



## Programs and Projects Committee Meeting Agenda Monday, September 13, 2021, 10:00 a.m.

Due to the statewide stay at home order and the Alameda County Shelter in Place Order, and pursuant to the Executive Order issued by Governor Gavin Newsom (Executive Order N-08-21), the Commission will not be convening at its Commission Room but will instead move to a remote meeting.

Members of the public wishing to submit a public comment may do so by emailing the Clerk of the Commission at [vee@alamedactc.org](mailto:vee@alamedactc.org) by 5:00 p.m. the day before the scheduled meeting. Submitted comments will be read aloud to the Commission and those listening telephonically or electronically; if the comments are more than three minutes in length the comments will be summarized. Members of the public may also make comments during the meeting by using Zoom's "Raise Hand" feature on their phone, tablet or other device during the relevant agenda item, and waiting to be recognized by the Chair. If calling into the meeting from a telephone, you can use "Star (\*) 9" to raise/ lower your hand. Comments will generally be limited to three minutes in length, or as specified by the Chair.

Committee Chair:	Carol Dutra-Vernaci, City of Union City	Executive Director	Tess Lengyel
Vice Chair:	Rebecca Saltzman, BART	Staff Liaison:	<a href="#">Gary Huisingh</a>
Members:	Jen Cavanaugh, David Haubert, Lily Mei, Nate Miley, Sheng Thao, Richard Valle, Bob Woerner	Clerk of the Commission:	<a href="#">Vanessa Lee</a>
Ex-Officio:	Pauline Russo Cutter, John Bauters		

### Location Information:

Virtual Meeting Information: <https://us06web.zoom.us/j/85905798808?pwd=Sk9NV2VGWk5LeGE4cCs3UCsyeiVnZz09>  
Webinar ID: 859 0579 8808  
Password: 423167

For Public Access  
Dial-in Information: (669) 900-6833  
Webinar ID: 859 0579 8808  
Password: 423167

To request accommodation or assistance to participate in this meeting, please contact Vanessa Lee, the Clerk of the Commission, at least 48 hours prior to the meeting date at: [vee@alamedactc.org](mailto:vee@alamedactc.org)

### 1. Call to Order

### 2. Roll Call

### 3. Public Comment

### 4. Consent Calendar

Page/Action

- |      |  |   |   |
|------|--|---|---|
| 4.1. | <a href="#">Approve July 12, 2021 PPC Meeting Minutes</a>  | 1 | A |
| 4.2. | <a href="#">Approve the Administrative Amendments to Various Agreements to Extend Agreement Expiration Dates</a> | 7 | A |

### 5. Regular Matters

- |      |   |    |   |
|------|---|----|---|
| 5.1. | <a href="#">Approve the 2022 State Transportation Improvement Program - Programming Principles and Schedule</a>   | 13 | A |
| 5.2. | <a href="#">Approve actions associated with allocation of Regional Measure 2 funds for Livermore Amador Valley Transit Authority's Shared Autonomous Vehicle Phase 2 Deployment</a> | 21 | A |
| 5.3. | <a href="#">Award Project Approval and Environmental Document Phase Contract for the State Route 262 (Mission Boulevard) Cross Connector Project</a>                                | 67 | A |

### 6. Committee Member Reports

### 7. Staff Reports

### 8. Adjournment

Next Meeting: Monday, October 11, 2021

#### Notes:

- All items on the agenda are subject to action and/or change by the Commission.
- To comment on an item not on the agenda (3-minute limit), submit a speaker card to the clerk.
- Call 510.208.7450 (Voice) or 1.800.855.7100 (TTY) five days in advance to request a sign-language interpreter.
- If information is needed in another language, contact 510.208.7400. Hard copies available only by request.
- Call 510.208.7400 48 hours in advance to request accommodation or assistance at this meeting.
- Meeting agendas and staff reports are available on the [website calendar](#).
- Alameda CTC is located near 12th St. Oakland City Center BART station and AC Transit bus lines. [Directions and parking information](#) are available online.



## Alameda CTC Schedule of Upcoming Meetings September and October 2021

**Commission Chair**  
Mayor Pauline Russo Cutter  
City of San Leandro

**Commission Vice Chair**  
Councilmember John Bauters  
City of Emeryville

**AC Transit**  
Board President Elsa Ortiz

**Alameda County**  
Supervisor David Haubert, District 1  
Supervisor Richard Valle, District 2  
Supervisor Wilma Chan, District 3  
Supervisor Nate Miley, District 4  
Supervisor Keith Carson, District 5

**BART**  
Vice President Rebecca Saltzman

**City of Alameda**  
Mayor Marilyn Ezy Ashcraft

**City of Albany**  
Councilmember Rochelle Nason

**City of Berkeley**  
Councilmember Lori Droste

**City of Dublin**  
Mayor Melissa Hernandez

**City of Fremont**  
Mayor Lily Mei

**City of Hayward**  
Mayor Barbara Halliday

**City of Livermore**  
Mayor Bob Woerner

**City of Newark**  
Councilmember Luis Freitas

**City of Oakland**  
Councilmember At-Large  
Rebecca Kaplan  
Councilmember Sheng Thao

**City of Piedmont**  
Councilmember Jen Cavanaugh

**City of Pleasanton**  
Mayor Karla Brown

**City of Union City**  
Mayor Carol Dutra-Vernaci

**Executive Director**  
Tess Lengyel

### Commission and Committee Meetings

Time	Description	Date
2:00 p.m.	Alameda CTC Commission Meeting	September 23, 2021 October 28, 2021
9:00 a.m.	Multi-Modal Committee (MMC)	October 11, 2021
10:00 a.m.	Programs and Projects Committee (PPC)	
11:30 a.m.	Planning, Policy and Legislation Committee (PPLC)	
4:00 p.m.	Alameda CTC Audit Committee	October 28, 2021

### Advisory Committee Meetings

1:30 p.m.	Alameda County Technical Advisory Committee (ACTAC)	September 9, 2021 October 7, 2021
9:30 a.m.	Paratransit Technical Advisory Committee (ParaTAC)	September 14, 2021
5:30 p.m.	Bicycle and Pedestrian Advisory Committee (BPAC)	October 21, 2021
1:30 p.m.	Paratransit Advisory and Planning Committee (PAPCO)	October 25, 2021

Due to the statewide stay at home order and the Alameda County Shelter in Place Order, and pursuant to the Executive Order issued by Governor Gavin Newsom (Executive Order N-29-20), the Commission will not be convening at its Commission Room but will instead move to a remote meeting.

Meeting materials, directions and parking information are all available on the [Alameda CTC website](http://www.AlamedaCTC.org). Meetings subject to change.

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# Programs and Projects Committee Meeting Minutes Monday, July 12, 2021, 10:00 a.m.

4.1

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## 1. Call to Order

## 2. Roll Call

A roll call was conducted. All members were present with the exception of Commissioner Valle.

## 3. Public Comment

There were no public comments.

## 4. Consent Calendar

### 4.1. Approve June 14, 2021 PPC Meeting Minutes

*Commissioner Haubert moved to approve the consent calendar. Commissioner Mei seconded the motion. The motion passed with the following roll call vote:*

Yes: Bauters, Cavanaugh, Cutter, Dutra-Vernaci, Haubert, Mei, Miley, Saltzman, Thao, Woerner

No: None

Abstain: None

Absent: Valle

## 5. Regular Matters

### 5.1. Approve the 2022 Comprehensive Investment Plan

Tess Lengyel, Executive Director, introduced Vivek Bhat to present this item. Mr. Bhat recommended the Commission approve the 2022 Comprehensive Investment Plan (CIP), which included incorporating the following:

- \$54.7M in previously approved programming actions occurring after the current 2020 CIP Update was approved (May 28, 2020)
- \$53.2M in new programming and allocation recommendations consisting of Measure B, Measure BB, Vehicle Registration Fee (VRF), Transportation Fund for Clean Air (TFCA), and MTC's Safe and Seamless Quick-Strike Program funds
- \$35.4M in allocations of previously programmed funds
- Technical CIP adjustments including reprogramming, deprogramming, and documenting exchanges.
- Authorize Executive Director or designee to execute Project Funding Agreements related to CIP allocation recommendations.

Mr. Bhat outlined the 2022 Comprehensive Investment Plan (CIP) which serves as a document for programming and allocation of Alameda CTC administered funds. The goal of the CIP is to advance countywide vision and goals, improve project delivery, and strategically program Alameda CTC's administered funds for maximum

returns of the County's investments. Mr. Bhat noted that the final 2022 CIP included \$141.6M in programming for FYs 2021-22 through 2025-26, with \$107.7 in allocations during the first two years of the CIP.

*Commissioner Mei moved to approve this item. Commissioner Cavanaugh seconded the motion. The motion passed with the following roll call vote:*

Yes: Bauters, Cavanaugh, Cutter, Dutra-Vernaci, Haubert, Mei, Miley, Saltzman, Thao, Woerner  
No: None  
Abstain: None  
Absent: Valle

**5.2. Approve actions necessary to facilitate project advancement into the construction phase for the I-680 Southbound Express Lanes from SR-84 to Alcosta Boulevard Project**

Tess Lengyel stated that Alameda CTC was the first agency in Northern California to deliver Express Lanes on the I-680 corridor and subsequently on the I-580 corridor. The proposed project closes a nine-mile express lane gap on I-680 Southbound from SR-84 to Alcosta Boulevard. The project had almost completed design and staff is seeking approval from the Commission to close the remaining funding gap in order to move the project into the construction phase. Ms. Lengyel introduced Vivek Bhat to present this item.

Mr. Bhat recommended the Commission approve the following actions related to the I-680 Southbound Express Lanes from SR-84 to Alcosta Boulevard Project:

- Approve Resolution 21-013 and Regional Measure 3 Initial Project Report (RM3-IPR) (Attachment A) to request Metropolitan Transportation Commission (MTC) allocation of \$80 million RM3 funds for the Construction (CON) phase through a Letter of No Prejudice (LONP);
- Approve final project funding of \$66.4 million;
- Authorize the Executive Director or designee to enter into all necessary agreements including a Cooperative Agreement with the California Department of Transportation (Caltrans).

Mr. Bhat stated that the project is ready to move into the construction phase. The delivery of the project is being coordinated with an upcoming Caltrans pavement rehab project along the same section of I-680. The coordination of these two projects will lead to a significant cost savings of approximately \$18 million, while reducing impact for the traveling public during the time of construction.

Commissioner Saltzman asked if there is an update on the resolving RM3 litigation. Ms. Lengyel shared that although there was no known timeline, MTC was hoping for a resolution by the end of 2021. Commissioner Saltzman also inquired whether the agency had an alternative plan in place in the event that the RM3 funding were not available. Ms. Lengyel stated contingency plans have been drafted and in the event RM3 funds are not made available, staff would bring back an alternate

funding proposal that could include a combination of eligible state, regional and local funding sources to be proposed towards the Project.

Commissioner Dutra-Vernaci inquired if the loan of \$66.4 would impact any of the other projects on the newly approved CIP. Ms. Lengyel confirmed that the loan would not have any impact on the CIP projects and would be paid back directly from the I-680 Express Lanes revenue.

*Commissioner Woerner moved to approve the item. Commissioner Haubert seconded the motion. The motion passed with the following roll call vote:*

Yes: Bauters, Cavanaugh, Cutter, Dutra-Vernaci, Haubert, Mei, Miley, Saltzman, Thao, Woerner

No: None

Abstain: None

Absent: Valle

**5.3. Approve actions necessary to facilitate toll system integration services for the I-680 Sunol Express Lanes Project (Phase 1) and I-680 Southbound Express Lane from SR 84 to Alcosta Boulevard Project**

Ms. Lengyel stated that the project, which focuses on the system integrator for the Express Lanes, will require the buildout of an interim toll operating system and the release of an RFP for system integration services for the entire of I-680 corridor within Alameda County (including the Gap Project from item 5.2), as well the inclusion of operations and maintenance. She introduced Liz Rutman to present this item.

Ms. Rutman provided an overview of the project, including an update on the status of the I-680 Sunol Express Lanes Project for which both directions are currently open only to carpoolers. Kapsch TrafficCom USA Inc was originally awarded the contract to design and develop the new toll system; however, their contract was terminated in June 2021. Ms. Rutman recommended that the Commission approve the following items:

- Authorize the Executive Director to execute a sole source agreement with Electronic Transaction Consultants, LLC (ETC) for a not-to-exceed amount of \$4.5 million to design and deploy an interim toll system for the I-680 Sunol EL Project;
- Approve inclusion of Toll System Integrator (TSI) Services for the I-680 Sunol EL Project in the previously authorized Request for Proposals (RFP) for TSI services for the I-680 Southbound Gap Project;
- Approve inclusion of Electronic Toll System Operations and Maintenance (O&M) Services in the RFP for TSI services for both the I-680 Sunol EL and I-680 Southbound Gap EL.

Commissioner Cutter asked if staff is seeing cars with multiple riders or if the users of the lanes are primarily single occupancy vehicles. Ms. Lengyel stated that carpooling has decreased due to the COVID-19 pandemic. There is general travel time reliability for both the carpool and general lanes.

Commissioner Cutter noted that users of the lane have the ability to identify the number of passengers in the car via the Fastrak Flex Tag and questioned if that data can help indicate if more people are carpooling. Ms. Lengyel confirmed that reports on operations of the Express Lanes are brought to the Commission and. Ms. Rutman stated that the information is also brought to the Multi-Modal Committee.

Commissioner Cutter asked for clarification of whether the Express Lanes will be means based. Ms. Rutman confirmed that vehicles meeting the carpool occupancy requirements will not be charged.

Commissioner Woerner asked if the agency had modified its contracting terms considering the experience with the contract termination for the toll system. Ms. Lengyel confirmed that the contract terms have been modified.

Commissioner Woerner asked how much of the interim solution will go toward the final solution. Liz Rutman responded that while the information is proprietary, some of the hardware can be leveraged for the new system. She did specify that this depends on the preferred hardware of the system integrator, as replacing the equipment can be more cost effective than using an unfamiliar hardware.

