tech platform training that will consist of face-to-face instruction, and live webex demonstrations. SPIDR Tech shall review the training material with COSA prior to the start of the actual training. All webex sessions can be recorded and will be reusable by COSA.

- Administrative User Training
- "Spotlight" Dashboard User Training
- Train-the-Trainer Training
- UAT Tester Training

Training Courses	Quantity	Number of Students per Course	Number of Hours per Course
UAT Tester Training (After System Testing Completion and Prior to User Acceptance Testing in Testing environment to avoid sending out data to citizens, limit to testers)	4	45	1.5
Dashboard Training	2	25	.5
Admin Training	2	20	1
Train the Trainer	2	20	1

Training Roles and Responsibilities	Vendor	City
Training Plan	L	R,A
Training Material Development	L	R
Training Material Review	L	R
Distribution and Printing of Training Material to all end users	S	L
Training	L	S

8. Configuration Management

SPIDR Tech uses JIRA for Configuration Management. SPIDR Tech tasks resources on a bi-weekly "sprint." During each sprint, SPIDR Tech stakeholders will assess the scope of our sprint, making alterations on an as-needed basis. The Project Manager, VP of Engineering, and the Product Manager must be in agreement in order to make a material change during an active sprint. After each sprint, SPIDR Tech holds a "sprint retrospective" meeting, followed by a "sprint planning" meeting. COSA will be informed of SPIDR Tech's sprint planning sessions, and COSA's deployment requirements will be tasked and prioritized by the Project Manager using JIRA. All work related to COSA will be placed in an "epic" where SPIDR Tech can track work required, status, and progress specific to COSA.

9. Project Deliverables and Milestones

9.1 Deliverable Ownership

The following table identifies the roles and responsibilities associated with documentation and delivery of required deliverables services. The table attempts to define the lead role, but it is expected that both SPIDR Tech and the COSA will work collaboratively to develop the documentation. An "L" Lead (develop core document), "R" Review, "S" Support, or "A" Approve is placed in the column under the party that will be responsible for performing the task.

Deliverables		Vendor	City
1.	Project Kick-Off – Technical Memorandum	L	A
2.	Project Management Plan – Project Characteristics	L	S
3.	Project Management Plan –Directory of SPIDR Tech team contact points	L	A
4.	Requirements Traceability Matrix	L	S
6.	Training Plan, and System Training Material	L	A
7.	Weekly Progress Report – Meeting Minutes	L	R
8.	Project Management Plan – Project Schedule	L	S
9.	Project Management Plan – Communication Plan	L	S
10.	Project Management Plan – Risk Management Plan	L	S
11.	Weekly Progress Report – Risk and Issues Logs	L	S
12.	Application hardware and system software requirements documentation	L	R
13.	Gap Analysis	L	S
14.	User Acceptance Testing Plans and Schedule	S	L
15.	User Acceptance Test Completion Certificate	S	L
16.	User Acceptance Testing Scripts	S	L

17.	To-Be Process Documentation and report	L	S
18.	As-Is Process Documentation	R	L
19.	System Security Plan and Risk Assessment	S	L
20.	Project Management Plan – Work Breakdown Structure	L	S
21.	Project Acceptance and Closure	L	A
22.	Service Level Agreement	L	A
23.	Special Reports	L	R
24.	Project Management Plan – Dependency Network Diagram	L	A
25.	Project Management Plan – Project Organization	L	A
26.	Monthly Progress Reports – Narrative Report	L	A
27.	Monthly Progress Reports – Progress Schedule	L	A
28.	System Test Plan and Schedule	L	R,S,A
29.	System Test Completion certificate	L	R,S,A
30.	System Test Scripts	L :	R,S,A
31.	Documentation of test results defect and issue logs	L	R,S,A
32.	Training Plan	L	R,A
33.	Training Material	L	R

