

A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT

Department of Highways Professional Services Procurement Bulletin 2021-11 Statewide Traffic Engineering Services - District 7

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

The selected Consultant will be responsible for performing Traffic Engineering Services in District 7. Up to two (2) consultants may be selected to provide these services on an as-needed basis for two years. The selected Consultant(s) will conduct Traffic Counts, Delay Studies, Speed Studies, Accident Studies/Diagrams, Corridor Reviews, Emergency/ Railroad Preemption, Re-timing of Signal Systems, Pedestrian/Multimodal Studies, Sign, ADA, or electrical equipment inventory, inspections, sign plan preparations, and other required Traffic Engineering functions. The selected Consultant(s) will provide Traffic Engineering functions including guidance on development of study needs for letter agreements. The selected Consultant will provide Traffic Engineering recommendations and Engineering Drawings based upon the results of those Studies. This may include management of electrical contractors that are under contract to the Transportation Cabinet for electrical devices (Traffic Signals and Systems, Flashing Beacons, and School Flashers and Pedestrian Crossings outside of Fayette County) operation and maintenance, installation of new electrical devices, and changes to existing electrical devices.

Counties – Anderson, Bourbon, Boyle, Clark, Fayette, Garrard, Jessamine, Madison, Mercer, Montgomery, Scott, and Woodford

II. PROJECT INFORMATION

Project Manager -	Natalia McMillan, P.E.
User Division -	Traffic Operations - Highway District 7
Approximate Fee -	Up to two (2) consultants may be selected. \$250,000 Upset Limit each consultant. Work will be assigned via Letter Agreement, not to exceed \$100,000 per Letter Agreement without written approval from State Highway Engineer.
Project Funding -	State and Federal Funds
Contract Term -	Two Years

III. PURPOSE AND NEED

Perform Traffic Engineering Services to assist the Highway District 7 Traffic Engineer. To provide Traffic expertise and support to assist the District 7 Traffic Department on various Traffic functions.

IV. DBE REQUIREMENT

None

V. SCOPE OF WORK

The selected Consultant(s) must possess the expertise and capacity to be able to perform the Traffic Engineering tasks including but not limited to:

Maintain continuous coordination with the Highway District 7 Traffic Engineer to schedule activities related to this Contract. Prepare reports detailing activities, results, and compliance with expected completion time-frames. Provide Traffic expertise to the District Traffic Department.

Traffic Counts – In general, 12-hr, 96-hr, peak hour, and turning movement counts (may be manual counts, electronic counts, or tube counts).

Signal Timing Conversion – Convert Wapiti 170 signal timing to Intelight 2070 ATC database. This shall include testing, implementation, and field adjustments. This shall also include conflict monitor key programming at the discretion of the Traffic Engineer.

Traffic Signal Timing – Review, analyze, develop, and implement traffic signal timing. Signal timing format may use Wapiti W4IKS firmware or Intelight 2070 software. All signal timing will be developed and implemented using Intelight 2070 software. Any software developed by the Department will be provided by the Department. There will be an emphasis on studying, developing, and implementing signal coordination timing for arterials. Intersection studies for optimization or lane use as well as for safety improvements may be included. Field adjustments will be vital to the final implementation of signal timing in the controller.

Intersection Review – This includes review of an intersection for possible improvements. Including but not limited to review for intersection control type (such as a study for signal warrants or other innovative intersection control type), lane assignments, signing, markings, or other traffic control devices, and safety review.

Intersection Delay Studies – In general, Intersection Delay Studies will be used to determine the 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.

Travel Time Studies – In general, the Travel Speed Studies will be for an arterial street. The study may involve multiple runs with all runs included in the study. The study should be performed with software developed by the Cabinet, using PDS and GPS units or a similar software to be approved by the District or Department. Software shall be provided by the Cabinet unless it is an approved alternate or pilot software. PDA and GPS units shall be provided by the Consultant. Studies will typically involve analysis collected.

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. Inventories may also include inventory of pedestrian crossings and ADA compliant infrastructure.

Speed Studies – Speed Studies shall be conducted manually and in conformance with standard practice from the Traffic Control Devices Handbook or another acceptable traffic engineering reference. Speed Study data collected with tubes or other automated methods is unacceptable. Speed Study areas will be designated on a map with the number of required collection points per direction indicated. A standard reporting format (Excel spreadsheet) will be provided by the District Traffic Engineer. Based upon the studies performed as enumerated, prepare Engineering recommendations and drawings to accomplish the additions/changes that may result from those studies.

