TRANSPLAN Technical Advisory Committee

Participating entities: Cities of Antioch, Brentwood, Oakley and Pittsburg • Contra Costa County
Tri Delta Transit • 511 Contra Costa • Contra Costa Transportation Authority (CCTA) • Caltrans District 4 • BART
TRANSPLAN • State Route 4 Bypass Authority • East Contra Costa Regional Fee & Financing Authority (ECCRFFA)

June 17, 2025 – 1:30 to 3:30 p.m.

Meeting Location:
Antioch City Hall, Third Floor Conference Room
200 H Street, Antioch, CA 94509

Virtual meeting call-in/log-in information:
https://cccounty-us.zoom.us/j/88113740705

Meeting ID Code: 8811 3740 705

Join via audio:
USA 214 765 0478 US Toll
USA 888 278 0254 US Toll-free
Conference code: 198675

AGENDA

*NOTE: The Technical Advisory Committee ("TAC") agenda/packet is only distributed digitally; **no paper copies will be sent.** If you need a printed copy, please contact TRANSPLAN staff.*

Action/Discussion Items (see attachments where noted [♦])

Item 1: Public Comment: The public will have an opportunity to comment on items not on the agenda**.**

Item 2: RECEIVE update on the East County Automated Transit Network (ATN) Project. CCTA staff will provide an update on the status of the East County ATN Project. ♦ **Page 2**

Item 3: RECEIVE miscellaneous TRANSPLAN TAC member comments.

Item 4: ADJOURN to Tuesday, July 15, 2025, at 1:30PM, or other date/time as deemed appropriate by the Committee.

The TAC meets on the third Tuesday of each month, 1:30 p.m., third floor conference room at Antioch City Hall. The TAC serves the TRANSPLAN Committee, the East Contra Costa Regional Fee & Financing Authority, and the State Route 4 Bypass Authority.

Persons needing a disability-related accommodation should contact Robert Sarmiento, TRANSPLAN staff person, at least 48 hours prior to the starting time of the meeting.

TRANSPLAN COMMITTEE

EAST COUNTY TRANSPORTATION PLANNING
Antioch • Brentwood • Oakley • Pittsburg • Contra Costa County
30 Muir Road, Martinez, CA 94553

TO: TRANSPLAN Committee

FROM: TRANSPLAN TAC

DATE: June 17, 2025

SUBJECT: **East County Automated Transit Network (ATN) Project: Project Update**

Recommendation
This is an informational item. No action is required.

Background

At its September 21, 2022 meeting, the Contra Costa Transportation Authority Board (Authority) authorized the release of Request for Proposals (RFP) No. 22-05 to solicit a Developer Team to advance the East County Automated Transit Network (ATN) project. The delivery strategy for the ATN project assumes a Public-Private-Partnership (P3) model that will leverage private sector resources to deliver the Project.

The solicitation and management of the ATN project is a joint effort between the Authority and the East Contra Costa Transit Authority (Tri Delta Transit) (jointly referred to as Authorities). A Memorandum of Understanding defining the roles and responsibilities of each agency in the delivery of the ATN project was executed by the Authorities in July 2023.

In response to RFP No. 22-05, one proposal was received from East County Connection Partners (ECCP), a team comprised of Plenary Americas USA LTD, Glydways Inc, Flatiron West Inc, Circlepoint Inc. and Infrastrategies LLC.

At the July 19, 2023 meeting, the Authority Board authorized execution of System Pre-Development Agreement (SPDA) No. 656 with East County Connection Partners (ECCP). A similar action to award the contract was taken by the Tri Delta Transit Board of Director on June 28, 2023.

The ECCP contract is structured for the contract to be delivered in three distinct phases. The initial two phases will be delivered at no cost to the Authorities.

During Phase 1, the Developer Team completed initial planning activities including identifying an initial viable segment for the East County ATN project that can be sustainably funded or financed through a combination of likely grant funding and ongoing project revenue.

