



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 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 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, June 22, 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. High-Speed Rail (Memo)
6. Public Comments on items not on the agenda
7. LPMG Member Comments/Requests
8. Next Meeting - Caltrain Corridor Crossing Strategy In-Person Workshop
 - a. *Note: No Meeting in July*
 - b. Thursday, August 24 at 5:30 pm
9. Adjourn

All items on this agenda are subject to action

**CalMod Local Policy Maker Group (LPMG)
DRAFT Summary Meeting Notes May 25, 2023**

Summary Notes

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

1. Call to Order

Chair Pat Burt called the in-person workshop meeting to order at 404 p.m.

2. Roll Call

City / County	Representative or Alternate	Present
Atherton	D. Hawkins-Manuelian	X
Belmont	T. McCune/D. Hurt	
Brisbane	T. O'Connell / C. Lentz	
Burlingame	E. Beach	X
Gilroy	M. Blankley	X
Menlo Park	J. Wolosin / B. Nash	X
Millbrae	G. Papan/M. Goodman	
Mountain View	M. Abe-Koga and R. Gonzales	X
Morgan Hill	M. Turner	X
Palo Alto	P. Kamhi, E. Lauing, M. Price, L. Thompson, and V. Veenker	X
Redwood City	D. Howard	X
San Bruno	R. Medina	X
San Carlos	R. Collins	X
San Francisco	A. Sweet	
San Jose	S. Jimenez / D. Davis	
San Mateo	A. Mitch	X
Santa Clara	A. Becker	X
South San Francisco	E. Flores	X
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	X
California Advocating Responsible Rail Design	Nadia Naik	X
HSR	Becca Tabor	X

SFCTA	Jielin Pan	X
SMCTA	Peter Skinner	X
VTA	Scott Haywood	X

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

CALTRAIN STAFF Michelle Bouchard, Devon Ryan, Casey Fromson, Dora Seamans, Navi Dhaliwal, Isabella Conferti

Kimley-Horn staff Jill Gibson, Naomi Willis, Brandi Childress, Whitney DiGiantommaso, Tyler Sepulveda, Merrick Howarth, Kao Saeteurn, Sam Zimbabwe

3. Caltrain Corridor Crossing Strategy Work Session

LPMG Chair Pat Burt and Caltrain Executive Director Michelle Bouchard provided opening remarks, welcoming all and noted the importance getting input from everyone and working together.

Casey Fromson, Chief Communications Officer, called the roll, noted other elected officials may be coming, and turned it over to the Kimley-Horn staff to review the layout of the meeting.

Jill Gibson, Naomi Willis, Sam Zimbabwe, and other transportation planners with Kimley Horn, provided the presentation and led the workshop for the Caltrain Corridor Crossings Strategy (CCS) and the LPMG on corridor-wide circulation and mobility, which included the following:

- Two paths with individual project delivery opportunities for a crossing delivery guide and program development strategy for balanced vision and an implementable action plan
- Coalition for long-term strategy on how to address crossings holistically system-wide and the next in person workshop to be in October
- Expressed appreciation for all agencies' staff participation at the last staff mobility workshop on jurisdictional coordination, the system as a whole, being part of the regional circulation network, tradeoffs and considerations, and crossing treatments
- Need to understand how individual crossing treatments are related to community circulation and the transportation network
- Discuss the different opportunities and challenges created by the different program approaches and work to define a systematic order and aligning the many stakeholders on crossings
- Program approach spectrum has been discussed over the last couple of months, with different ways to deliver grade separations from independent individual projects to more coordinated system-wide approaches, to be assessed August through October, followed by evaluation, and referring to the goals they have all helped to create
- By year end, develop the shared strategy focused on the organizational delivery
- Recapped the 2019 business plan process that filtered out crossings with low traffic or did not have as much gate downtime projected in the moderate growth scenario; currently 43 unplanned crossings to be looked at; full operational flexibility and then regularity; no impact from collisions; vision for fully grade separated
- Rapid inflation and 30 percent increase in construction costs, funding strategy, and future discussion with different program approaches and what that might mean in terms of a timeline for delivery
- Most of the workshop discussion would be on the corridor in the future, the regional transportation effort, local communities, goals, and vision on circulation mobility and a fully separated corridor
- Goal for a safe and reliable multimodal transportation network that provides equitable access for all with a fully separated the corridor to help reduce collisions with under or over crossings

- Robert Gonzales, City Engineer from City of Mountain View presented on the two Mountain View grade separation projects, from preliminary design to currently being in the final design phase; he reviewed some of the various options and issues that can occur with going through the many different processes for grade separations
- For the breakout exercise, the participants were grouped by geography: one from San Francisco to Menlo Park, second from Atherton to Gilroy, and the third group for any members of the public who wished to participate to consider and discuss hypothetical full grade separation scenarios
- The exercises were for everyone to (1) discuss, state what they do or do not like, make trades, identify challenges, opportunities, trade-offs - o collaborate together to foster a regional perspective and (2) to discuss the program approved approach opportunity, considering the circulation mobility element, and what they think of it

The meeting recessed to the breakout group exercises at approximately 4:46 pm.

The meeting reconvened at 5:34 pm for report out from each group

Each group reported on their discussions and included the following:

- Making safety improvements and the impacts of having the needed physical staging area in San Mateo County for construction projects versus there being no space elsewhere close to the corridor
- Impacts of Union Pacific (UP) ownership and responsibility
- Different types of connectivity, population distribution, and incorporating that on a map that considers the differences in each area, such as safety concerns near schools versus industrial areas, and the efficiency of the existing grade separations and crossings
- Consensus that it was easier working in smaller groups, and individual projects benefit from specific discussions with cities within the project's proximity as opposed to the whole system-wide approach
- Differences when crossing county lines, cities' control, funding, and prioritization are more complicated with the wider system; need for a system-wide approach, regional perspective, and collaboration for larger projects and for seeking federal funding
- Grade crossings and separated crossings make sense and need to plan for future increased service and safety, more screened, better-looking views of the tracks, and quieter service with electrification and or battery-operated trains on the corridor
- Feasibility and impacts of High-Speed Rail and a fourth track and who decides on the different projects' planning, prioritization, and timelines and having shared vision and costs
- Have a hybrid approach and the benefits of a coordinated mega projects concept and questions on project prioritization in determining which moves forward when or if there is funding
- Movement in general and what is around all the crossings – consider different types of treatments based on factors such as density, walkability, near schools or industrial areas, land use, and current modal movements
- The need for circulation data around how people are using the streets around crossings to help guide planning and the importance of communication, outreach, and educating our communities and residents, such as what is a grade separation as many may not know that
- Information on what is coming, including the benefits of electrification (for safety and number of trains), impacts, future business plan visions, and how to communication out for increased public understanding and support for these types of projects
- Jurisdictional boundaries, collaboration, cities are different with some having knowledgeable transportation staff while others may be more resource constrained
- Circulation and capacity impacts across jurisdictional boundaries, such when there are street closures

- Desire for cooperation and a streamlined approach for increased efficiency in being responsive to our communities and constituents
- Local preferences and the need to be clear with residents on the possible impacts of construction, such as emergency services circulation, as opposed to regret in not making the changes, but ensure they are bringing our residents along through education, outreach, and communications

Jill Gibson summarized the reasons and goals for the workshop and Chair Burt facilitated feedback on the key takeaways from participants, which included the following:

- Safety treatments related to grade separations and staff to work on a draft strategy for prioritization
- Continued desire to prioritize projects with efficient delivery and programming
- Acknowledged the tensions between the different local and corridor-wide perspectives
- Noted that there are multiple problems depending on different circumstances along the corridor
- A principal problem is the ability to handle local traffic loads with increased number of trains as well as security and safety on and along the tracks
- The funding approach is a collective problem and there were differences with some stating that they want to spend about 80 percent of the time defining the problem and the remaining 20 percent solving it, but the natural tendency is to spend 5 percent of the time on the problem definition
- There are a lot more questions that need answers and those answers will help guide us
- The need to then prioritize the problems and solutions, which was one of the biggest issues - deciding what is most important and what they willing to let go of
- Staff to synthesize the key takeaways for them to focus on and strategize going forward
- Reviewed LPMG/general participant's availability for virtual meetings in June, July, and August

Chair Burt noted that they had a lot more engagement at this meeting than over the last few years virtually; unfortunately, some cities/agencies did not have representation and he encouraged members to help involve their colleagues in their own agencies and in the neighboring cities. He noted the value of the workshop approach and how they discovered things that they may not have thought critical before this meeting. He asked that everyone think about having an in-person LPMG workshop about once a quarter so they can work on these problems together.