Commissioner Woerner asked whether delaying the interim solution, in favor of combining the contract with the final system integrator would be a better option in the long run. Ms. Lengyel emphasized that the goal is to get the Express Lanes up and running as soon as possible and the RFP process is not expected to be completed until next summer. She reiterated that the interim system should be operational and begin generating revenue during that time, providing several years of revenue until the final system integrator implements their solution.

Commissioner Woerner inquired how much the anticipated toll revenue is versus the \$4.5 million for the interim integrator. Liz Rutman affirmed that the projected revenue from tolling will justify the interim cost by comparing monthly revenues versus the interim cost.

*Commissioner Mei moved to approve the item. Commissioner Woerner seconded the motion. The motion passed with the following roll call vote:*

Yes: Bauters, Cavanaugh, Cutter, Dutra-Vernaci, Haubert, Mei, Miley, Saltzman, Thao, Woerner

No: None

Abstain: None

Absent: Valle

**5.4. Approve actions to facilitate the completion of environmental permit requirements for the State Route 84 Expressway Widening Project**

Tess Lengyel introduced the project which relates to the State Route 84 (SR 84) Widening Project. Ms. Lengyel introduced Trinity Nguyen to present this item. Ms. Nguyen provided an update on the project that covered replacement planting and plant establishment work that must be completed before Caltrans will accept the

Project. She reviewed the contract procurement process and recommended that the Commission approve the following actions related to the SR 84 Expressway Widening project:

- Award a contract in the amount of \$350,920 to Marshall Brothers Enterprises, Inc. (MBE) for plant establishment work along State Route 84 in Livermore from Ruby Hill Drive to Jack London Boulevard (R21-0005); and
- Authorize the Executive Director to execute Amendment No. 9 to the Professional Services Agreement No. A05-0004 with AECOM Technical Services, Inc. (AECOM) for an additional amount of \$50,000 for a total not-to-exceed amount of \$16,760,000 and an extension to December 31, 2024 to provide support as required to ensure compliance with project permit requirements.

Commissioner Bauters asked what amount of the plants were retained from the first provider. Trinity Nguyen stated that 10 percent of the plants from the first provider died. Commissioner Bautters requested further information regarding the type of plants experiencing failure, noting that groundcover does not equate to canopy building.

*Commissioner Miley moved to approve this item. Commissioner Dutra-Vernaci seconded the motion. The motion passed with the following roll call vote:*

Yes: Cutter, Dutra-Vernaci, Haubert, Mei, Miley, Thao, Woerner, Saltzman  
No: None  
Abstain: Bauters, Cavanaugh  
Absent: Valle

## **6. Committee Member Reports**

There were no member reports.

## **7. Staff Reports**

Ms. Lengyel noted that Alameda CTC received final actions from the California Transportation Commission (CTC) in June for phase two of the I-80 Gilman Interchange Project and she noted that phase one, which is the bicycle and pedestrian over crossing, is under construction,

Ms. Lengyel congratulated the City of Alameda and the Water Emergency Transportation Authority on the opening of the Seaplane Lagoon Ferry Terminal on July 1, 2021.

## **8. Adjournment**

The next meeting is Monday, September 13, 2021 at 10:00 a.m.

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# Memorandum

4.2

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**DATE:** September 7, 2021

**TO:** Programs and Projects Committee

**FROM:** Gary Huisingh, Deputy Executive Director of Projects  
Angelina Leong, Assistant Transportation Engineer

**SUBJECT:** Approve the Administrative Amendments to Various Agreements to Extend Agreement Expiration Dates

## Recommendation

It is recommended that the Commission approve administrative amendments to various Alameda CTC agreements (A10-013, A14-0051, A15-0030, A17-0060, A17-0080, A17-0115, A17-0125, A17-0126, A18-0026, A18-0049, A18-0054, A19-0036, A19-0060 and A19-0065) in support of both Alameda CTC-implemented Capital Projects and program delivery commitments and local agency-sponsored projects receiving Alameda CTC-administered discretionary funding.

## Summary

Alameda CTC enters into agreements/contracts with consultants and local, regional, state, and federal entities, as required, to provide the services, or to reimburse project expenditures incurred by project sponsors, necessary to meet the Capital Projects and program delivery commitments. Alameda CTC also enters into project funding agreements (PFAs) with local agencies for allocated Alameda CTC-discretionary fund sources, including Measure B, Measure BB, Vehicle Registration Fee and Transportation Fund for Clean Air. All agreements are entered into based upon estimated known project needs for scope, cost and schedule.

The administrative amendment requests shown in Table A have been reviewed and it has been determined that the requests will not compromise project deliverables.

Staff recommends that the Commission approve and authorize the administrative amendment requests as listed in Table A.

## **Background**

Amendments are considered “administrative” if they include only time extensions. For PFAs, the 1<sup>st</sup> request for a one-year time extension may be approved by the Executive Director, but 2<sup>nd</sup> and subsequent time extensions are brought to the Commission for approval.

Agreements are entered into based upon estimated known project needs for scope, cost, and schedule. Throughout the life of a project, situations may arise that warrant the need for a time extension or a realignment of project phase/task budgets.

The most common justifications for a time extension include (1) project delays; and (2) extended phase/project closeout activities.

Requests are evaluated to ensure that project deliverables are not compromised. The administrative amendment requests identified in Table A have been evaluated and are recommended for approval.

**Levine Act Statement:** Michael Baker International, Inc., HNTB Corporation, Mark Thomas & Company, Inc., HDR Engineering, Inc. and its subconsultants did not report any conflicts in accordance with the Levine Act.

**Fiscal Impact:** There are no fiscal impacts associated with the requested actions.

### **Attachment:**

- A. Table A: Administrative Amendment Summary

Table A: Administrative Amendment Summary

Index No.	Firm/Agency	Project/Services	Agreement No.	Contract Amendment History and Requests	Reason Code	Fiscal Impact
1	Michael Baker International	I-880 Improvements at 23 <sup>rd</sup> and 29 <sup>th</sup> Avenues / Findal design, right-of-way and acquisition and design support during construction services	A10-013	A1: Budget increase A2: Budget increase A3: Budget increase A4: Budget increase A5: 12-month time extension from 6/30/2013 to 6/30/2014 A6: Budget increase for design services during construction and 48-month time extension from 6/30/2014 to 6/30/2018 A7: Budget increase A8: Budget increase and 18-month time extension from 6/30/2018 to 12/31/2019 A9: Budget increase and 24-month time extension from 12/31/2019 to 12/31/2021 A10: Modify indemnification and insurance provisions in Contract A11: 6-month time extension from 12/31/2021 to 6/30/2022 ( <i>current request</i> )	2	None
2	HNTB Corporation	Oakland Alameda Access / Project approval and environmental document	A14-0051	A1: Budget increase and 36-month time extension from 12/31/2018 to 12/31/2021 A2: Modify indemnification and insurance provisions in Contract A3: Budget increase A4: 6-month time extension from 12/31/2021 to 6/30/2022 ( <i>current request</i> )	2	None

3	HNTB Corporation	East Bay Greenway (Lake Merritt to South Hayward BART) / Project approval and environmental document	A15-0030	A1: Contract General Terms A2: 12-month time extension from 12/31/2018 to 12/31/2019 A3: 12-month time extension from 12/31/2019 to 12/31/2020 A4: Modify indemnification and insurance provisions in Contract A5: 9-month time extension from 12/31/2020 to 9/30/2021 A6: 14-month time extension from 9/30/2021 to 11/30/2022 ( <i>current request</i> )	2	None
4	City of Fremont	South Fremont Arterial Management	A17-0060	A1: 12-month TFCA time extension from 12/12/2020 to 12/12/2021 and agreement time extension from 12/31/2021 to 12/31/2022 A2: 12-month TFCA time extension from 12/12/2021 to 12/12/2022 ( <i>current request</i> )	1	None
5	AC Transit	Berkeley Southside Pilot Transit Lanes	A17-0080	A1: 24-month time extension from 12/31/2019 to 12/31/2021 A2: 24-month time extension from 12/31/2021 to 12/31/2023 ( <i>current request</i> )	1	None
6	City of Oakland	East Oakland Community Streets Plan	A17-0115	A1: 12-month time extension from 12/31/2019 to 12/31/2020 A2: 12-month time extension from 12/31/2020 to 12/31/2021 ( <i>current request</i> )	2	None

7	City of Union City	Union City Boulevard Class 2 Bike Lane	A17-0125	A1: Administrative update to schedule A2: 12-month TFCA time extension (2 <sup>nd</sup> ) from 12/08/2020 to 12/08/2021 and 12-month agreement time extension from 12/31/2020 to 12/31/2021 A3: 12-month TFCA Time Extension (3 <sup>rd</sup> ) from 12/08/2021 to 12/08/2022 and 24-month agreement time extension from 12/31/2021 to 12/31/2023 ( <i>current request</i> )	1	None
8	City of Union City	Bicycle and Pedestrian Master Plan Update	A17-0126	A1: 12-month time extension from 12/31/2019 to 12/31/2020 A2: 12-month time extension from 12/31/2020 to 12/31/2021 A3: 12-month time extension from 12/31/2021 to 12/31/2022 ( <i>current request</i> )	1	None
9	Mark Thomas & Company, Inc.	I-880 Interchange Improvements (Whipple Road/Industrial Parkway Southwest and Industrial Parkway) / Project initiation document and Project approval and environmental document	A18-0026	A1: Contract General Terms A2: Modify indemnification and insurance provisions in Contract A3: 12-month time extension from 6/30/2021 to 6/30/2022 ( <i>current request</i> ) A4: 6-month time extension from 6/30/2022 to 12/31/2022 ( <i>current request</i> )	1	None
10	HDR Engineering, Inc.	7 <sup>th</sup> Street Grade Separation East / Final design services	A18-0049	A1: Modify indemnification and insurance provisions in Contract A2: 12-month time extension from 9/30/2020 to 9/30/2021 A3: 24-month time extension from 9/30/2021 to 9/30/2023 ( <i>current request</i> )	1	None

11	Alameda County Public Works	Hesperian Boulevard Corridor Improvements	A18-0054	A1: 3-month time extension from 3/31/2022 to 6/30/2022 A2: 12-month time extension from 6/30/2022 to 6/30/2023 ( <i>current request</i> )	1	None
12	City of Emeryville	Emeryville Senior Center Group Trips Bus Purchase	A19-0036	A1: 12-month time extension from 12/31/2020 to 12/31/2021 A2: 12-month time extension from 12/31/2021 to 12/31/2022 ( <i>current request</i> )	1	None
13	Livermore Amador Valley Transit Authority	Wheels Forward / 2020 Plan	A19-0060	A1: 24-month time extension from 12/31/2021 to 12/31/23 ( <i>current request</i> )	1	None
14	City of Pleasanton	Pleasanton Trip Reduction Program, FYs 19-20 & 20-21	A19-0065	A1: 12-month TFCA and agreement time extensions from 12/30/2021 to 12/30/2022 ( <i>current request</i> )	1	None

- (1) Project delays.
- (2) Extended phase/project closeout activities.
- (3) Other



# Memorandum

5.1

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**DATE:** September 7, 2021

**TO:** Programs and Projects Committee

**FROM:** Vivek Bhat, Director of Programming and Project Controls  
Jacki Taylor, Senior Program Analyst

**SUBJECT:** Approve the 2022 State Transportation Improvement Program - Programming Principles and Schedule

## Recommendation

It is recommended that the Commission approve the programming principles and schedule for the development of the Alameda County 2022 State Transportation Improvement Program (STIP) project list.

## Summary

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources administered by the California Transportation Commission (CTC), including Senate Bill 1 (SB 1). The 2022 STIP will cover Fiscal Years (FYs) 2022-23 through 2026-27. Based on the State's 2022 STIP Fund Estimate, approximately \$22.035 million of new programming capacity is anticipated for Alameda County of which \$15.87 million is anticipated to be available for programming to projects.

As part of the overall STIP programming process, Alameda CTC is to adopt and forward a program of STIP projects to the Metropolitan Transportation Commission (MTC) for inclusion in MTC's 2022 Regional STIP program (2022 RTIP). As the Regional Transportation Planning Agency (RTPA) for the nine-county Bay Area, MTC is responsible for developing the regional priorities for the RTIP. MTC approves the region's RTIP and submits it to the CTC for inclusion in the STIP. Staff is recommending Commission approval of the proposed programming principles (Attachment A) and schedule (Attachment B) for the development of the Alameda County 2022 STIP project list.

## Background

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System that is administered by the CTC and funded with revenues from the State Highway Account and other State and federal funding sources, including SB 1.

The STIP is composed of two sub-elements with 75% of the STIP funds reserved for the Regional Transportation Improvement Program (RTIP) and 25% for the Interregional Transportation Improvement Program (ITIP).

Senate Bill 45 (SB 45) was signed into law in 1996 and had significant impacts on the regional transportation planning and programming process. The statute delegated major funding decisions to the local level and allows the Congestion Management Agencies/County Transportation Agencies (CMAs/CTAs) to have a more active role in selecting and programming transportation projects. SB 45 changed the transportation funding structure and modified the transportation programming cycle, program components, and expenditure priorities.

Each STIP cycle, Alameda CTC adopts and forwards a program of STIP projects to MTC. As the Regional Transportation Planning Agency (RTPA) for the nine-county Bay Area, MTC is responsible for developing the regional priorities for the RTIP. MTC approves the region's RTIP and submits it to the CTC for inclusion in the STIP. Caltrans is responsible for developing the ITIP.

## **Development of the 2022 STIP**

### ***2022 STIP Fund Estimate***

The biennial State Transportation Improvement Program (STIP) programming process begins with the development of the STIP Fund Estimate (FE), approved by the CTC. The STIP Fund Estimate serves as the basis for determining the county shares for the STIP and the amounts available for programming each fiscal year during the five-year STIP period. Typically, the county shares represent the amount of new STIP funding available for programming in the last two years of the new STIP period.

