



**ADDENDUM 6 – SCOPE REVISION
REQUEST FOR LETTERS OF INTEREST
FOR**

**Design-Build Services for the SS4A Demonstration of Intelligent Transportation Systems Safety
Infrastructure Improvements in Escambia County**

RFP NO.: 03-2026

NOTICE IS HEREBY GIVEN that the Emerald Coast Regional Council (ECRC) is requesting proposals for Design-Build Services for the SS4A Demonstration of Intelligent Transportation Systems Safety Infrastructure Improvements in Escambia County.

The purpose of this Project includes two parts:

The first part is to complete the **ITS and safety improvements demonstration**, including but not limited to, design, permitting, construction, installation and integration, to deploy safety and operational improvements along two corridors: State Road (S.R.) 295 / Fairfield Drive from Mobile Highway to Texar Drive, and S.R. 95 / Pensacola Boulevard from Beverly Parkway to W Street. These two corridors were identified in the ECRC Safety Action Plan as high-risk locations for roadway fatalities, serious injuries, and recurring congestion. The ECRC, in partnership with the Florida Department of Transportation (FDOT) and Escambia County Florida, aims to alleviate high crashes and fatalities along these corridors. This Project intends to demonstrate how advanced intelligent transportation technologies can reduce crash risk and improve safety without hindering the mobility of traffic flow. These corridors are among the region's highest for severe and nighttime crashes and fatalities.

The second part of the Project includes the design and deployment of a **fiber optic communications network** along two corridors: S.R. 296 / West Michigan Avenue / Beverly Parkway from Mobile Highway to Pensacola Boulevard, and S.R. 10A / Mobile Highway from Michigan Avenue to Fairfield Drive, to provide a loop connection in order to ensure connectivity through a high speed network with the existing ITS network and the Project ITS and safety improvements demonstration corridors.

This Project intends to integrate the infrastructure into an Artificial Intelligence (AI)-based safety analytics system with connected vehicle communications, a digital twin model, and fiber optic connectivity to ultimately develop adaptive infrastructure that supports a unified, data-driven safety ecosystem while prioritizing drivers and vehicles along these corridors.

This project is federally funded with assistance from the Federal Highway Administration (FHWA).

QUALIFICATIONS

Contractor must be qualified under Rule 14-22, Florida Administrative Code –

Major Work Class:

16 - Intelligent Transportation Systems

Professional Team Member Qualified under Rule 14-75, Florida Administrative Code –

Major Work Types:

6.3.1 : Intelligent Transportation Systems Analysis and Design

6.3.2 : Intelligent Transportation Systems Implementation

6.3.3 : Intelligent Transportation Traffic Engineering Systems Communications

6.3.4 : Intelligent Transportation Systems Software Development

Minor Work Types:

3.1 : Minor Highway Design

4.1.1 : Miscellaneous Structures

6.1 : Traffic Engineering Studies

6.2 : Traffic Signal Timing

7.3: Signalization

8: Survey and Mapping

9: Soil Exploration, Material Testing & Foundation

All professional services to be provided under the awarded contract shall be performed by Professionals licensed to practice in the State of Florida.

RESPONSE EVALUATION: The Emerald Coast Regional Council (ECRC) has chosen the Adjusted Score Design-Build (ASDB) selection method for this Project: The contract award is based on the lowest adjusted score, which is determined by dividing the Price Proposal by the sum of the Letter of Interest (LOI) score and Technical Proposal score. The Selection Committee may approve an award to the Design-Build Firm with the lowest adjusted score.

ANTICIPATED SCHEDULE: Below is anticipated Schedule of Events for this Request for Letter of Interest and RFP. This schedule may be altered solely at the ECRC's discretion. All public information including responses to questions and announcements will be published on the ECRC website at the link below:

https://www.ecrc.org/services_we_offer/requests_for_proposals.php.

LOI Advertised & Posted on Website	Friday, May 1, 2026
Question Submittal Deadline	Friday, May 15, 2026, 4 P.M. (CDT)
ECRC Response to Questions	Tuesday, May 20, 2026, 4 P.M. (CDT)
LOI Submittals Due	Wednesday, May 27, 2026, 4 P.M. (CDT)
Shortlisted Firms Announcement	Tuesday, June 3, 2026, 4 P.M. (CDT)
Draft Alternative Technical Concepts (ATC) Submittal Deadline	Thursday, July 2, 2026, 4 P.M. (CDT)
One-on-One ATC Presentations	Monday, July 6 – Wednesday, July 8, 2026
Formal ATC Submittal Deadline	Thursday, July 9, 2026, 4 P.M. (CDT)
ATC Evaluation Meeting	Wednesday, July 15, 2026
ECRC Response to ATC Submittal	Wednesday, July 29, 2026
Technical Proposal Submittals Due	Friday, August 14, 2026 4 P.M. (CDT)
Technical Review Committee Evaluation Meeting	Wednesday, August 19, 2026
Bid Price Proposal Submittals Due	Thursday, August 20, 2026 4 P.M. (CDT)
Notice of Intent to Award Posted on Website	Friday, August 21, 2026
ECRC Board Meeting	Thursday, August 27, 2026
Final Selection Posted on Website	Friday, August 28, 2026

LOI SUBMITTAL DEADLINE: 4 P.M. (CDT) – WEDNESDAY, MAY 27, 2026

ALL SUBMITTALS ARE TO BE SUBMITTED VIA EMAIL TO:

Ada Clark at ada.clark@ECRC.org



REQUEST FOR PROPOSALS

FOR RFP NO.: 03-2026

**Design-Build Services for the SS4A Demonstration of Intelligent Transportation Systems
Safety Infrastructure Improvements in Escambia County**

**ADVERTISED: Website, Friday, May 1, 2026
SUBMITTAL DEADLINE: 4 P.M. (CDT) – Tuesday, May 26, 2026**

LETTERS OF INTEREST ARE TO BE SUBMITTED TO:

Emerald Coast Regional Council
Atten: Ada Clark
ada.clark@ECRC.org

May 2026

Revised July 28, 2026

The ECRC has chosen the **Adjusted Score Design-Build (ASDB)** selection method for this Project: The contract award is based on the lowest adjusted score, which is determined by dividing the **Price Proposal** by the sum of the **Letter of Interest (LOI)** score and **Technical Proposal** score. The Selection Committee may approve an award to the Design-Build Firm with the lowest adjusted score.

I. Letter of Interest Requirements

Each Proposer desiring to be considered for this Project is required to submit a Letter of Interest demonstrating their qualifications and approach to perform the required scope of work, responsibilities, requirements, and approach to deliver the Project. The Letters of Interest should provide a broad overview of a Design-Build Firm's understanding of the project requirements, identification of critical issues, and outline for addressing critical issues. The Letter of Interest shall include sufficient information to enable the ECRC to evaluate the capability of the Proposer to provide the desired services.

1. Submittal Requirements

A Letter of Interest will not be accepted by the ECRC after the due date and time listed on the advertisement in this RFP. The Letter of Interest shall be submitted electronically in PDF format with the information, paper size and page limitation requirements as listed. The Letter of Interest shall consist of three Sections. Each section shall be submitted as individual PDFs. The Letter of Interest shall be evaluated in its totality. No macros will be allowed. Times New Roman shall be the required font type. The minimum font size shall be 10 points, with the exception of graphics where the minimum font size shall be 8 points. A bold, italicized, or underlined font may be used provided it complies with the aforementioned requirements for font type and size.

Submit the LOI package electronically in PDF format:

Email LOI Package to: ada.clark@ecrc.org

Attn: Ada Clark 850-332-7976, ext. 278

The total combined file size of the three PDFs for Sections 1, 2, and 3, shall not exceed 20MB. The name of each file shall be in the following format: ECRC SS4A Demo-"NAMEofDesign-Build Firm"-LOISection "(1,2 or3)" Example: [ECRC SS4A Demo-AcmeConstruction-LOISection1].

General requirements for Section 1 are:

- Page size: 8½" x 11".
- The maximum number of pages for Section 1 shall be five (5), single-sided, typed pages including text, graphics, tables, charts, and photographs.
- Section 1 shall be submitted as a single PDF document.

General requirements for Section 2 are:

- A single 11"x17" organizational chart is allowed to be submitted. For the organizational chart the font size shall be no smaller than 8 points.
- Resumes for key personnel shall be limited to 2 pages per resume (8 ½" x 11"). Resumes for the key personnel listed below are required. The Design-Build Firm's work shall be performed and directed by Key Personnel identified in the Letter of Response by the Design-Build Firm. Any proposed change to Key Personnel shall be subject to review and approval by the ECRC.
 - Project Manager
 - Design Manager
 - Construction Manager
 - Project Controls Manager
 - ITS/Technology Manager
 - QA/QC Manager
- Additional resumes for other key personnel are allowed. No more than fifteen (15) total resumes are permitted to be submitted.
- Section 2 shall be submitted as a single PDF document.

General requirements for Section 3 are:

- The Design-Build Firm shall provide an affidavit from a surety/bonding company that certifies the Design-Build Firm has the financial means and capacity to provide the ECRC with a payment and performance bond for the face amount of \$7,510,000.00 for the Project.
- Section 3 shall be submitted as a single PDF document.

2. Short-Listing

The Technical Review Committee (TRC) members shall evaluate and score the Letters of Interest received from responsive Design-Build Firms. The ECRC will determine the short-listed firms to short-list the three-highest ranking LOI scores. If three or less responsive firms submitted LOIs, all firms will be shortlisted.

Criteria of the LOI that shall serve as a basis of the evaluation include the following:

- Qualifications and Similar Experience
 - Describe the qualifications and organization of the Proposer including teaming arrangements, structure, key leadership personnel, discipline leads, staff, roles/responsibilities, and location. Identify field staff and office staff on comparable scope of work and delivery method.
 - Describe the Proposer's experience in similar projects with limited durations and alternative delivery projects or programs that are similar in size and scope. Include and describe examples of similar work/projects, status of work, and references.