During Phase 2, the Developer Team will commence environmental scoping and apply for grant funding necessary to complete Phase 3 and the Implementation Phase.

During Phase 3, the Developer Team will advance the design of the initial viable segment to 30% and complete additional project development activities.

Phase 1 Activities

On November 7, 2023, ECCP was issued a Notice to Proceed with Phase 1 of the project. ECCP has completed SPDA Phase 1 and has identified three alignment options for an initial viable segment for the project that can be sustainably funded or financed through a combination of likely grant funding sources and ongoing project revenue.

To identify the initial viable segment ECCP, in partnership with the Authorities, conducted outreach to a variety of government stakeholders from November 2023 to February 2024, completing a comprehensive assessment of five Initial Segment options. Engagement efforts included outreach to East County cities (Pittsburg, Antioch, Brentwood, and Oakley) and key right-of-way holders such as Caltrans, BART, and the East Bay Regional Park District. Initial Segment options varied in scope and alignment and a detailed evaluation of each option was completed based on preliminary capital and operational cost estimates, rough order of magnitude (ROM) ridership potential, stakeholder input, right-of-way (ROW) complexities, benefits to Disadvantaged Communities, connectivity to existing transit, and development opportunities.

After considerable evaluation the Authorities and ECCP identified an Initial five-mile Segment along the State Route 4 (SR 4) Corridor for further study. This corridor connects the Antioch BART Station to the Slatten Ranch Shopping Center and the PA1 development area. This corridor not only demonstrated the most financially feasible solution but also offered the highest public utility based on expected usage, supported by planned future commercial and residential development within the study area. Conversely, the other Initial Segment options posed challenges related to access to ROW, particularly implementation around sensitive corridors such as the Delta De Anza Trail and Contra Costa Water District Canal. Stakeholder feedback during initial public meetings indicated these ROW opportunities would pose challenges to implementation.

The preferred corridor for the initial segment includes three alignment options to be further evaluated in the next project phase: the east side of SR 4, the median of SR 4, and the west side of SR 4. Each alignment is approximately five miles in length and features between four and seven access points (stations), with comparable origin and terminus locations.

In addition to the evaluation of initial segment options, other activities completed by ECCP as Part of Phase 1 include:

- **Development of Capital and Operating Cost Estimates**

  ECCP has estimated the total 2029 Design-Build cost for each initial segment to range from $300 million to $385 million, depending on the final alignment. Estimated Year 1 operations and maintenance (O&M) costs are projected between $10 million and $11 million. The average farebox recovery ratio is expected to range from 63% to 66%.

- **Preliminary Environmental Assessment**

  The Study evaluated potential environmental effects that could result with implementation of each alignment option. The assessment identified the following constraints on the project that could trigger adverse effects on the environment:

  - Agricultural resources: There are multiple parcels designated as Prime Farmland near the project's southern terminus; these areas should be avoided to the maximum extent feasible as direct loss of agricultural land would result in a significant and unmitigable impact. Currently, the ATN alignments avoid these areas consistent with the current PA1 development plans.
  - Biological Resources: All the evaluated alignments intersect with Sand Creek, and there are other biologically sensitive areas within or adjacent to portions of the alignments. To minimize impacts to sensitive species and habitat, the project should minimize the footprint in and around Sand Creek and other biologically sensitive areas to the extent feasible.
  - Commercial Facilities: The evaluated alignments could lead to impacts on intersected or adjacent commercial facilities, which could result in decreased economic activity and potentially cause long-term impacts on the commercial viability of this area. The alignments should not be at grade when intersecting commercial parking lots and should not acquire commercial buildings to the extent feasible. The Westside Alignment is the only alignment identified with the potential to result in unmitigable effects on commercial facilities. Ultimately, the goal of the ATN project is to integrate with and enhance the economic development of nearby commercial facilities, which ECCP will continue to focus on through development of the Project.
  - Vibration: There are multiple locations where the proposed alignments would be in close proximity to buildings, infrastructure, and sensitive receptors (such as residents and biological resources). Vibration generated during construction, especially if it involves pile driving, has a high potential to result in substantial adverse effects. The use of less vibratory equipment in proximity to buildings and sensitive receptors should be emphasized to the extent practicable.