Historically, the amount of funding available to Alameda County in a given STIP cycle has varied anywhere from \$0 to highs in the \$200 million range. Although the passage of SB 1 has added some stability to the STIP revenue, the Final 2022 STIP Fund Estimate approved at the August 2021 CTC meeting indicates \$22.035 million new programming capacity is available for Alameda County in FYs 2025-26 or 2006-27. As indicated below, when adjustments for prior commitments and program administration are considered, the balance available for programming to projects is estimated to be \$15.87 million:

#### 2022 STIP - Alameda County Fund Estimate:

- \$ 22.035 M 2022 STIP Fund Estimate for Alameda County
- \$ 5.063 M Payback of STIP funding advanced to ACTC by MTC through 2020 STIP for I-680 Southbound Express Lane from SR-84 to Alcosta Blvd project
- \$ 0.355 M STIP Administration funds for MTC
- \$ 0.747 M STIP Administration funds for Alameda CTC
- \$ 15.870 M 2022 STIP Funding Available to Program

The Final 2022 STIP Fund Estimate and Guidelines were adopted by the CTC in August. MTC's Regional 2022 STIP Policies and Fund Estimate are anticipated to be released and

adopted in September 2021 and could potentially include adjustments to the Regional STIP Fund Estimate.

### ***Draft 2022 STIP Principles***

In preparation for the development the Alameda County 2022 STIP project list, the Commission is requested to approve a set of principles by which the Alameda County share of the 2022 STIP will be programmed (Attachment A). The proposed principles for the development of the 2022 STIP are consistent with the State's 2022 STIP Guidelines and the goals and objectives of the Alameda CTC's near-term strategic planning and programming documents, the Countywide Transportation Plan and the Comprehensive Investment Plan. Other key project prioritization principles include:

- Ability of a project to demonstrate readiness to meet applicable STIP programming, allocation and delivery requirements, including obtaining federal National Environmental Policy Act (NEPA)
- Potential to leverage external funding such as Senate Bill 1 (SB1) funding
- A complete funding plan for the phase for which STIP funding is requested

### **Next Steps**

Due to the condensed programming schedule for the 2022 STIP, the Alameda County STIP project list needs to be adopted by October 2021. MTC is anticipated to approve the regional list of projects by December 2021. Based on this schedule and proposed STIP principles, Alameda CTC will request project nominations/information for STIP eligible projects in early September. Following the staff assessment of the eligibility and readiness of project nominations, a draft project list will be presented to the Commission in October 2021.

For projects selected for the 2022 STIP, supporting documentation required by MTC is expected to include: MTC Complete Streets Checklist, STIP Project Programming Request (PPR) form, project performance measures analysis, Final Project Study Report (PSR) or PSR Equivalent, Resolution of Local Support, and STIP Certification of Assurances.

The final 2022 STIP is scheduled to be adopted by the CTC in March 2022.

**Fiscal Impact:** There is no fiscal impact associated with the requested item.

### **Attachments:**

- A. Draft Principles for the Development of the Alameda County 2022 STIP Project List
- B. 2022 STIP Development Schedule

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**Principles for the Development of the Alameda County 2022 STIP Project List**

- It is anticipated that any new funding programmed in the 2022 STIP will be made available in FYs 2025-26 and/or 2026-27.
- Previously-approved commitments for STIP programming will be considered during the development of the 2022 STIP project list.
- Sponsors of currently programmed STIP projects will be required to provide updated project scope, status, schedule, cost and funding information.
- Any project considered for funding must be consistent with the Countywide Transportation Plan and satisfy all STIP programming requirements.
- Projects recommended for STIP funding must demonstrate readiness to meet applicable STIP programming, allocation and delivery requirements and deadlines, including federal requirements.
- Consideration of the following are proposed for the required project prioritization for the development of the 2022 STIP project list:
  - The principles and objectives set forth in the Alameda CTC Comprehensive Investment Plan;
  - Projects that can leverage funds from other SB1 and Regional programs;
  - Previous commitments for STIP programming approved by the Alameda CTC;
  - The degree to which a proposed project, or other activity intended to be funded by transportation funding programmed by the Alameda CTC, achieves or advances the goals and objectives included in the Countywide Transportation Plan; and
  - The degree to which a proposed project has viable project implementation strategies that are based on current project-specific project delivery information provided by applicants, including:
    - Readiness for the current/requested project delivery phase;
    - The status of environmental clearance, including federal National Environmental Policy Act (NEPA).
    - The project cost/funding plan by phase, including demonstration of a complete funding plan for the phase for which STIP funding is requested;
    - The potential for phasing of initial segment(s) which are fully-funded and provide independent benefit; and
    - Potential impediments, i.e. risks, to successful project implementation in accordance with the proposed project delivery schedule.

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## Draft 2022 STIP Development Schedule

Alameda CTC Activity	Date	MTC/ CTC Activity
	May 2021	<ul style="list-style-type: none"> <li>• CTC approves STIP Fund Estimate Assumptions</li> </ul>
	June 2021	<ul style="list-style-type: none"> <li>• CTC releases draft STIP Fund Estimate and Guidelines</li> <li>• MTC releases Draft Regional STIP (RTIP) Schedule</li> </ul>
	July 2021	<ul style="list-style-type: none"> <li>• CTC holds STIP Fund Estimate and Guidelines Workshop</li> </ul>
	August 2021	<ul style="list-style-type: none"> <li>• CTC adopts final STIP Fund Estimate and Guidelines</li> </ul>
<ul style="list-style-type: none"> <li>• Approve 2022 STIP Principles</li> <li>• Request project nominations / information and develop Draft 2022 STIP program recommendation</li> </ul>	September 2021	<ul style="list-style-type: none"> <li>• MTC releases Draft Regional STIP (RTIP) Policies and Procedures</li> <li>• MTC approves Final RTIP Policies and Procedures</li> </ul>
<ul style="list-style-type: none"> <li>• Submit Draft 2022 STIP project list &amp; Complete Streets Checklists by October 6<sup>th</sup></li> <li>• Draft 2022 STIP recommendation to Committees and Commission</li> </ul>	October 2021	
<ul style="list-style-type: none"> <li>• Submit Final 2022 STIP project list and supporting documentation to MTC by November 1<sup>st</sup></li> </ul>	November 2021	<ul style="list-style-type: none"> <li>• MTC releases Draft 2022 RTIP</li> </ul>
	December 2021	<ul style="list-style-type: none"> <li>• MTC approves and submits 2022 RTIP to CTC</li> </ul>
	March 2022	<ul style="list-style-type: none"> <li>• CTC adopts 2022 STIP</li> </ul>

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**DATE:** September 7, 2021

**TO:** Programs and Projects Committee

**FROM:** Vivek Bhat, Director of Programming and Project Controls  
Jacki Taylor, Senior Program Analyst

**SUBJECT:** Approve actions associated with allocation of Regional Measure 2 funds for Livermore Amador Valley Transit Authority's Shared Autonomous Vehicle Phase 2 Deployment

## Recommendation

It is recommended that the Commission approve the following actions associated with the Livermore Amador Valley Transit Authority's (LAVTA) Shared Autonomous Vehicle (SAV) Phase 2 Deployment project (Project):

1. Approve Resolution 21-014 (Attachment A) that approves the Regional Measure 2 (RM2) Initial Project Report (IPR), designates LAVTA as the Implementing Agency for the Project and authorizes LAVTA to execute and submit allocation requests for the design and construction phases to the Metropolitan Transportation Commission (MTC) for RM2 funds in the amount of \$2.695 million, under RM2 Capital Project #32 (I-580 Tri Valley Rapid Transit Corridor Improvements; Sponsor Alameda CTC).
2. Approve LAVTA's RM2 allocation request of \$150,000 (Attachment B) to MTC for the Plans, Specifications and Estimates (PS&E) phase of the Project.

## Summary

Alameda CTC is the sponsor of the I-580 Tri Valley Rapid Transit Corridor Improvements (RM2 Capital Project #32) which has a balance of \$2.695 million available for allocation to eligible transit-related projects in the corridor. In coordination with MTC and Alameda CTC, LAVTA is requesting this balance towards its SAV Phase 2 Deployment, with an initial funding allocation of \$150,000 for Plans, Specifications and Estimates (PS&E).

As the project sponsor of RM2 Capital Project #32, Alameda CTC is required to submit allocation request paperwork to MTC. In order to reduce administrative burden for both agencies and to create efficiencies, MTC is allowing LAVTA to access the RM2 funds directly, as long as Alameda CTC is supportive of LAVTA's allocation request and provides a Commission Resolution (Attachment A) that approves the RM2 IPR and designates

LAVTA as the Implementing Agency for the design and construction phases of the Project.

## **Background**

In 2004, Senate Bill 916 established the Regional Traffic Relief Plan, including a list of projects eligible to receive funding authorized by Regional Measure 2, which increased tolls on the seven state-owned toll bridges in the Bay Area by \$1 to fund various traffic relief programs and projects in eligible bridge corridors. SB 916 identified the Alameda CTC as the project sponsor of \$65 million in anticipated revenues to be allocated for RM2 Project #32, I-580 (Tri-Valley) Rapid Transit Corridor Improvements in Alameda County. To date \$62.3 million has been allocated in the corridor on construction of the I-580 High Occupancy Toll (HOT) lanes and other HOV improvements, improvements to the I-580/I-680 interchange, the construction phase of the Dublin/Pleasanton BART Parking Garage, and LAVTA Rapid Bus Stop Improvements.

LAVTA is currently requesting the remaining available balance of \$2.695 million for its SAV Phase 2 Deployment project, which advances project deployment with capital investments necessary to support Phase 2 operations along with an initial allocation request of \$150,000 for the Project's design phase.

The current LAVTA SAV Demonstration and Deployment Project - Phase 1 route operates between the East Dublin/Pleasanton BART station and the intersection near Persimmon Place, a retail shopping center approximately one-half mile from the BART station. The proposed extension of this route in Phase 2 will include additional key stops and serve even more passengers at the Zeiss Innovation Center and Ross Headquarters business park approximately one mile from the BART station. Project phase maps and vehicles are included in the RM2 IPR material attached to LAVTA's staff report (Attachment B).

Design-engineering work will provide for 100% PS&E for the construction of two key facilities necessary to support this expansion:

- Local infrastructure upgrades including vehicle-to-everything (V2X) communication with traffic lights and street side signage
- Construction of modern, attractive passenger facilities at or near the Ross Headquarters business park to serve as the route endpoint from the Dublin/Pleasanton BART station.

To support the expanded route, Phase 2 will also include an upgraded and expanded SAV fleet of vehicles capable of traveling up to 25 mph, with greater capacity to accommodate the increase in ridership. LAVTA anticipates these vehicles will be manufactured in the United States. A subsequent allocation request for the construction phase will include:

- Acquisition of three SAVs
- Construction of the passenger facilities

- Construction of local infrastructure upgrades, such as V2X communication with traffic lights and street side signage.

MTC staff has evaluated LAVTA's current proposal and confirmed its eligibility for RM2 Capital Project #32 funds. Per MTC's RM2 Policies and Procedures (MTC Resolution No. 3636) project sponsors must submit a governing-board certification of compliance with RM2 provisions in order to receive allocations. Because the RM2 legislation identifies Alameda CTC as the project sponsor of RM2 Capital Project #32, Alameda CTC must also submit a resolution of local support for the project that designates LAVTA as the Implementing Agency for the design and construction phases of the Project.

RM2 Policies and Procedures require each allocation to fund a minimum useable segment and/or deliverable. LAVTA's Board will be considering this initial RM2 allocation request of \$150,000 for the Project's PS&E phase at its September 13, 2021 meeting (Attachment B). Pending acceptance of 100% PS&E for the Project, MTC will consider LAVTA's \$2.545 million construction phase allocation request at a later date.

Staff has reviewed LAVTA's request and is recommending the Commission approve the following actions associated with the Project:

1. Approve Resolution 21-014 (Attachment A), which approves the RM2 IPR, designates LAVTA as the Implementing Agency for the Project and authorizes LAVTA to execute and submit allocation requests for the design and construction phases with MTC for RM 2 funds in the amount of \$2.695 million, under RM2 Capital Project #32
2. Approve LAVTA's RM2 allocation request of \$150,000 (Attachment B) to MTC for the PS&E phase of the Project.

### **Next Steps**

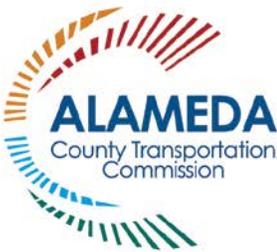
Upon approval by Alameda CTC and LAVTA, MTC will consider this allocation request at its next Commission meeting.

