

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

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



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Advanced Mobility Group













GLYDWAYS 1

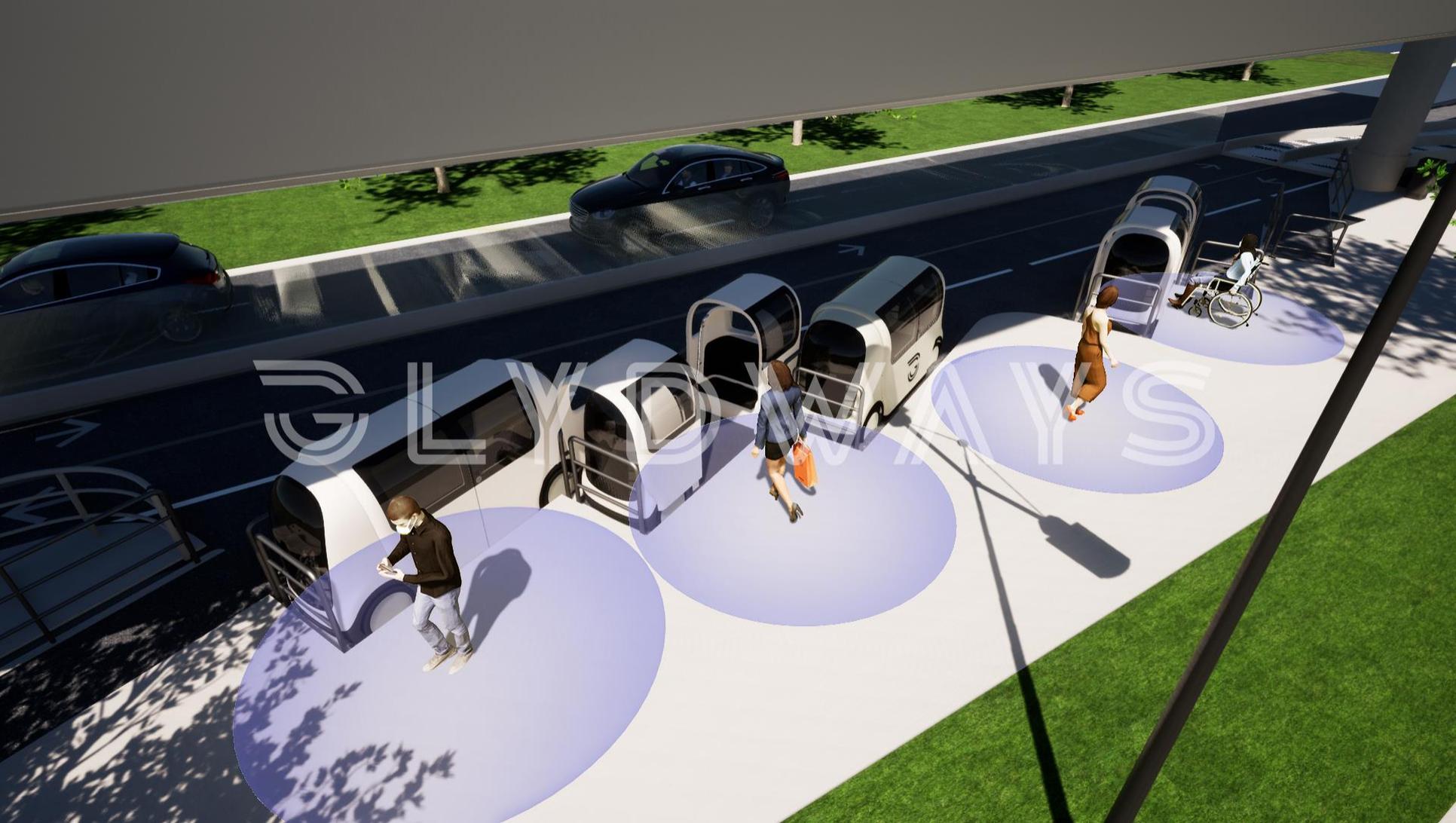
2

3

4

5

ACORN





STEAM