- Organization and Resource Approach
 - Provide evidence of the Proposer's capacity and ability to self-perform, and describe approach to self-performed work and subcontracting.
 - Describe the level of commitment made by the members of the Proposer's team and the team members' ability to make this Project their only or highest priority.
- Collaboration and Innovation Approach
 - Describe the Proposer's approach to develop a culture of collaboration with the ECRC, its representatives, Project Stakeholders, and its own team including subcontractors and trades during all phases of the Project. The collaboration approach should address Project communications; understanding of, and outreach approach for stakeholder needs; progressing the design; issue escalation; and construction.
 - Describe the Proposer's approach to developing, evaluating, and presenting innovations that improve the Project. Include relevant examples.
- Risk Management and Project Controls Approach
 - Describe the Proposer's approach to cost control, transparency, schedule management, budget management, construction phasing, design quality management, and construction quality management during all phases of the Project.
 - Describe the Proposer's understanding of the key project risks and approach to identifying, monitoring, mitigating, and managing risks during all phases of the Project, including the use of contingency, risk sharing, and shared savings.

3. Responsiveness Check

The ECRC is required to receive at least three (3) Letters of Interest in order to proceed with the procurement. If three (3) Letters of Interest are not received, then the ECRC will re-advertise.

The ECRC will validate that the Proposer has submitted a responsive LOI. The Letter must comply with all of the requirements of the RFP include Section 1, Section 2, and Section 3 in the proper form, and be prequalified in all required areas of work. In addition, the ECRC will use its standard processes to determine whether the Proposer has sufficient capacity to perform the work. The ECRC will post the responsiveness decision as required.

II. Alternative Technical Concept (ATC) Proposals

The ECRC has chosen to incorporate in the Adjusted Score Design-Build method of project delivery the process whereby Design-Build Firms may propose innovative technical solutions for the ECRC's approval which meet or exceed the goals of the project. The process involves the submission of an Alternative Technical Concept (ATC) as outlined below. This process has shown to be very cost effective in providing the best-value solution which is often a result of the collaborative approach of the contractor and their designer which is made possible with the Design-Build project delivery method and the ATC process.

The ATC process allows innovation, flexibility, time and cost savings on the design and construction of Design-Build Projects while providing the best value for the public. Any deviation from the RFP that the Design-Build Firm seeks to obtain approval to utilize prior to Technical Proposal submission is, by definition, an ATC and therefore must be discussed and submitted to the ECRC for consideration through the ATC process. The proposed ATC shall provide an approach that is equal to or better than the requirements of the RFP, as determined by the ECRC. ATC Proposals which reduce scope, quality, performance, or reliability should not be proposed. A proposed concept does not meet the definition of an ATC if the concept is contemplated by the RFP.

The ECRC will keep all ATC submissions confidential prior to the Final Selection of the Proposer to the fullest extent allowed by law, with a few exceptions. Although the ECRC will issue an addendum for all ATC Proposals contained in the list below, the ECRC will endeavor to maintain confidentiality of the Design-Build Firm's specific ATC proposal. Prior to approving ATC's which would result in the issuance of an Addendum as a result of the item being listed below, the Design-Build Firm will be given the option to withdraw previously submitted ATC proposals. Any approved ATC Proposal related to following requirements described by this RFP shall result in the issuance of an Addendum to the RFP:

- Significant changes in scope as determined by the ECRC.

The ECRC may deem a Proposal Non-Responsive should the Design-Build Firm include but fail to present and obtain ECRC approval of the proposed alternates through the ATC process.

1. One-on-One ATC Proposal Discussion Meetings

One-on-One ATC discussion meetings may be held for the Design-Build Firm to describe proposed changes to supplied basic configurations, project scope, design criteria, and/or construction criteria. Each Design-Build Firm with proposed changes may request a One-on-One ATC discussion meeting to describe the proposed changes. The Design-Build Firm shall provide, by the deadline shown in the Schedule of Events of this RFP, a preliminary list of ATC proposals to be reviewed and discussed during the One-on-One ATC discussion meetings. This list may not be inclusive of all ATC's to be discussed but it should be sufficiently comprehensive to allow the ECRC to identify appropriate personnel to participate in the One-on-One ATC discussion meetings. The purpose of the One-on-One ATC discussion meeting is to discuss the ATC proposals, answer questions that the ECRC may have related to the ATC proposal, review other relevant information and when possible, establish whether the proposal meets the definition of an ATC thereby requiring the submittal of a formal ATC submittal. The meeting will be between representatives of the Design-Build Firm and/or the Design-Build Engineer of Record and ECRC staff and/or the TRC members as needed to provide feedback on the ATC proposal. Immediately prior to the conclusion of the One-on-One ATC discussion meeting, the ECRC will advise the Design-Build Firm as to the following related to the ATC proposals which were discussed:

- The Proposal meets the criteria established herein as a qualifying ATC Proposal; therefore, an ATC Proposal submission IS required, or
- The Proposal does not meet the criteria established herein as a qualifying ATC proposal since the Proposal is already allowed or contemplated by the original RFP; therefore, an ATC Proposal submission is NOT required.

The ECRC will return all handouts back to the Design-Build Firm except one copy to remain in the secure procurement file.

2. Submittal of ATC Proposals

All ATC submittals must be in writing and may be submitted at any time following the Shortlist Posting but shall be discussed and submitted prior to the deadline shown in the Schedule of Events of this RFP. The ECRC will allow the submission of draft ATCs at any time following the Shortlist Posting until the date as defined in the Schedule of Events. The submission must be clearly marked as DRAFT. The Design-Build Firm, by submitting a Draft ATC, understands that the purpose of the submission is to provide information to facilitate the discussion during each presenter's ATC meeting and that the ECRC will discuss the concept but is not obligated to reply to the draft submission as if it were a formal ATC submittal. However, at any time prior to the formal Alternative Technical Concept Proposal submittal, the ECRC may provide the Design-Build Firm with a draft written response. The draft written response shall be clearly marked as DRAFT. The intent of this draft ATC response is to provide the Design-Build Firm with possible additional feedback beyond what is provided during the One-on-One ATC meetings, with the goal of allowing for more condensed procurement schedules, as well as potentially eliminating a One-on-One ATC meeting on complex projects.

All ATC submittals are required to be on letter-sized papers, and shall be sequentially numbered and include the following information and discussions:

- a) Description: A description and associated conceptual drawings of the proposed ATC or other appropriate descriptive information, including, if appropriate, product details and analysis as applicable;
- b) Usage: The locations of the proposed ATC elements/configuration and an explanation of how the ATC would be used on the Project;
- c) Deviations: References to requirements of the RFP which are inconsistent with the proposed ATC, an explanation of the nature of the deviations from the requirements and a request for approval of such deviations along with suggested changes to the requirements of the RFP which would allow the alternative proposal;
- d) Analysis: An analysis justifying use of the ATC and why the deviation, if any, from the requirements of the RFP should be allowed;
- e) Impacts: A preliminary analysis of potential impacts on vehicular traffic (during construction), environmental impacts, community impacts, safety, and life-cycle Project and infrastructure costs, including impacts on the cost of repair, maintenance, and operation;

- f) Risks: A description of added risks to the ECRC or third parties associated with implementation of the ATC;
- g) Quality: A description of how the ATC is equal or better in quality and performance than the requirements of the RFP including the traffic operational analysis if requested by the ECRC;
- h) Operations: Any changes in operation requirements associated with the ATC, including ease of operations;
- i) Maintenance: Any changes in maintenance requirements associated with the ATC, including ease of maintenance;
- j) Anticipated Life: Any changes in the anticipated life of the item comprising the ATC;

3. Review and Approval of ATC Submittals

After receipt of the ATC submittal, the ECRC will respond to the Design-Build Firm in writing within 7 calendar days of receipt of the ATC submittal as to whether the ATC is acceptable, not acceptable, or requires additional information. If the ECRC determines that more information is required for the review of an ATC, questions should be prepared by the ECRC to request and receive responses from the Design-Build Firm. The review should be completed within 7 calendar days of the receipt of the ATC submittal. Approved Design Exceptions required as part of an approved ATC submittal will result in the issuance of an addendum to the RFP notifying all Shortlisted Design-Build Firms of the approved Design Exception(s). Prior to approving ATC's which would result in the issuance of an Addendum as a result of a Design Exception, the Design-Build Firm will be given the option to withdraw previously submitted ATC Proposals. The ECRC reserves the right to disclose to all Design-Build Firms, via an Addendum to the RFP, any errors of the RFP that are identified during the One-on-One ATC meetings, except to the extent that the ECRC determines, in its sole discretion, such disclosure would reveal confidential or proprietary information of the ATC. It is the Design-Build Firm's responsibility to clearly establish in the ATC process how the engineering solution provides a benefit to the ECRC. ATC's are accepted by the ECRC at the ECRC's discretion and the ECRC reserves the right to reject any ATC submitted. The ECRC reserves the right to issue an Addendum to the RFP based upon a previously denied ATC Proposal, without regard to the confidentiality of the denied ATC Proposal. All ECRC approvals of ATC submissions are based upon the known impacts on the Project at the time of submission. The ECRC reserves the right to require a modification or amendment to a previously approved ATC as a result of a contract change which is issued by an addendum subsequent to the ECRC's initial approval of the ATC.

4. Incorporation of Approved ATC's into the Technical Proposal

The Design-Build Firm will have the option to include any ECRC Approved ATC's in the Technical Proposal. The Proposal Price should reflect any incorporated ATC's. All approved ATC's that are incorporated into the Technical Proposal must be clearly identified in the Technical Proposal Plans and/or Roll Plots. The Technical Proposal shall also include a listing of the incorporated, approved ATC's. By submitting a Proposal, the Design-Build Firm agrees, if it is not

selected, to disclosure of its work product to the successful Design-Build Firm, only after receipt of the designated stipend (if applicable) or after award of the contract whichever occurs first.

III. Technical Proposal

The Technical Proposal must be submitted electronically in PDF format including bookmarks for each section, meeting all the requirements submission requirements Bookmarks which provide links to content within the Technical Proposal are allowed. Bookmarks which provide links to information not included within the content of the Technical Proposal shall not be utilized. No macros will be allowed. Minimum font size of ten (10) shall be used. Times New Roman shall be the required font type. Submit the Technical Proposal electronically in PDF format to: Ada Clark ada.clark@ECRC.org.

The shortlisted firms shall submit a detailed technical proposal for the project. The proposal shall include sufficient information to enable the ECRC to fully evaluate the capabilities of the firm and its proposed approach to providing the specified services.

Firms and/or teams should demonstrate understanding of and approaches for the unique circumstances of each of the project scope, and unnecessarily elaborate or voluminous proposals are neither required nor wanted. Discussion of the firm's past experience that is not relevant to the specified services for the project should not be included.