**Fiscal Impact:** There is no fiscal impact associated with the requested item.

### **Attachments:**

- A. Alameda CTC Resolution 21-014
- B. LAVTA Projects and Services Committee staff report

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**ALAMEDA COUNTY TRANSPORTATION COMMISSION  
RESOLUTION 21-014**

**Commission Chair**  
Mayor Pauline Russo Cutter  
City of San Leandro

**Commission Vice Chair**  
Councilmember John Bauters  
City of Emeryville

**AC Transit**  
Board President Elsa Ortiz

**Alameda County**  
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Supervisor Richard Valle, District 2  
Supervisor Wilma Chan, District 3  
Supervisor Nate Miley, District 4  
Supervisor Keith Carson, District 5

**BART**  
Vice President Rebecca Saltzman

**City of Alameda**  
Mayor Marilyn Ezy Ashcraft

**City of Albany**  
Councilmember Rochelle Nason

**City of Berkeley**  
Councilmember Lori Droste

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Melissa Hernandez, Mayor

**City of Fremont**  
Mayor Lily Mei

**City of Hayward**  
Mayor Barbara Halliday

**City of Livermore**  
Mayor Bob Woerner

**City of Newark**  
Councilmember Luis Freitas

**City of Oakland**  
Councilmember At-Large  
Rebecca Kaplan  
Councilmember Sheng Thao

**City of Piedmont**  
Councilmember Jen Cavanaugh

**City of Pleasanton**  
Mayor Karla Brown

**City of Union City**  
Mayor Carol Dutra-Vernaci

**Executive Director**  
Tess Lengyel

**Approval of the Regional Measure 2 Initial Project Report for the  
Livermore Amador Valley Transit Authority (LAVTA) Shared Autonomous  
Vehicle Phase 2 Deployment and for LAVTA to serve as the RM2  
Implementing Agency**

**RM2 Sponsor: Alameda County Transportation Commission**

**RM2 Implementing Agency: Livermore Amador Valley Transit Authority  
(LAVTA)**

**RM2 Project Title: LAVTA Shared Autonomous Vehicle Phase 2  
Deployment**

**WHEREAS**, SB 916 (Chapter 715, Statutes 2004), commonly referred as Regional Measure 2, identified projects eligible to receive funding under the Regional Traffic Relief Plan; and

**WHEREAS**, the Metropolitan Transportation Commission (MTC) is responsible for funding projects eligible for Regional Measure 2 funds, pursuant to Streets and Highways Code Section 30914(c) and (d); and

**WHEREAS**, MTC has established a process whereby eligible transportation project sponsors may submit allocation requests for Regional Measure 2 funding; and

**WHEREAS**, allocations to MTC must be submitted consistent with procedures and conditions as outlined in Regional Measure 2 Policy and Procedures; and

**WHEREAS**, the Alameda County Transportation Commission (Alameda CTC) and Livermore Amador Valley Transit Authority (LAVTA) are each an eligible sponsor of transportation project(s) in Regional Measure 2, Regional Traffic Relief Plan funds; and

**WHEREAS**, the LAVTA Shared Autonomous Vehicle Phase 2 Deployment Project is eligible for consideration in the Regional Traffic Relief Plan of Regional Measure 2, as identified in California Streets and Highways Code Section 30914(c) or (d); and

**WHEREAS**, LAVTA has prepared the Regional Measure 2 allocation request, attached hereto in the Initial Project Report and incorporated herein as though set forth at length, which lists the project, purpose, schedule, budget, expenditure and cash flow plan for which LAVTA is requesting that MTC allocate Regional Measure 2 funds; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA and its agents shall comply with the provisions of the Metropolitan Transportation Commission's Regional Measure 2 Policy Guidance (MTC Resolution No. 3636); and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA certifies that the project is consistent with the Regional Transportation Plan (RTP); and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that the year of funding for any design, right-of-way and/or construction phases has taken into consideration the time necessary to obtain environmental clearance and permitting approval for the project; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that the Regional Measure 2 phase or segment is fully funded, and results in an operable and useable segment; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA approves the cash flow plan, attached to this resolution; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA has reviewed the project needs and has adequate staffing resources to deliver and complete the project within the schedule set forth in the updated Initial Project Report, attached to this resolution; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA is an eligible sponsor of projects in the Regional Measure 2 Regional Traffic Relief Plan, Capital Program, in accordance with California Streets and Highways Code 30914(c); and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA is authorized to submit an application for Regional Measure 2 funds for (project name) in accordance with California Streets and Highways Code 30914(c); and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA certifies that the projects and purposes for which RM2 funds are being requested is in compliance with the requirements of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), and with the State Environmental Impact Report Guidelines (14 California Code of Regulations Section 15000 et seq.) and if relevant the National Environmental Policy Act (NEPA), 42 USC Section 4-1 et seq. and the applicable regulations thereunder; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that there is no legal impediment to LAVTA making allocation requests for Regional Measure 2 funds; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that there is no pending or threatened litigation which might in any way adversely affect the proposed project, or the ability of LAVTA to deliver such project; and be it further

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA agrees to comply with the requirements of MTC's Transit Coordination Implementation Plan as set forth in MTC Resolution 3866; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA shall, if any revenues or profits from any non-governmental use of property (or project) that those revenues or profits shall be used exclusively for the public transportation services for which the project was initially approved, either for capital improvements or maintenance and operational costs, otherwise the Metropolitan Transportation Commission is entitled to a proportionate share equal to MTC's percentage participation in the projects(s); and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that assets purchased with RM2 funds including facilities and equipment shall be used for the public transportation uses intended, and should said facilities and equipment cease to be operated or maintained for their intended public transportation purposes for its useful life, that the Metropolitan Transportation Commission (MTC) shall be entitled to a present day value refund or credit (at MTC's option) based on MTC's share of the Fair Market Value of the said facilities and equipment at the time the public transportation uses ceased, which shall be paid back to MTC in the same proportion that Regional Measure 2 funds were originally used; and

**WHEREAS**, LAVTA has passed LAVTA Resolution No. 26-2021, which states that LAVTA shall post on both ends of the construction site(s) at least two signs visible to the public stating that the Project is funded with Regional Measure 2 Toll Revenues; now, therefore, be it

**RESOLVED**, that Alameda CTC approves the Initial Project Report, attached to this resolution as Exhibit A; and be it further

**RESOLVED**, that Alameda CTC designates LAVTA as the implementing agency for the design and construction phases of the LAVTA Shared Autonomous Vehicle Phase 2 Deployment project, under RM2 Project 32, I-580 (Tri Valley) Rapid Transit Corridor Improvements; and be it further

**RESOLVED**, that Alameda CTC indemnifies and holds harmless MTC, its Commissioners, representatives, agents, and employees from and against all claims, injury, suits, demands, liability, losses, damages, and expenses, whether direct or indirect (including any and all costs and expenses in connection therewith), incurred by reason of any act or failure to act of Alameda CTC, its officers, employees or agents, or subcontractors or any of them in connection with its performance of services under this allocation of RM2 funds; and be it further

**RESOLVED**, that Alameda CTC authorizes LAVTA to execute and submit allocation requests for the design and construction phases with MTC for Regional Measure 2 funds in the amount of \$2.695 million, for the project, purposes and amounts included in the project application attached to this resolution as Exhibit A; and be it further

**RESOLVED**, that LAVTA is hereby authorized to make non-substantive changes or minor amendments to the IPR as LAVTA deems appropriate; and be it further

**RESOLVED**, that a copy of this resolution shall be transmitted to MTC in conjunction with the filing of the LAVTA application referenced herein.

**DULY PASSED AND ADOPTED** by the Alameda CTC Commission at the regular Commission meeting held on Thursday, September 23, 2021 in Oakland, California, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

SIGNED:

Attest:

---

Pauline Russo Cutter  
Chair, Alameda CTC

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Vanessa Lee,  
Clerk of the Commission

Alameda CTC Resolution 21-014, Exhibit A

**RESOLUTION NO. 26-2021**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY  
AS IMPLEMENTING AGENCY FOR REGIONAL MEASURE 2 FUNDING FOR THE  
SHARED AUTONOMOUS VEHICLE PHASE 2 DEPLOYMENT PROJECT**

**WHEREAS**, SB 916 (Chapter 715, Statutes 2004), commonly referred as Regional Measure 2, identified projects eligible to receive funding under the Regional Traffic Relief Plan; and

**WHEREAS**, the Metropolitan Transportation Commission (MTC) is responsible for funding projects eligible for Regional Measure 2 funds, pursuant to Streets and Highways Code Section 30914(c) and (d); and

**WHEREAS**, MTC has established a process whereby eligible transportation project sponsors may submit allocation requests for Regional Measure 2 funding; and

**WHEREAS**, allocations to MTC must be submitted consistent with procedures and conditions as outlined in Regional Measure 2 Policy and Procedures; and

**WHEREAS**, Streets and Highways Code Section 30914(c) and (d) identifies the Alameda County Transportation Commission as Project Sponsor for RM2 Project 32, I-580 (Tri-Valley) Rapid Transit Corridor Improvements in Alameda County; and

**WHEREAS**, the Alameda County Transportation Commission plans to designate the Livermore Amador Valley Transit Authority (LAVTA) as implementing agency for the design and construction of the Shared Autonomous Vehicle Phase 2 Deployment Project, an eligible project under RM2 Project 32, I-580 (Tri-Valley) Rapid Transit Corridor Improvements; and

**WHEREAS**, LAVTA is an eligible implementing agency for transportation project(s) in Regional Measure 2, Regional Traffic Relief Plan funds; and

**WHEREAS**, the Shared Autonomous Vehicle Phase 2 Deployment Project is eligible for consideration in the Regional Traffic Relief Plan of Regional Measure 2, as identified in California Streets and Highways Code Section 30914(c) or (d); and

**WHEREAS**, the Regional Measure 2 allocation request, attached hereto in the Initial Project Report and incorporated herein as though set forth at length, lists the project, purpose, schedule, budget, expenditure and cash flow plan for which LAVTA is requesting that MTC allocate Regional Measure 2 funds; now, therefore, be it

**RESOLVED**, that LAVTA, and its agents shall comply with the provisions of the Metropolitan Transportation Commission's Regional Measure 2 Policy Guidance (MTC Resolution No. 3636); and be it further

**RESOLVED**, that LAVTA certifies that the project is consistent with the Regional Transportation Plan (RTP); and be it further

**RESOLVED**, that the year of funding for any design, right-of-way and/or construction phases has taken into consideration the time necessary to obtain environmental clearance and permitting approval for the project; and be it further

**RESOLVED**, that the Regional Measure 2 phase or segment is fully funded, and results in an operable and useable segment; and be it further

**RESOLVED**, that LAVTA approves the updated Initial Project Report, attached to this resolution; and be it further

**RESOLVED**, that LAVTA approves the cash flow plan, attached to this resolution; and be it further

**RESOLVED**, that LAVTA has reviewed the project needs and has adequate staffing resources to deliver and complete the project within the schedule set forth in the updated Initial Project Report, attached to this resolution; and, be it further

**RESOLVED**, that LAVTA is an eligible sponsor of projects in the Regional Measure 2 Regional Traffic Relief Plan, Capital Program, in accordance with California Streets and Highways Code 30914(c); and be it further

**RESOLVED**, that LAVTA is authorized to submit an application for Regional Measure 2 funds for the Shared Autonomous Vehicle Phase 2 Deployment Project in accordance with California Streets and Highways Code 30914(c); and be it further

**RESOLVED**, that LAVTA certifies that the projects and purposes for which RM2 funds are being requested is in compliance with the requirements of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), and with the State Environmental Impact Report Guidelines (14 California Code of Regulations Section 15000 et seq.) and if relevant the National Environmental Policy Act (NEPA), 42 USC Section 4-1 et. seq. and the applicable regulations thereunder; and be it further

**RESOLVED**, that there is no legal impediment to LAVTA making allocation requests for Regional Measure 2 funds; and be it further

**RESOLVED**, that there is no pending or threatened litigation which might in any way adversely affect the proposed project, or the ability of LAVTA to deliver such project; and be it further

**RESOLVED**, that LAVTA agrees to comply with the requirements of MTC's Transit Coordination Implementation Plan as set forth in MTC Resolution 3866; and be it further

**RESOLVED**, that LAVTA indemnifies and holds harmless MTC, its Commissioners, representatives, agents, and employees from and against all claims, injury, suits, demands, liability, losses, damages, and expenses, whether direct or indirect (including any and all costs and expenses in connection therewith), incurred by reason of any act or failure to act of LAVTA, its officers, employees or agents, or subcontractors or any of them in connection with its performance of services under this allocation of RM2 funds. In addition to any other remedy authorized by law, so much of the funding due under this allocation of RM2 funds as shall reasonably be considered necessary by MTC may be retained until disposition has been made of any claim for damages, and be it further

**RESOLVED**, that LAVTA shall, if any revenues or profits from any non-governmental use of property (or project) that those revenues or profits shall be used exclusively for the public transportation services for which the project was initially approved, either for capital improvements or maintenance and operational costs, otherwise the Metropolitan Transportation Commission is entitled to a proportionate share equal to MTC's percentage participation in the projects(s); and be it further

**RESOLVED**, that assets purchased with RM2 funds including facilities and equipment shall be used for the public transportation uses intended, and should said facilities and equipment cease to be operated or maintained for their intended public transportation purposes for its useful life, that the Metropolitan Transportation Commission (MTC) shall be entitled to a present day value refund or credit (at MTC's option) based on MTC's share of the Fair Market Value of the said facilities and equipment at the time the public transportation uses ceased, which shall be paid back to MTC in the same proportion that Regional Measure 2 funds were originally used; and be it further

**RESOLVED**, that LAVTA shall post on both ends of the construction site(s) at least two signs visible to the public stating that the Project is funded with Regional Measure 2 Toll Revenues; and be it further

**RESOLVED**, that LAVTA authorizes its Executive Director or his/her designee to execute and submit an allocation request for the design phase with MTC for Regional Measure 2 funds in the amount of one hundred fifty thousand dollars (\$150,000), for the project, purposes and amounts included in the project application attached to this resolution; and be it further

**RESOLVED**, that the Executive Director or his/her designee is hereby delegated the authority to make non-substantive changes or minor amendments to the IPR as he/she deems appropriate; and be it further

**RESOLVED**, that a copy of this resolution shall be transmitted to MTC in conjunction with the filing of the LAVTA application referenced herein; and be it further

**RESOLVED**, that allocation of Regional Measure 2 funding for the Shared Autonomous Vehicle Phase 2 Deployment Project is contingent upon action by the Alameda County Transportation Commission designating LAVTA as implementing agency for the Project and the

Metropolitan Transportation Commission's approval of this designation with the allocation request.

**PASSED AND ADOPTED BY** the governing board of the Livermore Amador Valley Transit Authority on this 13th day of September 2021.

