## LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY 1362 Rutan Court, Suite 100 Livermore, CA 94551

#### PROJECTS and SERVICES COMMITTEE MEETING / COMMITTEE OF THE WHOLE

#### **COMMITTEE MEMBERS**

JEAN JOSEY – CHAIR KARLA BROWN GINA BONANNO – VICE CHAIR DAVID HAUBERT

Agenda Questions: Please call the Executive Director at (925) 455-7564 or send an email to frontdesk@lavta.org

Documents received after publication of the Agenda and considered by the Projects and Services Committee in its deliberation will be available for inspection only via electronic document transfer, due to the COVID-19 outbreak. See the COVID-19 provisions outlined below. Please call or email the Executive Director during normal business hours if you require access to any such documents.

#### **TELECONFERENCE**

**JANUARY 24 2022 – 4:00 PM** 

### CORONAVIRUS DISEASE (COVID-19) ADVISORY AND MEETING PROCEDURE

This meeting will proceed via teleconference in accordance with Government Code Section 54953(e)(2), in order to protect the health and safety of staff, officials, and the general public. Councilmembers will not be physically in attendance, but will be available via video conference.

The administrative office of Livermore Amador Valley Transit Authority (LAVTA) is currently closed to the public and will remain closed for the duration of the Projects and Services (P&S) Committee meeting. Consequently, there will be no physical location for members of the public to participate in the meeting. We encourage members of the public to shelter in place and access the meeting online using the web-video communication application, Zoom. Zoom participants will have the opportunity to speak during Public Comment.

Public comments will also be accepted via email until 1:00 p.m. on Monday, January 24, 2022 at <a href="mailto:frontdesk@lavta.org">frontdesk@lavta.org</a>. Please include "Public Comment – 1/24/2022" and the agenda item in the subject line. In the body of the email please include your name. Public comments submitted will be read during Public Comment and will be subject to the regular three-minute time restriction.

This Projects and Services Committee meeting will be conducted on the web-video communication platform, Zoom. In order to view and/or participate in this meeting, members of the public will need to download Zoom from its website, www.zoom.us.

It is recommended that anyone wishing to participate in the meeting complete the download process before the start of the meeting.

There will be zero tolerance for any person addressing the Committee making profane, offensive and disruptive remarks, or engaging in loud, boisterous, or other disorderly conduct, that disrupts the orderly conduct of the public meeting.

#### How to listen and view meeting video:

• From a PC, Mac, iPad, iPhone or Android device click the link below:

https://zoom.us/j/85868238171

Passcode: PS1362Mtg

• To supplement a PC, Mac, tablet or device without audio, please also join by phone:

Dial: 1 (669) 900-6833 Webinar ID: 858 6823 8171

Passcode: 622062

To comment by video conference, click the "Raise Your Hand" button to request to speak when Public Comment is being taken on the Agenda item. You will then be unmuted when it is your turn to make your comment for up to 3 minutes. After the allotted time, you will be muted.

• Livestream online at: Livermore Amador Valley Transit Authority YouTube Channel

No option to make Public Comment on YouTube live stream.

#### How to listen only to the meeting:

• For audio access to the meeting by telephone, use the dial-in information below:

Dial: 1 (669) 900-6833 Webinar ID: 858 6823 8171

Passcode: 622062

Please note to submit public comment via telephone dial \*9 on your dial pad. The meeting's host will be informed that you would like to speak. If you are chosen, you will be notified that your request has been approved and you will be allowed to speak. You will then dial \*6 to unmute when it is your turn to make your comment for up to 3 minutes. After the allotted time, you will be muted.

