

MARC

Mid-America Regional Council

REQUEST FOR PROPOSAL

**Systems Engineering and
RFP Development**

For

**Central Traffic Signal
Control Software**

Operation Green Light Program

**Requested by
The Mid-America Regional Council**

October 27, 2017

Federal Project No. CMAQ 3302(423)

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Systems Engineering and RFP Development for Central Traffic Signal Control Software

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 engineer or firm to provide systems engineering and Request for Proposal (RFP) development 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. The budget for the work is estimated at \$150,000, and work is anticipated to be complete in 9 months following notice to proceed.

Submittals:

To be eligible for consideration, **1 (one)** electronic copy (Acrobat) and **2 (two)** hardcopies of the response (not to exceed 15 single sided, 12 font pages, excluding cover and required attachments) to the RFP must be received by MARC no later than **4:00 PM Central Time, November 21, 2017 at the below address and by email to: rwebb@marc.org**. Please contact Ray M. Webb, Manager of Traffic Operations at (816) 622-0731 or e-mail rwebb@marc.org for questions related to the RFP. Late 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 RFP 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 **13%**. The firm must be listed in the MRCC directory to be considered. 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

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The following items must be addressed in all proposals:

- Prior experience with similar projects
- Specific technical capabilities in traffic engineering, central software, traffic signal hardware and software and intelligent transportation systems
- Demonstrated experience in centralized signal systems (state which ones)
- Business partnership or other formal affiliation with one or more central signal system vendors or their products (identify the system and describe the nature of the affiliation)
- Demonstrated experience in facilitation and consensus building
- Demonstrated timeliness on similar projects
- Specific qualifications of employees intended to be assigned to the project
- Minimum of three 3 references
 - Names, address (physical and email) and phone number
- A listing of all proposed subconsultants, if any
- The name and address of the contracting firm, together with the name, telephone and fax number, and e-mail address of the primary contact person for purposes of this proposal
- See Attachment A for further required documents

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 approximately 700 traffic signals for 24 agencies in the Greater Kansas City area. MARC owns and operates an extensive regional wireless communication network that provides communication, video monitoring, and central traffic signal control for the regional traffic signal system.

Since 2008, the OGL system has used the TransSuite[®] central traffic signal control software. The software provides monitoring and management capability to several combinations of traffic signal controller hardware and firmware from various manufacturers. The system includes four separate central software implementations in different jurisdictions which are integrated through Center-to-Center functionality.

The program is overseen by a steering committee composed of representatives from each participating agency, including local municipalities along with Kansas and Missouri departments of transportation and their assigned Federal Highway Administration representatives. The program is operated by dedicated MARC staff. General information on the OGL program can be found at <http://www.marc.org/transportation/ogl/>.

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Scope of Work:

The consultant selected for this project will assist MARC and the OGL partner agencies to execute the systems engineering process in order to revise and update the system requirements for the central traffic signal control software based on current operational needs. The consultant will use these requirements as a basis to develop an RFP to select a central traffic signal control software. The primary project tasks are described in the following sections.

Stakeholder Engagement

Throughout the project, the consultant will be required to engage the OGL stakeholders. The stakeholders will provide input for and reviews of each project deliverable. This interaction will be coordinated through OGL staff and under the direction of the OGL Steering Committee.

Systems Engineering

The consultant will use the Systems Engineering Approach (as defined in the US DOT 2007 publication, “*Systems Engineering for Intelligent Transportation Systems*”) to review the current operating condition, assess the state of the practice, document the operational needs, and develop the functional requirements for a central traffic signal control system.

Task Deliverables:

- Systems Engineering Management Plan
- Concept of Operations
- System Functional Requirements
- High-level System Verification and Validation tests

ITS Project Architecture

In conjunction with the systems engineering process, the consultant shall review the MARC Regional ITS Architecture (available online at <http://www.marc2.org/Assets/ITS/index.htm>) to verify that the proposed system is in compliance. The consultant should also be aware that the Regional ITS Architecture is currently being updated and should coordinate with that work as necessary as part of this project. Any proposed modifications to the regional ITS Architecture shall be communicated to MARC for consideration. The consultant may be asked to assist MARC to implement accepted modifications to the regional architecture.

Task deliverables:

- ITS Project Architecture Report

RFP Development

With the Concept of Operations and Requirements from the systems engineering process as a basis, the consultant will develop an RFP compliant with MARC procurement standards. The

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consultant will use the technical requirements from the systems engineering process as a basis. The RFP shall include sections describing all aspects of the development and implementation of a metro-wide traffic signal control system, such as project management, implementation, integration, testing, transition, schedule, training, and general project requirements that define the project execution process.

Task deliverables:

- Central Traffic Signal Control System RFP

Evaluation Criteria:

Submittals will be evaluated using the following criteria:

- Proposed project approach (25 points)
- Team knowledge and experience with: (35 Points)
 - Traffic signal control systems (including both central and field elements)
 - The systems engineering process
 - ITS architectures
 - Working with and building consensus among multi-jurisdictional organizations
- Key personnel experience and technical competence (25 Points)
- Past performance/references (minimum of three verifiable references) (15 Points)

Schedule of Events:

The following RFP 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 RFP	October 27, 2017	
Deadline to Submit Questions	November 8, 2017	
Response to Questions	November 15, 2017	
Deadline for Submitting a Proposal	November 21, 2017	4:00 PM CST
Interviews - Tentative	December 4-8, 2017	
Evaluation Process	Late December 2017	
Recommendation of Award	Mid-January 2018	
Contract Effective Date, estimated	February 1, 2018	

Questions

All questions regarding this Request for Proposals (RFP) should be directed to Ray Webb by email at rwebb@marc.org by **November 8, 2017**. Responses to questions will be provided to all interested parties by **November 15, 2017**.

