



Bringing It Together: Passenger Rail, HSR, Transit and Innovative Mobility

San Joaquin Valley Annual Policy Conference

May 12, 2022

Rail Plan Overview

- The Rail Plan establishes a **strategic vision** for prioritizing state investment in the passenger and freight rail network statewide
- Provides a **framework for coordination** between planning partners, rail operators, rail owners and the state to develop a rail network with a strategic vision in mind.
- 2018 Rail Plan recognized by Mineta Transportation Institute and the Federal Railroad Administration as a model for other states to follow



State Rail Plan: 2040 Vision for Passenger Rail

» Integrated Statewide Network

- » High Speed Rail
- » Intercity and Regional Services
- » Integrated Express Bus

» Coordinated Schedules

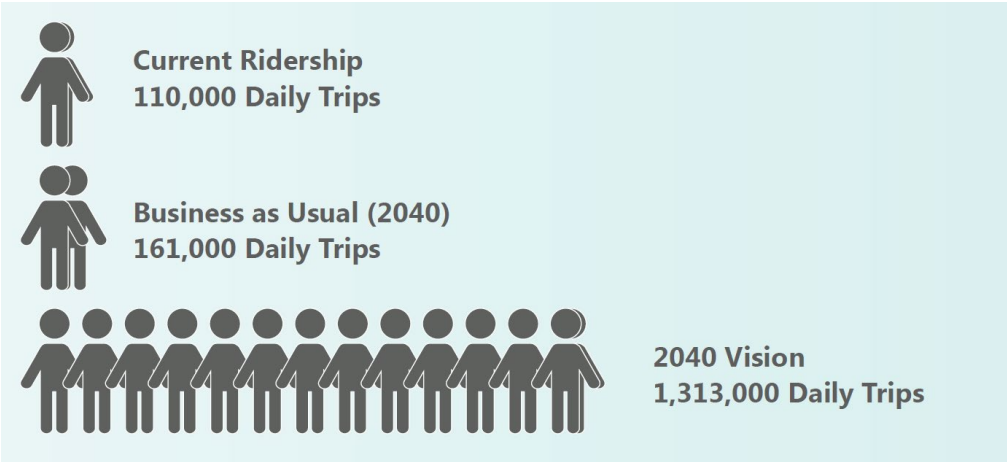
- » Regular pulsed service
- » Key transfer hubs
- » Public Transit Connections

» Customer Focus

- » Seamless First/Last-Mile Access
 - » Integrated Ticketing
 - » Auto and air competitive
- Over \$30 billion in dedicated and awarded funding so far, mostly from state resources**



Recap: 2018 SRP – Benefits & Effects



Rail Mode Share

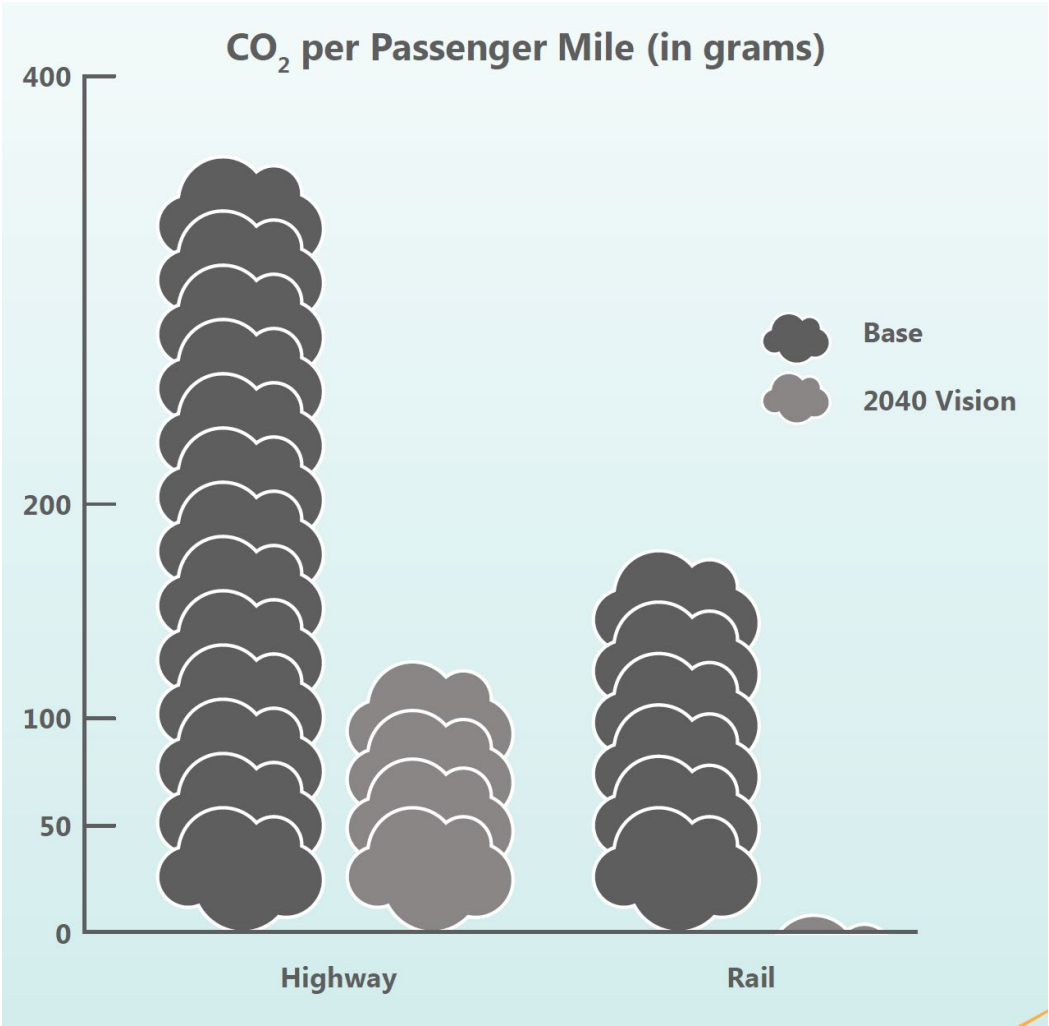
Current: 0.34%



2040 No Build: 0.52%



2040 Vision: 6.8%



2022 California State Rail Plan

What's being Updated?

The 2022 California State Rail Plan will **enhance rail service & serve as a basis for federal and state rail investments** in passenger and freight rail projects.



Revise the statewide vision

Incorporate outputs from network integration activities and local/regional studies



Advise priorities for state investment

Update operating plans and capital investments to deliver phased implementation



Devise implementation strategies

Coordinate across funding and operating agencies to structure service implementation



CalSTA Coordination

Regional Partnerships: Addressing Gaps in Service and Access



Network Effects



By analyzing network effects of transit, active transportation, intercity rail, intercity bus and other investments, CalSTA can understand where and how benefits or impacts accrue, beyond where a project is physically located.

Off-Peak Service



Traditional approaches emphasize peak-hour commute trips and leave significant off-peak service gaps. To address equity, we must design, fund, and prioritize robust, all-day competitive service with designed connections between services.

Targeted Fare Discounts



CalSTA and Caltrans are developing Cal-ITP tools that make the administration of means-based and other targeted fares simpler and less costly to implement statewide.



Highlights from the California Integrated Travel Project



What we're doing about it

Making travel simpler and more cost-effective by...

- 1 Enabling contactless payments
- 2 Automating discounts
- 3 Providing accurate and complete information for trip planning in real time



1

Contactless payments: Vision

From a customer's perspective, **paying for transit should be as easy as paying for a cup of coffee**: When buying coffee, customers know they can instantly pay by tapping their contactless bank card or smartphone, no matter which coffee shop they visit.



Advantages of contactless fare collection

Allowing customers to use what's already in their pockets—bank cards or smart devices—to pay for transit creates numerous advantageous outcomes for transit providers and riders, including:



**Known
customer
experience**



**Higher
ridership**



**Lower costs for
both riders and
providers**



**Reduced
emissions through
reduced dwell
times and mode
shift to transit**



**More equitable
access through
fare capping and
seamless
discounts**

2

Automating discounts: Vision

It shouldn't matter where in California a transit rider is--transit systems should honor fare discounts for **all eligible riders**. When a customer taps to pay, the fare validator will charge the right fare every time.



Context

Who gets transit discounts?

Transit providers offer reduced fares to specific rider groups, typically those most transit-dependent and/or high-need, including:

- Older adults
- Veterans
- Students
- Low-income riders
- Riders with disabilities



Cal-ITP Benefits Solution

Automatically enroll and receive discounts

- Easy online enrollment in minutes
- Discount eligibility linked to contactless bank card
- Discounts automatically honored when customers tap to pay
- Standardized, statewide definitions of discount-eligible groups



Receive your senior (65+) discount when you tap to ride!



Link your discount to your contactless card and pay the correct fare every time you tap.

1 Make sure you have:



- California driver's license or ID
- Contactless debit or credit card

2 Visit benefits.calitp.org/mst



← Open the camera on your mobile device, and point it at this code to get there quickly!

We hope to add more discount groups soon.