The Technical Proposal shall include the following information as a minimum:

Section 1: Project Approach

- Paper size: 8½" x 11". The maximum number of pages shall be fifteen (15), single-sided, typed pages including text, graphics, tables, charts, and photographs. 11"x17" sheets are prohibited.
- Describe how the proposed design solutions and construction means and methods meet the project needs described in this Request for Proposal. Provide sufficient information to convey a thorough knowledge and understanding of the project and to provide confidence that the design and construction can be completed as proposed.
- The Design-Build Firm may provide Value-Added Project Features, for any products or features the Design-Build Firm desires. The Design-Build Firm shall develop the Value-Added criteria, measurable standards, and remedial work plans in the Design-Build Firm's Technical Proposal for features proposed by the Design-Build Firm. Provide the term, measurable standards, and remedial work plan for any proposed Value-Added features that are not Value-Added features included in this RFP, or for extending the Value-Added period of a feature that is included in this RFP. Describe any material requirements that are exceeded.

- Provide a Written Schedule Narrative that describes the Design and Construction phases and illustrates how each phase will be scheduled to meet the Project needs required of this Request for Proposal. Bar or Gantt charts are prohibited.

Section 2: Plans

- Plan sets of the proposed improvements, if applicable, shall be submitted electronically in roll-plot format. The maximum width of the roll-plots shall be 36". The maximum length of the roll-plot shall be 8'. Inclusion of additional information on the roll-plot, other than depictions of the Plan and Profile views, is allowed provided it clarifies the plan and profile views. All other information not included on the roll plots, such as typical sections, special emphasis details, etc., shall be provided on 11"x17" sheets in PDF format.
- The Plans shall complement the Project Approach.

The Design-Build Firm shall address the quality and suitability of the following elements in the Technical Proposal, including, but not limited to:

- Safety
- ITS design and construction
- Artificial Intelligence integration & data visualization
- Digital twin platform & geospatial ecosystem
- Performance measures
- Systems design and development
- Systems testing and integration
- Concept of Operations
- Minimizing impacts through design and construction to environment, public, adjacent projects and properties, etc.
- Utility coordination and design
- Development of design approaches which minimize periodic and routine maintenance
- Computing environment, operational and maintenance requirements, software licensing model, warranty and support model, cybersecurity provisions, and other requirements included in the RFP
- Developing and deploying construction techniques that enhance project durability, reducing long term and routine maintenance, and those techniques which enhance public and worker safety
- Project scalability and interoperability
- Ease of maintenance and future technical support/operations
- Value-added services such as additional applications, warranty and technical support or any other products or features the Design-Build Firm desires

IV. Evaluation Criteria

The TRC shall evaluate the written LOI and Technical Proposal by each Design-Build Firm. The Design-Build Firm shall not discuss or reveal elements of the price proposal in the written proposals. A technical score for each Design-Build Firm will be based on the following criteria:

Submittal Item		Value
Letter of Interest		20
Technical Proposal	1. Project Approach / Unique Concepts	30
	2. Understanding of Requested Services	20
	3. Technical Strength, Experience and Detailed Staffing Plan	20
	4. Quality Control Methods	10
Maximum Score		100

Project Approach / Unique Concepts – 30 pts.

The Design-Build Firm shall present the proposed approach for completing the desired work based on the unique needs of the ECRC. The Design-Build Firm shall demonstrate the manner in which the ECRC's objectives will be achieved and how the firm will assist the ECRC staff in establishing project schedule and budget. The firm shall describe unique models, methodologies, or products that will be utilized in fulfilling the scope of services and shall detail the mechanisms that will be utilized to fulfill the project tasks. The efficient use of manpower and materials shall be considered. Methods to minimize the ECRC project support should be discussed along with innovative approaches for providing the services.

Understanding of Requested Services - 20 pts.

Understanding of requested services should consist of all aspects of the Project scope of services. The proposer should demonstrate detailed understanding of the Federal, State, and local requirements and compliance with those requirements.

Technical Strength, Experience and Detailed Staffing Plan – 20 pts.

The consultant shall submit a staffing plan which clearly illustrates the key elements of the organizational structure proposed to accomplish the management, technical and administrative services required, including sub-consultants/sub-contractors. Project management and key technical personnel within each discipline shall be identified and past experience of each, as it relates to this project, shall be discussed. Key staff resumes also are to be included.

The proposer will clearly identify the relevance of its experience with similar projects, including clear explanation of similarities between the experience and the requested services. All proposals

will be evaluated based on detailed descriptions of the experience related to the qualifications set forth and client references. A list of at least three (3) client references should be provided. References should be individuals who can verify performance on projects of a similar scope and budget as this project. The ECRC reserves the right to contact the referenced clients to verify the information and to solicit comments regarding the applicants' work.

Quality Control Methods – 10 pts.

The proposer shall demonstrate the firm's quality control program, namely the distinguishing policies and procedures followed to assure a complete, accurate, and quality product.

V. Price Proposal

The proposer shall submit the Price Proposal in the table below for all costs of the respective Project elements as defined by the RFP requirements. The Project Total Bid Price will be used for the final selection calculation.

Project Element	Bid Price
Part 1. ITS and safety improvements demonstration	
1.1 AI-based safety analytics system	
1.2 Digital twin	
1.3 Immersive room hardware and software	
1.4 Field equipment/installation	
1.5 Other	
Part 2. Fiber optic communications network	
Project Total	

Submittal of a proposal shall not obligate the ECRC to accept the proposal or proceed with construction through the Design-Build Firm. ECRC reserves the right to determine, in its sole discretion, whether the price is fair, reasonable, affordable, within available funding, and in the ECRC's best interest.

If the ECRC determines that a proposal is not fair, reasonable, affordable, within available funding, or otherwise in the ECRC's best interest, the ECRC may reject any or all proposals. Rejection of the proposals shall not obligate the ECRC to proceed with construction through the Design-Build Firm.

If the ECRC accepts the lowest adjusted score proposal, it may, in its sole discretion, pursue one or more of the following options:

A. Negotiate Modifications to the Proposal

Beginning with the selected design-build firm, the ECRC may request that the Design-Build Firm revise the proposal, project scope, construction approach, schedule, allowances, contingencies, subcontractor pricing, or other components of the proposal. If the ECRC and Design-Build Firm agree in writing to the revised bid proposal, the project may proceed by project-specific amendment, work authorization, or other approved contract mechanism.

B. Modify, Reduce, Phase, or Defer the Project Scope

The ECRC may reduce, phase, defer, or otherwise modify the project scope to align the project with available funding, schedule requirements, or ECRC priorities. Any revised scope shall be subject to ECRC approval and, if applicable, a revised technical proposal and price proposal.

C. Seek Additional Funding

The ECRC may suspend the project while additional funding is pursued. Suspension of negotiations or delay caused by the ECRC's funding review shall not obligate the ECRC to accept the proposal or proceed with the project.

E. Discontinue the Project Assignment

The ECRC may abandon, suspend, or terminate the specific project elements of the assignment in accordance with the Contract. Discontinuing a specific project element shall not necessarily terminate contract unless the ECRC elects to do so.

The submittal shall be a separate email, and indicate that it is the Price Proposal and shall identify the Design-Build Firm's name, project description, and any other information required. The Technical Review Committee shall have no access to the Price Proposals prior to the public opening of the Price Proposals. Submit the Price Proposal electronically in PDF format to: Ada Clark ada.clark@ECRC.org.

Price Proposal Guarantee

A Price Proposal guaranty in an amount of not less than five percent (5%) of the total bid amount shall accompany each Proposer's Price Proposal. The Price Proposal guaranty may, at the discretion of the proposer, be in the form of a cashier's check, bank money order, bank draft of any national or state bank, certified check, or surety bond, payable to the ECRC. The surety on any bid bond shall be a company recognized to execute bid bonds for contracts of the State of Florida. The Price Proposal guaranty shall stand for the proposer's obligation to timely and properly execute the contract and supply all other submittals due therewith. The amount of the Price Proposal guaranty shall be a liquidated sum, which shall be due in full in the event of default, regardless of the actual damages suffered.

VI. Final Selection Process

The ECRC shall publish the bid proposals on its website and calculate an adjusted score using the following formula:

$$\frac{BPP}{TS} = Adjusted\ Score$$

BPP = Bid Price Proposal

TS = Technical Score (Combined Scores from LOI and Technical Proposal)

The Design-Build Firm selected will be the Design-Build Firm whose adjusted score is lowest. The ECRC reserves the right to consider any proposal as non-responsive if any part of the

Technical Proposal does not meet established codes and criteria. The funding for the Project is established at \$ 7,510,000.00 (with an established limit of \$810,000.00 for design and \$6,700,000.00 for construction/equipment/supplies). In the event that all Bid Price Proposals exceed the established funding amount, the ECRC reserves the right (based on the availability of additional funds) to consider the Bid Price Proposals and factor the Adjusted Scores based on those Bid Price Proposals.

VII. Stipend Awards

The ECRC has elected to pay a stipend to all non-selected Short-Listed Design-Build Firms to offset some of the costs of preparing the Proposals. The non-selected Short-Listed Design-Build Firms meeting the stipend eligibility requirements of the Project Advertisement and complying with the requirements contained in this section will ultimately be compensated. The stipend will only be payable under the terms and conditions of the Design-Build Stipend Agreement and Project Advertisement, copies of which are included with this Request for Proposal. This Request for Proposal does not commit the ECRC or any other public agency to pay any costs incurred by an individual firm, partnership, or corporation in the submission of Proposals except as set forth in the Design-Build Stipend Agreement. The amount of the stipend will be \$40,000 per non-selected Short-Listed Design-Build Firm that meets the stipend eligibility requirements contained in the Project Advertisement. The stipend is not intended to compensate any non-selected Short-Listed Design-Build Firm for the total cost of preparing the Technical and Price Proposals. The ECRC reserves the right, upon payment of stipend, to use any of the concepts or ideas within the Technical Proposals, as the ECRC deems appropriate. In order for a Short-Listed Design-Build Firm to remain eligible for a stipend, the Short-Listed Design-Build Firm must fully execute the stipend agreement within one (1) week after the Short-List protest period for the Design-Build Stipend Agreement. The Short-Listed Design-Build Firm shall reproduce the necessary copies. Terms of said agreement are non-negotiable. A fully executed copy of the Design-Build Stipend Agreement will be returned to the Short-Listed Design-Build Firm. A non-selected Short-Listed Design-Build Firm eligible for stipend compensation must submit an invoice for a lump sum payment of services after the selection/award process is complete. The invoice should include a statement similar to the following: "All work necessary to prepare Technical Proposal and Price Proposals in response to the ECRC's RFP for the subject Project".