#### To submit written comments:

Provide public written comments prior to the meeting by email, to frontdesk@lavta.org

If you are submitting public comment via email, please do so by 1:00 p.m. on Monday, January 24, 2022 to <a href="mailto:frontdesk@lavta.org">frontdesk@lavta.org</a>. Please include "Public Comment – 1/24/2022" and the agenda item to which your comment applies in the subject line. In the body of the email please include your name. Public comments submitted will be read during Public Comment and will be subject to the regular three-minute time restriction

#### 1. Call to Order

#### 2. Roll Call of Members

#### 3. Meeting Open to Public

- Members of the audience may address the Committee on any matter within the general subject matter jurisdiction of the LAVTA Board of Directors.
- Members of the audience may address the Committee on items on the Agenda at the time the Chair calls for the particular Agenda item.
- Public comments should not exceed three (3) minutes.
- Agendas are published 72 hours prior to the meeting.
- No action may be taken on matters raised that are not on the Agenda.

#### 4. Minutes of the December 29, 2021 Meeting of the P&S Committee.

**Recommendation:** Approval

#### 5. Zero-Emission Bus Master Transition Plan

**Recommendation:** Staff requests the Project & Services Committee recommend the Board of Directors approve Resolution 03-2022, authorizing staff to proceed with the development of the Zero-Emission Bus Rollout Plan using the all fuel cell electric bus transition scenario.

- 6. Executive Directors Report
- 7. Preview of Upcoming P&S Committee Agenda Items
- 8. Matters Initiated by Committee Members
- 9. Next Meeting Date is Scheduled for: February 28, 2022

#### 10. Adjourn

Please refrain from wearing scented products (perfume, cologne, after-shave, etc.) to these meetings, as there may be people in attendance susceptible to environmental illnesses.

In the event that a quorum of the entire Board is present, this Committee shall act as a Committee of the Whole. In either case, any item acted upon by the Committee or the Committee of the Whole will require consideration and action by the full Board of Directors as a prerequisite to its legal enactment.

I hereby certify that this agenda was posted 72 hours in advance of the noted meeting.

/s/ Jennifer Suda	1/21/2022
LAVTA Administrative Services Department	Date

On request, the Livermore Amador Valley Transit Authority will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. A written request, including name of the person, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service should be sent at least seven (7) days before the meeting. Requests should be sent to:

Executive Director Livermore Amador Valley Transit Authority 1362 Rutan Court, Suite 100 Livermore, CA 94551 Fax: 925.443.1375

Email: frontdesk@lavta.org

## MINUTES OF THE DECEMBER 29, 2021 ZOOM TELECONFERENCE LAVTA PROJECTS AND SERVICES COMMITTEE MEETING

#### 1. Call to Order

Committee Chair Jean Josey called the meeting to order at 4:10pm.

#### 2. Roll Call of Members

#### **Members Present**

Jean Josey, City of Dublin Gina Bonanno, City of Livermore David Haubert, Alameda County (arrived at 4:05pm) Karla Brown, City of Pleasanton

#### 3. Meeting Open to Public

No comments.

#### 4. Minutes of the October 25, 2021 Meeting of the P&S Committee.

Approved: Bonanno/Haubert

Aye: Brown, Josey, Bonanno, Haubert

No: None Abstain: None Absent: None

#### 5. Zero-Emission Bus Study Update

Staff introduced Savannah Gupton of Center for Transportation and the Environment (CTE). Savannah Gupton provided an in-depth PowerPoint and discussed some of the updates to the Zero-Emission Bus (ZEB) Transition Study. The Projects and Services Committee asked questions and discussed the slide presentation with staff and CTE. Staff recommended Fuel Cell Electric Buses (FCEB), due to flexibility in fleet deployment, higher reliability, greater resiliency in times of emergency, future lower hydrogen fuel prices, and opportunities to collaborate with Valley Link project. Staff also noted that there would be less infrastructure needed at Atlantis and transit centers. Staff informed that January 10, 2022 staff will provide a ZEB presentation to the Livermore City Council and also highlighted the following dates:

- January 24, 2022 The Projects and Services Committee will receive a staff report with an action item
- February 7, 2022 Formal Board of Director's approval for zero-emission transition scenario selection
- April 4, 2022 Board of Directors will receive the Final ICT Rollout Plan

Staff received a request from Vice Chair Bonanno to provide a more quantitative risk assessment. Committee Member Haubert suggested a joint/regional type

Request for Proposal (RFP). Chair Josey requested less assumptions in the charts and more of a range versus a conclusion when this is presented to the full Board.