  The Study concluded that the initial Segment should be able to avoid any substantial adverse effects on the environment that could trigger preparation of an EIS pursuant to the National Environmental Policy Act (NEPA). It appears the appropriate environmental pathway for compliance with NEPA and the California Environmental Quality Act (CEQA) would be to prepare a joint Environmental Impact Report/Environmental Assessment (EIR/EA).

- **Preliminary Ridership Estimates**

The ECCP Team conducted a ridership study focused on the initial 5-mile ATN segment. The study projects daily ridership in 2040 to range between 3,200 and 5,000 passengers. Notably, the findings indicate that the ATN system is expected to double overall transit ridership in the corridor by 2028. These projections are consistent with the findings of the 2022 East County Integrated Transit Study, led by the Authority, which estimated that a five-mile BART extension from the Antioch BART Station to the Streets of Brentwood—with two stations and 15-minute headways—would attract approximately 3,700 weekday riders.

- **Development of Funding and Financing Options**

  ECCP developed a Funding and Financing Plan that identifies external funding contributions required to deliver the Project and includes several funding scenarios that will be explored in the next Phase.

Other key findings of the report:

- Project can be delivered in ~5-7 years
- The 5-mile ATN Project Segment was found to be technically feasible and financially cost effective
- The Project is capable of attracting private investment while retaining public ownership
- The P3 procurement strategy has the potential to reduce dependence on public operating subsidies, transfer risk, and accelerate project delivery
- The Glydways Technology will be tested and in production in time to meet the initial segment deployment.

Next Steps

Both CCTA and Tri Delta Transit Boards are anticipated to take action related to moving into Phase 2 of the project within the next 3 months.

