

2015 QBS
Request for Statement of Interest (SOI)
County Wide
Traffic System Operation Management
Section Number 15-00365-04-EG

The Kane County Division of Transportation is in need of professional services from a qualified engineering firm to provide assistance in the area of Traffic Systems Operation Management. These services are required to assist our Traffic Engineering staff in the management and operations of the County's Traffic Signal/ITS/Street Lighting Systems.

The attached Preliminary Scope of Services provides in detail anticipated items that are necessary as part of the services for Traffic Systems Operation Management.

At this time the County anticipates services available in December of 2015 with duration of approximately twenty-four (24) months with provisions for up to but not to exceed an additional twelve (12) months at the discretion of the Kane County Engineer.

The Statement of Interest shall be submitted electronically via **KDOT QBS** no later than **2:00 pm on August 18, 2015** and should be addressed to

Stephen Zulkowski, P.E.
Traffic/Permit Engineer

Mr. Zulkowski's email address is: Zulkowskistephen@co.kane.il.us

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.

The Short-listed firms will be posted on our Consultant Selection Summary Table website at <http://www.co.kane.il.us/dot/SOISummary.aspx>.

Firms interested in providing services to Kane County are hereby notified of the Kane County's Ethics Ordinance No. 10-206, in particular, Section 10, page 15. Only the firm that is ultimately selected for these professional services will be required to provide the Ethic Ordinance information directly to the Kane County Division of Transportation as part of the consultant services agreement. The complete Ethics Ordinance No. 10-206 document is available online at the following link [Kane County Ethics Ordinance](#).

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

Please refer to the following Description of Project Scope for more information on this project.

I. PROJECT DESCRIPTION / PRELIMINARY SCOPE OF SERVICES

The consultant will provide administration assistance to County Traffic Engineering staff for the management and operational oversight of the County's traffic operations infrastructure, which includes approximately 140 traffic signal and flashing beacon locations, 1,100 street light locations as well as the County's growing centrally controlled ATMS (Advance Traffic Management System) network. These services will include but are not limited to the following responsibilities and requirements:

1. System Monitoring and Reporting

- The remote monitoring of all Kane County maintained traffic signals and traffic signal systems, which can be communicated via internet through VPN (Virtual Personal Network) access for the purpose of identifying specific operational issues/deficiencies by performing the following analyses.
 - Critical Faults/Alarms for the traffic signal controllers, MMU (Malfunction Management Units) and UPS (Uninterruptible Power Supply) systems (daily/real time)
 - Detector Diagnostics (weekly)
 - CRC (Cyclical Redundancy Check) (weekly)
 - Video Monitoring
- The remote monitoring of all Kane County maintained ATMS communications infrastructure.
- The Consultant shall possess updated versions of both Aries and Marc NX traffic management software and be proficient in their use.
- The Consultant shall be proficient in the use of a transportation management software application (to manage signal controller databases and their modifications) such as:
 - Siemens *TACTICS*
 - TransCore *TransSuite, TCS (Traffic Control Software)*
- The Consultant shall investigate and develop an appropriate course of action to resolve any and all operational issues/deficiencies that are identified, which may include coordination with the Electrical Maintenance Contractor (EMC) or other contractors that might have temporary maintenance responsibilities of County facilities. The Consultant shall provide any guidance and oversight necessary to the EMC or other contractor in order to assure the issue has been resolved.
- Provide weekly condition reports to KDOT Traffic staff, the EMC and other contractors that might have temporary maintenance responsibilities of County facilities.
- Maintain and update as necessary a *Synchro* traffic model of the County's traffic signal network.

2. Operational Trouble Shooting and Public Complaints

- Assist KDOT Traffic staff in responding to public complaints regarding traffic signal operation.
- Provide analysis and recommendations as related to issues with traffic signal timing, coordination and overall traffic operations as requested by KDOT Traffic staff.