This was informational only.

## 6. Release of Request for Proposals (RFP) for LAVTA and Central Contra Costa Transit Authority Joint Paratransit Procurement

Staff provided the Projects and Services Committee a presentation on the evaluation of the 12-month pilot program with CCCTA for shared paratransit services. Staff noted that overall there has been an improved customer experience and that LAVTA has saved approximately \$290K over the first eight months of the pilot program compared to the procurement that was rejected in February 2021.

The Projects and Services Committee discussed this item with staff.

The Projects and Services Committee forwarded a recommendation to the Board of Directors to approve the request to release an RFP for a joint paratransit procurement with the Central Contra Costa Transit Authority.

Approved: Brown/Bonanno

Aye: Brown, Josey, Bonanno, Haubert

No: None Abstain: None Absent: None

#### 7. Executive Directors Report

Executive Director Michael Tree wished everyone a happy holiday season and New Year's.

Committee Member Brown thanked staff for allowing Pleasanton to use the LAVTA bus in the Pleasanton parade and noted that the driver was friendly and gracious. She also thanked staff and KKIQ for the Toys for Tots donation drive.

#### 8. Preview of Upcoming P&S Committee Agenda Items

#### 9. Matters Initiated by Committee Members

None.

#### 10. Next Meeting Date is Scheduled for: January 24, 2022

#### 11. Adjourn

Meeting adjourned at 5:40pm.

#### Livermore Amador Valley Transit Authority

### STAFF REPORT

SUBJECT: Zero-Emission Bus Master Transition Plan

FROM: Toan Tran, Director of Operations and Innovation

DATE: January 24, 2022

#### **Action Requested**

Staff requests the Project & Services Committee recommend the Board of Directors approve Resolution 03-2022, authorizing staff to proceed with the development of the Zero-Emission Bus (ZEB) Rollout Plan using the all fuel cell electric bus transition scenario.

#### **Background**

Under the California Air Resources Board's (CARB) Innovative Clean Transit Rule, LAVTA's new bus purchases are required to be a minimum of 25% ZEBs beginning in 2026 and ramping up to 100% in 2029, with the goal of transitioning the state's entire transit fleet to 100% ZEBs by 2040.

LAVTA has been working with the Center for Transportation and the Environment (CTE) to perform a ZEB study. The goal of the study is to develop a board-approved transition plan outlining the capital projects required to fully electrify the fleet in accordance with the CARB Innovative Clean Transit Rule and LAVTA's local priorities by July 1, 2023.

#### Discussion

The study analyzed several different zero-emission fleet scenarios and the resources and costs required, and compared them to a baseline. The scenarios were:

- Battery electric bus (BEB) only;
- Battery electric and fuel cell electric mixed fleet;
- Fuel cell electric bus (FCEB) only,

In each scenario, CTE assessed the assumptions and requirements for LAVTA's routes, service and operations, fleet replacement plan timeline, fuel and charging, facilities and infrastructure, maintenance, associated capital costs, and total cost of ownership.

Staff and CTE provided in-depth presentation on the findings of the study and highlighted the advantages and disadvantages of each scenario at the September 2021 Board of Directors meeting and at the December 2021 Project & Services Committee meeting. A copy of the ZEB Transition Master Plan was also provided to the board for review.

As discussed at the board and committee meetings, each scenario presents its own set up benefits and challenges. However, in evaluating the long-term financial and operational implications, the FCEB scenario offers the greatest balance among the three options.