On behalf of Caltrain, Executive Director Bouchard thanked everyone, including the City of Palo Alto for hosting the workshop, and noted how valuable and important their discussion on how to address these unique problems and processes and moving forward.

5. Public Comments on Items Not on the Agenda

There were none.

7. Next Meeting

Thursday, June 22, 2023 at 5:30 p.m. (via Zoom).

8. Adjournment

The meeting was adjourned at 6:00 p.m.



Memorandum

Date: June 22, 2023
To: Caltrain Local Policy Maker Group (LPMG)
From: Devon Ryan, Government and Community Affairs Officer
Re: Caltrain E-Updates



Electric Trains Running on Caltrain Corridor for the First Time in 160 Year History

The electrification of Caltrain has reached [another major milestone](#) as electric trains operated under power from the overhead contact system (OCS) for the first time. “The start of testing for our new electric trains marks an historic moment for our agency, symbolizing tangible progress towards electrification,” said Caltrain Executive Director Michelle Bouchard. “It signifies a future of improved service, reduced environmental impact and a more reliable experience that will benefit both our riders, and the communities that we serve.”

Caltrain Unveiling Electric Trains to the Public

On July 29, Caltrain will be hosting its first public tour of the new, modern electric trains at San Jose Diridon Station. Members of the community will get to explore the new electric trains and get a glimpse of what Caltrain will be like in 2024. Additionally, there will be food trucks, games/activity booths, and

other community resources to visit. The event is free and open to all.

You can learn more here: caltrain.com/electric-train-tour.



Caltrain

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South Santa Clara County Survey

Caltrain is excited to announce South Santa Clara County service will be increased from three trains to four trains in the AM and PM commute time starting in September 2023. Caltrain is conducting a South Santa Clara County survey seeking public opinion on a plan to add a fourth daily round trip and change arrival times between Gilroy and Tamien stations. The survey will close on June 25th. We would appreciate sharing information about this survey with South County Residents in order to reach as many riders and community members in the area as possible to share their thoughts.

Link to the [survey here](#).

Caltrain Electrification Construction and Service Changes Update

The Caltrain Electrification team has been working diligently to provide electrified service to riders by fall 2024. Caltrain is halfway through its approximately 30 weekends in which service will be impacted. Since the start of the year, crews have installed over 350,000 feet of wire and over 60 poles 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.

[Learn more](#).

State Budget Update

On June 15, the legislature approved the 2023 state budget bill but will continue discussing the final terms with Governor Newsom over the coming weeks. This budget proposal would restore the \$2 billion in cuts that had been made to the state's Transit and Intercity Rail Capital (TIRCP) and make other impacts on the transit funding landscape. We are very grateful to our delegation and leaders in the legislature for working hard to prioritize transit. However, we are working to better understand the impact the redirection of the zero-emission rail funding will have on projects already underway, including the battery-equipped electric multiple unit (BEMU) pilot project that Caltrain has been working with the state on for use on unelectrified territory south of Tamien to Gilroy, with demonstration trips to Salinas. We will continue to work with the legislature to address the full balance of transit funding needs that still remain.

PUBLIC MEETINGS:

JPB Advocacy and Major Projects Committee (AMP) Meeting – June 28, 2023 at 3:30 pm

JPB Technology, Operations, Planning, and Safety (TOPS) - June 28, 2023 at 1:30 pm

Caltrain Board Meeting – August 3, 2023 at 9:00 a.m. (July Caltrain Board Meeting Canceled)

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 June 1, 2023 Board Meeting is [available here](#).

Memorandum

Date: June 22, 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

The CCS held its first in-person workshops in May, centered around the Mobility and Circulation technical topic. One workshop was held for the City/County Staff Coordination Group (CSCG) and Project Partner Group (PPG) and the other was held for the LPMG. Both workshops covered the same topics and exercises, although the LPMG workshop included a report-out from the CSCG/PPG workshop.

Participants were provided with a Program Strategy update, a brief overview of the cost and funding background and preliminary assumptions, and a presentation on the Mobility and Circulation technical topic. The Mobility and Circulation technical topic presentation included a discussion of why mobility and circulation is important for the corridor, an outline of goals and vision, including a safe and reliable transportation network, and detailed the vision of a fully grade separated corridor. This presentation also introduced the access analysis and how access can change under a future scenario. Finally, this presentation provided instructions on how to accomplish the hands-on exercise.

In addition, the City of Mountain View provided a brief presentation on their Mountain View Transit Center Grade Separation and Access project highlighting the project goals, initial alternative, initial screening results, and why a closure was ultimately selected. The selection of the closure alternative considered the relatively low Castro Street vehicle traffic demand with diversion plan and the consideration of improvements to Central Expressway traffic operations, among other factors.

Participants were then asked to participate in a hands-on exercise. Participants were divided into three groups focused on two corridor segments and were instructed to assign various crossing treatment types to crossings in their corridor segment. Participants discussed the considerations and tradeoffs, as well as additional context of these corridor crossings that were not reflected in the materials and analysis. The workshop ended with a report out from all three groups.

In June, the LPMG will be provided a recap of the May Mobility and Circulation workshops, other stakeholder topics and CCS timeline. A detailed workshop summary and associated reference materials was provided to the LPMG in advance of the June meetings. In addition, the LPMG will be provided an update on the Cost and Funding strategy.

The purpose of the Cost and Funding strategy is to develop understanding of a corridor-wide cost range to inform program delivery approach and the scale of funding needed. The June presentation will focus on cost and funding assumptions, developing corridor-wide program cost ranges, implications for program delivery approaches (independent projects, coordinated projects, and system-wide), next steps, and an overview of current committed funds. Exploring the Cost and Funding strategy will help outline the trade-offs of the different corridor-wide approaches, helping stakeholders arrive at a decision informed by cost and funding realities.

There have been recent funding wins that are an important part of the Cost and Funding strategy discussion. Mountain View was recommended for \$25M from the California Transportation Commission for the Mountain View Transit Center. Palo Alto received \$6M from the United States Department of Transportation (USDOT) Rail Crossing Elimination Program (RCE) for projects at three crossings: Churchill Avenue, Meadow Drive, and Charleston Road.

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

There are no public meetings currently scheduled for July.

For more details, and a full list of upcoming meetings, please visit Caltrain.com/Meetings.

Progress Report

The agenda for the Caltrain Corridor Crossings Strategy approach presented at Caltrain's May 25, 2023, LPMG Meeting is [available here](#). This was an in-person only meeting but was recorded.

LPMG Workshop Summary

Date: May 25, 2023

Time: 4:00 PM – 6:00 PM

Location: Palo Alto City Hall

Facilitated By: Jill Gibson, Sam Zimbabwe, and Naomi Willis



MEETING PURPOSE

For the Caltrain Corridor Crossings Strategy (CCS), the Local Policy Makers Group (LPMG) participated in an in-person workshop focused on corridor-wide circulation and mobility with the following objectives:

- Foster an understanding of the relationship between crossing treatments (i.e., grade separations, pedestrian/vehicle grade separations, and closures) and community circulation.
- Discover tradeoffs and considerations of applying crossing treatments.
- Identify opportunities and challenges created by the program delivery approaches (i.e., A: Independent Projects, B: Coordinated Projects, and C: System-Wide).
- Identify corridor-wide assumptions for crossing treatments to inform a programmatic cost range.



MEETING TAKEAWAYS

The key takeaways from the workshop were as follows:

- Participants expressed the value of the in-person workshop format to identify shared priorities and discuss the corridor-wide vision.
 - This will continue to be important moving forward as future in-person workshops will be used to provide input and continue forming the corridor-wide vision and strategy.
- Some participants expressed some hesitancy at the concept of a fully separated corridor, specifically from a funding and resources-constrained environment. This will continue to be part of the conversation about the corridor vision moving forward.
- The diversity of opinion regarding a fully separated corridor was dependent on a community's prior involvement in grade separation projects. Those that have recently been more engaged in grade separation conversations were more in favor of a largely separated corridor.
- Participants acknowledged the benefits of a system-wide approach (Approach C) but understand the tensions of considering jurisdictions priorities and ambitions.
- Participants acknowledged the complexity of issues, information, and data that should inform any corridor-wide prioritization process. However, an organized approach with a deeper understanding of the issues should be further understood in order for the region to prioritize investments.

