OCTA

June 7, 2021

To: Regional Planning and Highways Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Consultant Selection for the Freeway Chokepoint Improvement Study

Overview

The Orange County Transportation Authority is retaining a consultant to conduct an 18-month study to identify freeway chokepoints remaining in Orange County after the implementation of the Measure M2 Freeway Program and to develop improvement strategies. Board of Directors' approval for the selection of a firm to perform the required work is requested.

Recommendations

A. Approve the selection of Kittelson and Associates, Inc., as the firm to provide consulting services to conduct the Freeway Chokepoint Improvement Study.

B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-1-3346 between the Orange County Transportation Authority and Kittelson and Associates, Inc., in the amount of $297,337, to provide consulting services to conduct the Freeway Chokepoint Improvement Study.

Discussion

Freeway chokepoints are areas of predictable and recurring congestion that may occur due to lane drops, merging, weaving, and other inefficient freeway operational or design elements. The 2018 Long-Range Transportation Plan (LRTP) Short-Term Action Plan recommended the development of a Freeway Chokepoint Improvement Study to identify and address future chokepoint locations, with a baseline assumption that the Measure M2 Freeway Program is fully implemented. In response, a scope of work was developed with a primary goal of identifying cost-effective, low-impact freeway chokepoint mitigation projects that increase safety, improve traffic operations, and reduce

congestion. The scope of work also includes the identification of opportunities to improve air quality, active transportation, and social equity.

A request for proposals (RFP) was issued to seek qualified consultants to conduct the Freeway Chokepoint Improvement Study. The consultant will be expected to deliver on the tasks and goals outlined in the scope of work. The Orange County Transportation Authority (OCTA) and the consultant will also incorporate a collaborative planning process to engage the California Department of Transportation (Caltrans) and potentially affected jurisdictions in the identification of chokepoints and evaluation improvement strategies. The results of this study will provide enough project detail so that the improvement options at priority locations can be considered for inclusion in the next LRTP.

Procurement Approach

This procurement was handled in accordance with OCTA's Board of Directors-approved procedures for professional and technical services. Various factors are considered in an award for professional and technical services. Award is recommended to the firm offering the most comprehensive overall proposal considering such factors as project organization and staffing, prior experience with similar projects, work plan, as well as cost and price.

On March 1, 2021, RFP 1-3346 was issued electronically on CAMM NET. The project was advertised in a newspaper of general circulation on March 1 and March 8, 2021. A pre-proposal teleconference was held on March 10, 2021, with 17 attendees representing 12 firms. An addendum was issued to provide a copy of the pre-proposal registration sheet and to respond to questions related to the RFP.

On March 25, 2021, five proposals were received. An evaluation committee consisting of OCTA staff from Contracts Administration and Materials Management, Planning and Analysis, Project Development, Transportation Modeling, and Project Management departments met to review all proposals received.

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

• Qualifications of the Firm	20 percent
• Staffing and Project Organization	25 percent
• Work Plan	35 percent
• Cost and Price	20 percent

Several factors were considered in developing the criteria weightings. Qualifications of the firm was weighted at 20 percent because firms had to demonstrate experience on similar projects, such as freeway chokepoint improvement projects or studies that reduce congestion, increase safety, and improve traffic operations. Staffing and project organization was weighted at 25 percent as the project team had to demonstrate expertise with project management and experience in identifying freeway chokepoints and developing improvement strategies. The work plan was weighted highest at 35 percent because the firm had to present an approach that demonstrated how they would develop a conceptual planning strategy to address chokepoints identified in the scope of work. Cost and price was weighted at 20 percent to ensure OCTA receives competitive pricing for the proposed services.

On April 14, 2021, the evaluation committee reviewed all proposals received based on the evaluation criteria and short-listed the three most qualified firms. The three short-listed firms are listed below in alphabetical order:

Firm and Location

HDR Engineering, Inc.(HDR)
Irvine, California

Iteris, Inc. (Iteris)
Santa Ana, California

Kittelson and Associates, Inc. (Kittelson)
Orange, California

On April 20, 2021, the evaluation committee interviewed the three short-listed firms. The interviews consisted of a presentation to demonstrate the firms' understanding of OCTA's requirements for this project. The firms' project managers and key team members had an opportunity to present qualifications and respond to the evaluation committee's questions. Questions were asked relative to the firms' experience performing similar services with projects

involving freeway chokepoint improvement studies. The firms were asked to discuss considerations, constraints, or risks that need to be assessed in executing the work plan and explain their approach to ensure successful completion of this study within the 18-month schedule. Finally, firms were asked clarifying questions related to each firm's proposal.