DISINFECTING

UV
DRYING

Detailing

Quality
Control

Efficient cleaning & Sanitization

SAFETY

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



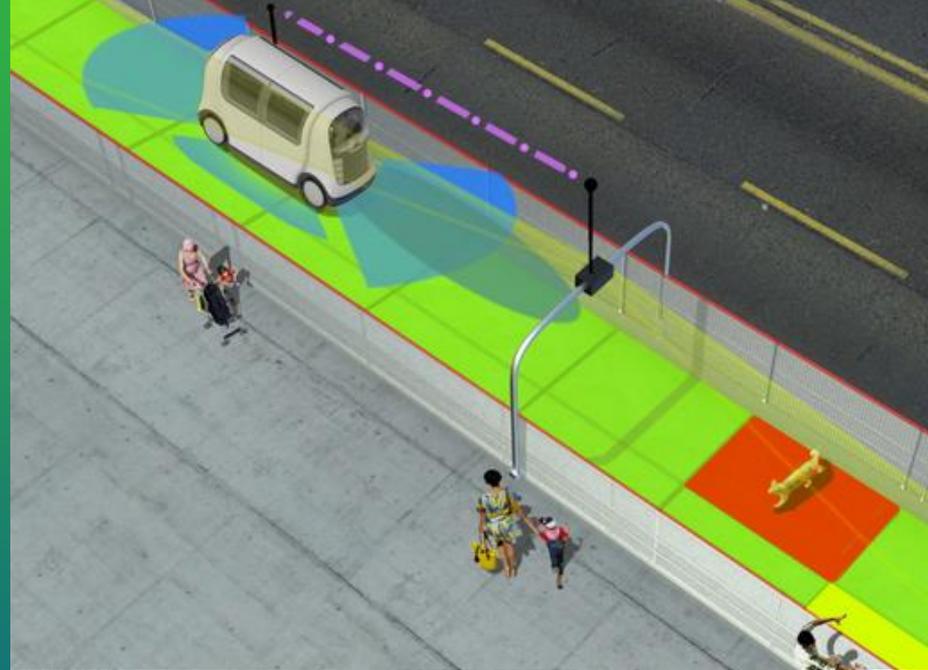
- ✓ **Safe Right of Way:** Closed corridor means it never mixes people and vehicles.