MEETING TOPICS SUMMARY

PRESENTATION (Approximately 30 Minutes)

1. Introduction

- The CCS team provided a refresher of the two CCS paths: Project Delivery Opportunities and Program Strategy Development. The team also outlined the CCS timeline, highlighting the schedules of both paths.
- Prior to the LPMG workshop, a similar workshop was held with the City/County Staff Coordinating Group (CSCG) and Project Partner Group (PPG) on May 17, 2023. A brief recap of the CSCG and PPG workshop was provided, describing discussion topics and collaboration exercises.
- The team discussed work session outcomes, focusing on highlighting the relationship between crossing treatments and the transportation network and on fostering a corridor-wide perspective on crossing treatments.

2. Program Strategy Update

- The CCS team provided a refresher of the CCS Program Strategy purpose.
- The team also outlined the program strategy process and how it relates to program delivery approaches, technical topics, goals, and selection of a shared corridor strategy.

3. Cost Update and Funding Strategy

- In preparation for the June Cost and Funding technical topic, the CCS team presented a brief overview of the approach to provide an updated program cost range which included the following:
 - Review of the Caltrain Business Plan estimates and assumptions.
 - Discussion of how conditions have changed, including construction costs and new active projects, since the Caltrain Business Plan.



- Outline of next steps for updating the program cost range, which includes improving coordination, identifying efficiencies and opportunities for funding, and operational capacity needs for program delivery.

4. Circulation and Mobility Analysis

- The CCS team presented the circulation and mobility technical topic, which outlines how the Caltrain corridor, regional transportation network, and local communities interact today and how they could interact in the future.
 - This technical topic included relevant crossing and transportation network data collection and conducting planning-level analyses of corridor accessibility.
- The CCS team presented the circulation and mobility framework and goals, illustrating why circulation and mobility are important for the corridor and its long-term vision of a largely separated corridor.
- To achieve a largely separated corridor, a spectrum of crossing treatments were explored for the corridor. The CCS team outlined the crossing treatments including their benefits, challenges, and trade-offs.
 - Robert Gonzales, City of Mountain View Principal Civil Engineer, provided a brief overview of the Mountain View Transit Center Grade Separation and Access project to provide relevant corridor experience and recent lessons learned. This project highlights the considerations and opportunities of closing the existing Castro Street at-grade crossing to vehicular traffic (via diversion of traffic to an adjacent roadway) and providing pedestrian/bicycle connectivity through an undercrossing.
- Using various crossing treatments applied to existing at-grade crossings, the CCS team analyzed and presented accessibility changes (compared to existing conditions) under a scenario (Scenario A) with 55% grade separations, 30% pedestrian/bicycle grade separations, and 15% closures. This presentation illustrated how access could function in the future under different conditions.
 - From this analysis, the CCS team concluded there is redundancy in accessibility along the corridor even when various crossing treatments are applied.
- The discussion of crossing treatments and how they could be applied to the corridor provided a baseline understanding for participants to apply during a group exercise.

BREAKOUT EXERCISE AND REPORT OUT (Approximately 1 Hour and 30 Minutes)

1. Exercise Description

- The participants were divided into three groups focused on two segments of the corridor (Segment 1: San Francisco to Menlo Park and Segment 2: Palo Alto to Gilroy). Each group had a CCS team member as a facilitator to guide them through the following exercises:
- **Part 1:**
 - The participants were instructed to move crossing treatment type game pieces and discuss the considerations and trade-offs of applying the various crossing treatments. The CCS team provided the Scenario A crossing treatments as a reference or starting point for the participants.
 - The participants were asked a series of questions to discuss how and why their crossing treatment assignments aligned or differed from Scenario A
 - The participants were asked to provide additional context of the corridor crossings that were not reflected in the materials and analysis.
- **Part 2:**



- The participants were asked to discuss the tensions/challenges and benefits/opportunities associated with each program delivery approaches.

2. Group Report Out

- After the exercise was completed, each group identified a spokesperson(s) to provide a report out of what the group discovered and learned to the entirety of the participants. Please note, similar themes across the groups are shown in *blue* text below.

Group 1 (Segment 1: San Francisco to Menlo Park)

- The group would have liked to see density, land use, modal movements, and impacts from adjacent jurisdictions' projects to inform the crossing treatments.
- The group specified a need for cooperation across jurisdictional boundaries.
- The group emphasized the importance of community education and communication on the benefits of applying crossing treatments and how the future increase in train service may impact at-grade crossing operations.
- Group members were supportive of a fully separated corridor but need to ensure communities are supportive first; there are still many questions around what this would entail, and education is needed.
 - Group members also mentioned a no-build scenario should be modeled to illustrate the importance to understand the future consequences of maintaining the "status quo" as the corridor evolves to the community.
- *The group discussed the desire for a system-wide approach (Approach C) but are aware of the need to be responsive to their communities. Therefore, a coordinated approach (Approach B) may be preferred to allow for more community control and support.*

Group 2 (Segment 2: Palo Alto to Gilroy)

- The group questioned if a fully separated corridor should be the corridor vision. Group members thought there are areas where at-grade crossings are applicable, such as less populated areas of Gilroy.
 - The group discussed if a shared vision equates to shared costs.
- Group members stated that it should be a priority to integrate community context into the corridor components and grade separation projects.
- *Group members also mentioned future High-Speed Rail service may impact crossings not grade-separated and electrification impacts the southern portion of the corridor differently than the rest of the corridor.*
- Group members were supportive of a coordinated approach (Approach B), but had questions on the following:
 - Project and funding prioritization, balancing project schedules, and other topics
 - *Depending on how these questions are answered, a hybrid approach may be more ideal.*

Group 3 (Segment 2: Palo Alto to Gilroy)

- Group members desired a better understanding of how crossings are used, i.e., close one crossing and how it will impact the next crossing/surrounding neighborhood, in order to decide between crossing treatments.
- The group noted that the distribution of funding and project prioritization is more difficult with a larger, coordinated effort.
- However, group members mentioned that collaboration is better with a larger group. A project with coordinated efforts across multiple jurisdictions increased funding competitiveness.



- *The group noted it was important to understand track/facility/road ownership (UPPR, Caltrain, etc.) when assigning crossing treatments.*

3. Closing Remarks

- The feedback highlighted questions that facilitate additional considerations which will guide the program strategy development.

Attachments:

1. LPMG Workshop Presentation
2. Mountain View Transit Center Grade Separation and Access Project Presentation

Resources:



- CCS Website: <https://www.caltrain.com/ccs/resources>
 - Program Overview
 - Funding Overview
 - Corridor Fact Sheets



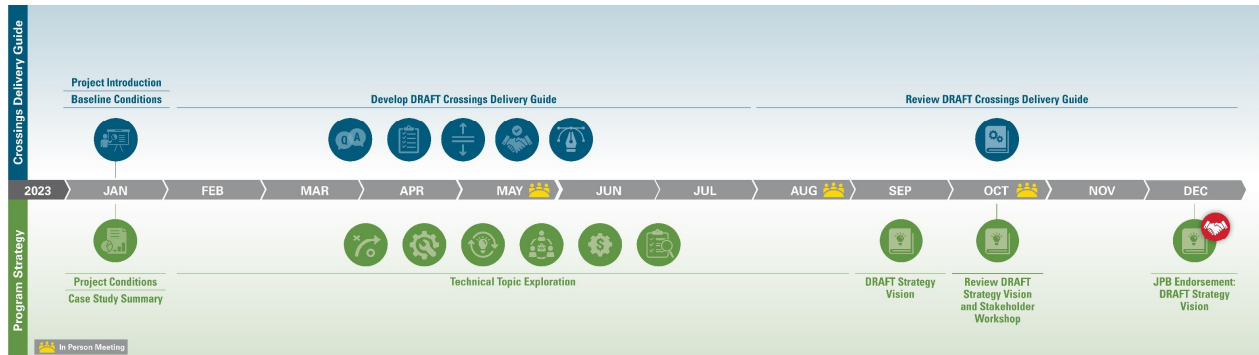
Attachment 1:
LPMG Workshop Presentation



