

CALIFORNIA HIGH-SPEED RAIL NORTHERN CALIFORNIA REGION

Staff-Recommended State's Preferred Alternative

Transbay Joint Powers Authority
Thursday, August 8, 2019



BACKGROUND



CONNECTING CALIFORNIA

CALIFORNIA HIGH-SPEED RAIL



Increase Mobility



Needed Alternative



Better Air Quality



Job Growth



2040 VISION FOR PASSENGER RAIL

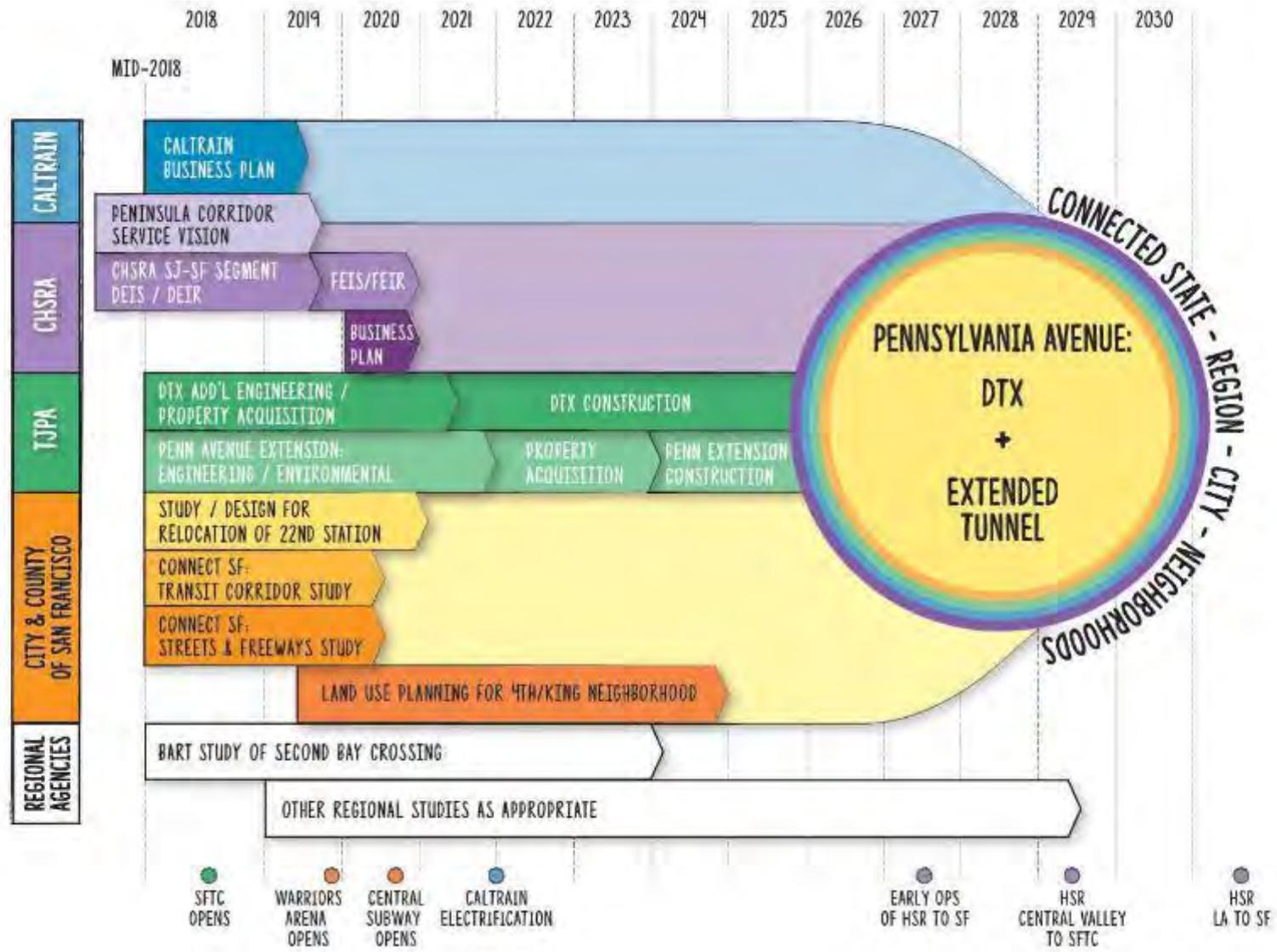
Goals of the State Rail Plan

- Integrated Statewide Network
- Coordinated Schedules
- Customer Focus





PROGRAM DEVELOPMENT AND STATUS



Approximate schedules, subject to change

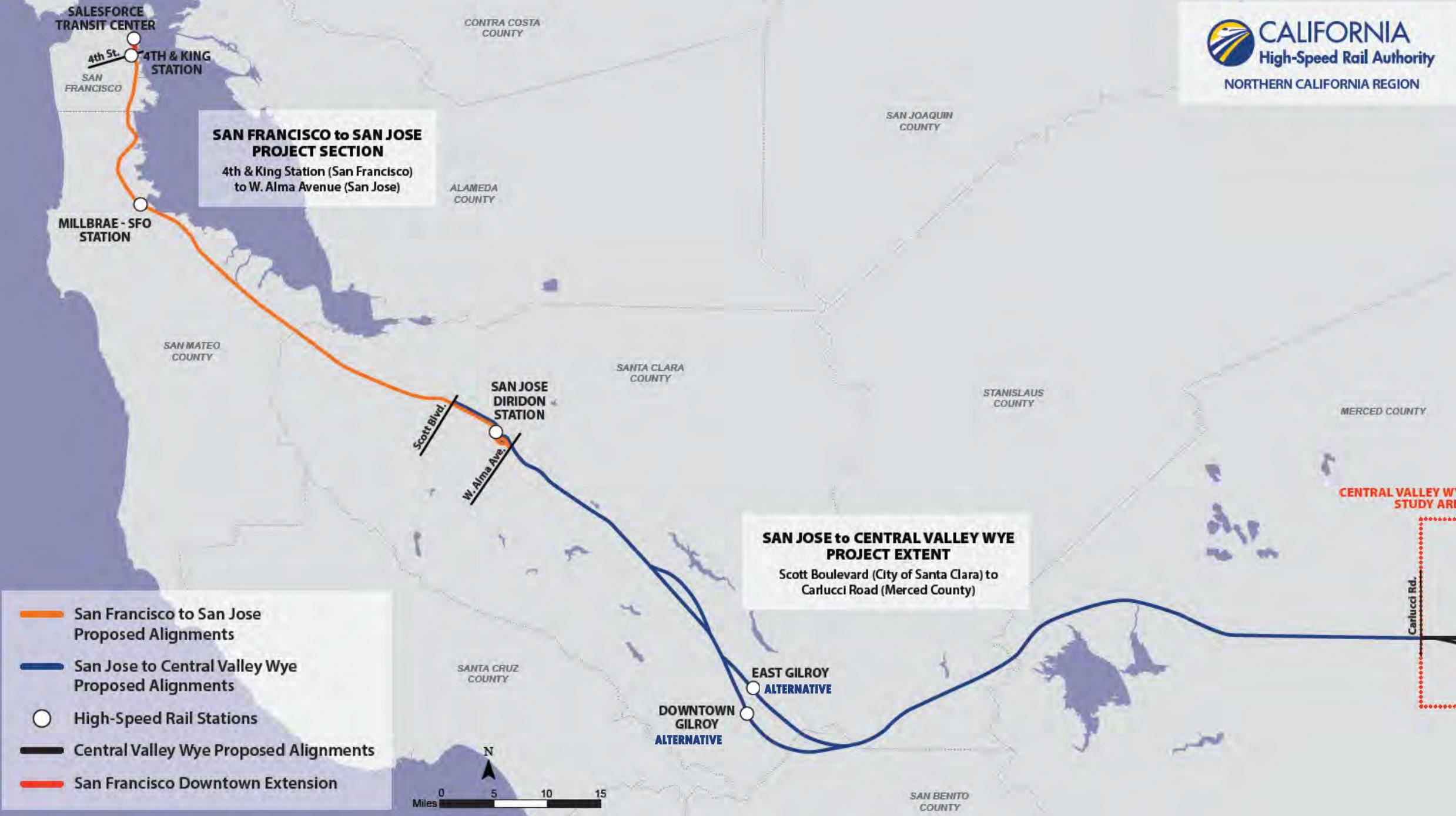


OBJECTIVE

Share staff-**recommended State's Preferred Alternative** and process for identifying the State's Preferred Alternative.

- The staff-**recommended State's Preferred Alternative** is based on stakeholder input and analyses completed to date.
- All alternatives will be analyzed at an equal level of detail and described in the published Draft EIR/EIS.
- Staff will summarize the comments received during planned outreach and report to the **Authority Board for consideration with the recommended State's Preferred Alternative** on September 17, 2019.
- **Identifying the State's Preferred Alternative** does not approve or adopt a preferred alternative for final design or construction.





