

REQUEST FOR QUALIFICATIONS For Signal Timing and Engineering Services

Operation Green Light Program

Federal Project No. STP 3302(436) and STP K-9218-23

Requested by The Mid-America Regional Council

November 10, 2022

The Mid – America Regional Council (MARC) serves as the association of city and county governments and the metropolitan planning organization for the bi-state Kansas City region. As a voluntary association, MARC strives to foster better understanding and cooperation on issues that extend beyond the jurisdiction of a single city, county or state.

MARC is seeking to retain consulting services of a qualified traffic engineering firm to provide traffic engineering and traffic signal timing services for the Regional Operation Green Light Program. The anticipated work performed by the firm/engineer under this proposed contract is described in the Scope of Work. MARC intends to enter into a contract for an assignment for a period of 24 months and reserves the right to renew the arrangement for an additional twelve (12) months. The budget for the work is estimated at \$150,000 annually.

Submittals:

To be eligible for consideration, **1** (one) electronic copy (Acrobat) (not to exceed 15 pages not including tabs or cover) must be received by MARC no later than <u>3:00 PM Central Time, Monday, December</u> <u>12, 2022 by email to: rwebb@marc.org</u>. Please contact <u>Ray M. Webb</u>, Manager of Traffic Operations at (816) 701-8358 or e-mail <u>rwebb@marc.org</u> for questions related to the RF. QLate submittals will not be considered. It is the responsibility of the sender to verify MARC's receipt of the document. MARC reserves the right to reject any or all proposals submitted. The RFQ shall be titled:

"OGL Traffic Signal Program"
Mid-America Regional Council
600 Broadway, Suite 200
Kansas City, MO 64105
Attn: Ray M. Webb

Business Participation

It is MARC's policy to encourage all qualified businesses to actively participate in the procurement of all MARC sponsored projects. MARC does not discriminate based on race, color, sex, national origin, age, military status, or disability. This project will be paid in part or in whole through US Department of Transportation (USDOT) funds. Firms should be aware that a Disadvantage Business Enterprise (DBE) goal for this project, in accordance with 49 CFR part 26, is 10%. Certified DBE may be found in the MRCC Directory at the following webpage:

http://www.modot.gov/business/contractor_resources/External_Civil_Rights/DBE_program.htm

The following items must be addressed in all proposals:

- Prior experience with similar projects
- Specific technical capabilities in traffic engineering, traffic signal timing and synchronization and intelligent transportation systems
- Demonstrated experience in centralized signal systems, state which ones
- Demonstrated experience with Synchro and other traffic modeling software
- Demonstrated experience in facilitation, consensus building, conducting research, monitoring and data analysis.
- Demonstrated methods in measuring signal timing effectiveness (modeled and/or field measured)
- Demonstrated timeliness on similar projects
- Specific qualifications of employees intended to be assigned to the project
- Minimum of three 3 references

- A listing of all proposed subconsultants, if any
- The name and address of the contracting firm, together with the name, telephone and email address of the primary contact person for purposes of this proposal

Background:

MARC leads the Regional Traffic Signal Operations & Management program, named "Operation Green Light" (OGL) that improves traffic flow and reduces vehicle emissions for the Kansas City metro area. OGL works with federal, state and local agencies to develop and implement a system that will coordinate traffic signal timing plans and communication between traffic signal equipment across jurisdictional boundaries.

MARC operates over 750 traffic signals for 27 agencies in the Greater Kansas City area. MARC owns and operates an extensive regional wireless communication network that provides communication and video monitoring to the regional traffic signal system. General information on the OGL program can be found at http://www.marc.org/transportation/ogl/

Scope of Work:

- I. Primary Tasks (qualifications for this work will receive higher priority):
 - Collect peak-hour turning movement counts or 24 hour counts as needed. Currently, OGL performs a most of its traffic counts with Miovision but on occasion may require various data collection assistance as determine by schedule and requirements.
 - Develop traffic signal timing plans to improve traffic flow, air quality and safety. All timing plans will be submitted to MARC in Synchro 11 format, or the latest format as determined such that they can be added to the existing models maintained by MARC staff. On corridors where models have already been created by others, a base Synchro model may be provided to the consultant for modification. All models shall be calibrated such that all Synchro settings accurately reflect the conditions in the field. The consultant may be required to provide a working SimTraffic model with each plan if appropriate. Other software modeling tools may be utilized as appropriate to the complexity of the modeling or local agency requirements.
 - Provide recommendations on the corridor time of day plan for day, night and weekend operations as part of the analysis including if the signal should run free, rather than be coordinated and at what times of the day including possible recommendation to nighttime flash operations. Documentation of the timing recommendations will be required.
 - Provide traffic engineering tasks that are to support the work of traffic signal timing.
 This task could include traffic signal warrant analysis, capacity analysis, MUTCD
 research and application to the intersection, design engineering for small PS&E work
 including ITS applications to traffic signals.
- II. Secondary Tasks (qualifications for this work will receive lower priority):
 - May conduct special studies for coordination of traffic signals, i.e., travel time, side street delay, intersection delay, network delay or otherwise.
 - May provide traffic engineering safety and capacity analysis of signalized intersections as needed.
 - May prepare research findings and other reports.
 - May provide support and/or lead in collaborating, persuading, presenting and negotiating with internal and external stakeholders including traffic signalization specialists, other transportation agency staff, technicians, vendors, contractors, elected officials, committees and the public to coordinate efforts and maintain cooperative and

efficient relations.

- May research current national best practice and compared / contrasted to OGL's current practice. Current practice analyzes benefits on a corridor-by-corridor basis.
- May utilize tools such as ATSPM and Traffic responsive systems.
- May provide leadership in facilitating efforts to update the existing OGL strategic plan. This effort will require facilitation skills to lead a regional effort to update the strategic plan for the OGL program. Activities may include revisiting regional mission, goals and objectives as well as documenting current and new operations activities.
- May research state of the practice wireless communications products and life-cycle costs for current and future operations.
- Other modeling tools may be considered as requested by OGL program partners.
- Familiarity with Advanced Traffic Management Systems (ATMS).

Evaluation Criteria:

Submittals will be evaluated using the following criteria:

- Understanding of the nature of the OGL Program (30 Points)
- Familiarity with local jurisdictions in the MARC region (20 Points)
- Key personnel experience and technical competence (15 Points)
- Consultants' depth and availability/ability to respond to MARC's schedule that is irregular (15 Points)
- Key personnel qualifications (At least one Professional Engineer (PE), with relevant work experience; (Professional Traffic Operations Engineer (PTOE) certification required. Provide certifications. (10 points)
- Past performance/references (minimum of three verifiable references) (10 Points)

Schedule of Events:

The following RFQ Schedule of Events represents MARC's best estimate of the schedule that shall be followed.

MARC reserves the right at its sole discretion to revise this schedule, as it deems necessary, without notification except for the deadline date for submitting a proposal.

MARC Issues RFQ	November 10, 2022	
Deadline for Submitting a Proposal	December 12, 2022	3:00 PM
Interviews - Tentative	First week of January, 2023	
Evaluation Process	December 2022	
Recommendation of Award	January 2023	
Contract Effective Date, estimated	April 2023	