Exhibit A
Scope of Services for
Demonstration of Intelligent Transportation Systems Safety Infrastructure
Improvements
in Escambia County

I. Introduction and Purpose

The Emerald Coast Regional Council, hereinafter known as the “ECRC”, is soliciting contracting services for the demonstration of Intelligent Transportation Systems (ITS) Safety Infrastructure Improvements in Escambia County, hereinafter known as the “Project”. The ECRC has recently been awarded the Federal Highway Administration (FHWA) Safe Streets and Roads for All (SS4A) Demonstration Grant, aiming to deploy innovative technological improvements and evaluate the safety impact of such improvements on SS4A Priority Segments in Escambia County.

The purpose of this Project includes two parts:

The first part is to complete the **ITS and safety improvements demonstration**, including but not limited to, design, permitting, construction, installation and integration, to deploy safety and operational improvements along two corridors: State Road (S.R.) 295 / Fairfield Drive from Mobile Highway to Texar Drive, and S.R. 95 / Pensacola Boulevard from Beverly Parkway to W Street. These two corridors were identified in the ECRC Safety Action Plan as high-risk locations for roadway fatalities, serious injuries, and recurring congestion. The ECRC, in partnership with the Florida Department of Transportation (FDOT) and Escambia County Florida, aims to alleviate high crashes and fatalities along these corridors. This Project intends to demonstrate how advanced intelligent transportation technologies can reduce crash risk and improve safety without hindering the mobility of traffic flow. These corridors are among the region’s highest for severe and nighttime crashes and fatalities.

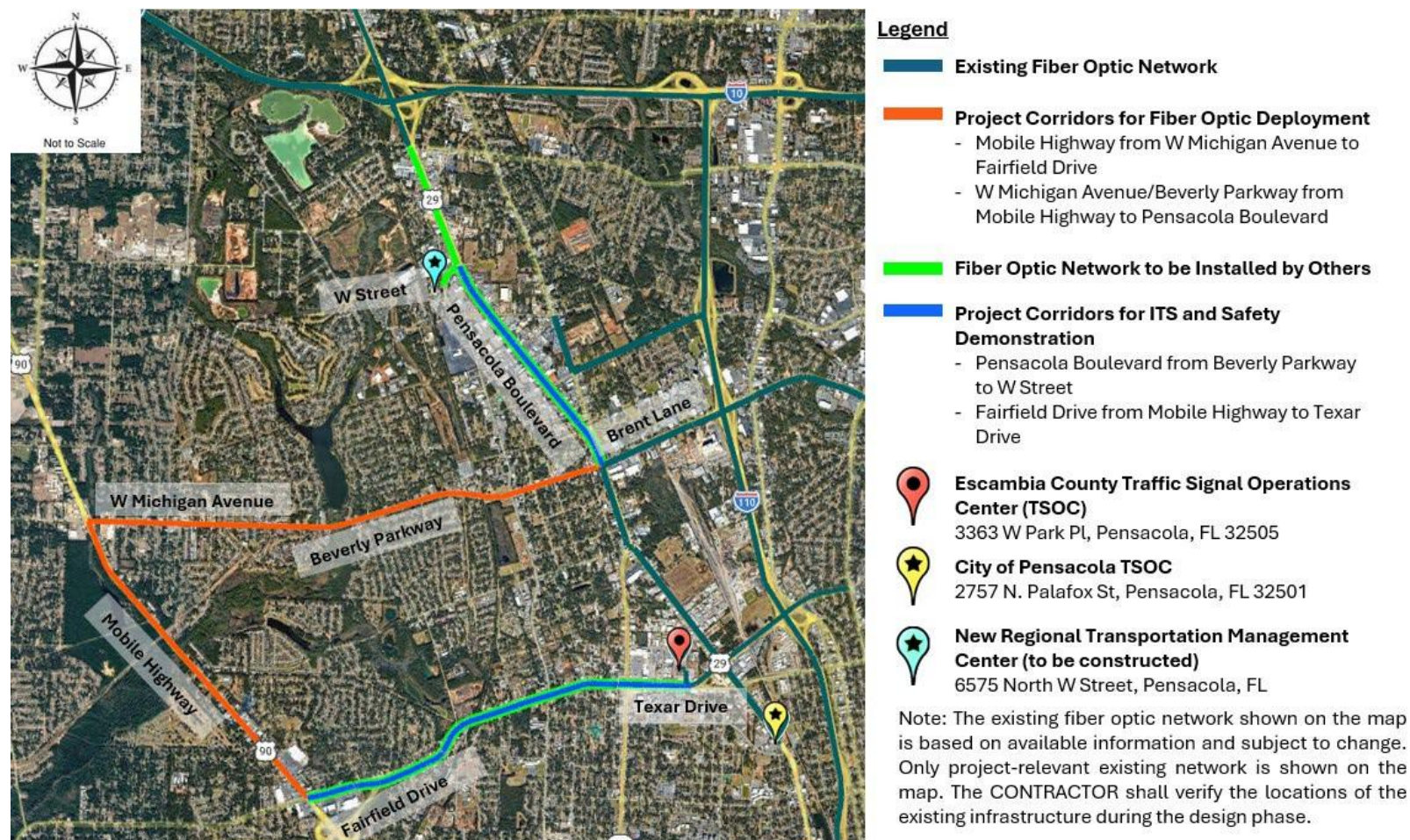
The second part of the Project includes the design and deployment of a **fiber optic communications network** along two corridors: S.R. 296 / West Michigan Avenue / Beverly Parkway from Mobile Highway to Pensacola Boulevard, and S.R. 10A / Mobile Highway from Michigan Avenue to Fairfield Drive, to provide a loop connection in order to ensure connectivity through a high speed network with the existing ITS network and the Project ITS and safety improvements demonstration corridors.

The CONTRACTOR shall also furnish and install a redundant communications path to the Regional Traffic Management Center (RTMC) along Pensacola Boulevard, providing a reliable "backdoor" communications link to the RTMC. In the event of a utility strike or fiber optic cable (FOC) failure, this alternate path would maintain communications to the project corridors, significantly improving the resiliency and reliability of the ITS network.

This Project intends to integrate the infrastructure into an Artificial Intelligence (AI)-based safety analytics system with connected vehicle communications, a digital twin model, and fiber optic connectivity to ultimately develop adaptive infrastructure that supports a unified, data-driven safety ecosystem while prioritizing drivers and vehicles along these corridors.

See **Figure 1** for the Project location map.

Figure 1 Project Location Map



II. Project General Requirements

A. Governing Regulations

The services performed by the CONTRACTOR shall comply with the General Terms and Conditions of the ECRC's SS4A direct recipient Grant Agreement and all applicable Manuals and Guidelines including the ECRC, Escambia County, FDOT, FHWA, American Association of State Highway and Transportation Officials (AASHTO), and additional requirements as applicable for a federally funded project including any applicable Code of Federal Regulations (CFR), such as the 2 CFR Part 200, and 23 CFR Part 940 (ITS Rule 940). The CONTRACTOR shall ensure that all infrastructure installed comply with the current Build America, Buy America Act (BABA) requirements. Except to the extent inconsistent with the specific provisions in this document, the current edition, including updates, of the following Manuals and Guidelines shall be used in the performance of this work: the latest version of the FDOT Standard Specifications for Road and Bridge Construction, the FDOT Standard Plans for Road and Bridge Construction, the FDOT Design Manual, the 2023 edition of the Manual on Uniform Traffic Control Devices (MUTCD). Current edition is defined as the edition in place at the date of advertisement of this Request for Proposal. It shall be the CONTRACTOR's responsibility to acquire and utilize the necessary manuals and guidelines that apply to the work required to complete this Project. The services shall include preparation of all documents necessary to complete the Project as described in this document.

B. Innovative Aspects

All innovative aspects shall be identified separately as such in the Technical Proposal. An innovative aspect does not include revisions to specifications, standards or established ECRC policies. Innovation should be limited to the CONTRACTOR's means and methods, software development, approach to the Project, etc.

C. Quality Management Plan (QMP)

Design:

The CONTRACTOR shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications, geotechnical and other services furnished by the CONTRACTOR under this contract.

The CONTRACTOR shall provide a Design Quality Management Plan, which describes the Quality Control (QC) procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. In addition, the QMP shall establish a Quality Assurance (QA) program to confirm that the Quality Control procedures are followed.

The CONTRACTOR shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The QMP may be one utilized by the CONTRACTOR, as part of their normal operation or it may be one specifically designed for this Project. The CONTRACTOR shall submit a QMP within fifteen (15) working days following issuance of the written Notice to Proceed. A marked up set of prints from the Quality Control review will be sent in with each review submittal. The responsible Professional Engineers or Professional Surveyor that performed the Quality Control review, as well as the QA manager will sign a statement certifying that the review was conducted.

The CONTRACTOR shall, without additional compensation, correct all errors or deficiencies in the surveys, designs, drawings, specifications and/or other services.

Construction:

The CONTRACTOR shall be responsible for developing and maintaining a Construction Quality Control Plan in accordance with Section 105 of the FDOT Standard Specifications which describes their Quality Control procedures to verify, check, and maintain control of key construction processes and materials.

The sampling, testing and reporting of all materials used shall be in compliance with the Sampling, Testing and Reporting Guide (STRG) provided by FDOT. The CONTRACTOR shall use the FDOT's database(s) to allow audits of materials used to assure compliance with the STRG. Refer to the FDOT State Materials Office website for instructions on gaining access to the databases:

<http://www.fdot.gov/materials/quality/programs/qualitycontrol/contractor.shtm>

Prepare and submit to the Engineer a Job Guide Schedule (JGS) using the FDOT database in accordance with Section 105 of Standard Specifications. The ECRC, FDOT, and FHWA, as necessary, shall maintain its rights to inspect construction activities and request any documentation from the CONTRACTOR to ensure quality products and services are being provided in accordance with the FDOT Materials Acceptance Program.

D. Environmental Services

In accordance with the approved SS4A Grant requirements, the CONTRACTOR shall not begin any part of the final design and construction of the Project unless and until the requirements of the National Environmental Policy Act (42 U.S.C. § 4321 et seq.) ("NEPA"), Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) ("NHPA"), and any other applicable environmental laws and regulations have been met and approved, and the written notification from FHWA is received. NEPA evaluation will be attained by ECRC at the 60% design completion.