Information and questions:

1-888-MST-BUS1 (678-2871)

TDD 831-393-8111

mst.org/benefits

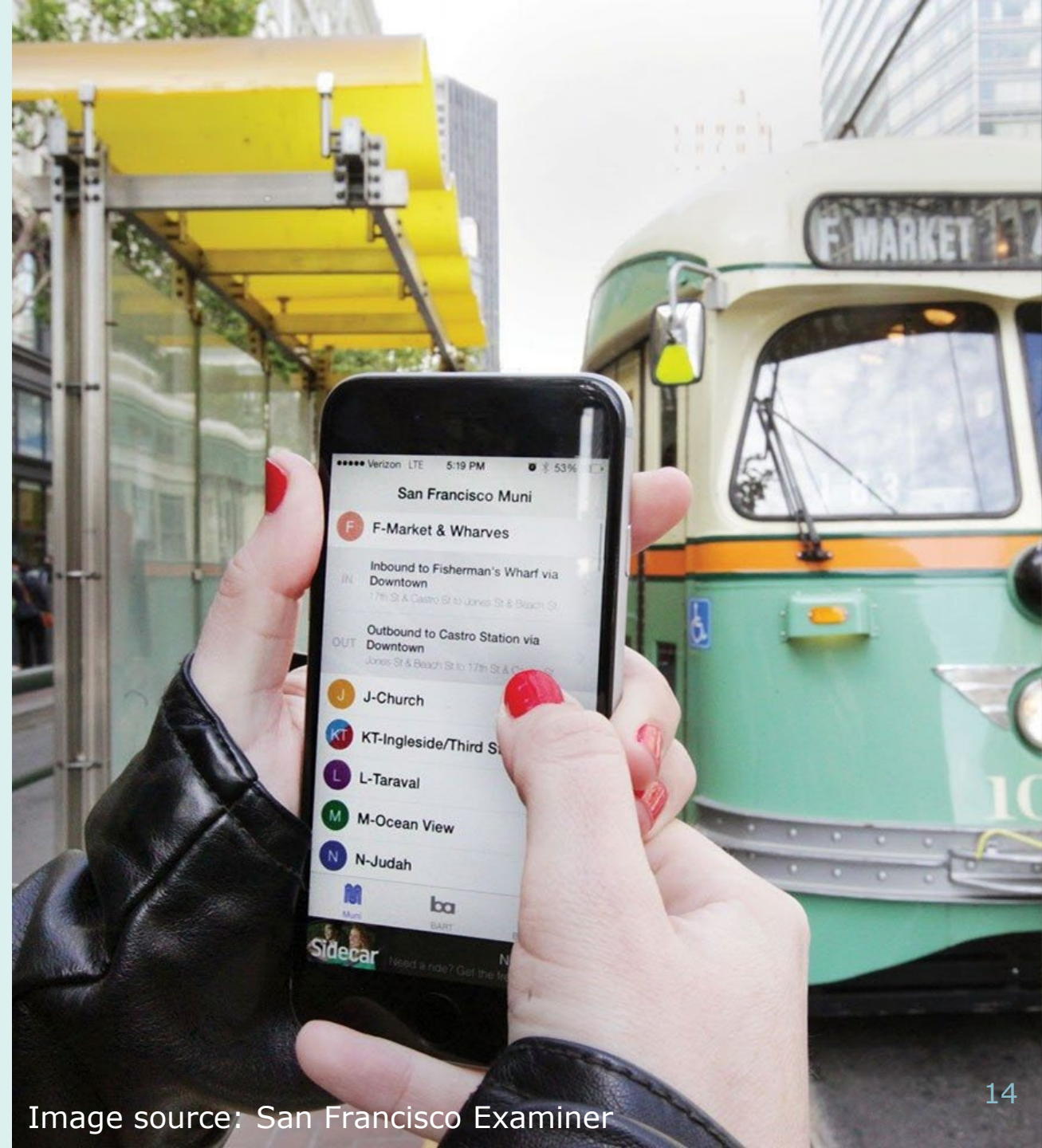
customerservice@mst.org



3

Transit data: Vision

Transit providers in California have the **most complete and accurate data of their own operations**—including information about schedules, fares, payment method, accessibility, and vehicle crowding—which they both **share with their customers** in a **standardized format** and **use themselves** to manage their service.



Monterey-Salinas Transit (MST)

First open-loop contactless fare collection demo in California

- 1 Lets riders tap contactless bank cards (Visa or Mastercard credit/debit) & mobile to pay
- 2 Older adults will receive transit discount when they tap to pay
- 3 Complete GTFS data feeds accessible through trip planning apps & maps



Santa Barbara Bus Services

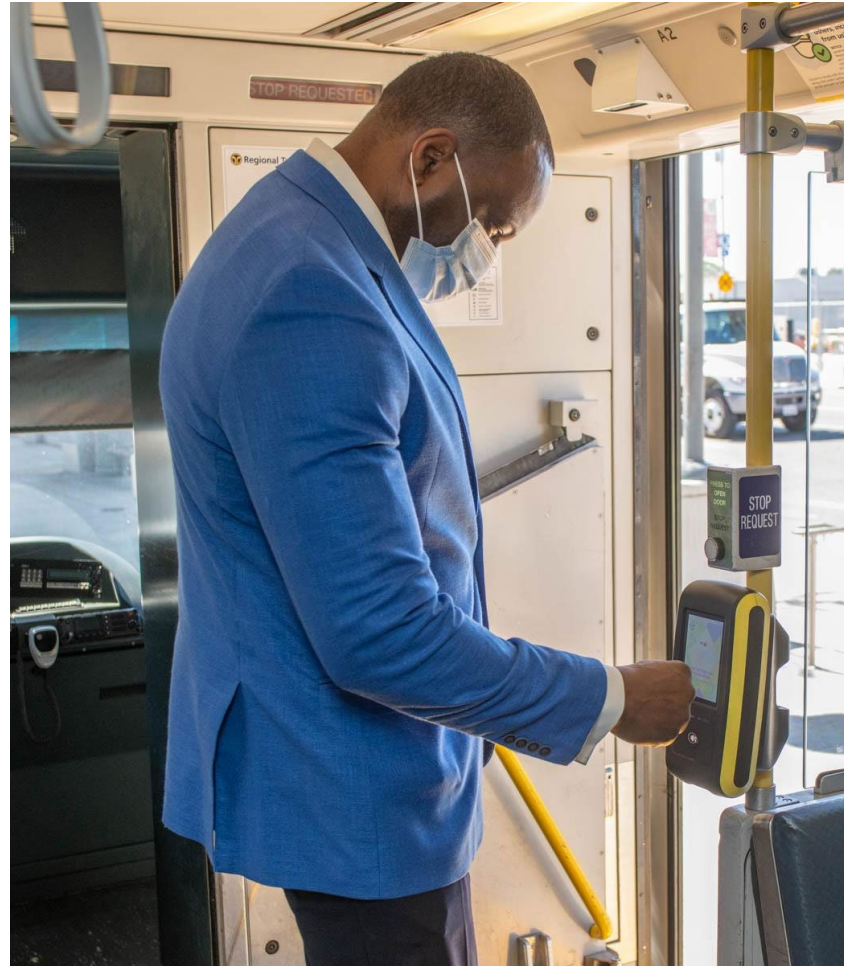
Contactless fare collection on the Clean Air Express and Santa Barbara Metropolitan Transit District buses on 7/26.



Click here to watch promotional video <https://vimeo.com/539436401>

Sacramento Regional Transit (SacRT)

Contactless fare collection launched on Sacramento light rail fleet 9/1



San Joaquin Valley Policy Conference

The Road Ahead

May 12, 2022

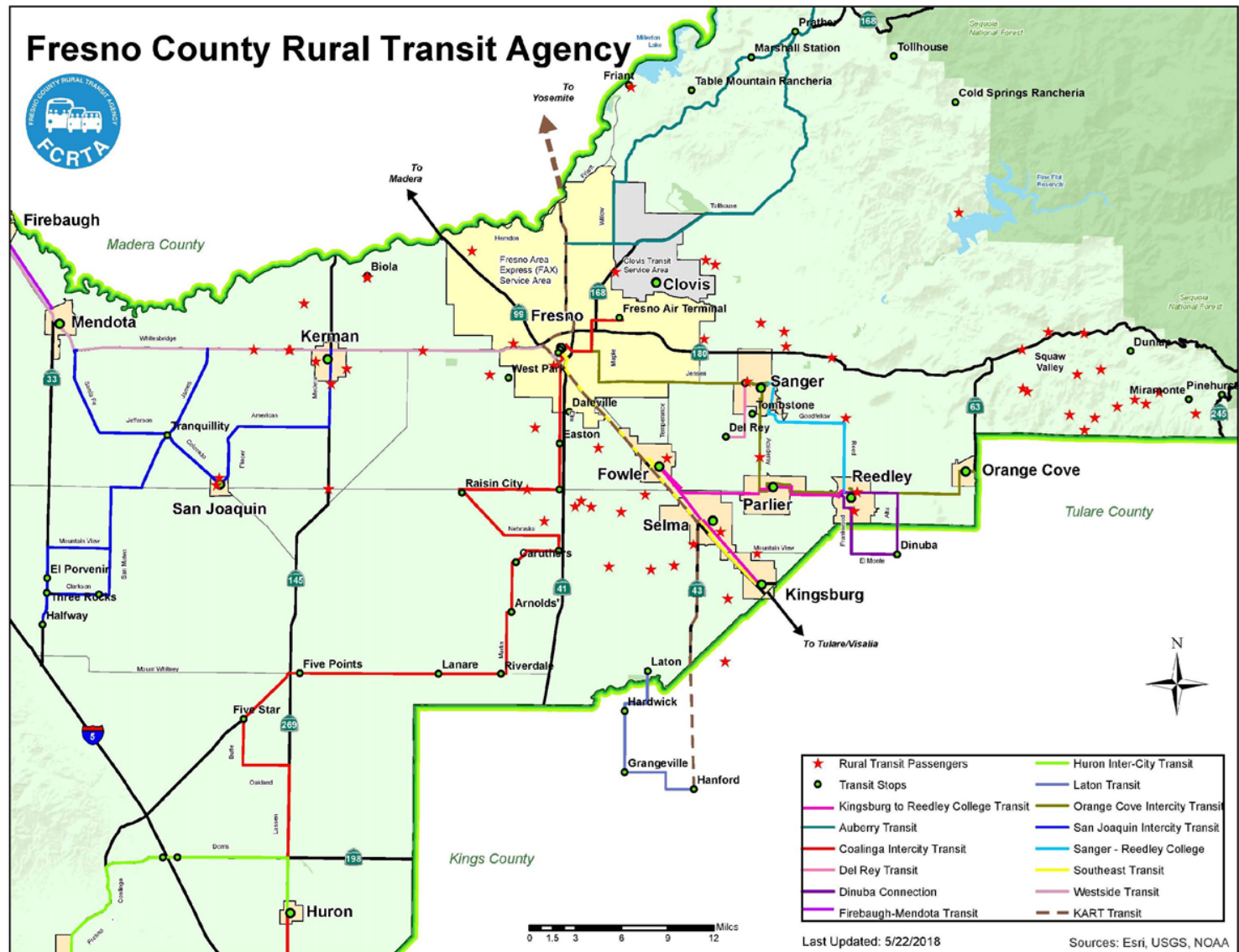
*Passenger Rail, Transit, HSR
and Innovative Mobility*