-  San Francisco to San Jose Proposed Alignments
-  San Jose to Central Valley Wye Proposed Alignments
-  High-Speed Rail Stations
-  Central Valley Wye Proposed Alignments
-  San Francisco Downtown Extension



CENTRAL VALLEY WYE STUDY AREA

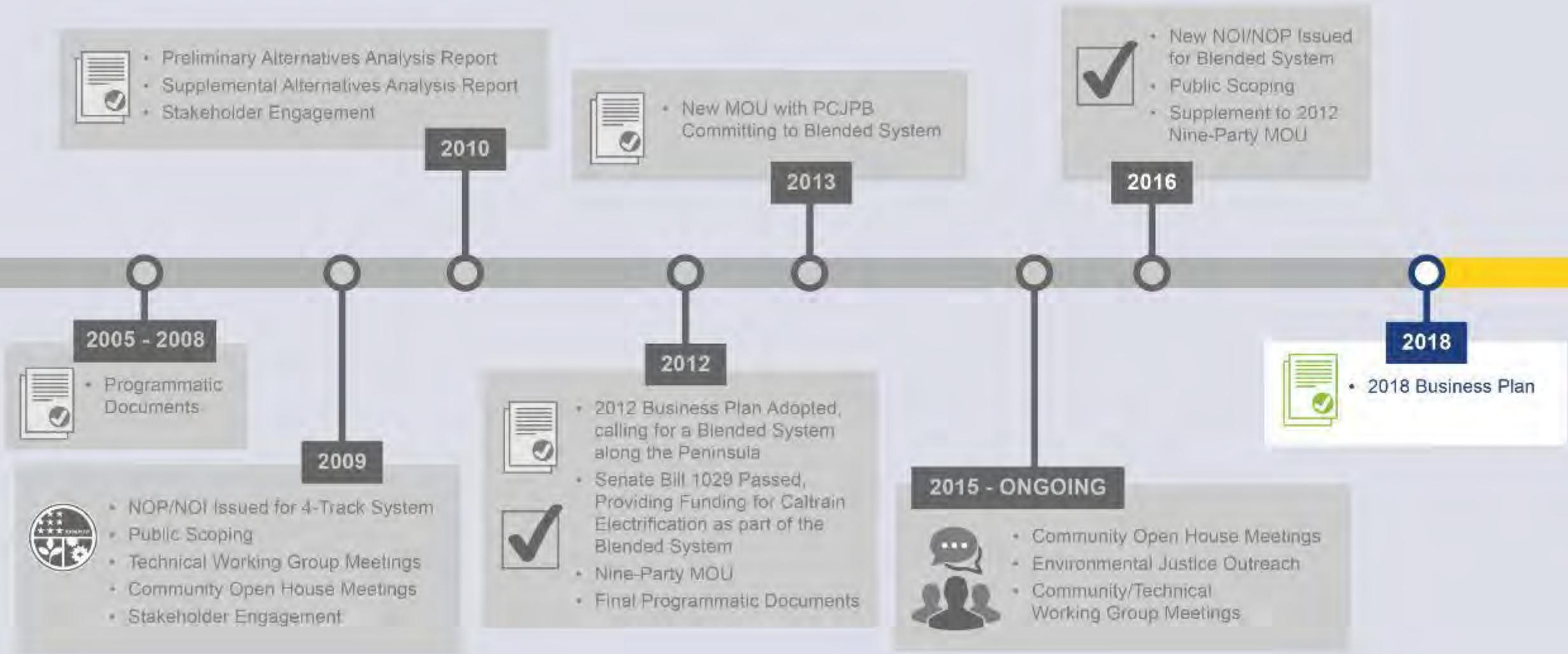
Carlucci Rd.

SAN FRANCISCO TO SAN JOSE PROJECT SECTION

ALTERNATIVES OVERVIEW



HIGH-SPEED RAIL ALTERNATIVES DEVELOPMENT



SAN FRANCISCO – SAN JOSE PROJECT ALTERNATIVES A AND B

San Francisco to San Jose Project Section

Alternative A Features

- M** East Option Light Maintenance Facility
- No Additional Passing Tracks

Alternative B Features

- M** West Option Light Maintenance Facility
- Additional Passing Tracks

○ HSR Stations

— — — San Jose to Merced Alignments

— Downtown Extension



SAN FRANCISCO TO SAN JOSE

Common Project Elements – Alternatives A & B

- High-Speed Rail stations¹
 - » San Francisco 4th and King
 - » Millbrae
- Up to 110 mph speeds
 - » Track modifications to support higher speeds
- Peak operations
 - » 4 High-Speed Rail trains and 6 Caltrain trains per hour/per direction

¹ **Salesforce Transit Center** has been environmentally cleared by Transbay Joint Powers Authority and will not be part of the California High-Speed Rail Authority's environmental analysis.

