

# SAN FRANCISCO TO SAN JOSE PROJECT SECTION

Staff-Recommended State's Preferred Alternative  
Community Working Group Meetings  
July 2019



# AGENDA

July 2019 San Francisco to San Jose Project Section Community Working Groups

- » Introductions & Agenda Review
- » Refining the Alternatives: Collaboration with Partner Agencies, Stakeholders, and Members of the Public
- » Characteristics of Alternatives
- » Identifying a Preferred Alternative
- » Discussion of the Staff-Recommended State's Preferred Alternative
- » Next Steps
- » Public Comment

# OBJECTIVES

- Share Staff-Recommended State's Preferred Alternative and process for selecting the State's Preferred Alternative.
- Provide CWG members with an opportunity to discuss the staff recommendation.
- Collect CWG feedback on the Staff-Recommended State's Preferred Alternative.

Staff will summarize the comments received at today's meeting and report to the Authority Board for consideration with the recommended State's Preferred Alternative on September 17, 2019.

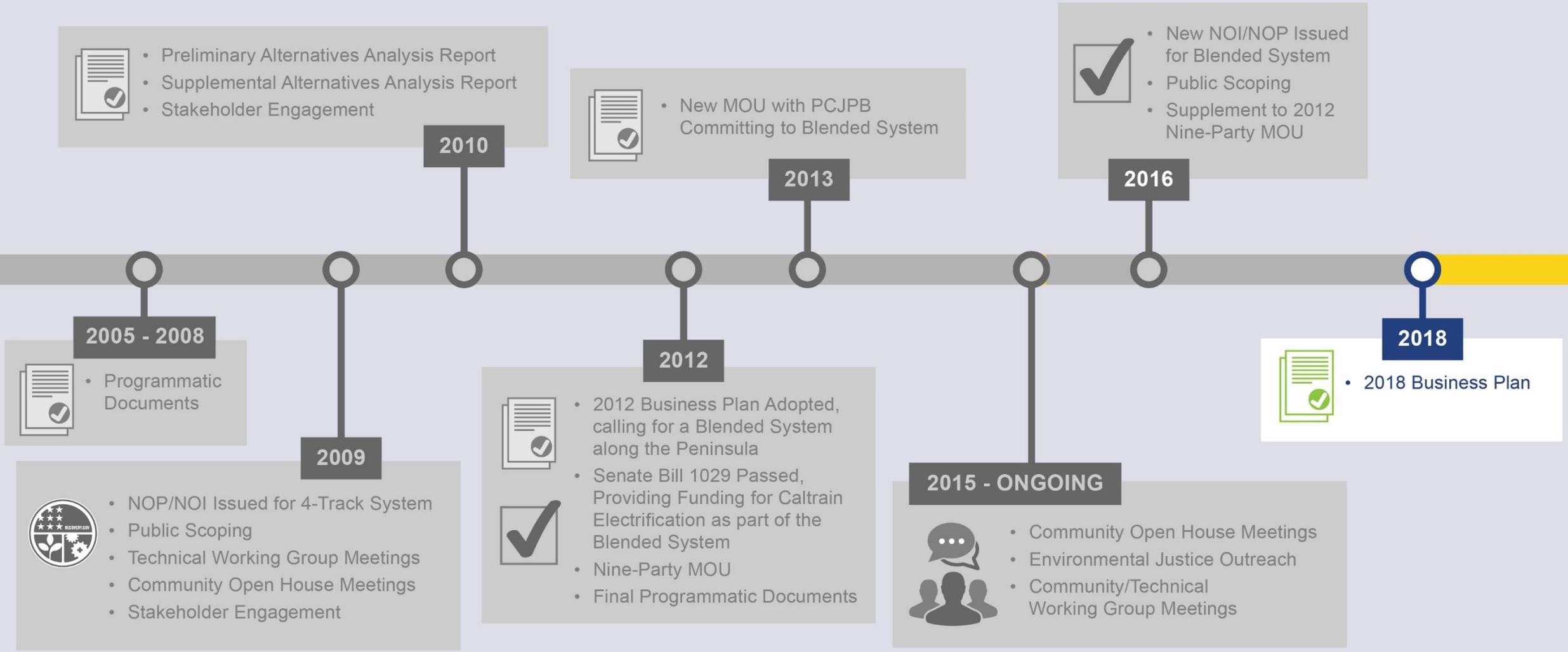
Identifying the State's Preferred Alternative does not approve or adopt a preferred alternative for final design or construction.