Fresno County Rural Transit Agency



FCRTA Fresno County
Rural Transit Agency

FCRTA Service Area & Rural Transit Passengers



History of EV Transition in Rural Areas

- 2016- FCRTA received its first EV Vans (1st generation & 2nd generation).
- 2017- FCRTA installed its first 13 Solar Arc Level 2 Charging Units in the 13 incorporated cities in rural Fresno County.
- 2018-Present: FCRTA continues to purchase electric buses and electric sedans, charging units with local, state and federal funding such as LCTOP and Measure C New Tech.
- Deploying BEV's in rural areas is difficult to due the range and infrastructure for charging.
- FCRTA purchased various buses and chargers to determine which one will work best for rural routes and charging based on range, weight and length.

FCRTA's Current Fleet

- Vehicle fleet of one hundred and twenty-two (122) vehicles
- Forty-four (44) are powered by CNG
- Twenty-three (33) are powered by electric batteries
- FCRTA does not operate any diesel powered vehicles
- Goal of 2030 to have 100% EV fleet



BYD



Chevy Bolt



Zenith



Proterra

FCRTA's Current Charging Infrastructure

- 24 Envision Solar Arc's (Level 2)
- 4 BYD Chargers (Level 2)
- 8 Proterra Chargers (Level 3)
- 25 JuiceBox Chargers (Level 2)
- 2 Envision Solar Trees (Level 3)



Proterra Charger



BYD Charger



Solar Tree



JuiceBox Charger for Bolt/Zenith



Solar Arc

FCRTA Solar EV Arc Charging Stations



Past & Current Projects:

- Fresno EV Microtransit Plan was completed in January 2021 and funded by the FCOG Sustainable Infrastructure Planning Grant (\$160,556).
- Electrical Grid Analysis Study for the incorporated and unincorporated communities was completed January 2022 and funded by the Caltrans Sustainable Communities Planning Grant (\$515,800).
- Transportation Needs Analysis Survey to analyze transportation needs in the unincorporated community of Biola (\$36,885).
- Transit Bus Air Flow Study in partnership with the Fresno State Transportation Institute to study the COVID virus and air flow through a transit bus (study concluded 2020).
- Microtransit study to examine the expansion of existing FCRTA microtransit service in unincorporated communities of Lanare, Cantua Creek, Laton, Riverdale and El Porvenir, this project is in partnership with Leadership Counsel for outreach efforts (\$59,000).
- Microtransit pilot project in West Park and Biola.
- Microgrid/Resilience hub feasibility analysis to analyze costs and locations for solar microgrids in rural Fresno County (\$455,500).
- Measure C New Technology Grant Projects- Electric Buses (6) , Solar Trees (2), Electric Sedans (15), Level 2 Chargers (40), UV Sterilization Lights (50).

Awarded and Proposed Project with Purpose and Value:

- Affordable housing project through the Affordable Housing and Sustainable Communities (AHSC) program in partnership with City of Coalinga, project includes housing, 2 electric buses, transit amenities and passes.
- Affordable housing project through the Affordable Housing and Sustainable Communities (AHSC) program in partnership with City of Sanger, project includes housing, solar parking, electric bus and charging station.
- Light-rail feasibility study along SR99 corridor with funding from the Caltrans Sustainable Communities Planning Grant.
- FCRTA applied for a TIRCP Grant to deploy a microgrid solar charging station near the HSR station in downtown Fresno.
- FCRTA applied for a Fresno County regional air mobility pilot project to explore the use of an air taxi service in rural Fresno County.
- FCRTA will be deploying a microtransit pilot project in the unincorporated communities following the RTAP study.
- These projects are consistent with the 2018 Fresno COG RTP, CTP 2040 and GHG reduction targets.

Challenges Going Forward



- Rural locations are challenging for transit due to miles, time and efficiency.
- Traditional transit is being affected by a decline in ridership and transit agencies must explore innovative alternative mobility options.
- Infrastructure must be in place to deploy EV's.
- Fresno County is a nonattainment air basin.
- Must address VMT which is challenging in rural communities.

In Coordination & Collaboration With:



- **In coordination with:**

KART, Tulare County Rural Transit Agency, FAX and Clovis Transit

- **In collaboration with:**

FCOG, CALSTART, CARB, Caltrans, CalSTA SJVAPCD, CalOES, and Measure C FCTA



Thank you



Contact Information:

Moses Stites – General Manager

mstites@fresnocog.org

Janelle Del Campo – Operations Manager

delcampo@fresnocog.org

(559) 233-6789



FCRTA Fresno County
Rural Transit Agency

SAN JOAQUIN VALLEY POLICY CONFERENCE

Garth Fernandez, Central Valley Regional Director
California High-Speed Rail Authority
May 12, 2022



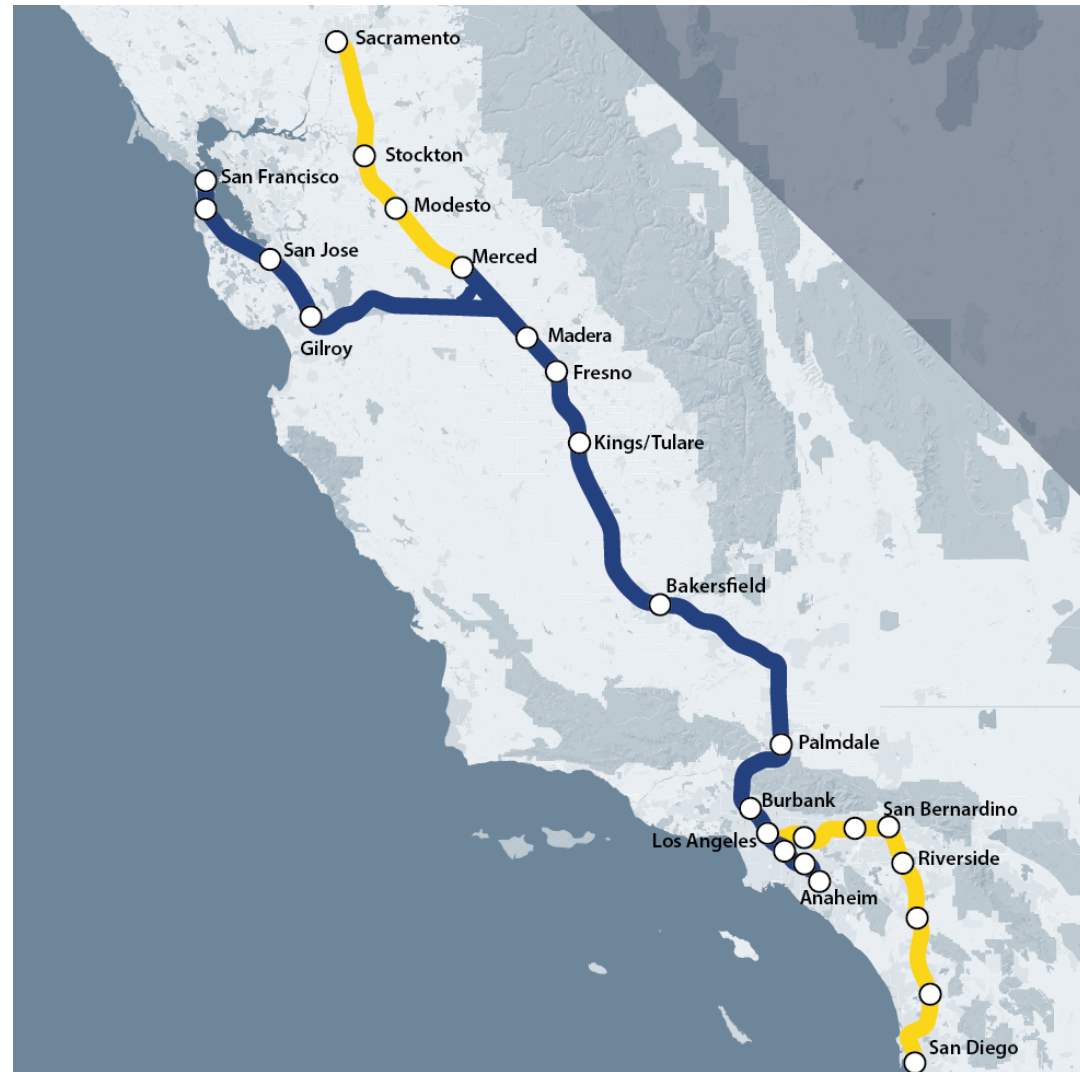
MISSION

CALIFORNIA HIGH-SPEED RAIL

To initiate the construction of a high-speed train system that utilizes an alignment and technology capable of sustained speeds of 200 miles an hour or greater.

