



## 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=L3pxeEVITTFrVjVIYWw3OW5wekw2dz09>

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

**Public Comments:** The Board 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 [video@caltrain.com](mailto:video@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, April 27, 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 - Caltrain Corridor Crossing Strategy In-Person Workshop
  - a. Thursday, May 25, 2023 at 4:00pm – Palo Alto City Hall
8. Adjourn

*All items on this agenda are subject to action*

**CalMod Local Policy Maker Group (LPMG)  
Summary Meeting Notes March 23, 2023**

**Summary Notes**

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

**1. Call to Order**

Incoming Chair Pat Burt called the meeting to order at 5:32 p.m.

**2. Roll Call**

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

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

CALTRAIN STAFF: Devon Ryan, Casey Fromson, Shirley Wong

HSR Staff: Rebecca Tabor, Morgan Galli, Boris Lipkin

### 3. Caltrain Staff Report

Casey Fromson, Chief Communications Officer, provided an update the following:

- High winds taking down trees on the corridor, and looking at safety issues along the corridor
- Full funding for the electrification project with celebratory events upcoming this summer
- Support from Washington D.C. regarding Caltrain electrification
- Grant applications for additional electric multiple units (EMUs) and battery electric trains
- Millbrae to Diridon [weekend shutdowns](#) beginning March 25<sup>th</sup>
- Caltrain Financial workshop April 6<sup>th</sup>

#### Public Comment

Adina Levin, Friends of Caltrain, commented on Caltrain ridership coming back gradually, finance board workshop topics, and Bay Area Transit Agencies seeking budget funding.

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

- A member asked about how Measure RR fits into these regional discussions and operational deficits observed
- Previous board meeting states Caltrain involvement with every aspect of the electrification project;
  - Executive Director is committed to making this happen, but requires greater oversight than envisioned;
  - intense oversight with BBII at all levels;
  - we expect them to come to the Board as well;
  - will bring electrification update back to Board next month

### 4. Caltrain Corridor Crossing Strategy

Jill Gibson, Transportation Planner, Kimley Horn, provided a presentation, which included the following:

- 2 paths – project delivery opportunities and program strategy development
- Timeline – culminating with a draft strategy in the Fall for discussion & crossings delivery guide
- Recap of February stakeholder Meeting (good feedback on goals & measures)
- Recap of February engagement (7 stakeholder meetings; over 50 people commented)
- Meeting goals & outcomes
- Current challenges (lack of corridor wide prioritization, lack of funding, jurisdictions need to apply for funding sources, organizational capacity, Caltrain's involvement reactive to city sponsored projects)
- Purpose – is to define a systematic corridor-wide approach to crossing & align stakeholder ambitions into balance with an implementable program
- Program delivery approaches
- Why bolster project delivery; initial stakeholder discovery revealed
- Crossings delivery guide topics (purpose: provide clear guidance for delivering a rail crossings project)
- Design criteria introduction
- Caltrain/UPRR corridors have different criteria
- Regulatory framework

- May mobility and circulation work sessions (location details to come)
- Asked 4-6 or 6:30-8:30pm since this is in person
- Upcoming stakeholder engagement
- Will bring to June Board meeting

Blake Silkwood, Project Manager, Kimley-Horn, provided information on the following:

- Grade separation and closure types (at grade, undercrossing, overcrossing, crossing closure, hybrid crossing, and bike/ped crossing)
- Visual examples of each given
- Takeaways (highlight technical components, )

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

- A member inquired about timelines and when locations would be provided to participating cities; staff replied they would provide technical timelines for the cities when are they provided
- Whether there would be a reevaluation for the proposed price tag proposed \$11.1 billion for all grade separations; staff replied they are tracking near term opportunities and committed to having a corridor funding approach
- Listing explicit priorities list: bicycle, pedestrians and public transportation for these grade seps be prioritized over automobiles
- Additional funding sources for active transportation, including for crossings and supplemental sources, different from vehicular sources and a request for a presentation on how to pursue these sources and various ranges different funding resources
- Elevating the corridor to be labelled a mega project and having a new design and technical standards mitigate impacts to communities
- May workshop polling time

#### Public Comment

Adina Levin, Friends of Caltrain, commented on finding designs for improvements and corridor approach for funding

#### **5. High-Speed Rail Staff Report – In Packet**

Boris Lipkin, Northern California Regional Director, High Speed Rail, provided a presentation which included the following:

- Connecting California (phase 1 San Francisco to Los Angeles, phase 2 – Sacramento to San Diego) – requirements renewable energy speeds of 220mph
- Project update reports (submitted March 1, 2023)
- Recent and upcoming milestones (statewide, central valley, northern/southern California)
- Global pandemic impacts (revised cost estimates, updated ridership estimates)
- Cost comparisons
- 10,000 jobs and counting
- Federal funding update (for every dollar on construction must be found elsewhere) –
- Federal funding opportunities – pending applications \$300 million (big one – federal state partnership for intercity rail)
- Phasing approach for federal grants

- Federal-state partnerships for intercity passenger rail (application to begin service for Central valley primarily \$2.8 billion request – the second application will be for the corridor configuration design \$194 million request)
- Federal Railroad Administration (FRA) comments on future grants (this project will need a federal partner)

#### **6. Public Comments on Items Not on the Agenda**

There were none

#### **7. LPMG Member Comments/Requests**

Chair Burt requested a presentation on how to pursue these additional funding sources and various ranges of funding resources in addition to the different approaches presentation (Corridor Crossings Strategies)

#### **10. Next Meeting**

Thursday, April 27, 2023 at 5:30pm

#### **11. Adjournment**

The meeting was adjourned at 6:49 p.m.



## Memorandum

**Date:** April 24, 2023

**To:** Caltrain Local Policy Maker Group (LPMG)

**From:** Devon Ryan, Government and Community Affairs Officer

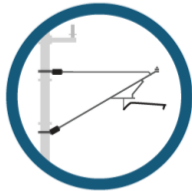
**Re:** Caltrain E-Updates

## CONSTRUCTION UPDATE

In March 2023, we installed:



**30**  
Poles



**178**  
Cantilevers



**99,000+**  
Feet of  
Wire

### Caltrain Electrification Construction and Service Changes Update

The Caltrain Electrification team has been working diligently to provide electrified service to riders by fall 2024. Since the start of weekend shutdowns earlier this year, the crew has made significant progress by installing 50 poles and over 190,000 feet of wire 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.

To support testing and construction, Caltrain will be temporarily reducing weekday service from Monday, April 17 to Friday, April 28.

Weekend service shutdowns are also continuing throughout 2023. On the weekends of April 29 - 30, May 6 - 7, and May 13 - 14, there will be no train service between Menlo Park and Santa Clara. Local weekend Caltrain service will be replaced with a bus bridge between Menlo Park and Santa Clara stations for

Caltrain dependent riders. There will be no bus or train service at Lawrence Station on these weekends. We encourage all passengers to plan ahead and use alternative transportation options when available. For the latest updates and information, please visit [caltrain.com/status](https://caltrain.com/status).

