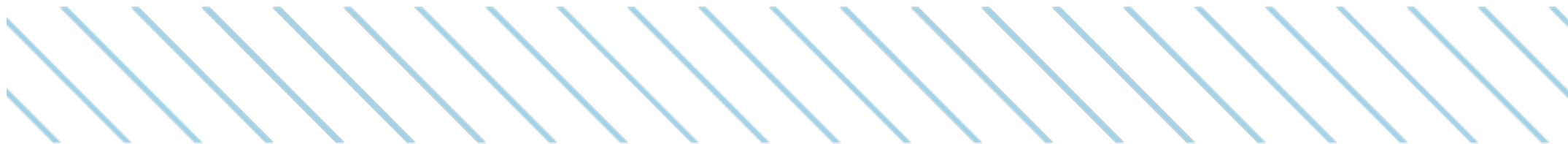


ZERO EMISSION PASSENGER RAIL AND TRAIL PROJECT

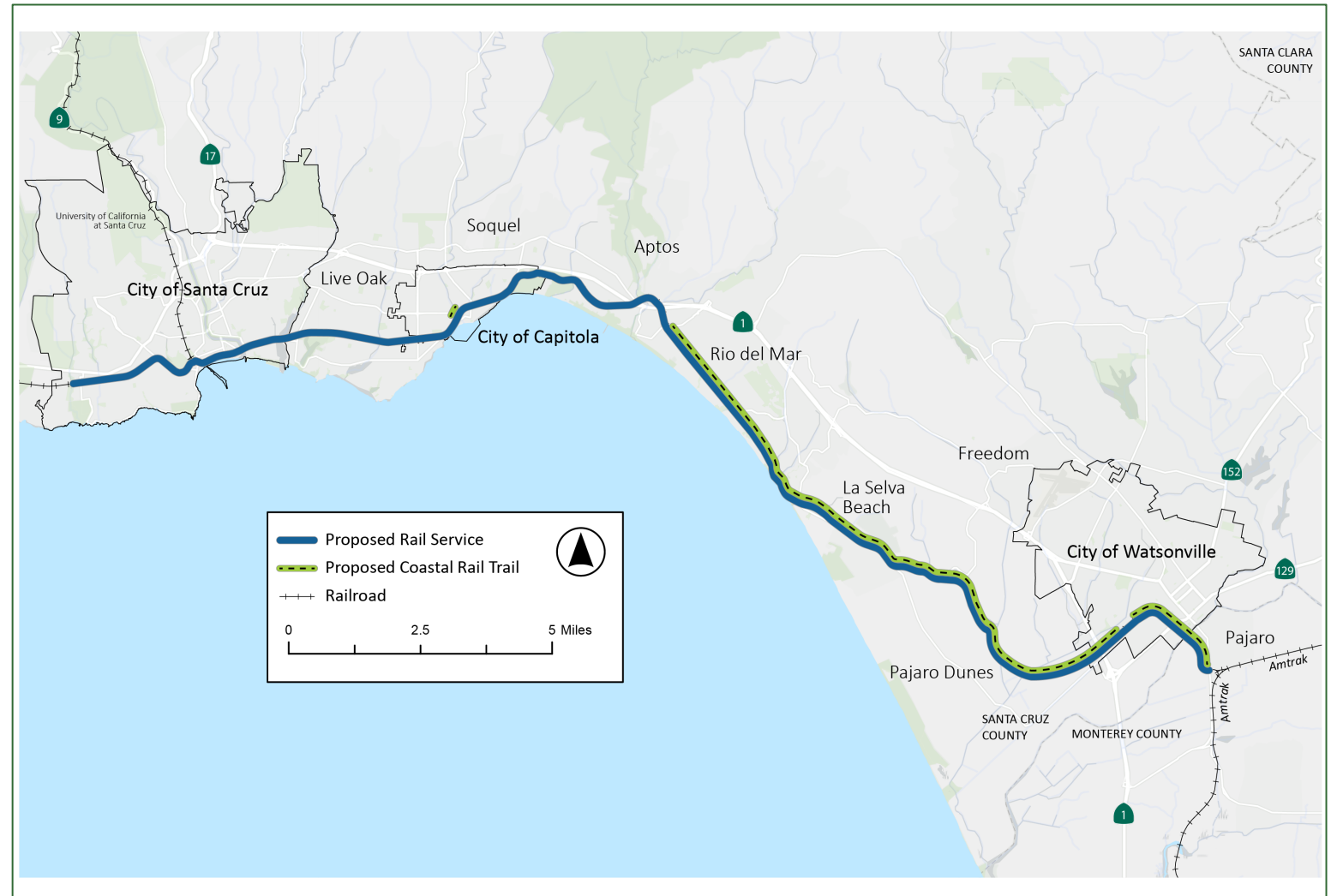
June 2024

Sarah Christensen, SCCRTC Staff

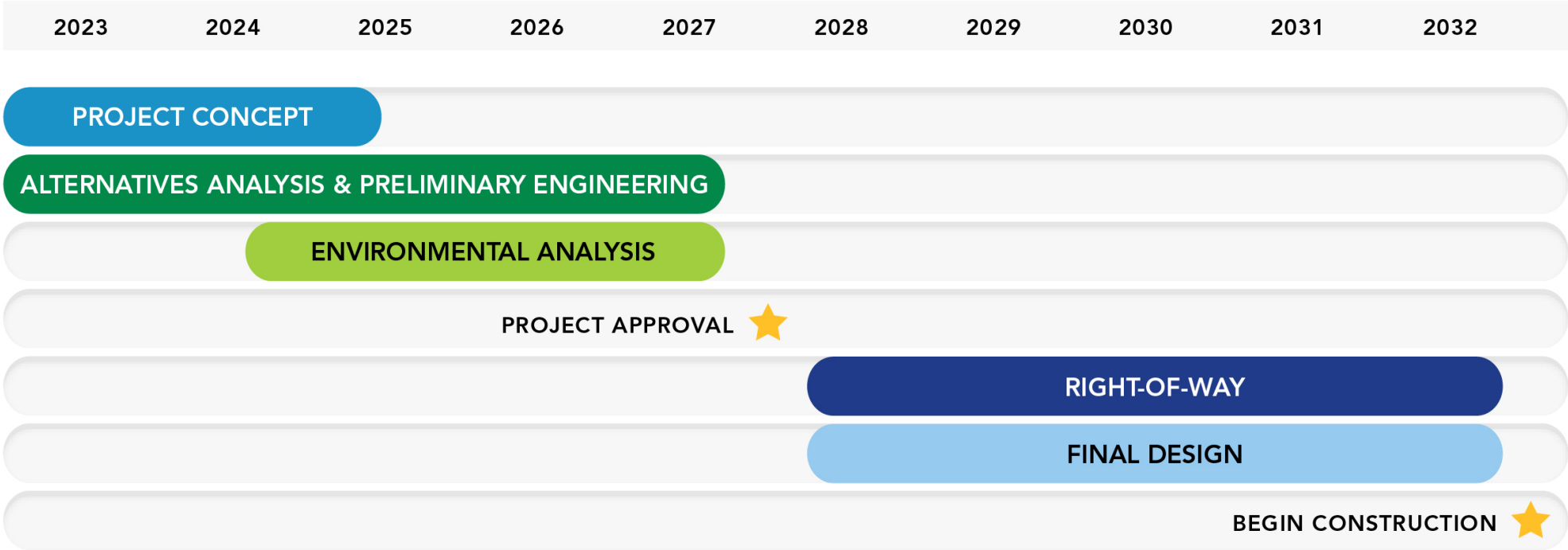


Project Overview

- New high-capacity passenger rail service and stations on approximately 22 miles of the Santa Cruz Branch Rail Line (SCBRL)
- 12 miles of Coastal Rail Trail: Segments 13-20 and the Capitola Trestle reach (Segment 11, Phase 2)



PROJECT SCHEDULE



Analysis of Conceptual Rail Transit Vehicle Types



Rail Vehicle Types

COMPARISON OF RAIL VEHICLE TYPES

- The vehicle type selected will influence the design of other Project elements and competitiveness for future grant funding.
- Project team is seeking feedback on which vehicle type would be most beneficial and factors to be prioritized.



LOCOMOTIVE HAULED TRAINS



Pros

- Compatible with freight, intercity, and commuter rail systems
- Long-range/high-speed ability
- High load/passenger capacity
- Ease of reconfigurability (add/remove coaches)
- Readily available fleet



Cons

- High fuel/energy consumption
- High weight/axle loads
- Poor acceleration/deceleration performance
- Limited zero emission availability and range



MULTIPLE UNIT TRAINS



Pros

- Propulsion option flexibility (catenary, battery, hydrogen, Diesel)
- High seated passenger capacity
- Compatible with freight, intercity, and commuter rail systems
- High speeds possible (100 mph)



