



Tri-Valley Hub Network Integration Study

LAVTA Board

Monday, June 7, 2021
Via Teams Conference Call

Agenda for Presentation



- I. Study Overview
- II. Tri-Valley Hub Location
- III. Transit Improvements to Address Gaps in the State Rail Network
- IV. Tri-Valley Hub Improvements

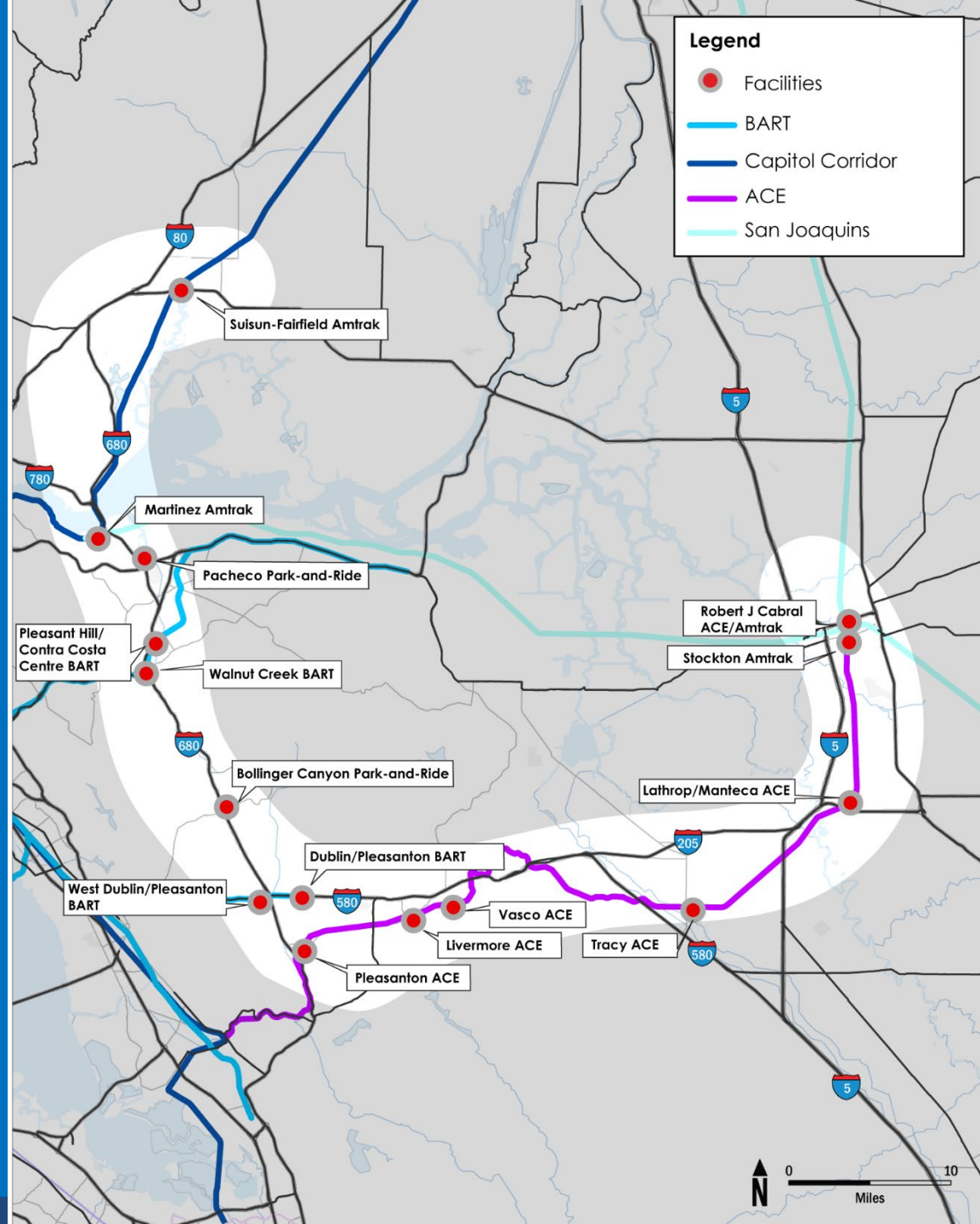
Purpose of the Study and Sponsors



- Threefold Purpose
 1. Address Gaps in the State Rail System with Transit Improvements on I-680 and I-580 Corridors
 2. Identify the Location for the Tri-Valley Hub
 - Linkage with existing and future transit and rail (BART, ACE, Wheels, County Connection, Valley Link, etc.)
 3. Identify High-Level Improvements at the Selected Tri-Valley Hub to Enhance Function and Appearance
- California State Transportation Agency (CalSTA) funded the study through a Transit and Intercity Rail Capital Program (TIRCP) grant
- Caltrans participated on the TAC and provided oversight

Study Area

- Tri-Valley Hub
 - Three potential locations
- I-680 Corridor
- I-580 Corridor



Project Study Team



- LAVTA provided project management
- Technical Advisory Committee (TAC) provided guidance and comment
- Consultant team conducted the technical analysis
 - Ascendal Group
 - AECOM Technical Services

TAC Membership



- Caltrans
- BART
- Alameda CTC