### **Caltrain Financial Workshop and Fiscal Cliff**

Caltrain and other transit agencies in the region are still recovering from the impacts of the pandemic. Caltrain is heavily reliant upon the farebox revenue we receive from ridership, and while ridership has increased recently, we still need to find additional revenue sources in the coming years to ensure the financial health of the system. State, federal and local elected officials as well as our partners and communities, have stepped up to provide significant funding in recent years, most notably \$410 million to complete the Electrification project. Thanks largely to this financial support, we have managed to avoid having to make significant cuts to service or other investments in operations and capital improvements.

However, Caltrain is facing a projected deficit of \$33 million in Fiscal Year (FY) 2026 and \$58 million in FY 2027. This “fiscal cliff” will require Caltrain to make difficult decisions, and conversations about how to approach this challenge are ongoing. Caltrain hosted a financial workshop on April 6 to inform the Caltrain Board and help shape decisions regarding the operating deficit, state of good repair, and capital projects. Caltrain will continue to look at ways to improve our system and continue to provide a world class experience for riders.

[Learn more.](#)

### **Caltrain Tree Assessment**

Due to recent storms, Caltrain experienced more than 50 trees and dozens of branches falling on our tracks and right-of-way. This impacted 5,000 feet of OCS wire, nine poles and a dozen cantilever arms and resulted in 33 hours of service delays along the corridor due to complete track closures. These impacts would have been even more substantial had electric service been in full operation. In order to better prepare for the future, Caltrain will be coordinating with cities on high priority areas and is working on a corridor-wide tree risk assessment and plan.

### **Caltrain Seeks Volunteers for Citizens Advisory Committee**

Caltrain is seeking volunteers from San Francisco, San Mateo and Santa Clara counties to apply for its Citizens Advisory Committee (CAC). The CAC currently has openings for six seats, two each for representatives from San Francisco, San Mateo and Santa Clara counties. Two of the seats available in San Francisco and Santa Clara are for alternate committee members. Committee members are asked to serve a three-year term. The CAC is comprised of nine community members who serve in an advisory capacity to the Caltrain board of directors, providing input on the needs of current and potential rail customers.

Residents interested in joining the CAC can find an application on the [CAC webpage](#) or by calling 650-508-6347. Applications are due by **Friday, May 5, 2023**.

[Learn more.](#)

## **PUBLIC MEETINGS:**

**JPB Advocacy and Major Projects Committee (AMP) Meeting – April Meeting Canceled**

**JPB Technology, Operations, Planning, and Safety (TOPS) - April 26, 2023 at 9:00 am**

**JPB Board Meeting – May 4, 2023 at 9:00 a.m.**

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

## **PROGRESS REPORT:**

The presentation on Caltrain Electrification progress presented at Caltrain's March 29, 2023 Board Meeting is [available here](#).



# Memorandum

**Date:** April 27, 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 is divided into three phases: Initiation Phase, Phase I, and Phase II. The Initiation Phase 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 2023. 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 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
- Strength partnerships between Caltrain, local jurisdictions, and regional member agencies.

Phase II will begin after the completion of Phase I, once a shared vision is identified. Phase II will include a corridor-wide strategy and programmatic approach for the organization, project development, funding, and implementation of the vision.

## Phase I Progress

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During the March stakeholder group meetings, stakeholders were provided an outline of the current corridor challenges, how a shared corridor-wide strategy will be developed, and feedback was collected on the updated Program Strategy goals and evaluation criteria. Key design criteria, considerations, and the current regulatory framework were also outlined to establish a baseline understanding of the engineering requirements and challenges of grade separation projects.

In April, the LPMG will be provided a recap of the March stakeholder topics and CCS timeline. In addition, an update of the two program paths will be provided: Program Strategy and Project Delivery Opportunities.

The Program Strategy update will outline the shared strategy process through the end of the year, review the finalized program strategy goals, and detail logistics for the May in-person work session. Cost and funding for grade separation and/or closure projects will also be discussed, outlining upcoming funding opportunities and their requirements, in addition to establishing a timeline of future funding information updates for LPMG members.

The Project Delivery Opportunities update will provide an overview of information on Construction Approaches and Delivery Methods, as part of the CCS technical topic exploration. Different requirements and opportunities across construction methods, common and alternative delivery methods, and important approach considerations will be discussed. It is important to establish an understanding of the construction approaches and delivery methods available, in order leverage the different strengths of each method and achieve the corridor's vision. Exploring these technical topics will help outline the trade-offs of the different corridor-wide approaches, 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](http://www.Caltrain.com/Projects/CCS). Questions or additional feedback about the program can be sent to the CCS project inbox at [CCS@Caltrain.com](mailto:CCS@Caltrain.com).

## Public Meetings

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**JPB Advocacy and Major Projects Committee – May 24 at 3:30 p.m.**

**Local Policy Makers Group Meeting – May 25 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

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The presentation on the Caltrain Corridor Crossings Strategy approach presented at Caltrain's March 23, 2023, LPMG Meeting is [available here](#).



# *Corridor Crossings*

STRATEGY



*Local Policy Maker Group*

4.27.2023





# AGENDA

- **March** Recap
- **Program Strategy** Update
- **Construction Approaches** and Delivery Methods
- **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*

# Timeline

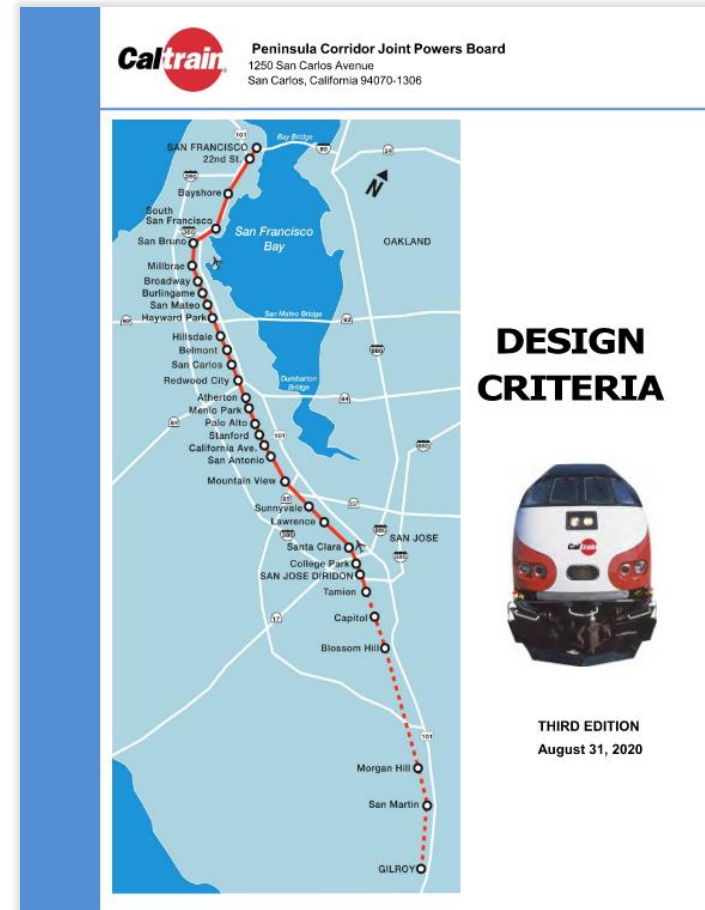


# Recap of March Topics

- Illustrated shared strategy development



- Reviewed Project Delivery Opportunities
- Outlined Grade Separation and Closure Considerations
- Presented and solicited feedback on May Mobility & Circulation work sessions





# Meeting Goals and Outcomes



**Update on Program Strategy**



**Outline Upcoming Funding Opportunities**



**Overview of Construction Approach and Delivery Methods**



This icon represents additional information provided in the Appendix for your reference.