cc: TRANSPLAN TAC

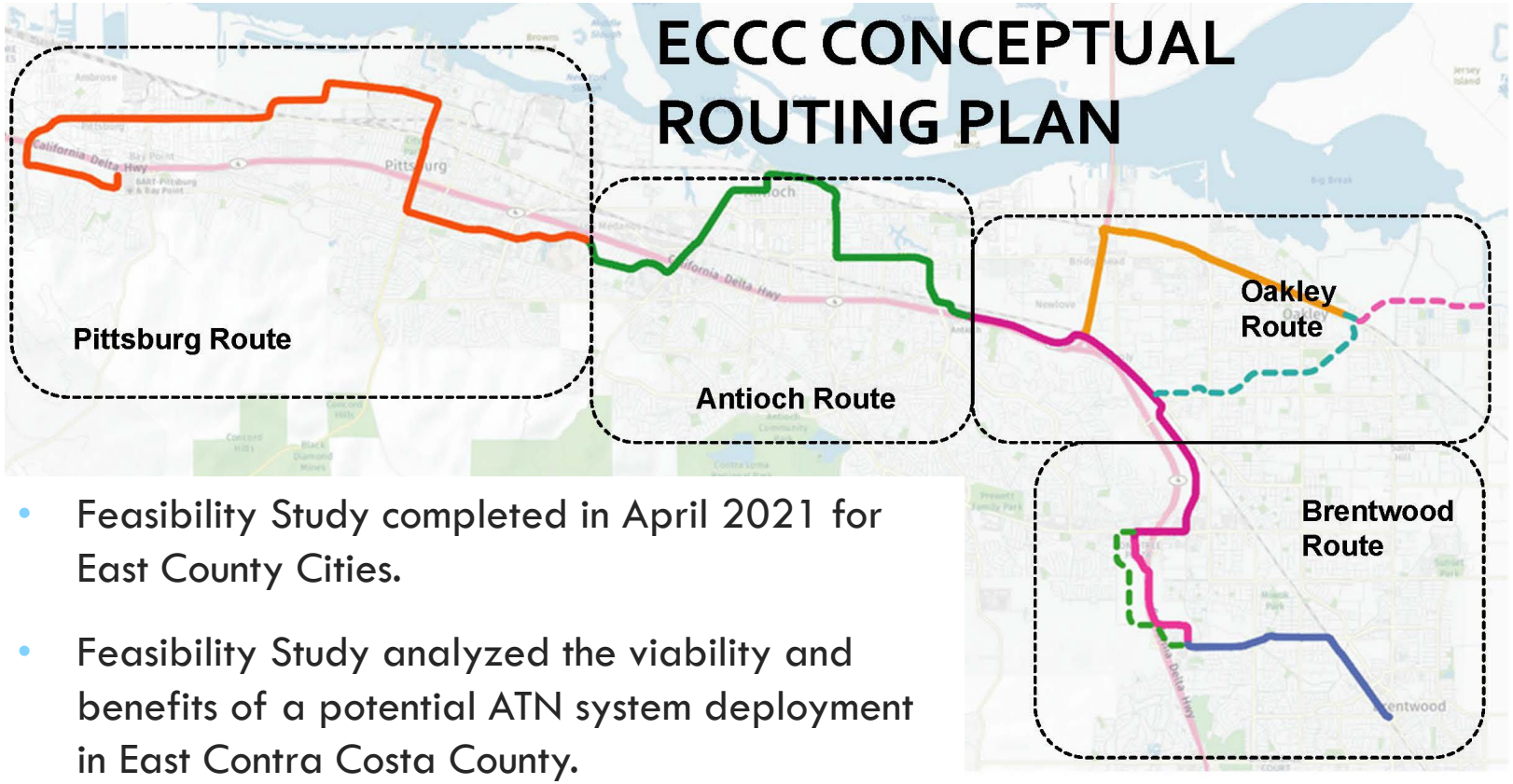
AUTOMATED TRANSIT NETWORK (ATN) PROJECT

TRANSPAC TAC

June 17, 2025

CONTRA COSTA transportation authority

East County Dynamic Personal Micro Transit (DPMT) Feasibility Study



- Feasibility Study completed in April 2021 for East County Cities.
- Feasibility Study analyzed the viability and benefits of a potential ATN system deployment in East Contra Costa County.
- Feasibility Study assumed Glydways technology as the demonstration technology for implementation of ATN system.
- Evaluate feasibility to attract potential **Public Funding and Private Financing.**

