

A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT

Department of Highways Professional Services Procurement Bulletin 2023-05 Fayette (Various) | 5-577 | I-64

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 -	Fayette (Various)
Route -	I-64
Item No. -	5-577.00
Project Description -	Planning study to evaluate the potential for dedicated Automated or Connected Vehicle (C/AV) lanes on I-64 between Lexington and Louisville.

II. PROJECT INFORMATION

Project Manager -	Stephen De Witte, P.E.
User Division -	Planning
SHE Office Liaison -	Shane McKenzie, P.E.
Approximate Fee -	\$600,000 (Lump Sum) Planning Study
Project Funding -	Federal Funds (NH)
Project Length -	Approximately 70 miles

III. STUDY GOALS & OBJECTIVES

Louisville and Lexington, connected by I-64, are Kentucky's largest cities and economic drivers; however, persons without a traditional motor vehicle may find it difficult to move between the two. Connected and automated vehicles (C/AV) offer a tremendous opportunity to expand the transportation system to driverless populations (older adults, people with disabilities, those who are unable or unwilling to drive), offer speed harmonization, improve quality of life – as well as reduce crashes. The objective of this study is to examine the feasibility of dedicated C/AV lanes (or other configurations) on I-64.

This study has a variety of unique considerations. Of particular interest is the suitability of the corridor to C/AV operations, as well as the upgrades needed to implement those operations. Finally, intentional public/private stakeholder and potential partner outreach/coordination is critical to the success of any ITS, TSMO, or C/AV solution.

IV. DBE GOAL

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 should demonstrate how DBE companies will be mentored or used to assist in the area(s) pertaining to this contract. Opportunities for firms to be mentored on how to receive DBE and/or prequalification status may be available. An additional page will be allowed in the Project Approach (Section 7) to exhibit this plan. A maximum of five (5) points will be considered in the Evaluation Factors for the DBE Participation Plan.

V. SCOPE OF WORK

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

- Assess suitability of I-64 as a C/AV or other type of connected corridor, including connected vehicle technology, dedicated lanes, managed lanes, and/or a “mixed traffic” operation
- Analyze physical and ITS infrastructure needs throughout the corridor
 - System Needs: Digital and Operational (hardware/software/edge computing)
 - Roadway/Geometric Needs: Widening/Striping/Signage
 - Utility Needs: Communication/Broadband/Power/Conduit
- Identify and consider maintenance operations, including snow & ice removal
- Identify legal and regulatory hurdles and potential enabling legislation
- Assess potential impacts to traffic in different scenarios of a C/AV or connected corridor
- Identify and plan improvements to the I-64 corridor, including potential environmental requirements
- Provide cost and implementation estimates and identify potential funding strategies
- Intentionally engage public, quasi-public, and private stakeholders, including identification of potential partners (manufacturers, transit agencies, etc.) with clear and effective communication

This project may be advanced to future phases upon the completion the initial study with a Contract Modification.

VI. 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>

VII. AVAILABLE STUDIES

[KYTC C/AV Strategy](#)

[Michigan DOT “Cavnue”](#)

VIII. METHOD OF DESIGN

The selected Consultant shall utilize the most recent CADD Standards for Highway Plans Policy in the development of the highway plans. Refer to the 2019 CADD Standards for ORD V4 Project Development Memo for information pertaining to the latest CADD Standards and plan submittal.

IX. ENVIRONMENTAL SERVICES

Environmental Services are not expected to be included in the initial study beyond a baseline identification of environmental requirements; however, any future Environmental Services may be provided by the Consultant. Prequalification of various Environmental Services are not required to be identified in the Consultant's Response to Announcement.

X. PHOTOGRAMMETRIC SERVICES

If photogrammetric information is not available for this project, the statewide LIDAR digital mapping is available for use.

XI. STRUCTURE DESIGN

Structure Design is not anticipated for the initial contract. If the project advances to Final Design and if the selected Consultant is retained for Final Design services, the selected Consultant shall do the necessary engineering services to submit to the KYTC an Advanced Situation Folder(s) for the appropriate structure(s). The selected Consultant may be responsible for any necessary Structure Design services. Structure Design of the proposed structure(s) may be added as a Contract Modification. Prequalification in the area of Structure Design is not required to be identified in the Consultant's Response to Announcement.

