



Local Policy Maker Group (LPMG) Meeting

Meetings of the LPMG are conducted via teleconference only (no physical location).

Directors, staff and the public may participate remotely via Zoom at

<https://us06web.zoom.us/j/85925215034?pwd=L3pxeEVITTFrVjVIYW5s3OW5wekw2dz09>

for audio/visual capability or by calling 1-669-219-2599, Webinar ID: # 859 2521 5034 Passcode: 973354 for audio only.

Public Comments: The Chair shall have the discretion to manage the Public Comment process in a manner that achieves the purpose of public communication and assures the orderly conduct of the meeting. Members of the public are encouraged to provide public comments in the following ways:

- **Email:** Comments may be submitted by emailing publiccomment@caltrain.com before each agenda item is presented. Please indicate in your email the agenda item to which your comment applies.
- **Auditory:** Oral comments will also be accepted during the meeting. Web users may use the 'Raise Hand' feature to request to speak. Callers may dial *9 to request to speak. Each commenter will be notified when they are unmuted to speak.

Thursday, August 24, 2023

5:30 p.m. – 7:30 p.m.

Agenda

1. Call to Order
2. Roll Call
3. Caltrain Staff Report (Oral Update and Memos)
4. Caltrain Corridor Crossing Strategy (Presentation)
5. Public Comments on items not on the agenda
6. LPMG Member Comments/Requests
7. Next Meeting
 - a. Thursday, September 28, 2023 at 5:30 p.m.
8. Adjourn

All items on this agenda are subject to action

**CalMod Local Policy Maker Group (LPMG)
Summary Meeting Notes June 22, 2023**

Summary Notes

The purpose of these notes is to capture key discussion items and actions identified for subsequent meetings.

1. Call to Order

Vice Chair Jen Wolosin called the virtual meeting to order at 5:32 p.m. Chair Burt was initially delayed due to technical issues and joined the meeting at approximately 5:37 p.m.

2. Roll Call

City / County	Representative or Alternate	Present	Representative or Alternate	Present
Atherton	D. Hawkins-Manuelian		S. Holland	X
Belmont	T. McCune	X	D. Hurt	
Brisbane	T. O'Connell		C. Lentz	
Burlingame	E. Beach	X	A. Keighran	
Gilroy	M. Blankley		Z. Hilton	
Menlo Park	J. Wolosin	X	B. Nash	
Millbrae	G. Papan		M. Goodman	
Mountain View	M. Abe-Koga		A. Hicks	
Morgan Hill	M. Turner	X	M. Beltran	
Palo Alto	E. Luaing	X	V. Veenker	
Redwood City	E. Martinez Saballos	X	D. Howard	
San Bruno	M. Salazar	X	R. Medina	
San Carlos	R. Collins		P. Venkatesh	X
San Francisco	A. Sweet			
San Jose	S. Jimenez		D. Davis	
San Mateo	A. Lee			
Santa Clara	A. Becker		R. Chahal	
South San Francisco	E. Flores		J. Coleman	
Sunnyvale	A. Cisneros		R. Mehlinger	
San Francisco BOS	TBD		TBD	
San Mateo BOS	TBD		TBD	
Santa Clara BOS	TBD		TBD	
Chair	Pat Burt	X	Jeff Gee	
Vice Chair	Jen Wolosin	X		

VACANT SEATS: Santa Clara BOS, San Francisco BOS, San Mateo BOS

CALTRAIN staff: Devon Ryan, Bella Conferti, Dora Seamans

Kimley-Horn staff: Jill Gibson, Sam Zimbabwe

3. Caltrain Staff Report (Oral Update and Memos)

LPMG Vice Chair Jen Wolosin said it was wonderful seeing some Members at the in-person workshop meeting in Palo Alto City Hall and encouraged everyone to attend the future upcoming in-person workshops.

Devon Ryan, Government and Community Affairs Officer provided the updates, which included the following:

- Historic moment in the railroad with a test electric multiple unit (EMU) that ran under its own power for the first time recently
- On July 29th there will be a public community event to showcase the EMUs at the Diridon station in Santa Clara County, all are encouraged to come, over 1,300 responded they plan to come, and there will be food trucks, and face painting for kids. Future public events are also being planned for the other two counties, one in San Mateo County and another in San Francisco County
- Starting in September, southern Santa Clara County service will be increased from 3 trains to 4 trains in the am and pm commute times and encouraged South County residents to take the survey, so they know how residents feel about the train service
- Weekend shutdowns have been a necessary part of the electrification process and have allowed them to lay 350,000 feet of wire and over 60 poles towards electrification of the corridor
- There will be more weekend service for special events coming up, such as the Giants games, the 2023 San Francisco Pride Parade, and other events and information on special train or shutdown schedules are available online
- The State budget was passed, and the proposed budget would restore 2 billion dollars in cuts that had been made in the State's Transit and Inner-City Rail Capital Program
- Redirected funds for use by regional agencies on a formula basis for either capital or operating depending on the situation, however, the redirection of funds could affect a battery-equipped multiple unit (BMU) pilot demonstration launch (for zero-emission service)

4. Caltrain Corridor Crossing Strategy (Presentation)

Jill Gibson and Sam Zimbabwe, transportation planners with Kimley Horn, provided the presentation that included a recap and review of the May in-person workshop and the following highlights:

- Recap of their purpose, program strategy process, spectrum approach, lessons learned, bike-pedestrian connectivity, and different takeaways from the May workshop
- Value of in-person collaboration and thinking outside of jurisdictional borders and acknowledgment of different tensions, different jurisdictional benefits and priorities, receipt of a significant amount of data from the individual project approach, focus on leveraging corridor-wide solutions and benefits, and there will be future in-person workshops
- A largely separated corridor is a newer concept and this needs to be talked about at broader community and regional levels, and across perspectives and jurisdictional boundaries as funding and resources are constrained
- Reviewed possible levels of future service and corridor conditions and referred to the 2040 Service Vision Plan and moderate growth
- Implications of more frequent transit service, including increased gate downtime and impacts on local mobility, and a diversity of opinions on solutions to address at grade crossings

LPMG members' and alternate members' comments and clarifications with staff included the following:

- Reality check on the timing, fulfilling the Caltrain business plan for moderate growth, having more trains by 2030, and the importance of maintaining a safety lens

- Determine what are the problems they are attempting to solve; desire for a higher volume of trains but needing grade separation for an efficient, reliable system as opposed to there being more gate down times and traffic gridlock at certain intersections that are not grade separated
- Security and safety are high priorities along with concerns for jurisdictions and properties along the corridor being impacted, particularly with High-Speed Rail and the ratio of service on the tracks
- *Staff to provide information on different scenarios for different time frames on service plans at a future LPMG meeting.*

Ms. Gibson and Mr. Zimbabwe continued their presentation, which included the following:

- Program approach spectrum incorporates input from all the jurisdictions and everyone working towards a strategy by the end of year as a foundation for success
- Reviewed program assumptions that included the following: used 2022 cost ranges as a base for understanding, looking at the corridor from San Francisco to Gilroy, program delivery, and a fully separated corridor with the current active projects and existing at grade crossings
- Currently there are 71 crossings: 28 crossings (including 3 new pedestrian under/over-crossings) in active projects and 43 unplanned crossings; detailed information compiled and provided in the Caltrain quarterly reports
- If each individual project were done, it might take 75 years to complete
- Program costs ranged from \$2.9 and \$11.6 billion based on typical costs (for example, a crossing or closure and without any consideration of site or circulation conditions). In contrast, once all costs are stacked together, the program costs ranged from \$5.8 and \$21.9 billion in 2022 dollars
- While combining projects may generally be faster and cheaper, they cannot assume the same for grade separations which are a big lift
- Current, active projects account for \$944 million but there is still a funding gap despite various funding grants
- Next steps include develop strategy for coordinated funding effort, discuss program delivery approach, and organizational capacity

LPMG members' and alternate members' key comments and clarifications with staff included the following:

- A member noted that they have been talking mostly about one scenario where the corridor would be some form of mega project and how that could be done with a 75-year time horizon
- When the costs were considered for a fully grade separated corridor, *staff did not make assumptions on tunneling but looked at what the typical recent costs and different treatments have been for projects that are further along*
- Consider how many active projects Caltrain could conceivably handle in terms of capacity, funding, staffing, and resources at any one time; how much construction can the corridor take over time
- *Staff noted that they will have an overall organizational capacity discussion in the future*
- Program overview, state and federal funding opportunities, and community fact sheets available at <https://www.caltrain.com/ccs> (Corridor Crossings Strategy | Caltrain)

Public Comment

Adina Levin, Friends of Caltrain, expressed support for the continuing work on corridor strategies and individual cities continuing work on their projects and getting more efficiencies and funding by working together for increased service over time. She noted the coming of High-Speed Rail and spoke in support of the need for grade separations, increased service, and connectivity in the community.

5. High-Speed Rail (Memo)

Chair Burt noted the information was in the packet.

6. Public Comments on items not on the agenda

There was no public comment.

7. LPMG Member Comments/Requests

Chair Burt requested a breakdown of the grade separation assumptions that went into generating the program cost estimates/ranges.

8. Next Meeting

Thursday, August 24 at 5:30 pm. It was noted that there would be no meeting in July.

9. Adjournment

The meeting was adjourned at 6:35 p.m.



Memorandum

Date: August 21, 2023
To: Caltrain Local Policy Maker Group (LPMG)
From: Devon Ryan, Government and Community Affairs Officer
Re: Caltrain E-Updates



Caltrain Holds First Public Electric Train Tour

On July 29th, Caltrain unveiled its new electric trains at San Jose Diridon Station, drawing a crowd of over 4,200 attendees. In addition to community members and train enthusiasts, many local and state officials came out in support, including event speakers Senator Aisha Wahab, Assemblymember Ash Kalra, San Jose Mayor Matt Mahan, and Caltrain Board Chair Jeff Gee.

In addition to having the opportunity to explore the trains, participants got to visit a variety of community booths, food trucks and art activities. You can watch a video of the event: [here](#).

Caltrain's next public tour will take place at San Francisco Station on September 23 from 10am-2pm. A tour in San Mateo County will follow, scheduled to take place this winter.

Learn more and RSVP at: www.caltrain.com/tour



Electric Train Testing

Currently, Caltrain has four train sets on site, with more to be delivered this fall. In preparation for passenger service next year, testing of the new electric trains has started between Mountain View and San Jose. Testing between San Francisco and Mountain View is expected to begin later this fall. Each of the 19 trainsets must be tested for 1,000 miles before being certified ready for passenger service. During testing, residents may hear additional noise from horns, bells, and crossing gates. We appreciate the patience of our community members as we enter this critical phase of the Project.

Sign-up for weekly construction and testing updates at www.caltrain.com/getinvolved.

Caltrain Electrification Construction and Service Changes Update

The Caltrain Electrification team has been working to provide electrified service to riders by fall 2024. In July, crews installed over 126,000 feet of wire and 316 cantilevers along the corridor. We appreciate the patience and understanding of our riders and communities during this critical work. The Caltrain Electrification is a transformational project for our railway, enabling faster, sustainable, and more frequent train service.

Construction updates can be found here: www.caltrain.com/construction.

Planned service disruptions are also continuing throughout 2023. This includes temporary weekday service changes from August 7 to August 25 and three weekend shutdowns in August between Millbrae and San Francisco. Learn more about these upcoming changes at www.caltrain.com/status. We

encourage all passengers to plan ahead and use alternative transportation options during weekend shutdowns.

California Transportation Commission Allocations and Battery-Equipped Electric Multiple Unit Train

On August 17, the California Transportation Commission approved allocations for two California State Transportation Agency (CalSTA) awards which included \$367M from the Transit and Intercity Rail Capital Program (TIRCP) to finish the Electrification Project and \$80M for one battery-equipped electric multiple unit train (BEMU) pilot project. The BEMU train, which will be purchased on a contract option with Caltrain's electric train manufacturer Stadler, will charge while the train runs on overhead power in the electrified service areas and then use battery charge to travel "off-wire" on non-electrified track areas. The BEMU train will run from Tamien to Gilroy and then include demonstration trips to Salinas. This will lead the way for Caltrain to operate a fully zero-emission service in the future.

Learn more about the [BEMU train](#).

PUBLIC MEETINGS:

JPB Finance Committee – Aug. 28, 2023 at 2:30 p.m.

