



**January 6, 2020**

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Consultant Selection for On-Call Traffic Engineering and Intelligent Transportation Systems Services

### **Overview**

On August 26, 2019, the Orange County Transportation Authority Board of Directors approved the release of a request for proposals for consultant to provide on-call traffic engineering and intelligent transportation system services for regional traffic signal synchronization projects. Board of Directors' approval is requested for the selection of the firms to perform the required work.

### **Recommendations**

- A. Approve the selection of DKS Associates, Albert Grover & Associates, Inc., KOA Corporation, and Iteris, Inc., as the firms to provide on-call traffic engineering and intelligent transportation system services for regional traffic signal synchronization projects, in the aggregate amount of \$5,328,000.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1513 between the Orange County Transportation Authority and DKS Associates to provide on-call traffic engineering and intelligent transportation system services for five years with two, one-year option terms for regional traffic signal synchronization projects.
- C. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1810 between the Orange County Transportation Authority and Albert Grover & Associates, Inc., to provide on-call traffic engineering and intelligent transportation system services for five years with two, one-year option terms for regional traffic signal synchronization projects.
- D. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1811 between the Orange County Transportation Authority and KOA Corporation to provide on-call traffic engineering and intelligent transportation system services for five years with two, one-year option terms for regional traffic signal synchronization projects.

- E. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-9-1812 between the Orange County Transportation Authority and Iteris, Inc., to provide on-call traffic engineering and intelligent transportation system services for five years with two, one-year option terms for regional traffic signal synchronization projects.

***Discussion***

This on-call consultant bench of contracts will support the traffic engineering and intelligent transportation system services for the Orange County Transportation Authority (OCTA) as part of the Measure M2 (M2) Project P and implement multiple Regional Traffic Signal Synchronization Program (RTSSP) projects over a five-year period. Projects are determined through the competitive call for projects (call) process.

As part of the application to request funding for RTSSP projects through the call, an applicant agency (cities and the County of Orange) can designate OCTA as the lead agency. OCTA then administers the project using consultants from the on-call bench. Historically, OCTA has led 36 out of 88 of the RTSSP projects that were awarded from the last eight calls. The table below shows the three corridors where OCTA will act as lead agency as part of the call, approved by the OCTA Board of Directors (Board) on June 10, 2019.

**Table 1 – Project P Corridors – Fiscal Year 2019**

Arterials	Project Intersections	Project Miles	Participating Agencies	Applicant Lead Agency
Aliso Creek Road	21	5.0	3	City of Aliso Viejo
Lake Forest Drive	24	7.5	4	City of Lake Forest
Red Hill Boulevard	28	6.7	4	City of Irvine

These three signal synchronization projects will optimize 73 signalized intersections along three regionally significant corridors, spanning a total of 19.2 miles throughout Orange County.

It is anticipated that local agencies will continue to request OCTA to lead additional traffic signal synchronization projects as part of upcoming calls. The selected traffic engineering consultants, as part of this procurement, will allow OCTA to manage these three projects, as well as projects from future calls.

***Procurement Approach***

This procurement was handled in accordance with OCTA's Board-approved procedures for architectural and engineering (A&E) services that conform to both federal and state laws. Proposals are evaluated and ranked in accordance with the qualifications of the firm, staffing and project organization, and work plan. As this is an A&E procurement, price is not an evaluation criterion pursuant to state and federal laws. Evaluation of the proposals was conducted on the basis of overall qualifications to develop a competitive range of offerors. The recommended firms are requested to submit cost proposals, and the final agreements are negotiated. The awarded contracts will have a five-year initial term with two, one-year extension options. Specific work assignments will be awarded by contract task orders (CTOs) on a rotational basis.

The Board authorized the release of Request for Proposal (RFP) 9-1513 on September 9, 2019, which was electronically issued on CAMM NET. The project was advertised on September 9 and 16, 2019, in a newspaper of general circulation. A pre-proposal conference was held on September 17, 2019, with 13 attendees representing ten firms. Two addenda were issued to provide pre-proposal conference information, responses to questions received, and handle administrative issues related to the RFP.