E. Data Collection

The CONTRACTOR shall collect and review available data, including but not limited to, geotechnical data, existing hydraulic modeling data, geologic and hydro-geologic data and reports, Geographic Information System (GIS) data, damage assessment data, correspondence, reports, topographic, and survey data. Data sources, information, and reports shall be reviewed to evaluate the technical merit and adequacy of the information as it relates to supporting the analysis. The proposed project elements must be confined to the existing FDOT Right of Way, but the CONTRACTOR shall analyze the proposed project elements for any needed environmental assessments and considerations for avoidance and minimization if needed. Relevant data available include property boundaries and ownership, land use and zoning, jurisdictional boundaries, roads, existing multimodal facilities, programmed improvements, traffic data, historical crash data, intersection and signal locations, lighting at key intersections, transit facilities, existing, programmed, and planned ITS infrastructure, existing historic and cultural resources, existing structures, conservation lands and parks, schools, and utilities. The CONTRACTOR shall be responsible to verify the available data accuracy, and identify and obtain additional data as needed.

Geotechnical

The CONTRACTOR shall be responsible for identifying and completing any geotechnical investigation, analysis and design of foundations, foundation construction, foundation load and integrity testing, and inspection dictated by the Project needs in accordance with FDOT guidelines, procedures and specifications. All necessary geotechnical work shall be performed in accordance with the Governing Regulations. The CONTRACTOR shall be responsible for completing the geotechnical aspects of the Project.

Survey

The CONTRACTOR shall coordinate with the ECRC and obtain the most current survey and mapping information applicable to the Project from the ECRC, including Right of Way information. The CONTRACTOR shall verify the accuracy of the information obtained from the ECRC and develop their plans based on their verification of existing conditions. For locations where existing survey and mapping information is not available, the CONTRACTOR shall perform all surveying and mapping services necessary to complete the Project. Survey services must also comply with all pertinent Florida Statutes (Chapters 177 and 472, F.S.) and applicable rules in the Florida Administrative Code (Rule Chapter 5J-17, F.A.C.). All field survey data will be furnished to the ECRC in an ECRC approved digital format, readily available for input and use in CADD Design files. All surveying and mapping work must be accomplished in accordance with the FDOT Surveying and Mapping Procedure, Topic Nos. 550-030-101, and the Surveying and Mapping Handbook.

The CONTRACTOR shall provide final Right of Way maps unless the ECRC determines it is not needed. These maps and any associated sketches, legal descriptions and all associated necessary documentation, field data collection and any other supporting documentation shall be included as part of the Construction Set of plans submitted by the CONTRACTOR.

Verification of Existing Conditions:

The CONTRACTOR shall be responsible for verification of existing conditions, including research of all existing records and other information. By execution of the contract, the CONTRACTOR specifically acknowledges and agrees that the CONTRACTOR is contracting and being compensated for performing adequate investigations of existing site conditions sufficient to support the design developed by the CONTRACTOR and that any information is being provided merely to assist the CONTRACTOR in completing adequate site investigations.

F. Design and Construction Submittals

The design shall meet the latest version of the FDOT Standard Specifications for Road and Bridge Construction, the FDOT Standard Plans for Road and Bridge Construction and the FDOT Design Manual. Services provided by the CONTRACTOR shall comply with all aspects of the ECRC's direct recipient grant agreement. The CONTRACTOR shall perform all engineering tasks required to develop 60/90/Final plans, permitting, and provide NEPA-supporting technical documentation. Provide plans that are reproducible to 40 scale on 11"x17" size plans. The as-built plans for the fiber optic network installation shall be in accordance with FDOT Specifications 611. The CONTRACTOR shall deliver the final CADD.zip in accordance with the CADD Manual. The final Project submittal shall contain all the Project deliverable information in .pdf format.

The deliverables shall include the following at a minimum:

- Design kickoff, Project Management Plan (PMP), baseline schedule, risk register
- Coordination meetings with Escambia County, FDOT, and ECRC
- Existing infrastructure data assembly
- Site visits
- Field surveys
- Signed and sealed geotechnical report
- Right of way needs determination (if any)
- NEPA-supporting technical documentation
- Design documentation, calculations, and computations
- Design criteria and specifications and Technical Special Provisions
- 60% plans and design documentation (prior to NEPA approval)
- 90% plans and design documentation (Upon NEPA approval)

- Final plans and documentation (Signed and Sealed “Release for Construction” plans)
- Cost estimates using FDOT standard pay items and schedule (at each submittal stage)
- Construction specifications
- All required regulatory permitting, including permit fee allowances
- Utility coordination
- Subsurface Utility Exploration (SUE) (as needed)
- Geotechnical Boring and Reports (as needed)
- QA/QC reviews documentation
- Network Diagrams and Details Sheets
- System configuration and equipment interface details
- Continuity of Operations Plan (COOP)
- Maintenance of Communications (MOC) Plan
- Estimated Quantities (EQ) Report
- Concept of Operations (ConOps) and other Systems Engineering analysis and documentation as required by the ECRC
- Post-design services, including but not limited to:
 - Attend preconstruction conference
 - Review shop drawings
 - Be available on an as-needed basis during construction to address issues with design or any unforeseen construction issues and to monitor construction
 - Prepare as-built drawings and certification based upon contractor mark-ups & post construction meetings and inspections. Certify project complete to applicable regulatory agencies. Escambia County, FDOT, and ECRC, or the Construction Inspection (CEI) consultant, will inspect all construction improvements.
- Transition Plan, including a summarization and packaging of all data collected
- Test Plan
- Training Plan
- Shop Drawings
- Sequence of Construction
- Transportation Management Plan and/or Temporary Traffic Control Plan (TTCP) as needed in accordance with FDOT and local agencies’ traffic control restrictions
- Stormwater Pollution Prevention Plans (SWPPP) as needed
- Project Documentation and Warranty

As-Built Set

The CONTRACTOR’s Engineer on Record (EOR) shall professionally sign, seal, and

certify the As-Built Plans, the special provisions and all reference and support documents. The professional endorsement shall be performed in accordance with the FDOT Design Manual. CONTRACTOR shall complete the As-Built Plans as the Project is being constructed. All changes made subsequent to the “Released for Construction” Plans shall be signed/sealed by the EOR. The As-Built Plans shall reflect all changes initiated by the CONTRACTOR or the ECRC in the form of revisions. The As-Built Plans shall be submitted prior to Project completion for ECRC review and acceptance as a condition precedent to the ECRC’s issuance of final acceptance. The ECRC shall review, certify, and accept the As-Built Plans prior to issuing final acceptance of the project in order to complete the As-Built Plans.

G. Operations, Maintenance and Warranty

The final acceptance and termination shall be scheduled towards the end of the contract term. Upon final acceptance, all equipment deployed under the project shall be turned to the ECRC and/or other agencies upon ECRC’s approval. Any demolition or removal, if applicable, shall be handled by the ECRC. If the demonstration is deemed successful by the ECRC, it is the ECRC’s option to continue service beyond contract term for the continuation of any software deployed, and the cost shall be negotiated separately.

The CONTRACTOR shall submit to the ECRC upon final acceptance all warranties provided by the equipment manufacturer for the Project equipment. Such warranties shall comply with the FDOT Standard Specifications, technical special provisions developed by the CONTRACTOR, and any applicable RFP requirements.

The CONTRACTOR shall warrant / guarantee all the work and materials utilized in this Project for a period of thirty-six months, which shall commence from the date of invoice acceptance by the ECRC. The CONTRACTOR shall upon written notice from the ECRC, make any repairs needed to the installation at no cost to the ECRC. Unless otherwise agreed to in writing by the ECRC, all repairs shall be made and completed by the CONTRACTOR within thirty days of the date of the written notice by the ECRC. This warranty / guarantee shall include all labor, materials and any other costs involved. The CONTRACTOR shall provide routine updates to the software and software environment necessary to preserve the fulfillment of the requirements. The CONTRACTOR shall provide initial training in the functionality of the proposed software and any additional training in the instance software updates are made that change the functionality of the proposed systems.

The CONTRACTOR shall be responsible for the maintenance of all hardware and software designed and deployed under the Project during the contract term. The contractor shall also be responsible for specific operations and maintenance activities including, but not limited to:

1. The system should be capable of being fully operational by the staff in the RTMC/TSOC for the duration of the contract. The design-build firm shall provide training

and technical support to the operators in the RTMC/TSOC to ensure they operate the system effectively.

2. The design-build firm shall respond to notifications provided by the RTMC/TSOC or automated through the vendors' software and hardware within 1 hour during normal operating hours (7 AM to 7 PM on normal business days) and 2 hours during all other periods. The design-build contractor and Escambia County will agree to the priority (emergency or non-emergency) of the condition and an appropriate response plan as part of the response.

3. If there is condition that requires emergency response time, the design-build firm shall arrive to the project site to address critical malfunctions within 2-hours of notification during normal hours and 4-hours during other periods. Emergency conditions include: signal operations or traffic control devices that influence traffic flow, dark/blank displays, or flashing signals – those that impact safety and traffic operations. This does not apply to outages that may occur during a force majeure event, such as a hurricane.

4. During a force majeure event, the design-build firm is expected to respond consistent with the direction of Escambia County's disaster recovery efforts.

5. Non-emergency repairs or minor issues generally require a 24-hour response and maximum 72-hour repair time. Non-emergency conditions include those that do not directly impact the safety or operations of travelers involving signals or traffic control devices.

6. The design-build firm is responsible for preventative and recurring maintenance of the hardware and software deployed throughout the contract term consistent with manufacturer specifications or FDOT specifications, whichever is greater, to ensure the effective operations of the hardware and software used for the project.

H. Existing ATMS in Escambia County

All existing traffic signals in Escambia County are currently connected via a system of both fiber optic and cellular communications to the Escambia County Traffic Signal Operations Center (TSOC) located at the Escambia County Central Office Complex 3363 W Park Place, Pensacola, FL. Escambia County currently operates and maintains all signals within their jurisdictions using in-house forces, in conjunction with consultant services provided by the ECRC as well as signal maintenance contractors. The traffic signals located on the State Highway System (SHS), which include the traffic signals within the Project limits, are owned by FDOT, and maintained by Escambia County in accordance with the current Traffic Signal Maintenance and Compensation Agreement with FDOT. The ATMS infrastructure consist of modern controller assemblies using McCain Ex Advanced Traffic Controllers (ATC), and ITS equipment including Closed-Circuit Television (CCTV) cameras for intersection monitoring throughout the county. The current ATMS software is Swarco McCain's MyCity version 1.10, hosted on-prem at TSOC, supplemented by the

Miovision One cloud service. All traffic signals and ITS devices in Escambia County have established full connection to the FDOT District 3 Regional Transportation Management Center (RTMC) with shared access.