---

Karla Brown, Chair

Attest:

---

Michael Tree, Executive Director

**Regional Measure 2 – INITIAL PROJECT REPORT**

# Regional Measure 2 Initial Project Report (IPR)

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**Project Title:**

LAVTA Shared Autonomous Vehicle Phase 2 Deployment

**RM2 Project No.****Allocation History:**

	<b>MTC Approval Date</b>	<b>Amount</b>	<b>Phase</b>
<b>#1:</b>			
<b>#2</b>			
<b>#3</b>			

**Total:     \$**

**Current Allocation Request:**

<b>IPR Date</b>	<b>Amount Being Requested</b>	<b>Phase Requested</b>
<b>June 18, 2021</b>	<b>\$150,000</b>	<b>PS&amp;E: Design-engineering for Passenger Facilities and V2I Intersection Upgrades</b>

## **Regional Measure 2 – INITIAL PROJECT REPORT**

### **I. OVERALL PROJECT INFORMATION**

#### **A. Project Sponsor / Co-sponsor(s) / Implementing Agency**

Alameda County Transportation Commission (TBD) / Livermore Amador Valley Transit Authority (LAVTA)

#### **B. Project Purpose**

The primary purpose of this project is to advance deployment of LAVTA's Shared Autonomous Vehicle (SAV) Project with capital investments necessary to support Phase 2 operations. Phase 2 will build on the success of Phase 1 testing and demonstration activities and involve the following principal components:

- Acquisition of three (3) next-generation SAVs
- Implementation of advanced traffic-signal technologies to enable vehicle-to-infrastructure (V2I)/vehicle-to-everything (V2X) communications
- Construction of attractive, modern passenger facilities at a business park approximately one mile from the East Dublin/Pleasanton BART station in LAVTA's service area.

Advances in SAV technology since LAVTA began road-testing its first SAV in 2019 are moving forward at a rapid pace. With an ability to operate much more efficiently than traditional first- and last-mile shuttles, the electric SAV can leverage the full potential of the region's transit investments by functioning as a reliable first/last mile feeder service into fast, frequent local and regional transit, such as the BART system and the Livermore Amador Valley Transit Authority's (LAVTA) bus rapid transit network.

LAVTA's SAV service between the Ross Headquarters business park (Zeiss and other businesses are also in the high-density office park) will generate new public transit ridership on BART and LAVTA that will reduce congestion on I-580, decrease pollution, and contribute to greater safety on roadways.

#### **C. Project Description (please provide details)**

##### **Project Graphics to be sent electronically with This Application**

The current LAVTA SAV Demonstration and Deployment Project - Phase 1 route operates between the East Dublin/Pleasanton BART station and the intersection near Persimmon Place, a retail shopping center approximately one-half mile from the BART station (see [Attachment A – Project Background and Phase 1 Summary](#)). The proposed extension of this route in Phase 2 will include additional key stops and serve even more passengers at the Zeiss Innovation Center and Ross Headquarters business park approximately one mile from the BART station (see [Attachment B – Phase 2 Map and Vehicle](#)).

Design-engineering work will provide for 100% plans, specifications, and estimates (PS&E) for the construction of two key facilities necessary to support this expansion:

- Local infrastructure upgrades including vehicle-to-everything (V2X) communication with traffic lights and streetside signage
- Construction of modern, attractive passenger facilities at or near the Ross Headquarters business park to serve as the route endpoint from the Dublin/Pleasanton BART station.

To support the expanded route, Phase 2 will also include an upgraded and expanded SAV fleet of vehicles capable of traveling up to 25 mph, with greater capacity to accommodate the increase in ridership. LAVTA anticipates these vehicles will be manufactured in the United States. A subsequent allocation request for the construction phase will include:

- Construction of local infrastructure upgrades, such as vehicle-to-everything (V2X) communication with traffic lights and streetside signage.

## **Regional Measure 2 – INITIAL PROJECT REPORT**

- Construction of the passenger facilities
- Acquisition of three SAVs

The passenger facility improvements are envisioned as an attractive, safe and, convenient place to board and alight the SAVs. LAVTA will work with professional engineering support services in Phase 2 to finalize access and circulation agreements as well as securing any necessary approvals from City of Dublin, the California Department of Motor Vehicles (DMV), and the National Highway Traffic Safety Administration (NHTSA).

The SAV project will continue to be overseen by LAVTA’s Director of Operations and Innovation, Toan Tran, as well as the agency’s SAV Operations and Maintenance General Manager, Neal Hemenover. Neal is the lead of the Transdev North America Autonomous Vehicle team, focused on implementation and deployment of autonomous vehicles for transit and city services.

LAVTA has also been collaborating closely with City of Dublin’s Traffic Engineer, Sai Midididdi, and the Gray-Bowen-Scott engineering consultant team led by Obaid Khan, P.E. Sai and Obaid have extensive experience in implementing traffic signal communication systems and exploring a potential SAV dedicated lane in the project area. LAVTA and the City of Dublin executed an MOU in September 2018 affirming each agency’s roles and responsibilities in advancing development of the SAV project within the City of Dublin.

### **D. Impediments to Project Completion**

While LAVTA was successful in securing permits for the current Phase 1 route, shared autonomous vehicles are still highly regulated by state and federal entities including NHTSA and the DMV. It is foreseeable that as the technology matures there could be delays from time to time to address unknown issues originating from these agencies in testing and deployment of passenger service. However, LAVTA expects these delays to be sporadic and short-term in nature as the agency has a past successful track record of working with state and federal regulators on the Phase 1 project.

Considering the careful, successful testing and service conducted thus far in Phase 1, LAVTA does not expect to encounter any unanticipated safety issues. Even though unanticipated, future legislation on SAVs at the federal and/or state level could influence the project and/or create potential for delays.

Although the COVID pandemic might create new commuting patterns that could affect the projected ridership of the LAVTA SAV project as well as related transit services, freeways are quickly returning to pre-pandemic congestion levels as previously remote workers are called back to offices. The pent-up demand for freeway space during commute hours given the job and housing imbalance at the regions outskirts is too severe to think otherwise, thereby driving demand for alternative transportation solutions, which can be facilitated by the LAVTA’s SAV project.

At this time LAVTA is anticipating full funding of the construction phase to include additional grant funding from MTC’s IDEA SAV Program and/or other source(s) to achieve the full scope. Should additional funds as listed in the Project Funding Sheet not be available, the scope of the project can be modified accordingly, such as by acquiring two SAVs to initiate service instead of three.

### **E. Operability**

LAVTA projects ridership in Phase 2 (based on a pre-COVID operating environment) to be 40 rides per hour and 300 rides per day on average with these operating assumptions:

## Regional Measure 2 – INITIAL PROJECT REPORT

- 2 revenue vehicles (12-15 minute headways), plus one spare vehicle
- 12 hours/day, Mon-Fri

	Peak one hour demand, peak direction only	Peak four-hour demand, peak direction only	Total daily ridership – 8 hours per day	Total Daily ridership- 16 hours per day
BART only	40	120	300*	380**
BART and Valley Link	99	300	660*	740**

Based on the above assumptions, the estimated annual operating budget is \$1.8 million annually. Farebox return is expected at 20-30 percent of operating costs, as operating costs will be low relative to more conventional modes of transit. LAVTA is working with businesses in the Ross Headquarters business park to utilize TDM benefits available to employees toward the SAV and other public transit options.

LCTOP and TDA funds have been identified as potential funding sources for ongoing operations.

For vehicle-storage facilities, LAVTA has included space for secure storage and charging facilities for up to six SAVs to be located on the ground floor of the new Dublin BART Parking Garage being constructed by Alameda County in part with RM2 funds sponsored by the Alameda County Transportation Commission (RM2 Project 32.3). Garage construction is currently expected to be completed in 2023. In the meantime, as may be necessary, vehicles can be transported by flatbed to LAVTA's Livermore O&M facility for overnight storage as is the case now in Phase 1 testing.

## II. PROJECT PHASE DESCRIPTION and STATUS

### **F. Environmental –**

Does NEPA Apply:  Yes  No

Based on the recent adoption of SB 288, this project is exempt from CEQA.

### **G. Design –**

Phase 2 design and engineering work will build on the Phase 1 test environment already in operation, by expanding the number of vehicles deployed and their reach from the BART station. Design and engineering work will involve the following tasks/milestones:

1. Initiate Task Order Contracts with On-Call Engineering Firms for passenger facilities and local infrastructure upgrades - December 2021
2. Complete 100% PS&E for passenger facilities, local infrastructure ready to advertise - May 2022

To complete these tasks, LAVTA currently has an on-call engineering contract in place with Kimley-Horn and Associates. It is anticipated that upon allocation of RM2 funding, LAVTA would execute a Task Order with Kimley-Horn to prepare 100% PS&E documents ready to advertise for construction and equipment acquisition for completion of the V2X Intersection Upgrades and Passenger Facilities projects within 6 months.

## Regional Measure 2 – INITIAL PROJECT REPORT

### H. Right-of-Way Activities / Acquisition –

For initial expansion of the route, LAVTA anticipates the SAVs will operate only in public right-of-way with the passenger facilities being constructed in public right of way adjacent to the Ross Headquarters Business Park and the Zeiss Innovation Center.

### I. Construction / Vehicle Acquisition –

Once design-engineering work is completed for both the intersection upgrades and to guide the location, design, and construction of the passenger facilities, LAVTA will be ready to advance to the construction phase. This phase will involve construction and equipment acquisition for the passenger facilities as well as the acquisition of three SAVs and upgraded technology that allows for communication between the vehicles and traffic signals via Cellular Vehicle to Everything (CV2X) equipment. LAVTA anticipates that the vehicle acquisition will take approximately 12 months, with three months for procurement and 9 months for manufacture and delivery.

## III. PROJECT BUDGET

### J. Project Budget (Escalated to year of expenditure)

Phase	Total Amount - Escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	\$3,145
Total Project Budget (in thousands)	\$3,295

### K. Project Budget (De-escalated to current year)

Phase	Total Amount - De-escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	\$3,074
Total Project Budget (in thousands)	\$3,224

### L. Project Budget – Deliverable Segment (Escalated to year of expenditure)

Phase	Total Amount - Escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	N/A
Total Project Budget (in thousands)	\$150

## Regional Measure 2 – INITIAL PROJECT REPORT

### M. Project Budget – Deliverable Segment (De-escalated to current year)

Phase	Total Amount - De-escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	N/A
Total Project Budget (in thousands)	\$150

### IV. OVERALL PROJECT SCHEDULE

Phase-Milestone	Planned (Update as needed)	
	Start Date	Completion Date
Environmental Document	N/A	
Environmental Studies, Preliminary Eng. (ENV / PE / PA&ED)	N/A	N/A
Final Design - Plans, Specs. & Estimates (PS&E)	November 2021	May 2022
Right-of-Way Activities /Acquisition (R/W) -- if needed	N/A	N/A
Construction (Begin – Open for Use) / Acquisition / Operating Service (CON)	September 2022	October 2023

### V. ALLOCATION REQUEST INFORMATION

#### N. Detailed Description of Allocation Request

**Describe the scope of the allocation request. Provide background and other details as necessary.**

In order to continue expanding the SAV project (Phase 1 progress to date is summarized in Attachment A) and support new revenue service, estimated capital costs for additional SAVs, technology upgrades, and passenger facilities total \$3.295 million, as shown in the attached IPR Estimated Budget Plan form, of which \$2.695 million would be funded by RM2 over both PS&E and construction phases. The current allocation request as shown below would only be for the PS&E phase, with a subsequent construction allocation request occurring upon completion of all PS&E activities and deliverables listed in **Section P, Workplan**.

**Regional Measure 2 – INITIAL PROJECT REPORT**

Amount being requested (in escalated dollars)	\$150,000
Project Phase being requested	PS&E
Are there other fund sources involved in this phase?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of anticipated Implementing Agency Board approval the RM2 IPR Resolution for the allocation being requested	September 13, 2021
Month/year being requested for MTC Commission approval of allocation	October 2021

**O. Status of Previous Allocations (if any)**

Not Applicable.

**P. Workplan**

Workplan in Alternate Format Enclosed

<b>TASK NO</b>	<b>Description</b>	<b>Deliverables</b>	<b>Completion Date</b>
1.	Award Design-Engineering Contract for <b>Passenger Facilities</b>	Executed Task Order encompassing design-engineering contract/scope of work + fee	November 2021
2.	Award Design-Engineering Contract for <b>V2X Intersection Upgrades</b>	Executed Task Order encompassing design-engineering contract/scope of work + fee	November 2021
3.	Design completion/ready to advertise/procure equipment for <b>Passenger Facilities</b>	100% Plans, Specifications & Estimates	May 2022
4.	Design completion/ready to advertise/procure equipment for <b>V2X Intersection Upgrades</b>	100% Plans, Specifications & Estimates	May 2022

**Q. Impediments to Allocation Implementation**

With the exception of minor delays for scoping comments requiring further effort, or alternatives that the Board wishes to study further, no impediments are foreseen in completing the allocation implementation.

**VI. RM-2 FUNDING INFORMATION****R. RM-2 Funding Expenditures for funds being allocated**

The companion Microsoft Excel Project Funding Spreadsheet to this IPR is included

**S. Next Anticipated RM2 Allocation Request. N/A**

**Regional Measure 2 – INITIAL PROJECT REPORT**

**VII. GOVERNING BOARD ACTION**

Check the box that applies:

**Governing Board Resolution attached**

**Governing Board Resolution to be provided on or before: September 13, 2021 (in consultation with Alameda CTC)**

**VIII. CONTACT / PREPARATION INFORMATION**

**Contact for Applicant's Agency**

Name: Toan Tran

Phone: (925) 455-7562

Title: Director of Operations & Innovation

E-mail: ttran@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

**Information on Person Preparing IPR**

Name: Jennifer Yeamans

Phone: (925) 455-7564

Title: Senior Grants & Management Specialist

E-mail: jyeamans@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

**Applicant Agency's Accounting Contact**

Name: Tamara Edwards

Phone: (925) 455-7566

Title: Director of Finance

E-mail: tedwards@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

Revised IPR 120905.doc

## **Attachment A**

### **Project Background and Accomplishments to Date in Phase 1**

Being one of the first agencies in the nation to implement a Shared Autonomous Vehicle (SAV) program for public use has required extensive testing of both the vehicle operation and an approved route before passenger service could be initiated. The testing has given LAVTA insight into how the SAV can function on public streets with other pedestrian, cyclist, and vehicular traffic in the same space. Examples of the test route and the type of vehicle used during Phase 1 are attached.