On October 10, 2019, seven proposals were received. An evaluation committee consisting of members from Strategic Planning departments, and external representatives from the cities of Irvine, Laguna Niguel, and Orange met to review all submitted proposals.

The proposals were evaluated based on the following Board-approved evaluation criteria and weightings:

- |                                     |            |
|-------------------------------------|------------|
| • Qualifications of the Firm        | 40 percent |
| • Staffing and Project Organization | 40 percent |
| • Work Plan                         | 20 percent |

In developing these weightings, several factors were considered, giving equal importance to qualifications of the firm, and staffing and project organization. Qualifications of the firm was weighted 40 percent because a firm's experience in traffic engineering and signal synchronization is vital to effective performance of services on the project. Similarly, equal importance was given to staffing and project organization as the qualifications of the project manager and other key personnel, and experience in performing work of similar scope, size, and availability of staff resources are critical to the timely delivery of the project.

The work plan criterion emphasizes the importance of the team's understanding of Project P, its challenges, and the team's approach to implementing the various elements of the scope of work. The work plan criterion is weighted lower as the CTOs issued will define a specific project's required scope of work.

The evaluation committee reviewed all proposals based on the evaluation criteria and found four firms most qualified to perform the required services. The most qualified firms are listed below in alphabetical order:

Firm and Location

Albert Grover & Associates, Inc. (AGA)  
Fullerton, California

DKS Associates (DKS)  
Orange, California

Iteris, Inc. (Iteris)  
Santa Ana, California

KOA Corporation (KOA)  
Orange, California

On November 14, 2019, the evaluation committee interviewed the short-listed firms. The interviews consisted of a presentation allowing each team to present its qualifications, highlight its proposal, and respond to evaluation committee questions. Each firm was asked some general questions related to their qualifications, relevant experience, project organization, and approach to the work plan. Firms also highlighted their staffing plans, availability of resources, work plans, and perceived project issues. Each team was asked general questions regarding its approach to the requirements of the scope of work, management of the projects, coordination with various agencies, experience with similar projects, and the team's solutions in achieving the project's goals.

Based on the evaluation of written proposals and information obtained during the interviews, staff recommends AGA, DKS, Iteris, and KOA as the firms to provide on-call traffic engineering and intelligent transportation systems (ITS) services. The firms ranked highest amongst the proposing firms based on the teams' relevant experience in traffic engineering and ITS. The proposed teams are comprised of highly-qualified key personnel with relevant and recent experience in RTSSP and ITS projects.

Each firm demonstrated an understanding of the project requirements and presented a comprehensive work plan addressing key issues that are critical to the success of the project. The following is a summary of the proposal evaluation results.

#### **Qualifications of Firm**

All short-listed firms are highly-qualified and have relevant experience in the type of services required by the scope of work. Each firm has identified experience providing signal timing and traffic coordination, along with related ITS experience.

AGA was founded in 1993 and has relevant experience with traffic engineering, traffic signal synchronization, transportation planning, and ITS-related services. The firm has an office in the City of Fullerton with 21 employees. AGA has provided services to local agencies in Southern California for traffic engineering and ITS projects. Recent and relevant projects include: Orange County Traffic Signal Coordination Program; Euclid Street Demonstration Project, Orange County; Chapman Avenue Proposition 1B (Prop 1B)/Traffic Light Signal Project (TLSP), Orange County; Tustin Avenue/Rose Drive RTSSP projects, City of Placentia; Adams Avenue, La Paz Road, and Antonio Parkway RTSSP projects. AGA was instrumental in the design and consensus building between the City of Rancho Santa Margarita, County of Orange, and the California Department of Transportation, providing new and future ITS communications infrastructure.

DKS has provided transportation planning and engineering services to public agencies across the country since 1979. The firm has 143 professionals in seven offices nationally, and ten staff locally in Anaheim. DKS has experience and expertise in traffic operational analysis, traffic signal synchronization, traffic signal design, systems engineering, and integration services in ITS and transportation communications networks. The majority of DKS' signal timing projects involve multiple jurisdictions and require consensus building amongst multiple agencies. DKS' recent and relevant projects in Orange County include: OCTA State College Boulevard RTSSP, Westminster Avenue/17th Street RTSSP, Anaheim Boulevard RTSSP, Olympiad Road – Felipe Road RTSSP, Los Alisos Boulevard Corridor RTSSP in the City of Mission Viejo, and the Magnolia Street corridor RTSSP, Orange County.