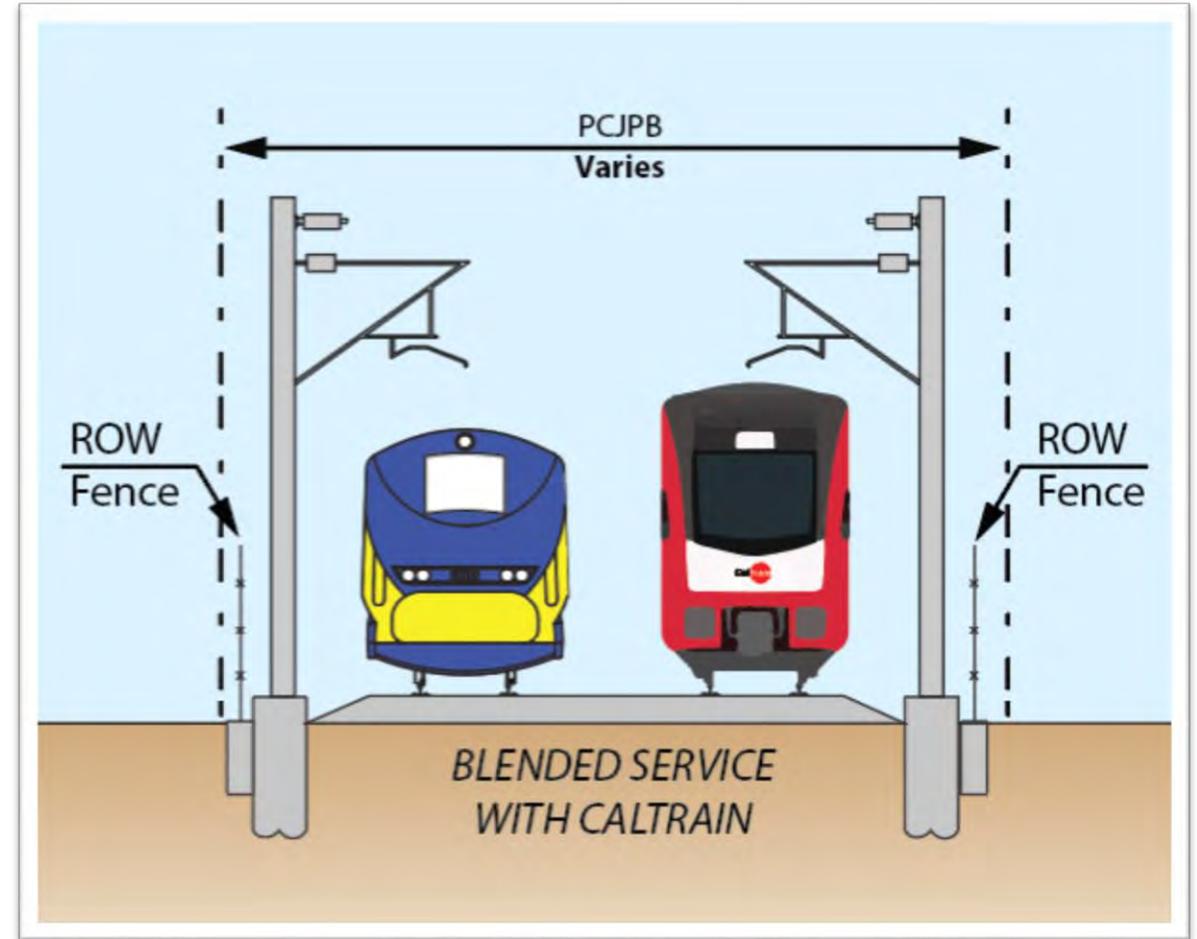
San Jose Diridon Station is being evaluated as part of the San Jose to Merced Project Section but will be included in both project sections' environmental analysis.



SAN FRANCISCO TO SAN JOSE

Common Project Elements – Alternatives A & B

- Remove hold-out rule at Broadway and Atherton Caltrain Stations
- Safety modifications at Caltrain-only stations and at-grade crossings
- Corridor fencing
- Uses Caltrain electrification infrastructure and tracks
- Predominantly within the existing railroad right-of-way
- At-grade tracks with quad gates at each road crossing



SAN FRANCISCO TO SAN JOSE PROJECT SECTION

IDENTIFYING
A PREFERRED ALTERNATIVE



FACT SHEETS: TECHNICAL ANALYSIS



ALTERNATIVES EVALUATION FOR SAN FRANCISCO TO SAN JOSE PROJECT SECTION



WHY IS STAFF RECOMMENDING ALTERNATIVE A AS THE STATE'S PREFERRED ALTERNATIVE?

Teams of rail and environmental planners, engineers, and other specialists in the design and operation of high-speed rail services have undertaken a complex analysis of the two alternatives. The results indicate that each alternative has tradeoffs – advantages and disadvantages. Nevertheless, Alternative A was identified as the staff-recommended State's Preferred Alternative because it provides the best overall balance between system performance, community, and environmental factors. The factors that differentiate the two alternatives are presented in the tables below.

HOW WERE THE ALTERNATIVES EVALUATED?

Alternatives A & B were evaluated by comparing the alternatives across three criteria:



System Performance, Operations, and Costs. The best-performing alternative is **bold**.