LAVTA's SAV program has operated autonomously for more than 400 miles accident-free over the past year. Testing thus far has included data collection and analysis of schedule adherence, weather impacts, vehicle speed, battery consumption and mileage, reacting to various obstacles that include pedestrians, cyclists, and motorist, and issues requiring manual override. Gradual speed increases have been programmed with the consideration of safe operation of the vehicle and transportation of passengers. Speed increases allow the SAV to operate on streets with higher speed limits with the goal of more seamlessly integrating into the flow of traffic.

Recently, LAVTA reached a milestone in its SAV project by offering rides to the public wanting to experience the SAV technology by traveling from the BART station to a nearby retail shopping center. While the vehicle is fully autonomous, an operator is on board at all times that can take immediate control of the SAV. With respect to COVID-19 precautions, LAVTA has limited the number of riders that are allowed on the vehicle when public-health conditions have required.

LAVTA plans to continue collecting information as this initial phase comes to a close. Upcoming testing includes:

- Auditory and visual boarding/alighting indications to passengers (including disabled and visually impaired)
- Vehicle speed and delay in various crosswalk scenarios, with and without operator validation
- Verifying vehicle location during route and relaying to passengers
- Addressing the Vehicle to Infrastructure (V2I) communication at intersection traffic lights
- Routing and operation for potential service expansions

More information can be found at: <https://www.wheelsbus.com/sav/>

# PHASE 1



## VEHICLE SETUP AND TESTING

- Weather
- Speed



Attachment B:  
Proposed Phase 2 Route and Vehicle



# PHASE 2



## UPGRADE VEHICLES

New technology  
Increased speed capability



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## LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

## STAFF REPORT

**SUBJECT:** Resolution in Support of Allocation Request for Regional Measure 2 Funding for the Shared Autonomous Vehicle Phase 2 Deployment Project

**FROM:** Jennifer Yeaman, Senior Grants & Management Specialist

**DATE:** August 23, 2021

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**Action Requested**

Staff requests the Projects & Services Committee recommend the Board of Directors approve Resolution 26-2021 in support of an allocation request to the Metropolitan Transportation Commission (MTC) for \$150,000 for the design phase of the Shared Autonomous Vehicle Phase 2 Deployment Project. This resolution is required to request an allocation of this funding from MTC.

**Background**

In 2004, Senate Bill 916 established the Regional Traffic Relief Plan, including a list of projects eligible to receive funding authorized by Regional Measure 2 (RM2), which increased tolls on the seven state-owned toll bridges in the Bay Area by \$1 to fund various traffic relief programs and projects in eligible bridge corridors. SB 916 identified the Alameda County Transportation Commission (CTC) as the project sponsor of \$65 million in anticipated revenues to be allocated for RM2 Project 32, *I-580 (Tri-Valley) Rapid Transit Corridor Improvements in Alameda County*. To date funds have been allocated in the corridor on construction of the I-580 High Occupancy Toll (HOT) lanes and other HOV improvements, improvements to the I-580/I-680 interchange, and construction of the Dublin-Pleasanton BART Parking Garage.

In late 2020, MTC notified LAVTA staff that a balance of approximately \$5 million remained on the Project available for allocation to eligible transit-related projects in the corridor and requested proposal(s) from LAVTA that could utilize the funds. In December 2020, Alameda CTC approved the update to the Countywide Transportation Program, which included several LAVTA priority projects, including \$3 million for systemwide passenger facilities rehabilitation and enhancements, and \$2 million for capital costs related to Phase 2 deployment of the Shared Autonomous Vehicle (SAV) project. LAVTA initiated formal requests to MTC for RM2 capital funding for both projects as they relate to addressing congestion on the I-580 corridor. In May 2021, MTC approved LAVTA's allocation request for design-engineering funding toward construction of \$2.3 million in Rapid Bus Stop Improvements, while discussions continued regarding the SAV proposal.

## Discussion

Per MTC Regional Measure 2 Policies and Procedures (MTC Resolution 3636), project sponsors must submit a governing-board certification of compliance with RM2 provisions ([Attachment 1](#)) in order to receive allocations. Because the RM2 legislation identifies Alameda CTC as the project sponsor, Alameda CTC must also submit a resolution of local support for the project. On September 13, Alameda CTC's Programs and Projects Committee is scheduled to consider its resolution to sponsor the project and designate LAVTA as the project's Implementing Agency, delegating responsibility to LAVTA for compliance with all RM2 Policies and Procedures. Contingent upon actions by both the LAVTA Board on September 13 and Alameda CTC on September 23, MTC would consider the allocation request in October.

RM2 Policies and Procedures require each allocation to fund a minimum usable segment and/or deliverable. Thus MTC's initial allocation will fund \$150,000 budgeted for the project's design phase only. Pending acceptance of 100% plans, specifications, and estimates for the project, MTC will consider allocating an additional \$2.545 million for the construction phase as described in the Initial Project Report (IPR), shown in [Attachment 2](#).

The initial project scope defined in the IPR calls for design-engineering work to support construction of two key facilities necessary to support the expansion of LAVTA's existing SAV route tested in Phase 1 (summarized in [Attachment 3](#)):

- Local infrastructure upgrades including vehicle-to-everything (V2X) communication with traffic lights and streetside signage
- Construction of modern, attractive passenger facilities at or near the Ross Headquarters business park to serve as the route endpoint from the Dublin/Pleasanton BART station.

A subsequent construction phase would provide for the construction of these facilities as well as the acquisition of three next-generation SAVs needed to operate on the proposed Phase 2 route, shown in [Attachment 4](#). Storage of the vehicles is provided for in the plans for the new Dublin-Pleasanton BART parking garage scheduled to begin construction next year.

## Budget

The project budget is funded 100% by RM2 funds in the design phase and by a combination of RM2 and potential future MTC discretionary funds from the Innovative Deployments to Enhance Arterials (IDEA) Shared Autonomous Vehicle (SAV) program in the construction phase, as shown below (all amounts shown in thousands of dollars).

	<b>RM2</b>	<b>MTC IDEA SAV Program (uncommitted)</b>	<b>Total</b>
PS&E ( <i>current allocation</i> )	\$150	--	\$150
Construction ( <i>future allocation</i> )	\$2,545	\$600	\$3,145
<b>Total</b>	<b>\$2,695</b>	<b>\$600</b>	<b>\$3,295</b>

**Next Steps**

Following MTC approval of the RM2 allocation in October, LAVTA will initiate one or more Task Order Requests with its on-call design-engineering firm, Kimley-Horn, to finalize the scope of work for the design-engineering phase of the project. The design phase is expected to If additional funding for the future construction phase is not secured from MTC's IDEA SAV Program, staff will seek out other potential funding sources for the project's construction phase.

**Recommendation**

Staff recommends Projects & Services Committee refer Resolution 26-2021 to the Board of Directors for approval in support of an allocation request to the Metropolitan Transportation Commission for \$150,000 for the design phase of the Shared Autonomous Vehicle Phase 2 Deployment Project.

## Attachments:

1. Resolution 26-2021
2. Initial Project Report: LAVTA Rapid Bus Stop Improvement Project
3. IPR Attachment A: Phase 1 Summary
4. IPR Attachment B: Proposed Phase 2 Route and Vehicle

**RESOLUTION NO. 26-2021**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY  
AS IMPLEMENTING AGENCY FOR REGIONAL MEASURE 2 FUNDING FOR THE  
SHARED AUTONOMOUS VEHICLE PHASE 2 DEPLOYMENT PROJECT**

**WHEREAS**, SB 916 (Chapter 715, Statutes 2004), commonly referred as Regional Measure 2, identified projects eligible to receive funding under the Regional Traffic Relief Plan; and

**WHEREAS**, the Metropolitan Transportation Commission (MTC) is responsible for funding projects eligible for Regional Measure 2 funds, pursuant to Streets and Highways Code Section 30914(c) and (d); and

**WHEREAS**, MTC has established a process whereby eligible transportation project sponsors may submit allocation requests for Regional Measure 2 funding; and

**WHEREAS**, allocations to MTC must be submitted consistent with procedures and conditions as outlined in Regional Measure 2 Policy and Procedures; and

**WHEREAS**, Streets and Highways Code Section 30914(c) and (d) identifies the Alameda County Transportation Commission as Project Sponsor for RM2 Project 32, I-580 (Tri-Valley) Rapid Transit Corridor Improvements in Alameda County; and

**WHEREAS**, the Alameda County Transportation Commission plans to designate the Livermore Amador Valley Transit Authority (LAVTA) as implementing agency for the design and construction of the Shared Autonomous Vehicle Phase 2 Deployment Project, an eligible project under RM2 Project 32, I-580 (Tri-Valley) Rapid Transit Corridor Improvements; and

**WHEREAS**, LAVTA is an eligible implementing agency for transportation project(s) in Regional Measure 2, Regional Traffic Relief Plan funds; and

**WHEREAS**, the Shared Autonomous Vehicle Phase 2 Deployment Project is eligible for consideration in the Regional Traffic Relief Plan of Regional Measure 2, as identified in California Streets and Highways Code Section 30914(c) or (d); and

**WHEREAS**, the Regional Measure 2 allocation request, attached hereto in the Initial Project Report and incorporated herein as though set forth at length, lists the project, purpose, schedule, budget, expenditure and cash flow plan for which LAVTA is requesting that MTC allocate Regional Measure 2 funds; now, therefore, be it

**RESOLVED**, that LAVTA, and its agents shall comply with the provisions of the Metropolitan Transportation Commission's Regional Measure 2 Policy Guidance (MTC Resolution No. 3636); and be it further

**RESOLVED**, that LAVTA certifies that the project is consistent with the Regional Transportation Plan (RTP); and be it further

**RESOLVED**, that the year of funding for any design, right-of-way and/or construction phases has taken into consideration the time necessary to obtain environmental clearance and permitting approval for the project; and be it further

**RESOLVED**, that the Regional Measure 2 phase or segment is fully funded, and results in an operable and useable segment; and be it further

**RESOLVED**, that LAVTA approves the updated Initial Project Report, attached to this resolution; and be it further

**RESOLVED**, that LAVTA approves the cash flow plan, attached to this resolution; and be it further

**RESOLVED**, that LAVTA has reviewed the project needs and has adequate staffing resources to deliver and complete the project within the schedule set forth in the updated Initial Project Report, attached to this resolution; and, be it further

**RESOLVED**, that LAVTA is an eligible sponsor of projects in the Regional Measure 2 Regional Traffic Relief Plan, Capital Program, in accordance with California Streets and Highways Code 30914(c); and be it further

**RESOLVED**, that LAVTA is authorized to submit an application for Regional Measure 2 funds for the Shared Autonomous Vehicle Phase 2 Deployment Project in accordance with California Streets and Highways Code 30914(c); and be it further

**RESOLVED**, that LAVTA certifies that the projects and purposes for which RM2 funds are being requested is in compliance with the requirements of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.), and with the State Environmental Impact Report Guidelines (14 California Code of Regulations Section 15000 et seq.) and if relevant the National Environmental Policy Act (NEPA), 42 USC Section 4-1 et. seq. and the applicable regulations thereunder; and be it further

**RESOLVED**, that there is no legal impediment to LAVTA making allocation requests for Regional Measure 2 funds; and be it further

**RESOLVED**, that there is no pending or threatened litigation which might in any way adversely affect the proposed project, or the ability of LAVTA to deliver such project; and be it further

**RESOLVED**, that LAVTA agrees to comply with the requirements of MTC's Transit Coordination Implementation Plan as set forth in MTC Resolution 3866; and be it further

**RESOLVED**, that LAVTA indemnifies and holds harmless MTC, its Commissioners, representatives, agents, and employees from and against all claims, injury, suits, demands, liability, losses, damages, and expenses, whether direct or indirect (including any and all costs and expenses in connection therewith), incurred by reason of any act or failure to act of LAVTA, its officers, employees or agents, or subcontractors or any of them in connection with its performance of services under this allocation of RM2 funds. In addition to any other remedy authorized by law, so much of the funding due under this allocation of RM2 funds as shall reasonably be considered necessary by MTC may be retained until disposition has been made of any claim for damages, and be it further

**RESOLVED**, that LAVTA shall, if any revenues or profits from any non-governmental use of property (or project) that those revenues or profits shall be used exclusively for the public transportation services for which the project was initially approved, either for capital improvements or maintenance and operational costs, otherwise the Metropolitan Transportation Commission is entitled to a proportionate share equal to MTC's percentage participation in the projects(s); and be it further

**RESOLVED**, that assets purchased with RM2 funds including facilities and equipment shall be used for the public transportation uses intended, and should said facilities and equipment cease to be operated or maintained for their intended public transportation purposes for its useful life, that the Metropolitan Transportation Commission (MTC) shall be entitled to a present day value refund or credit (at MTC's option) based on MTC's share of the Fair Market Value of the said facilities and equipment at the time the public transportation uses ceased, which shall be paid back to MTC in the same proportion that Regional Measure 2 funds were originally used; and be it further

**RESOLVED**, that LAVTA shall post on both ends of the construction site(s) at least two signs visible to the public stating that the Project is funded with Regional Measure 2 Toll Revenues; and be it further

**RESOLVED**, that LAVTA authorizes its Executive Director or his/her designee to execute and submit an allocation request for the design phase with MTC for Regional Measure 2 funds in the amount of one hundred fifty thousand dollars (\$150,000), for the project, purposes and amounts included in the project application attached to this resolution; and be it further

**RESOLVED**, that the Executive Director or his/her designee is hereby delegated the authority to make non-substantive changes or minor amendments to the IPR as he/she deems appropriate; and be it further

**RESOLVED**, that a copy of this resolution shall be transmitted to MTC in conjunction with the filing of the LAVTA application referenced herein; and be it further

**RESOLVED**, that allocation of Regional Measure 2 funding for the Shared Autonomous Vehicle Phase 2 Deployment Project is contingent upon action by the Alameda County Transportation Commission designating LAVTA as implementing agency for the Project and the

Metropolitan Transportation Commission's approval of this designation with the allocation request.

