# A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT

Department of Highways
Professional Services Procurement Bulletin 2020-10
Boone, Kenton, Campbell | 6-464 |
Northern Kentucky ATDM Feasibility Study

This document constitutes a Request for Proposals for a Professional Service Contract from qualified individuals and organizations to furnish those services as described herein for the Commonwealth of Kentucky, Department of Highways.

#### I. PROJECT DESCRIPTION

County - Boone, Kenton, Campbell

Route - I-75/71/275/471

Item No. - 6-464

Project Description - Northern Kentucky Active Traffic Demand Management (ATDM)

Feasibility Study

#### **II. PROJECT INFORMATION**

Project Manager - Stephen De Witte, P.E.

User Division - Division of Planning
Dane Blackburn, P.E.

OKI MPO Liaison - Bob Koehler, P.E.

Approximate Fee - \$350,000 (Lump Sum)
Project Funding - Federal Funds (PL)

Approximately 35 miles

#### III. STUDY OBJECTIVES

The Northern Kentucky ATDM Feasibility Study is a joint effort between the Department and the OKI Regional Council of Governments (OKI) MPO to identify technology programs and/or projects to improve capacity, safety, reliability, and travel time for all users on I-71/75, I-275, and I-471.

### IV. CONFLICT OF INTEREST

The current operators and coordinators of ITS infrastructure in the Northern Kentucky area will be included on the project team; therefore, no firm engaged in the integration and operation of this infrastructure nor engaged in the management of the Kentucky control center is eligible to respond to this announcement.

Award of this contract will not prohibit any team members, including all affiliated and subsidiary firms, from providing any future Professional Service or Personal Service contracts, directly or indirectly for KYTC, associated with the Brent Spence Bridge project. Furthermore, any consultant

under contract for any part of the Brent Spence Bridge project has also been determined to not have a conflict of interest, and is therefore eligible to respond to this announcement.

### V. DBE REQUIREMENT

The Consultant team shall include a DBE Participation Plan with their Response to Announcement to help the Department meet the 11.95% DBE goal established by FHWA. The plan needs to demonstrate how DBE companies will be mentored or used to assist in the area(s) pertaining to this contract. An additional 4<sup>th</sup> page will be allowed in the Project Approach (Page 7) to demonstrate this plan. A maximum of 5 points will be considered in the Evaluation Factors for the DBE Participation Plan.

## VI. SCOPE OF WORK

The selected Consultant will be required to provide engineering services including, but not limited to:

- Summarize data available from KYTC
- Draft purpose and need statement and identify project goals
- Assess the feasibility of ATDM strategies to improve capacity, safety, reliability, and travel time on the interstate system of Northern Kentucky including, but not limited to:
  - Dynamic lane use/shoulder control (HOT lanes, FAST lanes, Hard Shoulder Running, Managed Lanes, Bus On Shoulder, Truck Only Lanes, ect.)
  - Dynamic speed limits
  - o Enhance previous KYTC work on queue warning and detection
  - Adaptive ramp metering
- Identify locations where the above strategies are practicable to be implemented, and if strategies can be implemented alongside committed projects
- Identify opportunities for improved incident detection and management
- Work with KYTC to identify additional ITS infrastructure needs
- Identify any necessary changes to the State and/or Regional ITS Architecture for proposed strategies
- Provide cost estimates (D, R, U, C) as well as maintenance, operational, and/or regulatory requirements
- Quantify planning-level benefits of the proposed improvements, including safety, travel time, and emissions
- With the project team, prioritize the proposed improvements
- Summarize findings in a written report

#### VII. SPECIAL INSTRUCTIONS

The Department may retain any of the advertised services to be performed by in-house state forces.

Instructions for Response to Announcement can be found at: https://transportation.ky.gov/ProfessionalServices/Pages/Respond-to-an-Announcement.aspx

KYTC will allow the following modifications to the standard response format for response to this project advertisement only.

• Page 7 (A-D): Project Approach, as standard procedure, the DBE Participation Plan should also be included in this portion of the response with an additional page allowed.

#### **VIII. AVAILABLE STUDIES**

OKI ATDM Study Funding Request One-Page Summary

6-431 Brent Spence Strategic Corridor Study

2020 TANK System Redesign

FHWA ATDM Planning Brief

#### IX. METHOD OF DESIGN

The selected Consultant shall utilize the most recent CADD Standards for Highway Plans Policy in the development of the highway plans.

#### X. ENVIRONMENTAL SERVICES

Environmental services are not required for the initial contract; however, if KYTC chooses to advance the project by Contract Modification to preliminary engineering and final design, the selected Consultant will be responsible for any necessary Environmental Services.

#### XI. PHOTOGRAMMETRIC SERVICES

The Department will provide LiDAR digital mapping and will furnish manuscripts on computer-disks in DCN format. The selected Consultant shall supplement this information with conventional surveying as needed.

If photogrammetric information is not available for this project, the statewide LIDAR digital mapping is available for use. The selected Consultant may be asked to supplement this information with conventional surveying if needed.