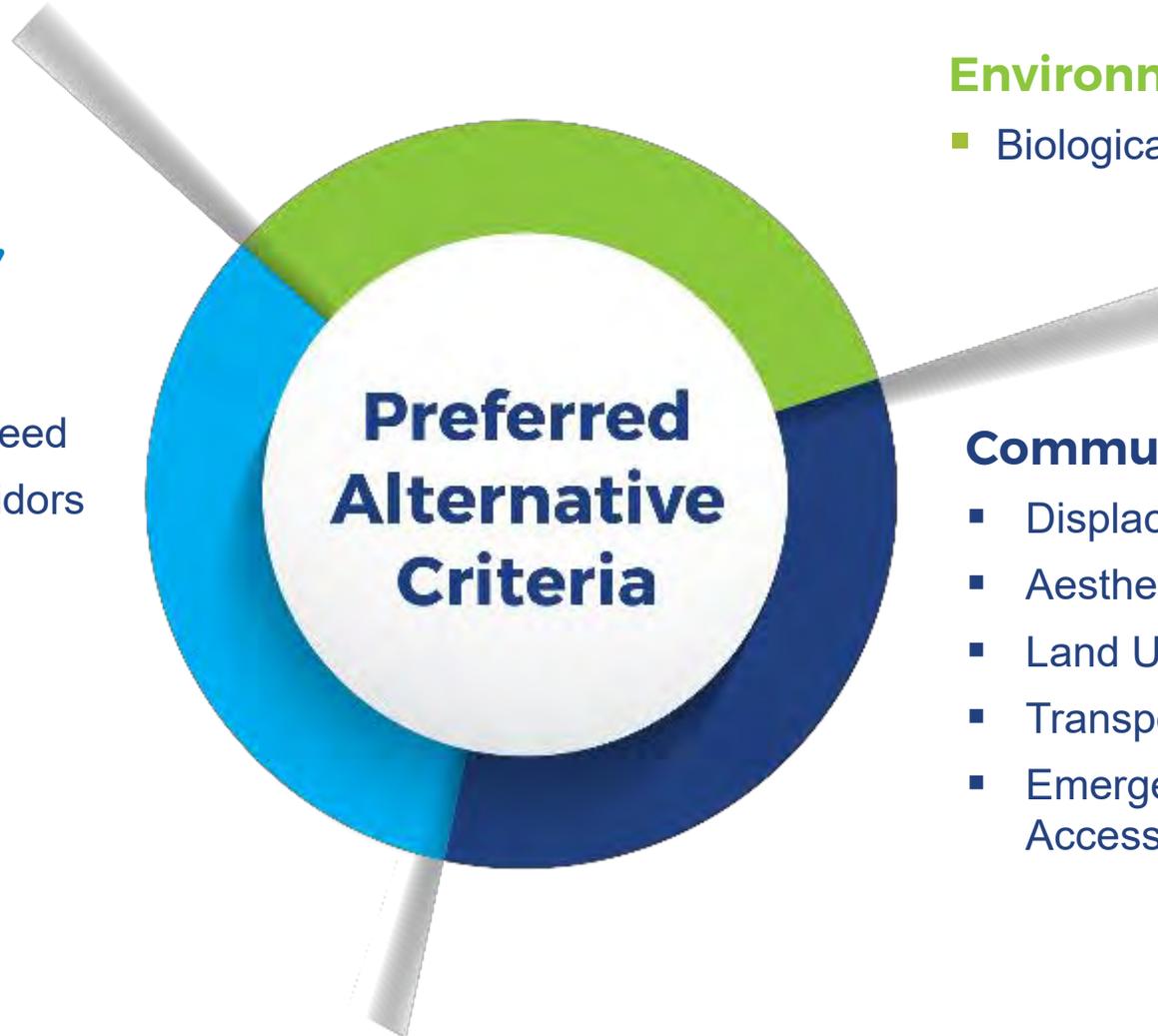
CRITERIA	ALT A	ALT B
Alignment length (miles)		42.9
Speed Capacity (mph)		Up to 110
HSR Peak Hour Average Representative Travel Time San Francisco to San Jose (minutes)	47	45
Proposition 1A Service Travel Time Compliance	✓	✓
Estimated Capital Costs (2017\$)	\$2.6 billion	\$3.5 billion
Estimated Annual Operations and Maintenance Costs (2017\$)		\$78 million
Caltrain Peak Hour Average Representative Travel Time (minutes)	63	65



STATE'S PREFERRED ALTERNATIVE CRITERIA

System Performance, Operations, & Costs

- Alignment Length
- Maximum Authorized Speed
- Proximity to Transit Corridors
- Travel Time
- Capital Costs
- O&M Costs



Environmental Factors

- Biological and Aquatic Resources

Community Factors

- Displacements
- Aesthetics and Visual Quality
- Land Use and Development
- Transportation
- Emergency Vehicle Access/Response Time