Pedestrian/Multimodal Studies – In general, Pedestrian/Cyclists counts will be used to determine potential needs for improvements to existing infrastructure, ADA compliance at existing crossing locations, and future needs for crossings. Studies will include but is not limited to traffic counts (as outlined above) along a corridor and/or at intersections, inventory of existing pedestrian/cycling facilities, collision history, and proposed pedestrian improvements and solutions. Task order will indicate the degree of sophistication desired for proposed solutions. In most cases, a good sketch with measurements and recommended equipment will be adequate.

Sign Inventory and Plan Development – To assist in developing simple sign plans and data sheets for resigning of corridors with HSIP or State funds. In general, satellite images with locations will suffice for sign plans. The District will provide CARS data for determination of any needed horizontal alignment signage. Format for data sheets will be provided by the District. Additional documentation may be needed and coordinated with Central Office HSIP for project letting and includes but is not limited to General notes and project description, special notes, standard detail sheets, standard forms for insurance and liquidated damages, traffic control plan, summary sheets, and standard drawings.

Manage the activities of electrical contractors that are under contract to the Transportation Cabinet in Highway District 7 for the Operation and Maintenance of electrical devices outside of Fayette County. This currently includes 312 Traffic Signals and 26 Traffic Signal Systems.

Manage the activities of electrical contractors that are under contract to the Transportation Cabinet in Highway District 7 to make modifications and improvements to existing electrical devices as required.

Manage the activities of electrical contractors that are under contract to the Transportation Cabinet in Highway District 7 to install new electrical devices as required.

VI. SPECIAL INSTRUCTIONS

Up to two (2) consultants will be selected to provide these services for a period of two (2) years with no new work assigned after two years from the Notice to Proceed, although the contract may be extended for time to complete work already assigned. Contracts will have an upset limit of \$250,000 per consultant. Once the upset limit is reached or the two year term has expired, services may be re-advertised and no additional Letter Agreements will be executed under the contract. Contracts will not be modified to increase the upset limit or extended for time to assign new work. No Letter Agreement shall exceed \$100,000 without written approval from the State Highway Engineer.

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.

The selected Consultant(s) will be assigned specific activities to perform, and will be paid in accordance with the prices established for the various activities. Task assignments will be based on the tasks that are performed to accomplish Traffic Engineering Services in Highway District 7. Work in anticipated in the general categories as indicated in the Scope. The selected Consultant must have the capacity to perform all of the Traffic Engineering Services enumerated above for Highway District 7. This will require rapid response to management of maintenance needs on a 24/7 basis, 365 days per year.

The selected Consultant(s) must have the capability to collect and analyze the data from Traffic Studies that it may conduct, as well as the capability to work with the Cabinet's Highway Information System (HIS) database and GIS database. In general, the data must be transmitted electronically in standard KYTC formats.

Instructions for Response to Announcement can be found at:

<https://transportation.ky.gov/ProfessionalServices/Pages/Respond-to-an-Announcement.aspx>

VII. METHOD OF DESIGN

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

VIII. TRAFFIC ENGINEERING

The Department will provide all the necessary existing traffic counts for this project. The selected consultant(s) will provide the necessary traffic projections and related information required for this project.

IX. PREQUALIFICATION REQUIREMENTS

To respond to this project, the Consultant(s) must be prequalified in the following areas by the response due date of this advertisement.

TRAFFIC ENGINEERING

- Electrical Engineering Roadway Lighting

- Traffic Engineering
- Electrical Engineering Traffic Signal

X. PROCUREMENT SCHEDULE

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

- Advertisement Posted: May 11, 2021
- Response Date: June 2, 2021 by 4:30 PM ET (Frankfort Time)
- First Selection Meeting: June 7, 2021
- Final Selection: June 23, 2021
- Pre-Design Conference: June 30, 2021
- Notice to Proceed: July 21, 2021

XI. PROJECT SCHEDULE

Individual project schedules will be defined by Letter Agreement on a project-by-project basis.

- Coordination with Highway District 7 Traffic Engineering – Continuous
- Management of Electrical Contractors per Cabinet Contracts – As Required
- Travel Time Studies – Four to Twelve Weeks
- Speed Studies – Three Weeks
- Surveying/Drawing/Inventory – Four to Twelve Weeks
- Traffic Counts – Three Weeks
- Intersection Delay – Three Weeks
- Plan Development- Four to Twelve Weeks

XII. EVALUATION FACTORS

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

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

XIII. SELECTION COMMITTEE MEMBERS

1. Natalia McMillan, P.E., User Division
2. Kimberly Bayert, P.E., User Division
3. Joseph Van Zee, P.E., Secretary's Pool
4. Larry Krueger, P.E., Secretary's Pool
5. Cindy Evensen, P.E., Governor's Pool