



City of Santa Ana
20 Civic Center Plaza, Santa Ana, CA 92701
Staff Report
June 3, 2025

TOPIC: Agreement for McFadden Avenue Transit Signal Priority Pilot Project

AGENDA TITLE

Agreement with Arcadis U.S., Inc. to Implement the McFadden Avenue Transit Signal Priority Pilot Project (No. 25-6031) (Non-General Fund)

RECOMMENDED ACTION

Approve an agreement with Arcadis U.S., Inc. to implement the McFadden Avenue Transit Signal Priority Pilot Project for an amount not to exceed \$1,107,502, for a term beginning June 3, 2025 and ending June 2, 2027, with provisions for two one-year extensions (Agreement No. A-2025-XXX).

GOVERNMENT CODE §84308 APPLIES: Yes

DISCUSSION

The Public Works Agency's Engineering Division (PWA) is responsible for the administration and oversight of all Capital Improvement Projects in the City, whereas the Traffic Engineering Section oversees the operations and maintenance of the City's Traffic Signal system. The Traffic Signal system is comprised of approximately 310 traffic signals that are interconnected via fiber optic communication and dynamically adjust traffic signal timings based on real-time traffic conditions to improve traffic flow and reduce congestion.

On October 15, 2025, City Council approved a cooperative agreement with Orange County Transportation Authority (OCTA) recognizing \$3,690,000 in Regional Early Action Planning (REAP 2.0) grant funding to deliver the McFadden Avenue Transit Signal Priority Pilot Project (Project). Under the cooperative agreement, the City of Santa Ana agreed to deliver the Project including implementation and evaluation of an innovative Transit Signal Priority (TSP) system. The project will include planning, assessing, deploying, and testing the TSP system. On September 17, 2024, the City Council approved the construction of the McFadden Avenue corridor roadway improvements that will prioritize active transportation and promote transit use. To ensure McFadden Avenue is accessible, safe, and secure for all modes of travel, it is important to provide highly reliable public transportation along the corridor. The proposed TSP project will improve OC Bus travel time, schedule reliability, reduce fuel

consumption and emissions while also maintaining traffic flow and improving corridor safety along McFadden Avenue. The grant funding will finance the entire cost of the TSP deployment in addition to bus stop improvements and all associated design and administration costs.

McFadden Avenue is a multi-modal corridor with many travelers, ranging from motorists to bicyclists and pedestrians, using this route to commute to work, school, and other key destinations. Additionally, OCTA operates the OC Bus Route 66 along the corridor, which has one of the highest ridership rates in the County transit system. In 2022, OCTA, in partnership with City of Santa Ana, studied the McFadden Avenue corridor to evaluate traffic flow and transit operations in preparation for the construction of active transportation improvements. From the study, a Transit Signal Priority Project was identified as a key upgrade to help enhance the corridor. The TSP is a strategy that modifies traffic signal timing to give OC buses priority at signalized intersections. Priority is achieved by extending green light times for OC buses, shortening red light times, or changing when green phases occur in the traffic signal cycle. TSP will be achieved via a cloud-based system that will collect real time speed and location data from OCTA's Traffic Operation Center and interface with the City's Traffic Management Center. The OCTA buses are currently equipped with comprehensive data collection, remote network communications, and location tracking that exchange information between the bus operator and the OCTA Traffic Operation Center (TOC). The cloud server will utilize algorithms to analyze the incoming data from the busses and transmit the data to the City's traffic signal controllers instructing them to adjust signal timing to accommodate the transit vehicle. The project will enhance the corridor traffic flow by assessing, deploying, and testing TSP at 19 signalized intersections on McFadden Ave. between Harbor Boulevard and Grand Avenue.

The McFadden Avenue Transit Signal Priority Pilot Project will be delivered in two phases: this phase (Phase 1) will implement and evaluate the TSP system and Phase 2 will construct bus stop improvements at 25 bus stops, including bus stop relocations with concrete bus pads, bus shelters, trash receptacles, and solar powered lighting fixtures. The bus stop improvements will be constructed per City of Santa Ana standards and after project completion will become City property and subject to regularly scheduled maintenance. A Phase 2 construction contract will be brought to City Council for consideration in September 2025.

On January 14, 2025, PWA released Request for Proposal (RFP) No. 24-122, by which it sought the services of a qualified consulting firm to implement the McFadden Avenue Transit Signal Priority Pilot Project.

The RFP was advertised and proposals were received electronically via PlanetBids, the City's online procurement management and publication system, on February 12, 2025. The City notified a total of 932 regional vendors via PlanetBids, one of which is Santa Ana based. Fifty-two vendors requested bidding documents and three proposals were

received and evaluated by a selection committee. Based on criteria outlined in the RFP, the following summarizes the top responding firms:

Firm	City	Ranking
Arcadis U.S., Inc.	Irvine, CA	1
Iteris, Inc.	Santa Ana, CA	2
Advantec Consulting	Irvine CA	3

Arcadis U.S., Inc. is an accomplished engineering, construction management, and environmental consulting firm. Arcadis U.S., Inc. has over 66 years of experience working with public and private agencies throughout the country and Southern California. They have played a key role in the selection and deployment of TSP technologies at over 5,000 signalized intersections, working with every major traffic signal controller manufacturer. Arcadis is currently performing work as the prime engineering firm on the Harbor Boulevard Innovative Corridor Project to enhance traffic signal operations and safety along Harbor Boulevard. Their experience supporting OCTA and other agencies nationwide in deploying intersection technologies offers reassurance towards their work to enhance transit operations along McFadden Avenue while also maintaining traffic flow and improving corridor safety. Staff recommends awarding the agreement to Arcadis U.S., Inc. to implement the McFadden Avenue Transit Signal Priority Pilot Project (Exhibit 1).

ENVIRONMENTAL IMPACT

There is no environmental impact associated with the action.

FISCAL IMPACT

Funds are available in the following account for the current year and will be budgeted and made available for the next fiscal year:

Fiscal Year	Accounting Unit - Account #	Fund Description	Accounting Unit, Account Description	Amount
2024-25	14717613-66220 (25-6031)	Street Safety Programs	Regional Early Action Planning – Improvements Other Than Buildings	\$1,107,502
Total:				\$1,107,502

EXHIBIT(S)

1. Agreement with Arcadis U.S., Inc.

Submitted By: Nabil Saba, P.E., Executive Director – Public Works Agency

Approved By: Alvaro Nuñez, City Manager