

Northeast Ohio Areawide Coordinating Agency

NOACA 1299 Superior Avenue Cleveland, Ohio 44114-3204 (216) 241-2414 www.noaca.org

Request for Proposals (RFP) for an Intelligent Transportation System (ITS) Architecture Comprehensive Update

Issue Date: December 14, 2017

Closing Date: January 22, 2018

NOACA is seeking a qualified person or firm to contract for consulting services for the ITS Architecture Update. **The deadline for submittals is 12:00PM ET on January 22, 2018.** Please read entire RFP for specific information and requirements.

CONTENTS

1.	The Northeast Ohio Areawide Coordinating Agency (NOACA)	3
2.	Background	3
3.	Scope & Project Details	4
4.	Cost	7
5.	Qualifications	7
6.	Procurement Timeline	8
7.	Selection Procedures	8
8.	Evaluation Criteria	9
9.	Administration Procedures & Conditions	10
10.	Questions	11
11.	Submittals	11

1. THE NORTHEAST OHIO AREAWIDE COORDINATING AGENCY (NOACA)

The Northeast Ohio Areawide Coordinating Agency (NOACA) is a Cleveland-based transportation and environmental planning organization that serves as the metropolitan planning organization (MPO) and designated areawide water quality management agency for the counties of Cuyahoga, Geauga, Lake, Lorain, and Medina in Ohio.

In these capacities it:

- Works with other organizations to help address northeast Ohio's transportation, air quality, and water quality needs.
- Conducts metropolitan planning for various modes of transportation, including vehicles, freight, transit, bicycle, pedestrian, etc., while considering the transportation system's impact on the environment and land use.
- Prepares the region's long-range transportation plan and short-range transportation improvement program, which is the region's capital budget for federally funded transportation projects.
- Conducts studies that address congestion, improve safety and strengthen community livability.

The vision of NOACA is as follows: NOACA will **STRENGTHEN** regional cohesion, **PRESERVE** existing infrastructure, and **BUILD** a sustainable multimodal transportation system to **SUPPORT** economic development and **ENHANCE** quality of life in Northeast Ohio.

NOACA is directed by a 45-member Board of Directors, representing the City of Cleveland and all five NOACA counties and their communities, plus transit agencies, the Northeast Ohio Regional Sewer District (NEORSD), the Cleveland-Cuyahoga County Port Authority, the Ohio Environmental Protection Agency (Ohio EPA), and the Ohio Department of Transportation (ODOT).

The NOACA region is home to 2.1 million people and over 150 units of government. The region is anchored by several urban core cities with the largest being Cleveland.

More information about NOACA is available on our website at www.noaca.org

2. BACKGROUND

In 1997, Congress passed the Transportation Equity Act for the 21st Century (TEA-21) to address the need to begin to work toward regionally integrated transportation systems. In January 2001, FHWA published a rule, and FTA published a companion policy, to implement Section 5206(e) of TEA-21. This Rule/Policy seeks to foster regional integration by requiring that all Intelligent Transportation Systems (ITS) projects funded from the Highway Trust Fund be in conformance with the National ITS Architecture and appropriate standards. "Conformance with the National ITS Architecture" is defined in the final Rule/Policy as using the National ITS Architecture to develop a "regional ITS architecture" that would be tailored to address the local situation and ITS investment needs, and the subsequent adherence of ITS projects to the regional ITS architecture.

The architecture defines integration opportunities among agencies within the region and identifies how cooperation between the agencies in the deployment of ITS systems can be used to meet regional transportation needs. By defining what currently exists in the area of ITS deployments, the Regional ITS Architecture can be used to identify gaps in needed ITS services and can identify how these gaps could be addressed. The architecture can then be used to efficiently structure implementations of ITS technologies. By creating a long range plan for the implementation of these systems and technologies, agencies can:

- Provide inter-operability among jurisdictions
- Establish minimum requirements within region
- Prepare for future expansion
- Prioritize regional investments
- Identify standard interfaces

Intelligent Transportation Systems are interrelated systems that work together to deliver transportation services. Integration of these systems requires an architecture to illustrate and gain consensus on the approach to be taken by a group of stakeholders regarding their particular systems. An ITS Architecture defines the systems and the interconnections and information exchanges between these systems.

