



PROFESSIONAL SERVICES PROCUREMENT BULLETIN 2008-09 STATEWIDE PLANNING TRAFFIC MODELING

COUNTY	Statewide
DISTRICT	Statewide
PROJECT DESCRIPTION	Consulting services are needed to refine existing and develop new travel demand models involving Statewide, MPO, Regional, and Corridor models using TransCAD. Consultant services will also be utilized to refine current modeling procedures through the incorporation of additional data sources and innovative modeling methodologies.
PROJECT MANAGER	Scott Thomson, P.E. and David Hamilton, P.E.
USER DIVISION	Division of Planning
APPROXIMATE FEE	<ul style="list-style-type: none"> • \$500,000 upset limit per consultant • Projects to be assigned by letters of agreement, not to exceed \$150,000 each • Three (3) consultants to be selected. • 2-year contract term.
PURPOSE AND NEED	To support the efforts of Design, Planning, Operations, and Environmental Analysis in developing and maintaining a safe and reliable transportation network for the Commonwealth.
METHOD OF DESIGN	The selected consultant will use a standardized TransCAD user interface and file structure for all travel demand models. Models will be evaluated based on an allowed maximum error (RMSE) using all available data.

SCOPE OF WORK

Selected consultants must possess the expertise and capacity to be able to perform any and all of the travel demand modeling tasks listed below:

1. *MPO, Regional, County, and Corridor Level Modeling*—These models provide a basis for supporting KYTC's traffic forecasting, planning, and air quality conformity analysis. The Division of Planning maintains HIS data extracts for model development. Some data collection or verification will be required by the consultant. Existing models may provide methodologies and transferable parameters in the development of new work.
2. *Statewide Modeling*—Maintenance and improvements to the Kentucky Statewide Traffic Model. The consultant shall be familiar with model calibration and validation, long distance travel, and other unique features of statewide modeling.
3. *Simulation Models*—Work shall include creating and calibrating sub area travel demand or micro simulation models.
4. *Innovative Modeling Methodologies*—Research, develop, and implement new modeling methodologies for the applications listed above while incorporating new data sources for freight, population, and employment.

Documentation of work, data sources, collection procedures, modeling techniques, calibration methodology with results and application shall be bound into a final report. A colorized PDF of the final report shall also be provided.

ADDITIONAL INFORMATION

Selected consultants must have the capacity to work and use the most recent version of TransCAD software. Working knowledge in MINUTP is required when converting existing MINUTP models to TransCAD. Also required is familiarity with GPS centerline and the Division's Highway Information System databases.

The modeling tasks shall consider innovative or state of the practice approaches when developing or updating the models. If micro-simulation is required, the most recent version of TransModeler is the preferred program. Electronic copies of all files and a guidance manual shall also be provided.

Travel Demand and Simulation Modeling and Traffic Data Collection are expected activities and are covered by the Cabinet's prequalification categories listed below.

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 after June 30, 2010. Contracts will have an upset limit of \$500,000. 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. No letter of agreement shall exceed \$150,000.

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 strict rotational 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 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.

PREQUALIFICATION REQUIREMENTS

TRANSPORTATION PLANNING

- Travel Demand and Simulation Modeling
Or **Small Urban Area Studies**
- Traffic Data Collection

PROJECT SCHEDULE & MILESTONES

RESPONSE DATE	June 4, 2008 4:30 p.m. (Frankfort Time)
SELECTION COMMITTEE MEETING	June 18, 2008
CONTRACT SCOPING MEETING	June 25, 2008
NOTICE TO PROCEED	August 1, 2008
COMPLETION OF SERVICES	July 30, 2010
REGIONAL AND COUNTY MODELS	12 Months
MICRO-SIMULATION MODELS	Six Months
STATEWIDE MODEL	Twelve to Eighteen Months
MPO MODEL	Twelve Months
INNOVATIVE MODELING METHODOLOGIES	Nine Months

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 travel demand modeling projects for KYTC and/or for federal, local or other state governmental schedule. (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. David Hamilton, P.E., User Division
2. Scott Thomson, P.E., User Division
3. Rob Hans, Secretary's Pool
4. Mike McGregor, Secretary's Pool
5. Howard Cruse, Governor's Pool