**PASSED AND ADOPTED BY** the governing board of the Livermore Amador Valley Transit Authority on this 13th day of September 2021.

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Karla Brown, Chair

Attest:

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Michael Tree, Executive Director

**Regional Measure 2 – INITIAL PROJECT REPORT**

# Regional Measure 2 Initial Project Report (IPR)

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**Project Title:**

LAVTA Shared Autonomous Vehicle Phase 2 Deployment

**RM2 Project No.****Allocation History:**

	<b>MTC Approval Date</b>	<b>Amount</b>	<b>Phase</b>
<b>#1:</b>			
<b>#2</b>			
<b>#3</b>			

**Total:     \$****Current Allocation Request:**

<b>IPR Date</b>	<b>Amount Being Requested</b>	<b>Phase Requested</b>
<b>June 18, 2021</b>	<b>\$150,000</b>	<b>PS&amp;E: Design-engineering for Passenger Facilities and V2I Intersection Upgrades</b>

## **Regional Measure 2 – INITIAL PROJECT REPORT**

### **I. OVERALL PROJECT INFORMATION**

#### **A. Project Sponsor / Co-sponsor(s) / Implementing Agency**

Alameda County Transportation Commission (TBD) / Livermore Amador Valley Transit Authority (LAVTA)

#### **B. Project Purpose**

The primary purpose of this project is to advance deployment of LAVTA's Shared Autonomous Vehicle (SAV) Project with capital investments necessary to support Phase 2 operations. Phase 2 will build on the success of Phase 1 testing and demonstration activities and involve the following principal components:

- Acquisition of three (3) next-generation SAVs
- Implementation of advanced traffic-signal technologies to enable vehicle-to-infrastructure (V2I)/vehicle-to-everything (V2X) communications
- Construction of attractive, modern passenger facilities at a business park approximately one mile from the East Dublin/Pleasanton BART station in LAVTA's service area.

Advances in SAV technology since LAVTA began road-testing its first SAV in 2019 are moving forward at a rapid pace. With an ability to operate much more efficiently than traditional first- and last-mile shuttles, the electric SAV can leverage the full potential of the region's transit investments by functioning as a reliable first/last mile feeder service into fast, frequent local and regional transit, such as the BART system and the Livermore Amador Valley Transit Authority's (LAVTA) bus rapid transit network.

LAVTA's SAV service between the Ross Headquarters business park (Zeiss and other businesses are also in the high-density office park) will generate new public transit ridership on BART and LAVTA that will reduce congestion on I-580, decrease pollution, and contribute to greater safety on roadways.

#### **C. Project Description (please provide details)**

##### **Project Graphics to be sent electronically with This Application**

The current LAVTA SAV Demonstration and Deployment Project - Phase 1 route operates between the East Dublin/Pleasanton BART station and the intersection near Persimmon Place, a retail shopping center approximately one-half mile from the BART station (see [Attachment A – Project Background and Phase 1 Summary](#)). The proposed extension of this route in Phase 2 will include additional key stops and serve even more passengers at the Zeiss Innovation Center and Ross Headquarters business park approximately one mile from the BART station (see [Attachment B – Phase 2 Map and Vehicle](#)).

Design-engineering work will provide for 100% plans, specifications, and estimates (PS&E) for the construction of two key facilities necessary to support this expansion:

- Local infrastructure upgrades including vehicle-to-everything (V2X) communication with traffic lights and streetside signage
- Construction of modern, attractive passenger facilities at or near the Ross Headquarters business park to serve as the route endpoint from the Dublin/Pleasanton BART station.

To support the expanded route, Phase 2 will also include an upgraded and expanded SAV fleet of vehicles capable of traveling up to 25 mph, with greater capacity to accommodate the increase in ridership. LAVTA anticipates these vehicles will be manufactured in the United States. A subsequent allocation request for the construction phase will include:

- Construction of local infrastructure upgrades, such as vehicle-to-everything (V2X) communication with traffic lights and streetside signage.

## **Regional Measure 2 – INITIAL PROJECT REPORT**

- Construction of the passenger facilities
- Acquisition of three SAVs

The passenger facility improvements are envisioned as an attractive, safe and, convenient place to board and alight the SAVs. LAVTA will work with professional engineering support services in Phase 2 to finalize access and circulation agreements as well as securing any necessary approvals from City of Dublin, the California Department of Motor Vehicles (DMV), and the National Highway Traffic Safety Administration (NHTSA).

The SAV project will continue to be overseen by LAVTA's Director of Operations and Innovation, Toan Tran, as well as the agency's SAV Operations and Maintenance General Manager, Neal Hemenover. Neal is the lead of the Transdev North America Autonomous Vehicle team, focused on implementation and deployment of autonomous vehicles for transit and city services.

LAVTA has also been collaborating closely with City of Dublin's Traffic Engineer, Sai Midididdi, and the Gray-Bowen-Scott engineering consultant team led by Obaid Khan, P.E. Sai and Obaid have extensive experience in implementing traffic signal communication systems and exploring a potential SAV dedicated lane in the project area. LAVTA and the City of Dublin executed an MOU in September 2018 affirming each agency's roles and responsibilities in advancing development of the SAV project within the City of Dublin.

### **D. Impediments to Project Completion**

While LAVTA was successful in securing permits for the current Phase 1 route, shared autonomous vehicles are still highly regulated by state and federal entities including NHTSA and the DMV. It is foreseeable that as the technology matures there could be delays from time to time to address unknown issues originating from these agencies in testing and deployment of passenger service. However, LAVTA expects these delays to be sporadic and short-term in nature as the agency has a past successful track record of working with state and federal regulators on the Phase 1 project.

Considering the careful, successful testing and service conducted thus far in Phase 1, LAVTA does not expect to encounter any unanticipated safety issues. Even though unanticipated, future legislation on SAVs at the federal and/or state level could influence the project and/or create potential for delays.

Although the COVID pandemic might create new commuting patterns that could affect the projected ridership of the LAVTA SAV project as well as related transit services, freeways are quickly returning to pre-pandemic congestion levels as previously remote workers are called back to offices. The pent-up demand for freeway space during commute hours given the job and housing imbalance at the regions outskirts is too severe to think otherwise, thereby driving demand for alternative transportation solutions, which can be facilitated by the LAVTA's SAV project.

At this time LAVTA is anticipating full funding of the construction phase to include additional grant funding from MTC's IDEA SAV Program and/or other source(s) to achieve the full scope. Should additional funds as listed in the Project Funding Sheet not be available, the scope of the project can be modified accordingly, such as by acquiring two SAVs to initiate service instead of three.

### **E. Operability**

LAVTA projects ridership in Phase 2 (based on a pre-COVID operating environment) to be 40 rides per hour and 300 rides per day on average with these operating assumptions:

## Regional Measure 2 – INITIAL PROJECT REPORT

- 2 revenue vehicles (12-15 minute headways), plus one spare vehicle
- 12 hours/day, Mon-Fri

	Peak one hour demand, peak direction only	Peak four-hour demand, peak direction only	Total daily ridership – 8 hours per day	Total Daily ridership- 16 hours per day
BART only	40	120	300*	380**
BART and Valley Link	99	300	660*	740**

Based on the above assumptions, the estimated annual operating budget is \$1.8 million annually. Farebox return is expected at 20-30 percent of operating costs, as operating costs will be low relative to more conventional modes of transit. LAVTA is working with businesses in the Ross Headquarters business park to utilize TDM benefits available to employees toward the SAV and other public transit options.

LCTOP and TDA funds have been identified as potential funding sources for ongoing operations.

For vehicle-storage facilities, LAVTA has included space for secure storage and charging facilities for up to six SAVs to be located on the ground floor of the new Dublin BART Parking Garage being constructed by Alameda County in part with RM2 funds sponsored by the Alameda County Transportation Commission (RM2 Project 32.3). Garage construction is currently expected to be completed in 2023. In the meantime, as may be necessary, vehicles can be transported by flatbed to LAVTA's Livermore O&M facility for overnight storage as is the case now in Phase 1 testing.

## II. PROJECT PHASE DESCRIPTION and STATUS

### **F. Environmental –**

Does NEPA Apply:  Yes  No

Based on the recent adoption of SB 288, this project is exempt from CEQA.

### **G. Design –**

Phase 2 design and engineering work will build on the Phase 1 test environment already in operation, by expanding the number of vehicles deployed and their reach from the BART station. Design and engineering work will involve the following tasks/milestones:

1. Initiate Task Order Contracts with On-Call Engineering Firms for passenger facilities and local infrastructure upgrades - December 2021
2. Complete 100% PS&E for passenger facilities, local infrastructure ready to advertise - May 2022

To complete these tasks, LAVTA currently has an on-call engineering contract in place with Kimley-Horn and Associates. It is anticipated that upon allocation of RM2 funding, LAVTA would execute a Task Order with Kimley-Horn to prepare 100% PS&E documents ready to advertise for construction and equipment acquisition for completion of the V2X Intersection Upgrades and Passenger Facilities projects within 6 months.

## Regional Measure 2 – INITIAL PROJECT REPORT

### H. Right-of-Way Activities / Acquisition –

For initial expansion of the route, LAVTA anticipates the SAVs will operate only in public right-of-way with the passenger facilities being constructed in public right of way adjacent to the Ross Headquarters Business Park and the Zeiss Innovation Center.

### I. Construction / Vehicle Acquisition –

Once design-engineering work is completed for both the intersection upgrades and to guide the location, design, and construction of the passenger facilities, LAVTA will be ready to advance to the construction phase. This phase will involve construction and equipment acquisition for the passenger facilities as well as the acquisition of three SAVs and upgraded technology that allows for communication between the vehicles and traffic signals via Cellular Vehicle to Everything (CV2X) equipment. LAVTA anticipates that the vehicle acquisition will take approximately 12 months, with three months for procurement and 9 months for manufacture and delivery.

## III. PROJECT BUDGET

### J. Project Budget (Escalated to year of expenditure)

Phase	Total Amount - Escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	\$3,145
Total Project Budget (in thousands)	\$3,295

### K. Project Budget (De-escalated to current year)

Phase	Total Amount - De-escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	\$3,074
Total Project Budget (in thousands)	\$3,224

### L. Project Budget – Deliverable Segment (Escalated to year of expenditure)

Phase	Total Amount - Escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	N/A
Total Project Budget (in thousands)	\$150

## Regional Measure 2 – INITIAL PROJECT REPORT

### M. Project Budget – Deliverable Segment (De-escalated to current year)

Phase	Total Amount - De-escalated - (Thousands)
Environmental Studies & Preliminary Eng (ENV / PE / PA&ED)	N/A
Design - Plans, Specifications and Estimates (PS&E)	\$150
Right-of-Way Activities /Acquisition (R/W)	N/A
Construction / Rolling Stock Acquisition (CON)	N/A
Total Project Budget (in thousands)	\$150

### IV. OVERALL PROJECT SCHEDULE

Phase-Milestone	Planned (Update as needed)	
	Start Date	Completion Date
Environmental Document	N/A	
Environmental Studies, Preliminary Eng. (ENV / PE / PA&ED)	N/A	N/A
Final Design - Plans, Specs. & Estimates (PS&E)	November 2021	May 2022
Right-of-Way Activities /Acquisition (R/W) -- if needed	N/A	N/A
Construction (Begin – Open for Use) / Acquisition / Operating Service (CON)	September 2022	October 2023

### V. ALLOCATION REQUEST INFORMATION

#### N. Detailed Description of Allocation Request

**Describe the scope of the allocation request. Provide background and other details as necessary.**

In order to continue expanding the SAV project (Phase 1 progress to date is summarized in Attachment A) and support new revenue service, estimated capital costs for additional SAVs, technology upgrades, and passenger facilities total \$3.295 million, as shown in the attached IPR Estimated Budget Plan form, of which \$2.695 million would be funded by RM2 over both PS&E and construction phases. The current allocation request as shown below would only be for the PS&E phase, with a subsequent construction allocation request occurring upon completion of all PS&E activities and deliverables listed in **Section P, Workplan**.

**Regional Measure 2 – INITIAL PROJECT REPORT**

Amount being requested (in escalated dollars)	\$150,000
Project Phase being requested	PS&E
Are there other fund sources involved in this phase?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of anticipated Implementing Agency Board approval the RM2 IPR Resolution for the allocation being requested	September 13, 2021
Month/year being requested for MTC Commission approval of allocation	October 2021

**O. Status of Previous Allocations (if any)**

Not Applicable.

**P. Workplan**

Workplan in Alternate Format Enclosed

<b>TASK NO</b>	<b>Description</b>	<b>Deliverables</b>	<b>Completion Date</b>
1.	Award Design-Engineering Contract for <b>Passenger Facilities</b>	Executed Task Order encompassing design-engineering contract/scope of work + fee	November 2021
2.	Award Design-Engineering Contract for <b>V2X Intersection Upgrades</b>	Executed Task Order encompassing design-engineering contract/scope of work + fee	November 2021
3.	Design completion/ready to advertise/procure equipment for <b>Passenger Facilities</b>	100% Plans, Specifications & Estimates	May 2022
4.	Design completion/ready to advertise/procure equipment for <b>V2X Intersection Upgrades</b>	100% Plans, Specifications & Estimates	May 2022

**Q. Impediments to Allocation Implementation**

With the exception of minor delays for scoping comments requiring further effort, or alternatives that the Board wishes to study further, no impediments are foreseen in completing the allocation implementation.

