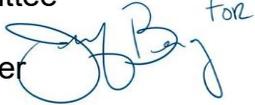




**March 2, 2026**

**To:** Regional Transportation Planning Committee

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

**Subject:** Agreement for the Harbor Boulevard Transit Signal Priority Deployment

**Overview**

On October 13, 2025, the Orange County Transportation Authority Board of Directors approved the release of a request for proposals to initiate a competitive procurement process to retain consultant services for the deployment of a transit signal priority solution that includes software, signal equipment, and system integration. The Harbor Boulevard Transit Signal Priority Deployment project will focus on the OC Bus Rapid Route 543 and will encompass 52 signalized intersections along Harbor Boulevard. Board of Directors' approval is requested to select a firm to perform the required work.

**Recommendations**

- A. Approve the selection of Arcadis U.S., Inc. as the firm to deliver the Harbor Boulevard Transit Signal Priority Deployment.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C250014 between the Orange County Transportation Authority and Arcadis U.S., Inc., in the amount of \$2,032,849, for a five-and-one-half-year term, to deliver the Harbor Boulevard Transit Signal Priority Deployment.

**Discussion**

Orange County agencies have made significant investments in traffic signal infrastructure, enhancing communications between signalized intersections and their respective Traffic Management Centers (TMC) using local funds, including Orange County Transportation Authority's (OCTA) Measure M2. OCTA buses are equipped with on-board technologies that enable real-time data collection, remote communication, and location tracking, supporting continuous information exchange with OCTA's Traffic Operations Center. This operational environment

is compatible with cloud-based transit signal priority (TSP) platforms, which use real-time data to generate priority requests for transit vehicles.

In 2023, OCTA was awarded \$1.6 million through the U.S. Department of Transportation's Strengthening Mobility and Revolutionizing Transportation Stage 1 Grant Program to pilot an innovative, cloud-based TSP system on a segment of the OC Bus Rapid Route 543 on Harbor Boulevard in the City of Fullerton, between Houston Avenue and Commonwealth Avenue. This pilot project activated TSP in November 2024, which was evaluated for transit performance and general traffic impacts. The results confirmed benefits to transit performance and the technical viability of broader TSP deployment.

In 2023, the OCTA also received funding through the Regional Early Action Planning Grants of 2021 (REAP 2.0) funds, administered by the Southern California Association of Governments, to support Stage 2 of the Harbor Boulevard TSP Deployment (Project). This Project involves deployment of a cloud-based TSP system along the full OC Bus Rapid Route 543. All expenditures for this Project, approximately \$2.35 million, must be completed by December 31, 2026.

The Project will implement a cloud-based TSP system at 52 signalized intersections along the OC Bus Rapid Route 543, from the OCTA Santa Ana Bus Base at MacArthur Boulevard to the Fullerton Transportation Center at Commonwealth Avenue. The intersections within these limits are owned and operated by the cities of Anaheim, Fountain Valley, Fullerton, Garden Grove, and Santa Ana. In addition to deploying the TSP system, the Project will upgrade traffic signal controllers, field communication switches, and cybersecurity protections at the TMC's to support the new technology.

The selected consultant for the Project will be responsible for system planning, technical design, procurement, and coordinating installation of traffic signal devices, configuration, testing, and deployment of the TSP system. The consultant will also lead system integration, training, documentation, and post-deployment support. Approval of the consultant to deliver the Project is necessary to maintain the project schedule and ensure compliance with the REAP 2.0 funding deadline. The Project schedule includes a total term of five-and-one-half-years, consisting of a six-month implementation period followed by five years of software licensing, support, and maintenance. The full five-year licensing and support cost will be paid up front upon successful deployment of the system, ensuring long-term system sustainability and pricing stability over the life of the Project.



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The evaluation committee reviewed all proposals based on the Board-approved evaluation criteria and short-listed the two most qualified firms listed below in alphabetical order:

Firm and Location

Arcadis U.S., Inc. (Arcadis)  
Headquarters: Highlands Ranch, Colorado  
Project Office: Irvine, California

Kimley-Horn and Associates, Inc. (Kimley-Horn)  
Headquarters: Raleigh, North Carolina  
Project Office: Orange, California

On January 13, 2026, the evaluation committee conducted interviews with the two short-listed firms. The interviews consisted of a presentation allowing each firm to demonstrate the firm's understanding of OCTA requirements. Each firm was also given an opportunity to provide a live demonstration of their proposed TSP solution and highlight how it addresses the project requirements specified in the scope of work. The firm's project managers and key team members had an opportunity to present their qualifications and respond to the evaluation committee's questions. Questions were related to the firms' approach to the requirements of the scope of work, management of the Project, coordination with the various agencies, and the proposed solutions for achieving the project goals, as well as specific clarification questions related to each firm's proposal.