XII. GEOTECHNICAL SERVICES

Geotechnical services are not expected to be required as part of the initial study. The selected Consultant may be asked to 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. Prequalification in the area of Geotechnical Services is not required to be identified in the Consultant's Response to Announcement.

XIII. 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.

XIV. 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. The selected Consultant may be asked to provide planning-level cost estimates for utilities.

XV. PREQUALIFICATION REQUIREMENTS

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

INTELLIGENT TRANSPORTATION SYSTEMS

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

ROADWAY DESIGN

- Rural Roadway Design
- Advanced Traffic Engineering Design & Modeling
- Urban Roadway Design

TRAFFIC ENGINEERING

- Traffic Engineering
- *Electrical Engineering Roadway Lighting* (see note below)*
- *Electrical Engineering Traffic Signals* (see note below)*

TRANSPORTATION PLANNING

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

Environmental Archeology & Other Services* (see note below)

- *Air Quality Analysis**
- *Socio-Economic Analysis**
- *Highway Noise Analysis**
- *Environmental Document Writing & Coordination**
- *Cultural-Historic Analysis**

Geotechnical Services* (see note below)

- *Geotechnical Engineering**

Structure Design* (see note below)

- Spans Under 500 Feet*

* Note – These prequalifications are not required with the initial proposal as it is uncertain to the extent practicable if they are necessary. Should 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.

XVI. PROCUREMENT SCHEDULE

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

- Advertisement Date: November 8, 2022
- Response Date: November 30, 2022 by 4:30 PM ET (Frankfort Time)
- First Selection Meeting: December 5, 2022
- Shortlist Meeting: December 15, 2022
- Interviews: January 19-20, 2023
- Final Selection: January 20, 2023
- Pre-Design Conference: January 27, 2023
- Consultant Fee Proposal: February 10, 2023
- Contract Negotiations: February 22, 2023
- Notice to Proceed: March 15, 2023

XVII. INTERVIEW

The selection committee will identify a shortlist of proposers who submit a responsive proposal to participate in an oral interview. All responding firms should be prepared to present a short presentation and respond to questions. The oral interview will last no more than 60 minutes. Each Proposer will be allowed no more than 30 minutes for a presentation followed by a question-and-answer session, which should take no longer than 30 minutes.

The presentation shall not be used to fill in missing or incomplete information in the written proposal. KYTC will ask the Proposers specific questions relative to their proposal. Follow-up questions from KYTC will be permitted. The oral interview will not be scored separately.

The interview is used solely for KYTC to see clarification of the Proposer's proposal. Proposers will not be permitted to ask questions of KYTC.

Persons with a disability may request a reasonable accommodation such as a sign language interpreter. Request for accommodations must be made one week in advance of the meeting, to allow time to arrange the accommodation.

Each firm shall be required to bring the Consultant's Project Manager and may bring up to four other individuals, at least one of which will actively participate at a local level on the team, to the interview.

Members of the KYTC's Selection Committee will attend each oral interview. Additional subject matter experts and FHWA staff may also attend the interviews. Elected officials will not be

permitted to attend. KYTC will terminate the interview promptly at the end of the allocated time.

KYTC may videotape to document the oral interviews. These recordings are not intended for public use except for the selected Consultant team, which shall be shared with the Department's project team. All other interviews will be returned to the responding firms but not dispersed by the Department. All interviews are anticipated to be held via videoconference.