JPB Technology, Operations, Planning, and Safety (TOPS) Meeting – Aug. 30, 2023 at 1:30 p.m.

JPB Advocacy and Major Projects (AMP) Meeting – Aug. 30, 2023 at 3:30 p.m.

Caltrain Board Meeting – Sep. 7, 2023 at 9:00 a.m.

For more details, and a full list of upcoming meetings, please visit [Caltrain.com/Meetings](https://caltrain.com/Meetings).

PROGRESS REPORT:

The presentation on Caltrain Electrification progress presented at Caltrain's August 3, 2023 Board Meeting is [available here](#).

Caltrain Electrification Project Update

LPMG Meeting
August 24, 2023



Project Overview

Project Overview

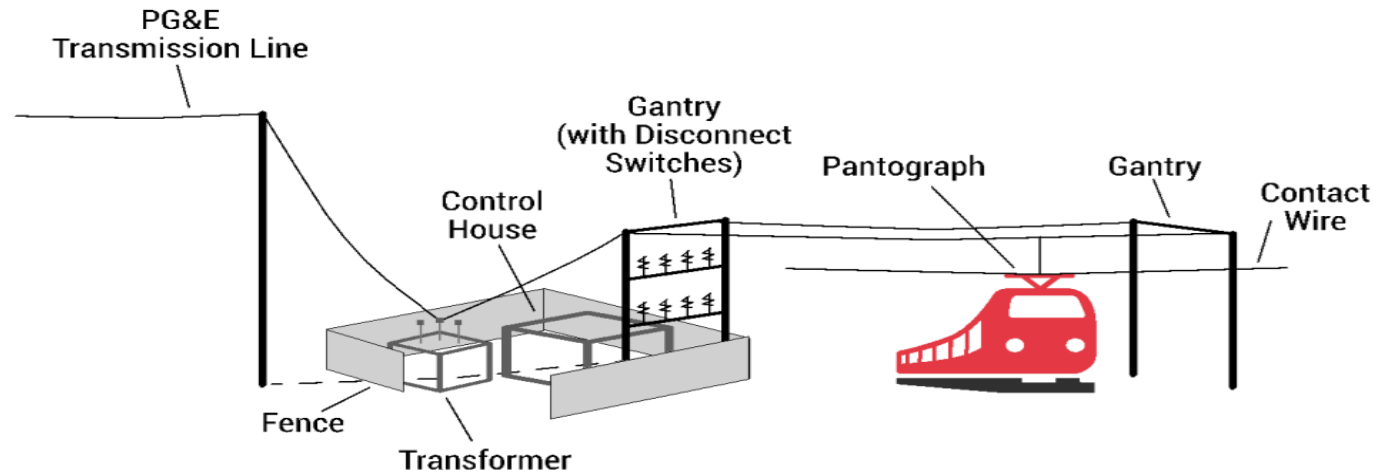
- San Francisco to San Jose (Tamien Station)
- 51 miles
- Project Cost: \$2.44B
- Revenue Service: Fall 2024



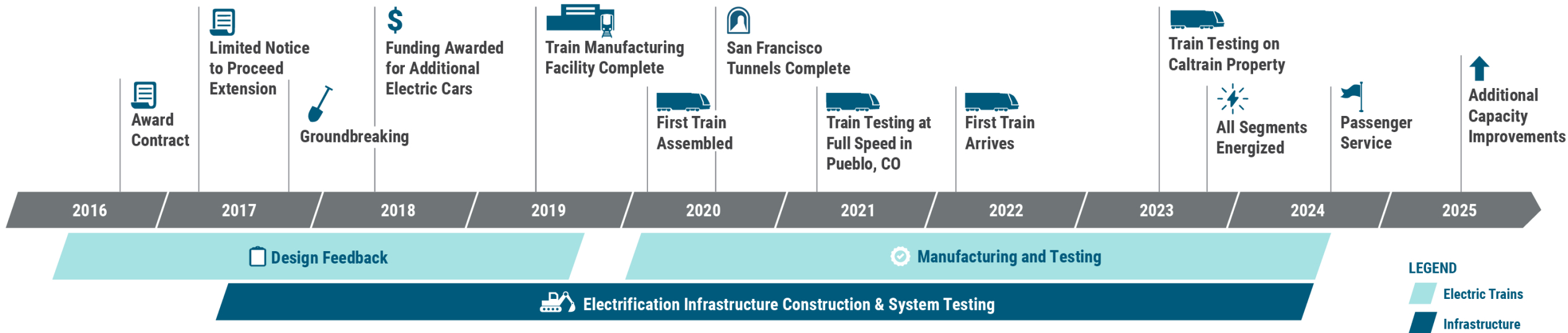
Project Elements

- Electrification
 - Overhead Contact System (OCS)
 - Traction Power Facilities
 - Signal System
- Electric Trains
 - 19 7-car train sets (133 cars)
 - 75% replacement diesel fleet

(Note: 96 cars funded by project; 37 cars funded by State TIRCP)



Project Schedule



Project Benefits



SUSTAINABILITY

Reduce greenhouse gas emissions and air pollution through electrification



EQUITY

Decrease emissions and noise pollution in communities of concern



BUY AMERICA

Electric trainsets manufactured by Stadler in Salt Lake City, Utah



SAFETY

State-of-the-art trainsets with better crash safety ratings and improved braking



READY FOR THE FUTURE

Set the foundation for future Caltrain service growth and HSR



CAPACITY

Expand service and capacity to carry more people



JOB CREATION

Create nearly 33,000 jobs locally and in 36 states across the country



ENERGY INDEPENDENCE

Reduce dependence on foreign energy and rely on renewable domestic energy



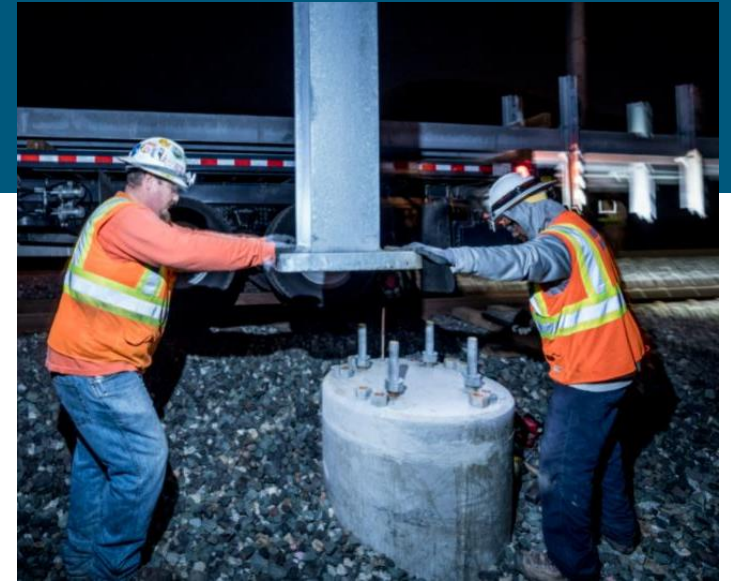
TRAFFIC RELIEF

Remove congestion on streets and highways

Infrastructure

- **Foundations:** All 3,092 foundations complete (January 2022)
- **Poles:** Installation to be completed August 2023
- **Wire:** Installation to be completed Fall 2023
- **Traction Power Facilities:** All 10 facilities to be completed 2023
- **San Francisco to Menlo Park Energization:** Fall 2023
- **Signal Work / System Integration and Testing:** Now - 2024

Revenue Service: September 2024



Foundations



Overhead Catenary System

Electric Trains

- **Trainsets 1 & 2 Arrival:** March 2022
- **Static Testing Begins:** Spring/Summer 2022
- **Trainsets 3 & 4 Arrival:** September 2022
- **Additional Trainset Arrive:** Fall 2023 through Summer 2024
- **Dynamic Testing:** Summer 2023 through Summer 2024