Paths

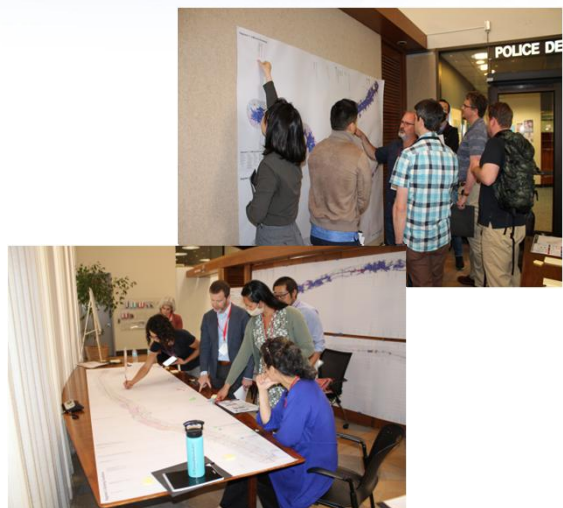
 <h2>Project Delivery Opportunities</h2> <p>Communicate roles, responsibilities, processes, and standards for individual projects.</p> <p><i>Outcome: Crossings Delivery Guide</i></p>	 <h2>Program Strategy Development</h2> <p>Develop a shared, corridor vision with an incremental and implementable approach for regional benefits.</p> <p><i>Balance vision with implementable action plan</i></p> <p><i>Outcome: Program Vision and Strategy</i></p>
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Timeline



CSCG Mobility Work Session

- Discussed existing crossing conditions along the corridor
- Highlighted relationship of crossing treatments* with the circulation network
- Discussed tradeoffs/considerations of applying crossing treatments
- Jurisdictions collaborated to apply crossing treatments on corridor segment maps



*Grade separated, pedestrian/bicycle separated, and closures

Work Session Outcomes



Identify corridor-wide assumptions to define a programmatic cost range



Understand the relationship of crossing treatments and community circulation



Discover tradeoffs and considerations of applying crossing treatments



Identify opportunities and challenges created by the program approaches

5



Program Strategy Update

6





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:

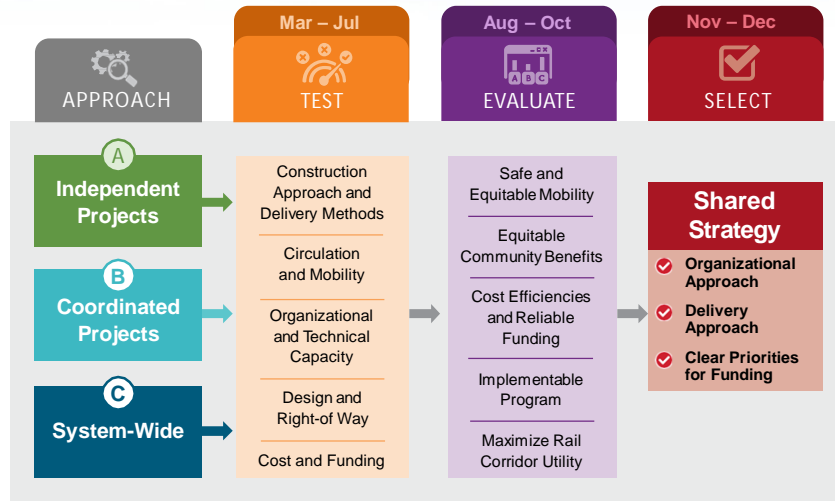
- Funding
- Organization
- Program Delivery

Note: Active grade separation projects will continue in parallel





Program Strategy Process



Cost Update and Funding Strategy

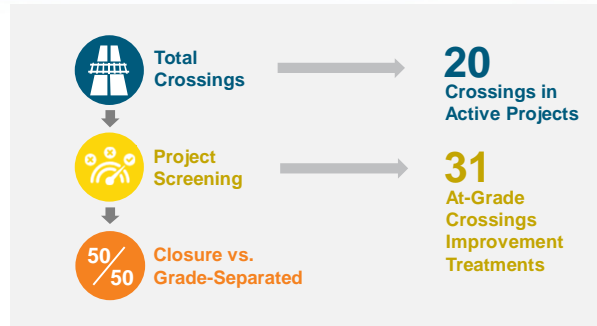




Caltrain Business Plan Assumptions

Caltrain Business Plan estimate included:

- ✓ Information about active projects;
- ✓ Assumptions about improvements, closures, and grade separations



Cost estimates were developed at a program level using \$2018

Table 7: Summary of Grade Crossing Cost Estimates (Medium Intensity Potential Investment Range)

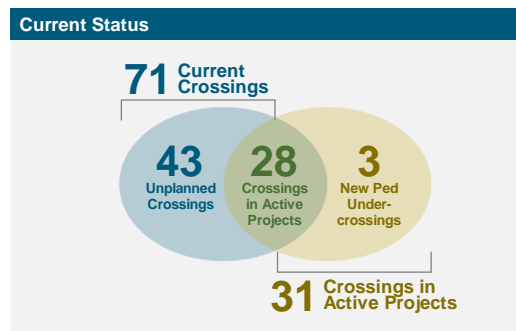
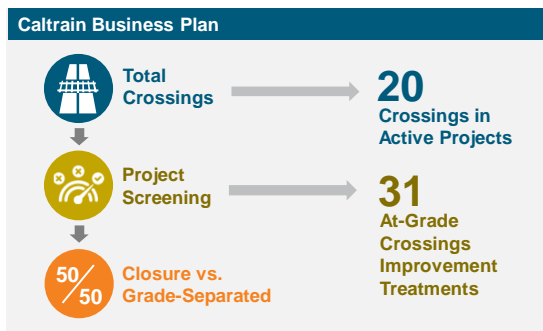
Type	Baseline Growth	Moderate Growth	High Growth
Auto (JPB-Owned Corridor)	\$6.8B	\$7B	\$8.3B
Auto (UP-owned Corridor)	\$1.9B	\$1.9B	\$1.9B
Bike/Ped	\$0.14B	\$0.14B	\$0.14B
Total	\$8.8B	\$9B	\$10.3B



Updating Caltrain Business Plan to Today

Since Caltrain Business Plan, conditions have changed:

- 11 more crossings in active projects
- Corridor Crossing Strategy will explore fully grade separated corridor

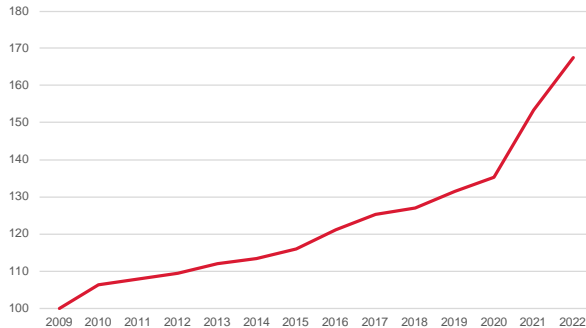




Updating Caltrain Business Plan to Today

Since Caltrain Business Plan, conditions have changed:

- 11 more crossings in active projects
- Corridor Crossing Strategy will explore fully grade separated corridor
- Construction costs in California have increased



Based on data from the
California Construction Cost Index (CCCI):
\$100 in \$2009 = \$127 in \$2018 = \$168 in \$2022

13



Updating Caltrain Business Plan to Today

Differences from Caltrain Business Plan

- More active projects for ambitious grade crossing removals
- Corridor Crossing Strategy is an opportunity to look in more detail at crossings.
- Vision to get to a fully separated corridor

Inflation-only suggests an increase of approximately 30 percent since 2018.

Corridor-wide programmatic cost range will be discussed at the June meeting and depends on the discussion today.