Project Background

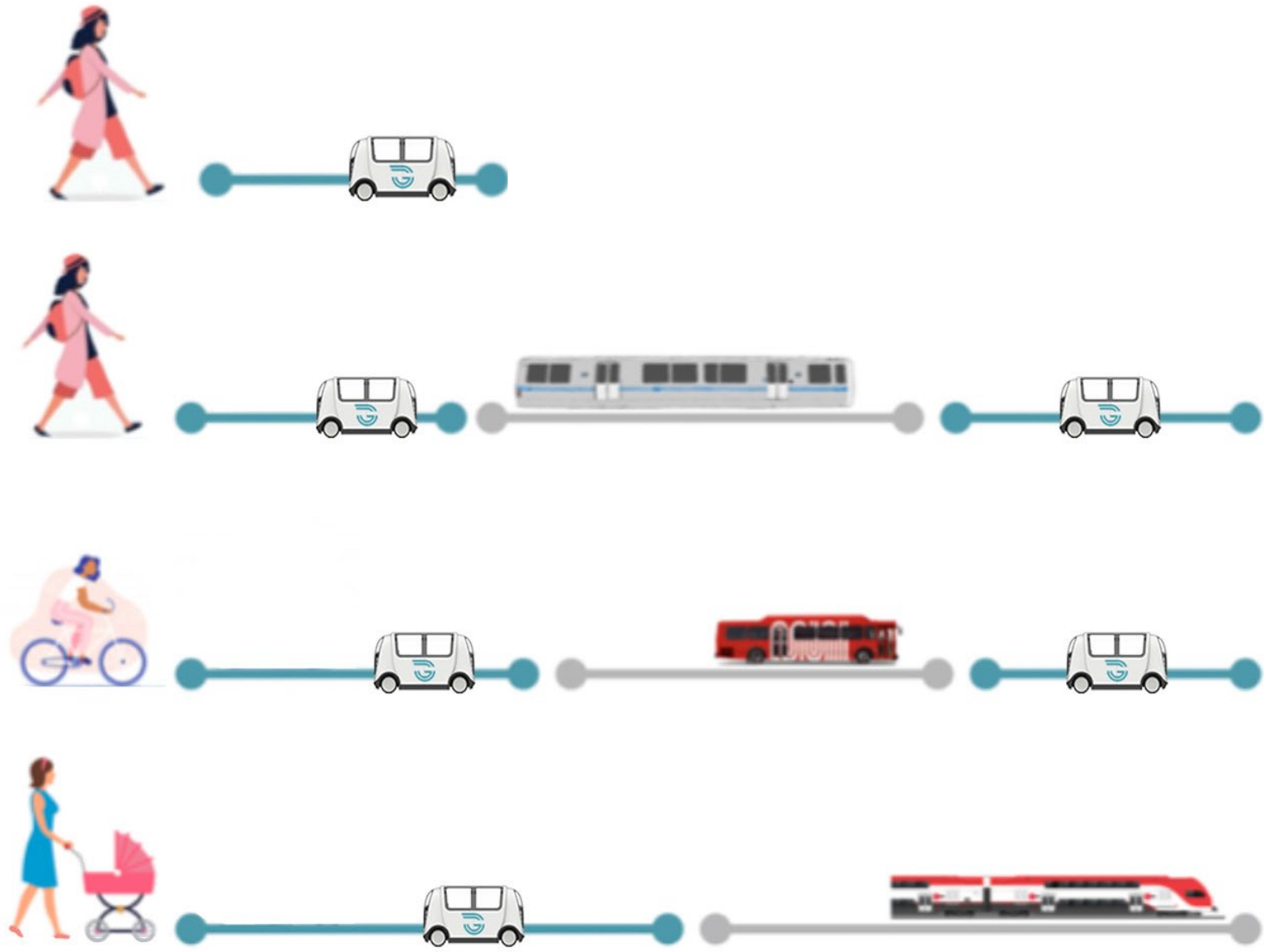
East County Transit Priorities

- Improve transit user experience;
- Respond to equitable access needs;
- Support economic development;
- Prepare for future, innovative transit options;
- Communicate benefits of transit with the public; and
- Improve connections to transit.

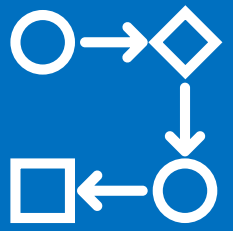
ATN Project Requirements

- Key Project Parameters:
  - On-demand
  - Wait times from 2 – 5 minutes
  - No shared vehicles (1-party ride, non-stop travel, point to point service)
- Product:
  - Fully automated vehicles
  - Plan for GHG neutral operations
  - Made in the USA (Vehicle/Infrastructure)
  - ADA accessible system and vehicles
  - NOT required to use same system assumed in the Feasibility Study
- Operations:
  - Fully traffic-separated operations
  - Directionally separated
  - Option to operate at grade

A Complete Trip (no auto)



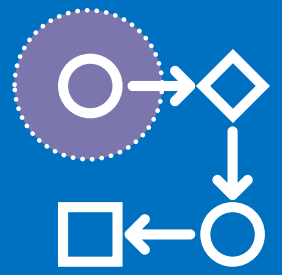
Delivery Approach



Step 1 - System Pre-Development Agreement (SPDA)