- STA
- City of Pleasanton
- Solano County Transit
- CCTA
- CA HSR
- CalSTA
- Innovate 680
- SJRTD
- SJCOG
- City of Dublin
- County Connection
- CCJPA
- MTC
- ACE

Study Process



- 20-month timeline: October 2019 - May 2021
- Four TAC meetings covering key milestones
 - Identification of a Tri-Valley Hub
 - I-680 Express Bus ridership estimate
 - Conceptual service plan for I-680 Express Bus
 - Improvements for the Tri-Valley Hub
- Four technical memoranda covering the key milestones presented to the TAC for review
- Draft and Final Reports incorporating TAC comments

TRI-VALLEY HUB

Tri-Valley Hub Identified



First Step in the Analysis – Three (3) Locations Evaluated

- Pleasanton ACE
- West Dublin/Pleasanton BART
- **Dublin/Pleasanton BART – selected**

Tri-Valley Hub Identified (cont.)



Selection of Dublin/Pleasanton BART Based on Various Factors:

- Multiple transit operators already serve the station
 - BART, Wheels, County Connection, AC Transit, Amtrak Thruway, SJRTD, MAX, StaRT
- Future Valley Link service from North Lathrop in ~2028
- New Parking Capacity to Come Online
- Robust Potential to Improve Existing Facilities, such as:
 - Bus bays, AV shuttle deployment, expanded bike and scooter storage/parking, expansion of sidewalk covers for pedestrians, electronic wayfinding