# **REFINING THE ALTERNATIVES:** **Collaboration with Partner Agencies, Stakeholders, and Members of the Public**

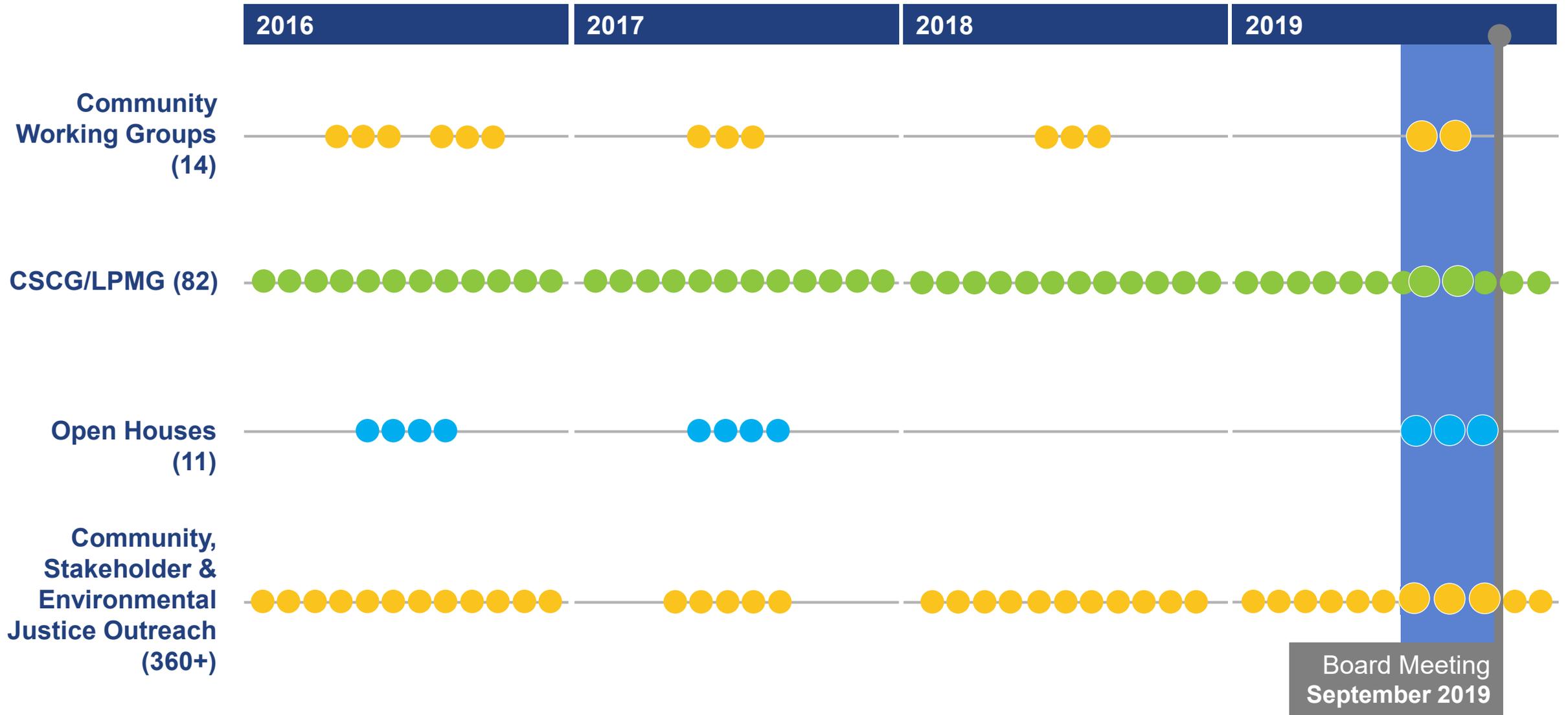


# ALTERNATIVES DEVELOPMENT



# SAN FRANCISCO TO SAN JOSE COMMUNITY OUTREACH

2016 – 2019



Board Meeting  
September 2019



# INTERFACING WITH NORTHERN CALIFORNIA AGENCIES

Topics covered in 2018 - 2019

	ALIGNMENTS	WATER MANAGEMENT	TRANSPORTATION/ ROADS	ENGINEERING/ DESIGN	LAND USE	JOINT OUTREACH	2018 BUSINESS PLAN
Bay Area Rapid Transit	●		●	●			●
California Strategic Growth Council	●			●	●		●
Caltrain	●			●		●	●
Caltrans District 4	●		●				●
City and County Staff (throughout corridor)	●	●	●	●	●	●	●
Floodplain Administrators and Managers	●	●		●			●
Metropolitan Transportation Commission	●				●		●
Mineta San Jose International Airport	●		●				●
San Francisco Bay Conservation and Development Commission	●				●		●
San Francisco International Airport	●			●	●		●
Santa Clara Valley Transportation Authority	●				●	●	●
Transbay Joint Powers Authority	●		●	●			●



# KEY ISSUES IDENTIFIED DURING OUTREACH

- Aesthetic impacts and visual quality
- Brisbane LMF: air quality, visual, and noise impacts of construction and operation
- Compatibility of project design with future land use development
- Displacements
- Employment opportunities
- Encroachment on BCDC jurisdiction
- Impacts on Caltrain and other transit services
- Noise and vibration
- Safety and security at at-grade crossings and on station platforms
- Traffic congestion



# STATE'S PREFERRED ALTERNATIVE



# CHARACTERISTICS OF ALTERNATIVES



# OVERVIEW

- There are differences between the two alternatives and the staff recommendation 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.