I. Adjoining Construction Projects Coordination

The CONTRACTOR shall be responsible for coordinating all design, permitting, and construction activities with other construction projects that are impacted by or impact on this Project. This includes projects under the jurisdiction of local governments, the ECRC, FDOT, other regional and state agencies, or private entities. The CONTRACTOR shall consider and include in the Construction Plans and Bid Price Proposal, any and all temporary detours or diversions required to facilitate traffic movements into and out of the project limits; notwithstanding the alignment, lane positioning and/or grade differences of traffic conditions on those adjacent projects.

The CONTRACTOR shall coordinate with the respective agencies for the following major ongoing projects, and incorporate into the Project design and deployment to ensure connection, communications, and integration:

- **Florida-Alabama Transportation Planning Organization (FL-AL TPO) RTMC**
 - Description: This is a Local Agency Program (LAP) project to design and construct a new RTMC located at 6575 North W Street, Pensacola, FL.
 - FDOT Financial Project Identification Number (FPID): 451524-1-58-01
 - Federal Funded Project FPID: D324-034B
 - Current status (subject to change): This project is led by Escambia County on behalf of FL-AL TPO. The design and specifications have been completed. The Invitation to Bid (PD 24-25.086) for construction was originally released on July 22, 2025. The County is currently in the process of rebidding (PD 25-26.049) at the time of this scope development.
- **Escambia County ATMS Conduit and Fiber Project**
 - Description: This is a Joint Participation Agreement (JPA) project between FDOT and Escambia County for the installation of conduit and fiber to support the new RTMC and this **ITS and safety improvements demonstration Project**.
 - FDOT FPID: 428058-6-54-01
 - Current status (subject to change): This project is at 60% design phase and under NEPA evaluation at the time of this scope development. The construction is anticipated to be led by Escambia County and run concurrently with this Project, subject to change.
 - Project limits:
 - Pensacola Boulevard from I-10 to W Street with a connection to the new RTMC
 - Pensacola Boulevard from Beverly Parkway to W Street

- Fairfield Drive from Mobile Highway to Texar Drive
- This project will tie in the existing traffic signals along the project limits and connect to the existing ATMS fiber optic network. The CONTRACTOR is expected to utilize the fiber optic cables to be constructed under this project for the communications of the proposed **ITS and safety improvements demonstration** along Pensacola Boulevard and Fairfield Drive, and terminate the proposed **fiber optic communications network** along Beverly Parkway and Mobile Highway at the project limits for future connection to the existing ATMS network.

The CONTRACTOR shall design the Project systems and subsystems such that they shall be monitored and controlled from both the new FL-AL TPO RTMC once constructed and operational, and from the Escambia County TSOC, with the exception that the data visualization/immersive room is only required for the use in the RTMC. The CONTRACTOR shall ensure that all ITS field devices and ancillary components comply with the FDOT's Approved Product List (APL) or, when applicable and approved by the FDOT and ECRC, FDOT's Innovative Product List (IPL), and are supported within the existing software used by the TSOC and FDOT District 3, unless otherwise approved by the ECRC. The CONTRACTOR shall include in the proposed improvements any required upgrade to the TSOC central hardware, equipment racks, and equipment wiring, to make the systems fully operational from the TSOC and the future RTMC facilities.

The CONTRACTOR shall coordinate with Escambia County, ECRC and FDOT on the above listed adjoining construction project schedules, scopes and specifications, and develop a COOP to ensure the connection, communication and integration with the existing ATMS and planned projects during and beyond the Project duration.

J. Contract Duration and Project Schedule

The Project shall begin upon written Notice to Proceed by the ECRC. The ECRC has established a Contract Duration of 918 calendar days for the subject Project. The CONTRACTOR shall develop and submit a Project design and implementation schedule and shall allow for up to fifteen (15) calendar days (excluding weekends and ECRC observed Holidays) review time for the review of all submittals. At the time of the RFP development, the following milestones are identified and shall be included in the schedule (dates shown are estimate and subject to change):

Milestones	# of Calendar Days	Date
Notice to Proceed Date		August 28, 2026
Begin Design		August 28, 2026

60% Design Submittal	60	October 27, 2026
Permitting (Concurrent)		
90% Design Submittal	35	December 1, 2026
Final Plans and Supporting Documents Submittal	34	January 4, 2027
Release for Construction Plans Approved and Begin Field Infrastructure Construction	25	January 29, 2027
Construction Substantial Completion and Open to Public Use	333	December 28, 2027
Performance Monitoring Begin	31	January 28, 2028
Performance Monitoring Complete and SS4A Final Report Submittal to FHWA (to be completed by others)	400	March 2 nd , 2029
Total Calendar Days	918	

K. Meetings and Progress Reporting

The CONTRACTOR shall anticipate periodic meetings with ECRC personnel and other agencies as required for resolution of design and/or construction issues. These meetings may include:

- Technical issue resolution
- Local government agency coordination
- Maintenance of Traffic Workshop
- Permit agency coordination
- Scoping Meetings
- System Integration Meetings
- Pre-Construction Meetings
- Progress Meetings
- Utility Coordination Meetings
- Comment Resolution Meetings
- Adjacent Project(s) Coordination Meetings
- Design Meetings
- Pre-Activity Meetings

During design, the CONTRACTOR shall meet with the ECRC's Project Manager on a monthly basis at a minimum and provide a two-week look ahead of the activities to be completed during the upcoming two weeks.

During construction, the CONTRACTOR shall meet with the ECRC's Project Manager on a weekly basis and provide a one-week look ahead for activities to be performed during the coming week.

The system integration meetings shall be held on mutually agreeable dates at least thirty (30) calendar days before beginning system integration activities. The purpose of these meetings shall be to verify the CONTRACTOR's ITS integration plans by reviewing site survey information, proposed connection and splicing diagrams, IP addressing schemes, troubleshooting issues, and other design issues. In addition, at these meetings the CONTRACTOR shall identify any concerns regarding the integration and provide detailed information on how such concerns will be addressed and/or minimized. The CONTRACTOR shall provide all documentation required to support system integration meetings, including detailed functional narrative text, system and subsystem drawings and schematics. Also included shall be the documentation to demonstrate all elements of the proposed design which includes, but is not limited to technical, functional, and operational requirements; ITS/communications; equipment; termination/patch panels; performance criteria; and details relating to interfaces to other ITS subsystems. All action items resulting from the System Integration Meeting shall be satisfactorily addressed by the CONTRACTOR and reviewed and approved by the ECRC.

The CONTRACTOR shall, on a monthly basis, provide written progress reports that describe the items of concern and the work performed on each task. The CONTRACTOR shall meet the 29 CFR 5 for the Davis-Bacon reporting requirements formalized through the grant agreement, including payroll reporting for prevailing wages.

L. Schedule of Values

The CONTRACTOR is responsible for submitting estimates requesting payment. Estimates requesting payment will be based on the completion or percentage of completion of tasks as defined in the schedule of values. Final payment will be made upon final acceptance by the ECRC of the Project. The CONTRACTOR must submit the schedule of values to the ECRC for approval. No estimates requesting payment shall be submitted prior to ECRC approval of the schedule of values.

Upon receipt of the estimates requesting payment, the ECRC's Project Manager will make judgment on whether or not work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

The CONTRACTOR shall also submit the cost trends spreadsheet with estimated quantities along with the associated unit. This data shall be submitted to the ECRC within ninety (90) days of the ECRC's Release for Construction Plans.

M. Construction Engineering and Inspection

The ECRC or its representative is responsible for providing Construction Engineering and

Inspection (CEI) and Quality Assurance Engineering.

N. Testing

The ECRC or its representative will perform verification and resolution sampling and testing activities at both on-site as well as off-site locations for Project deliverables in accordance with the applicable requirements.

III. ITS and Safety Improvements Demonstration

AI-based safety analytics system

The CONTRACTOR shall deploy a smart and revolutionary system along the two corridors listed below, using innovative concepts of products and services that focus on safety and have the ability to identify and prevent conflicts between vehicles and vehicles, and vehicles and vulnerable road users (such as pedestrians and cyclists):

- Pensacola Boulevard from Beverly Parkway/Brent Lane to W Street
- Fairfield Drive from Mobile Highway to Texar Drive

The CONTRACTOR, at minimum, shall furnish and install new vehicle detection at the following signalized intersection:

- Fairfield Dr and Hollywood Ave

The CONTRACTOR shall also furnish and install CCTV cameras at the following signalized intersections:

- Fairfield Dr and South Dakota St/Lowes
- Fairfield Dr and Ruby Ave
- Fairfield Dr and Hollywood Ave
- Fairfield Dr and W St
- Fairfield Dr and Pace Blvd
- Fairfield Dr and L St
- Fairfield Dr and Texar Dr
- SR 95/Hwy 29/Pensacola Blvd and Stumpfield Rd/Marcus Pointe Blvd
- SR 95/Hwy 29/Pensacola Blvd and Industrial Blvd
- SR 95/Hwy 29/Pensacola Blvd and Airport Blvd

The CONTRACTOR shall provide all hardware, software, installation, integration, training and support services necessary to deploy, operate and maintain the needs as defined in this RFP. All software and hardware provided must be compatible with the new FL-AL TPO RTMC and the existing ATMS infrastructure.

The proposed products shall be an AI-based safety analytics system, proven to improve safety. The proposed products and services shall provide real-time data transmissions, risk

monitoring, and real-time optimization based on the traffic conditions, allowing for push notifications delivered via an app-based platform, eliminating the need for specialized vehicle hardware and integration, or utilizing existing vehicle hardware and integration if available.

Digital Twin

The CONTRACTOR shall install necessary hardware and software at the immersive room to be constructed as part of the new FL-AL TPO RTMC building, so that the proposed digital twin can be visualized and/or displayed on the wall of the immersive room. All proposed hardware shall be compatible with the new RTMC specifications.