3. SCOPE & PROJECT DETAILS

NOACA is seeking proposals from qualified persons or firms to contract for consulting to update the existing regional ITS architecture for the five counties of NOACA (Cuyahoga, Geauga, Lake, Lorain and Medina Counties), last updated in 2010. The comprehensive update must be consistent with the National ITS Architecture and USDOT ITS Architecture and Standards 23 CFR Parts 655 and 940, and State of Ohio ITS protocols.

The comprehensive update is necessary to ensure the architecture continues to accurately represent the regional view of ITS Systems, and establish the blueprint for the future. The comprehensive update includes engaging stakeholders, reviewing transportation needs and services for the region, updating the status of projects, establishing new goals and strategies as appropriate; updating system functional requirements, project sequencing, ITS standards, agency agreements; and define interfaces/functions/standards to support early deployments of connected/autonomous vehicles.

The comprehensive update should include the themes of US DOT's 2015-2019 ITS Strategic Plan:

Enable Safer Vehicles and Roadways by developing better crash avoidance, performance measures, and other notification mechanisms; commercial motor vehicle safety considerations; and infrastructure-based and cooperative safety systems.

Enhance Mobility by exploring methods and management strategies that increase system efficiency and improve individual mobility.

Limit Environmental Impacts by better managing traffic flow, speeds, and congestion, and using technology to address other vehicle and roadway operational practices.

Promote Innovation by fostering technological advancement and innovation across the *ITS Program*, continuously pursuing a visionary/exploratory research agenda, and aligning the pace of technology development, adoption, and deployment to meet future transportation needs.

Support Transportation Connectivity through the development of standards and systems architectures, and the application of advanced wireless technologies that enable communications among and between vehicles of all types, the infrastructure, and portable devices.

1. Project Management/Administration

The successful consultant shall hold a kickoff meeting with NOACA staff at 1299 Superior Avenue, Cleveland, Ohio 44114. Minutes of the meeting shall be submitted to NOACA for approval within (5) working days. The kickoff meeting will include a discussion of expectations for the project. The agenda for the meeting will be developed in coordination with NOACA project manager.

The successful consultant will be responsible for developing a project management plan detailing the tasks to be completed, the deliverables to be produced and a detailed project schedule. The PMP is a living document until complete and should be updated throughout the project. At a minimum the plan should contain:

- a. Project overview
- b. Scope
- c. Methodology
- d. Schedule
- e. Budget
- f. Project team
- g. Risk management
- h. Communication/Stakeholder Engagement Plan

The selected consultant will also be responsible for submitting regular invoices and progress reports to NOACA. The selected consultant will submit monthly progress reports to NOACA throughout the project.

Deliverables:

- Kickoff meeting (within 20 days of project execution)
- Draft PMP (to be submitted to NOACA within two months of contract execution)
- Monthly progress reports
- Invoices

2. Communication/Stakeholder Engagement Plan

a. The selected consultant will develop and implement a stakeholder engagement plan that will facilitate the successful completion of the NOACA Regional ITS Architecture update. The stakeholder outreach plan must include stakeholder meetings, stakeholder interviews, workshops, and other outreach efforts that will be required to complete the tasks for this project. The selected consultant will hold kickoff meeting(s) with external stakeholders to explain the concept and value of the architecture update and an ITS strategic plan.

Deliverables:

- Communication/stakeholder engagement plan (submitted within two months of contract execution
- Engagement activities
- Meeting materials and meeting minutes

3. Identification of Partners

The selected consultant will create an updated list of partner agencies and stakeholders that need to be incorporated into the updated NOACA Regional ITS Architecture. Also identify the roles and responsibilities of stakeholders with regard to the operation, implementation and maintenance of the ITS.

Deliverables:

- Updated list of partner agencies and stakeholders
- Roles and responsibilities report

4. Regional Needs Analysis/Gap Assessment

The selected consultant will perform a regional ITS needs analysis. The needs must be identified through discussion with and input from regional stakeholders. Of particular interest will be the potential impact/needs of integrating connected and autonomous vehicle requirements and transit connected vehicle requirements. The identified needs must be related to the AIM Forward 2040 Long Range Transportation Plan. The Plan can be found at the following link:

https://www.dropbox.com/s/1pvfvhx8xszqdlo/AIM%20Forward%202040.pdf?dl=0

The selected consultant will also examine existing and planned ITS deployment and programs and compare these with identified needs in order to identify gaps between the ITS program and needs. Review and revise the market packages consistent with the National ITS Architecture that support these elements. Document and review with the stakeholder group. This assumes at least one stakeholder meeting per County.