BUS SERVICE IMPROVEMENTS

California State Rail Plan



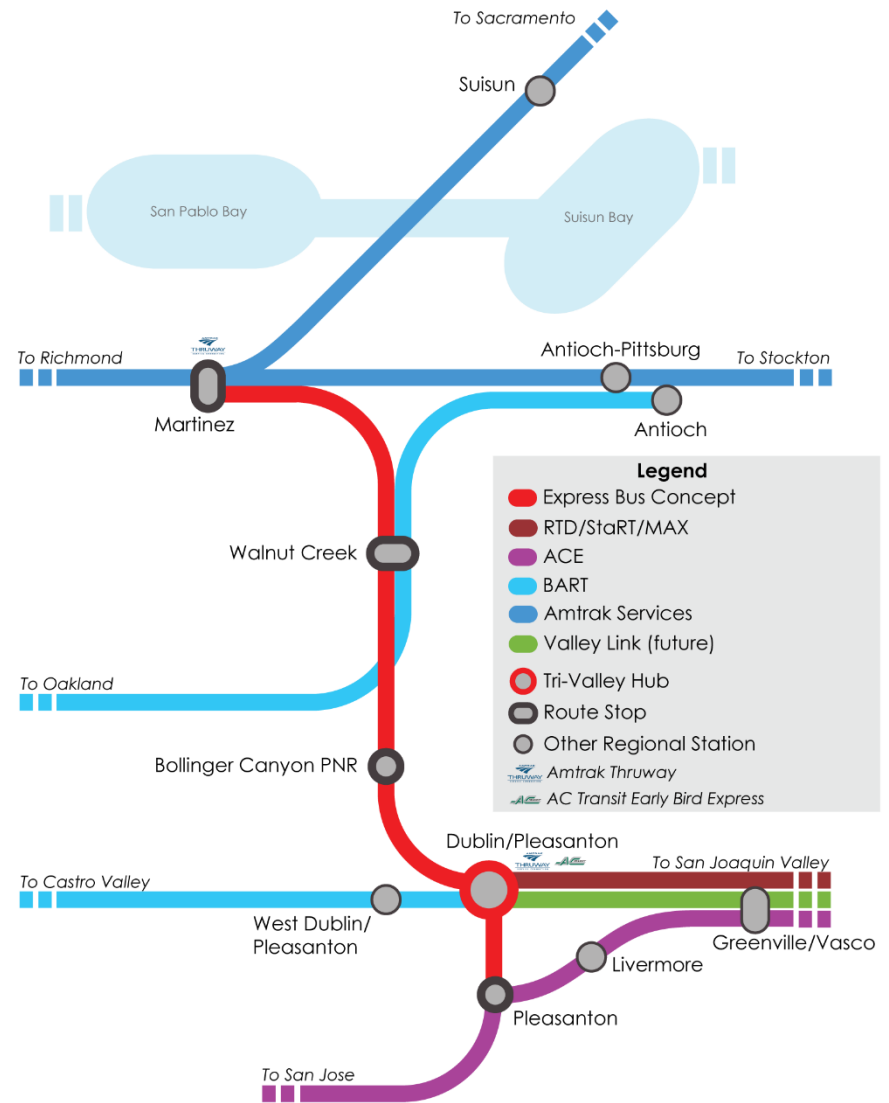
- Express Bus service along the I-680 corridor identified as a need
- Service implementation assumed in 2022
- Headways: ~hourly northbound and southbound Monday through Friday
- Connections to state rail and transit systems: Capitol Corridor, San Joaquins, ACE, BART and bus services



Northern California Service Vision, 2040

Route for I-680 Express Buses:

- Provides a one-seat ride between Martinez and the Tri-Valley Hub
- Produces strong ridership: 850 per weekday on average
- Maximizes rail connections and minimizes route miles
- Lowers capital and O&M costs
- Can be extended to Suisun as SMART builds out from Marin County



Operating Plan Details



- Service to have its own branding
 - Paint scheme and logo to identify it as new service
- Five used buses at start-up
 - Transitioning to zero-emission buses by 2027
- Bollinger Canyon Park-&-Ride
 - New transit stop to serve Bishop Ranch
- Rail and Transit Connections
 - Capitol Corridor, San Joaquins at Martinez Amtrak
 - BART plus future Valley Link at Dublin/Pleasanton BART
 - ACE at Pleasanton ACE (commute period)
 - Bus services at Martinez, Walnut Creek BART, Dublin/Pleasanton BART, and Pleasanton ACE

Next Steps: Governance and Funding



- Governance: Two concepts were considered
 - A Joint Powers Authority (JPA) could be established to govern the new service, consisting of the agencies in the operational area, i.e. CCCTA, LAVTA, and STA.
 - Alternatively, a joint operation involving the three agencies could be established, along the lines of SolanoExpress.
 - ☐ TAC members showed a preference for a joint operation
- Funding: **A new funding source will be needed.**
 - Candidate sources: SB1, TIRCP, Sustainable Communities Grants, Strategic Partnership Grants, local sales tax.