At the conclusion of the interviews, a request for the best and final offer (BAFO) was issued to the short-listed firms to seek clarification regarding the proposed solution and all associated costs, as well as final pricing. Arcadis' proposed pricing decreased. The firm also provided a separate, optional software cost in response to the requested clarifications. Kimley-Horn's proposed pricing remained the same.

Based on the evaluation of the written proposals and the information obtained from the interviews and BAFOs, as well as cost and price, the evaluation committee recommends Arcadis for consideration of the award to deliver the Project. The following is a summary of the proposal evaluation results.

Qualifications of the Firm

Arcadis, founded in 1957, is headquartered in Highlands Ranch, Colorado with 11 offices in California including an office in the City of Irvine, proposed as the

project office. The firm has over 700 employees across 11 offices in California. Arcadis demonstrated relevant experience implementing TSP solutions and intelligent transportation systems (ITS) for multiple public agencies. The firm's projects include the OCTA Harbor Boulevard Pilot Innovative TSP Study, McFadden Avenue TSP Pilot, North County Transit District 303 TSP Study, Mid-City Bus Rapid Transit Signal Controller Update and TSP Project, and North Carolina Department of Transportation Multimodal Connected Vehicle Travel. The firm proposed two subcontractors for the cloud-based TSP solution and for TSP timing, controller installation, and hardware and software procurement support. Arcadis received positive feedback from its references.

Kimley-Horn was founded in 1967 and is headquartered in Raleigh, North Carolina with 16 offices in California including an office in the City of Orange proposed as the project office. The firm has over 850 employees. The firm demonstrated relevant TSP, signal synchronization, and ITS projects. Kimley-Horn developed the proposed cloud-based TSP solution, which is currently being implemented in the City of Los Angeles for the Los Angeles County Metropolitan Transportation Authority (LA Metro) buses. The firm has implemented its TSP solution for the San Diego Association of Governments, City of Austin, Texas, and Regional Transportation Commission of Southern Nevada. The firm has also worked with OCTA on the Santa Ana Transit Cooperative Study and Transit Signal Synchronization Master Plan. Kimley-Horn proposed one subcontractor to lead the procurement for controllers and switches. The firm received positive feedback from its references.

#### Staffing and Project Organization

Arcadis proposed a project team with extensive experience. The proposed project manager has over 24 years of experience in transportation and traffic engineering. The individual served as project manager on the McFadden TSP Pilot. One of the proposed technical leads for this Project served as the project manager on the Harbor Boulevard Pilot Innovative TSP Study. The project team demonstrated clear roles and responsibilities with the proposed project manager focused on managing the overall project scope and schedule and the proposed technical leads assigned to tasks related to their level of expertise. The allocation of staff resources demonstrated a clear understanding of the project timeline and requirements to meet the REAP 2.0 grant funding deadline. During the interview, the project team presented the proposed TSP solution, as well as provided thorough responses to the evaluation committee's questions, which confirmed the proposed staffing plan and team organization.

Kimley-Horn proposed an experienced and knowledgeable project team. The proposed project manager has over 30 years of TSP and ITS experience, including developing and implementing the proposed TSP solution. The individual is also proposed to lead technical aspects of the Project. The proposed project team have been involved in building and implementing the TSP solution and they are currently implementing it for LA Metro. The firm provided a demonstration of the TSP solution and responded to the evaluation committee's questions. Although the proposed project manager demonstrated in-depth knowledge of the TSP solution and a deputy project manager was proposed for additional support, there were concerns that managing both the technical aspects and overall project oversight could overextend the project manager, potentially impacting the Project's overall objectives and meeting the REAP 2.0 grant funding deadline. During the interview, the project team provided a demonstration of its proposed TSP solution, as well as responses to the evaluation committee's questions.

#### Work Plan

Arcadis presented a comprehensive work plan that clearly demonstrated an understanding of the project requirements, including the tight grant funding deadline by focusing efforts on project management and items that would impact the project schedule and taking on responsibilities that will assist the participating cities to move forward with the Project. The firm's approach and proposed TSP solution meet the project requirements. The firm's approach also includes providing support to the participating cities with the configuration and installation of the traffic signal controllers, switches, and firewall equipment, which demonstrates Arcadis' commitment to the project schedule, as well as an understanding that the cities may not have the resources and staff necessary to adhere to the schedule. While the firm has proposed a cloud-based solution, installation includes a physical device that acts as a firewall when connecting to the participating cities' traffic signal systems, adding a layer of defense against any cybersecurity threats. As an enhancement, Arcadis proposed to overlay traffic data available to OCTA with the transit information the proposed TSP solution will generate. During the interview, the firm provided a demonstration of the various features and capabilities of the proposed TSP solution and how it meets OCTA's requirements. Additionally, the responses to clarifications in the BAFO provided further assurances regarding Arcadis' ability to meet OCTA's requirements, as well as transparency related to associated project costs.

