

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Julia H. Cooper

SUBJECT: SEE BELOW

DATE: July 25, 2022

Approved



Date

7/29/2022

**SUBJECT: REPORT ON REQUEST FOR PROPOSAL FOR A CENTRALIZED
TRANSIT SIGNAL PRIORITY SOLUTION**

RECOMMENDATION

Accept the report on the Request for Proposal and adopt a resolution authorizing the City Manager to:

- (a) Negotiate and execute an agreement with SinWaves, Inc. dba LYT (Santa Clara, CA) for a centralized transit signal priority solution, including related professional services such as implementation, testing, training, support, and maintenance, for a five-year term beginning on or about August 10, 2022 and ending on or about August 9, 2027 in alignment with the term of the software license and maximum compensation not to exceed \$500,000; and
- (b) Negotiate and execute amendments and change orders as required for any unanticipated changes for a contingency amount not to exceed \$62,500.

OUTCOME

Authorizing the City Manager to take this action will improve Santa Clara Valley Transportation Authority (VTA) bus operating speeds on VTA bus routes 66 and 68 to reduce travel times, increase transit ridership, and reduce vehicle emissions, and supports the City of San José's (City) goal of providing viable transportation choices that promote a strong economy and a transportation system that enhances community livability.

BACKGROUND

A majority of San José residents commute in single-occupancy vehicles (76.4% based on [U.S. Census Bureau, 2015](#)) which contributes significantly to congestion and pollution. To address this, the City has implemented many strategies to reduce vehicle miles travelled, balance the different modes of transportation, and reduce congestion and pollution. One of these strategies

involves transit signal prioritization whereby traffic signals change to prioritize transit vehicles, such as VTA buses. To date, this transit signal prioritization has relied on hardware-based systems that use sensors to detect transit vehicles at intersections and adjust signal phasing to minimize transit vehicle stops. Physical infrastructure and ongoing maintenance make larger scale deployments of these hardware-based solutions cost prohibitive.

In 2019, the City and VTA collaborated on a pilot project to test a primarily cloud- and software-based transit signal prioritization solution. The pilot project solution used machine learning based on historical traffic data to optimize transit signal operations and minimize conflicting traffic impacts. The pilot was successful, and the City subsequently received grant funding from VTA through the Transportation Fund for Clean Air program to procure the same or similar solution for larger scale deployment.

This agreement will provide for a primarily software-based centralized transit signal priority solution for VTA bus routes 66 (runs from south San José to the Milpitas BART station to north Milpitas) and 68 (runs from Gilroy to San José Diridon Station). These routes were selected in collaboration with VTA, and combined, include 120 signalized intersections.

ANALYSIS

In February 2022, the Finance Department released a Request for Proposal (RFP) for a primarily software-based central transit signal priority solution through the City's e-procurement system, Biddingo. A total of 26 companies viewed the RFP, and three responsive proposals were received prior to the submittal deadline.

Evaluation Process: Proposals were evaluated and scored independently, in accordance with the evaluation criteria set forth in the RFP, by a five-member evaluation team comprised of representatives from the Department of Transportation and VTA. Final scores are as follows:

Evaluation Criteria	Maximum Points	ACT Traffic Solutions Inc.	Kimley-Horn & Associates, Inc.	SinWaves, Inc. dba LYT
General Requirements	10	5	7	9
Experience & Qualifications	20	9	15	16
Project Approach/Schedule	10	7	9	8
Technical Capabilities	40	25	32	33
Cost Proposal	20	16	0*	20
TOTAL SCORE	100	62	63	86

*Vendor received 0 cost points for not submitting a completed cost form with their proposal response.

Local and Small Business Enterprise Preference: Pursuant to [San José Municipal Code 4.12.330](#), the City's Local and Small Business (LBE/SBE) Enterprise Preference did not apply to this procurement due to the federal grant funding.

Protest: The City RFP process included a 10-day protest period that began when the City issued the Notice of Intended Award on May 13, 2022. No protests were received.

Award Recommendations: Staff recommends award of contract to SinWaves, Inc. dba LYT whose proposal was scored as the best value proposal per the evaluation criteria set forth in the RFP. The vendor's proposal was rated highly in the following key areas:

- Central transit signal priority solution with technical capabilities that meet or exceed all City requirements.
- Technically adept project manager necessary for deployment of this highly technical solution and a dedicated project team from Advanced Traffic Solutions, the software company that the City currently uses for all its traffic signal controllers.
- Thorough project approach and schedule with detailed timelines.
- Lowest overall total cost of ownership that was approximately 17% less than the grant-funded budget, allowing excess grant funds to be used for City staff support costs and contingency as required.

