

# EAST CONTRA COSTA COUNTY (ECCC) DYNAMIC PERSONAL MICRO TRANSIT (DPMT) PROJECT

Prepared for SIP-adus Workshop 2021  
*Innovation for Automated Driving for Universal Services*



Presented by  
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Advanced Mobility Group













GLYDWAYS 1

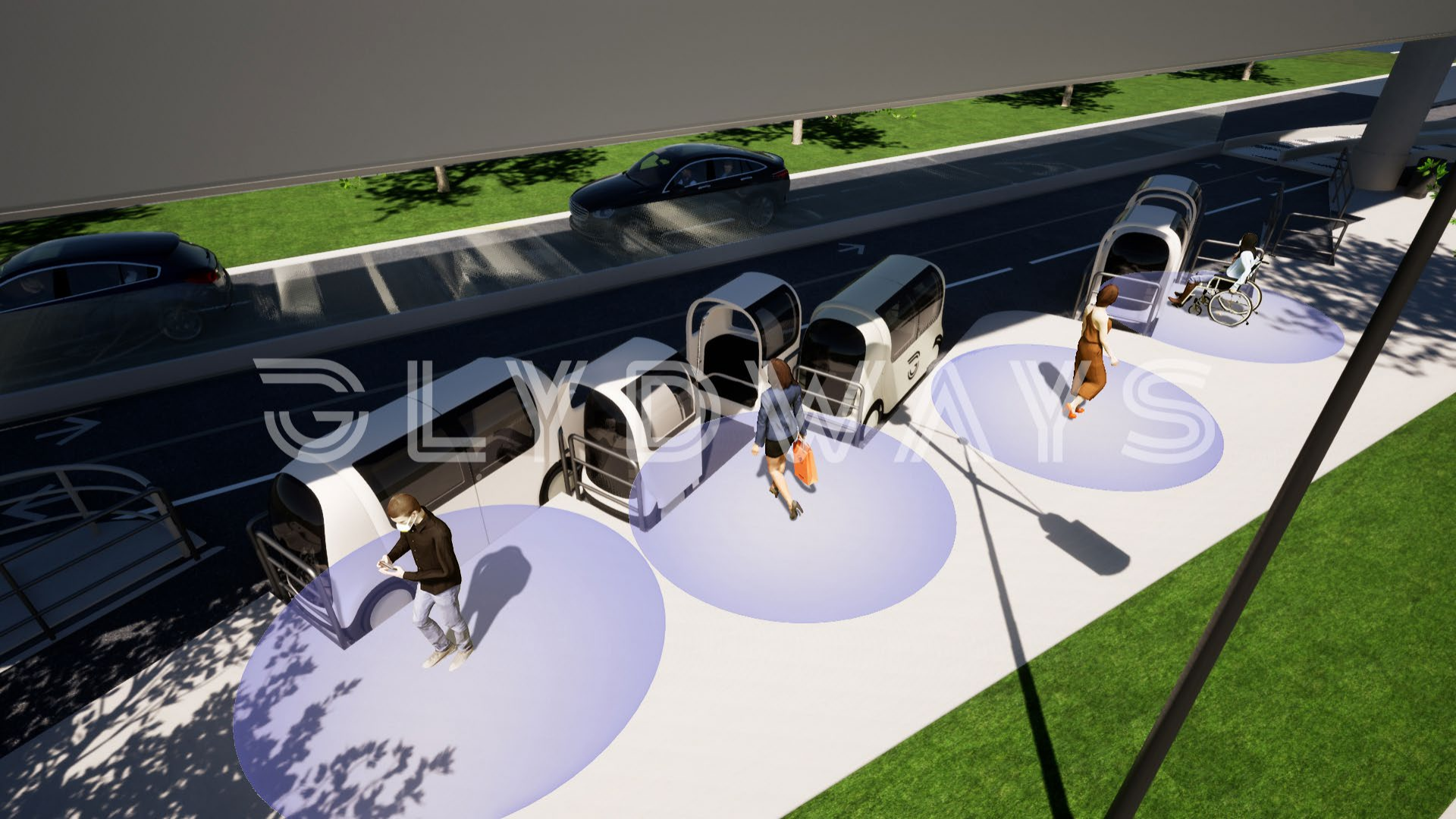
2

3

4

5

ACOM





STEAM  
DISINFECTING



UV  
DRYING

Detailing

Quality  
Control

Efficient cleaning & Sanitization



# SAFETY

- ✓ **Personalized Travel:**
  - ✓ Your ride
  - ✓ Your personal space
  - ✓ On demand and safe



- ✓ **Safe Right of Way:** Closed corridor means it never mixes people and vehicles.