- Phase 1 and Phase 2 At Risk by Developer Team – No Payment from Authorities
- Phase 1
  - Identify Initial Viable Segment, Technology Solution
  - Funding Plan, Confirm Feasibility Study Assumptions
  - Approach and Cost Estimate for Environmental Review
- Phase 2
  - Commence Environmental Scoping
  - Secure Grant/Private Funding for Future Phases

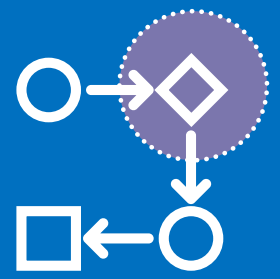
Delivery Approach



Step 1 - System Pre-Development Agreement (SPDA)

- Phase 3 – Grant Funded
  - Dependent on Securing Grant Funds
  - Advance Initial Viable Segment to 30% Design
  - Environmental Clearance
  - Investment Grade Ridership and Revenue Analysis

Delivery Approach

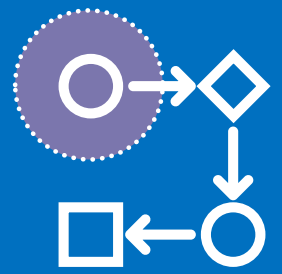


Delivery Approach:

Step 2 - System Development Agreement (SDA) for Implementation Phase

- Implementation Phase
  - **Covered by the separate/future System Development Agreement (SDA) with the same Developer Team**
  - Complete Final Design of Initial Viable Segment
  - Obtain necessary ROW, permits and approvals
  - Construction of Initial Viable Segment
- SDA can cover Future Implementation Phases of Remaining Segments

Project Status and Next Steps



Project Status

Phase 1 Work and Updated Feasibility Study Nearing Completion

Authority and Tri-Delta Staff Reviewing Deliverables

Action by Authority and Tri-Delta to Proceed to Next Phase Anticipated in Coming Months

P3 Contract Scope and Schedule

Advancing to Phase 2 initiates the early environmental scoping and funding planning processes

Today

Pre-Award | **System Pre-Development Agreement (SPDA)** | **Implementation Agreement**

PRE-PROPOSAL	RFP & Award 12 MONTHS	PHASE 1 ~15 MONTHS	PHASE 2 ~10 MONTHS	PHASE 3 ~18 MONTHS	CONSTRUCTION ~30 – 40 MONTHS	OPERATIONS 30 – 50 YEARS
Feasibility Study Complete 2021		Planning and Commercial Structure	Funding and Environmental Scoping	30% Design, Environmental Clearance, and Financials		

- Project Studies 2019 - 2021
- RFP Developed Nov 2022
- Contract Awarded June 2023
  Phase 1 start Nov 2023
- **Board Approval SPDA Phase 2 July 2025**
- Estimated Board Approval SPDA Phase 3 March 2026
- Board Approval Sign Imp. Agreement ~September 2027
- Board Approval to Start Rev. Service 2030

East Contra Costa County P3 Automated Transit Network Project

Unique benefits of this project:

- Project can be delivered in 5-7 years
- Attracts private investment while retaining public ownership
- Reduces dependence on operating subsidies substantially
- Creates new economic and workforce development opportunities
- Stimulates Transit Oriented Development (TOD)

