

**Request for Statement of Interest (SOI)
Traffic Engineering Services
On-call Traffic Engineering Assistance**

The Kane County Division of Transportation is in need of professional services from a qualified engineering firm to provide on-call Traffic Engineering. These services are required to assist the KDOT Traffic staff with the performance of various traffic engineering tasks.

The attached *Preliminary Scope of Services* provides in detail anticipated items that are necessary for this project.

At this time, the County anticipates starting this work on December 1, 2011. The anticipated contract duration is twenty-four (24) months.

The Statement of Interest shall be submitted **VIA EMAIL** no later than **4:00 P.M.** on **September 14th, 2011** and should be addressed to:

**Thomas F. Szabo, TOPS, TSOS
Traffic Section Manager**

Mr. Szabo's email address is: szabotom@co.kane.il.us

Statements of Interest received will be used by County engineering staff to develop a short-list of three (3) firms. The County will then submit a Request for Proposal (RFP) and schedule interviews with the short-listed firms.

For more information regarding the SOI, such as content and format of these items, please reference our QBS document found at www.co.kane.il.us/dot/qbs/esp.pdf. Also, the SOI shall be submitted in PDF format viewable with the latest version of Adobe reader. The County will provide you with an e-mail receipt/response verifying that your submittal was received. If you do not receive this verification please contact Mr. Szabo at (630) 208-3139.

If you plan to enter into a joint venture with another firm for this project please note this on your Statement of Interest, including the name of the firm you are entering into a joint venture with for this project.

Short-listed firms will be posted on our website at www.co.kane.il.us/dot. Click on the link labeled "Request for Consultant Services", then click on the link labeled "Summary Table".

A Statement of Interest (SOI) received after the above noted deadline will not be used as part of our consultant selection process.

PROJECT DESCRIPTION/PRELIMINARY SCOPE OF SERVICES

The Consultant will provide traffic study assistance on an “as-needed” basis at locations to be determined. All tasks will be conducted on a work order basis and be paid for as time and materials. For each task performed, a specific scope of work and fee estimate will be developed by the Consultant and submitted to KDOT Traffic for approval prior to start of any work.

The various services that may be requested but are not limited to the following:

1. Speed Studies

Speed studies will be performed for both the AM and PM non-peak hours at specified locations. The speed study will be conducted by utilizing a radar gun or other approved traffic data collection device. The study will require a minimum of 100 vehicles (in each direction) or a maximum of 3-hours of count. The results of the speed study will be tabulated with the prevailing speed and any necessary reduction factors in accordance with the Kane County *Interim Policy the Establishment and Posting of Speed Limits on County and Township Highways* or if available, the latest edition thereof. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

2. Intersection Control Study

An evaluation for the determination for the most appropriate intersection control at a requested intersection shall include the following control measures. All alternatives shall be compared on the basis of safety, user delay and implementation cost. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

a. Multi-way Stop

Consideration for a multi-way Stop installation shall include an engineering study, which utilizes methodology described in Section 2B.07 of the latest Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*.

Traffic counts will be performed for all approaches to the intersection. The counts will be performed for a 24-hour period during a typical workday (unless specified otherwise by KDOT Traffic).

b. Traffic Signal

Consideration for a traffic signal installation shall include an engineering study, which utilizes methodology described in Section 4C of the latest Edition of the *Manual on Uniform Traffic Control Devices (MUTCD)*. Unless specified otherwise by the County, it should be assumed warrants 1 through 8 will be analyzed for each location requested.

Machine traffic counts will be performed for all approaches to the intersection. The counts will be performed for a 24-hour period during a typical workday (unless specified otherwise by KDOT Traffic). It is assumed that no right turn factor will be applied for intersections that do not include State routes. A warrant analysis for intersections that do include State routes will require a right turn factor and entail a 12-hour manual count.

c. (Modern) Roundabout

Consideration for a Modern Roundabout installation shall include an engineering study, which utilizes methodology described in the *Kane County Division of Transportation Roundabout Selection and Design Guide* and the *FHWA Roundabouts: An informational Guide*.

3. Advisory Speed Determination (“Ball Bank”) Studies

In order to ascertain the correct advisory speeds for various roadway sections, a “Ball Bank” indicator study will be performed. The study will be based on criteria outlined in the Institute of Transportation Engineers Traffic Engineering Manual and the latest edition of the MUTCD. The results of the study will be summarized and delivered to KDOT Traffic for review.