**VI. RM-2 FUNDING INFORMATION****R. RM-2 Funding Expenditures for funds being allocated**

The companion Microsoft Excel Project Funding Spreadsheet to this IPR is included

**S. Next Anticipated RM2 Allocation Request. N/A**

**Regional Measure 2 – INITIAL PROJECT REPORT**

**VII. GOVERNING BOARD ACTION**

Check the box that applies:

**Governing Board Resolution attached**

**Governing Board Resolution to be provided on or before: September 13, 2021 (in consultation with Alameda CTC)**

**VIII. CONTACT / PREPARATION INFORMATION**

**Contact for Applicant's Agency**

Name: Toan Tran

Phone: (925) 455-7562

Title: Director of Operations & Innovation

E-mail: ttran@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

**Information on Person Preparing IPR**

Name: Jennifer Yeamans

Phone: (925) 455-7564

Title: Senior Grants & Management Specialist

E-mail: jyeamans@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

**Applicant Agency's Accounting Contact**

Name: Tamara Edwards

Phone: (925) 455-7566

Title: Director of Finance

E-mail: tedwards@lavta.org

Address: 1362 Rutan Court Suite #100, Livermore, CA 94551

Revised IPR 120905.doc

## **Attachment A**

### **Project Background and Accomplishments to Date in Phase 1**

Being one of the first agencies in the nation to implement a Shared Autonomous Vehicle (SAV) program for public use has required extensive testing of both the vehicle operation and an approved route before passenger service could be initiated. The testing has given LAVTA insight into how the SAV can function on public streets with other pedestrian, cyclist, and vehicular traffic in the same space. Examples of the test route and the type of vehicle used during Phase 1 are attached.

LAVTA's SAV program has operated autonomously for more than 400 miles accident-free over the past year. Testing thus far has included data collection and analysis of schedule adherence, weather impacts, vehicle speed, battery consumption and mileage, reacting to various obstacles that include pedestrians, cyclists, and motorist, and issues requiring manual override. Gradual speed increases have been programmed with the consideration of safe operation of the vehicle and transportation of passengers. Speed increases allow the SAV to operate on streets with higher speed limits with the goal of more seamlessly integrating into the flow of traffic.

Recently, LAVTA reached a milestone in its SAV project by offering rides to the public wanting to experience the SAV technology by traveling from the BART station to a nearby retail shopping center. While the vehicle is fully autonomous, an operator is on board at all times that can take immediate control of the SAV. With respect to COVID-19 precautions, LAVTA has limited the number of riders that are allowed on the vehicle when public-health conditions have required.

LAVTA plans to continue collecting information as this initial phase comes to a close. Upcoming testing includes:

- Auditory and visual boarding/alighting indications to passengers (including disabled and visually impaired)
- Vehicle speed and delay in various crosswalk scenarios, with and without operator validation
- Verifying vehicle location during route and relaying to passengers
- Addressing the Vehicle to Infrastructure (V2I) communication at intersection traffic lights
- Routing and operation for potential service expansions

More information can be found at: <https://www.wheelsbus.com/sav/>

# PHASE 1



## VEHICLE SETUP AND TESTING

- Weather
- Speed



**Attachment B:  
Proposed Phase 2 Route and Vehicle**



# PHASE 2



## UPGRADE VEHICLES

- New technology
- Increased speed capability





**DATE:** September 7, 2021

**TO:** Programs and Projects Committee

**FROM:** Gary Huisingsh, Deputy Executive Director of Projects  
Jhay Delos Reyes, Senior Transportation Engineer

**SUBJECT:** Award Project Approval and Environmental Document Phase Contract for the State Route 262 (Mission Boulevard) Cross Connector Project

## Recommendation

It is recommended that the Commission approve and authorize the Executive Director to execute Professional Services Agreement (PSA) A21-0042 with Kimley Horn Associates (KHA) for a not-to-exceed amount of \$8,300,000 to provide services for preparation of the Project Approval / Environmental Document (PA/ED) phase related to the State Route 262 (Mission Boulevard) Cross Connector Project.

## Summary

Alameda CTC is the Implementing Agency for the State Route 262 (Mission Boulevard) Cross Connector Project (Project) (PN 1472.000) for the PA/ED phase in partnership with the City of Fremont (Fremont) and the California Department of Transportation (Caltrans).

Staff is completing the Project Study Report-Project Develop Study (PSR-PDS) as part of the Project Initiation Document (PID) phase. Once signed by Caltrans, the document will allow the Project to move forward into the PA/ED phase. Caltrans will be the lead agency for the Environmental Document which is anticipated to be an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act (CEQA) and an Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA).

Alameda CTC's selection process to procure services for the PA/ED phase of the project began in February 2021 with Commission approval to release the Request For Proposal (RFP).

RFP 21-0004 was released on March 3, 2021. Proposals were received from four firms. An independent selection panel comprised of representatives from the City of Fremont, Caltrans and Alameda CTC reviewed the four proposals submitted and proceeded to interviews with all four firms. Interviews with those firms were conducted in June 2021.

Based on those interviews, the selection panel concluded that KHA was the top-ranked firm.

Alameda CTC negotiated the contract with KHA for a not-to-exceed amount of \$8,300,000. The estimated duration to complete the required scope with KHA for PS&E services is 43 months.

This contract is funded with Regional Measure 3 (RM3) funds. Although the Local Business Contract Equity (LBCE) or Disadvantage Business Enterprise (DBE) Programs do not apply, due to RM3 funds, KHA is a Local Business Enterprise (LBE).

## **Background**

Alameda CTC is the Implementing Agency for the Project for the PA/ED phase in partnership with Fremont and Caltrans. The project aims to reduce congestion and improve traffic flow for the local and regional transportation network in the vicinity of SR-262.

SR-262 is the most traveled I-680 to I-880 east-west corridor and is located in Fremont and serves as a vital goods movement route, main access point to transit and local business and the gateway connection to Silicon Valley. Recurring congestion along SR-262 impacts operations along both I-680 and I-880, divides the Warm Springs community and results in cut-through traffic through residential streets.

The PSR-PDS describes addressing key safety and operational improvements along SR 262 and identifies a phased approach to deliver the Project for a reduced dollar value. Phase 1 focuses on implementing the following features: Grade separating Warm Springs Boulevard and Mohave Drive from SR 262, modifying the SR-262/I-680 Interchange to accommodate all users and constructing Frontage Roads to maintain local access and provide high quality bicycle facilities between Warm Springs Boulevard and I-680. The total cost of Phase 1 is currently estimated at \$445 million. Future phases described in the PID are the Express Lane Direct Connectors that connect the I-680 Express Lanes to the I-880 Express Lanes through the SR 262 corridor.

The Project is currently completing the scoping phase with the PSR-PDS to be signed off by Caltrans by the end of September and serves as the initiating document of the PA/ED phase. Caltrans will be the lead agency for the Environmental Document which is anticipated to be an EIR in compliance with CEQA and EA in compliance with NEPA. Alameda CTC will be responsible for public outreach and required meetings under CEQA and NEPA.

The Alameda CTC selection process to procure services for the PA/ED phase of the project began in February 2021 with Commission approval to release the Request For Proposal (RFP). The RFP 21-0004 was released on March 3, 2021. A pre-proposal meeting was held on March 17, 2021 and was attended by 24 firms, of which there were six (6) self-identified prime consultants. Alameda CTC received a total of four (4) proposals.

An independent selection panel comprised of representatives from Fremont, Caltrans and Alameda CTC reviewed the four proposals submitted and short-listed all four firms. Interviews were conducted in June 2021. Based on these interviews, the selection panel concluded that KHA was the top-ranked firm.

After a thorough review of the submitted cost proposal and comparison to Alameda CTC's independent cost estimate and assumptions, Alameda CTC negotiated the contract with KHA for a not-to-exceed amount of \$8,300,000. The estimated duration to complete the required scope is 43 months.

This contract is funded with RM3 funds. Although the LBCE or DBE Program does not apply due to RM3 funds, KHA is an Alameda CTC Certified LBE. Their contract contains 75% LBE, 16% SLBE participation.

Funds necessary for the PA/ED Phase work were programmed and allocated in April 2017 as part of the 2018 Comprehensive Investment Plan. In February 2021 Alameda CTC approved Resolution 21-001, which requested a Letter of No Prejudice with the Metropolitan Transportation Commission (MTC) for RM3 funds. MTC approved the LONP in April 2021.

**Levine Act Statement:** The KHA Team did not report a conflict in accordance with the Levine Act.

**Fiscal Impact:** The fiscal impact for awarding the contract A21-0042 to KHA is \$8,300,000. This amount is included in the adopted FY2021-2022 Capital Program Budget.

**Attachment:**

- A. Project Fact Sheet

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# State Route 262 (Mission Boulevard) Cross Connector

5.3A

SEPTEMBER 2021

## PROJECT OVERVIEW

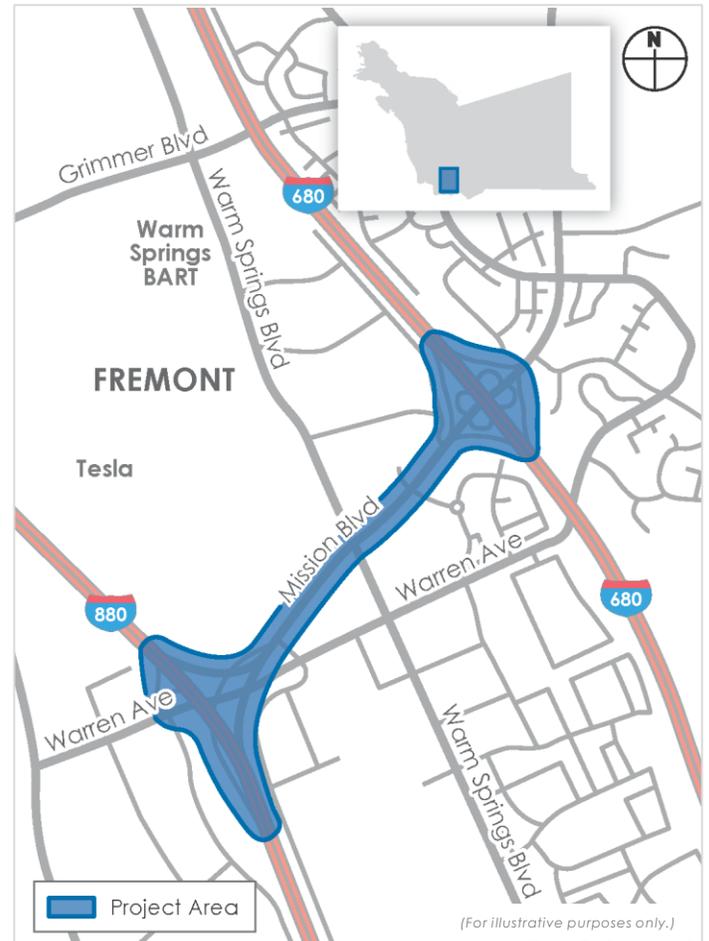
The Alameda County Transportation Commission (Alameda CTC) is working to develop Project Initiation Document Phase alternatives for the State Route 262 (SR- 262) Cross Connector project, a heavily traveled east-west corridor located in the City of Fremont (City). The project aims to reduce congestion and improve traffic flow for the local and regional transportation network in the vicinity of SR-262/Mission Boulevard.

Alternative solutions will be developed to improve east-west regional connectivity traveling between Interstate 680 (I-680) and Interstate 880 (I-880) in Southern Alameda County. The alternatives are intended to encourage mode shift from single-occupancy vehicles to increase vehicle occupancy and person through-put by promoting multimodal components through the corridor.

SR-262 is a vital east-west facility in the City. It serves as a predominant gateway to and from Silicon Valley and as access to major economic employment centers and transportation facilities (e.g. Tesla and Warm Springs BART station, respectively). Alameda CTC, in cooperation with the City, Caltrans, and other local and regional partners, is also looking at funding and financing options to deliver the best alternative solution.

## PROJECT BENEFITS

- Improves traffic operation
- Reduces traffic congestion
- Enhances local/regional economic vitality
- Improves safety



## PROJECT NEED

- SR-262 is a major east-west connector between I-880 and I-680 that experiences the most daily commute and commercial vehicle trips.
- Existing travel demand and operational deficiencies cause recurring traffic congestion on SR-262 and adjoining I-680 and I-880 freeways throughout the day on weekdays and weekends.
- Congestion adversely affects local circulation, inhibits access to local land uses, and results in undesirable use of local neighborhood streets as cut-through routes for regional traffic.
- Vehicle delay and restricted mobility impact the economic vitality of the local community and the region as a whole.



Eastbound SR-262 at the I-680 southbound on-ramp.



Westbound congestion along SR-262 during the afternoon commute.



Westbound and eastbound traffic on SR-262 in Fremont.

**COST ESTIMATE BY PHASE** (\$ x 1,000)

	Phase 1	Future Phases
Planning/Scoping		\$3,500
PE/Environmental	\$10,000	\$5,000
Final Design (PS&E)	\$25,000	\$5,000
Right-of-Way	\$104,500	\$45,500
Construction	\$302,000	\$1,423,000
<b>Total Expenditures</b>		<b>\$1,923,500</b>

Note: Costs reflect a Full-Build project, based on 2021 dollars; subject to update.

**FUNDING SOURCES** (\$ x 1,000)

Measure BB	\$9,000
Federal	TBD
State	TBD
Regional Measure 3	\$15,000
Local	TBD
TBD	\$1,899,500
<b>Total Revenues</b>	<b>\$1,923,500</b>

**STATUS**

**Implementing Agency:**  
Alameda CTC

**Current Phase:** Scoping

- Project scoping work began in spring 2018.

**PARTNERS AND STAKEHOLDERS**

California Department of Transportation, Alameda CTC and the City of Fremont

**SCHEDULE BY PHASE**

	Begin	End	Begin	End
Scoping	Spring 2018	-	-	Fall 2021
	Phase 1		Future Phases	
Preliminary Engineering/ Environmental	Fall 2021	Spring 2025	TBD	TBD
Final Design	TBD	TBD	TBD	TBD
Right-of-Way	TBD	TBD	TBD	TBD
Construction	TBD	TBD	TBD	TBD

Note: Schedule subsequent to the environmental phase subject to revision based on availability of funding and selection of a preferred alternative.