I-580 Transit Improvements



- Existing Services
 - RTD, MAX, StaRT, Amtrak Thruway
- Future Services
 - Valley Link, expansion of ACE
- Improvements
 - Future I-205 managed lane project and I-580 interchange projects present opportunities for transit service improvements

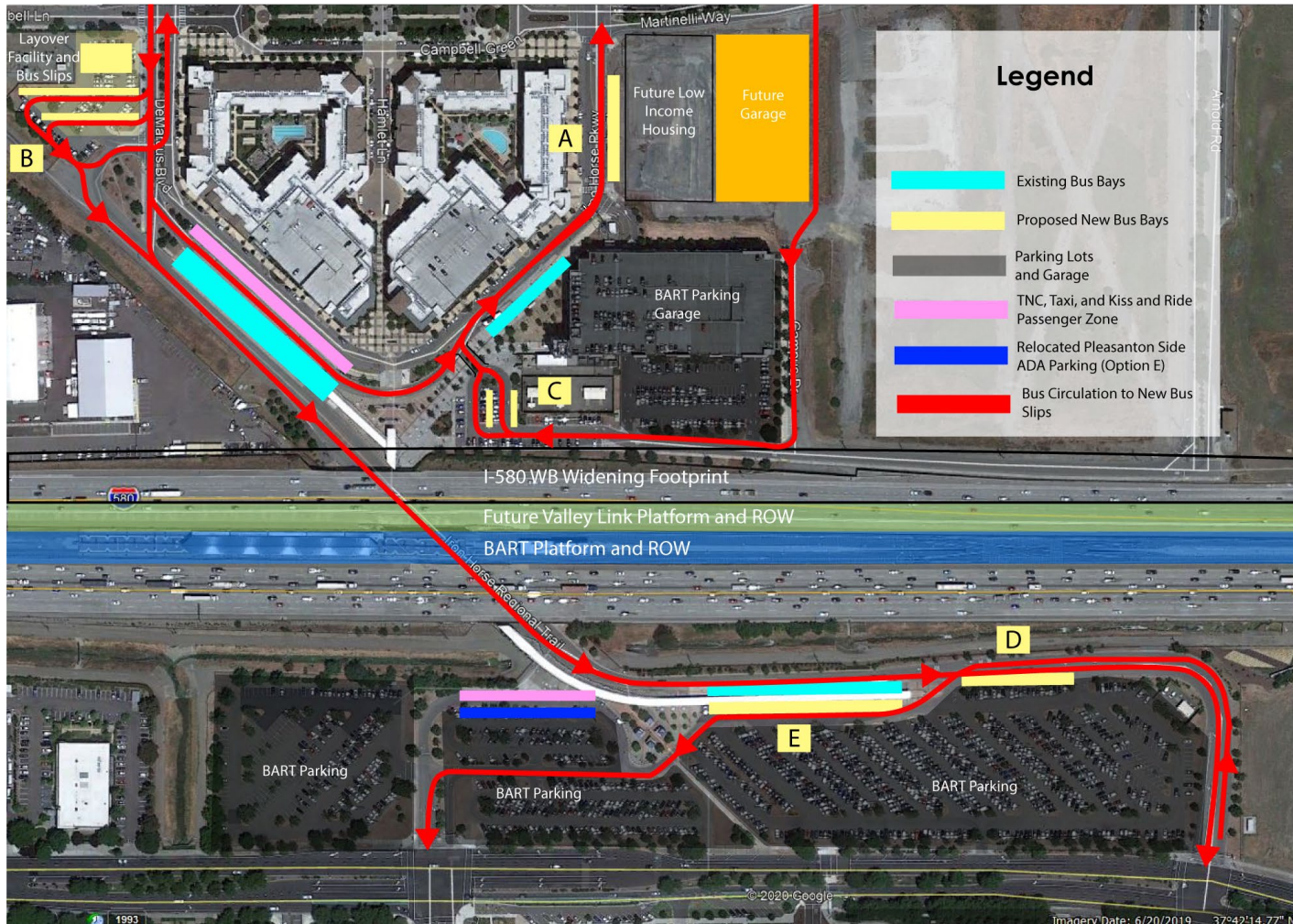
TRI-VALLEY HUB IMPROVEMENTS