Deliverables:

Needs analysis/gap assessment report

5. Mapping of Current and Proposed System

The selected consultant will review existing and planned ITS components and programs in the study area and will create a comprehensive list of current and planned ITS elements with stakeholders and map them to the latest National ITS Architecture. This requires at least one stakeholder meeting per County, including personal interviews and phone interviews with major stakeholders, as necessary. For each element, the inventory will include name, stakeholder, existing or planned status, description, and the mapping to the National ITS Architecture. Use of ARC-IT 8.0 software, or the most recent version, is required.

Deliverables:

Final comprehensive list of current and planned ITS elements

6. Documentation

Update the existing ITS architecture documentation, maintaining compliance with the USDOT Architecture Rule, and in ARC-IT database format, including system functional requirements, interface diagrams, and recommended standards.

Deliverables:

Regional ITS Architecture documentation in user friendly format

7. Service Packages

Update the service packages and information flows. The selected consultant will survey the service packages identified in the NOACA regional ITS architecture, and identify service packages that are currently applicable that are not included in the current Regional ITS Architecture. Update the information flows, and develop a complete set of service package diagrams.

Deliverables:

Complete set of service package diagrams

8. Website

Create a new version of the NOACA Regional Architecture Website to include all updated information and comments received from stakeholders, conforming to Rule 940.9 for the content of the Regional ITS Architecture. NOACA's current Regional ITS Architecture website: http://www.consystec.com/ohio/noaca/web/.

Deliverables:

- A new version of NOACA Regional ITS Architecture Webpage(2)
- 9. Develop an ITS strategic plan. The Strategic plan will detail ITS strategies, including project cost estimates that directly support the AIM Forward 2040 Long Range Transportation Plan. The strategic plan will forecast possible ITS projects that major stakeholders in the area would like to pursue. It is broken down into two major time frames, 0-5 years and 6+ years. It should provide a description of the projects, lead agency capital costs; as well as operation and maintenance costs and the type of service the project will provide, so that it can be easily tied to the existing ITS architecture.

Deliverables:

NOACA Regional ITS Strategic Plan

10. Interagency Agreements

Develop a list and description of interagency agreements that may be necessary for effective implementation of the projects identified above.

Deliverables:

 List of potential interagency agreements necessary to support the recommended ITS projects and sample agreements will also be provided.

11. Maintenance Plan

Review and revise the Maintenance Plan for the regional ITS architecture, including responsibilities, timelines, and protocols for maintaining and updating the Regional ITS Architecture.

Deliverables:

Updated Maintenance Plan

The draft deliverables shall be submitted to NOACA for review as they are completed, and the final deliverables shall be completed within 18 months of contract execution.

4.0 COST

Proposed budget must be no more than 1 page, and include detailed project costs, by task, staff member, and estimated hours. Actual compensation is subject to contract negotiation.

5.0 QUALIFICATIONS

Consultant Team must demonstrate experience with the tasks included in the scope of services, with a minimum of five years of experience and three relevant examples verifying expertise with creating/updating ITS architecture, and developing ITS strategic plans.

6.0 PROCUREMENT TIMELINE

NOACA's process and timeline for selection of a consultant are as follows:

January 22, 2018. 12:00 noon - Deadline for Submittals.

Submittals must be received at NOACA by the above deadline. Digital proposals are to be submitted via e-mail to procurement@mpo.noaca.org, but NOACA assumes no responsibility for formatting or transmission errors. Submittals received after the deadline will not be considered. Please reference, "ITS Architecture Update RFP" in email subject line.

January 23-26, 2018. Consideration of Submittals and Selection of Interview Candidates An evaluation team will select candidate(s) from submittals received for interview(s). This process will include review of submittals, references, and other information as necessary, as well as rating of submittals.

January 29-30, 2018. Interviews with Selected Candidates (If Needed).

Interviews will provide an opportunity for NOACA and selected candidates to further gauge their fit and ability to work with each other.