Note: It is the responsibility of the consultant to verify the receipt of proposals by MARC staff as there is always the possibility of emails getting blocked by MARC's firewall/spam filter.

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ATTACHMENT A

- 1 Complete the AFFIRMATIVE ACTION CHECKLIST (Attachment B) or provide company's executed Affirmative Action Plan. (If applicable)
- 2 Complete the CERTIFICATION REGARDING LOBBYING Attachment C.
- 3 Complete the CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION Attachment D.
- 4 Complete the INTENT TO PERFORM AS A DBE Attachment E (if applicable).
- 5 Complete the CERTIFICATION OF INSURANCE Attachment F.

ATTACHMENT B

AFFIRMATIVE ACTION CHECKLIST:

Federal regulations require that any firm 50 or more employees soliciting an assisted federally funded contract must have an affirmative action program. If applicable, please provide a brief response to the following items that would typically be covered in any such program. You may provide a copy of your program and reference appropriate pages.

- 1 Date plan was adopted
- 2 Name of Affirmative Action Officer
- 3 Statement of commitment to affirmative action by the chief executive officer
- 4 Designation of an affirmative action officer, of assignment of specific responsibilities and to whom the officer reports.
- 5 Outreach recruitment
- 6 Job analysis and restructuring to meet affirmative action goals
- 7 Validation and revision of examinations, educational requirements, and any other screening requirements.
- 8 Upgrading and training programs
- 9 Internal complaint procedure
- 10 Initiating and insuring supervisory compliance with affirmative action program
- 11 Survey and analysis of entire staff by department and job classification and progress report system
- 12 Recruitment and promotion plans (including goals and time tables)

ATTACHMENT C

**Certification Regarding Debarment,
Suspension, Ineligibility, and Voluntary Exclusion**

This Certification is required by the regulation implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The Regulations are published as Part II of the June 1985, Federal Register (pages 33, 036-33, 043)

Read instructions for Certification below prior to completing this certification.

- 1 The prospective proposer certifies, by submission of this proposal that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in this transaction by any Federal department or agency.
- 2 Where the prospective proposer is unable to certify to any of the statements in this certification, such prospective proposer shall attach an explanation to this proposal.

Date

Signed – Authorized Representative

Title of Authorized Representative

.....
Instructions for Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion:

- 1 By signing and submitting this agreement, the proposer is providing the certification as set below.
- 2 The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the proposer knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

ATTACHMENT D

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1 No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersign, to any person influencing or attempting to influence an officer or employee of a federal agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- 2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for attempting to influence an officer or employee of any federal agency, Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal or Federally assisted contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

- 3 The undersigned shall require that the language of this certification be included in the award documents of all tiers (including subcontracts, subgrants, and contracts under grant, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 32, US Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

(Name of Entity)

(Name and Title of Authorized Official)

(Signature of above Official)

(Date)

ATTACHMENT E

INTENT TO PERFORM AS A DISADVANTAGE BUSINESS ENTERPRISE (DBE)

Project Title and Description: _____

The undersigned intends to perform work in connection with the above project as (check one):

_____ Prime Contractor _____ Subcontractor
_____ Joint Venture _____ Other (please specify) _____

If applicable name of prime contractor or joint venture partner: _____

The DBE status of the undersigned is confirmed by a DBE Certification from one or all of the following (please provide copy of current Certification Certificate):

_____ MRCC (Missouri Regional Certification Committee)
_____ KDOT
_____ MoDOT
_____ City of Kansas City Missouri
_____ Kansas City Area Transportation Agency (KCATA)
_____ Other (please specify) _____
(MARC may require additional certification documentation)

The undersigned is prepared to perform the following described work in connection with the above project (attach additional sheet in needed),

at the following price _____ **(complete only after MARC contract price negotiations)**

Date

Name of DBE Firm

By: _____
Signature of DBE Firm's Authorized Representative

Print Name and title

ATTACHMENT F

CERTIFICATION OF INSURANCE

1. The Consultant shall maintain commercial general liability, automobile liability, and worker's compensation and employer's liability insurance in full force and effect to protect the Consultant from claims under Worker's Compensation Acts, claims for damages for personal injury or death, and for damages to property arising from the negligent acts, errors, or omissions of the Consultant and its employees, agents, and subconsultants in the performance of the services covered by this Agreement, including, without limitation, risks insured against in commercial general liability policies.
2. The Consultant shall also maintain professional liability ("Errors and Omissions") insurance to protect the Consultant against the negligent acts, errors or omissions of the Consultant and those for whom it is legally responsible, arising out of the performance of professional services under this Agreement.
3. The Consultant's insurance coverages shall be for not less than the following limits of liability:
 - a. Commercial General Liability: \$400,000.00 per claim up to \$2,000,000.00 per occurrence;
 - b. Automobile Liability: \$100,000.00 per claim up to \$2,000,000.00 per occurrence;
 - c. Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000.00; and
 - d. Professional ("Errors and Omissions") Liability: \$1,000,000.00, each claim and in the annual aggregate.
4. The Consultant shall, upon request at any time, provide the Sponsor with certificates of insurance evidencing the Consultant's commercial general or professional liability ("Errors and Omissions") policies and evidencing that they and all other required insurance is in effect, as to the services under this Agreement.
5. Any insurance policy required as specified shall be written by a company which is incorporated in the United States of America or is based in the United States of America. Each insurance policy must be issued by a company authorized to issue such insurance in the State of Missouri.

I affirm or attest that _____ has and shall maintain (at the minimum) the
(name of company)
fore-mention insurance coverage during the contract agreement period.

Date

Signed – Authorized Representative

Title of Authorized Representative