# 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

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**○** HSR Stations

**— — —** San Jose to Merced Alignments

**—** Downtown Extension



# SAN FRANCISCO TO SAN JOSE

## Common Project Elements – Alternatives A & B

- **High-Speed Rail stations<sup>1</sup>**
  - » San Francisco 4<sup>th</sup> 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



<sup>1</sup> 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

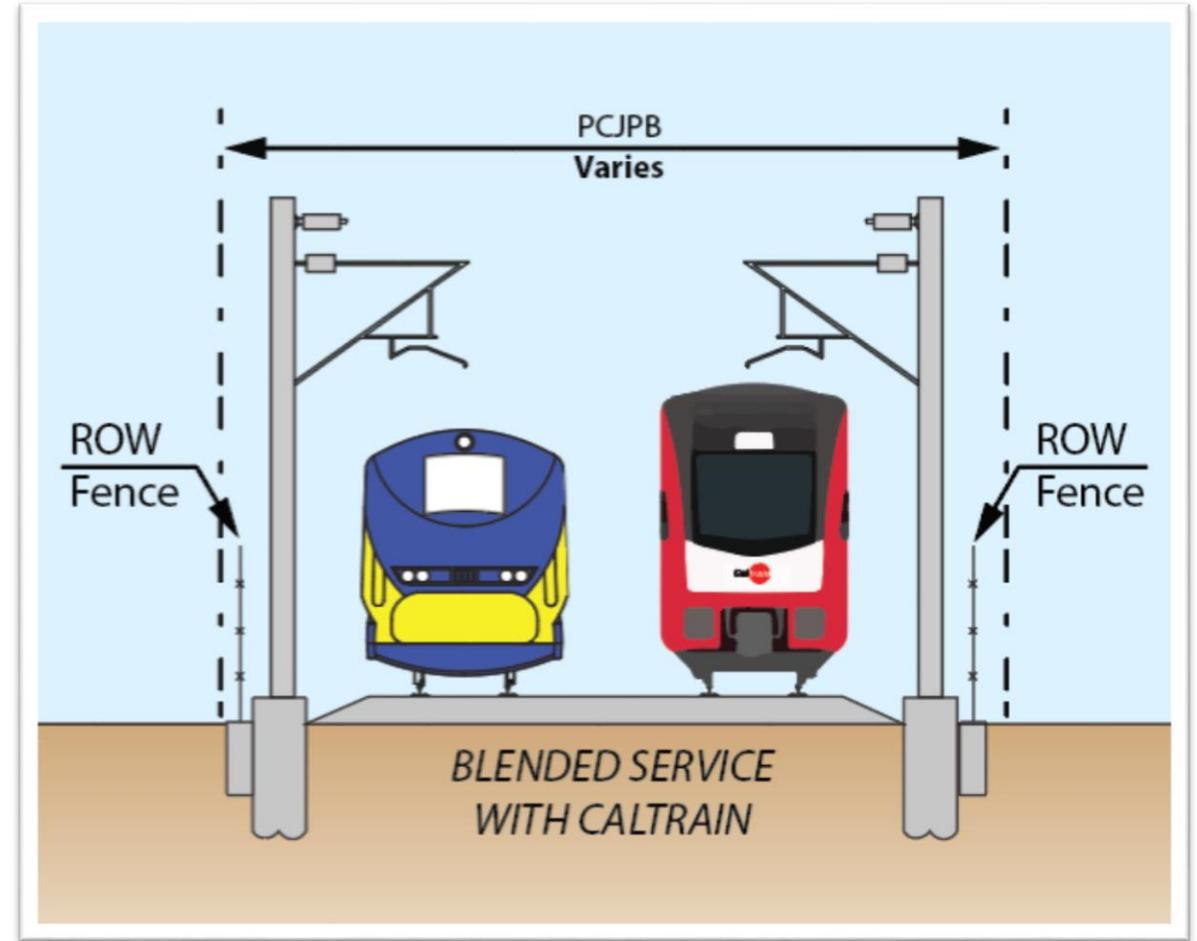
- **Remove hold-out rule at Broadway and Atherton Caltrain Stations**
- **Safety modifications at Caltrain-only stations and at-grade crossings**
- **Corridor fencing**