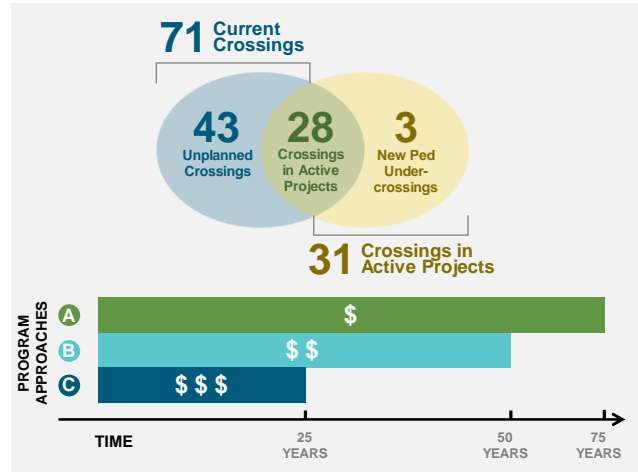
14





Next Steps on Cost & Funding

- ✓ Develop corridor-level cost range
- ✓ Coordinate with project sponsors
- ✓ Identify potential efficiencies
- ✓ Identify opportunities for funding
- ✓ Determine corridor program delivery capacity needs



15



Circulation and Mobility Workshop



16



Workshop Objectives

The Corridor Today

How does the Caltrain Corridor, regional transportation network, and local communities interact **TODAY**?

Share Data

Corridor Crossings
Transportation Network
Key Destinations
Community Context

Is there anything else **YOU** would like to share with us about existing crossings in your community?

Materials: community fact sheet summaries, crossing data tables, travel shed access analysis

The Corridor in the Future

How could the Caltrain Corridor, regional transportation network, and local communities interact in the **FUTURE**?

Foster the Trade-off Discussion

How do **YOU** envision the Caltrain Corridor to function in the future?

Materials: scenario summaries, travel shed access analysis

17



Workshop Outline

Discussion framework

- Why are circulation & mobility important for the corridor?
- Circulation and mobility goals and vision

Fully separated corridor

- Toolbox
- Benefits, challenges, and trade-offs

Access analysis

- Travel sheds

Scenarios

Breakout Exercise

Discuss key takeaways from breakout exercise

18

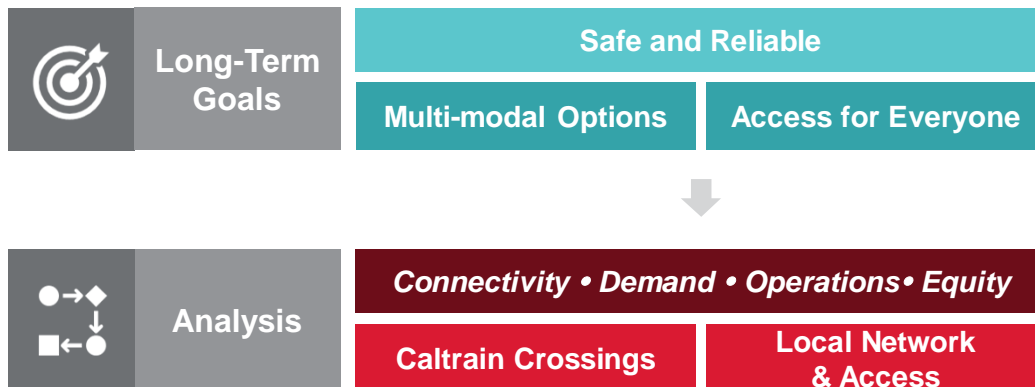


Why are Circulation and Mobility important for the corridor?



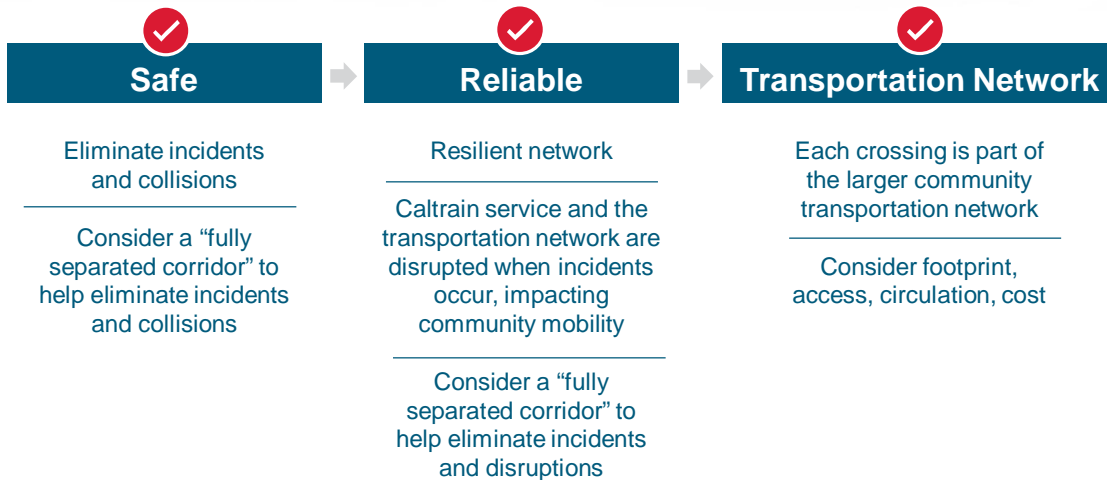
19

Circulation and Mobility Long-Term Vision

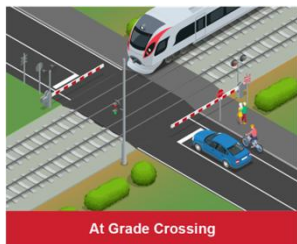


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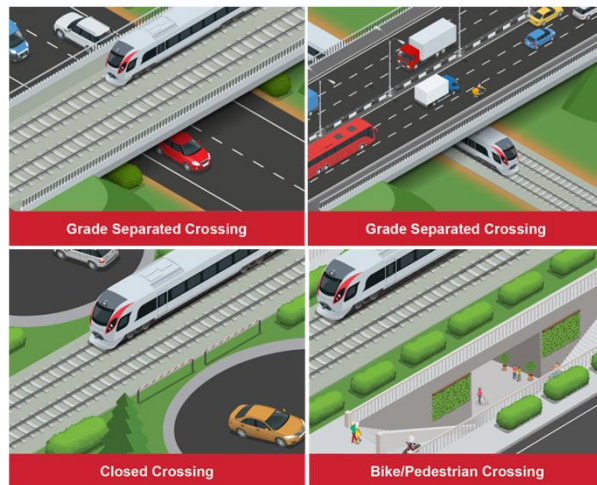
Safe and Reliable Transportation Network



Fully Separated Corridor



Long-term goal to eliminate all at-grade crossings



Fully Separated Corridor Toolbox

	Full Grade Separation (GS)	Pedestrian/Bike Grade Separation (PBGS)	Closure
Cost	\$\$\$\$\$\$	\$\$	\$
Footprint	Largest	Moderate	Smallest
Access	Access for all modes	Access for ped/bike	Requires alternate access routes
Emergency Access	Maintains existing emergency access	Requires alternate access routes	Requires alternate access routes

23

Spectrum of Options



Grade Separate Many Crossings

Benefits

- Maintains or improves existing levels of circulation across the corridor

Costs

- Expensive
- Impacts access to adjacent parcels



Closing Many Crossings

Benefits

- Less expensive
- Safety benefits

Costs

- Longer trips to cross the corridor
- Impacts access along the corridor

24

Fully Separated Corridor Tool: Closures



Cost Effective



Minimal Impact on
Adjacent Land Uses



Minimize Access
Disruption

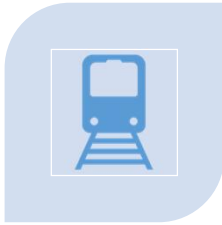
25



MOUNTAIN VIEW TRANSIT CENTER



26



ADDRESS SAFETY AND
ACCESS NEEDS WITH
CALTRAIN
ELECTRIFICATION AND
HIGH SPEED RAIL



HELP MEET MODE SHIFT
GOALS TO MOUNTAIN
VIEW EMPLOYMENT
AREAS



SUPPORT DOWNTOWN
ECONOMY AND VITALITY

27

CASTRO VEHICLES UNDER TRACKS AND CENTRAL EXPRESSWAY

CASTRO VEHICLES UNDER TRACKS WITH CENTRAL EXPRESSWAY
DEPRESSED

ELEVATING OR LOWERING OF TRACKS

CASTRO CLOSURE WITH PEDESTRIAN AND BICYCLE PROVISION;
SHIFT TRAFFIC TO SHORELINE

28

KEY CONCLUSIONS

- ELIMINATED OPTIONS TO RAISE OR DEPRESS RAILROAD DUE TO PHYSICAL CONSTRAINTS – KEEP RAILROAD AT CURRENT GRADE
- IMPACT TO CENTRAL EXPRESSWAY SHOULD BE LIMITED – DO NOT DEPRESS
- VEHICLE DIVERSION TO SHORELINE BOULEVARD IS FEASIBLE
- PEDESTRIANS AND BICYCLISTS SHOULD BE PRIORITIZED