This icon represents feedback is requested on content. However, questions and feedback are encouraged throughout presentation.



# Program Strategy Update



**Corridor Crossings**  
STRATEGY



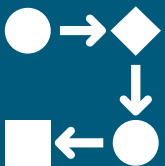
# Purpose

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:

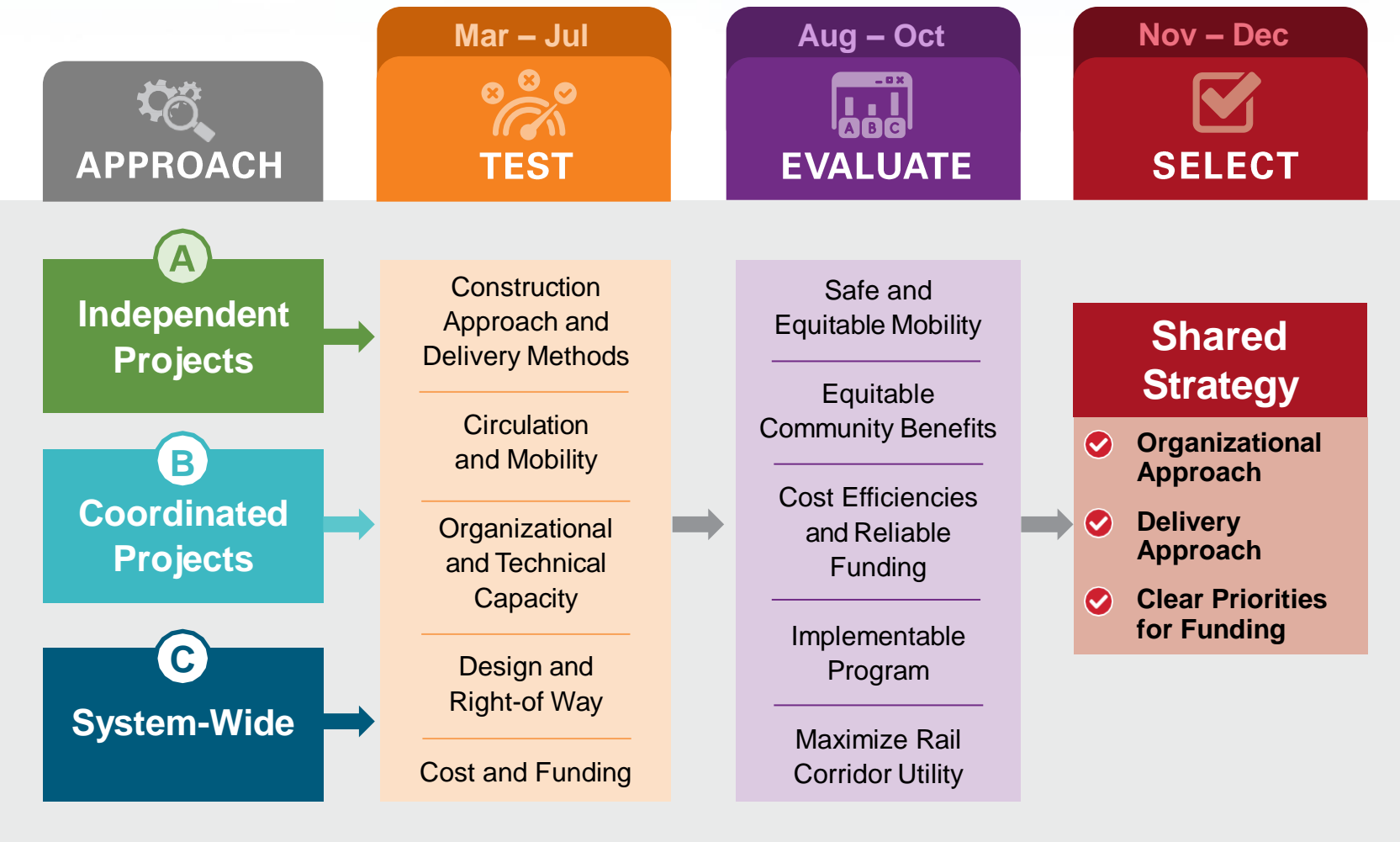
- Funding
- Organization
- Program Delivery

***Note: Active grade separation projects will continue in parallel***





# Program Strategy Process








# Program Strategy Goals


## Safe and Equitable Mobility

-  Eliminate collisions along the corridor
-  Improve access and circulation, with priority for walking, biking, transit, goods movement, and emergency response
-  Provide mobility choices during construction

## Equitable Community Benefits

-  Establish a framework for equitable investments
-  Foster placemaking
-  Improve quality of life and reduce environmental impacts for neighboring communities

## Cost Efficiencies & Reliable Funding

-  Facilitate design approaches and innovation that enable corridor delivery
-  Streamline program delivery methods to reduce overall costs
-  Leverage existing committed funding and promote new and stable funding sources

## Implementable Program

-  Define clear roles for Caltrain and its partners
-  Accelerate construction and reap schedule efficiencies
-  Establish clear program corridor objectives for delivery
-  Organize partnerships for successful program delivery

## Maximize Rail Corridor Utility

-  Support implementation of adopted service vision
-  Sustain service & minimize disruptions during construction
-  Promote quality passenger experience and improve reliability
-  Leverage value created by grade separations and/or closures



# Cost and Funding

## April:

- Publish a Funding Program Brochure on CCS website
- Provide updates on upcoming grant programs, award notification timing and relevant application criteria and requirements

## May:

- In-person workshop with opportunity to start discussing coordinated funding approach
- Provide updates on upcoming grant programs, award notification timing and relevant application criteria and requirements