ALTERNATIVE A – STAFF-RECOMMENDED STATE’S PREFERRED ALTERNATIVE



LEGEND

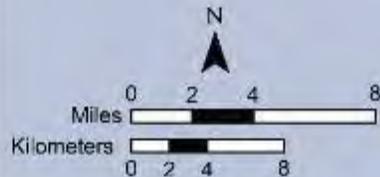
San Francisco to San Jose Alignments

Alternative A

HSR Stations

Maintenance Facility

San Jose to Merced Alignments



ALTERNATIVE A – Staff-Recommended State’s Preferred Alternative

Conclusions of Technical Analysis



Fewest major visual impacts



Fewest impacts on natural resources



Fewest displacements



Lowest capital cost



Fewest road closures



Slower HSR, faster Caltrain peak hour travel time



Fewest impacts on wetlands and habitats



Policy-level alignment with the Caltrain Business Plan

SAN JOSE TO MERCED PROJECT SECTION

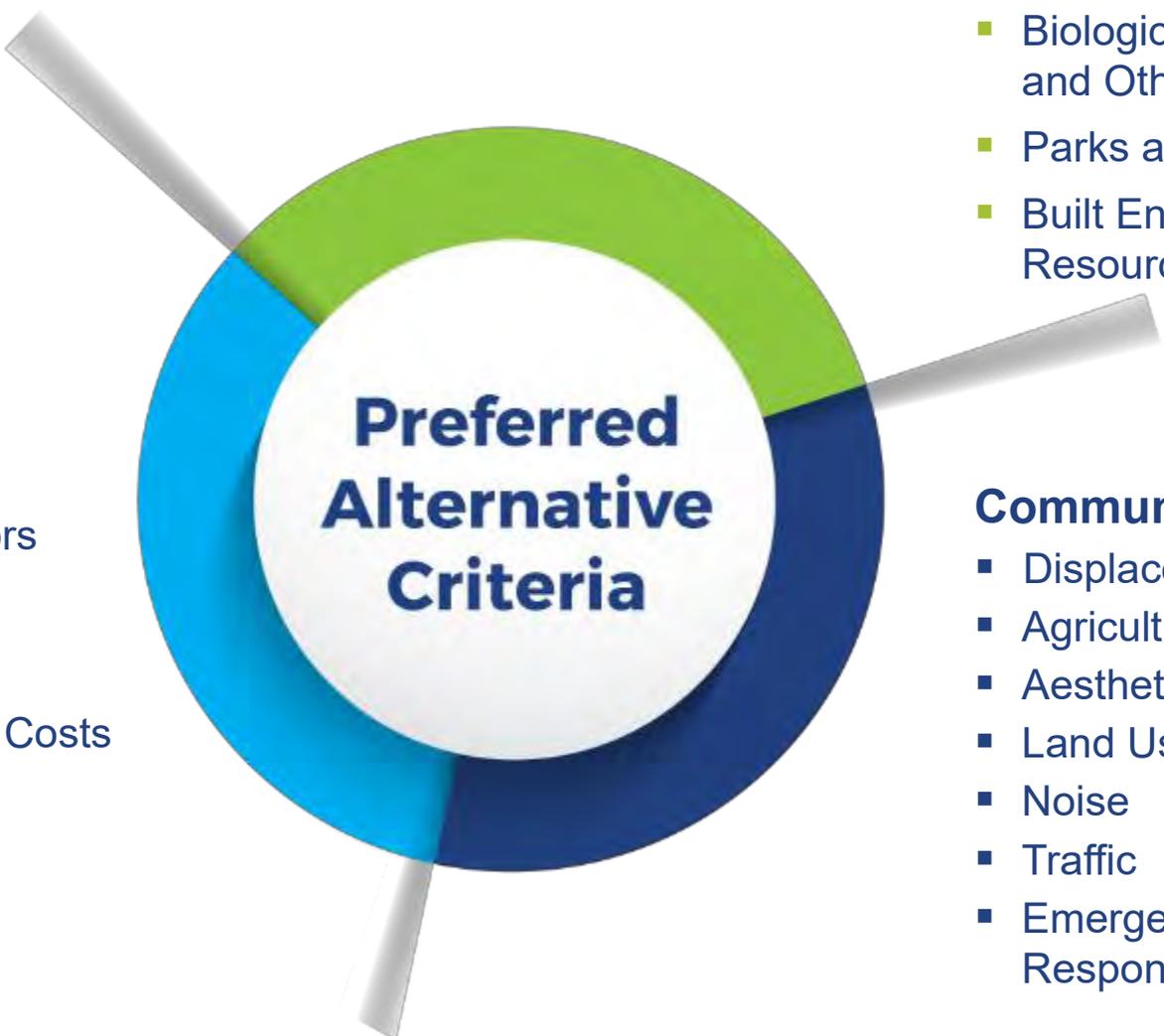
IDENTIFYING A PREFERRED ALTERNATIVE



STATE'S PREFERRED ALTERNATIVE CRITERIA

System Performance, Operations, & Costs

- Alignment Length
- Operational Speed
- Proximity to Transit Corridors
- Travel Time
- Capital Costs
- Operations & Maintenance Costs