FINAL ALTERNATIVES

- ALTERNATIVE 1 – VEHICLE UNDERCROSSING
- ALTERNATIVE 4 – CLOSURE WITH VEHICLE DIVERSION

29

RELATIVELY LOW CASTRO STREET VEHICLE TRAFFIC DEMAND WITH DIVERSION PLAN

IMPROVES CENTRAL EXPRESSWAY TRAFFIC OPERATIONS

BEST IMPROVEMENTS FOR PEDESTRIANS AND BICYCLES

ESTABLISHES WALKABLE DOWNTOWN GATEWAY

NO IMPACT TO ADJACENT PROPERTY AND BUSINESSES ON CASTRO AND MOFFETT

SHORTER CONSTRUCTION SCHEDULE

LOWEST COST (1/3 OF VEHICLE UNDERCROSSING)

COMMUNITY SUPPORT

30

KEYS TO CONSENSUS

- LINK TO URBAN DEVELOPMENT PLANS
- REVIEW ALL POSSIBLE ALTERNATIVES AT HIGH LEVEL
- NARROW ALTERNATIVES – BUILDING CONSENSUS IN STEPS
- FOCUS ON SAFETY, URBAN DESIGN AND WALKABILITY, NOT JUST TRAFFIC IMPACTS

FACTORS SUPPORTING CLOSURE

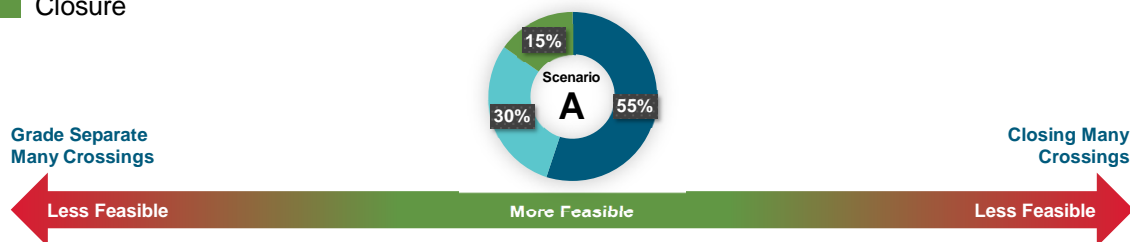
- MODERATE TRAFFIC VOLUMES
- NEARBY GRADE SEPARATED ALTERNATIVE
- SUBSTANTIAL BUSINESS AND PROPERTY IMPACTS WITH VEHICLE SEPARATION
- PEDESTRIAN AND BICYCLE BENEFITS WITH CLOSURE
- OPPORTUNITY TO ENHANCE URBAN ENVIRONMENT AND WALKABILITY

31

Fully Separated Scenarios

Considered a range of hypothetical scenarios, with different mixes of the following:

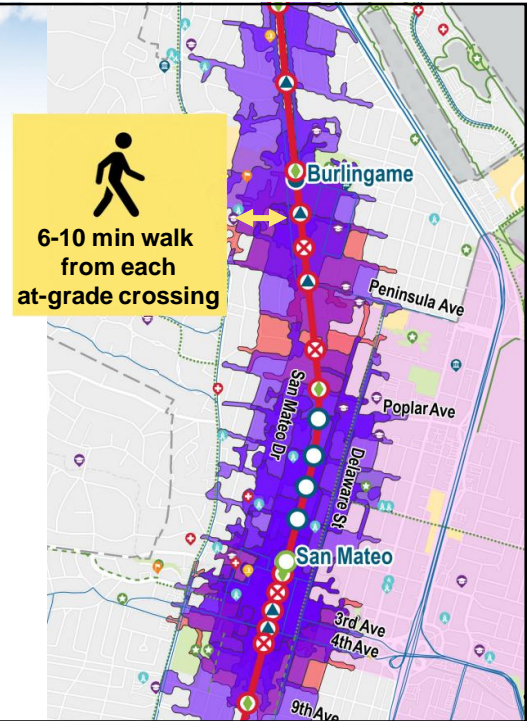
- Fully Grade Separated (GS)
- Pedestrian/Bike Grade Separated (PBGS)
- Closure



Hypothetical Scenario considered Locally Preferred Alternatives (LPA) for crossing improvements as part of active projects

Access Analysis

- Crossings provide access to destinations and emergency services
- **Travel sheds** ... how far can you walk or drive from each crossing in 5-10 minutes?
- Analyze how access changes with scenarios
- How much can you still access in 5-10 minutes with closures?



33

Access Analysis Results

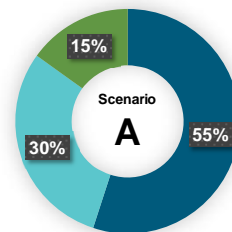
Hypothetical Scenario consists of the following at-grade crossing treatments:

- Fully Grade Separated (GS) – [\$\$\$\$\$]
- Pedestrian/Bike Grade Separated (PBGS) – [\$\$]
- Closure – [\$]

Access Type	Existing Access Area (Square Miles)	Scenario A % Change in Area
Pedestrian Access (10-min walkshed)	13.4	-0.4%
Pedestrian Access (6-min walkshed)	4.5	-2.3%
Vehicular Access (3-min driveshed)	101.6	-0.9%

✓ Takeaway:

Hypothetical scenario provides **comparable** multi-modal access to existing conditions



34

Breakout Exercise

Three Groups

- **Group 1 (LPMG):** San Francisco to Menlo Park Segment
- **Group 2 (LPMG):** Palo Alto to Gilroy Segment
- **Group 3 (Public):** Palo Alto to Gilroy Segment
- *Group Number provided on name tag*

Facilitators in each group

Come back together for exercise report out

Materials

- Roll plots illustrating Scenario A walksheds and drivesheds
- Community Fact Sheets and Crossing Data Tables



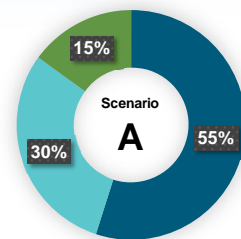
Breakout Exercise

PART 1: Full Grade Separation Scenario

- Collaborate to foster a regional perspective
- Exercise to learn how your crossings function as part of the larger regional network
- Using the game pieces provided, discuss and refine the placement of crossing treatments for existing at-grade crossings

PART 2: Program Approach Opportunities

- Discuss the benefits and opportunities of the program approaches



No decisions are being made today

- Treat this as a living lab
- Goal is to better understand potential trade-offs and corridor context

Report Out

- *Volunteer a Group Spokesperson*
- *Introduce Group Members*

PART 1: Full Grade Separation Scenario

- Discuss the trade offs/considerations of applying crossing treatments.
- What did you discover from this exercise?

PART 2: Program Approach Opportunities

- What are the tensions and challenges of each approach?
- What are the benefits and opportunities created by each approach?

What are the common themes across each group?