## June:

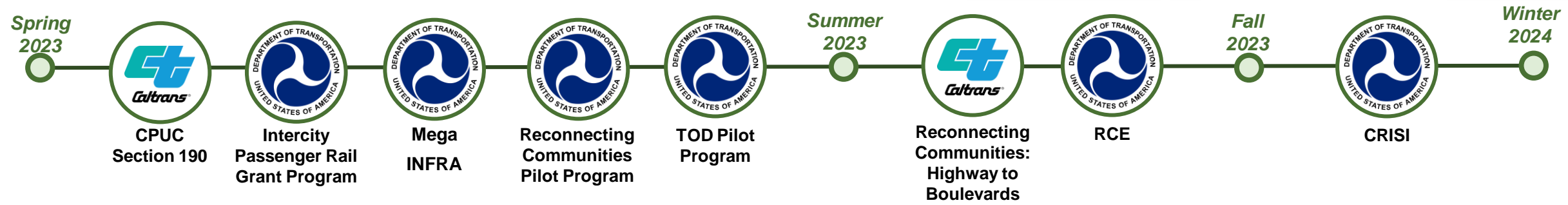
- Discuss options for FY24 coordinated funding approach
- Present the findings from the funding technical exploration topic to inform the long-term strategy

## June – December:

- Anticipate announcement on first round of FRA Railroad Crossing Elimination Grants
- Updated corridor level estimate of grade separation costs
- Discussion or any other corridor level grant coordination



# Upcoming Notice of Funding Opportunities



Grant	Funding Available	Additional Information
California Public Utilities Commission (CPUC) Section 190	\$15M FY22	<b>Applications due April 1<sup>st</sup> to be on priority list</b>
Federal-State Partnership for Intercity Passenger Rail Grant Program	\$4.57B FY22*	<b>April 21, 2023, 5 PM EST *Advanced appropriations.</b>
INFRA Grant Program	\$1B FY22   \$5B FY22 - FY26	No minimum size
Mega Grant Program	\$1.55B FY22   \$8B FY22 - FY26	\$5M min
Reconnecting Communities Pilot Program	\$200M FY24   \$1B FY22 – FY 26	Capital/Construction: \$5M min / Planning: \$2M max
Reconnecting Communities: Highway to Boulevards	\$149M disbursement program	Application workshop summer 2023
Railroad Crossing Elimination (RCE) Grant Program	\$573M FY22   \$3B FY22 – FY26*	\$1M min. *Advanced appropriations.
Transit-Oriented Development (TOD) Pilot Program	\$14M FY24   \$68M FY22 - FY26	Maximum award of 80% of project cost
Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant Program	\$1.4B FY22   \$5B FY22 – FY26	No predetermined award size

*Highlighted are most likely to fund grade separation projects*



# Project Criteria/Requirements

Grant	Criteria/Requirements
<b>California Public Utilities Commission (CPUC) Section 190</b>	<ul style="list-style-type: none"> <li>• Includes alteration/reconstruction of existing grade separations &amp; construction of new grade separations</li> <li>• All necessary agreements with the affected railroad(s) need to be fully executed by railroad and applicant.</li> <li>• Preconstruction costs expended prior to any allocation may be included</li> </ul>
<b>Federal-State Partnership for Intercity Passenger Rail Grant Program</b>	<ul style="list-style-type: none"> <li>• Projects that replace, rehabilitate, or repair infrastructure used for providing intercity passenger rail service</li> <li>• Planning or capital projects that improve, expand, or establish new intercity passenger rail service</li> <li>• Similar criteria to RCEP program</li> </ul>
<b>Mega/INFRA Grant Program</b>	<ul style="list-style-type: none"> <li>• Requires stable and dependable funding or financing and significant need of Federal funding</li> <li>• Ready to begin construction within 18 months from obligation</li> <li>• Applicant has sufficient legal, financial, technical capacity to carry out the project</li> <li>• National or regional economic, mobility, or safety benefits.</li> <li>• INFRA has some additional goals with more funding, but likely smaller awards</li> </ul>
<b>Reconnecting Communities Pilot Program</b>	<ul style="list-style-type: none"> <li>• Planning or implementation grants</li> <li>• Community- and equity-focused evaluation criteria</li> <li>• Evaluation of project readiness</li> <li>• Applicants to Capital Construction Grants must own the eligible transportation facility or have the owner as an endorsing, joint applicant</li> </ul>
<b>Reconnecting Communities: Highway to Boulevards</b>	<ul style="list-style-type: none"> <li>• Similar to USDOT program</li> <li>• ROW owner must be a co-applicant</li> </ul>
<b>Railroad Crossing Elimination (RCE) Grant Program</b>	<ul style="list-style-type: none"> <li>• Includes grade separation, closure, or track relocation</li> <li>• Similar equity criteria to the RCP</li> <li>• Also considers technical merit and safety</li> </ul>
<b>Transit-Oriented Development (TOD) Pilot Program</b>	<ul style="list-style-type: none"> <li>• Available for planning projects</li> <li>• One application per corridor</li> <li>• Must be an existing FTA grantee that is sponsoring an eligible transit project and partnering with an entity in the corridor with land use authority, <b>or</b> have land use authority and is partnering with the transit project sponsor</li> </ul>
<b>Consolidated Rail Infrastructure and Safety Improvements (CRISI) Grant Program</b>	<ul style="list-style-type: none"> <li>• Wide range of rail capital &amp; planning projects</li> <li>• Similar criteria to RCEP program</li> </ul>





# May In-Person Work Sessions

## Objectives:

- Discuss how the Caltrain corridor and transportation network interacts today and how they could interact in the future.
- Outline the trade-offs of different corridor improvement scenarios to foster a regional perspective

## Agenda:

1. Funding Opportunities Summary
2. Mobility and Circulation Presentation
  - Approach Framework, Analysis, Highlight Castro Street Closure (MV Speaker), Scenarios, and Break Out Exercise
3. Break Out and Report Out
  - Break into segments focused on further exploring existing conditions and discussing trade-offs of closures and grade separation
  - Each group report out on discoveries and takeaways