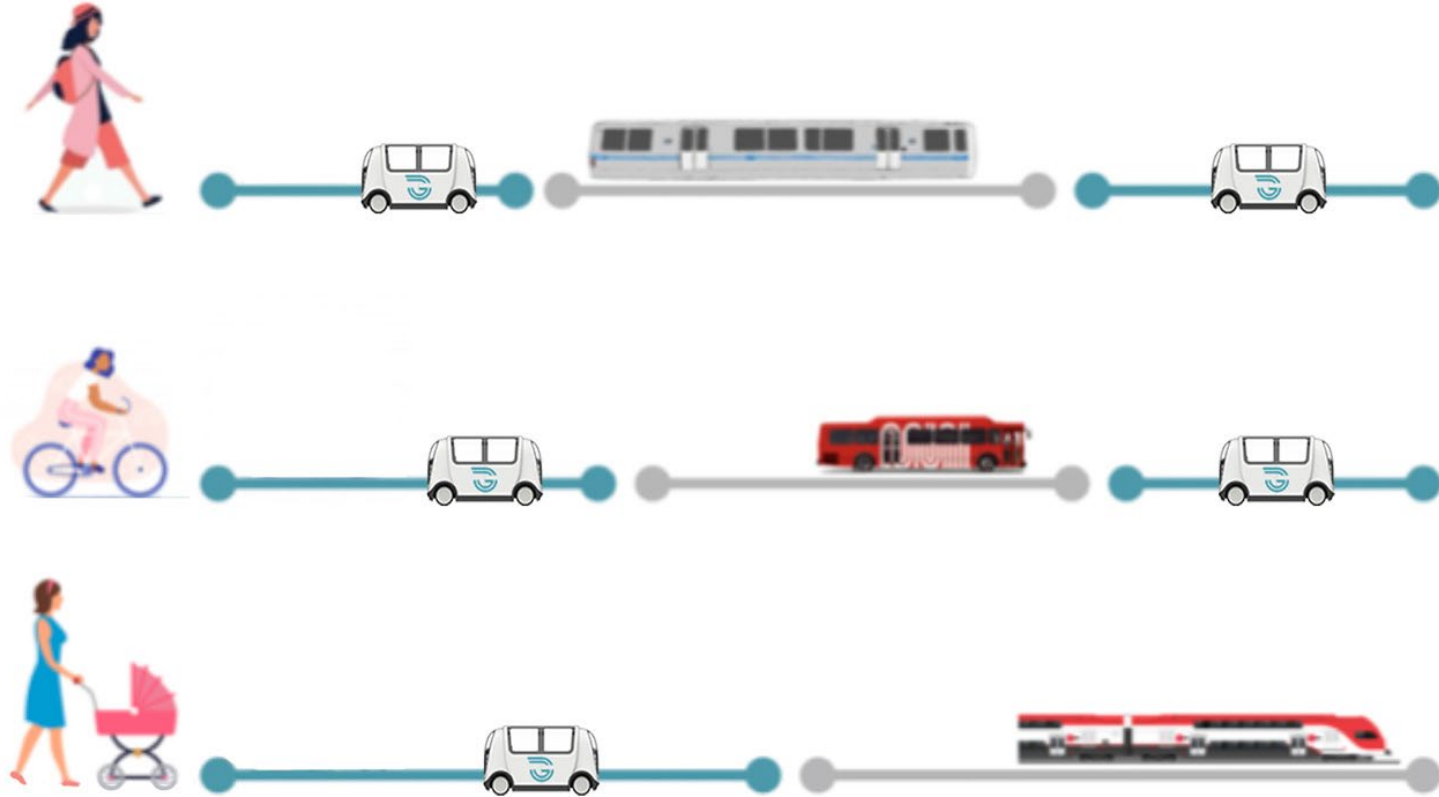


# SAFETY AND SECURITY

- ✓ **Built-in Multi-layered Protection and Security:**
  - ✓ Security Barriers
  - ✓ Sensors
  - ✓ SOS buttons
  - ✓ Cameras
  - ✓ Instant emergency response
  - ✓ Vehicles that stop/react in concert
  
- ✓ Real-time monitoring inside and outside of the network and intrusion alarm system.