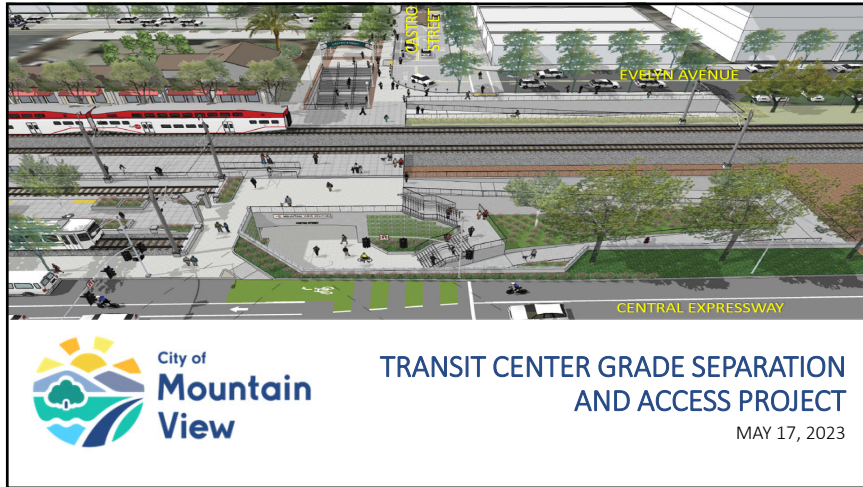


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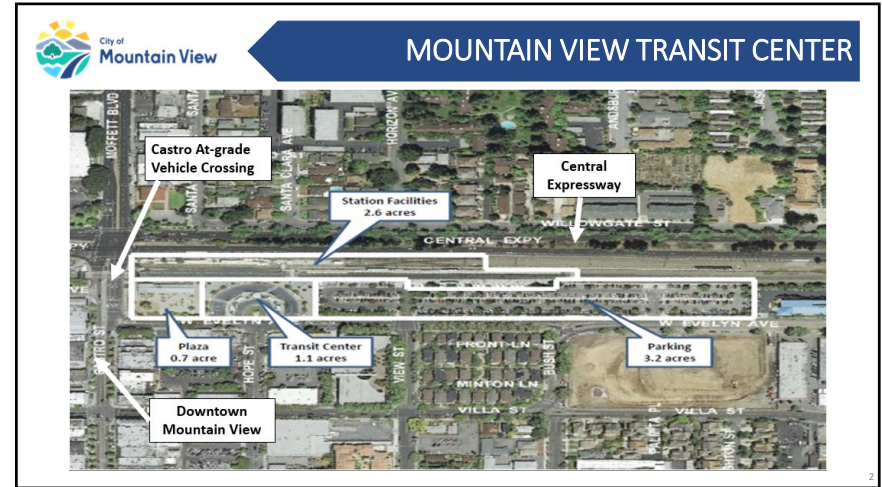




Attachment 2:
***Mountain View Transit Center Grade
Separation and Access Project Presentation***



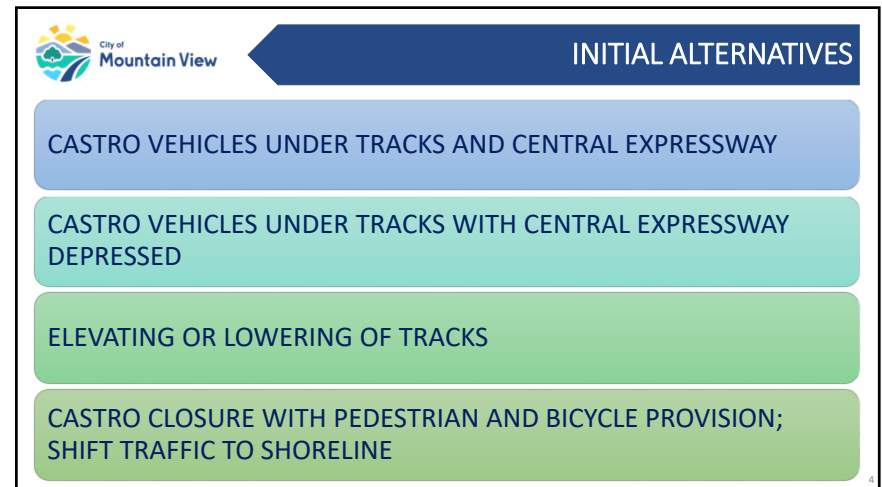
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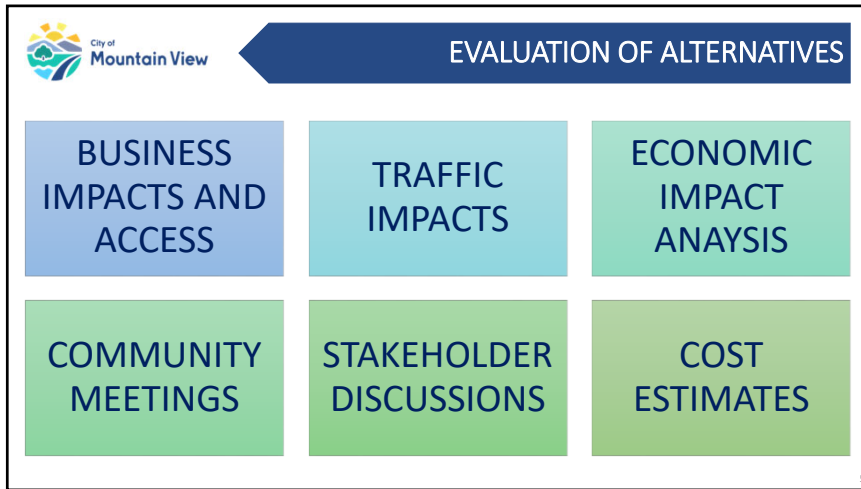
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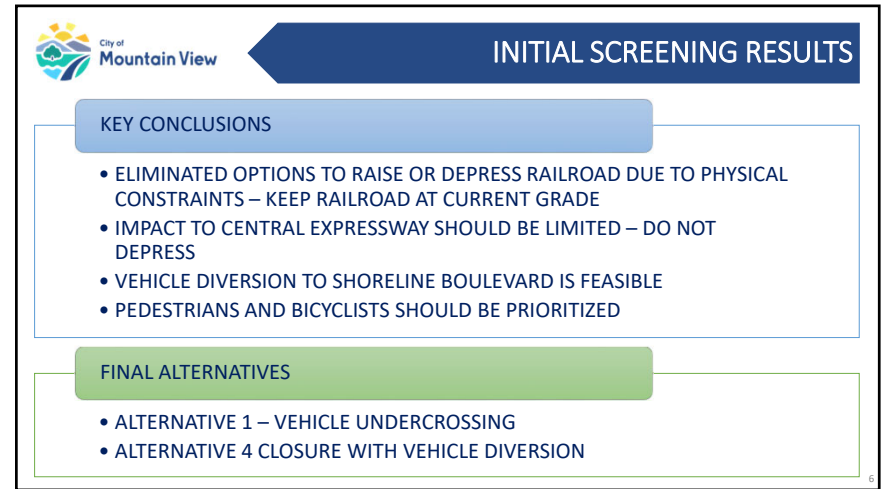
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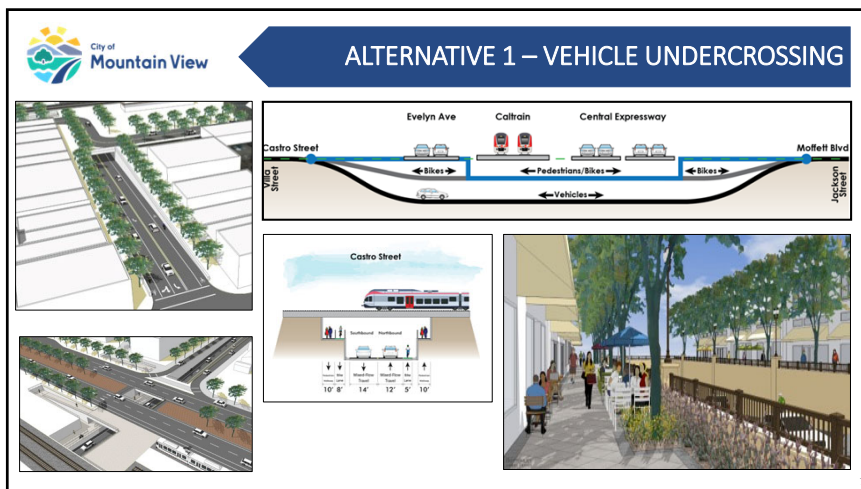
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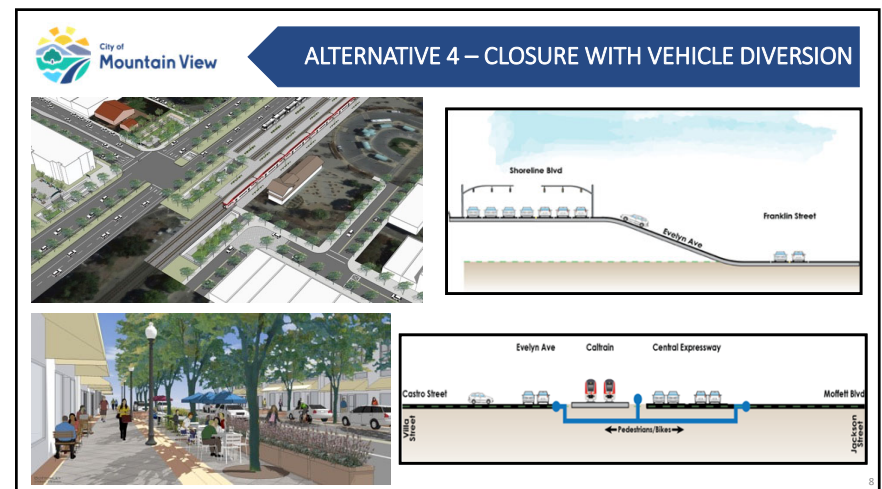
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7



