

# **A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT**

## **Department of Highways Professional Services Procurement Bulletin 2017-10 Statewide Traffic Engineering**

This document constitutes a Request for Proposals for 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**

Project Description – Consulting services are needed to perform various traffic engineering tasks involving data collection and analysis. Consultant services will also be utilized to develop and implement signal timing in field controllers based on review of coordinated signal timing along various arterials. Consultant services may also be utilized to model traffic flow using data collected and software tools such as CORSIM. Three (3) consultants will be selected.

### **II. PROJECT INFORMATION**

Project Manager – Telma Lightfoot

User Division – Division of Traffic Operations

Approximate Fee – Three (3) Consultants will be selected to provide services.

\$200,000 Upset Limit each consultant.

Work will be assigned via Letter Agreement, not to exceed \$100,000

Each consultant will be assigned specific tasks to perform and will be paid in accordance with the prices established for the various activities. Task assignments will be made by Letter Agreement. Work is anticipated in five general categories as indicated in the Scope.

Project Funding – State Funds

Contract Duration – June 30, 2019

### **III. PURPOSE AND NEED**

To collect and/or analyze data that will support traffic engineering decisions concerning traffic signals, traffic signal systems, simulation, etc. and to measure the performance of traffic operational systems.

### **IV. DBE REQUIREMENT**

None

### **V. SCOPE OF WORK**

Selected Consultants must possess the expertise and capacity to be able to perform all of the traffic engineering tasks listed below:

- Traffic Signal Timing – Review, analyze, develop and implement traffic signal timing using Wapiti W4IKS firmware. Any software developed by the Department shall be provided by the Department. There will be an emphasis on studying, developing and implementing signal coordination timing for arterials. Field adjustments will be vital to the final implementation of signal timing in the controller.
- Travel Time Studies – In general, travel time studies will be conducted along arterial streets. The data collection method may involve GPS units or Bluetooth readings. The study may involve multiple runs with all runs included in the study. The study may be performed with software developed by the Department, data collection device, and GPS unit. Software shall be provided by the Department. The data collection device (Netbook, Laptop or Tablet) and GPS unit shall be provided by the consultant. Most studies will require analysis of the data collected. Some data collected may be done by Bluetooth methods. Methods must be approved by the Department before data collection is initiated, and approval will be decided on a case by case basis.
- Survey/Drawing/Inventory – The task order will indicate the degree of sophistication desired. In most cases, a good sketch with rough distances will be adequate. Inventories will generally consist of equipment and support infrastructure.
- Macro/Microsimulation – Data collection, design and analysis. A macro or microsimulation program accepted by The Division of Traffic Operations will be used. The latest version of software programs, such as, HCS7, TSIS and VISSIM shall be used. Any files created with Synchro shall be capable of saving and viewing in version 8. Files shall be calibrated to the study area and provided to the Department. A drawing or layout of the intersection(s)/arterial and intersection turn movements should be provided to the Department.
- Intersection Delay Studies – In general, intersection delay studies will be used to determine total vehicle delay on a specific approach to an intersection. Intersection Delay is typically measured during the peak hour and includes the number of vehicles on the approach, the total vehicle delay (veh-hours), the maximum queue length for the approach, and the average delay per vehicle (seconds) on the approach.

The Division of Traffic Operations reserves the right to modify or change programs used.

## **VI. SPECIAL INSTRUCTIONS**

Three (3) firms will be selected to provide these services for a period of two (2) years. Contracts will have an upset limit of \$200,000. Once the upset limit is reached or the two year term has expired, services will be re-advertised and no additional work assignments will be made under the contract. Contracts will not be modified to increase the upset limit or extended for time to assign new work.

The Selection Committee will randomly draw from the pool and list in consecutive order to determine the initial order for which a project will be offered. Projects will be offered to firms on a rotating basis. A firm will not be offered an additional project until the remaining firms on the list have been offered a project. If a firm declines to accept a project, that firm will not be eligible to accept another project until the remaining firms on the list have been offered a project. If a firm declines a project or does not respond to an invitation to perform services for a project within

fourteen days, documentation shall be placed in the project files and the next firm on the rotating list shall be offered the project.

If a firm is more than 30 days past due on two (2) or more tasks on an active Letter Agreement, at the discretion of the Department's Project Manager, the firm may not be offered an additional project until the remaining firms on the list have been offered a project. In such situation, the Department's Project Manager may assign the next project to the subsequent firm on the rotating list. The Department's Project Manager shall document such decisions in the project files. The firm that is skipped shall not be eligible to accept another project until the remaining firms on the list have been offered a project.

Instructions for Response to Announcement can be found at:

<http://transportation.ky.gov/professional-services/pages/respond-to-an-announcement.aspx>

## **VII. ADDITIONAL INFORMATION**

Selected Consultants must have the capability to collect and analyze the data as well as the capability to work with the Department's Highway Information System (HIS) database and GIS database. In general, the data may be transmitted electronically in standard KYTC formats. It is expected that frequent coordination between the consultant and the Department's User Division will be necessary for each specific task.

## **VIII. PREQUALIFICATION REQUIREMENTS**

To respond to this project, the project team must be prequalified in the following areas by the Response Date of this advertisement.

### **TRAFFIC ENGINEERING**

- Traffic Engineering Services

## **IX. PROCUREMENT SCHEDULE**

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

- Bulletin Posted – April 11, 2017
- Response Date – May 3, 2017 by 4:30 PM ET (Frankfort Time)
- First Selection – May 8, 2017
- Final Selection – May 24, 2017
- Contract Scoping Conference – May 31, 2017
- Notice to Proceed – July 1, 2017

## **X. PROJECT SCHEDULE**

Completion of All Services – June 30, 2019

## **XI. EVALUATION FACTORS**

1. Relative experience of consultant personnel assigned to project team with traffic engineering projects for KYTC and/or for federal, local or other state governmental agencies. (15 points)
2. Past record of performance on project of similar type and complexity. (15 points)

3. Capacity to comply with project schedule. (10 points)
4. Project approach and proposed procedures to accomplish the services for the project. (10 points)
5. Consultant's offices where work is to be performed. (2 points)

For state-funded projects, if a Selection Committee vote results in a tie between two (2) firms, one (1) of which will perform more of the work tasks in Kentucky than the other, then the former firm shall be ranked one (1) place ahead of the latter.

## **XII. SELECTION COMMITTEE MEMBERS**

1. Joe Carter, P.E., User Division
2. Ezekiel Goodwin, P.E., User Division
3. Thomas Gilpin, P.E., Secretary's Pool
4. Darren Back, P.E., Secretary's Pool
5. Wes Sydnor, P.E., Governor's Pool