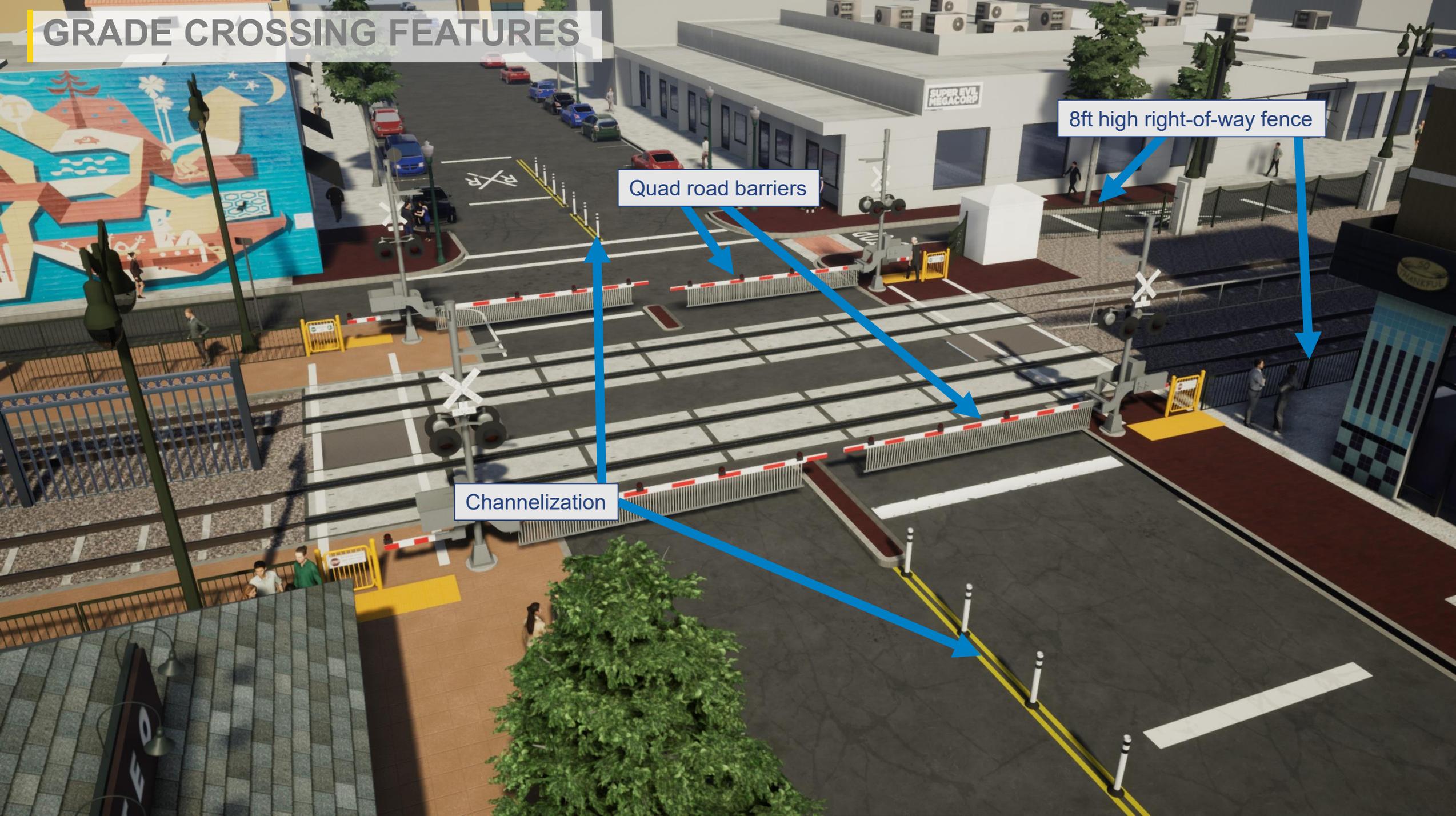
# BLENDED AT-GRADE

Typical Section North of Santa Clara

- Uses Caltrain electrification infrastructure and tracks
- Predominantly within the existing railroad right-of-way
- At-grade tracks with quad gates at each road crossing