34.	Distribution and Printing of Training Material to all end users	S	L
35.	Train the Trainer Session	L	S
36.	Train all users	S	L
40.	Configuration Documentation	L	R,S,A
42.	Interface Documentation (RMS and CAD)	L	R,S,A

9.2 Payment Milestones and Deliverables

SPIDR Tech will provide this service to the City of San Antonio on a fixed fee with deliverables based payments. The projected cost of this project is $730,200. The City of San Antonio will be billed on the invoice schedule below. The Milestone Value is full value for each deliverable payment. The net due at each Payment Milestone is the net of Milestone Value minus the Retention 10% holdback. The cumulative total of the retention holdback amounts will be paid at the time of the final Payment Milestone:

Requirement Reference	#	Milestone/Deliverable Description	Scheduled Date	Contract %	Retention %	Value
1.5	1	SOW Complete and Contract Signed	4/28/2020	10	10	10.00
2.6	2	Kickoff Complete	1 week post council approval	10	10	10.00
	3	Development of RMS Interface is Complete	30 days	15	10	10.00
	4	Development of CAD Interface is Complete	45 days	15	10	15.00
	5	Testing Acceptance is Complete	20 days	20	10	20.00
	6	Launch is Complete	30 days	30	0	30.00
Total						100.00

9.3 Deliverable Acceptance Criteria

No	Deliverable Acceptance Criteria Description
1	SOW is complete and contract is signed.
2	Kickoff meeting is complete. Stakeholders and sponsors will be identified.
3	Develop RMS Interface with Mark43: SPIDR Tech will receive API credentials from Mark43 and will build COSA's Interface, COSA Resource will perform Unit Testing in SPIDR Tech's testing environment. Testing will need to occur in RMS Training environment. SPIDR Tech recommends using the current Mark43 testing environment to build the Interface, test the Interface, and once testing has completed, switch to production when Mark43 switches to production data. This way testing can be done with test data, reducing risk to COSA and SPIDR Tech.
4	Development of CAD Interface is complete: SPIDR Tech and COSA, in collaboration, will develop an Interface to send required CAD data to SPIDR Tech's API. SPIDR Tech will provide data requirements, example scripts, and Quality Assurance testing. Unit, Interface, and System testing will be performed. All documentations must be approved by COSA.
5	UAT completes successfully with NO open HIGH or CRITICAL defects. COSA will provide the UAT plan and scripts in collaboration with SPIDR Tech and SAPD.
6	Launch is complete: SPIDR Tech will begin sending messages to San Antonio Police Department victims and callers. Closeout documents must be approved and signed off. Training (train-the-trainer) is complete: SPIDR Tech will deliver training sessions and will provide training materials as outlined in the SOW.

All project deliverables will be reviewed and signed-off on within ten business days of notification that the deliverable is complete.

10. Software and Hardware

SPIDR Tech shall list any specific software and hardware requirements for this project and who is responsible for each.

COSA is responsible for installing a modern browser onto staff computers in order to access the SPIDR Tech platform. Modern browsers include Chrome, Firefox, Safari, and Edge. One of these browsers is needed in order to access an optimized version of the SPIDR Tech platform.

11. Assumptions and Constraints

To identify and estimate the required tasks and timing for the project, certain assumptions and constraints were made and are listed below. If an assumption is invalidated at a later date, the activities and estimates will be adjusted accordingly:

11.1 Assumptions

SPIDR Tech assumes that approximately two weeks (up to 10 business days) of SPIDR Tech staff performing on-site engineering time will be necessary to complete the Interface and quality assurance in a timely manner. If additional time on-site is necessary, COSA will approve and reimburse SPIDR Tech for travel expenses associated with the trip. SPIDR Tech will not charge COSA for any additional manhours associated with the trip. Remote support will be provided by SPIDR Tech during the Interface period at no additional charge.