*A virtual option will NOT be provided*



## DATE

### CSCG/PPG

May 17<sup>th</sup> 10:00 AM – 12:00 PM

### LPMG

May 25<sup>th</sup> 4:00 PM – 6:00 PM



## LOCATION

Palo Alto City Hall

# Construction Approaches and Delivery Methods



# Common Construction Methods



## Traditional (Ground-Up)

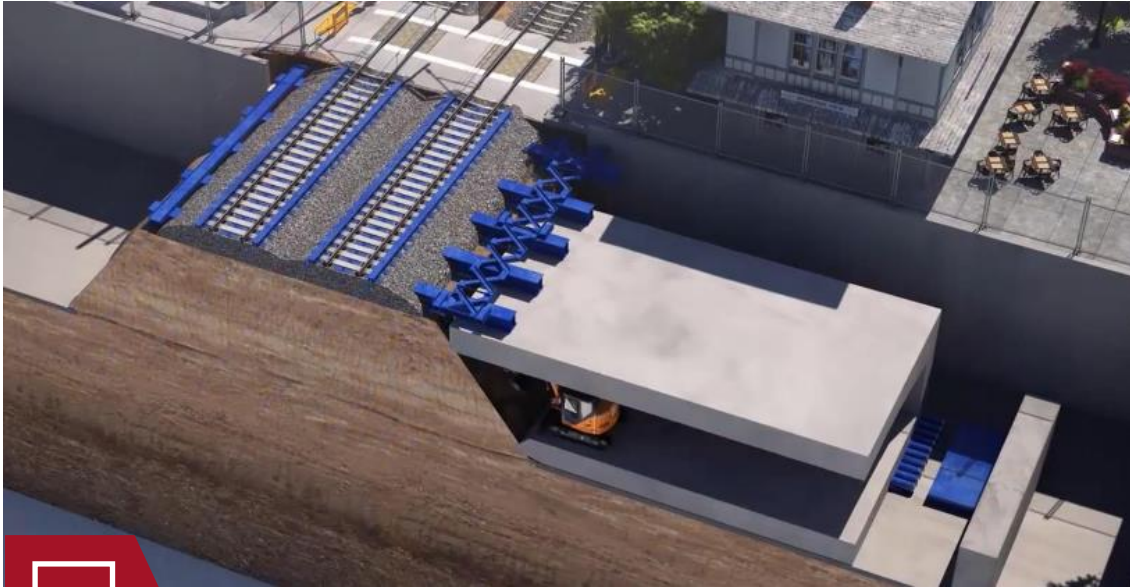
- Straight forward and familiar to contractors
- Typically requires shoofly tracks or relocated mainline
  - Expensive to electrify shoofly tracks



## Top-Down

- Flexibility for construction staging and maintaining traffic
- Eliminates need for temporary walls (shoring)
- Typically requires shoofly tracks or relocated mainline
  - Expensive to electrify shoofly tracks

# Accelerated Construction Methods



## Box Jacking / Placement

### Both Methods Offer:

- Structure constructed adjacent to active track, then lifted/jacked into place
- Less familiar; requires specialized contractor
- Maintain train operations during construction



## Accelerated Bridge Construction

- Reduce project schedule
- Eliminate need for shoofly tracks
- Reduce impact to electrification system

# Multi-Crossing Construction Methods



Olympic GS, Santa Monica



## Viaduct

- Typically used for multiple grade separations or longer distances
- Complex staging within active railroad R/W
  - Corridor electrification increases staging complexity
- Increased impact to stations within project limits
- Typically requires shoofly tracks or relocated mainline

# Multi-Crossing Construction Methods



## Cut and Cover

- Typically used for multiple grade separations or longer distances
- Complex staging within active railroad R/W
  - Corridor electrification increases staging complexity
- Increased impact to stations within project limits
- Typically requires shoofly tracks or relocated mainline
- Additional challenges related to utilities and drainage



## Tunneling

- Typically used for multiple grade separations
- Minimizes impacts to existing train operations, traffic circulation, and right-of-way
- Constrained by OCS (Clearance to existing foundations), stations, and staging area (boring pits)
- Specialty contractor / equipment
- High construction cost

# Common Delivery Methods

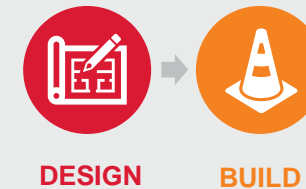
## Conventional Delivery Method

- Design-Bid-Build (DBB)
  - 95% of existing Caltrain Projects

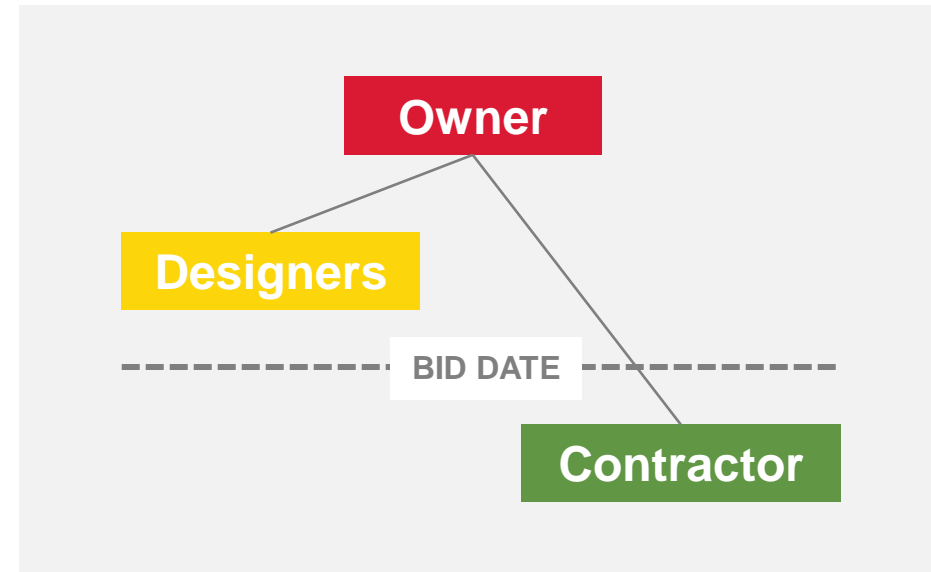
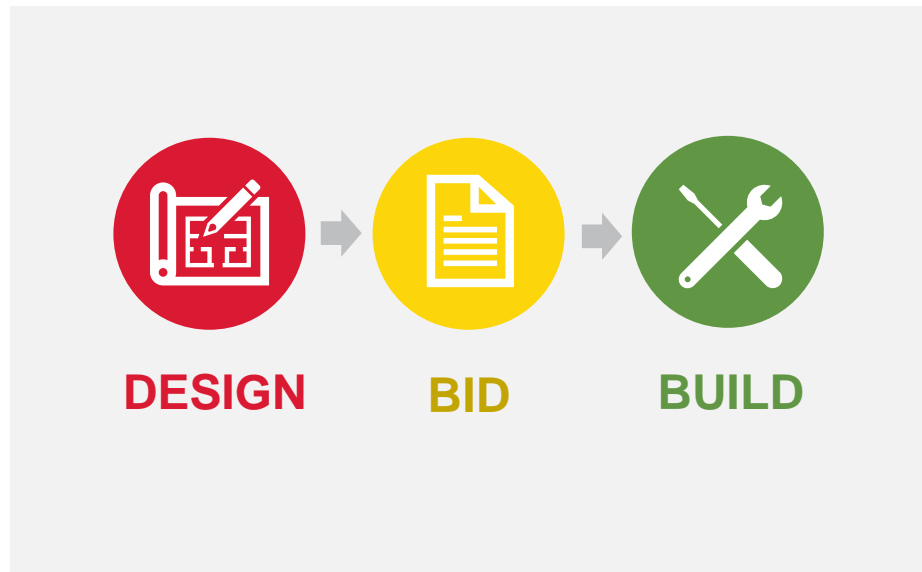


## Alternative Delivery Methods

- Design-Build (DB)
  - PCEP
- Design-Build-Operate-Maintain (DBOM)
- Progressive Design Build (PDB)
- Construction Manager/General Contractor (CMGC)
  - Burlingame Broadway Grade Separation
  - Mountain View Transit Center Grade Separation and Access Project
- Public-Private Partnership (P3)
- Public-Public Partnership (PuP)