After considering the responses to the questions asked during the interviews, the evaluation committee reviewed the preliminary rankings and made adjustments to individual scores; however, the overall ranking of the firms did not change as a result of the interviews.

Based on the evaluation of the written proposals, information obtained from the interviews, as well as cost and price, the evaluation committee recommends Kittelson for award. The following is a brief summary of the proposal evaluation results.

Qualifications of the Firm

The short-listed firms are qualified and demonstrated experience providing related services.

Kittelson was founded in 1985 and has 250 employees across 24 offices in the United States. Kittelson's Southern California regional office, located in the City of Orange, provides multimodal transportation planning and traffic engineering to local, regional, and state agencies. Kittelson has experience working on relevant projects, such as the Pennsylvania Department of Transportation Freeway Planning and Operations Analysis System where the firm evaluated systemwide freeway operations to propose future improvements and traffic management strategies, some of which were at chokepoint locations. The firm also worked on several studies with the Florida Department of Transportation to identify future potential freeway-congested locations and assess freeway operation impacts of constructing dual high-occupancy vehicles/high-occupancy toll at managed lanes access points. Other relevant efforts included projects with the North Carolina Department of Transportation, Contra Costa Transportation Authority, and multiple projects for OCTA including the State Route 91 Geometric and Design Alternatives Analysis, the Beach Boulevard Corridor Study, and the Master Plan of Arterial Highways (MPAH) Complete Streets Assessment.

Iteris was founded in 1987 and the firm's headquarters, as well as project office, is located in the City of Santa Ana. Iteris' 19 offices and 425 employees specialize in transportation planning and traffic engineering. The firm has proven experience contracting with transit companies and public agencies with projects

that include the Inland Empire comprehensive corridor plans for the Southern California Association of Governments, the United States 101 Multimodal Corridor Study for Ventura County, a highway system assessment and hot spot analysis for the Los Angeles County Metropolitan Transportation Authority (LA Metro), an update to the monitoring process for the Congestion Management Program for the San Bernardino County Transportation Authority (SBCTA), an MPAH reclassification traffic analysis for the County of Orange, and development and maintenance of a traffic management plan for the Interstate 405 (I-405) Design-Build Improvement Project for OCTA.

HDR was founded in 1917 and has been in Southern California since 1973, and the local office is located in the City of Irvine. The firm has over 10,000 employees in 200 locations worldwide specializing in infrastructure planning and design, transportation planning, strategic planning, traffic studies, tolling studies, and public outreach. The firm has worked with OCTA on multiple projects including the Orange County Freeway Study, Pacific Coast Highway Corridor Study, and South Orange County Multimodal Transportation Study. Additionally, the firm has relevant experience with LA Metro, on the Interstate 605 Corridor Improvement Project, developed alternatives and proposed geometric improvements on State Route 133 for the City of Laguna Beach, and developed a strategic assessment for Riverside County Transportation Commission.

Staffing and Project Organization

Kittelson proposed a qualified team with transportation planning, traffic engineering, and conceptual design experience. The firm proposed a co-project manager approach with two project managers assigned to the effort. The first proposed co-project manager has more than 24 years of experience and six years with the firm coordinating with local and regional transportation and environmental agencies in Southern California and is experienced on planning and engineering projects in Orange County. The proposed co-project manager provided project management on the MPAH Complete Streets Assessment and has worked on other projects to develop solutions for freeway congestion and street problems in coordination with OCTA and Caltrans. The second proposed co-project manager has 41 years of experience and 35 years with the firm. The individual has conducted freeway operations studies of lane options for several freeways in the Orlando, Tampa Bay, and Fort Meyers areas of Florida. The proposed project team demonstrated transportation backgrounds and familiarity with freeway operations. During the interview, the project team provided comprehensive responses to the evaluation committee’s questions.

Iteris proposed an experienced team. The proposed project manager has over ten years of experience working in the field of transportation engineering and three years with the firm. The project manager has demonstrated knowledge and experience in traffic operations analysis and transportation impact analysis. The proposed principal-in-charge has five years of experience with the firm and has a background in transportation systems development and designing, as well as designing and deploying projects involving technologies, including traffic management systems for application in the traffic and transit environments. During the interview, the project manager was unable to clarify how they would manage potential problems and escalating issues.

HDR proposed an experienced team with prior transportation and Orange County freeway project history. The project manager has 11 years of experience with the firm and has managed projects involving transportation planning, traffic engineering, and travel demand forecasting for over 40 years. His relevant projects include the Orange County Freeway Study and Pacific Coast Highway Corridor Study. The proposed planner has more than 16 years of experience in planning and transportation including multiple Southern California projects and has one year of experience with the firm. The firm proposed reasonable availability of key staff but did not include sufficient details describing the level of commitment at the support staff level. During the interview, the firm proposed to assign project staff as the project progresses but was unable to identify any specific support personnel during the interview.

