



Professional Services Procurement Bulletin 2007-10 Jefferson County

COUNTY	<i>Jefferson</i>
ROUTE	<i>Various state-maintained routes in Jefferson County.</i>
DISTRICT	<i>5-Louisville</i>
ITEM NO	<i>5-183.00</i>
PROJECT DESCRIPTION	<i>Consulting services are needed to perform various traffic engineering tasks involving data collection and analysis for signal system improvements in Jefferson County. Consultant services will also be utilized to model traffic flow using data collected and software tools such as CORSIM.</i>
PROJECT MANAGER	<i>Dan O'Dea</i>
USER DIVISION	<i>Division of Traffic Operations</i>
APPROXIMATE FEE	<i>Estimated \$500,000. Two (2) consultants will be selected with a \$250,000 upset limit contract each. Consultants will be assigned specific tasks to perform via letter agreement. Tasks will be paid in accordance with the negotiated prices 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.</i>
PROJECT FUNDING	<i>State SP Funds</i>
PURPOSE AND NEED	<i>To collect and/or analyze data that will support traffic engineering decisions concerning traffic signals, traffic signal systems, etc. and to measure the performance of traffic operational systems.</i>
DBE REQUIREMENT	<i>None</i>

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 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 study will be for an arterial street in Jefferson County. 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 or laptop and GPS unit. Software shall be provided by the Cabinet. PDA or laptop and GPS unit shall be provided by the consultant. 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 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 required 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 in excel format.

<p><i>SCOPE Cont'd</i></p>	<p><i>Microsimulation- Data collection, design, and analysis. A microsimulation program accepted by the Division of Traffic Operations will be used. TSIS version 5.1 or 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.</i></p> <p><i>The Division of Traffic Operations reserves the right to modify or change programs used.</i></p>
<p><i>SPECIAL INSTRUCTIONS</i></p>	<p><i>The Selection Committee will select up to two (2) consultant firms to perform the required services. Consultants may be assigned one task or multiple tasks. Tasks will be assigned via letter agreement.</i></p>
<p><i>ADDITIONAL INFORMATION</i></p>	<p><i>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.</i></p> <p><i>It is expected that frequent coordination between the consultant and the Transportation Cabinets user division will be necessary for each specific task.</i></p>
<p><i>PREQUALIFICATION REQUIREMENTS</i></p>	
<p><u>TRAFFIC ENGINEERING</u></p>	<ul style="list-style-type: none"> • <i>Traffic Engineering Services</i>

PROJECT SCHEDULE & MILESTONES

<i>RESPONSE DATE</i>	<i>May 9, 2007 4:30 p.m. (Frankfort Time)</i>
<i>SELECTION COMMITTEE DATE MEETING</i>	<i>To Be Determined</i>
<i>PRE-DESIGN CONFERENCE</i>	<i>20 days from date of selection committee meeting</i>
<i>TENTATIVE DEADLINE FOR CONSULTANT FEE PROPOSAL</i>	<i>50 days from date of selection committee meeting</i>
<i>CONTRACT NEGOTIATIONS</i>	<i>60 days from date of consultant fee proposal</i>
<i>NOTICE TO PROCEED</i>	<i>120 days from date of contract negotiations</i>
<i>INTERSECTION DELAY</i>	<i>Three Weeks</i>
<i>TRAVEL TIME STUDIES</i>	<i>Four to Twelve Weeks</i>
<i>HIGHWAY CAPACITY ANALYSIS</i>	<i>Four to Eight Weeks</i>
<i>SURVEYING/DRAWING/INVENTORY</i>	<i>Four to Twelve Weeks</i>
<i>SPEED STUDIES</i>	<i>Three Weeks</i>
<i>CORSIM</i>	<i>One to Six Months</i>

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 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. *Jeff Wolfe, P.E., User Division*
2. *Dan O'Dea, P.E., User Division*
3. *Patty Dunaway, Secretary's Pool*
4. *Shari Greenwell, Secretary's Pool*
5. *Ed Dyer, Governor's Pool*