# GRADE CROSSING FEATURES



Quad road barriers

8ft high right-of-way fence

Channelization

# LIGHT MAINTENANCE FACILITY

Alternatives Carried Forward

## Brisbane



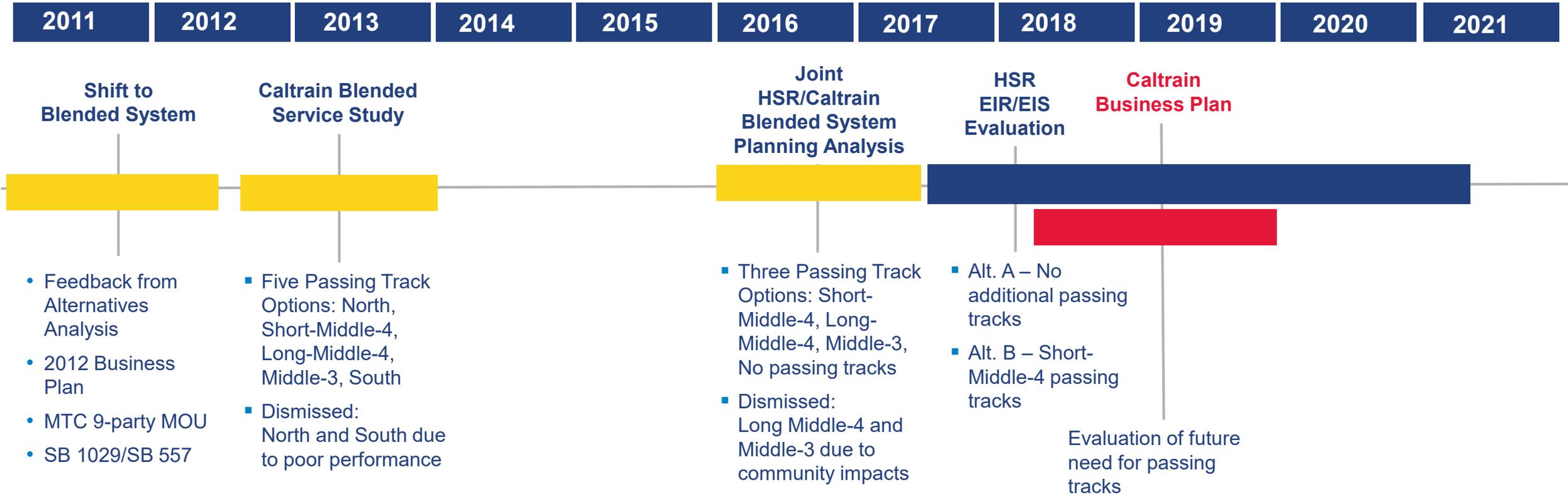
**Alternative A**  
**M** East



**Alternative B**  
**M** West



# PASSING TRACKS EVALUATION TIMELINE



# PASSING TRACKS

## Alternatives Carried Forward

- **Alternative A: No Additional Passing Track Option**
- **Alternative B: Short-Middle 4-Track Passing Track Option (6 miles)**
  - » San Mateo to Redwood City
  - » Adjacent to 1.8 miles of residential uses
  - » Relocates San Carlos Caltrain station



*Note: "Middle" means middle of the corridor*

# IDENTIFYING A PREFERRED ALTERNATIVE



# PREFERRED ALTERNATIVE CRITERIA

## System Performance, Operations, & Costs

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



## Preferred Alternative Criteria

## Environmental Factors

- Biological and Aquatic Resources

## Community Factors

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

*All data is preliminary and subject to change*

SALESFORCE  
TRANSIT CENTER

4th St.

4TH & KING  
STATION

SAN  
FRANCISCO



MILLBRAE - SFO  
STATION

**SAN FRANCISCO to SAN JOSE  
PROJECT SECTION**

4th & King Station (San Francisco)  
to W. Alma Avenue (San Jose)

ALAMEDA  
COUNTY

SAN MATEO  
COUNTY

SANTA CLARA  
COUNTY

SAN JOAQUIN  
COUNTY

STANISLAUS  
COUNTY

SAN JOSE  
DIRIDON  
STATION

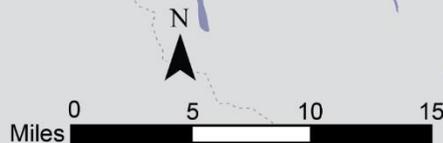
Scott Blvd.

W. Alma Ave.

**SAN JOSE to CENTRAL VALLEY WYE  
PROJECT EXTENT**

Scott Boulevard (City of Santa Clara) to  
Carlucci Road (Merced County)

*To Carlucci Road*



# STAFF-RECOMMENDED STATE'S PREFERRED ALTERNATIVES



**CALIFORNIA**  
High-Speed Rail Authority

NORTHERN CALIFORNIA REGION

-  Alternative A: San Francisco to San Jose
-  Alternative 4: San Jose to Central Valley Wye
-  High-Speed Rail Stations
-  Maintenance Facilities
-  Central Valley Wye Proposed Alignments
-  San Francisco Downtown Extension

\*Environmental documents will include the entire project section from San Francisco to Alma St., San Jose

# SYSTEM PERFORMANCE, OPERATIONS AND COSTS<sup>1</sup>



**Bold text** in tables indicates best-performing alternative(s).

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

<sup>1</sup> Operational service time includes station stops, schedule pad, and other operating parameters

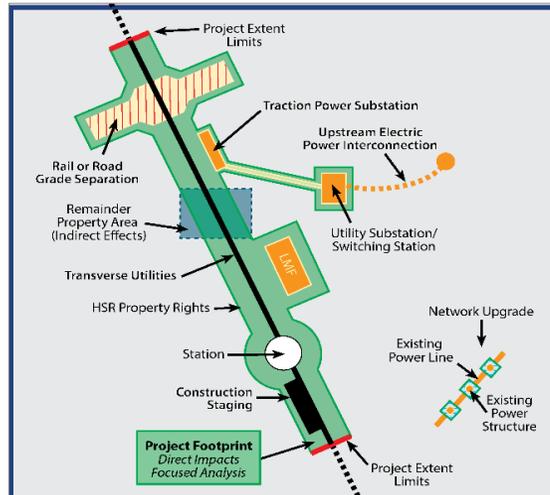
# DISPLACEMENTS



**Bold text** in tables indicates best-performing alternative(s).

CRITERIA	ALT A	ALT B
Residential displacements (number of units)	<b>10</b>	19
Commercial and industrial displacements (# of businesses)	<b>29</b>	108
(square feet)	<b>211,261</b>	466,084
Community and public facilities displacement (number of units)	<b>2</b>	4

