2017 Full Service Traffic Operations Engineering – On-Call Services

Request For Proposal

Iowa Department of Transportation

Introduction

The Iowa Department of Transportation’s (Iowa DOT) Office of Traffic Operations is interested in entering into a professional services contract with up to 9 consultant firms to provide on-call Full Service Traffic Operations Engineering Services including but not limited to fiber optic and ITS design, traffic incident management services, traffic operations, maintenance program support, and intelligent transportation systems services to meet the needs of the Department. If your firm is interested in providing the described services, please submit a proposal stating your ability and availability to complete this work.

Project Background

The Iowa DOT requires outside assistance and expertise to assist in the development of strategic and program level planning documents, state of technology analysis for various existing and future Traffic Operations services, Systems Engineering, Performance Measurement, and other services as required by the DOT. Additional needs of the Department include assistance and expertise to maintain a proactive approach toward adapting and implementing ITS technologies, assistance and expertise to assist in the development of plans, specifications, and related documents for the construction and utilization of new and existing fiber optic installations statewide, provide support in the development and deployment of ITS (rural and urban) across the state, and provide assistance and expertise with a wide variety of traffic incident management, traffic operations, and maintenance program services throughout the state including planning, implementation, evaluation, training and exercise work serving a wide range of needs in Iowa.

Project Scope

The consultants selected on this RFP will assist the Iowa DOT in a range of traffic operations services. A list of the potential needs and associated tasks is included below. It is anticipated additional tasks may be included as needs dictate.

Traffic Operations

- Traffic Operations Management Support- supports the Office of Traffic Operations (OTO) and other DOT offices in the management of traffic operations projects and programs. Work tasks may include support and assistance with the Transportation Management Center (TMC), research, facilitation of meetings, document management, project management, and schedule development and monitoring, as well as additional support required by OTO. Work tasks also include a variety of support functions and services under Iowa DOT’s Transportation Systems Management and Operations (TSMO) program.
• Traffic Operations Performance Measures and Management- assist OTO in the development, implementation, and utilization of program-level strategic planning and management plans, documents, and guidelines. Additionally, the development of traffic operations short and long term planning tools and processes. Support in the planning and development of Service Layers for the Transportation Systems Management and Operations (TSMO) Program Plan.

• Project Level Design and Engineering Services- assist in the development of plans, specifications, Requests for Proposals (RFP), and other documents for the procurement of goods and services. Work tasks may include detailed design, RFP writing, and coordination with various DOT offices and divisions (e.g., Office of Purchasing, Information Technology, Maintenance) and other state agencies (e.g., Department of Administrative Services). Assist the OTO in the management of procurement, construction, or other projects, as well as other support required by OTO.

• ITS Architecture and Systems Engineering- development of the tools necessary for intelligent transportation systems, including emerging technologies and connected/autonomous vehicles. Work tasks may include assisting in the development of traffic operations needs assessment and/or concept of operations, analysis of traffic operations tools/strategies (e.g., connected vehicle, freight mobility, automated commercial vehicle enforcement), development and delivery of traffic operations training, as well as other support required by OTO.

• Traffic Modeling Support and Management- assist OTO and other DOT Offices (e.g., Traffic and Safety, Maintenance) in the development and interpretation of various traffic modeling projects. Work tasks may include evaluation of the effects on traffic by construction projects, ramp metering, events, weather, incidents, etc. Development of performance management tools for metro wide and corridor traffic operations, as well as other support required by OTO.

• Traffic Critical Projects (TCP) Program Support – assist OTO in the support of the TCP program to develop work zone safety and mobility mitigation. Work tasks may include input on the design and scheduling and intelligent work zone (IWZ) system planning and support.

**Fiber Optic Design and ITS Services**

The Iowa DOT has a statewide Intelligent Transportation System (ITS) network consisting of portable and permanent field devices, network equipment, and various technologies utilized to facilitate traffic system operations and for data gathering for planning and design purposes.

• Assist OTO in a wide range of ITS and Fiber Optic Design services including:
  - The consultants should be familiar with the purpose and function of a wide range of ITS programs, technologies, and services.
  - Consultants will provide design services for ITS infrastructure installations and fiber optic splicing diagrams for all aspects of the project; from concept thru deployment, including the development of PS&E, construction administration support and inspection, and as-built documentation.
• Assist in the research, review, and recommendations to the DOT of emerging technologies.
• Develop and/or review detailed logical and physical network architectures of existing and planned ITS deployments.
• Work with DOT staff to plan, organize, and review the efforts of various contractors throughout the state including Intelligent Work Zone (IWZ) projects.
• Assist in the utilization of the DOT’s fiber management software, (currently NetDesigner).

Proposals for fiber and ITS deployment plan development shall include example plan sets, including splice diagrams, of projects which have been let for construction.

**Traffic Incident Management**

- **Development of comprehensive, coordinated Traffic Incident Management (TIM) plans** - These plans may serve metropolitan areas, interstate and freeway highway segments, regional areas, rural areas, traffic critical construction projects and special events.