Cons

- Limited flexibility to reconfigure (add/remove coaches)
- Few active suppliers in U.S. market
- Battery and hydrogen technology is not as mature as catenary or diesel



LIGHT RAIL VEHICLES



Pros

- Smaller vehicle, light axle loads
- Multiple options available in market
- High braking and acceleration performance



Cons

- Not compatible with freight, intercity, or commuter rail traffic
- Lower speeds (60 mph max)
- Low seated passenger capacity
- Limited power options (catenary, battery with limited [less than 10 miles] range)
- Visual impacts of overhead catenary infrastructure
- High cost and maintenance needs of overhead catenary

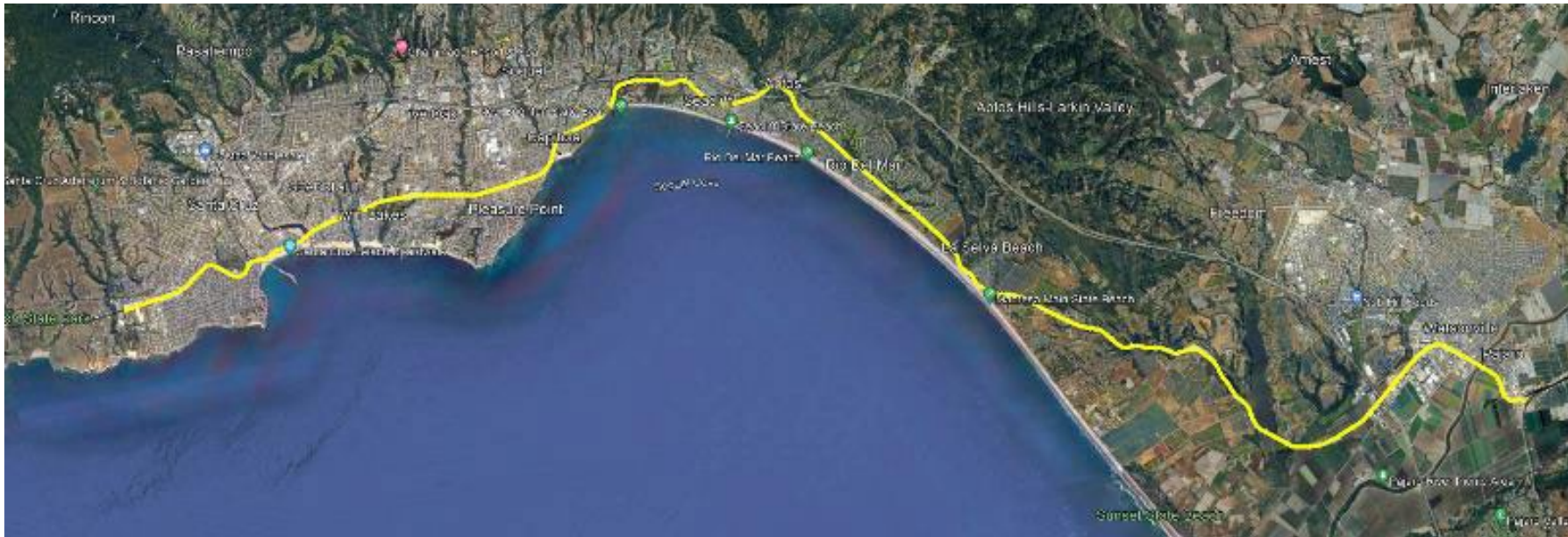
Initial Conceptual Alignment



Initial Conceptual Alignment

At this stage, the Project team is aiming to provide a refined design that:

- Fits within the existing right-of-way while accommodating both the rail and trail
- Optimizes operations (transit headways and total travel times)
- Allows for faster train travel speeds, where possible, to reduce end-to-end point total travel time