#### XII. STRUCTURE DESIGN

Structure design services are not required for the initial contract; however, if the KYTC chooses to advance the project by Contract Modification to preliminary engineering and final design, the selected Consultant will be responsible for any necessary Structure Design Services. These services will include any necessary engineering services to submit to the KYTC an Advanced Situation Folder(s) for the appropriate structure(s). Prequalification in the area of Structure Design is required to be identified in the Consultant's Response to Announcement.

#### XIII. GEOTECHNICAL SERVICES

The selected Consultant may provide all Geotechnical Services required for the project. The Preliminary Design contract may include preliminary geotechnical services to review available geological, mining, or other geotechnical information that could influence the selection of the preferred alternate. Geotechnical services necessary for the completion of Final Design may be

added by contract modification at the appropriate time. At any time, if the Department has the capacity to provide these services, the Department may retain the advertised geotechnical services.

#### XIV. TRAFFIC ENGINEERING

The selected Consultant will provide the analysis of the existing and proposed operations. Traffic Signal Design and Lighting Design services, if necessary for the completion of Final Design, may be added by Contract Modification at the appropriate time. At any time, if the Department has the capacity to provide these services, the Department may retain the advertised traffic services.

Microsimulation models previously developed for KYTC in the study area will be made available to the selected Consultant.

#### XV. UTILITIES

The selected Consultant shall provide a project location map to the Department. The Department will send project location maps to all potential utility contacts to determine whether they may have existing utilities within these project limits. The Department will develop the utility contact list. Facility atlas maps received for this project will be provided to the selected Consultant.

# XVI. PREQUALIFICATION REQUIREMENTS

To respond to this project the Consultant must be prequalified in the following areas by the response due date of this advertisement:

#### Environmental & UST Services (please see note below)

• UST & Hazmat Preliminary Site Assessment (Phase 1)

#### Environmental Archeology & Other Services (please see note below)

- Air Quality Analysis
- Socio-Economic Analysis
- Highway Noise Analysis
- EIS Writing & Coordination
- Cultural-Historic Analysis

#### Geotechnical Services (please see note below)

• Engineering Services

#### **Intelligent Transportation Systems**

- System Design, Deployment & Integration
- System Maintenance, Management & Operations
- Technology / System Evaluation
- Architecture Development

#### Right of Way (please see note below)

- Right of Way Relocation
- Right of Way Acquisition

#### Roadway Design

- Advanced Traffic Engineering Design & Modeling
- Surveying
- Photogrammetry & Related Services
- Urban Roadway Design

#### Structure Design

Spans Under 500'

#### **Traffic Engineering**

- Electrical Engineering Roadway Lighting Services
- Traffic Engineering Services
- Electrical Engineering Traffic Signal Services

### **Transportation Delivery Systems**

Transit Technical Studies

#### **Transportation Planning**

- Traffic Forecasting
- Traffic Data Collection
- Advanced Transportation Planning Engineering Services
- Conceptual Transportation Planning Services
- Transportation Planning Engineering Services
- Travel Demand & Simulation Modeling

### <u>Utility Design</u> (please see note below)

- Electrical Level 1
- Utility Construction Inspection
- Utility Preconstruction Coordination
- Electrical Level 2
- Gas Level 1
- Communication
- Water & Sewer Level 2
- Water & Sewer Level 1
- Gas Level 2

Note – Environmental, geotechnical, right of way, and utility prequalifications are not required with the initial proposal as it is uncertain to the extent practicable if they are necessary. Should any of these services become necessary during the delivery of the project in this or future phases, the selected Consultant team must obtain the required qualifications before providing those services, or bring on a prequalified subconsultant at that time.

#### XVII. PROCUREMENT SCHEDULE

Dates other than Response Date are tentative and provided for information only.

• Advertisement Date: April 14, 2020

Response Date: May 6, 2020 by 4:30 PM ET (Frankfort Time)

First Selection Committee: May 11, 2020
 Final Selection Committee: May 27, 2020
 Contract Scoping Conference: June 3, 2020

Consultant Fee Proposal: June 12, 2020
 Contract Negotiations: June 24, 2020
 Notice To Proceed: July 15, 2020

# XVIII. PROJECT SCHEDULE

- Existing Conditions Meeting October 2020
- Initial Concept Feasibility Meeting December 2020
- Refined Concept Meeting March 2021
- Final Report July 2021

#### XIX. EVALUATION FACTORS

Consultants will be evaluated by the selection committee based on the following, weighted factors:

- 1. Project approach and proposed procedures to accomplish the services for the project. (20 Points)
- 2. Relative experience of consultant personnel assigned to project team with highway project for KYTC and/or federal, local or other state governmental agencies. (20 Points)
- 3. Past record of performance on projects similar in type and complexity. (15 Points)
- 4. Capacity to comply with project schedule. (10 Points)
- 5. DBE Participation Plan. (5 Points)
- 6. Knowledge of the locality and familiarity of the general geographic area. (5 Points)

#### XX. <u>SELECTION COMMITTEE MEMBERS</u>

- 1. Stephen De Witte, P.E., User Division
- 2. Bob Koehler, P.E., User Division
- 3. Dane Blackburn, P.E., Secretary's Pool
- 4. Katy Stewart, P.E., Secretary's Pool
- 5. Brad Rister, P.E., Governor's Pool

# XXI. AREA MAP