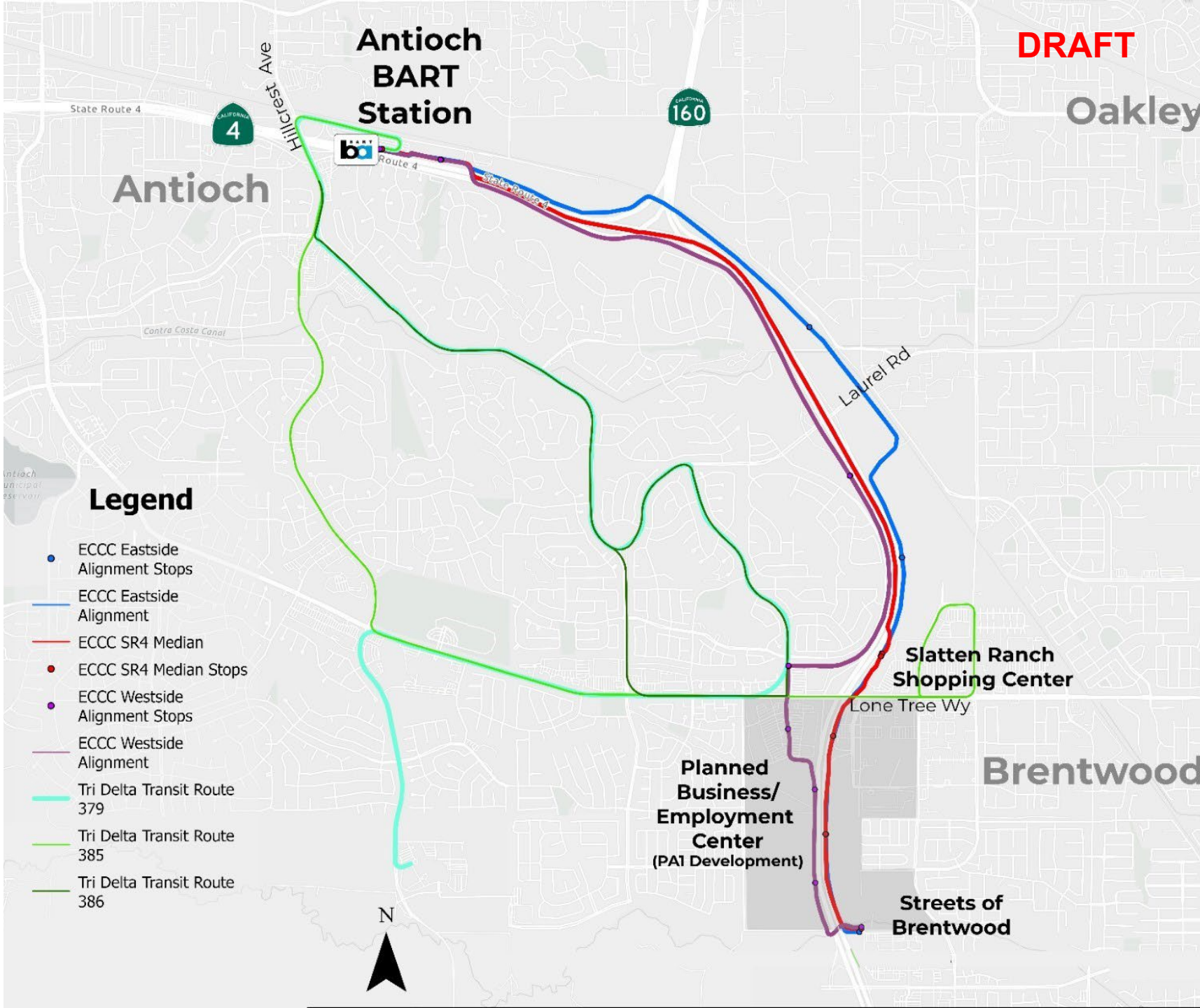
Project By-the-Numbers

Full System	28 miles 44 stations ~11 Million Riders
Segment 1	5 miles (mostly at-grade)
Proposed Fares	$3 Shared $10 Non-Shared
Travel Time (Antioch to Brentwood)	10 minutes
Wait Times (SPDA)	2 – 5 minutes
Segment 1 Annual Riders (2040 estimate)	1.1 – 1.7 Million

Full System: Phasing Plan

Segment 1 Alignment Options

- Segment 1 options review conducted to identify alignment opportunities and risks, position project for environmental clearance
- Three Options Studied (each ~ 5 miles, ranging from 4-7 Access Points)
  - Eastside of SR4
    - 6 Access Points
    - 90% at-grade
  - SR4 Median
    - 4 Access Points
    - 93% at-grade)
  - Westside of SR4
    - 7 Access Points
    - 83% at-grade)