Three principles guide our decisions:

1. Initiate high-speed rail service in California as soon as possible.
2. Make strategic, concurrent investments that will be linked over time and provide mobility, economic and environmental benefits at the earliest possible time.
3. Position ourselves to construct additional segments as funding becomes available.



CONNECTING CALIFORNIA

CALIFORNIA HIGH-SPEED RAIL



Increase Mobility



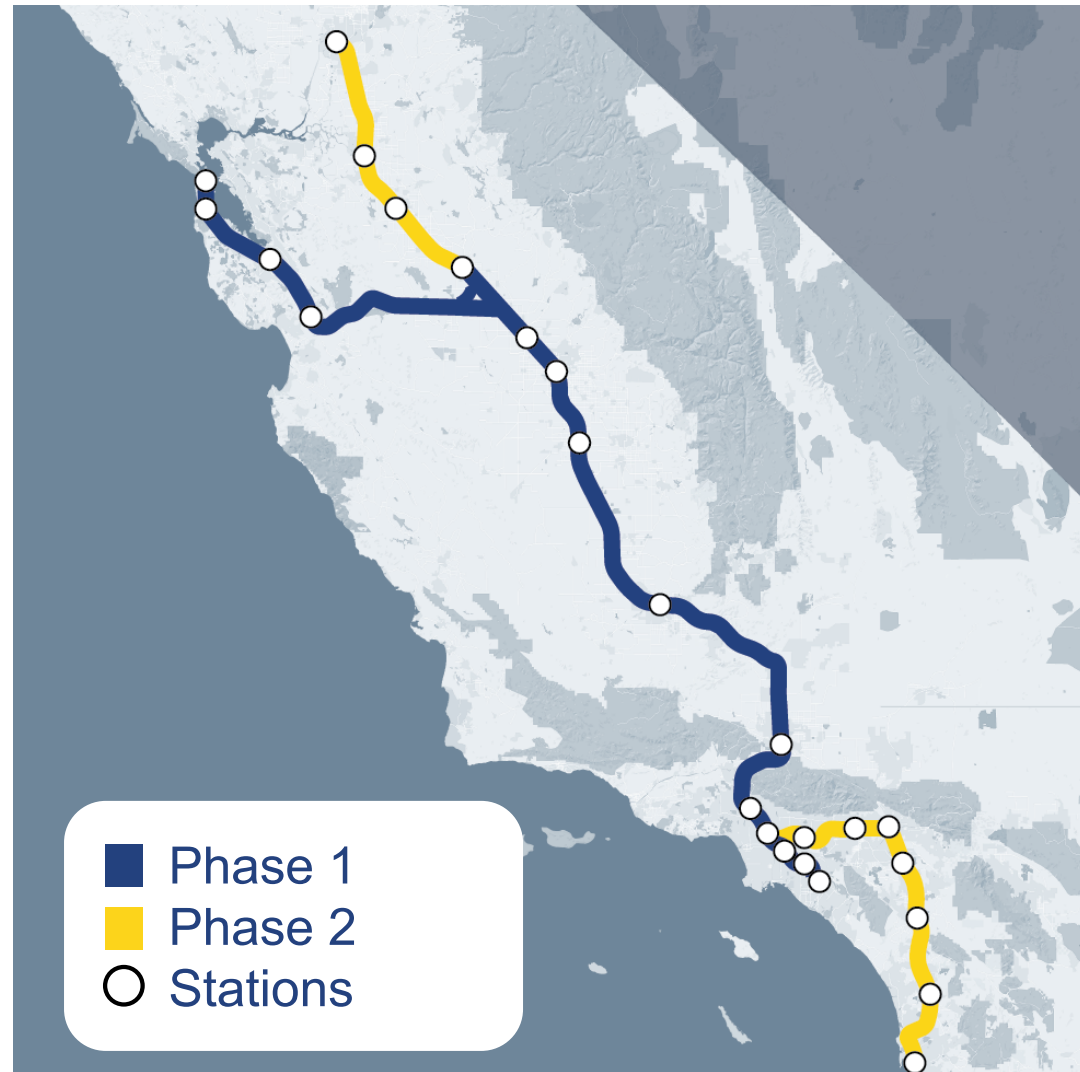
Needed Alternative



Better Air Quality



Job Growth



PROGRAM UPDATE

PROGRESS UNDERWAY

Today:

- » Environmentally Clearing Full 500 Miles Between SF and LA
- » Nearly 380 miles environmentally cleared
- » 119 miles under design and construction
- » Commitment to complete the Merced to Bakersfield initial operating segment
- » Caltrain electrification construction underway
- » LA Union Station improvements
- » Station planning
- » MOU with Brightline



PROGRESS IN THE CENTRAL VALLEY

- **Central Valley Construction**

- » Since 2018, design advanced from 30% to nearly 100%
- » Working to get design changes that address third-party concerns into contracts
- » 71% of structures in construction or completed (66 out of 93)
- » 72% of the miles of guideway completed or in progress (86 out of 119 miles)
- » Nearly 8,000 construction jobs created
- » 698 Small Businesses Engaged

- **Central Valley Right-of-Way**

- » More than 2,305 parcels delivered to contractors – 90% of the total needed



CONSTRUCTION IN THE CENTRAL VALLEY

CONSTRUCTION PACKAGE 1

San Joaquin River Viaduct



- Construction package 1 (CP 1) is the first construction contract executed on the initial operating section
- Extends 32-miles between Avenue 19 in Madera County to East American Avenue in Fresno County
- Includes 22 grade separations, 3 viaducts, a major river crossing over the San Joaquin River and 2 trenches.



CONSTRUCTION IN THE CENTRAL VALLEY

CONSTRUCTION PACKAGE 2-3

Hanford Viaduct



- Construction Package 2-3 (CP 2-3) is the second significant construction contract executed on the Initial Operating Section
- Extends approximately 65 miles from the terminus of Construction Package 1 at East American Avenue in Fresno to one mile north of the Tulare-Kern County line
- Includes approximately 36 grade separations in the counties of Fresno, Tulare and Kings, including viaducts, underpasses and overpasses



CONSTRUCTION IN THE CENTRAL VALLEY

CONSTRUCTION PACKAGE 4

Wasco Viaduct



- Construction Package 4 (CP 4) is the third significant construction contract executed on the Initial Operating Section
- 22-mile stretch bounded by a point approximately one mile north of the Tulare/Kern County Line at the terminus of Construction Package 2-3 and Poplar Avenue to the south
- Will include construction of at-grade, retained fill and aerial sections of the high-speed rail alignment.



CENTRAL VALLEY STATIONS

Downtown Fresno Station



CENTRAL VALLEY STATIONS

Downtown Fresno Station



EXPLORING BUILDHSR.COM

HIGHLIGHTING PROGRESS IN THE CENTRAL VALLEY



California High-Speed Rail | [Contact Us](#) | [Press Center](#)

PROJECTS | ROAD CLOSURES & DETOURS | MAP | GET THE FACTS | JOBS |

CONSTRUCTION PACKAGES | CONSTRUCTION UPDATES | FACES OF HSR



California
High-Speed Rail
Creating **Jobs**,
Building the
Future



Keith
Villagrana
&
Desrae
Ruiz,
Ironworkers

CONSTRUCTION
update

Looking to make a change? Join our team.

Working on the nation's first high-speed rail program requires a variety of experts.

Photo: Keith Villagrana and Desrae Ruiz, Ironworkers



Over 5,500 jobs created building high-speed rail. | [MORE DETAILS >](#)



QUESTIONS?



Headquarters

California High-Speed Rail Authority
770 L Street, Suite 800
Sacramento, CA 95814
www.hsr.ca.gov