11.2 Constraints

SPIDR Tech's proposal included up to two weeks of engineering resources in order to support the building of the Interfaces and performance of Quality Assurance. If additional time on-site is necessary, COSA will approve and reimburse SPIDR Tech for travel expenses associated with the trip. SPIDR Tech will not charge COSA for any additional manhours associated with the trip. Remote support will be provided by SPIDR Tech during the Interface period at no additional charge.

12. Recurring Costs

List if any recurring costs exist for this project. Include any specific licenses, subscription costs, maintenance costs.

No	Description	Amount
1	First year fee: Year 1 annual software-as-a-service, maintenance, and support fee; including the one-time deployment fee.	$730,200
3	Year 2 annual software-as-a-service, maintenance, and support fee	$715,200
4	Year 3 annual software-as-a-service, maintenance, and support fee	$715,200

5	Year 4 annual software-as-a-service, maintenance, and support fee	$715,200
6	Year 5 annual software-as-a-service, maintenance, and support fee	$715,200
	TOTAL	**$3,590,000**

13. Post Go-live Technical support and Warranty

SPIDR Tech shall provide sufficient post go-live support after implementation to support the optimal usage of the solution. Defects in the production system are captured and must be corrected during the 90 day warranty phase. Each of these defects are reviewed through the change control process to determine the impact on the system, level of effort for change and the impact to the end users. Once the changes have been approved, each of the maintenance fixes goes through the design, development, and test phases prior to being released into production. SPIDR Tech warrants that the Software will function substantially in accordance with its Documentation. As the COSA's sole exclusive remedy for breach of this warranty, SPIDR Tech will, at its option, fix the defective Software.

14. Service Level Agreement

SPIDR Tech's SLA was provided as an attachment to their response to the RFCSP. It is incorporated to this SOW by reference. Below is an excerpt from the SPIDR Tech SLA for San Antonio. Please refer to the SLA for all remedies available.

> "During the term of the applicable SLA, SPIDR Tech's API will be operational and available to the Client at least 99.99999% of the time in any calendar month. Note that even during API down-time (for whatever reason), once the API availability is reestablished, SPIDR Tech can receive "lost" data. The platform will generate and send any messages that can still be reasonably sent. This reduces the number of messages failed even during unexpected API outage."

SPIDR Tech shall provide a well-defined SLA and will contain the following components as examples at a minimum:

1. Type of service to be provided:
   It specifies the type of service and any additional details of type of service to be provided.

2. The service's desired performance level, especially its reliability and responsiveness:
   A reliable service will be the one which suffers minimum disruptions in a specific amount of time and is available at almost all times.

3. Service Availability rate, times and downtime:
   For example, “At a minimum 100% availability, 24/7 etc”

4. Monitoring process and service level reporting:
   This component describes how the performance levels are supervised and monitored. This process involves gathering of different type of statistics, how frequently these statistics will be collected and how these statistics will be accessed by the customers.

5. The steps for reporting issues with the service:
   This component will specify the contact details to report the problem to and the order in which details about the issue have to be reported. The contract will also include a time range in which the problem will be researched and resolved.

6. Response and issue resolution time-frame:
   Response time-frame is the time period by which the service provider will start the investigation of the issue. Issue resolution time-frame is the time period by which the current service issue will be resolved and fixed.

7. Repercussions for service provider not meeting its commitment:
   If the provider is not able to meet the requirements as stated in the SLA then service provider will have to face consequences. These consequences may include customer's right to terminate the contract or ask for a refund for losses incurred by the customer due to failure of service.

8. Disaster Recovery Mechanism (for cloud Solutions)
9. Business continuity (for cloud solutions)
10. Service Scheduled maintenance and unscheduled maintenance process(for cloud Solutions)
11. Backup mechanism (for cloud Solutions)
12. Process for adding, testing and deploying modifications or enhancements to the solution

15. Appendix - Requirements

The Requirements Traceability Matrix (RTM) is incorporated to this SOW.
RTM