# CONNECTION PROTECTION - A COMPLETE JOURNEY



# DPMT DEMONSTRATION AT GOMENTUM STATION

GLYDWAYS







# FEASIBILITY STUDY WORKFLOW



A blue-tinted background image of a transit station. In the foreground, a white bus with a stylized 'G' logo is partially visible on the left. In the middle ground, a person is pushing a stroller across a crosswalk. In the background, a modern transit station with a curved roof and glass panels is visible, with several people walking. The sky is overcast with a few birds flying. On the right side of the image, there are several white diagonal lines of varying lengths.

# GOALS AND OBJECTIVES



# GOALS AND OBJECTIVES – EAST COUNTY

- ✓ Provide Transit Accessibility by building a network of Dynamic Personal Micro Transit (DPMT) system at no cost to the Cities.
- ✓ Provide Transit Accessibility to assure “Economic Development” and attract employers.
- ✓ Conduct a Feasibility Study in DBFOM environment to attract potential Public Funding and Private Financing.

A green-tinted background image of a transit station. In the foreground, a white bus with a blue 'G' logo is partially visible on the left. In the middle ground, a person is pushing a stroller across a crosswalk. In the background, a modern transit station with a curved roof and glass panels is visible, with several people walking around. The sky is overcast with a few birds flying. On the right side of the image, there are several white diagonal lines of varying lengths.

