PROFESSIONAL SERVICES PROCUREMENT BULLETIN 2007-02 STATEWIDE TRAFFIC ENGINEERING

COUNTY	Statewide
ROUTE	N/A
DISTRICT	Statewide
ITEM NO	N/A
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	An estimated $500,000 to be divided among three consultants. 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 based on firm's work capacity and expertise. Work is anticipated in six general categories as indicated in the scope.
PROJECT FUNDING	State Funds
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.
PROJECT LENGTH	N/A
METHOD OF DESIGN	N/A
DBE REQUIREMENT	None

SCOPE

Select consultants must possess the expertise and capacity to be able to perform at least one 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 park hours and includes the number of vehicles on the approach, the total vehicle delay (veh-hours), the maximum queen length for the approach, and the average delay per vehicle (seconds) on the approach.

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, PDS and GPS unit. Software shall be provided by the Cabinet. PDA and GPS unit shall be provided by the consultant. Some studies may 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.

Microsimulation—Data collection, design and analysis. A microsimulation program accepted by the Division of Traffic Operations will be used. TSIS version 5.1 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.

ADDITIONAL

Selected consultants must have the capacity to collect and analyze the data as well as the capacity 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.

INFORMATION

It's expected that frequent coordination between the consultant and the Transportation Cabinet's user division will be necessary for each specific task.

SPECIAL IN-STRUCTIONS	The Selection Committee will select up to three consultant firms to perform the required services. Work will be assigned on a rotation basis via letter agreement. Consultants may be assigned one task or multiple tasks. Contracts will be for a 2-year period, with a 1-year option for renewal. Please note the new guidelines for responding to project bulletins should be used. **Instructions Response to Kentucky Transportation Cabinet.pdf**

PREQUALIFICATION REQUIREMENTS

TRAFFIC ENGINEERING	• Traffic Engineering Services

PROJECT SCHEDULE & MILESTONES

RESPONSE DATE	September 6, 2006, 4:30 p.m. (Frankfort Time)
SELECTION COMMITTEE DATE MEETING	September 20, 2006
PRE-DESIGN CONFERENCE	October 4, 2006
TENTATIVE DEADLINE FOR CONSULTANT FEE PROPOSAL	October 18, 2006
CONTRACT NEGOTIATIONS	November 8, 2006
NOTICE TO PROCEED	December 20, 2006
INTERSECTION DELAY	Approximately 3 weeks
TRAVEL TIME STUDIES	4 to 12 weeks
HIGHWAY CAPACITY ANALYSIS	4 to 8 weeks
SURVEYING/DRAWING/INVENTORY	4 to 12 weeks
SPEED STUDIES	Approximately 3 weeks
CORSIM	1 to 6 months

The selected consultant is expected to meet the scheduled milestone dates.

EVALUATION FACTORS

1. Relative experience of consultant personnel assigned to project team with highway 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 project of similar type and complexity. (10 points)
4. Project approach and proposed procedures to accomplish the services for this 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. Jeff Wolfe, User Division 2. Wayne Bates, User Division 3. Michael Calebs, Secretary's Pool 4. Shari Greenwell, Secretary's Pool 5. Howard Cruse, Governor's Pool