HSR Temporary and permanent footprint



Example: overlay of footprint in urban area



# AESTHETICS AND VISUAL QUALITY



**Bold text** in tables indicates best-performing alternative(s).

CRITERION	ALT A	ALT B
Number of key viewpoints with decreased visual quality	<b>3</b>	5



# LAND USE AND DEVELOPMENT



- Both alternatives potentially reduce available land for development at Brisbane Baylands
- Alternative B would also convert 8 acres of land at Icehouse Hill

## LEGEND

Permanent Project Footprint

### Land Use

Residential	Heavy Commercial
Commercial	Public Facilities
Mixed Use	Planned Development



**Alternative A** East

Impacts 93 acres planned commercial and 2 acres planned mixed use (with residential permitted)



**Alternative B** West

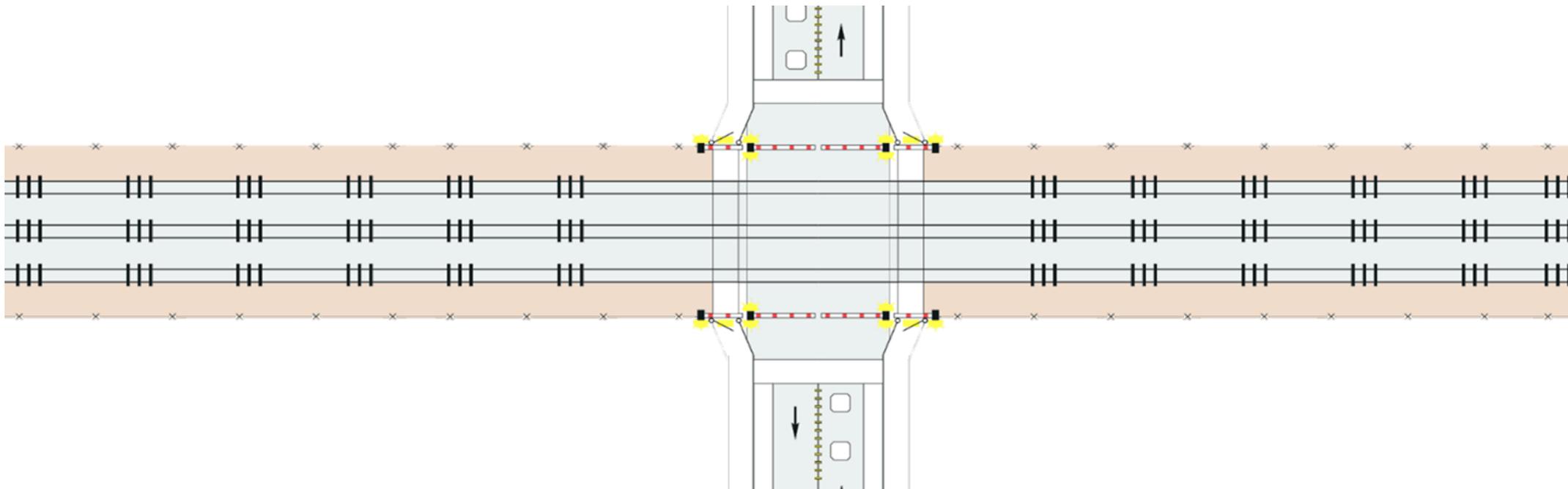
Impacts 90 acres planned commercial and 21 acres planned mixed use (with residential permitted)

# TRANSPORTATION



**Bold text** in tables indicates best-performing alternative(s).

CRITERIA	ALT A	ALT B
Temporary interference with local vehicle circulation	<b>No Change</b>	Along El Camino Real during passing track construction
Pedestrian Access from Downtown San Carlos to Caltrain Station	<b>No Change</b>	Reduced pedestrian access due to the relocation of the station 2,260 feet south of current location



# EMERGENCY VEHICLE ACCESS/RESPONSE TIME



**Bold text** in tables indicates best-performing alternative.

CRITERION	ALT A	ALT B
Temporary increases in emergency vehicle access/response time in south San Mateo, Belmont, San Carlos, and northern Redwood City due to short-term road closures and construction traffic associated with passing track construction	<b>None</b>	Yes