# PROPOSED ROUTING PLAN

# ECCC DPMT ROUTING PLAN










## Pittsburg Route

## Antioch Route

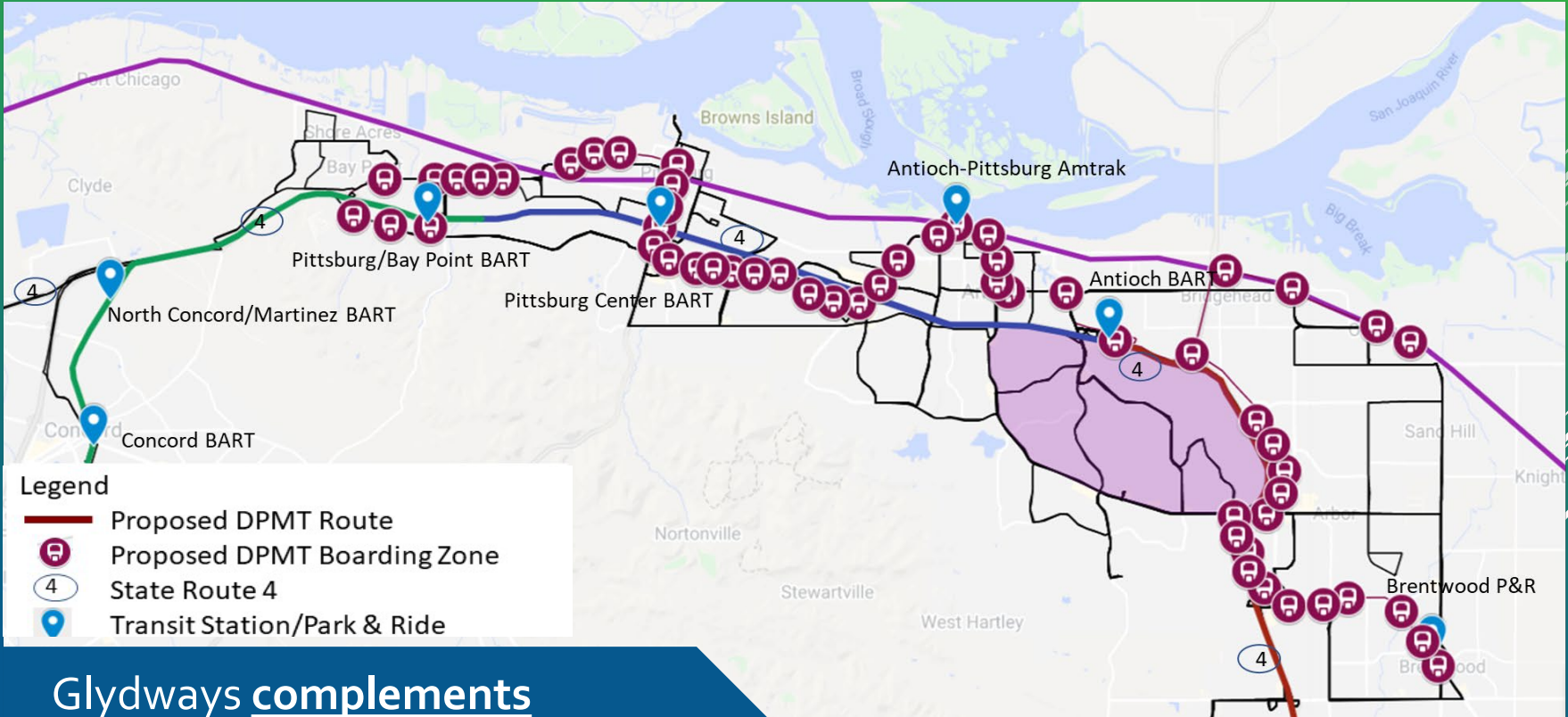
## Oakley Route

## Brentwood Route

### Legend

-  Pittsburg-Bay Point BART to Los Medanos College
-  Los Medanos College to Antioch BART
-  Antioch BART to Future Brentwood Innovation Center
-  Future Brentwood Innovation Center to The Streets of Brentwood
-  Future Brentwood Innovation Center Loop
-  The Streets of Brentwood to Brentwood Park and Ride
-  SR-4 to Future Oakley Park and Ride
-  Neroly Road to Future Oakley Park and Ride
-  Future Oakley Park and Ride to Future Regional Park

# TRANSPORTATION SERVICES WITH DPMT

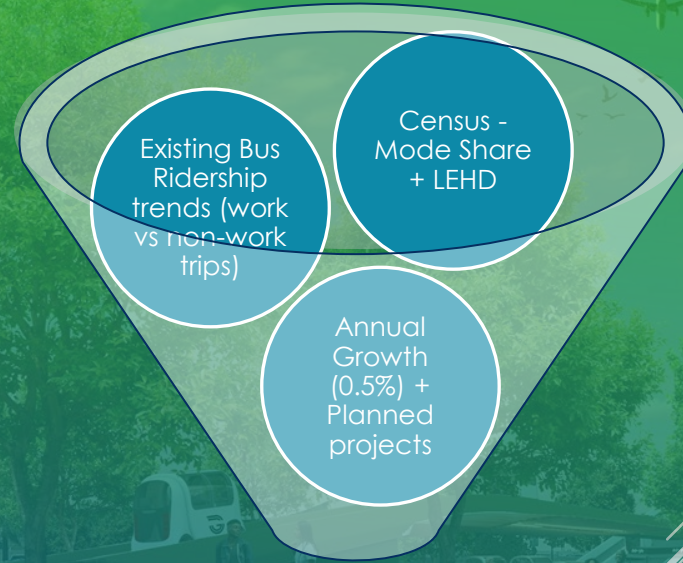


Glydways complements  
existing transit and other active  
transportation modes

# DEMAND ANALYSIS AND PROJECTED RIDERSHIP

The background features a stylized illustration of a transit station. In the foreground, a white bus with a blue 'G' logo is partially visible on the left. In the middle ground, a person is pushing a stroller, and another person is walking. In the background, a modern transit station with a curved roof and glass panels is visible. The entire scene is overlaid with a green and blue gradient. On the right side, there are several white diagonal lines. The text 'DEMAND ANALYSIS AND PROJECTED RIDERSHIP' is written in white, bold, sans-serif font across the center.