Central Valley Regional Office

1111 H Street
Fresno, CA 93721





Valley Rail Expansion Program Update

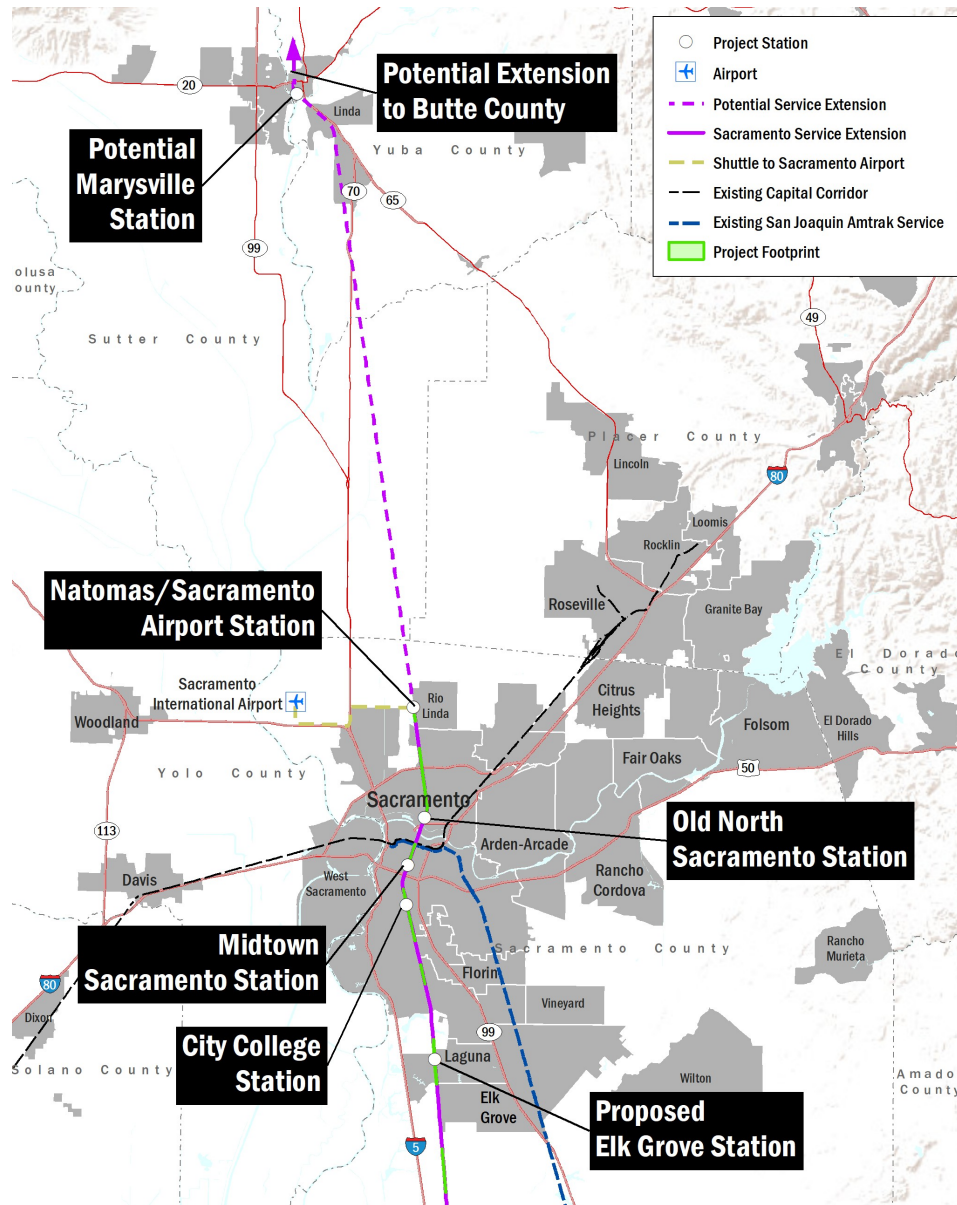
SJV Policy Conference: May 12, 2022





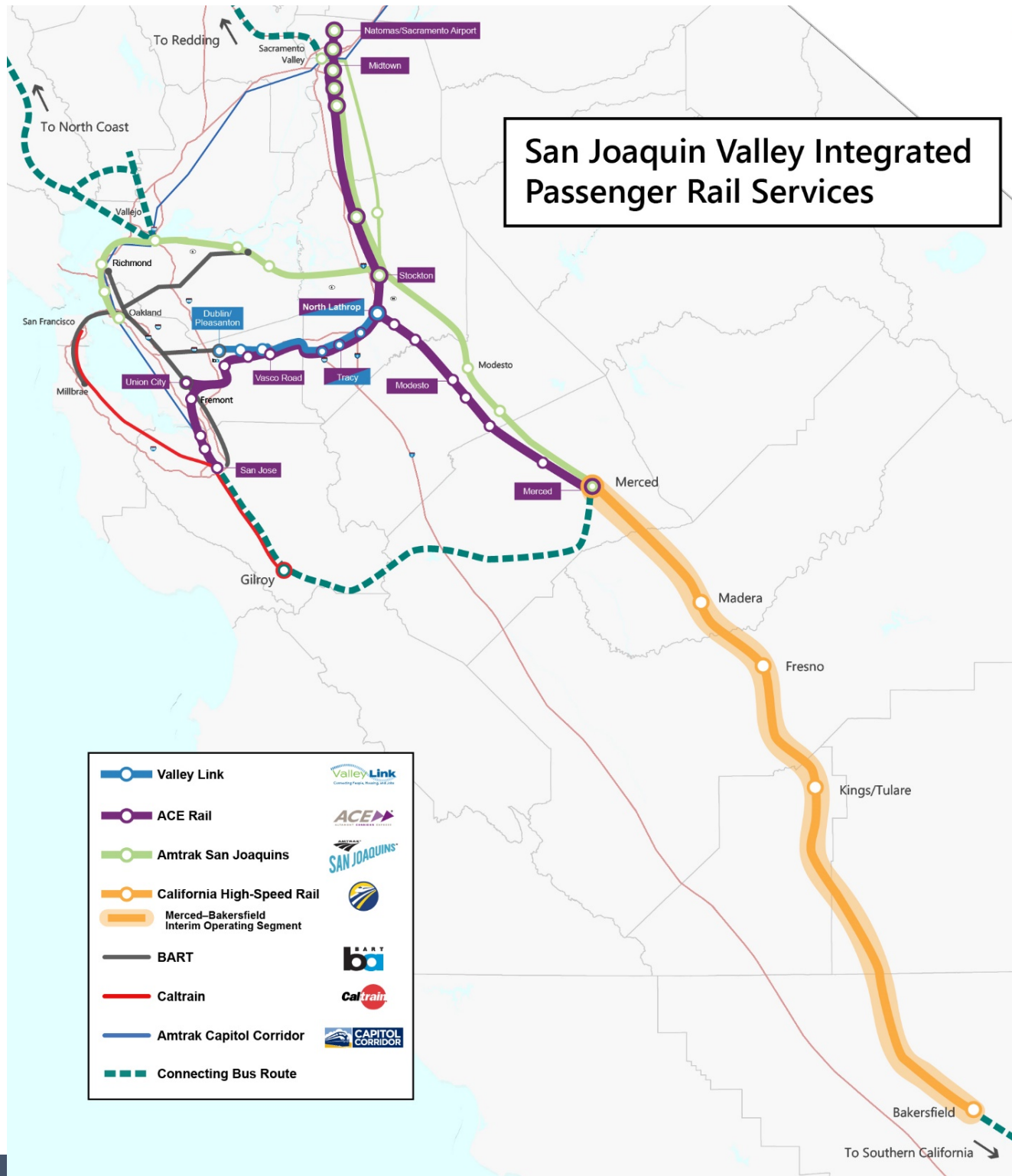
- Valley Rail Program includes expansion of both ACE and the San Joaquins Services
- Valley Rail has received about \$1.3 billion in state and other funding sources
- First round-trip to/from Ceres and Natomas by 2024

Overview of the Sacramento Extension



- Service to Sacramento Valley Station via current route is capped by UPRR
- UPRR Sacramento Subdivision will support additional San Joaquins service and new ACE service.
- Working with Butte CAG and SACOG to plan for further extension north to Yuba City/Marysville and Butte County

San Joaquin Valley Integrated Passenger Rail Services



MITC Alignment

Potential Layover & Maintenance Facility

MITC (At-Grade)

Relocated Spur Track

MITC (Aerial)