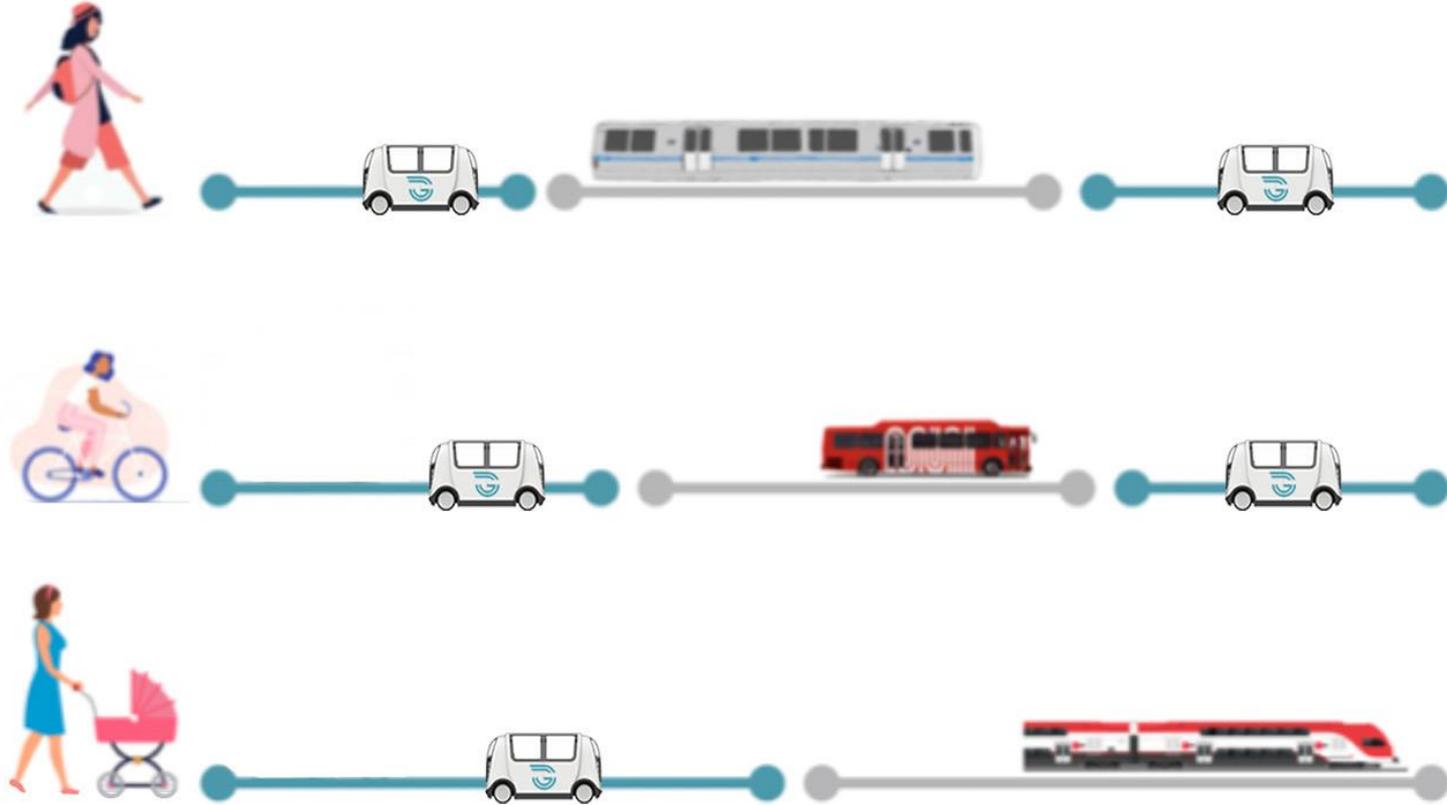
SAFETY AND SECURITY

- ✓ **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.



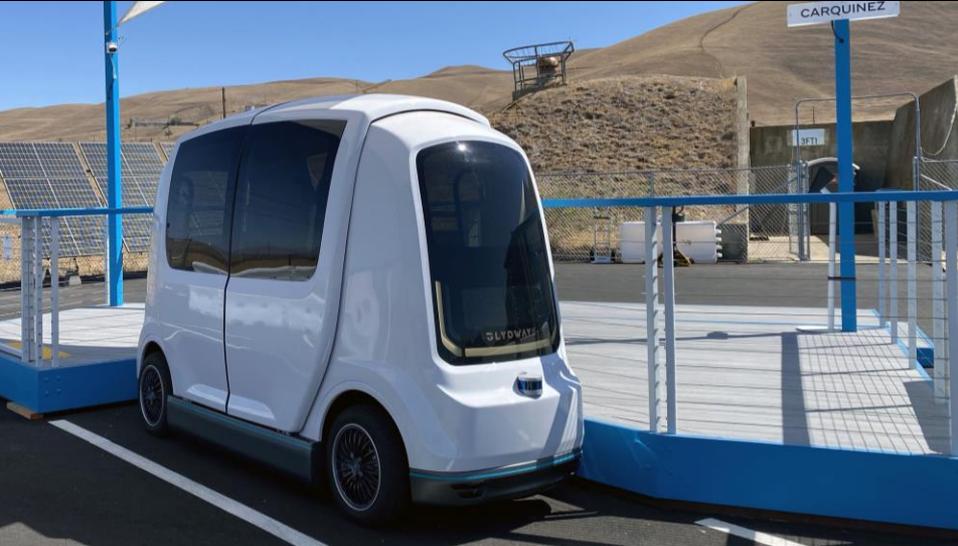
CONNECTION PROTECTION - A COMPLETE JOURNEY



DPMT DEMONSTRATION AT GOMENTUM STATION

GLYDWAYS





FEASIBILITY STUDY WORKFLOW



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.