Revenue Service: September 2024



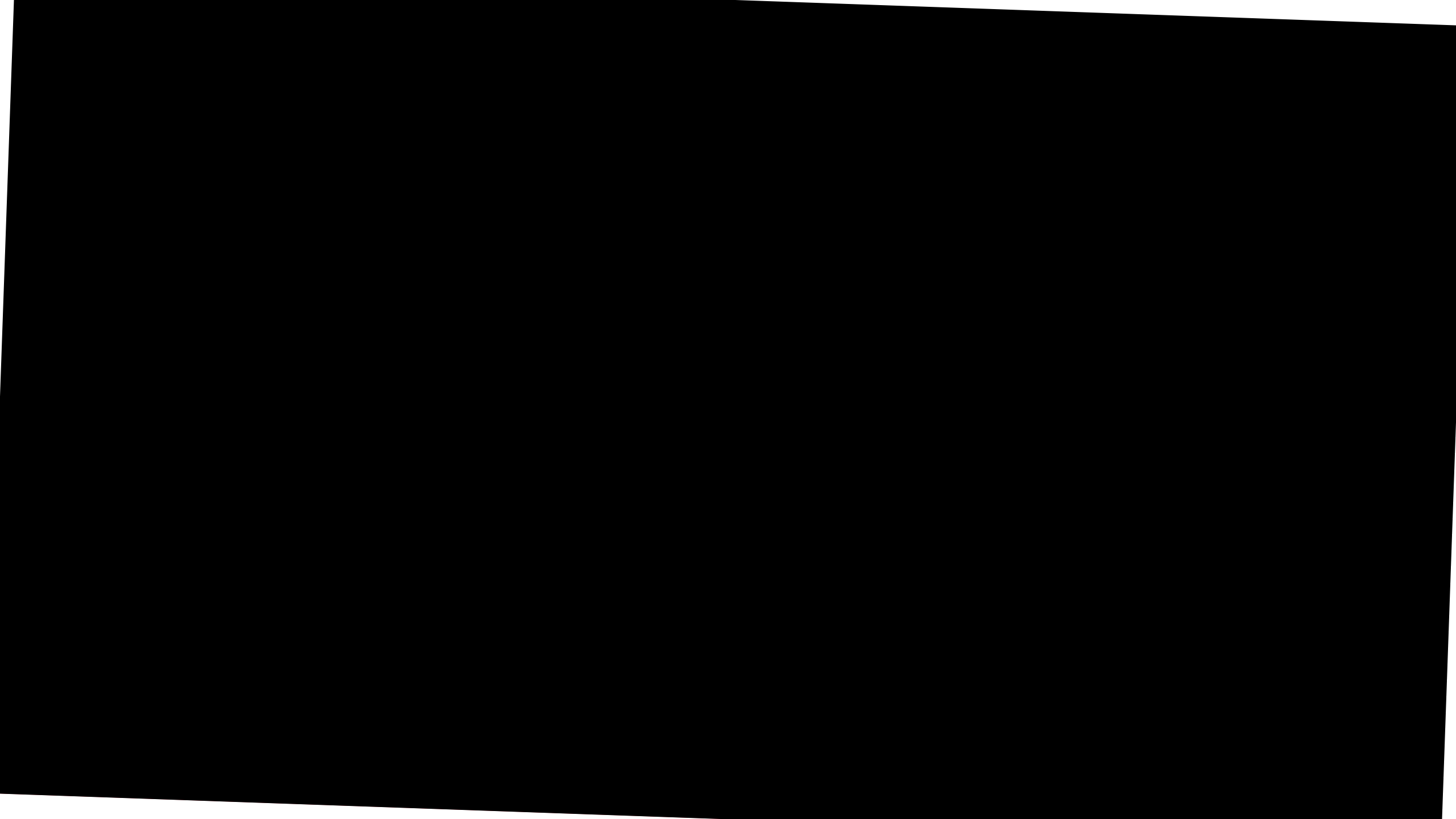
First Trainset Arrival

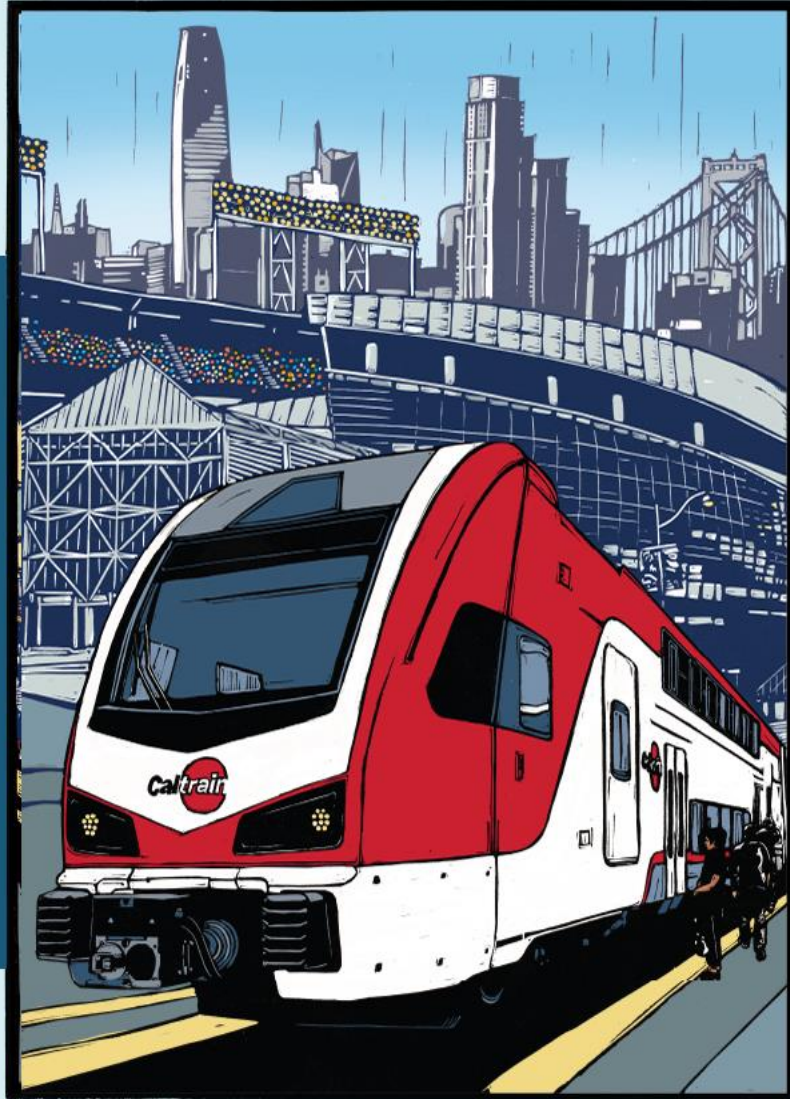


Clearance Test

Public Train Tour
San Jose Diridon Station
July 29, 2023
4,200+ Attendees







© 3 Fish Studios www.3fishstudios.com

Caltrain's Electric Train Tour

San Francisco Station

September 23rd, 2023

10am – 2pm

caltrain.com/tour

Train Testing Activities

Live Run Tests

- Live run tests ensure overhead wires, trains, and system are functioning properly
- Multiple test runs needed for each segment
- Tests start at 5mph and increase speed at each subsequent test, up to 79mph
- Residents may hear additional noise from horns, bells, and crossing gates during train movements
- Tests planned for Friday and Saturday nights after Caltrain revenue service

Pre-Service Tests

- Each of the 19 trainsets need to be tested for 1,000 miles
- Pre-service testing starts mid-September with first four trainsets
- Additional trainsets delivered Fall 2023 – Summer 2024
- Residents may hear additional noise from horns, bells, and crossing gates during train movements
- Trains can run during revenue service hours or at night. Exact schedule to be determined.

Testing Schedule

Mountain View to San Jose (20 miles)

Activity	Start Date
Live Run Tests	August 2023
Pre-Service Tests	September 2023

San Francisco to San Jose (50 miles)

Activity	Start Date
Live Run Tests	October 2023
Pre-Service Tests	December 2023



Safety Information

ALWAYS WAIT FOR THE GATE

- Even if you can't hear the new trains coming, make sure to wait for the gate to fully rise before crossing.



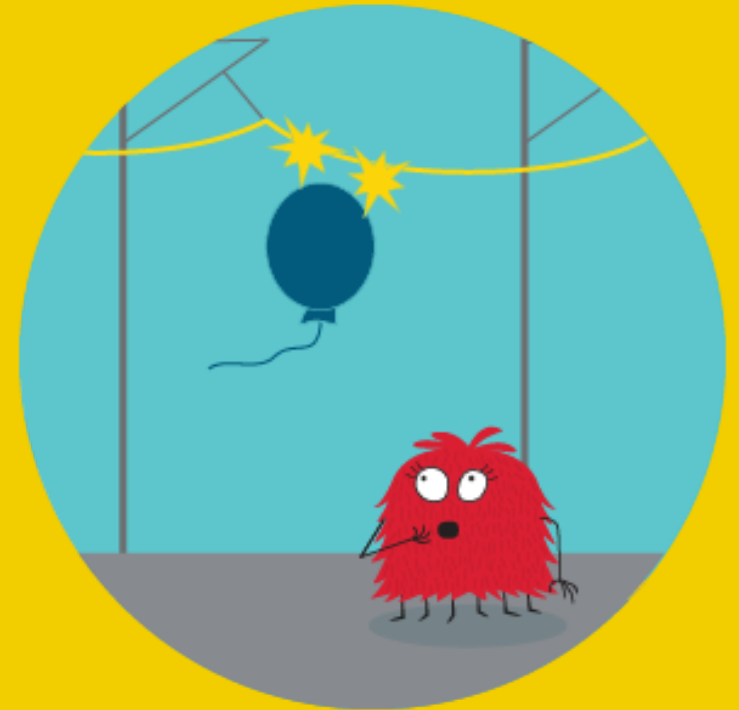
STAY AWARE OF OVERHEAD WIRES

- Treat all overhead wires as energized and dangerous. Caltrain's electric overhead wires carry 25,000 volts of electricity.



KEEP YOURSELF AND OBJECTS AWAY

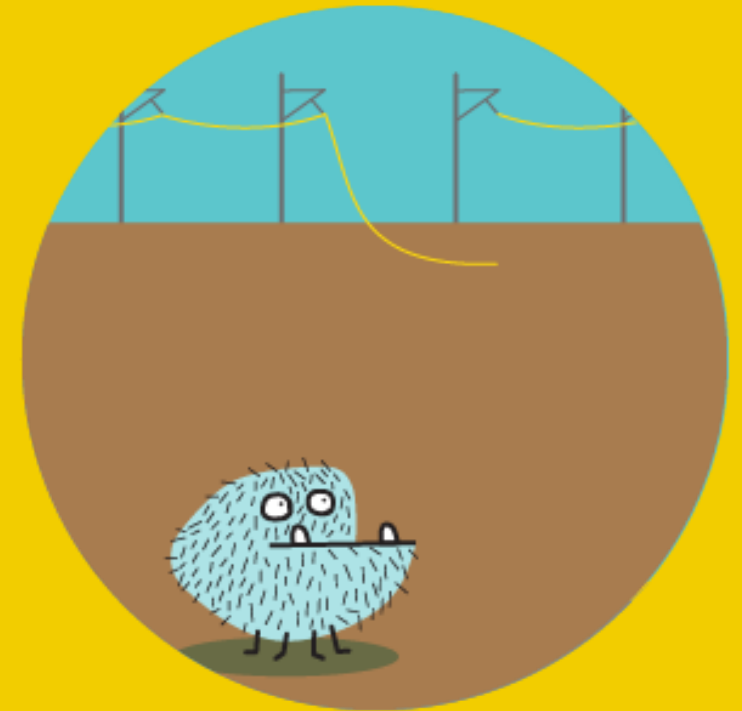
- Never approach overhead wires with things like ladders, antennas, balloons, and most importantly, yourself!



STAY AWAY FROM DAMAGED WIRES

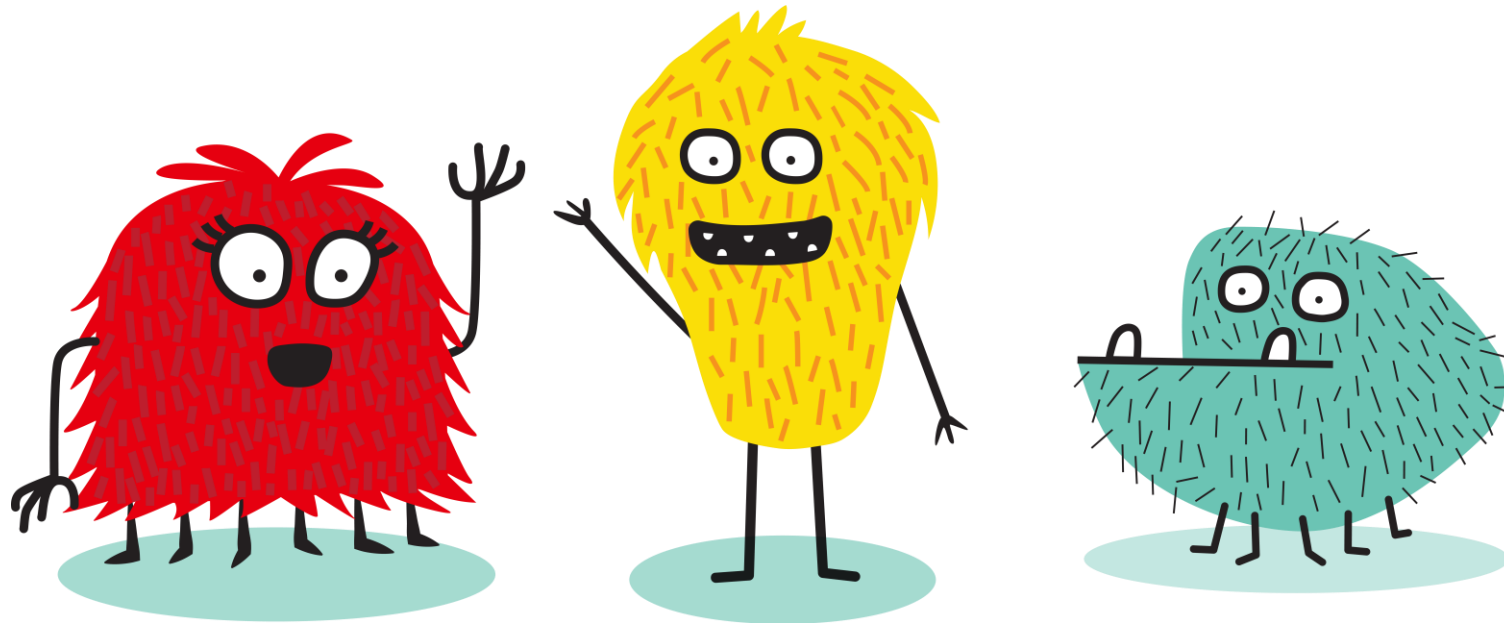
- If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away.

CALL 1.877.SAF.RAIL or 911 for any emergency on Caltrain, to report suspicious activity, or if you see a damaged electrical wire.



LEARN MORE

- Visit caltrain.com/safety for more information about how to stay safe around the new electric overhead wires



Public Outreach



STAY AWARE, STAY SAFE.

Caltrain is getting an upgrade: out with diesel, in with electricity! While this change means big improvements for the Caltrain community, it also means new electric overhead wires will be installed to power the new trains. Electric overhead wires can be **dangerous and even life-threatening**. The new electric trains will also be much quieter than the diesel trains. You can stay safe by following a few easy rules:



Always wait for the gate
Even if you can't hear the new trains coming, make sure to wait for the gate to fully rise before crossing.



Be mindful of overhead wires
Caltrain's electric overhead wires carry 25,000 volts of electricity and can be dangerous. Never approach overhead wires with things like ladders, antennas, balloons, and most importantly, yourself!



Stay away from damaged wires
If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away and call the Transit Police at 1.877.SAF.RAIL (1.877.723.7245).