- Analyze and adjust existing timing plans and other system programming as directed by the KDOT Traffic staff.
- Maintain “tracking” database of all submitted complaints and their status. Provide weekly status reports to KDOT Traffic staff for all open complaints.
- The Consultant shall possess the latest version of Synchro traffic analysis software and be proficient in its use.
- The Consultant shall possess proficiency in programming the following traffic signal controllers in both proprietary manufacturer firmware and NTCIP firmware as applicable:
 - Siemens M52
 - Econolite ASC/3
 - Peek 1000
 - Intelight X-1 & X-1L (Including “MaxTime” Software Solution)

3. Electrical Maintenance Contractor (EMC) Supervision

In concert with the KDOT Traffic staff, provide direct general contract administration of the County’s EMC as follows:

- Coordination and administration of the EMC and any other designated maintenance agent on specific issues related to traffic signal/roadway lighting/ITS equipment maintenance, repair, modifications, scheduling and general trouble shooting.
- Maintenance of a “tracking” database of all ongoing work orders (routine and non-routine) and their status. Provide weekly status reports to KDOT Traffic staff for all open work orders. The Consultant should also provide QC (Quality Assurance) for the EMC meeting required response times per EMC contract.
- Field inspection of all work performed by the EMC.
- Field review of temporary traffic control for all work performed by the EMC.
- Review of all invoices submitted by the EMC for submittal to KDOT Traffic staff for approval and final processing.
- Provide oversight for the maintenance of inventory for County maintained traffic system and roadway lighting infrastructure.
- Coordinate and attend a monthly coordination meeting between the County and the EMC and other interested parties.
- Attend various other meeting on request such as pre-construction conferences, staff meetings, etc.

4. Field Inspections

- Coordinate and provide detailed (intermediate/final) inspection for new/modernized traffic signal/roadway lighting/ITS equipment at maintenance transfers and “turn-ons”.
- Provide detailed inspection for temporary traffic signal/roadway lighting/ITS equipment “turn-ons” during construction projects.

5. Future Arterial Operations Center Support

- Coordinate and provide possible staff support for future Arterial Operations Center scheduled to open in the Late 2015.

6. Engineering “Peer” Review

- Review prepared signal timing and optimization plans submitted by others and provide written comments the KDOT Traffic staff.
- Review traffic signal/roadway lighting/ITS plans and specifications prepared by others and provide written comments the KDOT Traffic staff.
- Review manufactures' material submittal (“catalog cuts”) and provide written comments the KDOT Traffic staff.
- Periodic review and revisions of the County’s Traffic Signal Specifications and other traffic related standards and guidelines.
- Review and/or preparation of all necessary contract/bidding documents for the County’s EMC contract.

7. Special Projects and Traffic Signal Coordination and Timing (SCAT)

- Provide GIS mapping of COUNTY ATMS (fiber optic) network
- Provide traffic signal optimization services following IDOT specifications for Re-Optimize Traffic Signal System – Level 2 unless otherwise directed by KDOT traffic. *Synchro* Traffic Modeling files shall be developed and submitted as part of these special projects.

II. QUALIFICATIONS

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

- General traffic engineering in accordance with MUTCD, ITE, IMSA, FHWA and other nationally recognized standards pertaining to the requested services.
- Project manager that possesses certification as a Professional Traffic Operations Engineer (PTOE) from the Transportation Professional Certification Board, Inc.
- Project manager and or representatives that possess IMSA certification in
 - Traffic Signals (Level II as a min. and Level III, Field desirable)
 - Traffic Signal Inspection
 - Fiber Optics in ITS (Level I as a min. and Level II Field desirable)
 - Roadway Lighting (Level I as a min. and Level II Field desirable)
- Traffic signal timing and programming.
- Oversight/project management of traffic signal/street lighting/ITS infrastructure maintenance
- Traffic Signal and Street Lighting design (per IDOT Region/District One), and Kane County standards)
- Staff performing traffic Signal Coordination and Timing (SCAT) work must be prequalified by Illinois Department of Transportation (IDOT) for SCAT.

III. PROJECT DURATION

Contract duration shall begin upon the receipt of the notice to proceed from the COUNTY to the CONSULTANT, which is anticipated to be in early December 2015 and continue through December of 2017 for an approximate duration of 24 months with provisions for up to but not to exceed an additional twelve (12) months at the discretion of the Kane County Engineer. This provisionary extension may extend the contract through December 2018.