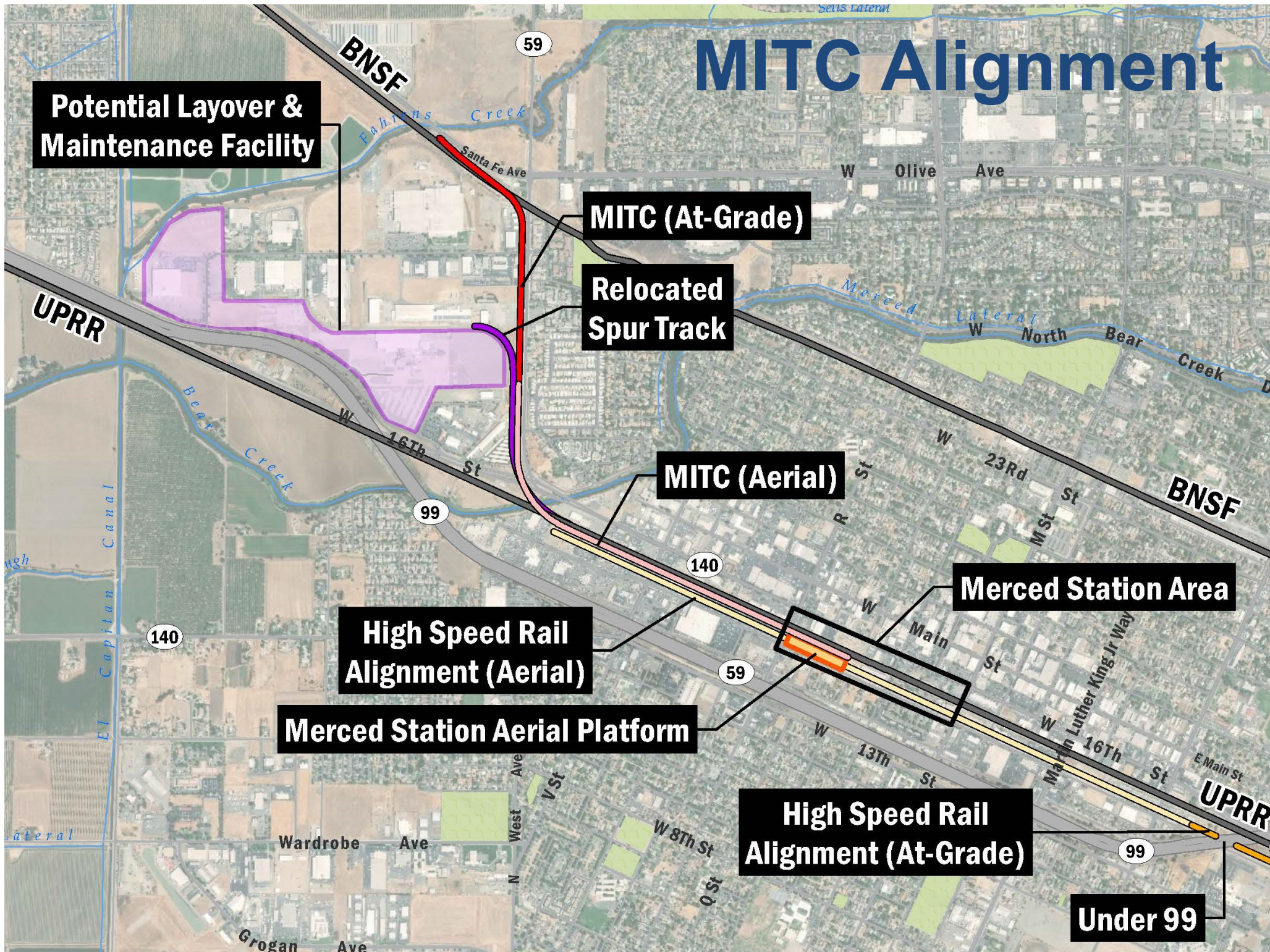
Merced Station Area

High Speed Rail Alignment (Aerial)

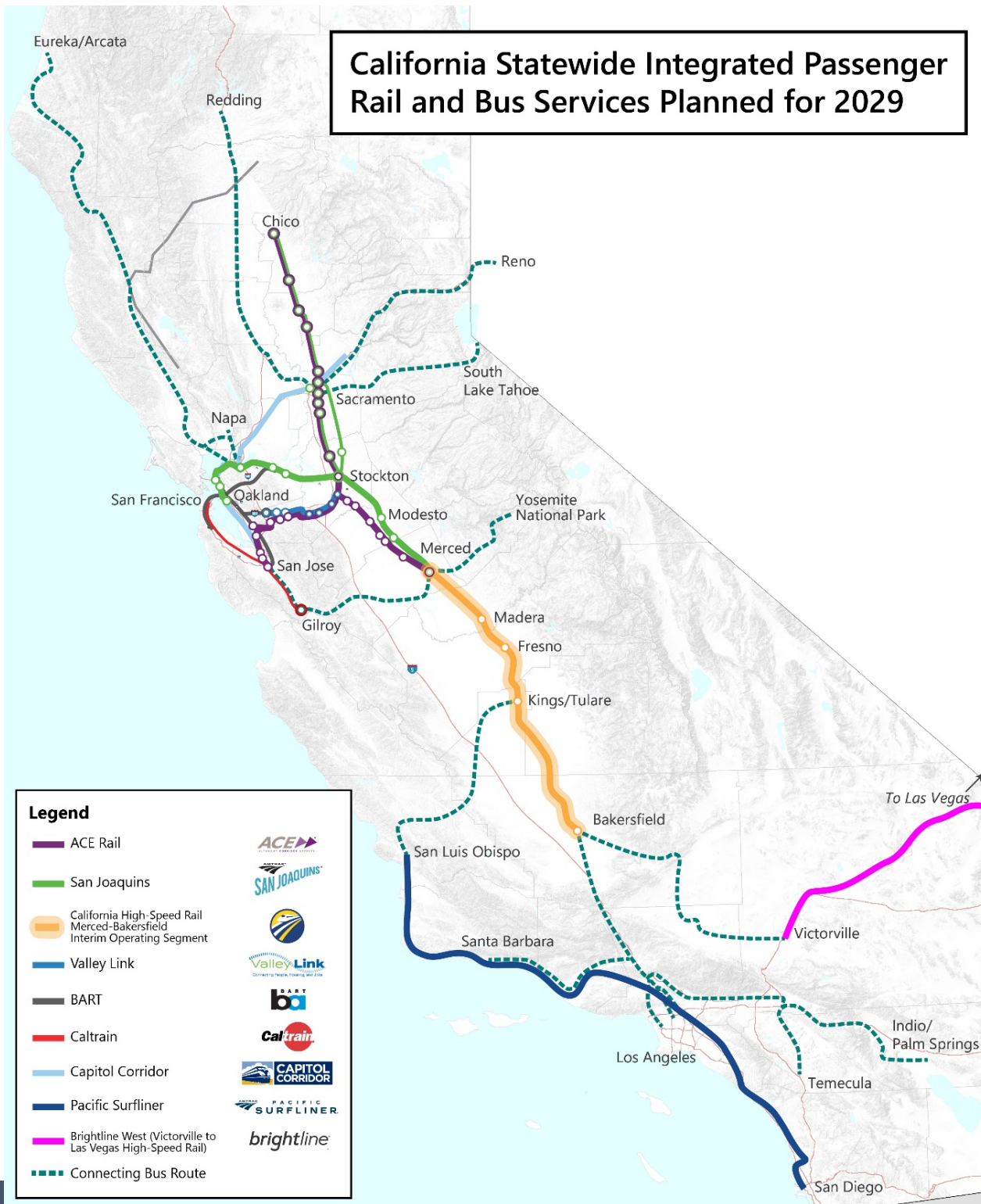
Merced Station Aerial Platform

High Speed Rail Alignment (At-Grade)

Under 99



California Statewide Integrated Passenger Rail and Bus Services Planned for 2029

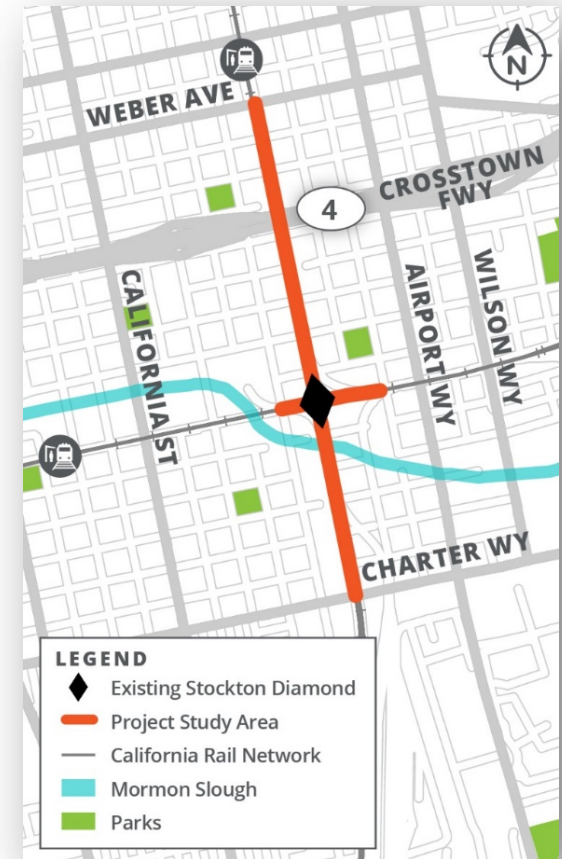


Stockton Diamond Grade Separation



*Busiest, most congested
at-grade rail crossing in CA*

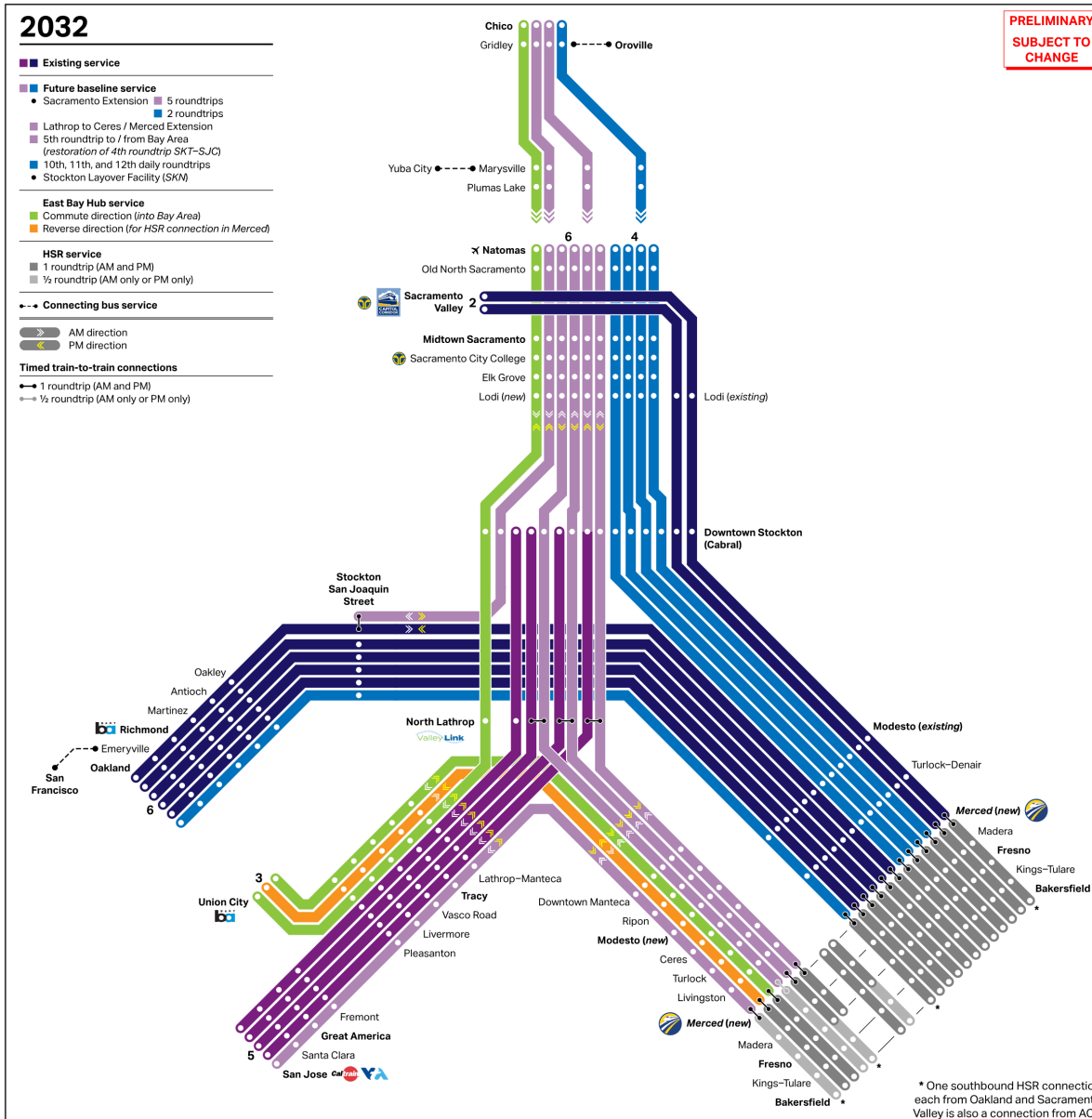
- Causes significant **congestion** and **delays** to service
- Impacts **frequency**, **reliability** and potential **expansion**
- Causes local **crossing delays**