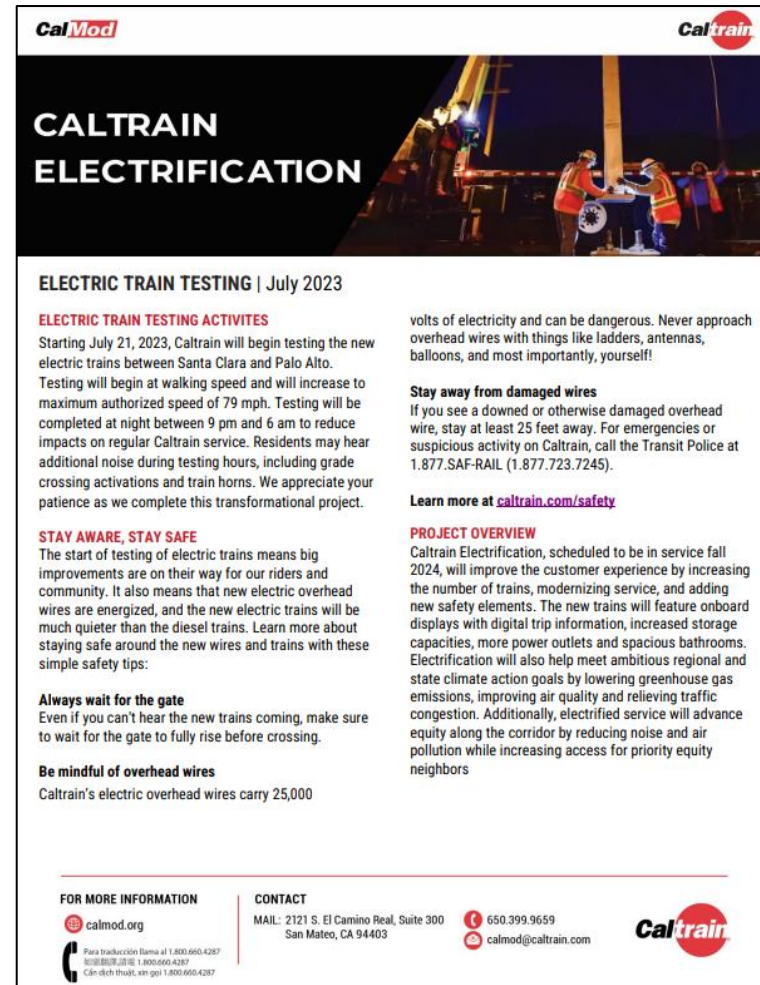
CALL 1.877.SAF.RAIL
for any emergency on Caltrain, to report suspicious activity, or if you see a damaged electrical wire.





Caltrain.com/safety



Safety Mailer



CALTRAIN ELECTRIFICATION

ELECTRIC TRAIN TESTING | July 2023

ELECTRIC TRAIN TESTING ACTIVITIES
Starting July 21, 2023, Caltrain will begin testing the new electric trains between Santa Clara and Palo Alto. Testing will begin at walking speed and will increase to maximum authorized speed of 79 mph. Testing will be completed at night between 9 pm and 6 am to reduce impacts on regular Caltrain service. Residents may hear additional noise during testing hours, including grade crossing activations and train horns. We appreciate your patience as we complete this transformational project.

STAY AWARE, STAY SAFE
The start of testing of electric trains means big improvements are on their way for our riders and community. It also means that new electric overhead wires are energized, and the new electric trains will be much quieter than the diesel trains. Learn more about staying safe around the new wires and trains with these simple safety tips:

Always wait for the gate
Even if you can't hear the new trains coming, make sure to wait for the gate to fully rise before crossing.

Be mindful of overhead wires
Caltrain's electric overhead wires carry 25,000

volts of electricity and can be dangerous. Never approach overhead wires with things like ladders, antennas, balloons, and most importantly, yourself!

Stay away from damaged wires
If you see a downed or otherwise damaged overhead wire, stay at least 25 feet away. For emergencies or suspicious activity on Caltrain, call the Transit Police at 1.877.SAF.RAIL (1.877.723.7245).

Learn more at caltrain.com/safety


PROJECT OVERVIEW
Caltrain Electrification, scheduled to be in service fall 2024, will improve the customer experience by increasing the number of trains, modernizing service, and adding new safety elements. The new trains will feature onboard displays with digital trip information, increased storage capacities, more power outlets and spacious bathrooms. Electrification will also help meet ambitious regional and state climate action goals by lowering greenhouse gas emissions, improving air quality and relieving traffic congestion. Additionally, electrified service will advance equity along the corridor by reducing noise and air pollution while increasing access for priority equity neighbors

FOR MORE INFORMATION
calmod.org

Para traducción llame al 1.800.660.4287
如需翻譯,請電 1.800.660.4287
Call-toll free: 1.800.660.4287

CONTACT
MAIL: 2121 S. El Camino Real, Suite 300
San Mateo, CA 94403

650.399.9659
calmod@caltrain.com



Testing Mailer



FOR MORE INFORMATION

WWW.CALTRAIN.COM



Memorandum

Date: August 24, 2023

To: Local Policy Makers Group (LPMG)

From: Dahlia Chazan, Deputy Chief, Caltrain Planning

Re: Caltrain Corridor Crossings Strategy (CCS) Project E-Update



Corridor Crossings Strategy (CCS) Description

The Corridor Crossings Strategy (CCS) has been discussed as an agency priority since 2019, when it was first identified within the Caltrain Business Plan Process. This strategy was first funded in 2019 but was delayed due to the COVID-19 pandemic. As Caltrain and other operators plan to increase rail services, Caltrain understands that a coordinated approach to grade separations or closures is needed to unlock regional mobility and safety benefits.

The Caltrain Business Plan acknowledges that grade separation projects are costly, complex, and challenging. The CCS strives to identify areas for enhancement in the current process and develop a potential strategic approach to deliver corridor-wide consensus on delivery of grade separation projects.

The CCS began with the Initiation Phase which started in July 2022 and finished in December 2022. This phase included the initial issue identification collected from Caltrain coordination, initial stakeholder engagement, and preliminary existing conditions gathering.

Phase I commenced in January 2023 and will end approximately in Winter 2024. Phase I takes the outputs from the Initiation Phase to provide an initial framework to organize the overall study, workplan, and stakeholder engagement process. The purpose of Phase I is to enhance the current grade separation process and develop a corridor-wide consensus on how to deliver grade separation and/or closures at a regional scale. The outcomes of Phase I include the following:

- Develop a Crossings Delivery guide that defines, communicates, and facilitates a clear project delivery process.
- Identify an implementable, shared vision on how to deliver projects at a regional scale
- Identify a corridor-wide strategy and programmatic approach addressing funding, organization, and program delivery.
- Strengthen partnerships between Caltrain, local jurisdictions, and regional member agencies.

Phase I Progress

The LPMG did not meet during the month of July; therefore, the last LPMG meeting was in June. During the June stakeholder group meetings, stakeholders were provided a recap of the May in-person workshop focused on the Circulation and Mobility technical topic, an update to the program approach tracker, and an overview of the Cost and Funding technical topic. The cost and funding technical topic included a *draft* program cost range and a funding overview.

In August, the LPMG will be provided a detailed overview of the Design and Right-of-way (ROW) technical topic, including a presentation by a Redwood City representative detailing the design and ROW considerations of the recent Redwood City Grade Separation Study.

The Design and ROW technical topic is centered around how to most efficiently and cost effectively deliver grade crossing projects (e.g., grade separations, pedestrian/bicycle separations, and closures). The approach is to review existing conditions, consider typical solutions, and develop common themes. The Design and ROW presentation will first explore existing conditions and ROW considerations. The presentation will outline typical design solutions for grade crossing projects. The presentation will next explore themes on the corridor, organized by rural/Union Pacific Railroad (UPRR), urban isolated, urban, and urban downtown segments. The presentation will conclude with detailing the impacts of design considerations on potential program delivery approaches.

The presentation by Redwood City will explore these concepts in a real-world example. Redwood City will explain their public outreach process, initial alternatives, how these initial alternatives were evaluated and refined, and ultimately how a recommended alternative was chosen.

Exploring the Design and ROW technical topic will help outline the factors that must be considered for appropriate design solutions, helping stakeholders arrive at the best decision to balance community concerns and corridor demands.

Lastly, the upcoming stakeholder meetings will be presented for reference for the LPMG members. Previously presented meeting material, in addition to the latest project information, is available on the CCS website at www.Caltrain.com/Projects/CCS. Questions or additional feedback about the program can be sent to the CCS project inbox at CCS@Caltrain.com.



Public Meetings

JPB Advocacy and Major Projects Committee – September 27 at 3:30 p.m.

Local Policy Makers Group Meeting – September 28 at 5:30 p.m.

For more details, and a full list of upcoming meetings, please visit [Caltrain.com/Meetings](https://caltrain.com/Meetings).

Progress Report

The presentation on the Caltrain Corridor Crossings Strategy approach presented at Caltrain's June 22, 2023, LPMG Meeting is [available here](#).



Corridor Crossings

STRATEGY



Local Policy Makers Group (LPMG)

8.24.2023





AGENDA

- **Program Approach** Recap
- **Design & ROW** Topic
- **Redwood City** Example
- **Look Ahead**

Paths



Project Delivery Opportunities

Communicate roles, responsibilities, processes, and standards for individual projects.

Outcome: Crossings Delivery Guide



Program Strategy Development

Develop a shared, corridor vision with an incremental and implementable approach for regional benefits.

Balance vision with implementable action plan

Outcome: Program Vision and Strategy



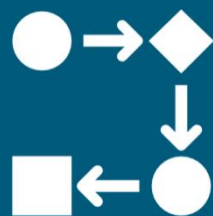
Purpose

As an outcome of the **Business Plan**, the Corridor Crossings Strategy is an effort to **define a systematic corridor-wide approach** to crossings.

The strategy aims to **align stakeholder ambitions into balance with an implementable program**, addressing:

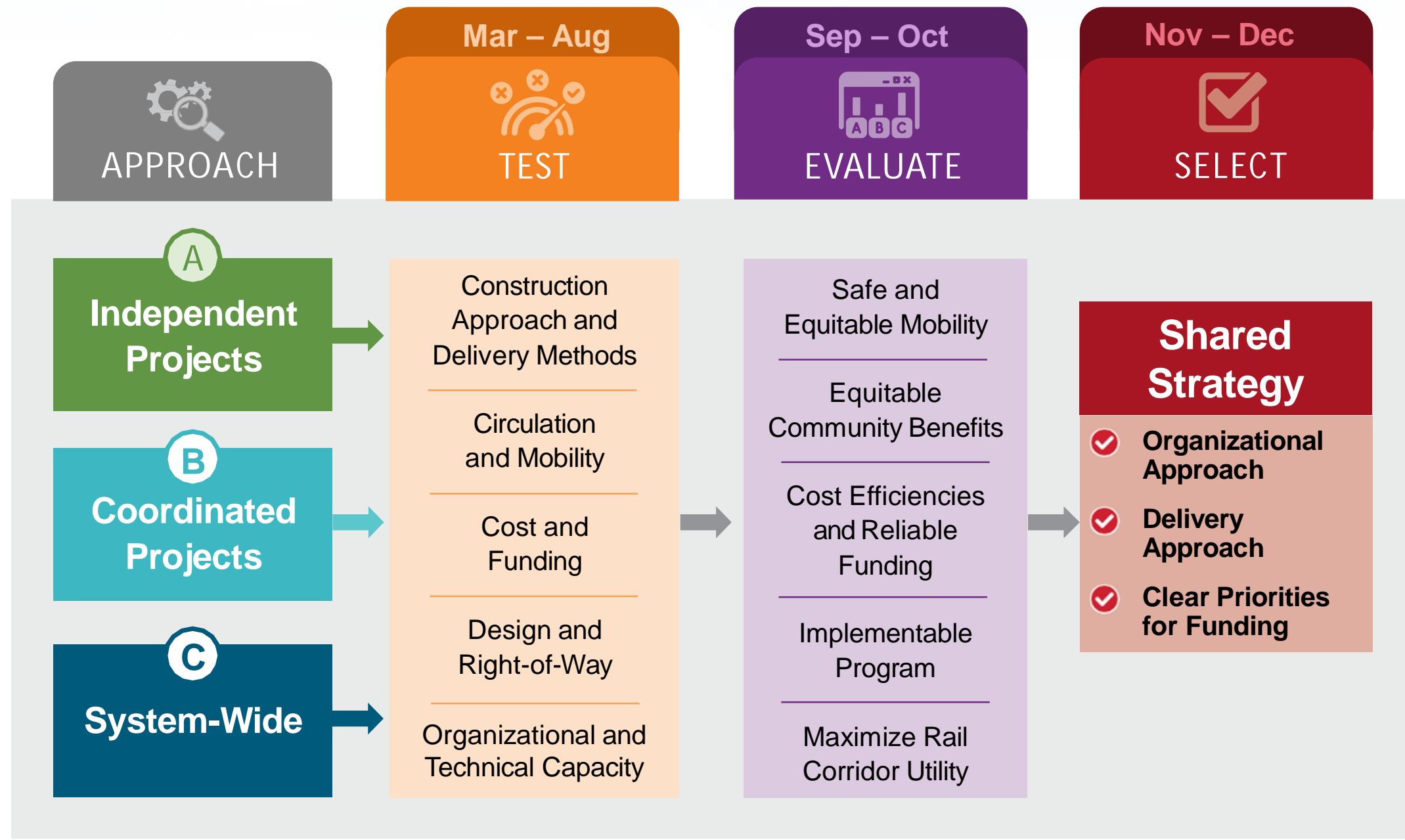
- Funding
- Organization
- Program Delivery