# Conventional Delivery Method

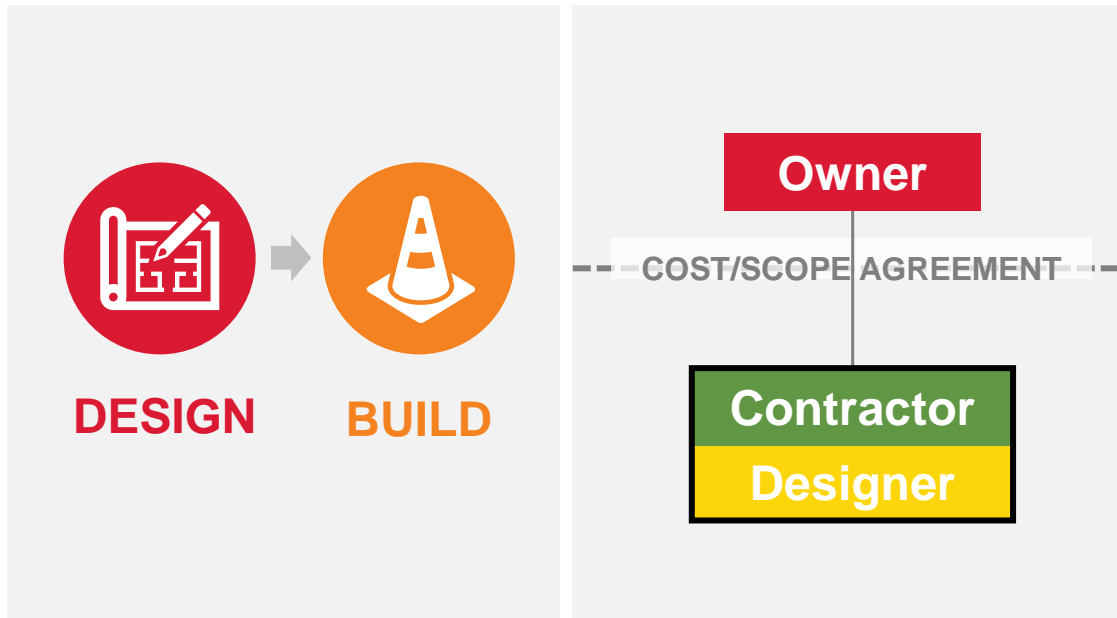


## Design-Bid-Build

Client holds separate design and construction contracts

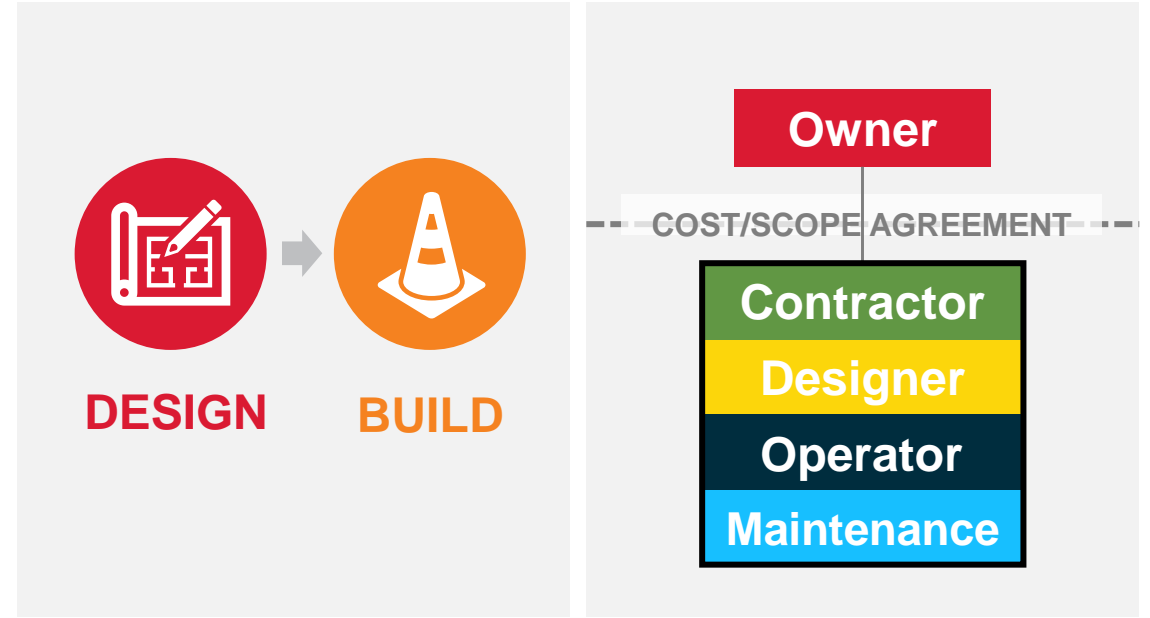


# Alternative Delivery Methods



## Design-Build

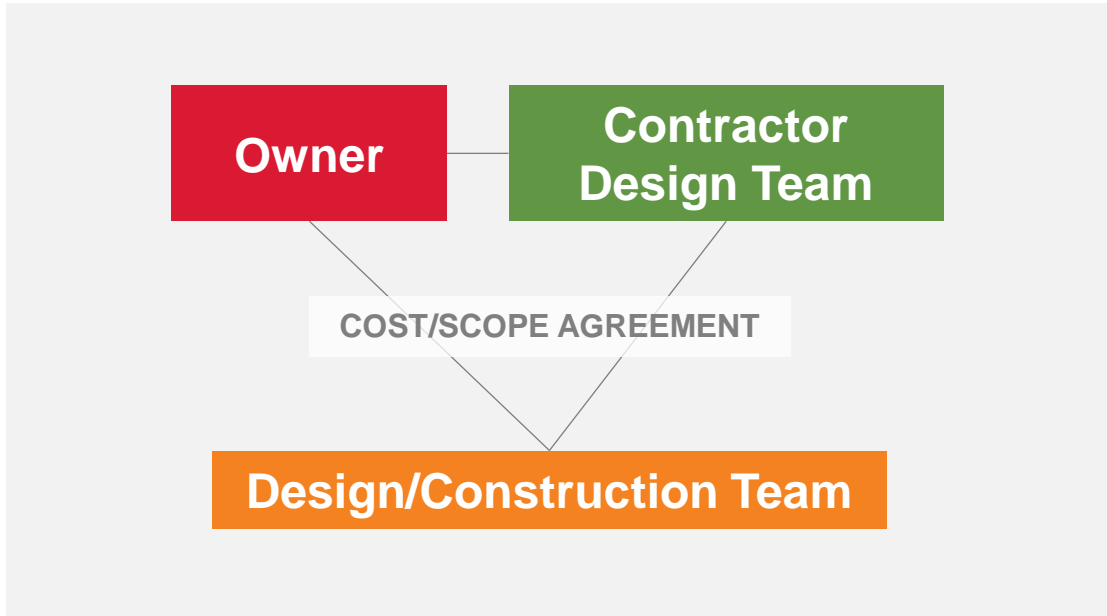
Client contracts with a single entity for design and construction