The digital twin, the immersive room, and any software and hardware needed for the management and operation of the digital twin and immersive room furnished and installed under this project shall be on-premises, and the necessary servers shall reside in the new RTMC.

Digital Twin Specifications

ECRC is seeking a Level 5 Digital Twin: a closed-loop, AI-enabled transportation operations twin rather than just a visualization dashboard, or simple simulation model.

For purposes of this procurement, a Level 5 Digital Twin means an integrated, geospatially accurate, real-time, AI-enabled digital representation of the transportation system that continuously ingests operational data, models current conditions, predicts future conditions, evaluates alternative strategies, recommends optimized actions, and supports automated or semi-automated operational decision-making through a closed feedback loop. Proposed solutions should demonstrate capabilities across representation, interaction, prediction, and optimization, and evaluate maturity across data services, modeling, mapping, intelligence, user experience, and trustworthiness. The digital twin should be framed around multi-source data interaction, data processing, modeling/simulation, visualization, traffic monitoring, scenario simulation, and dynamic traffic control strategy development.

The ECRC intends the Digital Twin to meet a Level 5 maturity objective. The proposed solution shall not be limited to a static 3D model, dashboard, GIS viewer, or manually operated simulation environment. The Digital Twin shall function as an integrated transportation operations decision-support environment capable of real-time data ingestion, bidirectional data exchange where applicable, AI-assisted analytics, predictive modeling, scenario testing, optimization, and closed-loop recommendations or actions for transportation system operations.

Minimum capabilities clarification:

- Geospatial transportation system model: roadway network, intersections, signalized corridors, lane configurations, lighting, assets, devices, and other infrastructure required by ECRC.
- Real-time operational data integration: traffic signal data, detector data, CCTV/video analytics where available, connected device feeds, weather, incidents, work zones, roadway condition data, lighting data, and other agency-provided systems.
- AI and analytics layer: anomaly detection, congestion identification, predictive travel conditions, incident impact estimation, asset condition insights, and operational performance measures.
- Scenario simulation: ability to test alternative signal timing, lane configurations, detours, incident response plans, evacuation operations, construction staging, and other operational scenarios.
- Optimization and recommendation engine: ability to compare scenarios and recommend operational strategies based on user-defined goals such as safety, delay reduction, travel time reliability, queue management, emergency response, or system resiliency.
- Closed-loop capability: ability to support human-approved or rules-based automated updates to connected systems where interfaces, permissions, and as agency policy and applicable Florida Law/Statute allow.
- Immersive visualization: ability to display live conditions, simulations, scenario comparisons, alerts, and performance dashboards in the RTMC immersive room, with stereoscopic 3D capabilities and augmented reality like capabilities.
- Governance and security: role-based access, cybersecurity controls, audit logs, data quality monitoring, model validation, configuration management, and documentation.
- Open architecture: documented APIs, integration approach, data ownership provisions, export capabilities, and avoidance of unnecessary vendor lock-in.
- Implementation roadmap: contractors should identify which capabilities are available at go-live, which require future integration, and what assumptions, dependencies, and agency decisions affect Level 5 realization.
- Expandable: ability to expand the digital twin platform beyond the current project if proven to be successful into areas outside the SS4A scope/project limits.

Deliverables:

Proposers must clearly identify within their bid the following deliverables:

- Capability Matrix *
- Data Integration Plan**
- System Architecture Diagram
- Implementation Roadmap
- Assumptions and Exclusions
- Recurring Cost Schedule
- Cybersecurity Approach
- Demonstration or Proof of Concept Description

*Proposers must clearly identify any capabilities that are autonomous, semi-autonomous, advisory-only, dependent on third-party system integration, or dependent on future agency policy decisions.

**Proposers must also identify any data sets, software, APIs, or services which require ongoing third-party subscriptions, licenses and their costs associated with ongoing usage.

Immersive Data Visualization Room Specifications

Intent/System Requirements

The designed RTMC will host an immersive data visualization room (see architectural drawings provided). The Contractor shall provide all necessary equipment, hardware, and software for a turnkey immersive stereoscopic 3D visualization room within the built RTMC capable of displaying, navigating, and interacting with complex 3D transportation data, models, simulations, and the required digital twin visualizations. Contractors are required to work with the design specifications of the RTMC data visualization room and the full RFP requirements for the compatibility and integration of the digital twin and field devices proposed.

The proposed immersive data visualization room solution is a 3 wall and floor immersive data visualization room which may be a CAVE, cube, immersive projection room, multi-wall powerwall, direct-view LED environment, hybrid visualization system, or comparable immersive display approach, provided the system satisfies the functional and performance requirements described herein and supports collaborative visualization in an immersive 3D environment.

The immersive visualization room shall be provided as a complete, integrated system. The requirements below describe minimum functional and performance expectations and shall be satisfied through commercially available, serviceable, and supportable components, software, and integration methods. The Contractor shall not propose a solution that depends on a single source product or proprietary configuration unless an equal or comparable approach can meet the same stated performance requirements, including BABA compliance.

The system shall create an interactive, spatially accurate, stereoscopic 3D visualization experience with sufficient resolution, brightness, color uniformity, refresh performance, low latency, tracking accuracy, and geometric alignment to support collaborative review of transportation data, simulations, and digital twin visualizations.

Minimum Functional Specifications

The system shall provide an environment that allows multiple users to view and discuss the same spatial content simultaneously. The display environment shall support life scale or near life scale visualization of 3D transportation data (as being collected by existing and proposed field devices and datasets) and shall provide sufficient resolution, brightness, contrast, color uniformity, image alignment, and refresh performance for detailed review of roadway geometry, traffic simulations, operational scenarios, and other spatial datasets.

The system may be projection-based, direct view LED based, or another immersive display technology that meets the specified performance requirements. The proposed configuration shall identify the number of display surfaces, approximate viewing area, usable floor area, projection or display method, native and effective resolution, stereoscopic capability, expected viewing distance, room lighting requirements, and any required space behind, above, below, or adjacent to the display surfaces for equipment access and maintenance.

The immersive stereoscopic 3D visualization system shall meet or exceed the following minimum display performance criteria at final acceptance:

- Effective stereoscopic resolution of not less than 1920×1080 per eye per primary viewing surface;
- Minimum 60 frames per second per eye during interactive visualization of representative Owner approved content;
- Motion-to-photon latency target of 30 milliseconds or less and maximum of 50 milliseconds;
- Stereo crosstalk of 2 percent or less;
- Viewed luminance of not less than 34 cd/m^2 through stereo eyewear at the primary viewing position;
- System contrast ratio of not less than 50:1, with 100:1 or greater preferred;
- Brightness uniformity of not less than 80 percent across each display surface after calibration;
- Geometric alignment error of not more than 1.0 pixel RMS across each display surface and not more than 2.0 pixels maximum at seams, corners, and edge-blended regions.

Additional minimum specs include:

- Immersive configuration: Provide a 3 wall plus floor display environment within the designed space in the RTMC suitable for collaborative visualization, operator review, design coordination, training, demonstrations, and stakeholder briefings.
- 3D visualization: Support stereoscopic 3D visualization using active glasses, passive glasses, tracked viewing, or comparable technology that provides depth perception and spatial

visualization. The system shall also support standard 2D visualization when stereo viewing is not required.

- Tracking and perspective: Provide user/head tracking for at least one primary viewer where required to maintain correct spatial perspective, with the ability for additional participants to observe the same scene.
- Interaction and navigation: Provide intuitive navigation and control through a tracked controller, wand, touchscreen, tablet, keyboard/mouse, operator console, gesture interface, or comparable interaction method.
- Rendering and processing: Provide workstation, graphics processing, media server, image processing, synchronization, and software components necessary to render real-time 2D and stereoscopic 3D content across all display surfaces to create an immersive spatial visualization experience.
- Content compatibility: Support common transportation visualization inputs, including CAD, BIM, GIS, 3D models, simulation outputs, video, dashboards, maps, and real-time or recorded data feeds, either natively or through documented conversion workflows.
- Image quality: Provide a seamless or visually continuous viewing experience with appropriate edge blending, warping, alignment, color calibration, brightness uniformity, refresh rate, and latency suitable for interactive visualization.
- Collaboration: Support group viewing and discussion without requiring all participants to wear head mounted displays. Head mounted displays may be offered as supplemental devices but shall not be the sole means of immersive visualization.
- Operations: Provide a user interface that can be operated by trained RTMC staff without requiring continuous vendor support for routine startup, shutdown, content creation, calibration checks, and presentation use.
- Scalability: Provide an architecture that can support future expansion of display surfaces, content sources, data integrations, software applications, or additional visualization modes.

Integrated Components

The Contractor shall furnish, install, integrate, configure, test, and commission all components required for a complete immersive data visualization room in the RTMC, including as applicable:

- Display surfaces, projection screens, LED panels, powerwall elements, or comparable immersive display hardware.
- Projectors, LED processors, image processors, media servers, graphics workstations, render nodes, synchronization hardware, and control equipment.
- 3D glasses, tracking cameras or sensors, handheld controllers, wands, interaction devices, and associated charging/storage equipment.
- Visualization software, content management tools, calibration software, drivers, licenses, and documented workflows required to operate the system.
- Audio, control interfaces, equipment racks, cabling, network connections, power distribution, surge protection, cooling/ventilation coordination, and room integration components.

- Training, documentation, warranty, preventive maintenance procedures, calibration procedures, and technical support requirements.

Submittal Requirements

The Contractor shall submit a technical narrative and system drawings demonstrating how the proposed immersive visualization room meets the requirements of this specification. The submittal shall identify the proposed system type, manufacturer(s), major components, room layout, display dimensions, viewing area, resolution, brightness, refresh rate, stereoscopic approach, tracking approach, interaction devices, compute architecture, software platform, data/content compatibility, maintenance access, utility requirements, and operator workflow. The submittal shall also identify any proprietary dependencies, single-source components, required licenses, recurring costs, vendor-hosted services, limitations on content formats, cybersecurity considerations, and assumptions regarding RTMC room conditions, network connectivity, electrical service, HVAC load, lighting control, and acoustics.

Acceptance Testing

Prior to final acceptance, the Contractor shall demonstrate that the immersive visualization room operates as a complete integrated system. Acceptance testing shall include startup and shutdown, display alignment, brightness and color uniformity, stereo 3D functionality, user tracking, navigation and interaction, switching between content sources, visualization of representative 2D and 3D transportation datasets, and operation by trained Owner staff.