Conceptual, Incremental Improvements



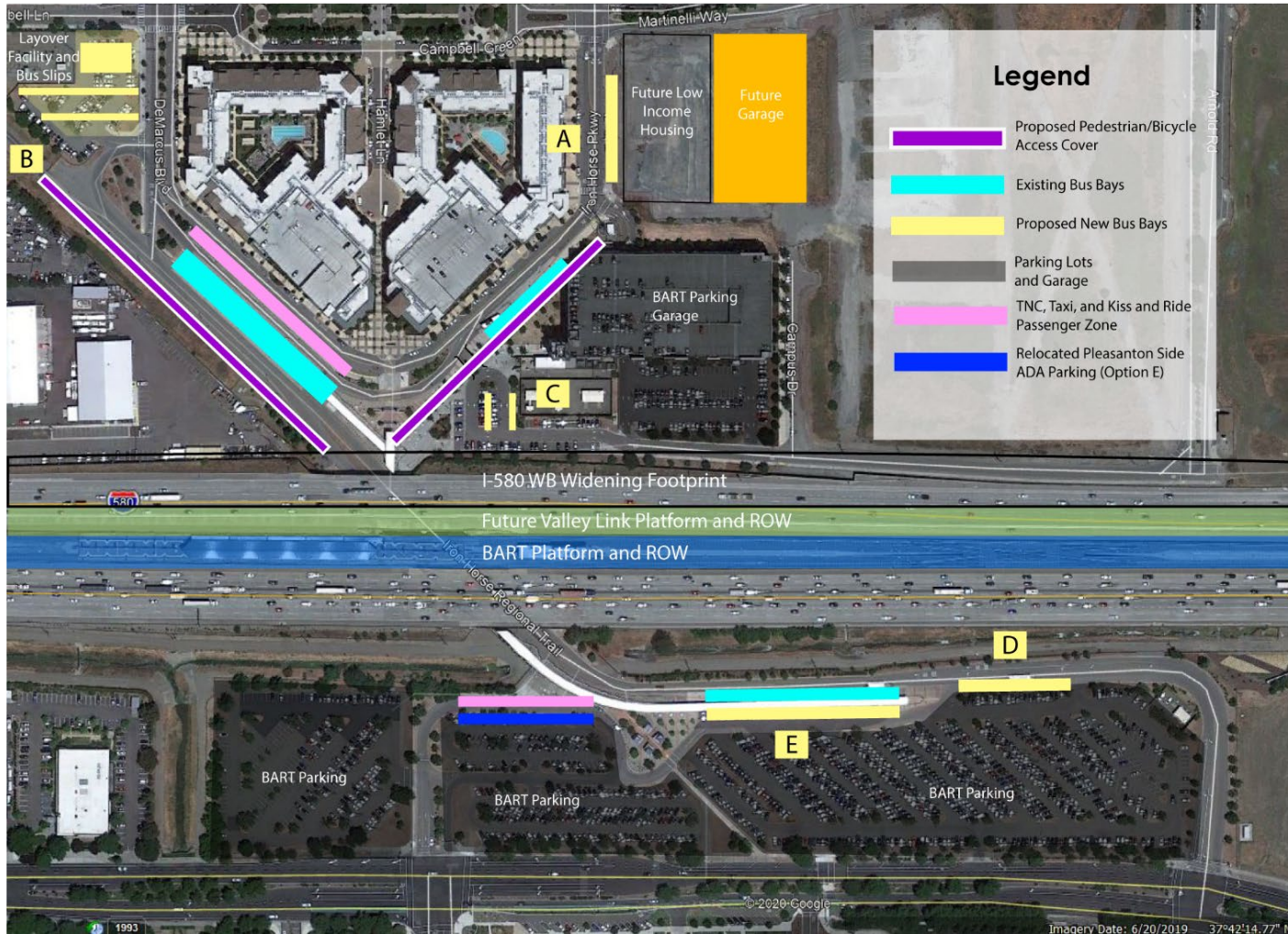
- Improvements are conceptual and scalable to demand
- Improvements are incremental, that is, they complement existing facilities
- Improvements must be supported by all facility users (BART and other transit operators), plus the cities of Dublin and Pleasanton