Note: Active grade separation projects will continue in parallel





Program Strategy Process





Meeting Goals and Outcomes



**Understand
and discuss
Design & ROW**



**Discuss Design &
ROW Example:
Redwood City**



Design & ROW Topic



Corridor Crossings
STRATEGY

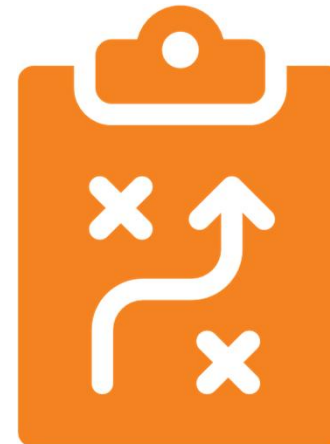


Design and Right-of-Way (ROW)



Objectives

- How do we most efficiently and cost effectively deliver projects?
- Identify design approaches that integrate with the community context



Approach

- Review existing conditions
- Consider typical solutions
- Develop common themes



Takeaways



Understand how to address
Key Constraints



Approach for identifying
most appropriate solution



Existing Conditions



Utilities

**Cross Street
Traffic Volumes**

**Drainage/
Underground Utilities**

**Crossing
Spacing**

Right-of-Way

OCS

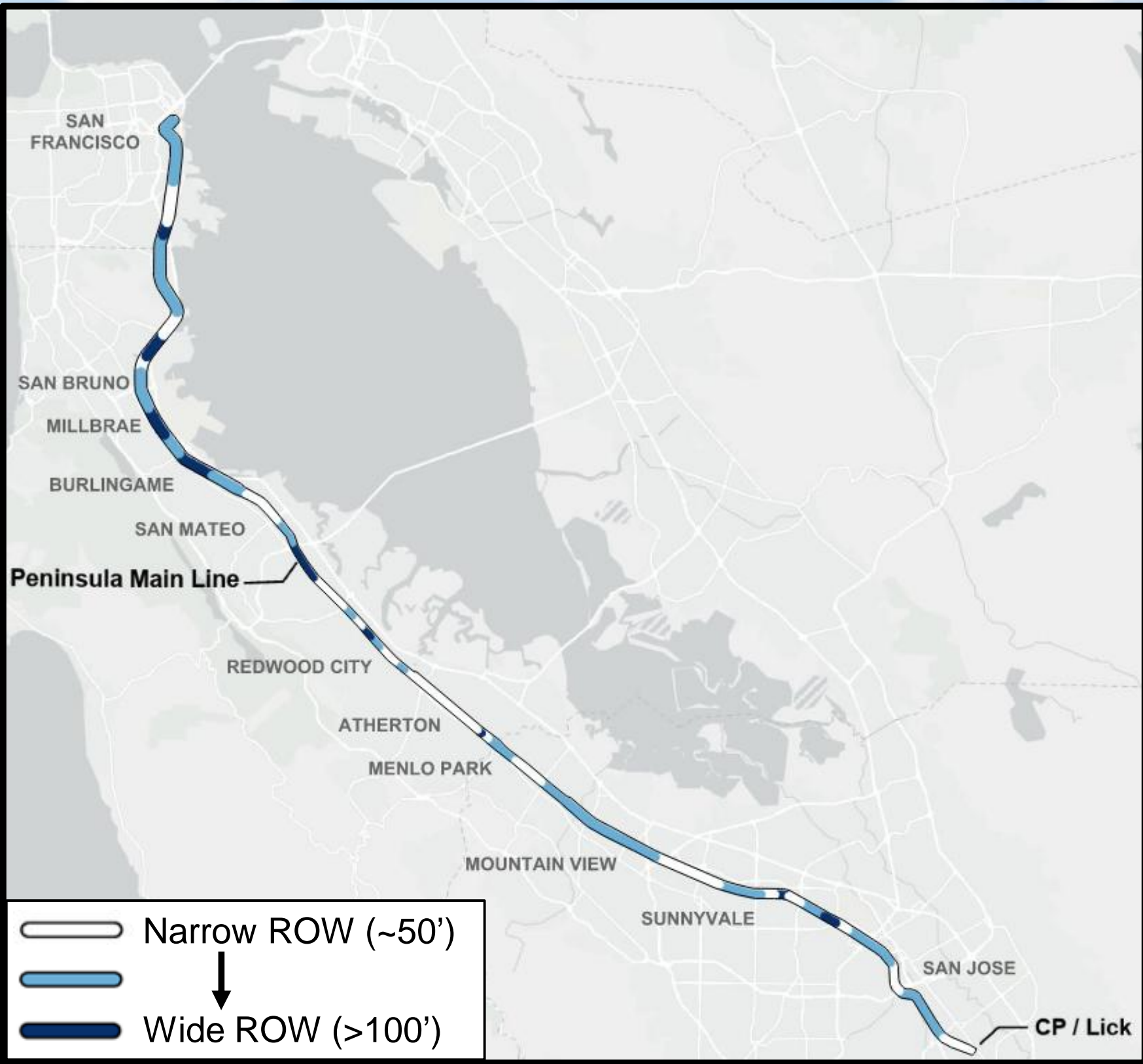
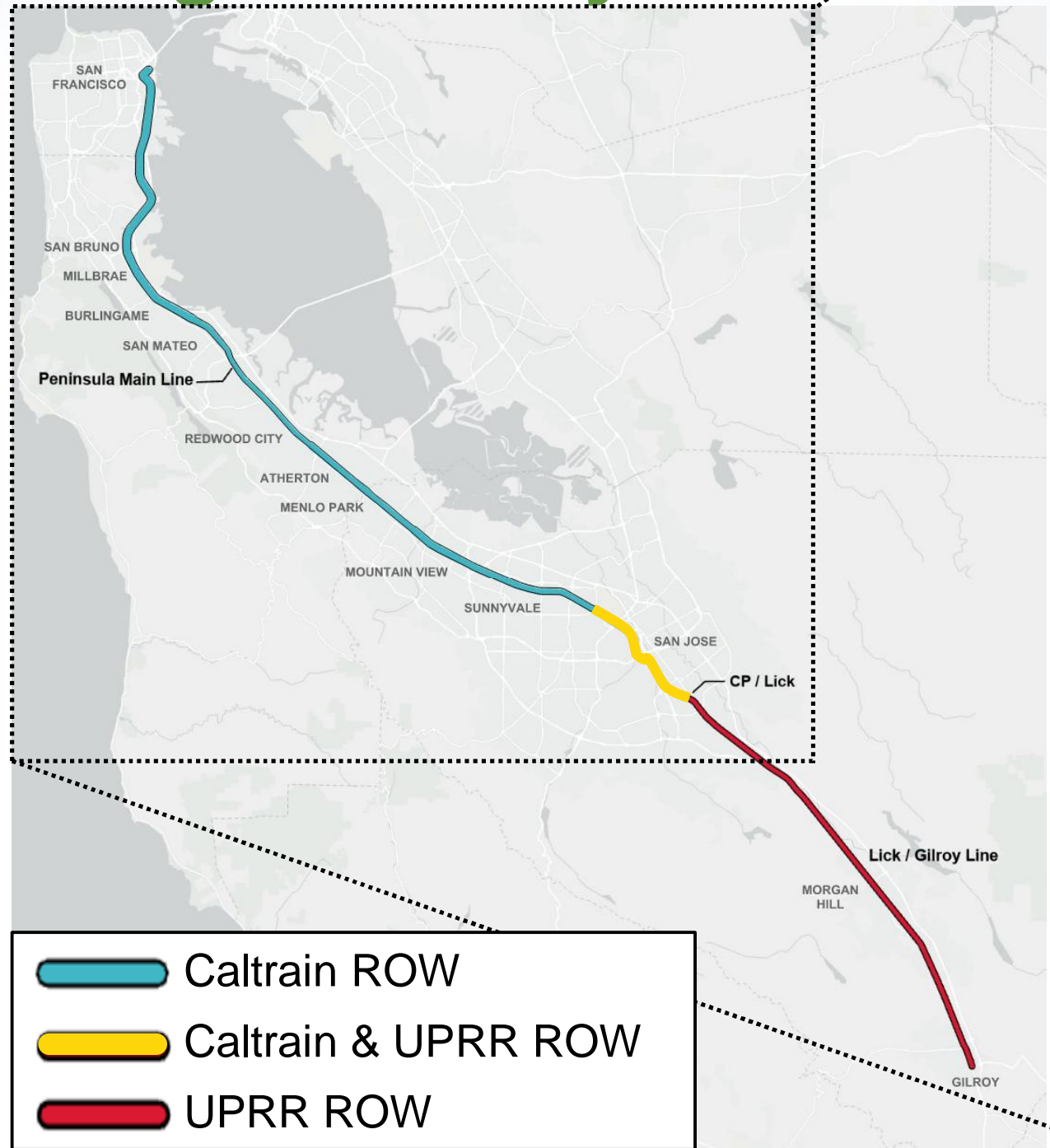
**Ultimate Track/
Station Layout**