Iteris specializes in transportation planning, engineering, and technology services since 1987. The firm has 433 employees and 13 offices, including an office in the City of Santa Ana. Iteris has demonstrated experience in traffic engineering, ITS, transportation planning, initial impact studies, transportation modeling, planning systems engineering, and other transportation technologies

both nationally and internationally. The firm is experienced in performing services of similar scope and magnitude. Recent projects successfully completed include: various OCTA RTSSP Project P corridors, Southern California Association of Governments Transportation Control Measure on Harbor Boulevard, City of Anaheim, Westminster Avenue/17<sup>th</sup> Street/State College Boulevard RTSSP projects, Orange County, Beach Boulevard TLSP Program (Prop 1B/TLSP), City of Anaheim, Edinger Avenue/Irvine Center Drive/Moulton Parkway/Golden Lantern TLSP, Orange County, and Katella Avenue TLSP, Orange County.

KOA was founded in 1987 and provides traffic engineering, civil engineering, and transportation planning services. KOA has a project office in Orange County and various other locations in California, with more than 120 skilled staff members. KOA specializes in traffic engineering projects, and recent and similar projects in signal timing optimization and related services include: Harbor Boulevard, MacArthur Boulevard/Talbert Road, and Santa Margarita Parkway. KOA has successfully completed five RTSSP projects for the Los Angeles County Department of Public Works, which include Bellflower Boulevard, Artesia Boulevard, Fair Oaks Avenue, Garvey Avenue, Foothill Boulevard, and Beverly Boulevard.

#### **Staffing and Project Organization**

The short-listed firms proposed qualified project managers, key personnel, and subconsultants with extensive knowledge in traffic engineering and intelligent transportation system services.

AGA's proposed team is experienced in traffic engineering operational contracts for traffic signal timing and coordination utilizing the firm's in-house traffic management systems. The proposed project manager has over 25 years of experience in traffic and transportation, and has managed over 11 different traffic engineering, traffic signal synchronization, and ITS projects for OCTA since 1998. AGA proposed an experienced quality assurance/quality control manager as an integral part of the project management process. These two individuals founded AGA in 1993 and collectively have vast experience in the traffic engineering and ITS profession. AGA's key personnel and support staff have proven experience in the areas deemed critical to this project.

DKS' proposed team is skilled in signal timing and synchronization projects, and has experience in traffic operations and transportation engineering, including traffic signal timing, operational analysis, and systems engineering for ITS. DKS' proposed project manager has over thirty years of experience managing corridor studies, arterial signal systems projects, ITS planning, and development projects. The principal-in-charge for DKS has 25 years of experience and has been involved with several hundred traffic signal design and coordination

projects, 150 of which involved light rail, streetcar, or bus transit signal priority. DKS' key personnel and support staff successfully worked on recent relevant projects and have experience in traffic operations and transportation engineering including traffic signal timing, operational analysis, traffic signal, and communication design and systems engineering for ITS.

Iteris proposed an experienced project team with demonstrated relevance in transportation planning, RTSSP, ITS, traffic engineering and design, and traffic operations and analysis. The project team consists of specialists in transportation planning, civil and traffic engineering, and signal synchronization. Iteris' project manager has 29 years of experience in the field of transportation and ITS planning, traffic systems engineering, transportation planning, transportation systems and analysis, and development and integration of real-time traffic systems. Iteris' proposed principal-in-charge has 31 years of experience in transportation systems and traffic engineering, and experience managing and designing traffic engineering and ITS projects. Iteris' other key personnel include task leaders experienced in ITS, traffic engineering, operations, maintenance and monitoring, systems communications, traffic collection, traffic management centers, and signal Improvement.

KOA's proposed project team has experienced and qualified personnel. The proposed project manager and task leaders have over 30 years of experience working together on signal timing optimization, traffic signal master plans, and various signal and ITS projects. KOA's principal-in-charge has more than 28 years of experience in transportation and planning, roadway design, traffic design, and transportation modeling and studies. Members of the proposed team have worked together on similar projects, have been involved on projects with OCTA and other local agencies, and are experienced in signal system design and implementation, and ITS.