XVIII. PROJECT SCHEDULE

- Draft Report March 2024
- Final Report June 2024

XIX. EVALUATION FACTORS

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

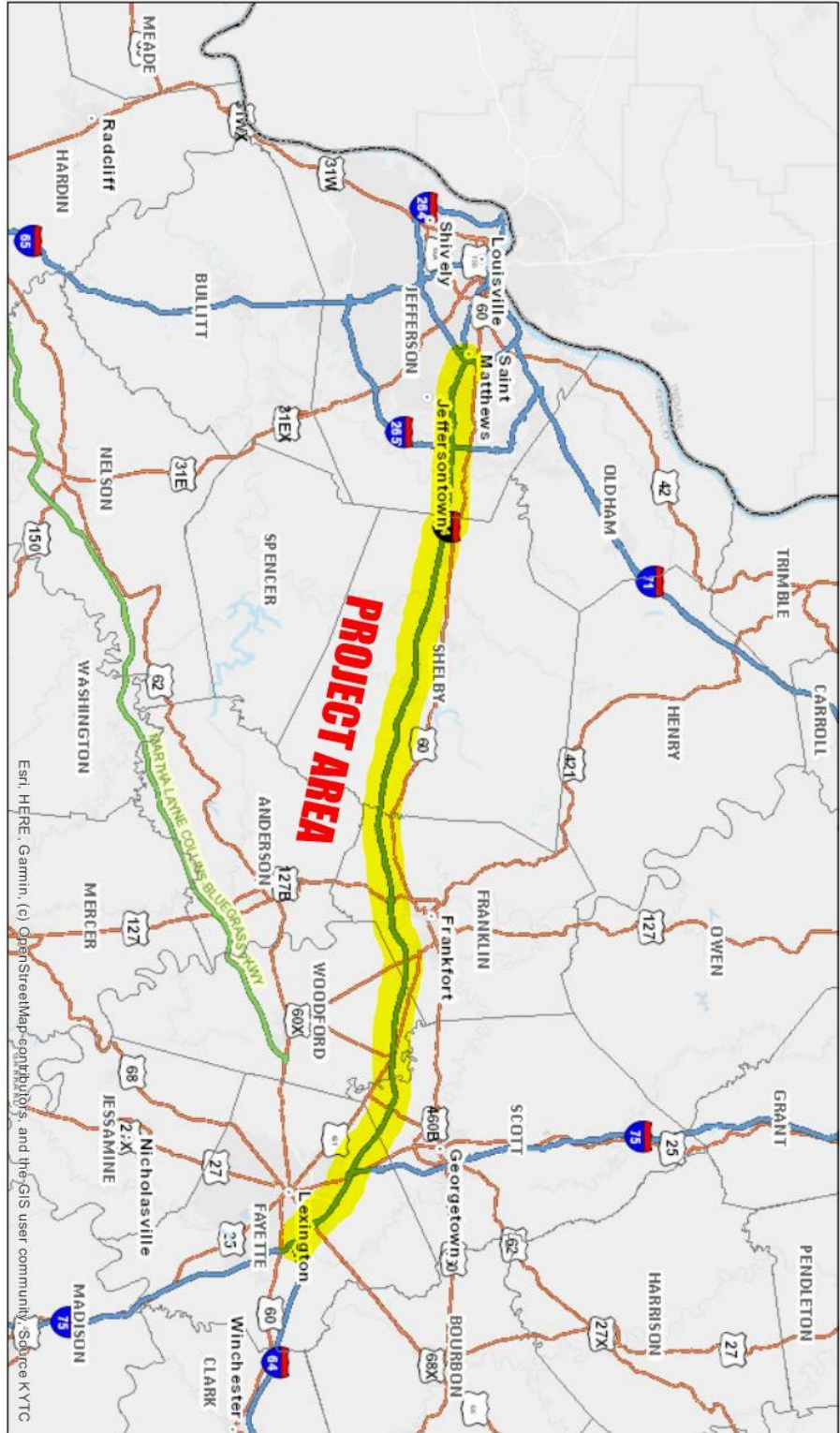
1. Project approach and proposed procedures to accomplish the services for the project. (15 Points)
2. Relative experience of consultant personnel assigned to project team with highway project for KYTC and/or federal, local, or other state governmental agencies. (15 Points)
3. Past record of performance on projects similar in type and complexity. (15 Points)
4. Capacity to comply with project schedule. (5 Points)
5. DBE Participation Plan. (5 Points)
6. Knowledge and understanding of the physical, digital, and operational infrastructure attributes necessary to deliver a connected automated corridor that supports increased equity, quality of life, and logistics. (5 Points)
7. Knowledge of the locality and familiarity of the general geographic area. In particular, the consultant team must be intentional about how to communicate these technologies to a diverse set of public and private stakeholders. (5 Points)

XX. SELECTION COMMITTEE MEMBERS

1. Shane McKenzie, P.E., User Division
2. Jarrod Stanley, P.E., User Division
3. Larry Krueger, P.E., Secretary's Pool
4. Stephen De Witte, P.E., Secretary's Pool
5. Cindy Evensen, Governor's Pool

XXI. AREA MAP

5-577 Study I-64



I - 64
Various Counties
Item No. 5-577.00
Planning Study