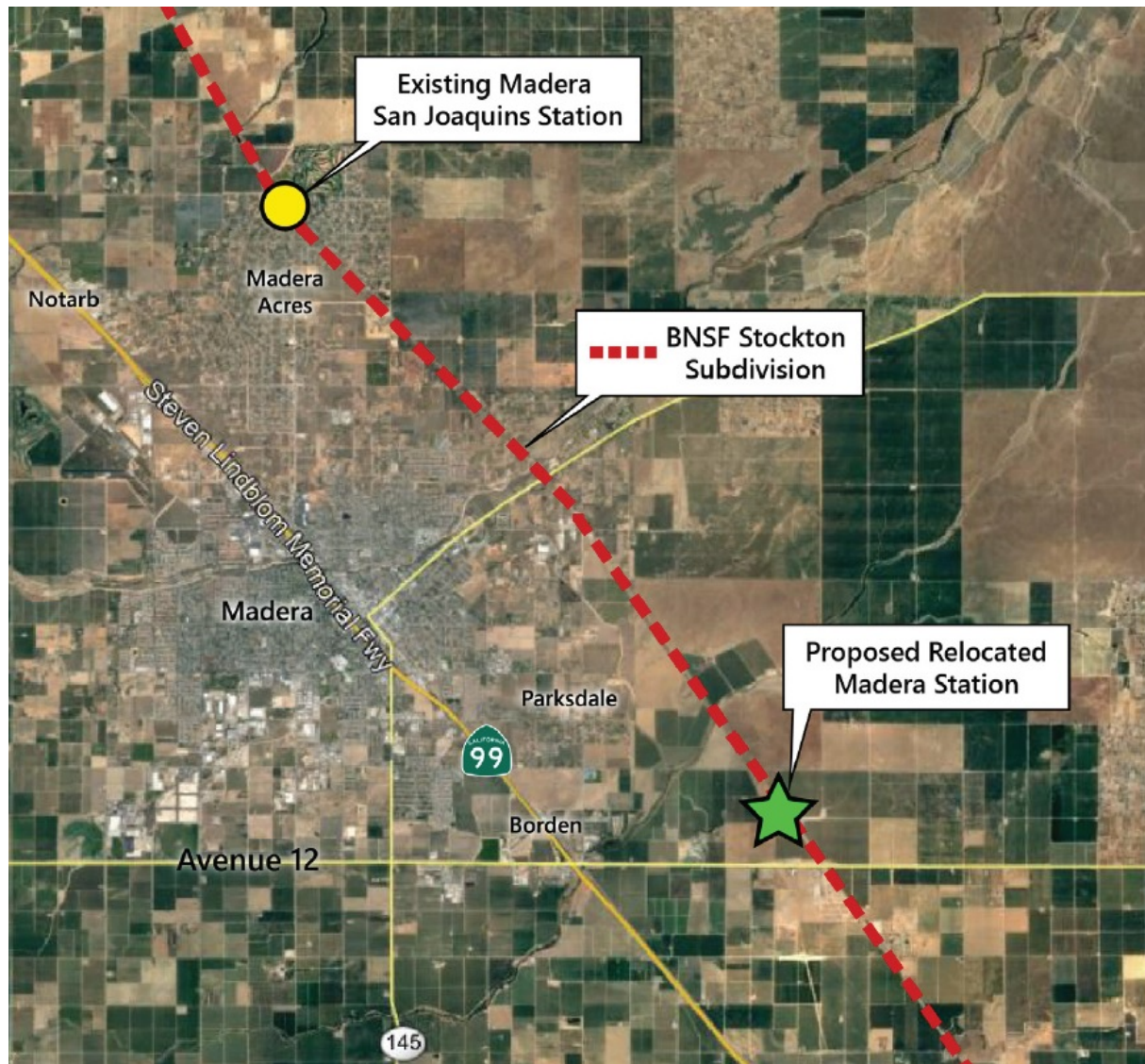
Flyover Concept Rendering



Expanded Valley Rail Program



Madera Station Relocation Project

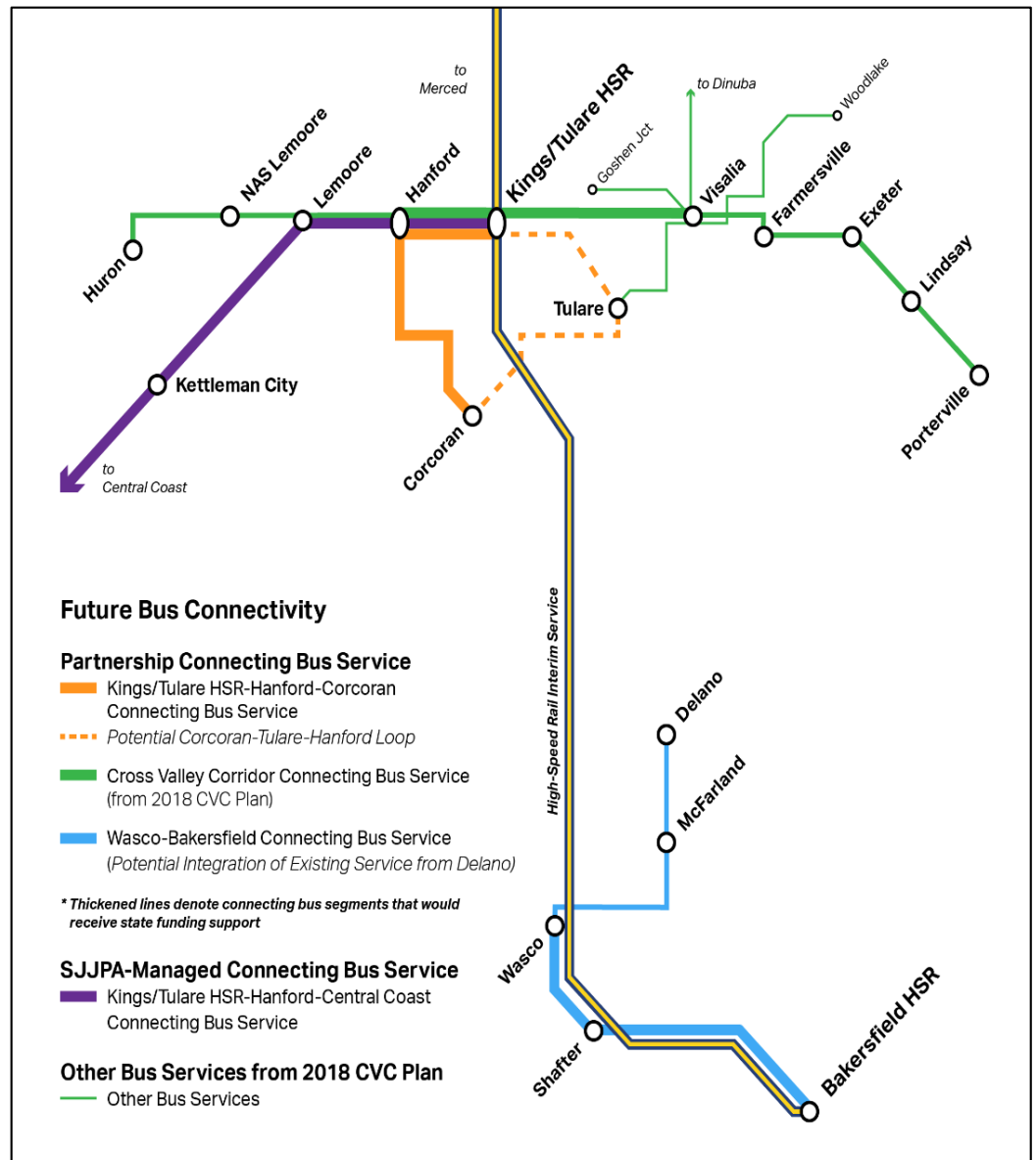


- Existing Madera San Joaquin Station located in vicinity of Madera Acres
- Relocated Station to be located just north of Avenue 12 along the existing BNSF tracks