#### **Work Plan**

All short-listed firms met the scope requirements of the RFP, and each firm effectively discussed its approach to the projects.

The work plan for AGA demonstrated a thorough understanding of each project's requirements and project issues. AGA discussed their project approach performing operations and timing analysis to develop a good coordination of signal timing. AGA made recommendations to new or modified traffic signal equipment to improve synchronization and traffic enhancement solutions. AGA's work plan addressed high-traffic volumes at certain intersections, split phase operations and heavy traffic volumes, and pedestrian traffic challenges. AGA provided solutions for traffic signal optimization and signal timing analysis implementation.

The work plan for DKS demonstrated a clear understanding of each project's key requirements, project challenges, and practical recommendations and solutions. The work plan addressed traffic volumes and synchronization performance, and proposed recommendations and solutions. DKS addressed how timing would be performed and presented traffic enhancement solutions. Main project goals presented were operation and timing analysis to develop and implement timing plans at signalized intersections, and determination and recommendations to improve synchronization. The interview demonstrated understanding of project issues and identified proposed solutions.

Iteris' project approach conveyed a clear project understanding, project management approach, quality assurance and quality control methods, adherence to schedule and budget, and discussed traffic signal equipment upgrades to enhance operations. The firm demonstrated a thorough understanding of traffic conditions and signal synchronization timing and delays. The firm proposed enhancements, such as reviewing existing transportation infrastructures along the corridor, using data sources to determine origin/destination patterns and seasonality, and conducting case studies at certain locations along the corridors to assess the effects of proposed improvements on actual operations of the streets. The interview demonstrated an understanding of possible corridor issues and proposed solutions.

KOA's proposed work plan demonstrated their understanding of the project requirements. The firm discussed specifics on the tasks to be performed and completed a detailed work plan of the corridor and addressed identified issues. KOA's work plan proposed examples of signal equipment upgrades, modification of signal phasing, vehicle detection improvements, and compliant curb ramps. During the interview, the project team demonstrated its knowledge related to RTSSP and specifics of various project corridors.

#### **Procurement Summary**

Based on the evaluation of the written proposals, the teams' qualifications, and information obtained during the interviews, the evaluation committee recommends the selection of Albert Grover & Associates, Inc., DKS Associates, Iteris, Inc. and KOA Corporation as the firms to provide on-call traffic engineering and ITS services for RTSSP. All firms have relevant experience, submitted a comprehensive and responsive proposal, proposed highly-skilled staff and presented a thorough interview highlighting the firm's relevant experience and understanding of the Project.



**Fiscal Impact**

The funding for this project is included in OCTA's Fiscal Year 2019 – 20 Budget, Planning Division Account No. 0017-7519-SPF27/28/29-P57. The program is funded through the Orange County Local Transportation Authority, M2.

**Summary**

Staff recommends Board approval for the Chief Executive Officer to negotiate and execute agreements with Albert Grover & Associates, Inc., DKS Associates, Iteris, Inc., and KOA Corporation as the firms to provide on-call traffic engineering and intelligent transportation systems services for regional traffic signal synchronization projects, in the aggregate amount of \$5,328,000.

**Attachments**

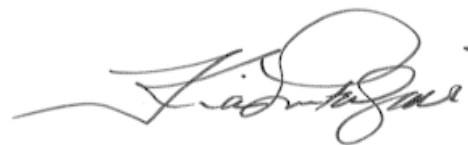
- A. Review of Proposals, RFP 9-1513, Consultant Selection for On-Call Traffic Engineering and Intelligent Transportation Systems Services for Regional Traffic Signal Synchronization Projects
- B. Proposal Evaluation Criteria Matrix - Short-Listed Firms, RFP 9-1513 Consultant Selection for On-Call Traffic Engineering and Intelligent Transportation Systems Services
- C. Contract History for the Past Two Years, RFP 9-1513, Consultant Selection for On-Call Traffic Engineering and Intelligent Transportation Systems Services

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