**Adjacent
Land Use**

**Subsurface
Conditions**



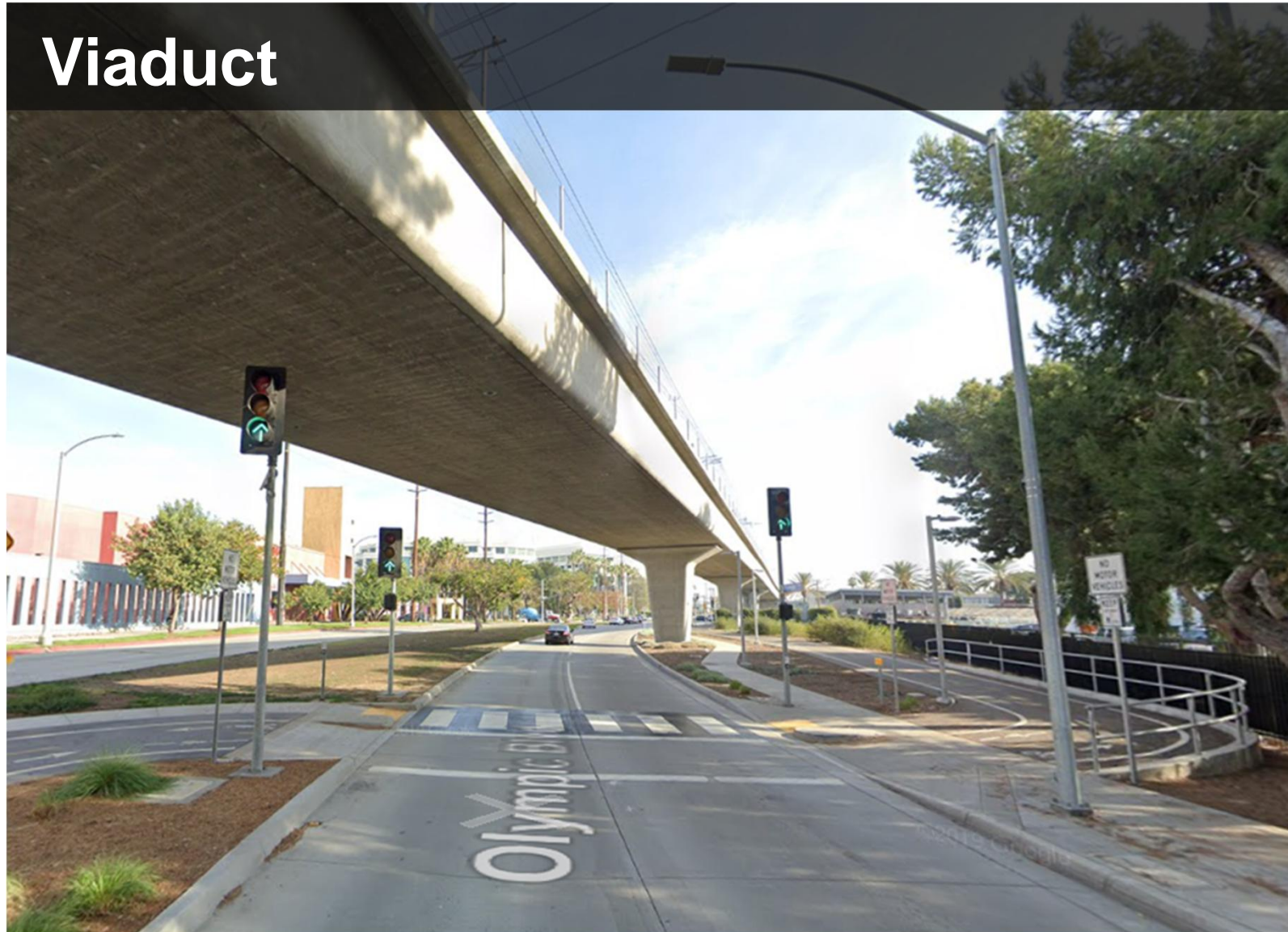
Existing Right-of-Way





Typical Design Solutions

Viaduct



Olympic GS, Santa Monica

Embankment



E 25th Ave, San Mateo



Activation Opportunities



Parking



Active Transportation



Greenspace



Revenue Generation



Parking Beneath 7 Train Viaduct, New York City



Active Transportation Beneath
Davenport Diamond Viaduct, Toronto



Businesses Beneath Railway Viaduct,
London, England

*Physical
Considerations*

*Regulatory
Considerations*

*Community
Considerations*

*Financial
Viability*



Typical Design Solutions



Fifth Ave, North Fair Oaks, San Mateo County



E 28th Ave, San Mateo



Typical Design Solutions

Trench



Alameda Mid-Corridor Trench, Los Angeles

Overpass



San Antonio Station, Mountain View



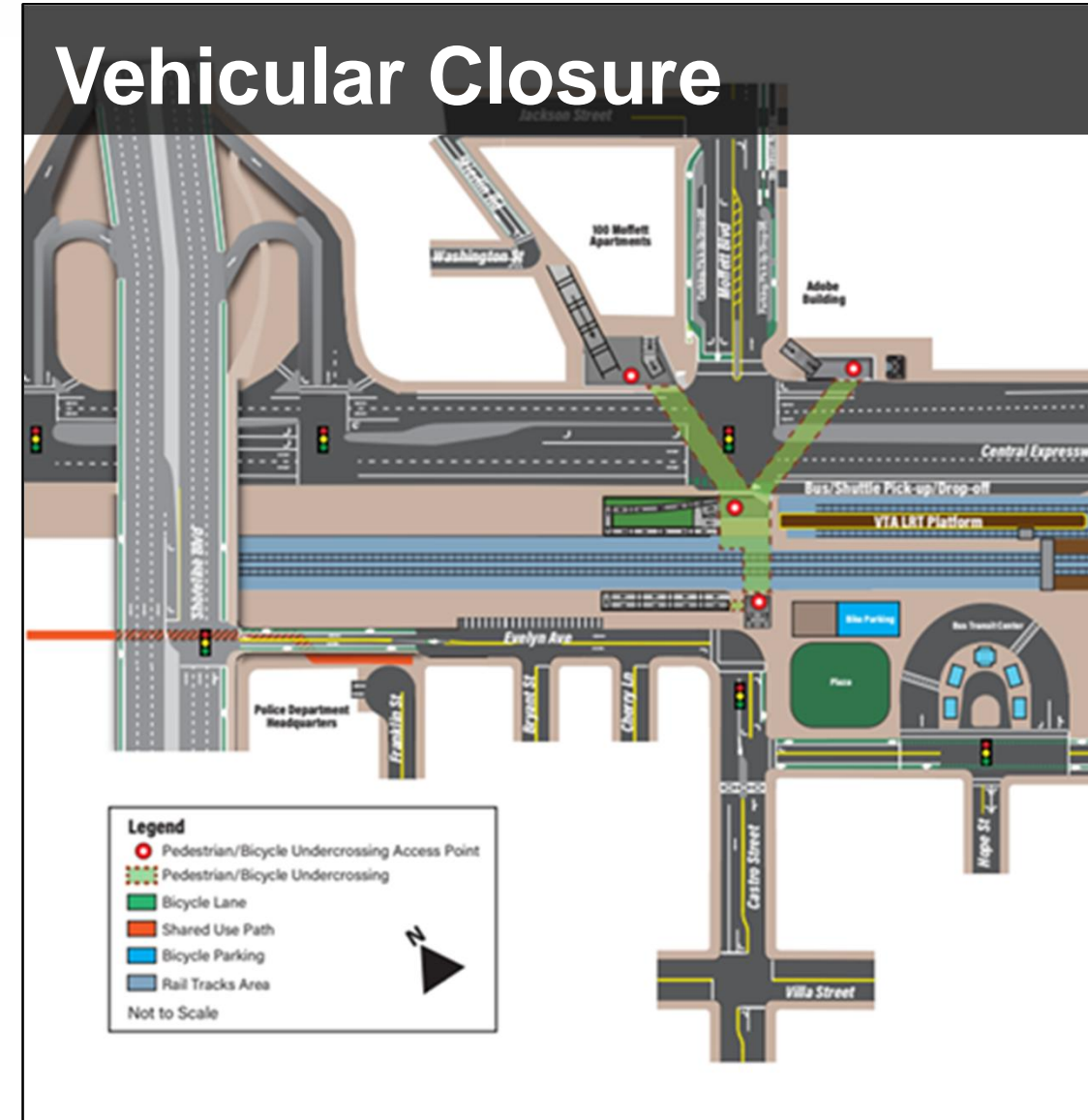
Typical Design Solutions

Full Closure



Benton St, Santa Clara

Vehicular Closure



Castro St, Mountain View



Corridor Themes

Rural/UPRR

- Long at-grade crossing spacing
- Low density development

Urban Isolated

- Long at-grade crossing spacing
- High density development

Urban

- Medium at-grade crossing spacing
- High density development

Urban Downtown

- Short at-grade crossing spacing
- Very high density development

At-Grade Crossing Spacing	Distance
Long	> 1 mile
Medium	½ - 1 mile
Short	< ½ mile





Themes – Rural/UPRR

Characteristics

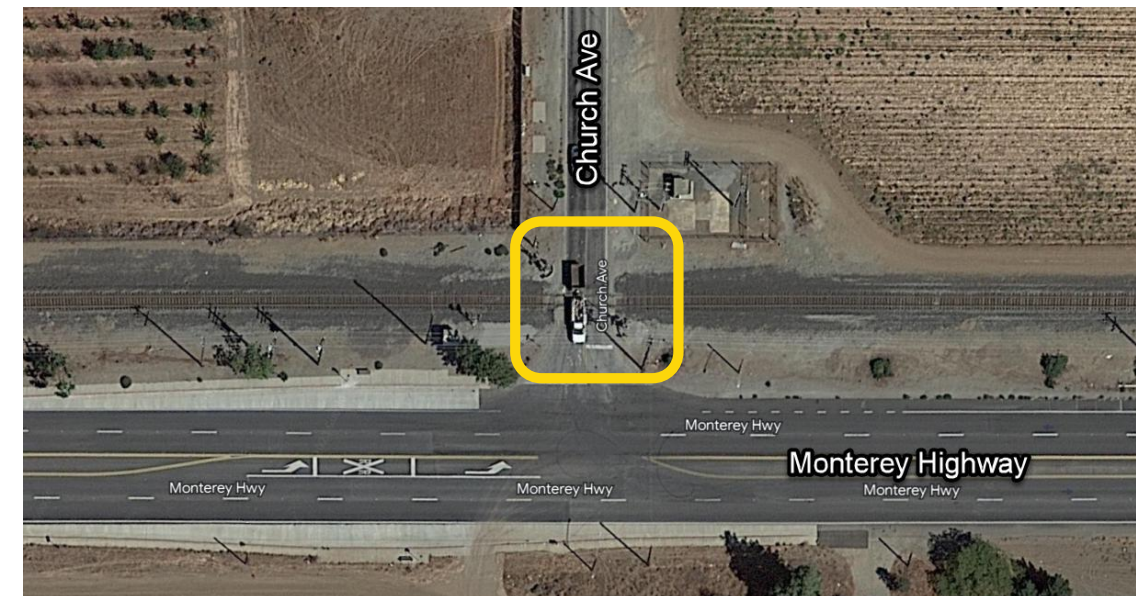
- Long crossing spacing (> 1 mile)
- Low density adjacent land use
- Local roadway reconfiguration feasible
- Low traffic volume
- Less constrained right of way



E Middle Ave Crossing, Morgan Hill

Potential solutions

- Grade Crossing Improvements
- Closure
- Underpass



Church Ave Crossing, San Martin



Themes – Urban Isolated

Characteristics

- Long crossing spacing (> 1 mile)
- High density adjacent land use
- Ranges from low to high traffic volumes
- Less constrained right-of-way



Churchill Ave Crossing, Palo Alto

Potential Solutions

- Underpass
- Embankment
- Hybrid



Rengstorff Ave Crossing, Mountain View
LPA: Underpass



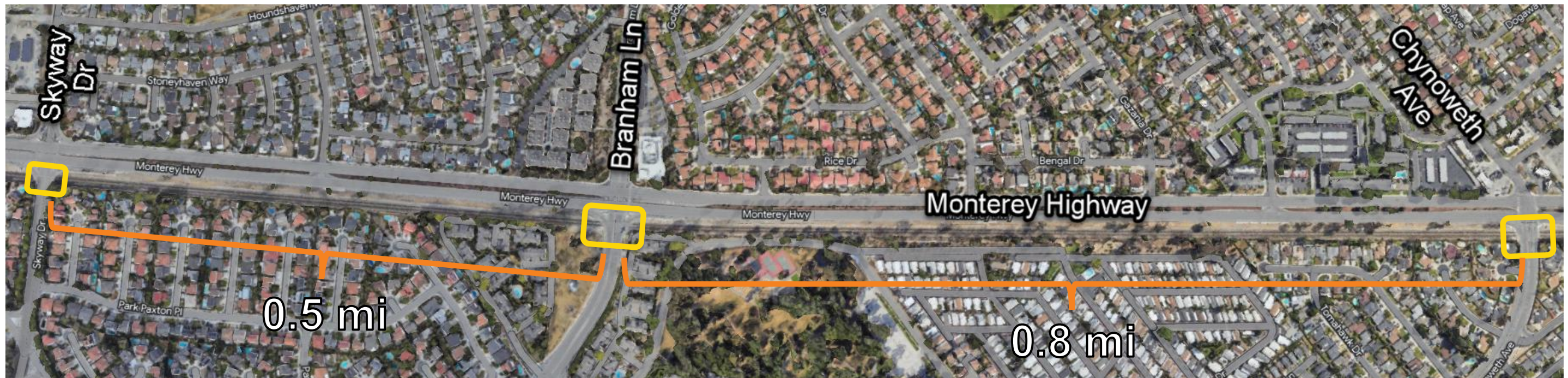
Themes – Urban

Characteristics

- Medium Crossing Spacing (0.5 - 1 mile)
- High density adjacent land use
- Ranges from low to high traffic volumes
- Constrained right-of-way

Potential Solutions

- Viaduct
- Embankment
- Trench
- Hybrid
- Underpass



Three close crossings adjacent to Monterey Highway in San Jose.
Skyway Dr, Branham Ln, and Chynoweth Ave



Themes – Urban Downtown

Characteristics

- Short Crossing Spacing (<0.5 mi)
- Very high-density adjacent land use
- Ranges from low to high traffic volumes
- Constrained right-of-way

Potential Solutions

- Viaduct
- Embankment
- Combo viaduct/embankment
- Trench
- Tunnel



Closely spaced crossings in Downtown San Mateo



Themes – UPRR Urban Downtown

Characteristics

- Short Crossing Spacing (<0.5 mi)
- Very high-density adjacent land use
- Constrained right-of-way
- **UPRR**
- **Less frequent Train Traffic**

Potential Solutions

- Viaduct
- Embankment
- Combo viaduct/embankment
- Grade Crossing Safety Improvements