## Design-Build-Operate-Maintain

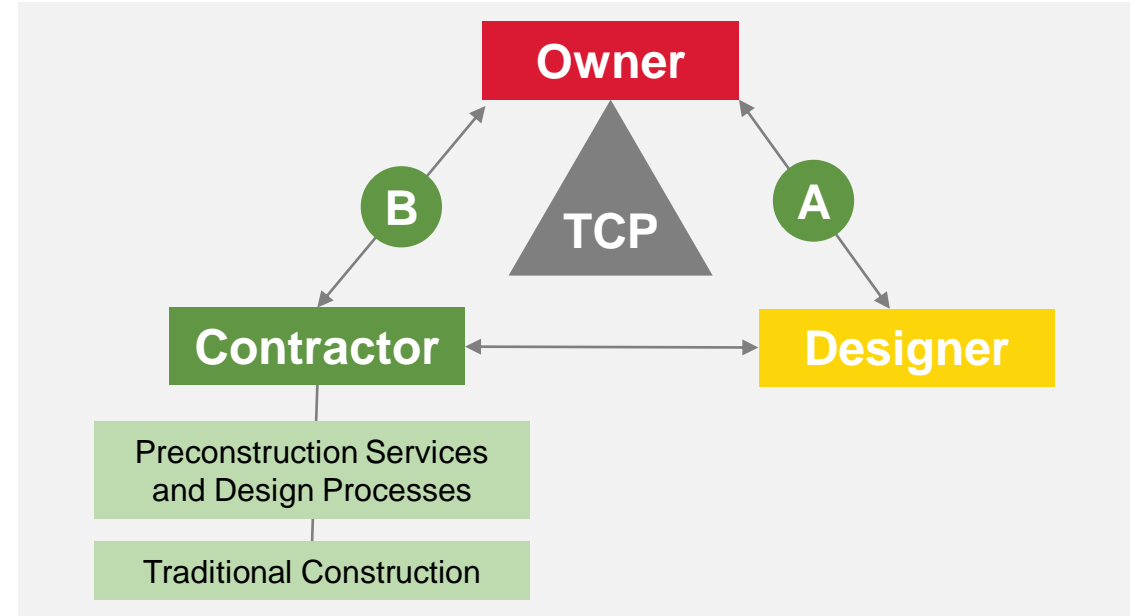
Client contracts with a single entity for design, construction, maintenance, and operations for an agreed upon duration

# Alternative Delivery Methods



## Progressive Design-Build

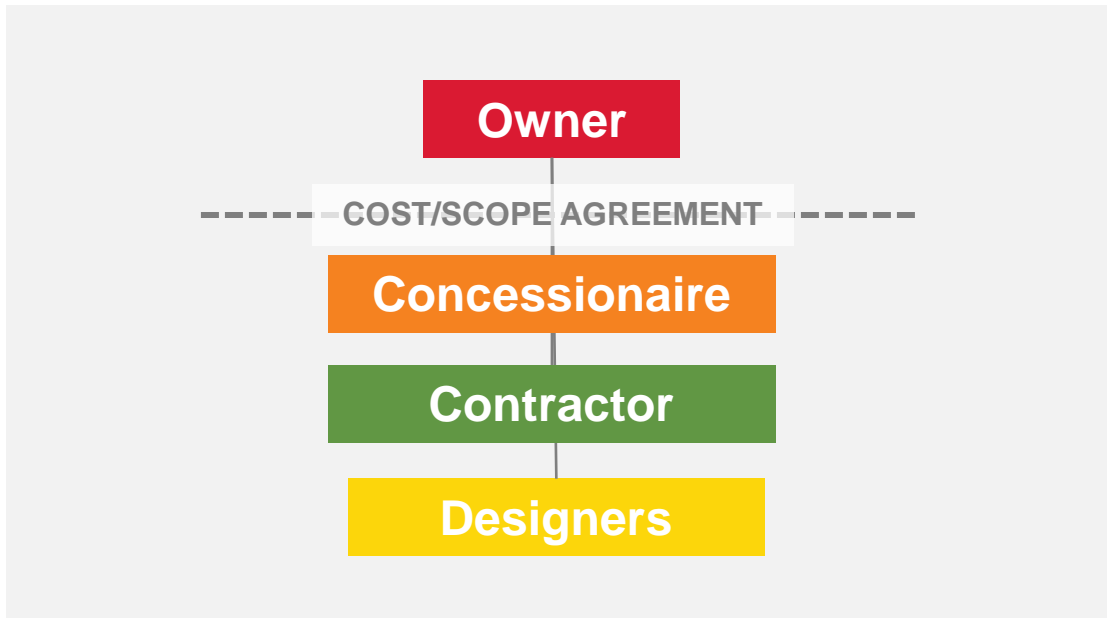
Owner holds one contract  
Contractor/Designer are one team



## Construction Manager/General Contractor

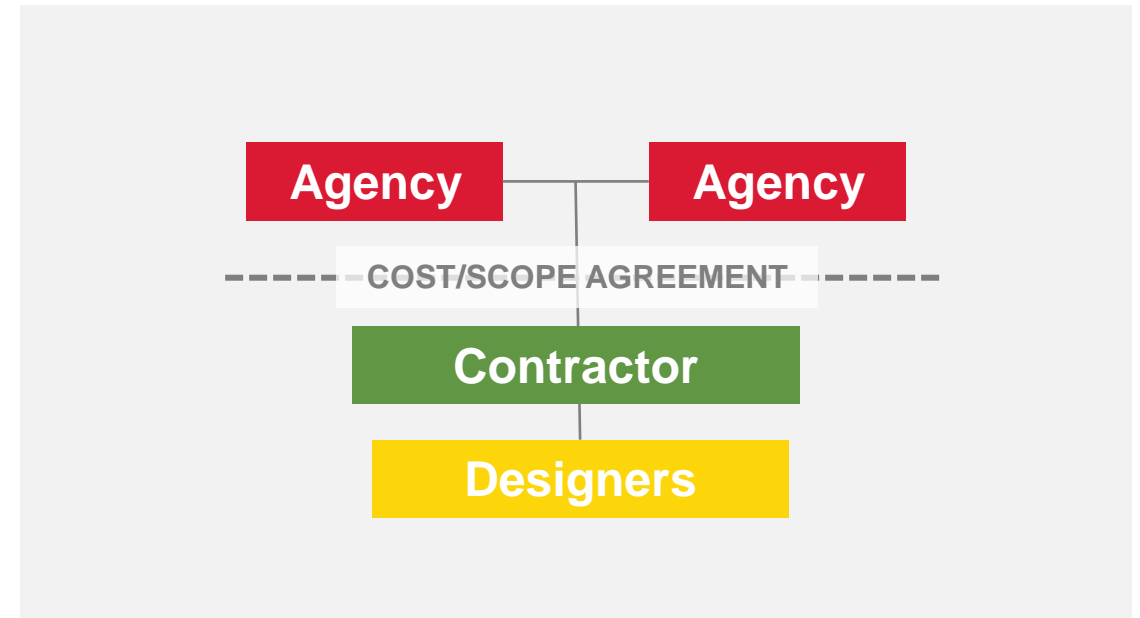
Owner holds Design and Construction contracts (A&B)  
All parties agree on Total Contract Price (TCP)