Total cost of ownership is not the only thing that matters, operational payoff is also very important to consider. Some of these operational factors include:

- Operating range FCEBs offer comparable range to the existing hybrid diesel buses, which will provide greater flexibility in deployment than BEBs.
- Fueling time Fueling time for BEBs is much longer than for FCEBs.
- Resiliency FCEBs is more resilient following a major disaster. If there's a power outage, a BEB fleet would be non-operational while a FCEB fleet will be ready for service once the backup power generator is up and running.
- Reliability and availability Based on a recent study conducted by a neighboring agency, the data shows that FCEBs have a higher reliability and availability rates than BEB

Additionally, the general expectation is that hydrogen fuel prices will decrease over the next decade with more suppliers entering the market and more hydrogen production plants being built. For these reasons, staff recommends proceeding with the FCEB scenario for the development of the ZEB Rollout Plan.

#### Recommendation

Staff requests the Project & Services Committee recommend the Board of Directors approve Resolution 03-2022, authorizing staff to proceed with the development of the Zero-Emission Bus Rollout Plan using the all fuel cell electric bus transition scenario.

#### Attachments:

1. Resolution 03-2022 ZEB Transition Path

#### RESOLUTION NO. 03-2022

# A RESOLUTION OF THE BOARD OF DIRECTORS OF THE LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY AUTHORIZING STAFF TO PROCEED WITH THE DEVELOPMENT OF THE ZERO-EMISSION BUS (ZEB) ROLLOUT PLAN USING THE ALL FUEL CELL ELECTRIC BUS TRANSITION SCENARIO

**WHEREAS**, Under the California Air Resources Board's (CARB) Innovative Clean Transit Rule, LAVTA's new bus purchases are required to be a minimum of 25% ZEBs beginning in 2026 and ramping up to 100% in 2029, with the goal of transitioning the state's entire transit fleet to 100% ZEBs by 2040; and

**WHEREAS**, LAVTA has been working with the Center for Transportation and the Environment (CTE) to perform a ZEB study; and

**WHEREAS**, the goal of the study is to develop a board-approved transition plan outlining the capital projects required to fully electrify the fleet in accordance with the CARB Innovative Clean Transit Rule and LAVTA's local priorities by July 1, 2023; and

**WHEREAS**, the study analyzed several different zero-emission fleet scenarios and the resources and costs required, and compared them to a baseline; and

**WHEREAS**, the scenarios were: battery electric bus (BEB) only, fuel cell electric bus (FCEB) only, and BEB and FCEB mixed fleet; and

**WHEREAS**, in evaluating the long-term financial and operational implications, the FCEB scenario offers the greatest balance among the three options; and

WHEREAS, FCEBs provide greater flexibility in deployment due to the longer operating range, FCEBs have much shorter fueling time, FCEBs is more resilient following a major disaster, FCEBs have higher reliability and availability rate, and the general expectation is that hydrogen fuel prices will decrease over the next decade with more suppliers entering the market and more hydrogen production plants being built

**NOW, THEREFORE, BE IT RESOLVED**, by the Board of Directors of the Livermore Amador Valley Transit Authority hereby authorizes staff to proceed with the development of the Zero-Emission Bus Rollout Plan using the all fuel cell electric bus transition scenario.

**PASSED AND ADOPTED** this 7<sup>th</sup> day of February 2022.

Karla Brown, Chair	

ATTEST:

	Michael Tree, Executive Director
APPROVED AS TO FORM:	
Michael Conneran, Legal Counsel	_

Livermore/Amador Valley Transit Authority

#### **EXECUTIVE DIRECTOR'S REPORT**

January 2022

Information will be provided at the Project and Services Committee meeting.

### **LAVTA COMMITTEE ITEMS - February 2022 - June 2022**

### **Projects & Services Committee**

February Minutes DAR Customer Satisfaction Survey	Action X	Info X
March Minutes ZEB ICT Rollout Plan MOU with Las Positas College (Student Pass Program)	Action X X X	Info
April Minutes On-Vehicle Advertising Contract Award	Action X x	Info
May Minutes Fall Service Changes (effective August)	Action X X	Info
June Minutes TAAC Appointments	Action X X	Info