Please ensure that the appropriate representative, including the designated Project Manager, will be available to attend an interview if selected as a finalist.

February, 2018. NOACA Committee Review Process

March, 2018. Approval of Contract by NOACA Board of Directors.

7.0 SELECTION PROCEDURES

NOACA will directly select a consultant based on the Letter of Interest (LOI) and interview. The requirements for the LOI and the Consultant evaluation are contained in this document.

Firms interested in being considered for selection should respond by submitting (1) copies of the Letter of Interest electronically to procurement@mpo.noaca.org by 12:00 PM on the response due date listed above:

Responses received after 12:00 PM on the response due date will not be considered.

Please ensure that the appropriate representative, including the designated Project Manager, will be available to attend an interview if needed (January 29-30, 2018) if selected as a finalist. Interviews may occur via conference call.

7.1 Requirements for Letters of Interest

- A. Instructions for Preparing and Submitting a Letter of Interest
 - 1. Provide the information requested in the Letter of Interest Content (Item B below), in the same order listed, in a letter signed by an officer of the firm. <u>Do not</u> send additional forms, resumes, brochures, or other material.
 - 2. The Letters of Interest shall be limited to twelve (12) 8½" x 11" single-sided pages.
 - 3. Adhere to the following <u>requirements</u> in preparing letters of interest:
 - a. Use a minimum font size of 11-point and maintain margins of 1" on all four sides.
 - b. Page numbers must be centered at the bottom of each page.
 - c. Use 8½" x 11" paper only.

B. Letter of Interest Content

Firm & Staff:

- Team Personnel List the Project Manager and other key staff members, including key sub
 consultant staff. Include personnel for important disciplines and staff members that will be
 responsible for the work, and the project responsibility of each. Address the experience of
 the key staff members on similar projects, and the staff qualifications relative to the selection
 sub factors noted. Provide resumes of each firm/team member along with a list of major
 services offered by each team member.
- Firm Experience Provide detail of the firm's qualifications as well as success with projects
 of similar programs, budgets, and/or clients. Describe the capacity of your staff and their
 ability to perform the work in a timely manner, relative to present workload, and the
 availability of the assigned staff. List significant sub consultants, their current prequalification
 categories, and the percentage and areas of work to be performed by each sub consultant.

Project Approach:

Provide a description of your Project Approach, not to exceed four pages. Address your firm's: 1) Technical approach; 2) Understanding of the project; 3) Your firm's qualifications for the project; 4) Innovative ideas; 5) Your firm's project specific plan for ensuring increased quality, reduced project delivery time and reduced project costs; 6) Schedule for completing the tasks.

The above items must be included within the 12-page body of the LOI. Remaining space within the twelve (12) pages may be utilized to provide additional information concerning general qualifications.

8.0 EVALUATION CRITERIA:

Criteria	Weight %
Project Approach: Exhibit 1, Note 3	30
Demonstration of Firm's experience with similar projects-Exhibit 1, Note 2	30
Qualifications of Staff- Exhibit 1, Note 1	30
Project Budget: Exhibit 1, Note 4	10
Total	100

Exhibit 1 - Consultant Selection Rating Form Notes

- 1. **Project Approach** Each consultant shall be evaluated based on the approach presented in the proposal to complete the project. Factors for evaluation shall include project schedules; demonstration of understanding for the project; methods and strategies to best accomplish the project; creativity; viability; and implementation. Proposals should clearly describe how each task or deliverable will be completed.
- 2. Demonstration of Firm's Experience with Similar Projects The proposal must demonstrate each consulting firm's experience and established competence related to this procurement. Each consulting firm shall be ranked, with the highest ranked consulting firm and proposed subconsulting firm receiving the greatest number of points, and lowest ranked consulting firm and proposed subconsulting firm receiving commensurately lower scores. The rankings and scores will be based on each firm's experience on similar projects and past performance for NOACA and other appropriate agencies. The selection team will consider documented performance ratings if available, and consult other agencies as appropriate. The use of documented ratings shall place emphasis on the specific type of services requested.
- **3. Qualification of Staff** The Proposal must demonstrate that the Consultant has the organizational capability and experience to complete the project. Identify the project team members, the role of the prime consultant, and any subconsultant(s). The rankings and scores will be based on the Staff's experience on similar projects and past performance for other agencies.