Bus Bays: Five Options Considered



Recommendation: D and E can be implemented first with least impacts

Proposed Sidewalk Covers



Covers offer shade in summer and protection from rain in winter

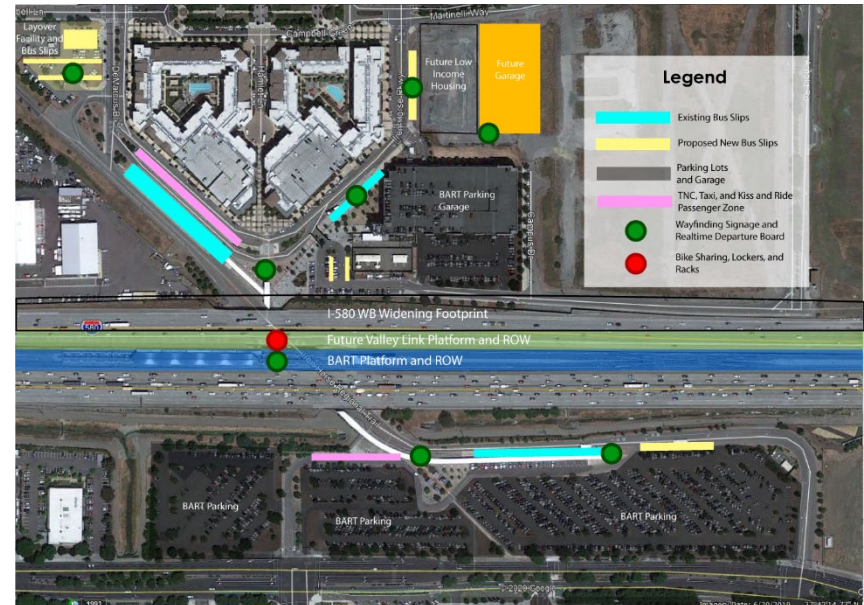
Wayfinding and Bicycle Improvements



Electronic Wayfinding



Locations for Signs & Expanded Bike Storage



Circulation Improvement Concept



AV Shuttle



AV service can build off test deployment

AV Route Concept



Study Conclusions



- Move forward with implementing I-680 Express Bus service between Martinez and the Tri-Valley Hub, i.e. Dublin/Pleasanton BART.
- Establish a governance structure.
- Secure a funding source.
- Work with cities and operators at Dublin/Pleasanton BART to build consensus on improvements enhancing the facility's ability to serve as a successful Tri-Valley Hub.

QUESTIONS AND ANSWERS

THANK YOU!

Tri-Valley Hub Improvement Costs in 2020 Dollars



- **Additional Bus Bays**
 - Alternative A: \$598,000
 - Alternative B: \$1,930,000
 - Alternative C: \$1,132,000
 - Alternative D: \$818,000
 - Alternative E: \$1,421,000
- **Sidewalk Covers: \$458,000**
- **AV Shuttles**
 - Capital costs: \$2.7 million
 - O&M costs: \$4.4 million
- **Wayfinding: \$53,000**
- **Additional Bike & Scooter Lockers: \$27,000**

Express Bus Implementation Costs and Financials in 2022 Dollars



- Five used buses at start-up: \$2.4 million
 - Transitioning to zero-emission buses by 2027
- Bollinger Canyon Park-&-Ride: \$478,000
 - New transit stop to serve Bishop Ranch
- Financials in 2022
 - Revenue: \$1.2 million
 - O&M costs: \$1.6 million
 - Subsidy: \$0.4 million