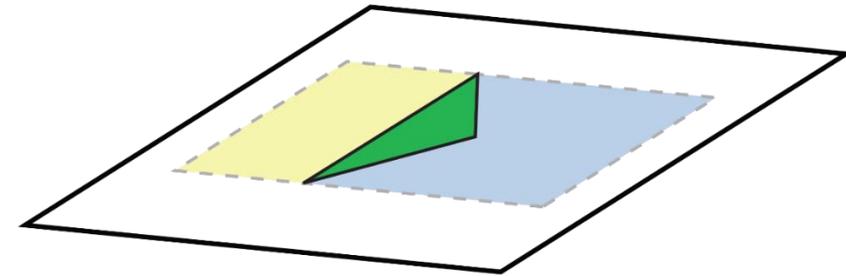


# ENVIRONMENTAL JUSTICE

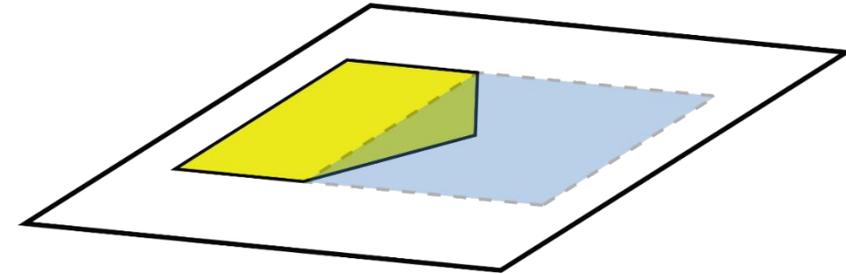


**Bold text** in tables indicates best-performing alternative(s).

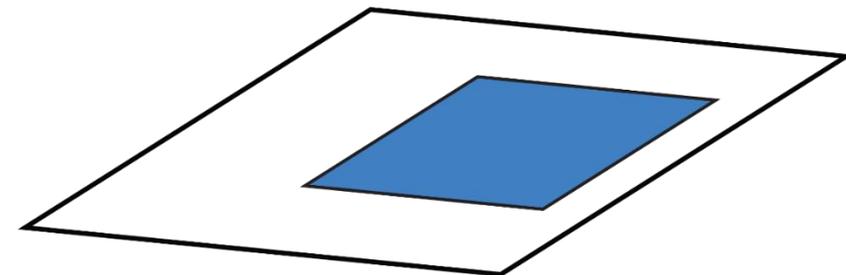
CRITERIA	ALT A	ALT B
Construction-related disruption to Caltrain Service	<b>Less than Alt. B due to no passing track construction</b>	More than Alt. A due to passing track construction
Permanent Effect on Planned Mixed Use Development (residential uses allowed) in Brisbane (acres)	<b>2</b>	21



EJ Populations + Impacts



EJ Populations



Adverse & Beneficial Impacts

# BIOLOGICAL AND AQUATIC RESOURCES



**Bold text** in tables indicates best-performing alternative(s).

CRITERIA	ALT A	ALT B
Total permanent impacts on wetlands and other waters of the U.S. (acres)	<b>8.8</b>	12.8
Permanent Impacts on endangered callippe silverspot butterfly habitat (acres)	<b>0.0</b>	8.0



# SUMMARY OF ALTERNATIVES EVALUATION – SYSTEM PERFORMANCE, OPERATIONS, AND COST FACTORS<sup>1</sup>

CRITERIA	ALT A	ALT B
Alignment length (miles)	No Difference	
Maximum Operating Speed (mph)	No Difference	
HSR Peak Hour Average Representative Travel Time San Francisco to San Jose (minutes)		●
Proposition 1A Service Travel Time Compliance	✓	✓
Estimated Capital Costs (2017\$)	●	
Estimated Annual Operations and Maintenance Costs (2017\$)	No Difference	
Caltrain Peak Hour Average Representative Travel Time (minutes)	●	

● = Best-performing alternative

<sup>1</sup> Operational service time includes station stops, schedule pad, and other operating parameters

# SUMMARY OF ALTERNATIVES EVALUATION – COMMUNITY FACTORS

CRITERIA	ALT A	ALT B
Residential displacements	●	
Commercial and industrial displacements	●	
Community and public facilities displacement	●	
Number of key viewpoints with decreased visual quality	●	
Temporary interference with local vehicle circulation	●	
Pedestrian Access from Downtown San Carlos to Caltrain Station	●	
Temporary increases emergency response time in south San Mateo, Belmont, San Carlos, and northern Redwood City due to short-term road closures	●	
Construction-related disruption to Caltrain Service	●	
Permanent Effect on Planned Mixed Use Development (residential uses allowed) in Brisbane	●	

● = Best-performing alternative (fewest/least community impacts)

# SUMMARY OF ALTERNATIVES EVALUATION – ENVIRONMENTAL FACTORS

CRITERIA	ALT A	ALT B
Total permanent impacts on wetlands and other waters of the U.S.	●	
Permanent Impacts on endangered callippe silverspot butterfly habitat	●	

● = Best-performing alternative (fewest environmental impacts)