# Alternative Delivery Methods



## Public-Private Partnership

Cooperation between public and private entities to finance, build, operate, and/or maintain a project



## Public-Public Partnership

Peer relationship forged around common interests. Two or more public agencies unite to leverage shared capacities

# Legislative Basis for Alternative Delivery Methods

## County Transit Districts

- SamTrans: Authority to pursue only traditional or CMGC (CPUC sec. 103395)
- VTA: Authority to pursue only traditional or CMGC (CPUC sec. 100151)

## Caltrain

- Authority to enter into any contract necessary for its powers (CPUC sec. 160005)
- Opens options for other alternative delivery methods

## Local Jurisdictions

- Authority to enter into any contract necessary for its powers (CPUC sec. 180152)

# Construction and Delivery Considerations



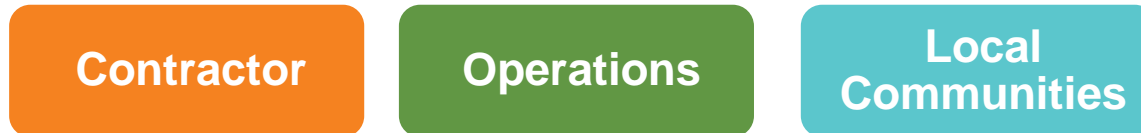
**Corridor Crossings**  
STRATEGY

# Important Considerations

## 1 Program Strategy Approaches:



## 2 Perspectives of Key Stakeholders:



## 3 Project Elements:



# What are the construction and delivery trade-offs?

## Approach A: Independent Projects

- Best suited for single crossings
- Multiple entities/projects coordinating with Caltrain
- Uncertainty in resource allocation decisions and project delivery timelines

## Approach B: Coordinated Projects

- Single and multi-crossing construction methods viable
- Economy of scale / Efficient
- Geographic grouping across jurisdictional boundaries

## Approach C: System-wide

- Advantages of Approach B, plus:
- Unified funding advocacy
- Simplified procurement accelerates corridor delivery

# Key Perspectives

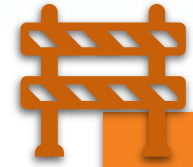
Establish trust and building partnership between:



How do these perspectives change by delivery approach?



# Perspectives of Key Stakeholders



## Contractor

- Constant Site Access
- Ample Work Area
- Time is money
- Mitigate impacts to:
  - Utilities
  - Community
  - Environment



## Operations

- Maintain Service to customers
  - Temporary service options
- Protect OCS
- Accommodate future needs
- Expedite project delivery



## Local Communities

- Limit impacts to:
- Transportation
    - Traffic
    - Mobility
    - Access
  - Right-of-Way
  - Environment
    - Construction Noise
    - Air Quality
    - Work Hours

# What elements impact the construction and delivery approach?



## Corridor Electrification

Protect OCS infrastructure to reduce costs and shorten schedule

## Geographic Grouping

Grade separate multiple locations with one solution

## Temporary Service Options

- Shoofly Tracks
- Single Track
- Bus Bridge

## Schedule and Budget

Larger projects open options for bulk ordering, stockpiling of material, and consolidation of lay down areas, reducing project duration and cost

# Construction and Delivery Takeaways



Moving toward **Program Strategy Approaches B or C** helps leverage the advantages/strengths of alternative construction approaches and delivery methods



Construction and delivery methods must be aligned with the perspectives of **Key Stakeholders**




**Project Elements** influence the decision of construction and delivery methods



# Look Ahead



# Upcoming Stakeholder Engagement

Stakeholder Group	Name	Timeframe	Content
LPMG	Local Policy Makers Group	May	Mobility, Circulation & Funding Work Session
CSCG	City Staff Coordination Group	May	
AMP	Advocacy and Major Projects (JPB Subcommittee)	May	 Provide Program Introduction, Case Study Summary, and Program Strategy Approach.
JPB	Joint Powers Board	June	
GMG	General Manager Group	July	

# Contact Information

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



Contact Email:  
[CCS@caltrain.com](mailto:CCS@caltrain.com)



# CALIFORNIA High-Speed Rail Authority

## Memorandum

**Date:** April 21, 2023  
**To:** Local Policy Maker Group (LPMG)  
**From:** Boris Lipkin, Northern California Regional Director  
**Re:** California High-Speed Rail Program Update

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### STATEWIDE UPDATE

#### **Federal-State Partnership for Intercity Passenger Rail**

On April 20<sup>th</sup>, the Authority submitted two applications to the Federal-State (Fed-State) Partnership for Intercity Passenger Rail Grant Program. This is the most significant funding opportunity for the Authority of the numerous others the Authority is pursuing through the IIA. While Application 1 will be the largest request at \$2.8 billion for the Inaugural High-Speed Service in the Central Valley, Application 2 focuses on advancing design in Northern and Southern California where environmental clearance is complete and will lay the foundation for future construction and high-speed rail service in the region. Below are more application details:

Applications	
California Inaugural High-Speed Service	California Phase 1 Corridor Configuration Design
Grant Request	
\$2.825 billion	\$193.6 million
Scope	
<ul style="list-style-type: none"> <li>Procure six electric trains</li> <li>Construct second track</li> <li>Construct Fresno Station</li> <li>Complete final design/early works on the Merced and Bakersfield extensions</li> </ul>	Configuration design including geotechnical studies in the following project sections: <ul style="list-style-type: none"> <li>San Jose to Merced</li> <li>Bakersfield to Palmdale</li> </ul>

We received 28 letters of support from Northern California partners and stakeholders. We appreciate your support!

### NORTHERN CALIFORNIA UPDATE

#### **APA California – Northern Section Award**

This month, the Authority has been recognized by the American Planning Association’s California – Northern Section with the [2023 Excellence Award for Advancing Diversity and Social Change in Honor of Paul Davidoff](#), an urban planner who pioneered inclusionary zoning. The recognition is for high-speed rail’s San Jose to Merced Project Section, Environmental Justice Community Improvement Planning and Engagement Process. Please see the [Press Release](#) to read more about this multi-year engagement process.

### RECENT AND UPCOMING OUTREACH ACTIVITIES

- Los Banos Downtown Spring Street Faire – April 15, 2023, 8:30am-3:00pm
- [Earth Day San Francisco](#) – April 22, 2023, 11:00 am – 6:00 pm
- [Evergreen Farmers’ Market](#) – May 10, 2023, 9:00am – 1:00pm
- [Burlingame Fresh Market](#) – May 11, 2023, 3:00pm – 7:00pm
- [Benicia Farmers’ Market](#) – May 18, 2023, 4:00pm – 8:00pm