PROPOSED ROUTING PLAN

ECCC DPMT ROUTING PLAN

Pittsburg Route

Antioch Route

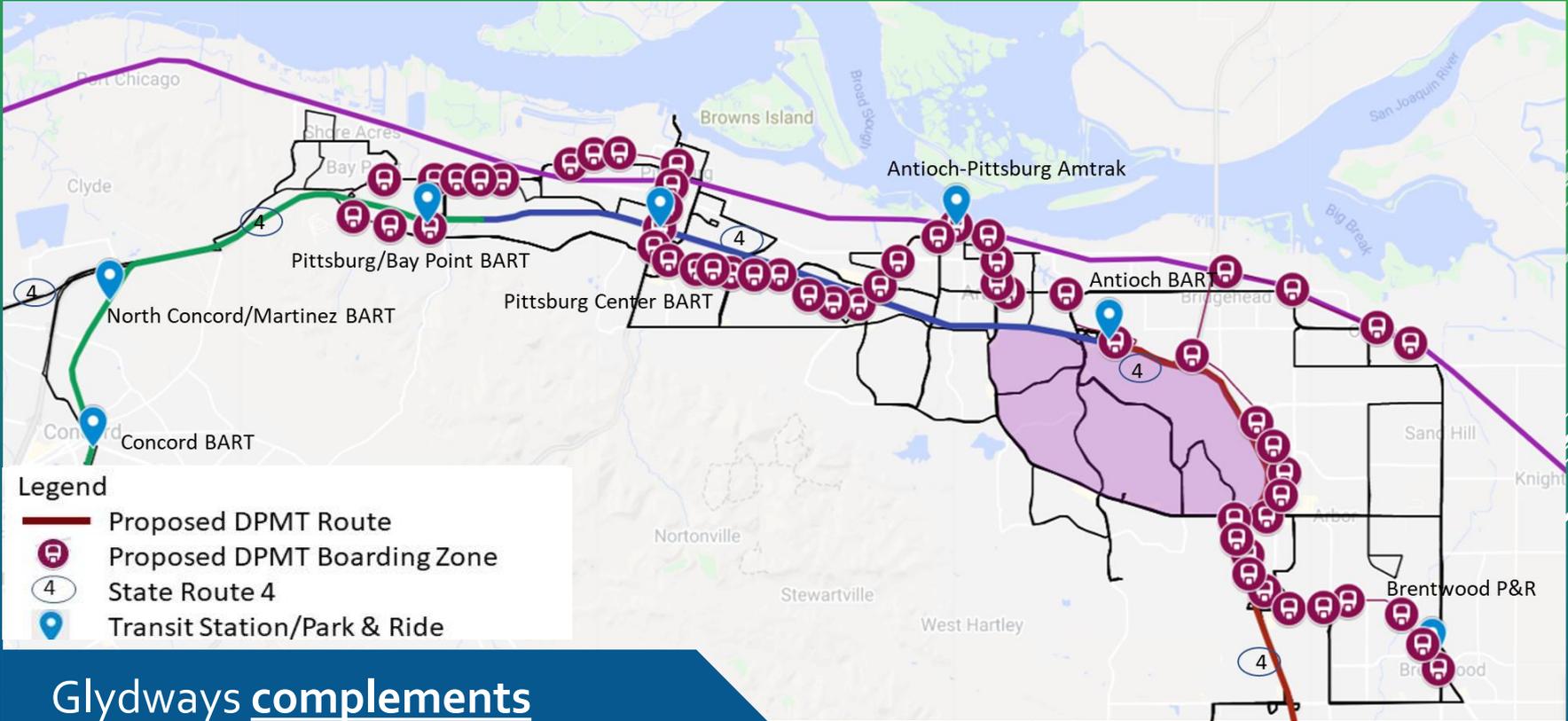
Oakley Route

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

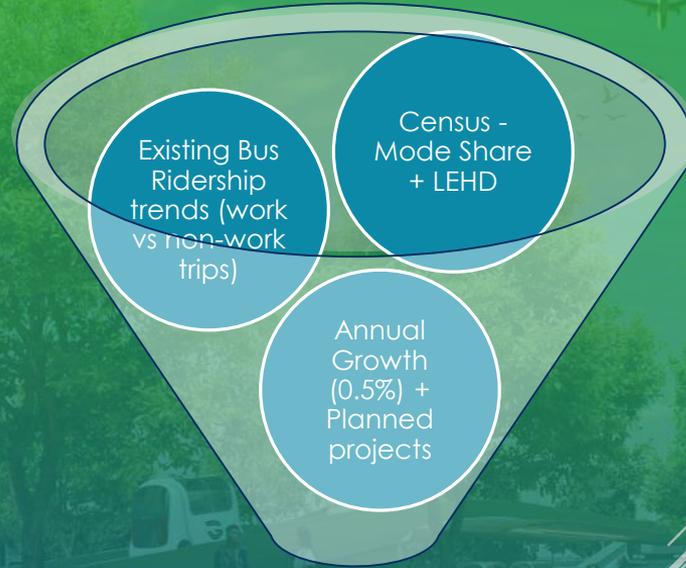


Glydways complements
existing transit and other active
transportation modes



DEMAND ANALYSIS AND PROJECTED RIDERSHIP

RIDERSHIP DEMAND ESTIMATE



13 M (Potential Demand)

7 M Annual Ridership Estimate



RIDERSHIP IN PERSPECTIVE



2019
eBART Annual
Ridership



Glydways
Projected 2030
Ridership

**2.7
Million**

**2.2
Million**

**52
Million**

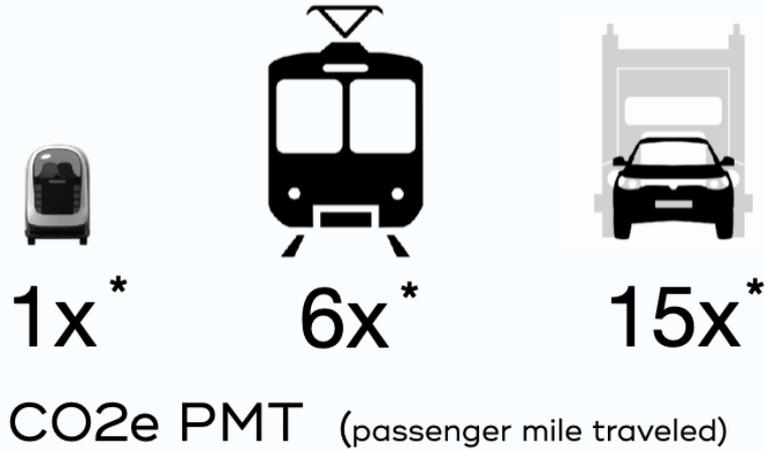
**7
Million**



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 SR₄



**Increased Access for
Underserved
Communities**



Transit accessibility – first/last
mile connectivity



FINANCIAL PLAN

The background is a green-tinted architectural rendering of a transit station. In the foreground, a white, rounded vehicle with a blue 'G' logo is partially visible on the left. In the middle ground, a person is pushing a stroller, and other people are walking. A small, white, rounded vehicle is parked on the right. The background shows a station building with a curved roof and trees. The sky is overcast with a few birds flying. The overall scene is a modern, accessible transit environment.

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)



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