# CALTRAIN BUSINESS PLAN

2040 Baseline Growth Scenario

## 2040 Baseline Growth Scenario (6 Caltrain + 4 HSR)



### Features

- Blended service with up to 10 TPH north of Tamien (6 Caltrain + 4 HSR) and up to 10 TPH south of Tamien (2 Caltrain + 8 HSR)
- Three skip stop patterns with 2 TPH – most stations are served by 2 or 4 TPH, with a few receiving 6 TPH
- Some origin-destination pairs are not served at all

### Passing Track Needs

- Less than 1 mile of new passing tracks at Millbrae associated with HSR station plus use of existing passing tracks at Bayshore and Lawrence

### Options & Considerations

- Service approach is consistent with PCEP and HSR EIRs
- Opportunity to consider alternative service approaches later in Business Plan process



DRAFT



# 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

# ALTERNATIVE A – STAFF-RECOMMENDED STATE’S PREFERRED ALTERNATIVE

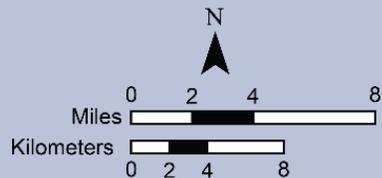
**LEGEND**

San Francisco to San Jose Alignments

- Alternative A

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- HSR Stations
- M** Maintenance Facility
- San Jose to Merced Alignments



\* 4th Street and King Street  
(interim until the Downtown Extension to the Salesforce Transit Center)

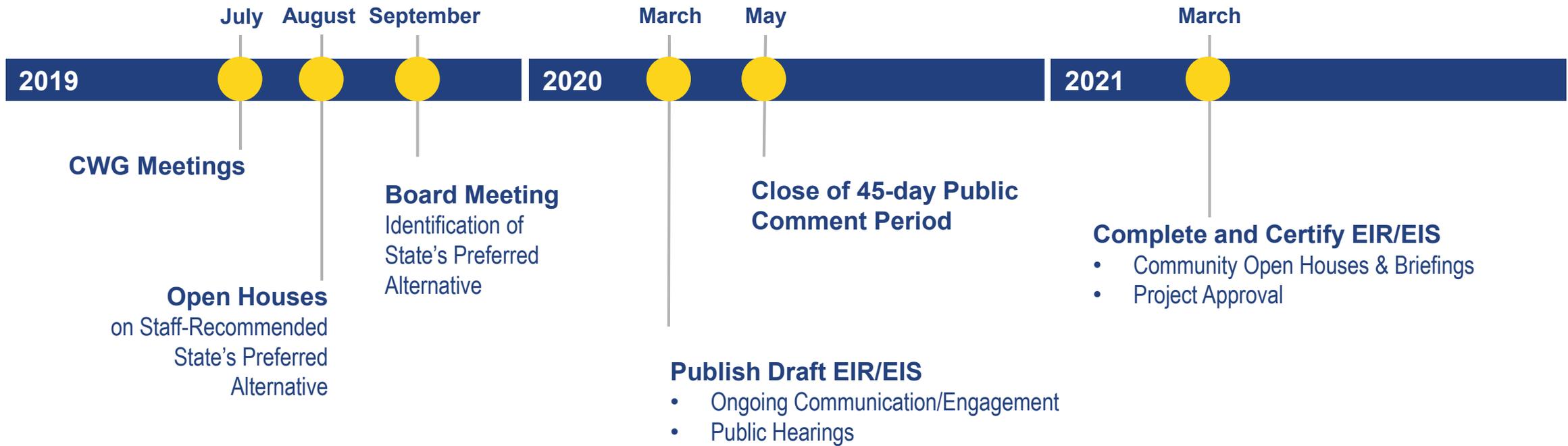
# DISCUSSION OF THE STAFF-RECOMMENDED STATE'S PREFERRED ALTERNATIVE



# NEXT STEPS



# NEXT STEPS



# UPCOMING 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 County 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

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 received by **August 22, 2019** will be summarized in the staff report to the Authority Board.
- Comments can be submitted via email to [San.Jose\\_Merced@hsr.ca.gov](mailto:San.Jose_Merced@hsr.ca.gov) and [San.Francisco\\_San.Jose@hsr.ca.gov](mailto: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.**

# PUBLIC COMMENT



# PUBLIC COMMENT PERIOD GUIDELINES

- **Please submit a speaker card to be added to the comment queue**
- **2 minute time limit**
- **Public comment is intended for working group members to hear from the public**
- **Staff will be available after the presentation to respond to questions, as necessary**
- **Please be respectful and follow meeting guidelines**



## Headquarters

California High-Speed Rail Authority  
770 L Street, Suite 620  
Sacramento, CA 95814  
[www.hsr.ca.gov](http://www.hsr.ca.gov)



**Northern California Regional Office**  
California High-Speed Rail Authority  
100 Paseo De San Antonio, Suite 300  
San Jose, CA 95113