Preferred Alternative Criteria

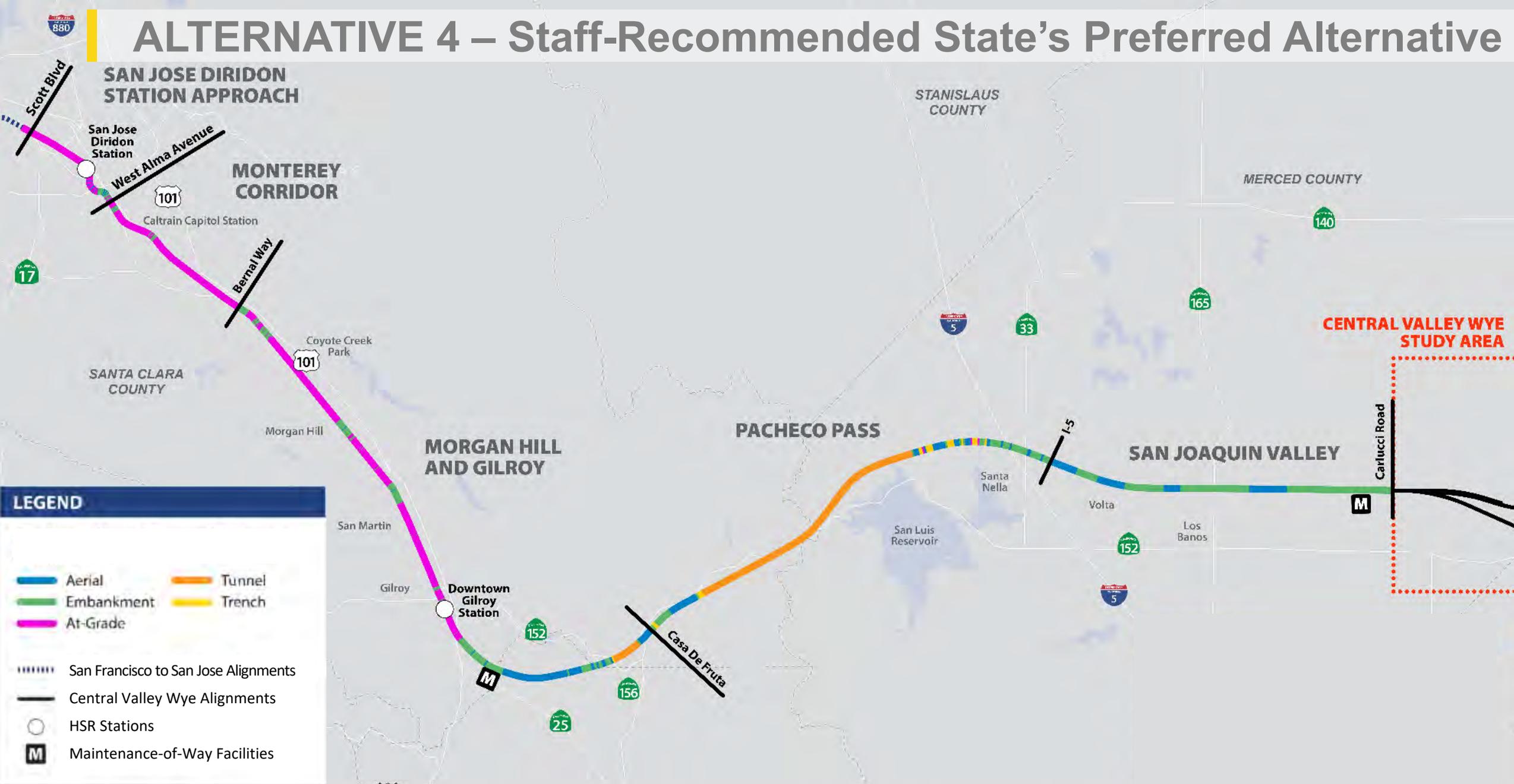
Environmental Factors

- Biological Resources and Wetlands and Other Waters of the U.S.
- Parks and Recreation Areas
- Built Environment Historic Resources

Community Factors

- Displacements
- Agricultural Lands
- Aesthetics and Visual Quality
- Land Use and Development
- Noise
- Traffic
- Emergency Vehicle Access/ Response Time

ALTERNATIVE 4 – Staff-Recommended State’s Preferred Alternative



LEGEND

- Aerial
- Embankment
- At-Grade
- Tunnel
- Trench
- San Francisco to San Jose Alignments
- Central Valley Wye Alignments
- HSR Stations
- M Maintenance-of-Way Facilities