Staff conducted reference checks with the City of Fremont (CA) and San Mateo County Transit District (CA). Both references provided positive feedback.

Summary of Proposed Agreement: The agreement with LYT will be in accordance with the City's standard terms and conditions. Should any modifications to the City's standard terms and conditions arise, changes will be approved by the City Attorney's Office and City Manager's Office per City policy. The agreement includes the following provisions:

- Detailed scope of work to ensure that the implemented solution complies with the City's requirements;
- Preliminary project implementation plan that meets the City's requirements for project completion;
- Compensation schedule that includes a 20 percent holdback on vendor payment until after final acceptance of all project milestones and deliverables; and
- Fixed pricing for the full five-year term of the agreement.

CONCLUSION

Approval of this recommendation will provide a primarily software-based centralized transit signal priority solution for VTA bus routes 66 (runs from south San José to the Milpitas BART station to north Milpitas) and 68 (runs from Gilroy to San José Diridon Station). Through this project, it is estimated that over 800 single occupancy vehicle trips per weekday and over 450

single occupancy vehicle trips per weekend will be removed. As a result of these vehicle trip removals, it is also estimated that 1.9 tons of vehicle emissions and 1,100 tons of greenhouse gas emissions will be reduced within just the first two years of the project, helping the City achieve its multi-modal goals while also reducing traffic congestion and harmful emissions and improving transit speed and travel time reliability.

EVALUATION AND FOLLOW-UP

This memorandum will not require any follow-up from staff.

CLIMATE SMART SAN JOSE

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This item will be posted on the City's website for the August 9, 2022 City Council meeting.

COORDINATION

This memorandum has been coordinated with the Department of Transportation, the City Attorney's Office, and the City Manager's Budget Office.

COMMISSION RECOMMENDATION

No commission recommendation or input is associated with this action.

FISCAL/POLICY ALIGNMENT

This project aligns with the Transportation and Aviation Services City Service Area outcomes to provide viable transportation choices that promote a strong economy and to provide a transportation system that enhances community livability.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION (Five-Year Term) \$500,000

2. COST ELEMENTS:**One-Time Implementation Services (First Year)**

- Project Kick-Off	\$ 0
- Solution Deployment	29,280
- Verification Plan / Acceptance Testing	4,000
- Verification Test	4,000
- Go Live	0
- Training / Solution Documentation	7,200
- Final Acceptance (20%)	11,120

One-Time Implementation Services Subtotal \$55,600

Licensing, Maintenance, and Support (Five Years)

- Software Licensing	\$344,400
- Support and Maintenance	100,000

Licensing, Maintenance, and Support Subtotal \$444,400

CONTRACT NOT-TO-EXCEED TOTAL (Five-Year Term) \$500,000

Contingency* 62,500

Project Delivery** 40,500

GRAND TOTAL NOT TO EXCEED (GRANT-FUNDED AMOUNT) \$603,000

* Subject to an executed change order or amendment

** City staff costs for project management

3. SOURCE OF FUNDING:

429 – Building and Structure Construction Tax Fund

4. FISCAL IMPACT:

The Department of Transportation received a one-time allocation for this project via the Bay Area Air Quality Management District's Transportation Fund for Clean Air program, sponsored by VTA.

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BUDGET REFERENCE

The table below identifies the funds and appropriations proposed to fund the contract recommended as part of this memorandum.

Fund #	Appn. #	Appn. Name	Total Appn.	Amt. for Contract*	2022-2023 Proposed Capital Budget Page**	Last Budget Action (Date, Ord. No.)
429	423E	TFCA 2020-2021 Transit Signal Priority (TSP)	\$566,000	\$500,000	Page 757	6/21/2022, 30790

*Amt. for Contract does not include \$62,500 in contingency subject to an executed change order or amendment.

**The 2022-2023 Proposed Capital Budget was adopted by the City Council on June 21, 2022.

CEQA

Not a project, Public Project Number PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

/s/

JULIA H. COOPER
Director of Finance

For procurement- and contract-related questions, please contact Jennifer Cheng, Deputy Director of Finance, at jennifer.cheng@sanjoseca.gov. For program-related questions, please contact Ken Jung, Signal Operations Division Manager, Department of Transportation, at Kenneth.Jung@sanjoseca.gov.