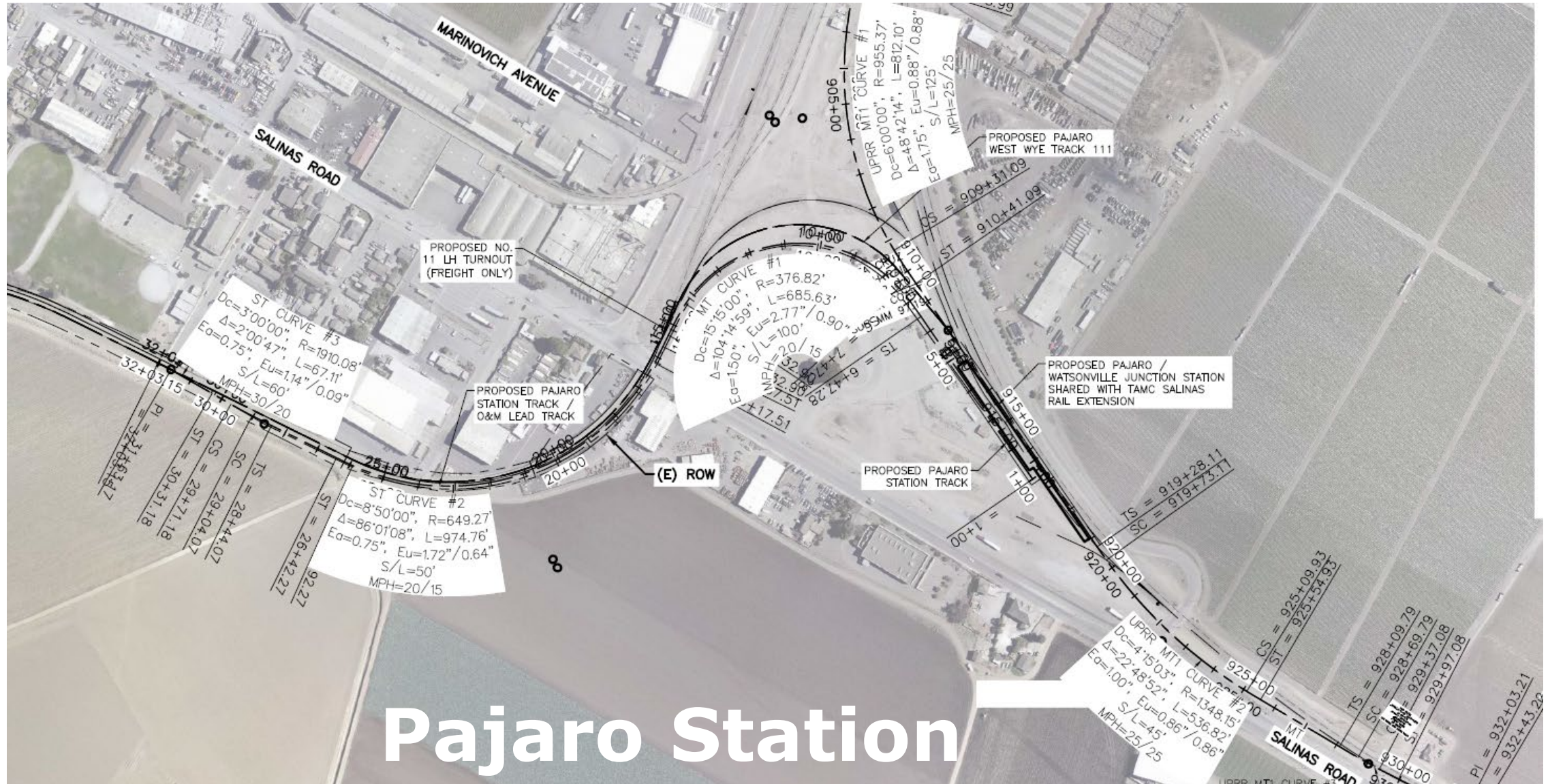


Initial Conceptual Alignment

- Provides a “first pass,” from which the Project team will continue to develop a refined conceptual alignment over the coming months.
- Intent is to fit, to the extent feasible, the rail and trail facilities within existing right-of-way and optimize operations.
- Project team is evaluating a number of potential conceptual solutions to address constraints.
- Seeking community feedback to identify concerns and ideas for improvements.