ALTERNATIVE 4 – Staff-Recommended State’s Preferred Alternative

Conclusions of Technical Analysis



Fewest displacements



Fewest road closures



Fewest impacts on wetlands and habitats



Good access to transit systems and services



Fewest impacts on natural resources



Fewest visual impacts



Marginal increase in system travel time



More noise (if no quiet zones)



Lowest capital cost



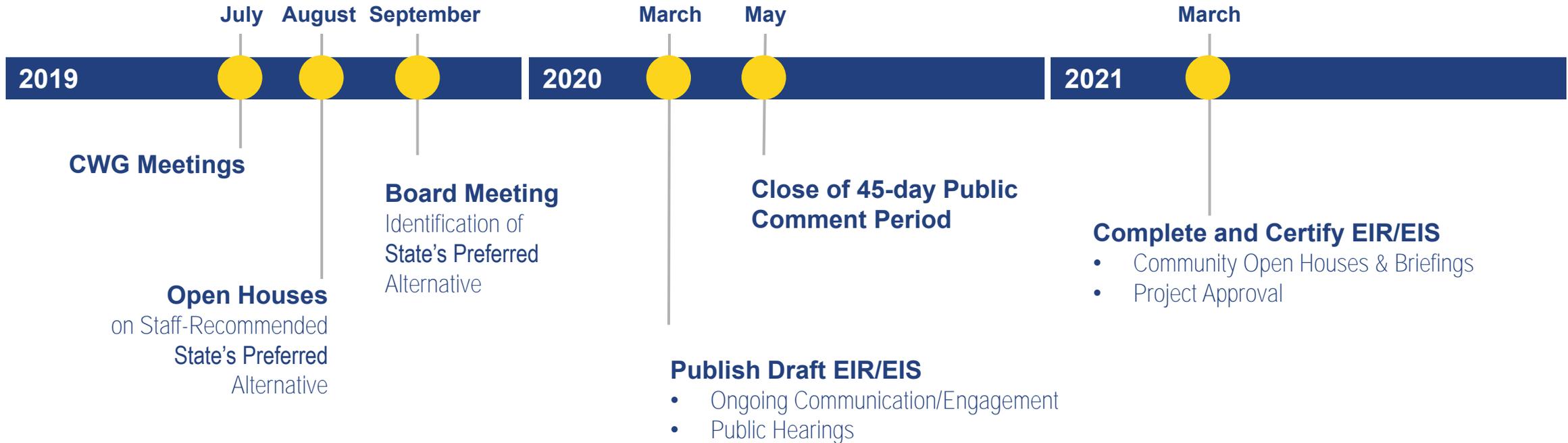
Allows for extension of electrified Caltrain service to Gilroy

NEXT STEPS



NEXT STEPS

San Francisco to San Jose Project Section



UPCOMING MEETINGS

Community Working Groups

Morgan Hill-Gilroy CWG
July 10, 6:00 – 8:00 pm
Morgan Hill Community and Cultural Center
Morgan Hill, CA

San Jose CWG
July 16, 6:00 – 8:00 pm
Leininger Center
San Jose, CA

San Francisco CWG
July 22, 6:00 – 8:00 pm
Bay Area Metro Center
San Francisco, CA

San Mateo County CWG
July 24, 6:00 – 8:00 pm
Burlingame Library
Burlingame, CA

Open Houses

South Peninsula Open House
August 6, 5:00 to 8:00 p.m.
Adrian Wilcox High School
Santa Clara, CA

San Francisco Open House
August 12, 5:00 to 8:00 p.m.
Bay Area Metro Center
San Francisco, CA

San Mateo Open House
August 19, 5:00 to 8:00 p.m.
Sequoia High School
Redwood City, CA

Gilroy Open House
August 8, 5:00 to 8:00 p.m.
Gilroy Portuguese Hall
Gilroy, CA

San Jose Open House
August 15, 5:00 to 8:00 p.m.
City Hall Council Chambers
San Jose, CA
**Hosted by Sen. Beall*

Los Banos Open House
August 21, 5:00 to 8:00 p.m.
Los Banos Community Center
Los Banos, CA



REQUEST FOR COMMUNITY FEEDBACK

CALIFORNIA HIGH-SPEED RAIL

Please share the information presented today with your communities and give us your feedback.

- Comments will be accepted through August 22, 2019 to be included in the staff report to the Authority Board.
- Comments can be submitted via email to San.Francisco_San.Jose@hsr.ca.gov or via mail to: Northern California Regional Office
California High-Speed Rail Authority
100 Paseo De San Antonio, Suite 300
San Jose, CA 95113

OR

- Share feedback in person at an upcoming Open House or at the Authority Board meeting on September 17 in San Jose, CA.

THANK YOU



Headquarters

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