The TIM plans will be developed utilizing local stakeholder input and improving safety for the travelling public, safety for first responders, and mitigating the effects of planned and unplanned traffic incidents. Emphasis is placed on the key focus areas of incident response, traffic management and communications & coordination as the primary components of the TIM planning.

The goal is to develop comprehensive, coordinated Traffic Incident Management plans which have a high level of ownership by local stakeholders (rather than the DOT’s or consultant’s TIM plan). It is imperative the TIM plans maximize local stakeholder buy in and acceptance. In order to accomplish this acceptance, the consultant will need to develop strong working relationships with local stakeholders and maintain the appropriate levels of attendance and stakeholder participation at the working group meetings. OTO staff will provide project management and oversight. While OTO staff will be involved in meetings and the review of deliverables, the consultant should be able to work independently with limited day-to-day oversight.

- **Conversion of response plans to electronic format** - To enhance accessibility and ease of use, the DOT utilizes electronic formats (such as PDF with imbedded links) for the TIM response plans. Recent formats include GIS-based TIM plans that are stored in enterprise databases. All TIM response plans will be required to conform to the designated electronic format.

- **TIM training and exercise program development and implementation** – Development of TIM training modules to train and reinforce with local stakeholders the various components and procedures established in their local TIM plan. Development of TIM exercise program and conducting tabletop exercises with stakeholders in field locations.
• **Motor Vehicle Enforcement planning and response** — Development of concepts, plans, documents, TIM plans, management plans, programs, guidelines, reviews, grants, or other items in support of Motor Vehicle Enforcement. Work tasks may include concept of operations, analysis of traffic operations tools/strategies, connected vehicle, freight mobility, automated commercial vehicle enforcement, virtual weigh-in-motion, and other ITS related development and review. This also includes program support for TIM functions and integration of MVE technology with the Traffic Management Center.

**Maintenance**
• Investigation and analysis of a maintenance program in total or in specific problem areas and may require studies relating to management, operations, design and equipment, personnel and materials requirements.
• Perform comparative technical, economic, and environmental analyses of state of the art systems and design, model, build, install, test, analyze, demonstrate and evaluate prototype or innovative maintenance concepts.

**Contract Information**

On-call professional services contracts will be established between the Iowa DOT and the selected consultants for a period of three years. The selection process is anticipated to be completed in the spring of 2017. Work on specific projects will be dependent upon the needs of the Iowa DOT for the duration of the contract. The actual amount of work under this agreement may vary depending on the need for services and available budget. The Iowa DOT will not guarantee the number of consultants selected, the amount of work, nor contract value.

The base contract will define the general terms and actual work will be defined by supplemental agreements. It is anticipated that the payment method will be cost plus fixed fee, fixed overhead, lump sum, or specific rate of compensation, depending on the task.

**General Requirements**

The consultant and their subconsultants are required to meet the requirements of specified work categories as defined in the Iowa DOT’s Policy and Procedure Manual, Policy No. 300.04, at the time of contract execution, and for the duration of the contract. **Work under this contract will require the consultant team to meet the requirements of work category 237, Highway Maintenance Equipment, Materials and Methods Research and Analysis, and/or work category 238, Intelligent Transportation Systems.** Failure to meet the requirements during the contract will result in cancellation of any remaining portion of the contract.

It is the policy of the Iowa DOT that Disadvantaged Business Enterprises (DBEs) and Targeted Small Businesses (TSBs) shall have the maximum practicable opportunity to participate in the performance of Iowa DOT contracts. Funding of the work under this contract is not expected to involve federal-aid highway funds. Although a DBE / TSB goal is not established, the Iowa DOT still encourages the spirit of the program to be incorporated in the proposed contract whenever possible. In the event DBE participation is required on a particular contract, the goal will be
established as part of the negotiation. A list of certified DBE firms may be found at http://www.dot.state.ia.us/contracts/contracts_eeoaa.htm. A list of TSB firms may be found at https://dia.iowa.gov/tsb/.

**Selection Information**

Emphasis should be placed upon providing information concerning your proposed project approach, similar projects your firm has recently performed and the availability and qualifications of your key staff. The proposal may include additional information, as deemed appropriate, subject to the overall length restriction established in Proposal Requirements.

The selection committee will review and evaluate the proposals submitted based on the following criteria and the weighted value assigned to each. Include a detailed statement for each evaluation criteria.

A. **Key Staff expertise and experience related to Traffic Operations – 25%**

B. **Staffing – 25%**
   1. Specific qualifications of team-15%
   2. Specific qualification of project manager-10%

C. **Firm’s depth of experience and resources for items outlined in the RFP-20%**

D. **Understanding of the project scope and familiarity with local/regional issues -20%**

E. **Current Workload of the firm and Project Manager-10%**

The selection committee does not anticipate the need for oral interviews.

Contacting any selection team member other than the RFP contact person is inappropriate. Marketing meetings with the Iowa DOT while this RFP is active is also considered inappropriate.

**Proposal Requirements**

Please provide the following information in the order listed:

1. All responders must provide adequate information on the cover page to clearly identify the submittal is for the **2017 Full Service Traffic Operations Engineering - On-Call Services** contract along with the replying firm and an email for the point of contact for the firm.