Kimley-Horn presented a work plan that addressed all elements of the scope of work. The firm demonstrated an understanding of the project scope and schedule with a focus as a one-stop-shop as the proposed TPS solution was

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built in-house and would require less coordination for implementation. With an understanding of the funding deadline, the proposed TSP solution is a cloud-based system that can be installed without any devices and only needs internet connection to the participating cities' traffic signal systems. However, this type of direct connection does not provide a layer of defense for any potential cybersecurity threats. Kimley-Horn proposed an alternate solution, which was also indicated in their BAFO response, that would require the participating cities to procure a server if additional security was desired. This would be at the expense of the cities, which is inconsistent with their agreement with OCTA and expectations for this Project. Kimley-Horn provided a demonstration of the functionalities and capabilities of the proposed TSP solution during the interview, which includes a value-added dashboard that provides vehicle travel time information along the length of the project corridor.

#### Cost and Price

Pricing scores were based on a formula, which assigned the higher score to the firm with the lower total firm-fixed price and scored the other proposal's total firm-fixed price based on its relation to the lower total firm-fixed price. Although Arcadis did not propose the lower total firm-fixed price, it is less than the OCTA project manager's independent cost estimate; therefore, deemed fair and reasonable.

While Kimley-Horn proposed a lower total firm-fixed price, it is based on the proposed fully cloud-based TSP solution with the option for the participating cities to procure a server at their expense should another layer of security be desired. Additionally, the lower cost and hours allocated for project management, as well as support and coordination with the cities in the installation of the traffic signal devices do not seem sufficient as these are critical paths to meeting the funding deadline. Despite the firm's assurances to meet the project schedule and experience with information technology networks and cybersecurity, the evaluation committee remained uncertain about Kimley-Horn's overall understanding of the networking requirements and ability to provide an approach that would minimize resource needs and financial impacts to the participating cities.

#### Procurement Summary

Based on the evaluation of the written proposals, the firms' qualifications, work plan approach, the information obtained from the interviews and BAFOs, as well as cost and price, the evaluation committee recommends the selection of Arcadis as the top-ranked firm to deliver the Project. Arcadis delivered a

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thorough and comprehensive proposal and an interview that was responsive to all the requirements of the RFP.

The evaluation committee recommends Arcadis as the top-ranked firm for the following reasons:

- Demonstrated depth of experience in providing a solution that addresses participating city communication networking and cybersecurity requirements and concerns.
- Proposed an experienced project manager focused on managing the overall project schedule and scope with a web-based project dashboard that will be accessible to all stakeholders to track progress, allowing Arcadis' technical staff to focus on the task details and deployment of the TSP system.
- Presented a technical approach and project schedule that demonstrates a clear understanding of the project requirements, potential challenges, and adherence to the project timeline.
- Proposed value-added enhancements that incorporate traffic speed information along and crossing the corridor into the TSP performance metric dashboard to provide a holistic understanding of the corridor for all users.
- Proposed pricing directly aligns with the firm's experience, proposed project team, and technical approach to support this unique Project.

#### Fiscal Impact

The Project was approved in OCTA's Fiscal Year 2025-26 Budget, Planning Division, Account No. 0017-7669-SPT01-0Q7, and will be funded using the REAP 2.0 program funds.

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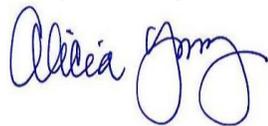
***Summary***

Staff is recommending the Board of Directors authorize the Chief Executive Officer to negotiate and execute Agreement No. C250014 between the Orange County Transportation Authority and Arcadis U.S., Inc., in the amount of \$2,032,849, for a five-and-one-half-year term, for the Harbor Boulevard Transit Signal Priority Deployment.

***Attachments***

- A. Review of Proposals, RFP 250014, Harbor Boulevard Transit Signal Priority Deployment
- B. Proposal Evaluation Criteria Matrix (Short-Listed Firms), RFP 250014, Harbor Boulevard Transit Signal Priority Deployment
- C. Contract History for the Past Two Years, RFP 250014, Harbor Boulevard Transit Signal Priority Deployment

**Prepared by:**



Alicia Yang  
Senior Project Manager, Planning  
(714) 560-5362

**Approved by:**



Rose Casey  
Executive Director, Planning  
(714) 560-5729



Pia Veesapen  
Director, Contracts Administration and  
Materials Management  
(714) 560-5619