4. Guardrail Analysis

A variety of services may be performed to assist the County in the evaluation of guardrails throughout the County. The services performed could entail any or all of the following:

- Topographic survey to determine the distance and size of fixed objects within the clear zone
- Survey of roadway backslopes and foreslopes within the clear zone
- Evaluation of existing guardrail installations
- Warrant for new guardrail installations in accordance with the latest edition of *The ASSHTO Roadside Design Guide*.

The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review.

5. Safety Studies

Safety studies based on documented crash history will be performed for requested locations within the County. At the time of the study, a specific scope of work will be determined for the specific study. The results of the study including recommendations shall be summarized in draft memorandum format and submitted to the KDOT Traffic for review. All study findings and recommendations should be in accordance with methodologies and practices set forth in the latest edition of the ASSHTO Highway Safety Manual (HSM).

6. Contract (PS&E) Preparation

The Consultant shall prepare all contract (PS&E) documents necessary for the bidding and construction of small to moderate scale projects (\$5,000 ~ \$500,000). Preparation of all documents shall be in accordance with applicable IDOT Bureau of Local Roads and Streets/Federal Aid Project; and County standards. Project scope and schedule will be provided to the Consultant by KDOT Traffic. Projects may include but are not be limited to the following:

- Modernization/maintenance upgrades to existing traffic signal, street lighting or ITS (Intelligent Transportation System)/ATMS (Advanced Traffic Management System) infrastructure.
- Construction/implementation of new traffic signal, street lighting or ITS/ATMS infrastructure.
- Implementation of various low cost safety countermeasures at county/township highway segments and intersections.
- Annual pavement marking maintenance contracts.
- Annual traffic sign material contracts.

7. Highway Standard Details

Development of CAD drawings for County Traffic (Highway Standard type) detail drawings. Preliminary or conceptual sketches will be supplied to the Consultant from the County. The drawing will be prepared and provided in *MicroStation* format.

8. Phase I/II Engineering Review

Performance of traffic engineering review for Phase I studies and Phase II (PS&E) documents prepared by in-staff or consultants for the development of written comments to be provided to KDOT Traffic. Traffic engineering elements to be reviewed may include but are not limited to the following:

- IDSs (Intersection Design Studies)
- Traffic Impact Studies
- Intersection Traffic Control Studies (ex. warrants for traffic signal, all-way Stop conditions, etc.)
- Highway Capacity Analyses (for intersections, segments, weaving situations, etc.)
- Traffic Signal/ITS/ATMS Design
- Street Lighting Design
- Pavement Marking and Traffic Signing plan Design
- MOT (Management of Traffic)/Work Zone Plan Design

9. Roundabout Engineering

a. Design Review:

The consultant shall provide design review services as needed for engineering design submittals for roundabout designs prepared by another consultant for the County or a Kane County Township.

The consultant shall provide written comments and recommendations to county staff on various elements of “Modern Roundabout” design in accordance with the *Kane County Roundabout and Selection Design Guide*, *AASHTO Policy on Geometric Design of Highways and Streets* and the *Manual on Uniform Traffic Control Devices* when requested by the County, which may include but not be limited to the following elements:

- Location
- Capacity
- Geometrics

- Pavement Marking and Signing
- Illumination
- Pedestrian/Bicyclist Safety

The consultant may be required to submit all projects to a second party consultant that is a nationally recognized expert in the field of “Modern Roundabout” design for peer review. The second party consultant shall be approved by the County prior to the commencement of the contract. Review comments shall be summarized and submitted to the County in memo format.

b. Intersection Feasibility Study:

When requested, the Consultant shall evaluate the feasibility and appropriateness of a modern roundabout for a specified intersection for the planning and programming purposes. The evaluation should include all necessary elements specified in the *Concept Design* per section 3 of *Kane County Roundabout and Selection Design Guide* and shall be summarized in memo format. The study should include recommendations and an estimated project cost, which shall include construction, right of way acquisition, phases I, II and III engineering.

10. Miscellaneous Traffic Engineering Services

Traffic engineering services not specifically identified in previous subtasks may be performed by the Consultant at the direction of the KDOT Traffic.

QUALIFICATIONS

Interested consultants should possess competency in the following areas of expertise and documents:

- General traffic engineering and provide a project manager that possesses certification as a Professional Traffic Operations Engineer (PTOE)
- Traffic Signal design (per IDOT Region One and Kane County standards)
- Pre-qualified for Phase II engineering with IDOT, District One, Region One
- Manual on Uniform Traffic Control Devices (MUTCD)
- ITE Traffic Control Devices Handbook
- ASSHTO Roadside Design Guide

PROJECT DURATION

Contract duration shall begin upon the receipt of the notice to proceed from the County to the Consultant, which is anticipated prior to **December 1, 2011** and continue through **November 30, 2013**.