2. Clearly identify in the proposal the areas of expertise your firm has from the four main sections identified in the Project Scope section above (Traffic Operations, Fiber Optic and ITS Design, Traffic Incident Management, Maintenance). It is **NOT** required to have expertise in or include all areas identified in the scope to submit a proposal. Each topic area will be limited to five pages each in the proposal. Include your firm’s approach and philosophy for each area.

3. Include your firm’s approach to addressing the identified tasks, your eligibility to meet the requirements of the “Required Work Categories” for the work you intend to perform, your
understanding of the project’s scope, key issues and relevancy to Iowa’s transportation system. Briefly discuss similar projects the members on your team have completed in the past five years. This listing should be limited to the three most applicable projects.

4. Include the name, qualifications, experience, office address and availability of the contract manager as well as the manager in charge of each major work task. This information should include the identification of similar projects managed or participated in by these individuals. The selection of a contract manager and work task managers by a firm will constitute a commitment by that firm and NO substitute managers will be allowed without prior written approval by the Iowa DOT.

5. Include experience and qualifications as related to the “Required Work Categories” for any sub-consultants to be used and work they will perform.

6. A listing of key members of the project team, a presentation of their qualifications, related experience, office location, and the percent of time they will be committing to the project.

7. A summary of the current workload and commitment of key project members.

8. The location of the office where the majority of work will be performed.

9. Include, as a separate electronic deliverable (portable media if one file is too large to e-mail), recent examples of plans or reports (in pdf format) related to the scope items identified in the proposal that will be reviewed by the selection committee.

- For fiber optic expertise, include a representative sample of plan sheets for fiber optic deployment plans and specifications prepared by your firm (do not include an entire plan set). Examples should include Network Architecture sheet(s), Fiber Installation plan sheet(s), Infrastructure installation (i.e. conduit, pole, hand hole) sheet(s), Typical Installation sheet(s), Fiber Optic Installation and Material Specifications, and multiple fiber splice/termination sheets.
- For other scope items examples, include example reports that exhibit the quality that can be expected at product delivery.
- If needed, mail electronic media with staff resumes, example plans, reports, specifications, etc. to Steven Schroder, Iowa Department of Transportation, Consultant Coordination Section, 800 Lincoln Way, Ames, IA 50010. Information provided through electronic media will not be included in the page count and needs to be postmarked by the day proposals are due. Please include a cover letter with the media mailer to clearly identify that the media is in support of the 2017 Full Service Traffic Operations Engineering - On-Call Services RFP.

10. A disclosure of all work for other clients that may be affected by work on the proposed contract to avoid a potential conflict of interest.

11. Inclusion of promotional literature of a general nature will not be considered in the selection process.

Cost information should not be submitted as part of the proposal.

The proposal must be submitted as a single electronic PDF and be formatted to print on 8.5” x 11” pages. The proposal must be limited to 25 pages. All pages will be counted including: proposal covers, cover letter, dividers, appendices, etc. The maximum size limit of a proposal is 7.5 megabytes.
The electronic proposal must be submitted via email to Steven.Schroder@iowadot.us. An email will be sent confirming receipt of the proposal by 3:00 p.m. on the submittal deadline date.

Proposals are due by 3:00 pm on **March 13, 2017**.

Any technical questions or questions regarding this RFP shall be submitted via email to Steven.Schroder@iowadot.us. Any questions about this RFP must be received by noon on March 6, 2017. Questions and answers regarding this RFP will be posted with the RFP on the Consultant Utilization website, http://www.prof-tech-consultant.dot.state.ia.us.

Any proposal not complying with all requirements stated in the RFP may not be accepted.

**Public Records Law**

The Iowa DOT will treat all information submitted by a consultant as open records following the conclusion of the selection process. Open records are public records that are open for public examination and copying. The Iowa DOT’s release of records is governed by Iowa Code Chapter 22 and 761 IAC Chapter 4. Consultants are encouraged to familiarize themselves with these laws before submitting a proposal.

**Statement of Non-Discrimination**

The selection and contract are subject to the provisions of Executive Order 11246 (Affirmative Action to Insure Equal Employment Opportunity). Federal and state laws prohibit employment and/or public accommodation discrimination on the basis of age, color, creed, disability, gender identity, national origin, pregnancy, race, religion, sex, sexual orientation or veteran’s status. If you believe you have been discriminated against, please contact the Iowa Civil Rights Commission at 800-457-4416 or Iowa DOT's affirmative action officer at 515-239-1693. If you need accommodations because of a disability to access the Iowa DOT’s services, contact the agency's civil rights/ADA coordinator at 515-239-1921. TTY/TDD: 515-239-1514

**References**

PPM 300.04 – Prequalification of Architectural, Engineering and Related Professional and Technical Firms (http://www.prof-tech-consultant.dot.state.ia.us/uploads/300_04.pdf)

PPM 300.12 – Negotiated Contracts for Architectural, Engineering, and Related Professional and Technical Services (http://www.prof-tech-consultant.dot.state.ia.us/uploads/300_12.pdf)