PROFESSIONAL SERVICES PROCUREMENT BULLETIN 2009-03 STATEWIDE TRAFFIC ENGINEERING

COUNTY	Statewide
PROJECT DESCRIPTION	Consulting services are needed to perform various traffic engineering tasks involving data collection and analysis. Consultant services will also be utilized to model traffic flow using data collected and software tools such as CORSIM.
PROJECT MANAGER	Telma Lightfoot
USER DIVISION	Division of Traffic Operations
APPROXIMATE FEE	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 of agreement. Work is anticipated in seven general categories as indicated in the Scope. Three (3) firms will be selected to provide these services with a contract period of two (2) years and an upset limit of $250,000. No letter of agreement shall exceed $50,000.
PURPOSE AND NEED	To collect and/or analyze data that will support traffic engineering decisions concerning traffic signals, traffic signal systems, speed zones, etc. and to measure the performance of traffic operational systems.
METHOD OF DESIGN	N/A
DBE REQUIREMENT	None
PROJECT FUNDING	State Funded

SCOPE OF WORK

Select consultants must possess the expertise and capacity to be able to perform **all** of the traffic engineering tasks listed below:

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.

Traffic Signal timing—Traffic Signal timing shall consist of developing and delivering signal timing in W4IKS/TransPHAT format. Signal timing may include, but is not limited to timing isolated signals, coordinated signals and pedestrian intervals. Traffic signal timing may include downloading timing to field controllers, performing field observations, making adjustments to the timing to fine tune coordination and repeating these steps as necessary to optimize traffic flow. Software shall be provided by the Cabinet.

Travel Time Studies – In general, the travel speed study 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, PDA and GPS unit. Software shall be provided by the Cabinet. PDA and GPS unit shall be provided by the consultant. Some studies will require analysis of the data collected.

Highway Capacity Analysis – Highway Capacity 2000 Version 4.1 or HCS+ is to be used for all analyses. While all components of the Highway Capacity Manual may be necessary, the primary analysis tool will be the software package for signalized intersections. A signalized intersection analysis would normally include data such as: volume to capacity ratios, average control delays, level of service, and/or queue length calculations.

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.

Speed Studies – Speed studies need to be manual and in conformance with standard practice from the Traffic Control Devices Handbook or some other reference. We would also want these to be manual, not tubes or other methods. These may need to be paid by the number of locations requested and maybe by direction (we typically need speeds at multiple spots as part of the same study). We may also want to require format of reporting. We have a standard reporting sheet and excel format.

SCOPE OF WORK (continued)

Microsimulation – data collection, design and analysis. A microsimulation program accepted by The Division of Traffic Operations will be used. TSIS version 5.1or higher shall be used; *.trf files shall be calibrated to the study area and provided to the Cabinet; a drawing or layout of the intersection(s)/arterial and intersection turn movements should be provided to the Cabinet.

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

SPECIAL INSTRUCTIONS

Three (3) firms will be selected to provide these services. The contract period is a two (2) year contract with no new work to be assigned after the initial 2 year period. Contracts will have an upset limit of $250,000. 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 upset limit or extended for time to assign new work. Task assignments will be made by letter of agreement. No letter of agreement shall exceed $50,000.

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 that 30 days past due on two (2) or more tasks on an active letter of agreement, at KYTC's project manager's discretion, the firm may not be offered an additional project until the remaining firms on the list have been offered a project. In such situation, KYTC's project manager may assign the next project to the subsequent firm on the rotating list. KYTC'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.

ADDITIONAL INFORMATION

Selected consultants must have the capability to collect and analyze the data as well as the capability to work with the Cabinet'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 Transportation Cabinet's user division will be necessary for each specific task.

PREQUALIFICATION REQUIREMENTS

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

TRAFFIC ENGINEERING

- Traffic Engineering Services

PROJECT SCHEDULE & MILESTONES

RESPONSE DATE	March 11, 2009, 4:30 p.m. (Frankfort time)
SELECTION COMMITTEE MEETING	March 25, 2009
CONTRACT SCOPING CONFERENCE	April 8, 2009
NOTICE TO PROCEED	May 1, 2009
COMPLETION OF SERVICES	April 30, 2011

Individual project schedules will be by letter agreement on a project by project basis. The selected consultant is expected to meet the scheduled milestone dates.

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. (10 points)

2. Capacity to comply with project schedule. (10 points)

3. Past record of performance on projects of similar type and complexity. (10 points)

4. Project approach and proposed procedures to accomplish the services for the project. (10 points)

5. Consultant's Kentucky office where work is to be performed. (2 points)
   - 75%-100% of work accomplished in Kentucky offices (2 points)
   - 26%-74% of work accomplished in Kentucky offices (1 point)
   - 0%-25% of work accomplished in Kentucky offices (0 points)

SELECTION COMMITTEE MEMBERS

1. Ted Swansegar, P.E., User Division
2. Wayne Bates, P.E., User Division
3. Ryan Griffith, Secretary's Pool
4. Mike McGregor, Secretary's Pool
5. David Atwell, Governor's Pool