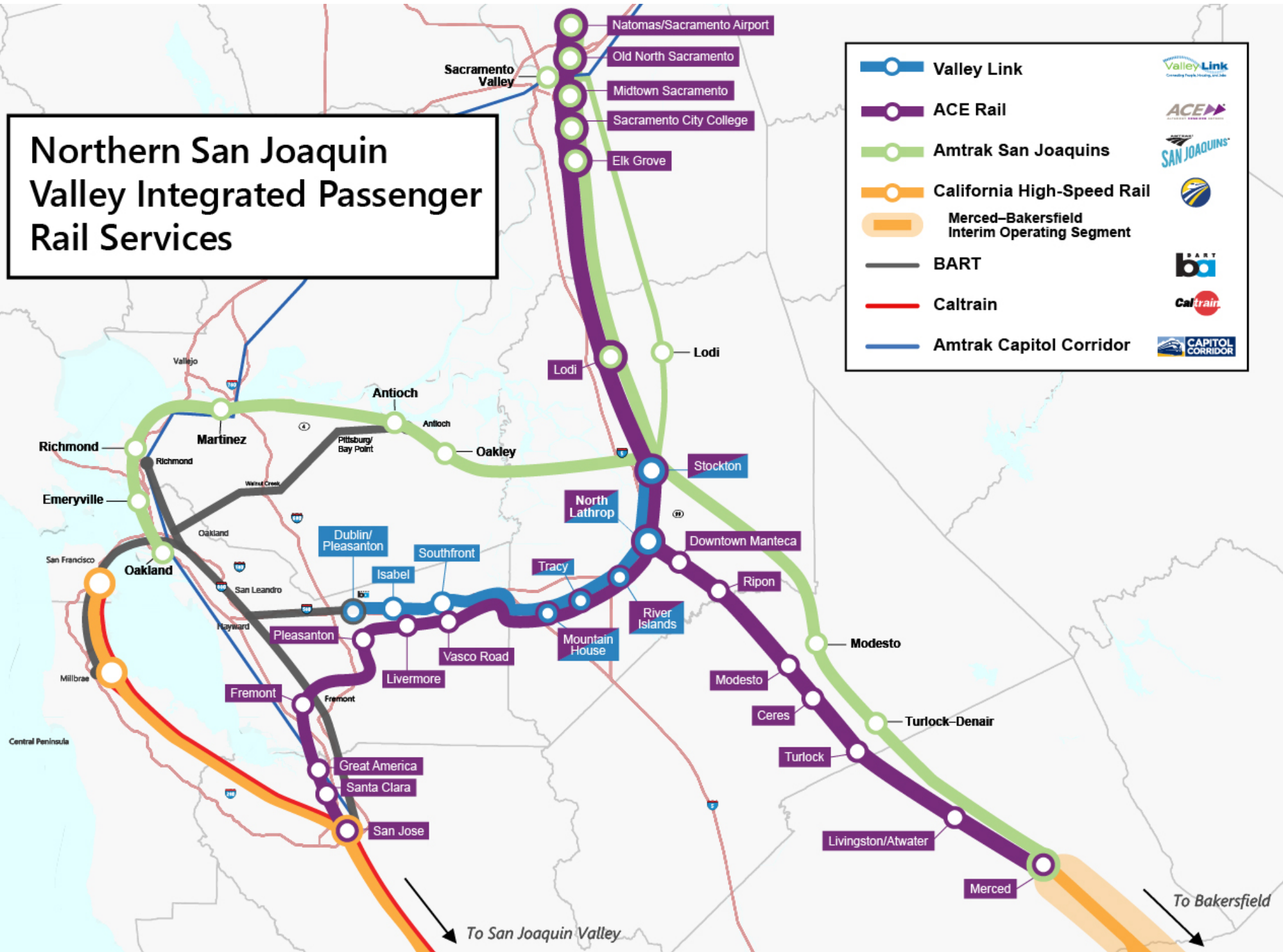
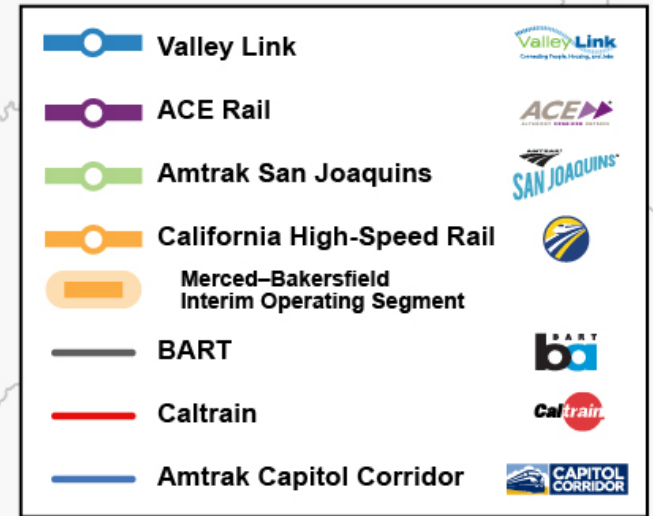


San Joaquin Joint Powers Authority

Potential Regional Bus Network in the San Joaquin Valley (South of Merced)

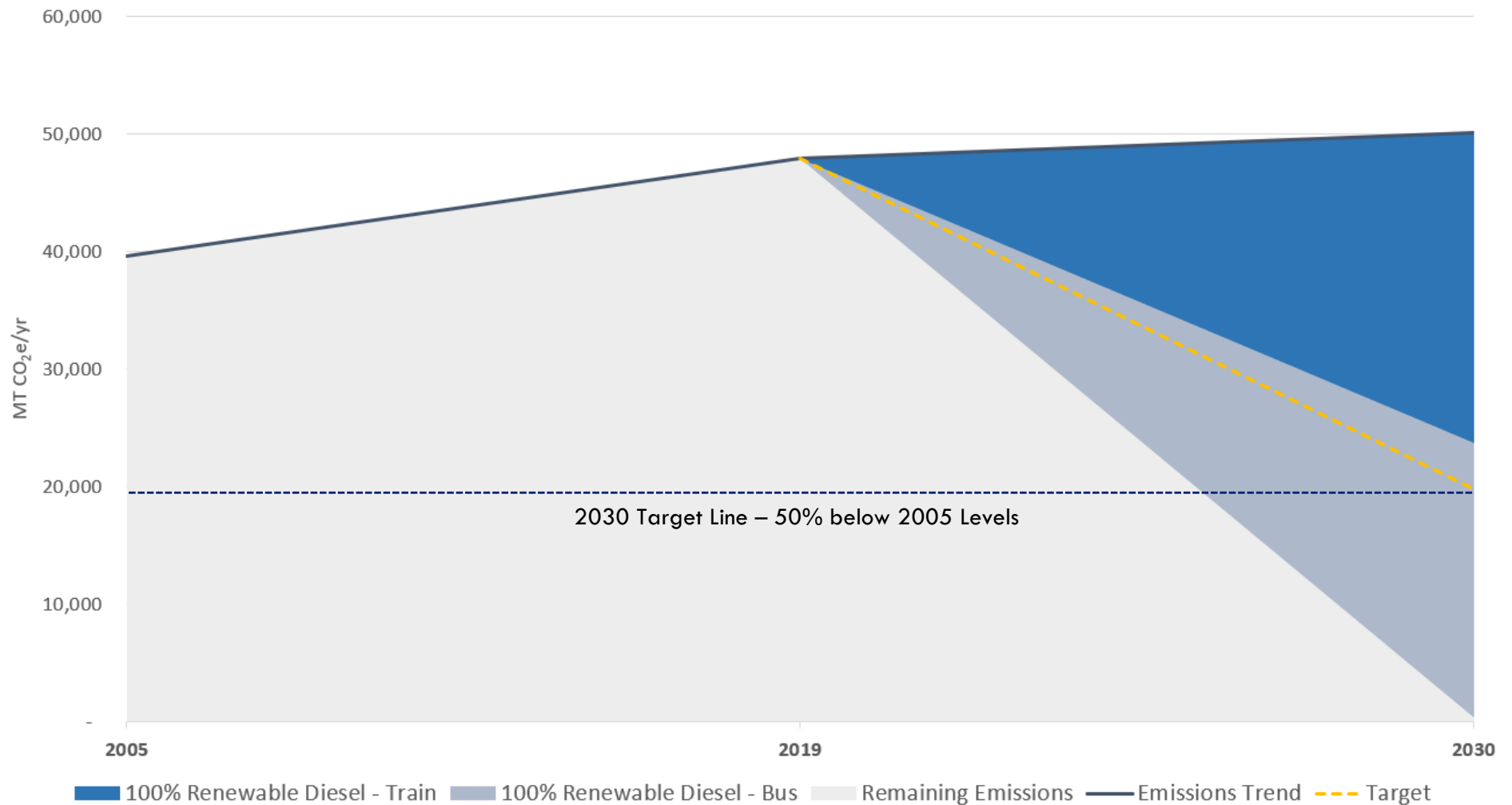


Northern San Joaquin Valley Integrated Passenger Rail Services





2030 Target Achievement Pathway



Valley Rail Program Innovations:

- Network Integration with HSR & Service Expansion
- Consolidated Management
- Stockton Diamond Grade Separation Project
- Climate Action Plans
- Zero Emission Vehicles & Solar at Stations
- Enhanced Connectivity to Public Transportation and Sustainable, Transit-Oriented Development



www.acerail.com

www.sjjpa.com

dan@acerail.com; (530) 400-9475