Work Plan

Kittelson presented a work plan that addressed all elements of the scope of work and its requirements. The firm provided a thorough approach to completing each task and proposed enhancements to the scope of work requirements including looking at active transportation and demand management strategies, as well as identifying other issues, such as the coronavirus (COVID-19) and the work from home impacts on traffic. The firm also discussed potential future scenarios and proposed a clear plan on how the improvement strategies would be analyzed and screened. The proposed work plan focused on delivering a product tailored for OCTA's needs. The proposal included the use of datasets, such as the Caltrans Performance Measurement System, Street Light Data, INRIX, or the Federal Highway Administration's National Performance Management Research Set to identify chokepoints. The proposal demonstrated how FREEVAL, an advanced corridor-based traffic operations assessment tool can be used to assess the current and future chokepoint locations and offered to share the model with OCTA and provide any needed training at the end of the project.

Iteris' work plan demonstrated an understanding of the project requirements. The firm discussed specifics of the scope of work and presented a detailed work plan. Iteris provided details on the firm's approach using a big data analytics platform, ClearGuide, to identify freeway chokepoints and provided examples of its use in traffic management for OCTA's I-405 Improvement Project, LA Metro's Measure Up Arterial Performance Measure Pilot, and monitoring arterial roadways for SBCTA. The big data approach utilizes larger, more complex data sets that cannot be managed and analyzed by traditional data processing software. In transportation, big data may be collected from cell phone data, sensors, or connected vehicles and allows for more detailed and real time understanding of traffic congestion. The firm also identified potential issues, such as data collection through the Caltrans Performance Measurement System, uncertainty over future traffic growth due to COVID-19, and the potential for different results when utilizing different tools. The work plan relied heavily on utilizing ClearGuide, in conjunction with the Caltrans Performance Measurement System data, but did not articulate the impact of COVID-19 in identifying existing chokepoint locations as required in the scope of work.

The work plan proposed by HDR addressed the requirements of the scope of work, and the firm demonstrated an understanding of lessons learned from the 2018 Orange County Freeway Needs Study. The firm stressed the importance of big data to evaluate congestion on statewide freeways and establish a thorough understanding of existing chokepoints in Orange County. The firm identified several key issues, such as considering improvements on a corridor-wide level, the effects of emerging technologies, and the effects of COVID-19 on the transportation system. During the interview, the firm stated that they plan to utilize INRIX and the Caltrans Performance Measurement System data, but additional data sources may need to be provided by OCTA. The proposal included details on how the firm will analyze proposed chokepoint improvement strategies; however, this process was not clearly explained during the interview.

Cost and Price

Pricing scores were based on a formula, which assigned the highest score to the firm with the lowest total firm-fixed price and scored the other proposals' total firm-fixed price based on its relation to the lowest total firm-fixed price. Kittelson's total firm-fixed price to complete the study was competitive among the firms and was also lower than the OCTA project manager's independent cost estimate. Therefore, Kittelson's proposed firm-fixed price is deemed fair and reasonable.

Procurement Summary

Based on the evaluation of the written proposals, the firm's qualifications, the information obtained from the interviews, as well as cost and price, the evaluation committee recommends the selection of Kittelson as the top-ranked firm to conduct the Freeway Chokepoint Improvement Study. Kittelson demonstrated strong relevant experience, competitive pricing, and submitted a thorough and comprehensive proposal that was responsive to all requirements of the RFP.

Fiscal Impact

The project is included in OCTA's Fiscal Year 2020-21 Budget, Planning and Analysis Division, Account No. 1531-7519-A4461-0YW, and is funded by State Transportation Improvement Program funds.

Summary

Staff is recommending the Board of Directors authorize the Chief Executive Officer to negotiate and execute Agreement No. C-1-3346 between the Orange County Transportation Authority and Kittelson and Associates, Inc., in the amount of $297,337, to provide consulting services to conduct the Freeway Chokepoint Improvement Study.

Attachments

A. Review of Proposals, RFP 1-3346 Freeway Chokepoint Improvement Study
B. Proposal Evaluation Criteria Matrix (Short-Listed Firms), RFP 1-3346 Freeway Chokepoint Improvement Study
C. Contract History for the Past Two Years, RFP 1-3346 Freeway Chokepoint Improvement Study

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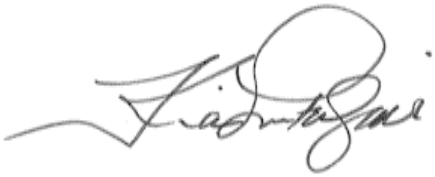

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