The Contractor shall correct deficiencies identified during testing and provide final as-built documentation, licenses, credentials, operating manuals, training materials, warranty documentation, maintenance procedures, and calibration instructions prior to final acceptance.

Systems Engineering

The CONTRACTOR shall follow the FHWA Rule 940 (Intelligent Transportation Systems Architecture Standards) requirements and use a Systems Engineering approach for determining the requirements for the Project. The CONTRACTOR shall develop all necessary documents to support the Rule 940 requirements including ConOps, Systems Engineering Management Plan (SEMP), Requirements Traceability Verification Matrix (RTVM) and others as deemed necessary by the ECRC. The CONTRACTOR shall coordinate with the ECRC to obtain any available systems engineering documentation prior work.

The CONTRACTOR shall develop a Testing Plan for review and approval by the ECRC. The Testing Plan shall clearly identify procedures and pass/fail criteria for testing individual components and system functionality. The ECRC will utilize the Testing Plan to validate and accept the successful deployment prior to payment to the CONTRACTOR. Components or devices that fail testing shall be repaired or replaced as necessary and re-tested. In the event a single component or device fails testing two (2) times, the item shall

be replaced in its entirety and tested again.

The CONTRACTOR shall be responsible to provide, furnish, and install any ancillary equipment for a fully functional system.

Performance Measures

The proposed system shall include a dashboard interface that provides customizable visualizations of system performance. The anticipated performance measures as approved by the SS4A Grant for the ITS and Safety Improvements Demonstration include the following:

- Safety
 - Fatalities: Total annual fatalities in the project location(s)
 - Serious Injuries: Total annual serious injuries in the project location(s)
 - Crashes by Road User Category: Total annual crashes in the project location(s) broken out by types of roadway users involved (e.g., pedestrians, bicyclists, motorcyclist, passenger vehicle occupant, commercial vehicle occupant)
 - Crashes by Type: Total annual crashes in the project location(s) broken out by type of crash (e.g., side swipe, rear end, single vehicle crash, etc.)
- Cost
 - Project Costs
- Outcomes and Benefits
 - Quantitative Project Benefits: Quantification of evidence-based projects or strategies implemented
 - Qualitative Project Benefits: Qualitative description of evidence-based projects or strategies implemented
 - Project Location(s): GIS/geo coordinate information identifying specific project location(s)
- Lessons Learned and Recommendations
 - Description of lessons learned and any recommendations relating to future projects or strategies to prevent death and serious injury on roads and streets.

The proposed improvements shall not have negative impacts on the mobility of the arterial network such as speed limit reduction or lane elimination that will change the roadway environment. The mobility performance measures as required by ECRC will be considered in the evaluation of the proposed improvement.

Existing ATMS within the Improvement Corridor Limits

The proposed products shall be fully compatible with the new FL-AL TPO RTMC and the ATMS infrastructure. The existing traffic signal locations and vehicle detection system within the improvement corridor limits are listed in **Table 1**. The existing servers at TSOC are listed in **Table 2**. These traffic signals are currently connected to TSOC via cellular

modem, with planned connection via fiber optic under the ongoing Escambia County ATMS project. The existing Miovision detection system includes hardware connection in the traffic signal cabinets and a cloud-based platform operated at the TSOC. The CONTRACTOR shall be responsible for coordinating and verifying the current supporting environment with the new FL-AL TPO RTMC and the ATMS infrastructure.

It is anticipated that the proposed improvements under this Project can utilize the fiber connection to be completed under the ongoing Escambia County ATMS project for communication. The CONTRACTOR shall coordinate and verify the project schedule with Escambia County, and be responsible for providing alternative communication methods as needed.

The CONTRACTOR shall propose and implement retrofit or upgrade to the existing ATMS and traffic signal system if needed for the proposed technology implementation as part of the Project. Any proposed improvements shall be compatible with the existing Miovision and traffic signal system.

Table 1 Existing Traffic Signal Locations and Vehicle Detection System within the Improvement Corridor Limits

Traffic Signal Locations	Existing Vehicle Detection
Mobile Hwy and Fairfield Dr	Miovision Core DCM + 1 360° Camera
Fairfield Dr and South Dakota St/Lowes	Miovision Core DCM + 1 360° Camera
Fairfield Dr and Ruby Ave	Miovision Core DCM + 1 360° Camera
Fairfield Dr and Hollywood Ave	Inductive Loops
Fairfield Dr and W St	Miovision SmartLink + SmartSense + 1 360° Camera
Fairfield Dr and Pace Blvd	Miovision Core DCM + 1 360° Camera
Fairfield Dr and L St	Miovision SmartLink + SmartSense + 1 360° Camera
Fairfield Dr and Texar Dr	Miovision SmartLink + SmartSense + 1 360° Camera
SR 95/Hwy 29/Pensacola Blvd and W St	Miovision Core DCM + 2 360° Cameras + 2 Advanced Camera Detectors
SR 95/Hwy 29/Pensacola Blvd and Stumpfield Rd/Marcus Pointe Blvd	Miovision SmartLink + SmartSense + 1 360° Camera
SR 95/Hwy 29/Pensacola Blvd and Industrial Blvd	Miovision SmartLink + SmartSense + 1 360° Camera
SR 95/Hwy 29/Pensacola Blvd and Airport Blvd	Miovision Core DCM + 2 360° Cameras
Brent Ln/Beverly Pkwy and SR 95/Hwy 29/Palafox St	Miovision Core DCM + 2 360° Cameras

Table 2 Existing TSOC Server Inventory

TSOC Server Inventory
Juniper Switch
Palo Alto Firewall
Miovision SmartLink Integration Unit
Dell 7920
Dell R640
Dell QNAP
Dell Power Edge R720 Server 1
Dell Power Edge R720 Server 2

System Access & User Security

The proposed system and subsystems shall provide secure, role-based access to authorized users through multi-factor authentication (MFA). User accounts shall be managed by system administrators, supporting configurable access permissions and audit logs. Authentication mechanisms shall include Hypertext Transfer Protocol Secure (HTTPS) encryption and compliance with cybersecurity standards to protect user credentials and sensitive data. System access shall be available via a web-based interface with no requirement for proprietary software installations. Logs of all user activity, security events, and configuration changes shall be maintained for audit and compliance purposes. The proposed system shall meet all applicable ECRC, FDOT and Escambia County cybersecurity standards.

System Scalability & Integration

The proposed systems shall be scalable, supporting regional expansion and additional traffic management modules for future growth. Integration with existing and new detection systems, connected vehicle technologies, and third-party data sources shall be supported for future growth. Application Programming Interface (API) capabilities shall allow for external system interoperability, enabling data exchange with transportation agencies and third-party applications.

Training and Documentation

The CONTRACTOR shall provide ECRC, FDOT and Escambia County staff either remote or in person training by a qualified technician in the proper operations, troubleshooting, configuration, administration, and calibration of the system, as well as, on preventive maintenance and repair of equipment. The CONTRACTOR shall be responsible for providing all material necessary for the training session including, but not limited to, training materials, electronic copies of presentations, and system operations manuals and

user guides. The CONTRACTOR shall also provide electronic and printed version of the manuals and references for all hardware and software supplied by the CONTRACTOR as part of the Project deployment. Materials shall include, but not be limited to, user manuals, maintenance manuals, troubleshooting manuals and specifications.

IV. Fiber Optic Communications Network

The CONTRACTOR shall design and deploy fiber optic backbone to enhance the existing regional ATMS network. The CONTRACTOR shall analyze and document ITS design and construction tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, existing ITS standard operating procedures, strategic plans, FDOT Systems Engineering Management Plan (SEMP) guidelines, National and regional ITS architectures, and local agencies' standards and specifications.

Corridor limits for fiber optic deployments are as follows (total approximately 6 miles):

- Mobile Highway from W Michigan Avenue to Fairfield Drive (approximately 2.4 miles)
- W Michigan Avenue/Beverly Parkway from Mobile Highway to Pensacola Boulevard (approximately 3.6 miles)

The design and construction services shall include the following:

- Two - 2" HDPE conduits with a single direct buried tracer wire with splice boxes as needed
- One conduit shall include a 144-count single-mode fiber optic cable backbone, and the other conduit shall be a spare.
- The system goal is a 10 GB fiber optic cable backbone that meets or exceeds upload and download speeds up to 10 Gbps.
- System resilience and its role in disaster recovery shall be considered in the design of the fiber optic cable backbone and ADMS network.
- These facilities, upon final acceptance, shall be dedicated to the ATMS network to be owned, maintained, and operated by the local maintaining agencies and/or FDOT after the contract term.

The CONTRACTOR shall furnish and install fiber splice vaults, splice enclosures and splice trays at all existing traffic signal cabinets along the corridors, and at the tie-in locations of the existing network, see the lists of locations below. A 200 feet minimum slack fiber shall be coiled inside each splice vault. The splicing with the traffic signals and the existing network will be completed by others for future connection.

- There are 11 existing traffic signals within the corridor limits:
 1. S.R. 10A (U.S. 90/MOBILE HWY) @ S.R. 296 (MICHIGAN

AVE/SAUFLEY FIELD RD)

2. S.R. 10A (U.S. 90/MOBILE HWY) @ MARLANE DR
 3. S.R. 10A (U.S. 90/MOBILE HWY) @ MASSACHUSETTS AVE
 4. S.R. 10A (U.S. 90/MOBILE HWY) @ EDISON DR
 5. S.R. 10A (U.S. 90/MOBILE HWY) @ CHEROKEE TR
 6. S.R. 10A (U.S. 90/MOBILE HWY) @ S.R. 727 (FAIRFIELD DR)
 7. S.R. 296 (MICHIGAN AVE) @ MEMPHIS AVE
 8. S.R. 296 (MICHIGAN AVE) @ SOUTH GULF MANOR
 9. S.R. 296 (MICHIGAN AVE) @ CLIFTON AVE
 10. S.R. 296 (BEVERLY PKWY) @ W ST
 11. S.R. 95 (U.S. 29/N PALAFOX ST) @ S.R. 296 (BRENT LN/BEVERLY PKWY)
- The tie-in locations for future connection to adjacent regional ATMS fiber optic network are as follows:
 1. S.R. 10A (U.S. 90/MOBILE HWY) @ S.R. 727 (FAIRFIELD DR)
 2. S.R. 95 (U.S. 29/N PALAFOX ST) @ S.R. 296 (BRENT LN/BEVERLY PKWY)