Initial Conceptual Alignment

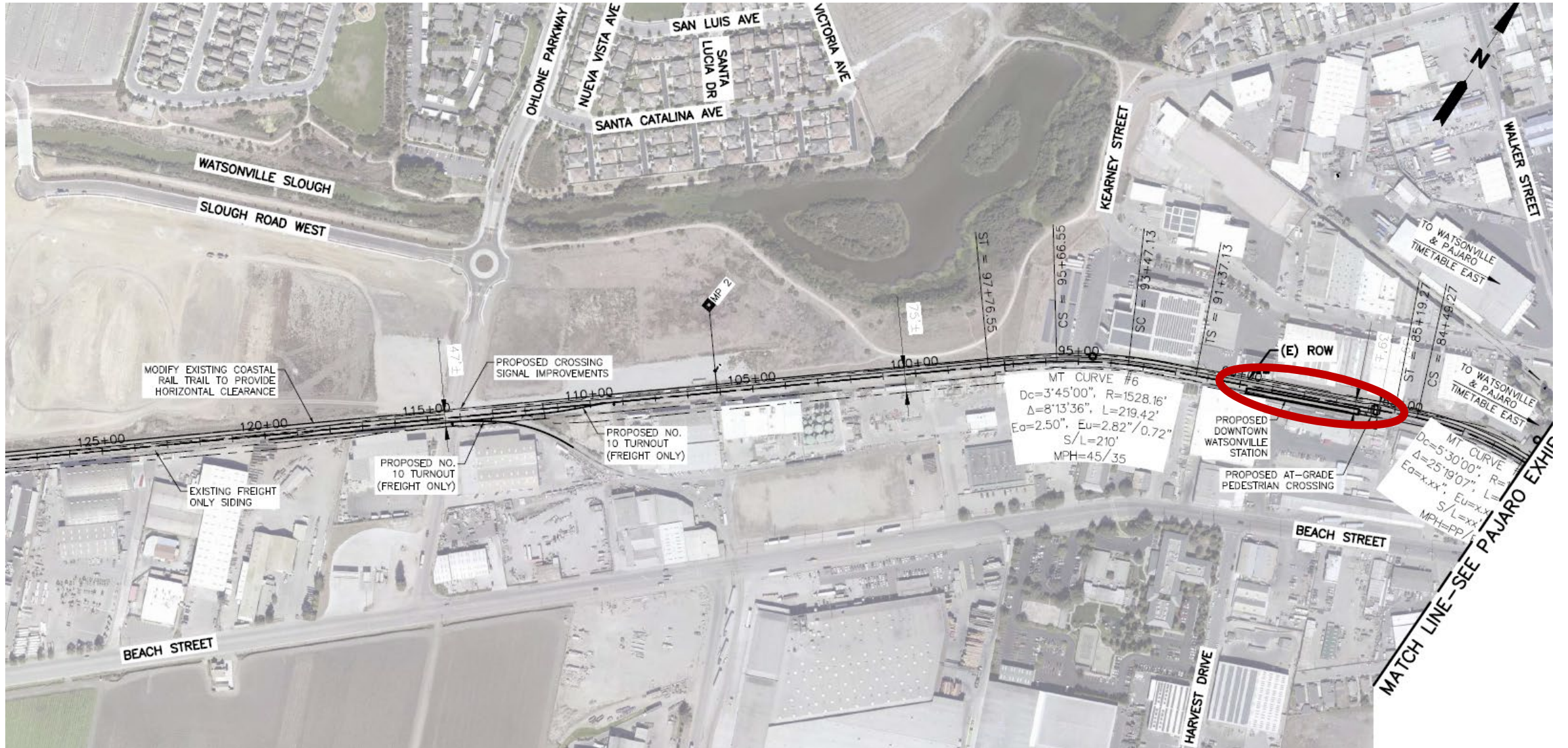


Pajaro Station

Initial Conceptual Alignment



Initial Conceptual Alignment



Interactive Map



Community Engagement



Community Engagement

- Seeking feedback on initial conceptual alignment and rail transit vehicle types.
- Virtual and In-Person Open Houses
- Partner agency briefings
- Presentations and community engagement events
- *Request feedback by July 18, 2024*



ZERO EMISSION PASSENGER RAIL AND TRAIL PROJECT COMMUNITY OPEN HOUSE



VIRTUAL OPEN HOUSE

June 6–July 18
zeprt.com

OR

IN PERSON OPEN HOUSE

**Monday,
June 24**

6:00–7:30pm
Civic Plaza
Community Room
275 Main Street
Watsonville

**Tuesday,
June 25**

6:00–7:30pm
Live Oak Grange
1900 17th Avenue
Santa Cruz



Next Steps



Upcoming Engagement Opportunities

PROJECT CONCEPT REPORT Milestones and Engagement Opportunities

WINTER
2024

- PRELIMINARY PURPOSE AND NEED STATEMENT
- PROJECT LOOK AHEAD

SUMMER
2024

- CONCEPTUAL ALIGNMENTS
- ZERO EMISSION VEHICLE TYPES

 **WE ARE
HERE**

FALL
2024

- REFINED CONCEPTUAL ALIGNMENT
- STATION/LAYOVER FACILITY AND MAINTENANCE LOCATIONS

WINTER
2025

- DRAFT PROJECT CONCEPT REPORT
- PRELIMINARY COST ESTIMATES
- NEXT STEPS FOR PROJECT DEVELOPMENT



Thank you!