Closely spaced crossings in UPRR ROW in Downtown Gilroy



Redwood City Example



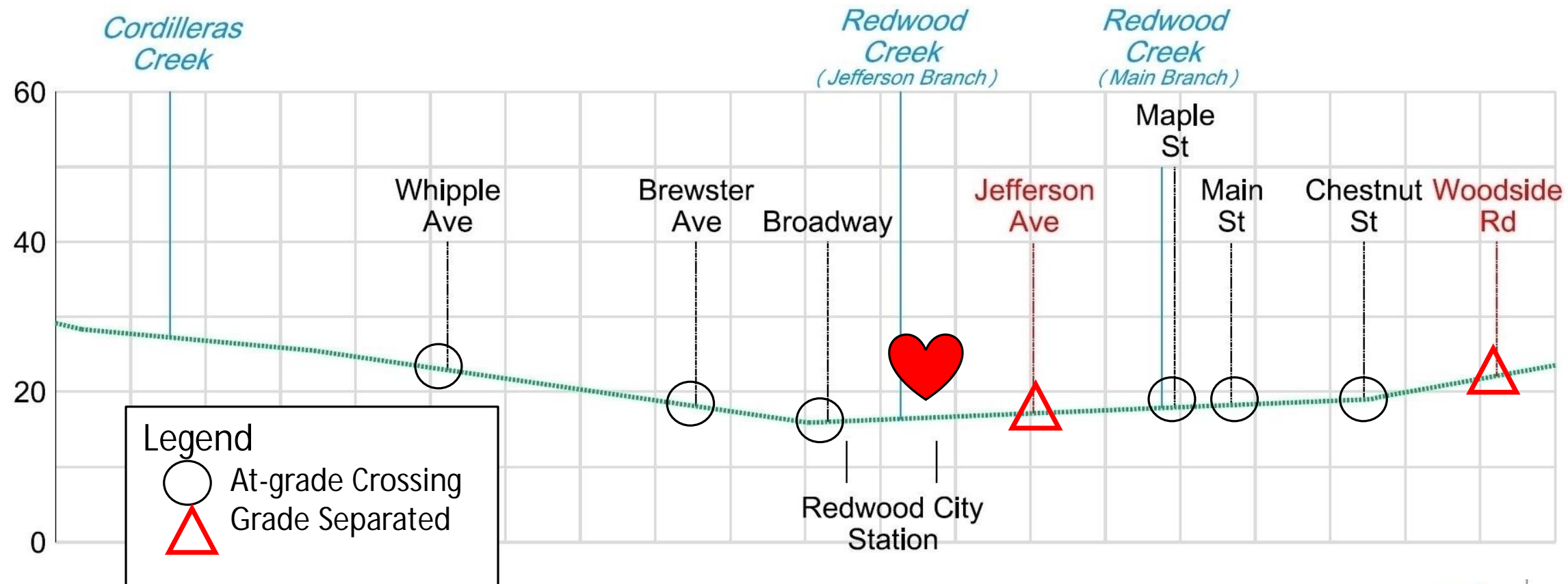


Project Goals & Setting

Study Goals

- Analyze feasible alternatives for remaining 6 at-grade crossings
- Decide on a long-term strategy for grade separations (which crossings when)

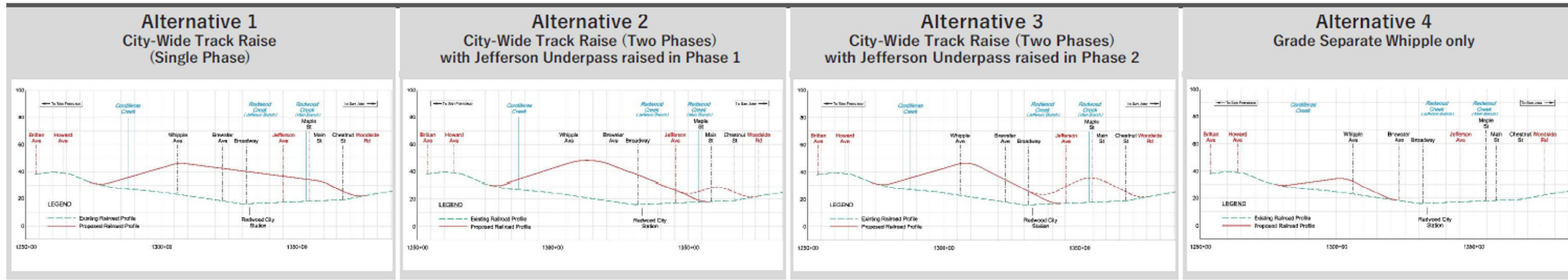
Project Setting





Alternative Refinement

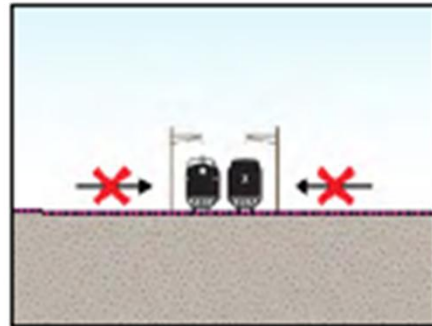
- Initial direction from City Council to avoid trenching/tunneling for rail
- “Cast a wide net” = 15 alternatives focused on vertical alignments



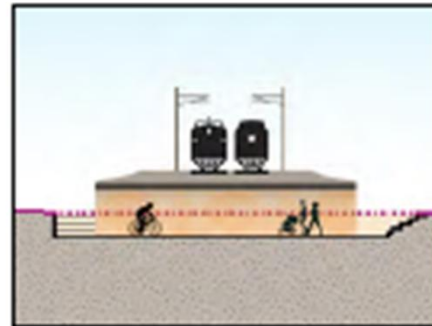
- Narrowed corridor and individual crossing options using public input and technical criteria with an eye to minimize potential ROW impacts and accommodate transit needs
- Community survey to finalize preferred alternative