Differential scoring will consider the relative importance of the Project Managers role in the success of a given project. The Project Manager's role in a simple project may be less important than for a complex project, and differential scoring will reflect this, with higher differentials assigned to projects that require a larger role for the Project Manager.

4. **Project Budget** – Total cost will be evaluated on a scale relative to the cost of all proposals received. The low cost proposal shall receive the highest points possible and each proposal thereafter will be weighted in comparison. The selection team shall review cost factors, such as billable hours, rates of pay, appropriate staff assignment relative to the complexity of each task.

9. ADMINISTRATIVE PROCEDURES AND CONDITIONS

A. It is the policy of NOACA, as required by the Federal Highway Administration (FHWA), that Disadvantaged Business Enterprises (DBEs) shall have equal opportunity to compete for contracts and/or subcontract with another consultant to perform the requested services. The Consultant must

use its best efforts to solicit from and to utilize DBE subcontractors with meaningful minority groups and female representation among their employees. The Consultant must ensure that the DBE subconsultant(s) is performing a "commercially useful function" as defined in CFR 26.55. This agreement includes a DBE Goal of 0%. At least this percent of the agreement shall be subcontracted to certified DBE firms. However, in the event the Consultant is unable to meet the DBE goal placed on this project, a good faith effort must be demonstrated, which documents the effort made to secure the services of DBE subcontractors. This documentation must be included with the proposer's submittal, which is not part of the 12 page limit. The percentage goal may be met if the awarded Consultant is DBE certified. Consultant proposals that do not include the minimum percentage of DBE participation noted above, or that cannot demonstrate good faith efforts to include a DBE, WILL be rejected. If selected, the Consultant's price proposal shall reflect the required level of DBE participation, or provide an explanation of how the requirement will be met in later phases of the work.

- B. Consultants agree not to discriminate against any employee or applicant for employment because of race, color, religion, age, creed, sex, sexual orientation or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultants further agree to comply with all requirements of Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq., 49 C.F.R. Part 21.
- C. All proposals received by NOACA in response to this RFP shall remain valid for 90 days from the date of submittal.
- D. An RFP does not constitute an offer or a contract. No contract may be awarded without a resolution by the NOACA Board of Directors.
- E. NOACA reserves the right to cancel or reissue the RFP or to revise the timeline at anytime. NOACA reserves the right to reject any and all proposals and to waive minor irregularities in the proposal process. NOACA may accept any proposal if such action is believed to be in the best interest of the agency.
- F. NOACA is not liable for any cost incurred by the proposer prior to execution of a contract.
- G. The contract between the successful proposer and NOACA shall include all documents mutually entered into specifically including the contract instrument, the RFP, and the response to the RFP. The contract must include, and be consistent with, the provisions stated in the RFP.
- H. The prime consultant or system provider will be required to assume the responsibility for all services offered in the proposal whether or not directly performed by the prime consultant. Further, the prime consultant will be the sole point of contact for NOACA with regard to contractual matters.
- I. The consultant project team shall be approved by NOACA. NOACA must approve any changes in the project team.
- J. Any award of contract will be to the consultant or contractor that provides the highest value relative to costs.
- K. Consultants must show proof of liability insurance.
- L. NOACA reserves the right to cancel or reissue the RFP or to revise the timeline at anytime.

Suspended or Debarred Firms

Firms included on the current Federal list of firms suspended or debarred are not eligible for selection.

10. QUESTIONS

For questions regarding the RFP, please contact <u>procurement@mpo.noaca.org</u>. All questions must be submitted by email and be submitted by **January 15, 2018 noon.** All answers will be publicly posted on <u>www.NOACA.org</u>.

11. SUBMITTALS

Submissions must be made electronically by **12:00 noon on Monday**, **January 22**, **2018**, using a PDF or Microsoft Office format. To submit the proposal, please email the proposal to procurement@mpo.noaca.org. If the proposal is a large file, greater than 65MB, please instead request the Dropbox site and password for posting the proposal materials.

NOACA supports environmental consciousness and discourages mailed submissions for this RFP. However, for material that must be mailed, use:

Susanna Merlone, Director of Administrative Services Northeast Ohio Areawide Coordinating Agency 1299 Superior Ave. Cleveland OH 44114