ATN will Integrate and Augment the Existing Transit System

Complementary Service

Designed for transfers with BART and Tri Delta Routes 384, 385, 391

Provides additional on-demand system to Tri Delta's Tri MyRide offering

System Integration

On-demand service removes transfer friction with scheduled bus and rail service

Glydways can preload Access Points with vehicles to align with BART and Tri Delta arrival schedules

Ridership

Almost all trips originate from Single Occupancy Vehicles (SOVs), Transportation Networking Companies (TNCs), walking or biking trips within half mile of the system

ATN projected to double transit ridership in 2028 in the area

No ridership cannibalization from Tri MyRide, Paratransit or future TDT fixed route.

Operational Model Integration

Tri Delta has operational authority; service branded as Tri Delta

Glydways app and software can integrate transit routes, wait times, and travel durations for seamless multimodal trip planning.

ATN can send personalized alerts about transit connections, highlighting the convenience and time savings of Tri Delta Transit.

Segment 1 Alignments Study Results

	Westside	SR4 Median	Eastside
Total Project Cost (2029 $)*	$385 Million	$300 Million	$329 Million
Number of Stations	7	4	6
2028 Daily Ridership (Total)	3,400	2,200	2,500
2040 Daily Ridership (Total)	5,000	3,200	3,400
Year 1 OpEx	~ $10.9 Million	~ $10.4 Million	~ $10.4 Million
Average Cost Recovery (Fares + Ancillary Revenues, over 30-year period)	64%	63%	66%
Right-of-Way Challenges	Low - Med	Low - Med	Low
Environmental Constraints	Med	Low	Low
Construability Risks and Challenges	Med	Med	Low

**Include 10-year operating shortfall.*

TAKEAWAYS

Westside offers the most appealing farebox recovery and ridership benefits, it also presents the greatest complexity and challenges.

Eastside most feasible due to greatest cost effectiveness and constructability

Optimal alignment could be a combination of the three options

RECOMMENDATION:

Leverage majority of the Eastside alignment ROW due to low cost and explore augmentations to capture Westside ridership

WHY ATN

Comparison with Alternatives

ATN is the most cost effective option within the Segment 1 corridor.

ATN provides 2X - 6X improvement in farebox recovery

Lower Design-Build Cost Estimate to BRT with lower cost per rider.

ATN provides a higher level of service and drives higher ridership compared to BRT and eBART.

Intermediate stations facilitate community integration and improved connectivity.

	Segment 1 ATN	eBART Extension	SR4 Median BRT
Level of Surface (Headways)	On-Demand *(Wait times 2 - 5 Minutes)*	15 Minutes - 30 Minutes	15 Minutes - 30 Minutes
Cost to Build *(2029$, Flatiron)*	**~$265M - $343M*** (depending on alignment)	***~$713M***	**~$382M**
Cost to Operate *(O&M Cost Per Rider)*	$5 - $8	$9	$23
Farebox Recovery	54% - 63%	28%	10%
Ridership *(ppdph)*	3,200 - 5,000 Scalable to Demand	3,400	780
Stations	4 - 7	2	2

**Excludes 10-year operating allowance and Developer Fee*

Glydways Development Facility (GDF2)

- ✓ Major investment in expanded test facilities to validate technical readiness and resilience
- ✓ Controlled environment to refine solution, while simulating real-world conditions and features.
- ✓ Real time on-demand travel demonstrations, Operations Control Center (OCC), and MSF (13,000 sf)
- ✓ Opportunity to stress test different scenarios project is in development, e.g. station interface/boarding process
- ✓ First rides will be delivered in Fall 2025. Over a mile of dedicated guideway delivered by Mid 2026

CONTRA COSTA
transportation
authority

Questions?