Broadway



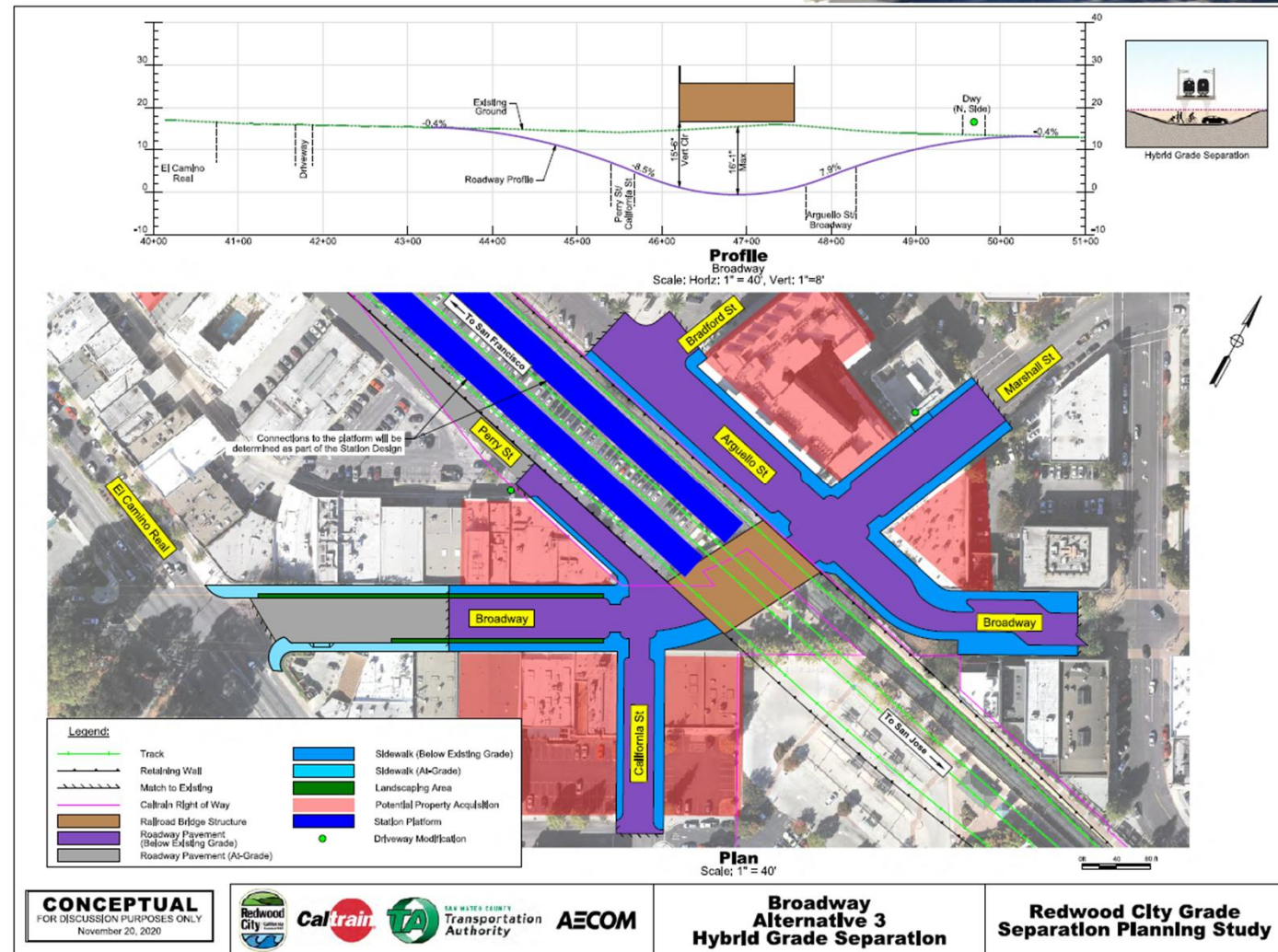
Full Closure



Pedestrian & Bike Underpass

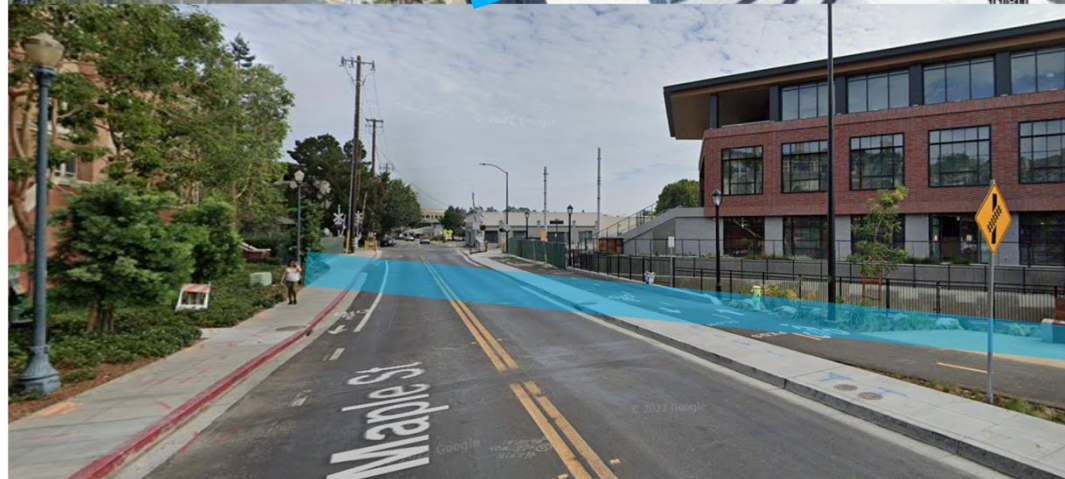


Hybrid Grade Separation



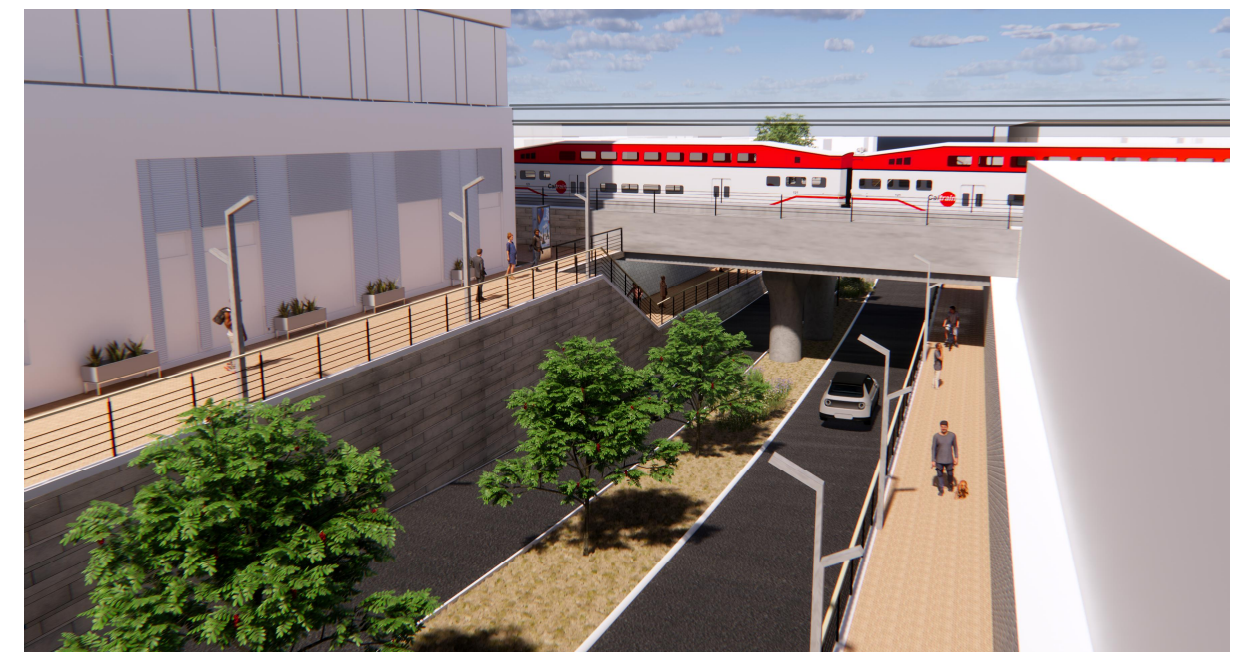
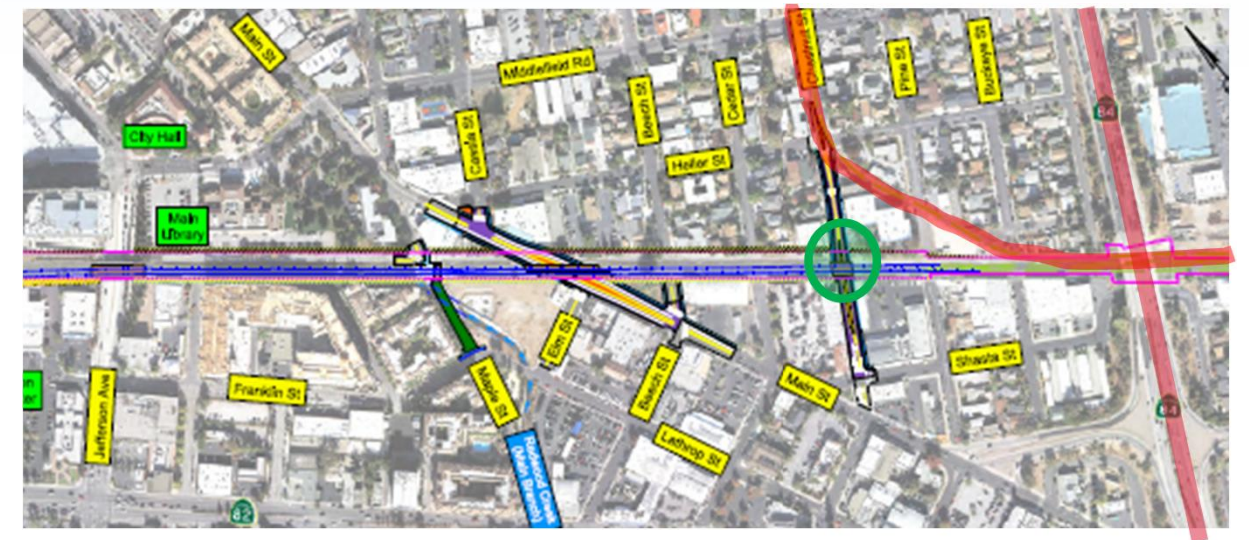


Maple Street



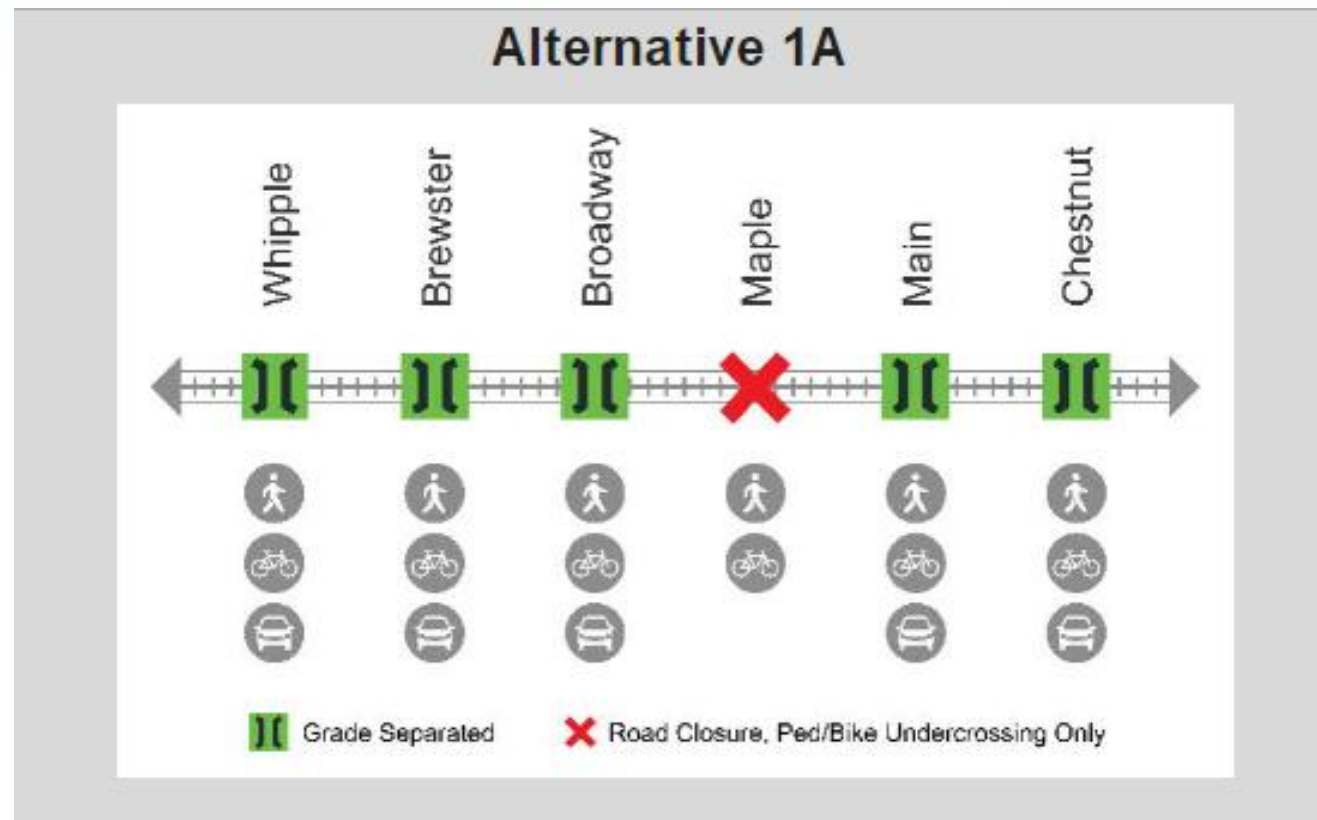


Chestnut Street





Recommended Alternative



- Citywide raise of the tracks with grade separations at all 6 rail crossings
- Maple closed to vehicular traffic (open to people walking and biking)
- Other crossings open for all modes





Questions and Discussion



Corridor Crossings
STRATEGY



Summary

Understand how to address Key Constraints

- ROW impacts
- Cost
- Utilities/Drainage
- OCS

Factors to consider for appropriate solutions

- Profile consistency
- Single-crossing vs multi-crossing solutions
- Activation opportunities
- Community context
- Track owner standards





Impacts of Approach on Design

Approach A: Independent Projects

- Best suited for single crossing solutions
- Potential scheduling conflicts between independent projects

Approach B: Coordinated Projects

- Single and multi-crossing designs viable
- Geographic grouping across jurisdictional boundaries

Approach C: System-wide

- Multi-crossing designs preferred/prioritized
- May detract from unique needs of local agencies

Look Ahead



Recent / Pending Discretionary Grants

City	Project	At-Grade Crossings	Funding Grants	Anticipated Award Notification or Awarded
South SF San Bruno	South Linden Avenue and Scott Street Grade Separation	S. Linden Avenue Scott Street	TIRCP	July
Burlingame	Burlingame Broadway Grade Separation	Broadway	RCE TIRCP	June July
Redwood City	Redwood City Grade Separation Study	Multiple	TIRCP	July
San Mateo	San Mateo Downtown Grade Crossings (Planning Phase)	Multiple	RCE	June
Palo Alto	Connecting Palo Alto	Churchill Avenue Meadow Drive Charleston Road	CRISI RCE TIRCP	TBD June July
Mountain View	Mountain View Transit Center and Grade Separation	Castro Street	LPP TIRCP	June July
Mountain View	Rengstorff Grade Separation	Rengstorff Avenue	CRISI RCE TIRCP	TBD June July
Sunnyvale	Mary Avenue Grade Separation	Mary Avenue	OBAG	November

Blue text = awarded

Upcoming Stakeholder Engagement

Stakeholder Group	Name	Timeframe	Content
PPG	Project Partner Group	September	Technical Topic Recap and Next Steps
CSCG	City/County Staff Coordinating Group	September	
LPMG	Local Policy Makers Group	September	
AMP	Advocacy and Major Projects (JPB Subcommittee)	September	Program Update
JPB	Joint Powers Board	October	Program Update

Website Updates and Contact Information

Website is regularly updated with deliverables, including:

- *Program Overview brochure*
- *Funding Opportunities brochure*
 - *Updated with bike/ped*
- *Community Fact Sheets by Jurisdiction*
- *Caltrain CCS Program Strategy Report, Part 1*

Program Website:

<https://www.caltrain.com/CCS>



Contact Email:

CCS@caltrain.com



CALIFORNIA High-Speed Rail Authority

Memorandum

Date: August 24, 2023
To: Local Policy Maker Group (LPMG)
From: Boris Lipkin, Northern California Regional Director
Re: California High-Speed Rail Program Update

STATEWIDE UPDATE

July Central Valley Tours



July brought the opportunity for several groups from Northern California to tour construction in the Central Valley. On July 12th, staff from the City of Gilroy attend a construction site tour and met with staff from the Downtown Fresno Partnership, the City of Fresno's Planning Division, and the Fresno Arts Council to learn how they are working with the Authority in the planning and preparation for high-speed rail.

(Photo of City of Gilroy and Authority staff on the Cedar Viaduct.)

On July 21st, Mineta Summer Transportation Institute (MSTI) high-school students visited the San Joaquin River Viaduct, Fresno Station Area, and Tulare Street Underpass. You can watch a video highlight of their tour [here](#).

Central Valley Construction Progress

On August 3rd, the Authority, in collaboration with California Rail Builders and the city of Wasco, celebrated the completion of the Poso Avenue grade separation project, which is now open to traffic. The Poso Avenue underpass is located between State Route (SR) 43 and J Street taking traffic and pedestrians under the BNSF freight railroad and future high-speed rail tracks.

On August 9th, the Merced Avenue overcrossing and grade separation opened, marking the seventh high-speed rail structure completed in the Central Valley this year. Located south of Wasco in Kern County, the Merced Avenue overcrossing will take traffic over SR 43, as well as BNSF and future high-speed rail lines.

For more information on construction updates, visit <https://buildhsr.com/>.

RECENT & UPCOMING OUTREACH ACTIVITIES IN NORTHERN CALIFORNIA

- Fruitvale Farmers' Market – August 8, 11:00am – 3:00pm
- Burlingame on the Avenue Festival – August 19, 10:00am – 6:00pm
- Mission Community Market – August 31, 3:00pm – 7:00pm
- Viva CalleSJ – September 10, 10:00am – 3:00pm