# RIDERSHIP DEMAND ESTIMATE



**13 M** (Potential Demand)

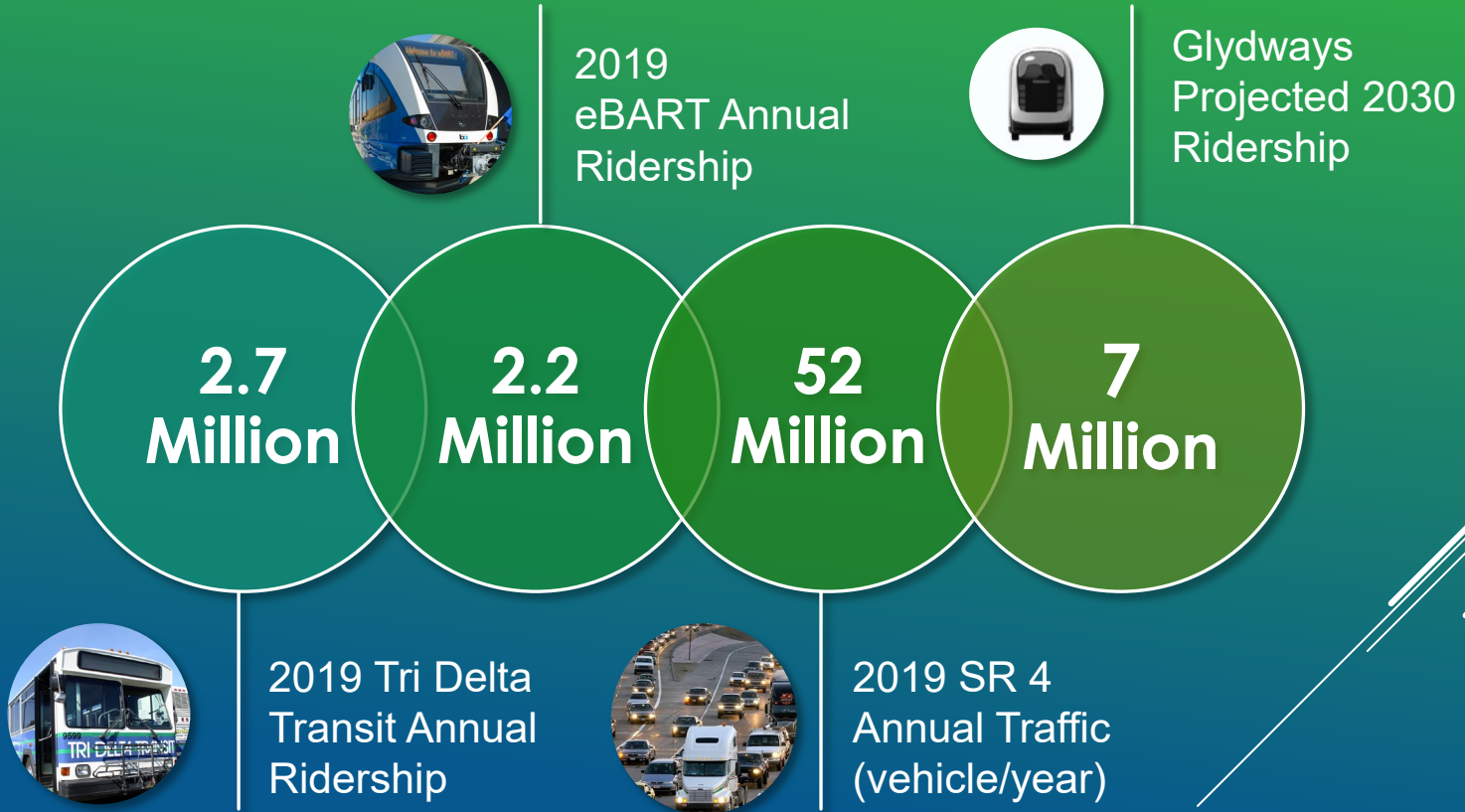


**7**

Annual  
Ridership  
Estimate



# RIDERSHIP IN PERSPECTIVE



2019  
eBART Annual  
Ridership



Glydways  
Projected 2030  
Ridership

**2.7  
Million**

**2.2  
Million**

**52  
Million**

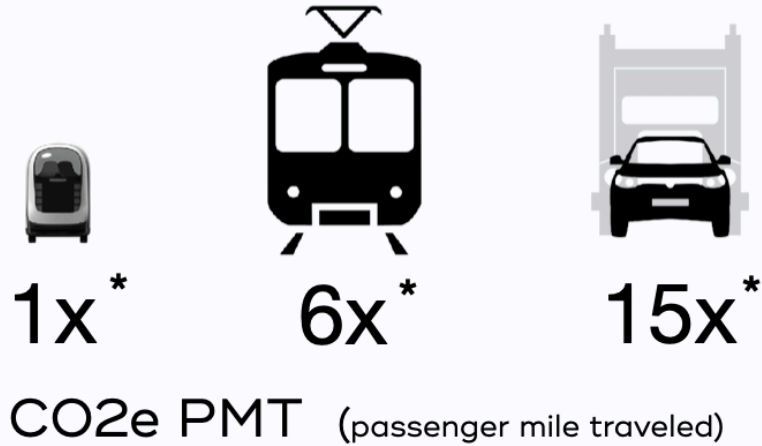
**7  
Million**



2019 Tri Delta  
Transit Annual  
Ridership



2019 SR 4  
Annual Traffic  
(vehicle/year)



11

## EMISSIONS REDUCTION\*

- ✓ 15x less emissions than cars/buses
- ✓ 6x less emissions than light rail

\* Carbon Equivalent emissions over a 30-year lifetime analysis with solar infrastructure:  
gCo2e PMT: Glydways: 37, Light Rail: 224, Cars: 573



# BENEFITS



**Support Economic  
Development and Create  
Jobs**



Sustainable, speedy deployment with  
Public/Private Partnership (P3)



**Congestion Relief with  
Deployment of First  
Micro-Transit Network**



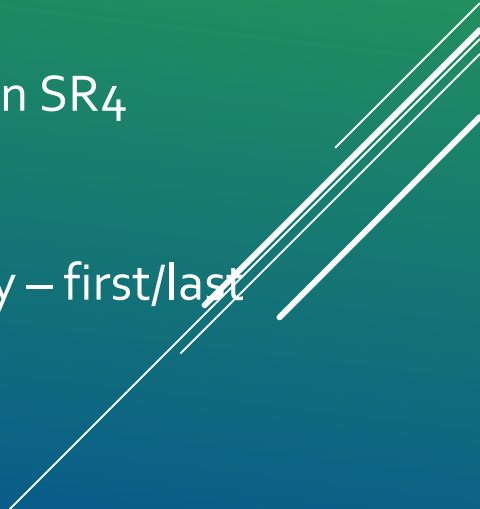
Reduction in VMT on SR<sub>4</sub>



**Increased Access for  
Underserved  
Communities**



Transit accessibility – first/last  
mile connectivity



# FINANCIAL PLAN

The image is a green-tinted architectural rendering of a transit station. In the foreground, a small, white, rounded vehicle with a blue 'G' logo is parked on a paved area. To its left, a larger white vehicle is partially visible. In the background, a transit station platform is shown with several people, including a woman pushing a stroller. The station has a modern design with a curved roof and glass panels. The sky is overcast with a few birds flying. The overall scene is set in an urban environment with trees and buildings in the distance. The text 'FINANCIAL PLAN' is overlaid in white, bold, sans-serif font on the left side of the image.

# POTENTIAL PUBLIC FUNDING SOURCES

- ✓ State Transportation Improvement Program (STIP)
- ✓ Rebuilding American Infrastructure with Sustainability and Equity (RAISE), formerly BUILD
- ✓ BAAQMD (Air District)
- ✓ Regional Transportation Plan (RTP)
- ✓ East Contra Costa Fee and Revenue Financing Authority
- ✓ Active Transportation Program (ATP)
- ✓ Climate Action Plan for Transportation Infrastructure (CTPTI)
- ✓ Transportation Infrastructure Finance and Innovation Act (TIFIA)

# BUSINESS CASE MODELS

- ✓ Public Funding
- ✓ Private Financing
- ✓ Design Build **Finance** Operate Maintain (DBFOM)

A green-tinted architectural rendering of a transit station. In the foreground, a white, rounded, boxy vehicle with a stylized 'G' logo is partially visible on the left. In the background, a transit station platform with a curved roof is shown, with several people walking. A stroller is being pushed across the platform. The sky is overcast with a few birds flying. The entire image has a green overlay, and there are several white diagonal lines on the right side.

FINAL CONCLUSION

# Real Project and Transportation Solution for ECCC

# SCHEDULE & NEXT STEPS

- Final Report released in April 2021
- All four City Councils, including Tri-Delta Transit Board, approved the Feasibility Study
- Glydways PoC Demonstration at GoMentum Station - ongoing
- Project Development Agreement/discussions – in-progress
- Full engagement with Tri Delta Transit and CCTA
- P3 Procurement Investigation – on the way

# Q&A



**AMG** ADVANCED  
MOBILITY  
GROUP

Thank you  
**Advanced Mobility Group**