8



SELECTION OF CLOSURE ALTERNATIVE

- RELATIVELY LOW CASTRO STREET VEHICLE TRAFFIC DEMAND WITH DIVERSION PLAN
- IMPROVES CENTRAL EXPRESSWAY TRAFFIC OPERATIONS
- BEST IMPROVEMENTS FOR PEDESTRIANS AND BICYCLES
- ESTABLISHES WALKABLE DOWNTOWN GATEWAY
- NO IMPACT TO ADJACENT PROPERTY AND BUSINESSES ON CASTRO AND MOFFETT
- SHORTER CONSTRUCTION SCHEDULE
- LOWEST COST (1/3 OF VEHICLE UNDERCROSSING)
- COMMUNITY SUPPORT

9

9



LESSONS LEARNED

KEYS TO CONSENSUS

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- REVIEW ALL POSSIBLE ALTERNATIVES AT HIGH LEVEL
- NARROW ALTERNATIVES – BUILDING CONSENSUS IN STEPS
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- OPPORTUNITY TO ENHANCE URBAN ENVIRONMENT AND WALKABILITY

10

10



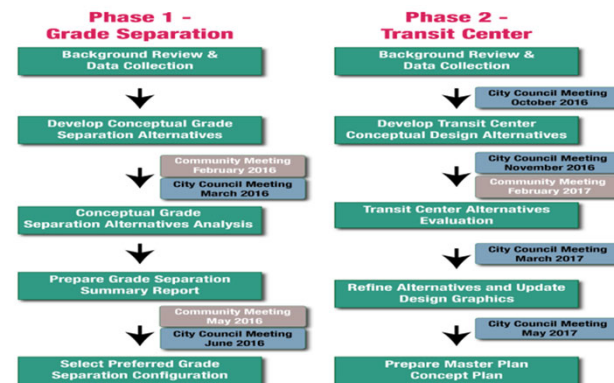
ADDITIONAL SLIDES

11

11



TRANSIT CENTER MASTER PLAN



12

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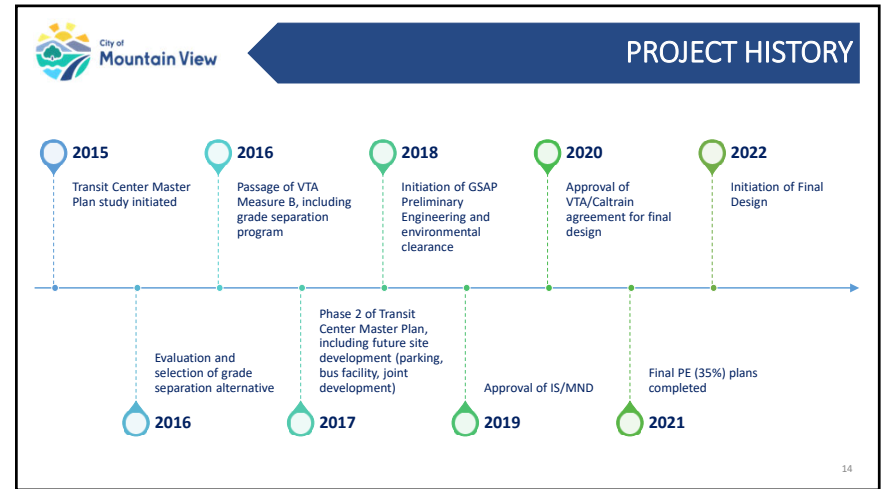
City of Mountain View

EVALUATION OF FINAL ALTERNATIVES

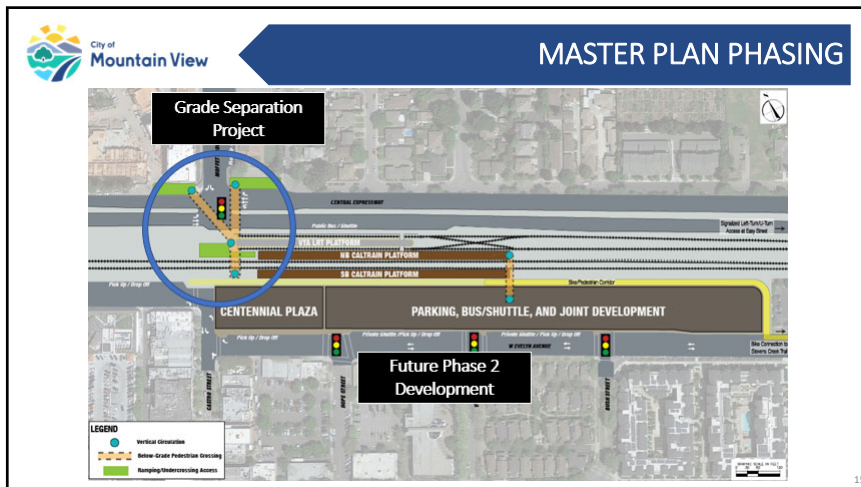
Criteria	No Build	Alternative 1 (Castro/Moffett Vehicle Underpass)	Alternative 4 (Re-routing of Castro Traffic with Pedestrian Undercrossing)
Bicycle and Pedestrian Circulation	○	●	●
Transit Access & Operations	○	●	◐
Traffic	◐	●	◐
Safety	○	●	●
Integration with Downtown Mountain View	●	◐	●
Construction Impact	●	○	●
Cost	Not applicable.	◐	●

13

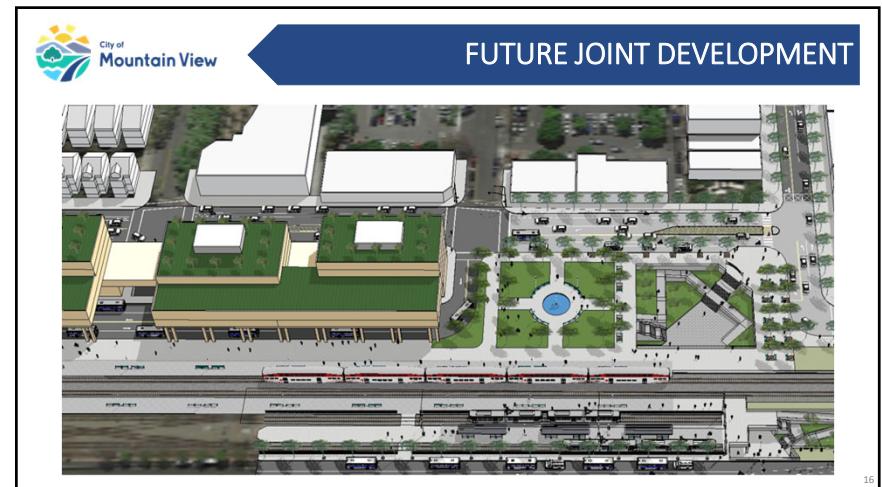
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14



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16





Corridor Crossings

STRATEGY



Local Policy Maker Group (LPMG)

6.21.2023





AGENDA

- **May Workshops** Recap
- **Program Approach** Tracker
- ***DRAFT* Program Cost** Range
- **Funding** Overview
- **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



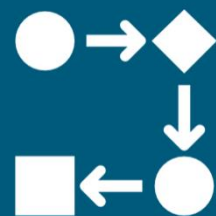
Purpose

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:

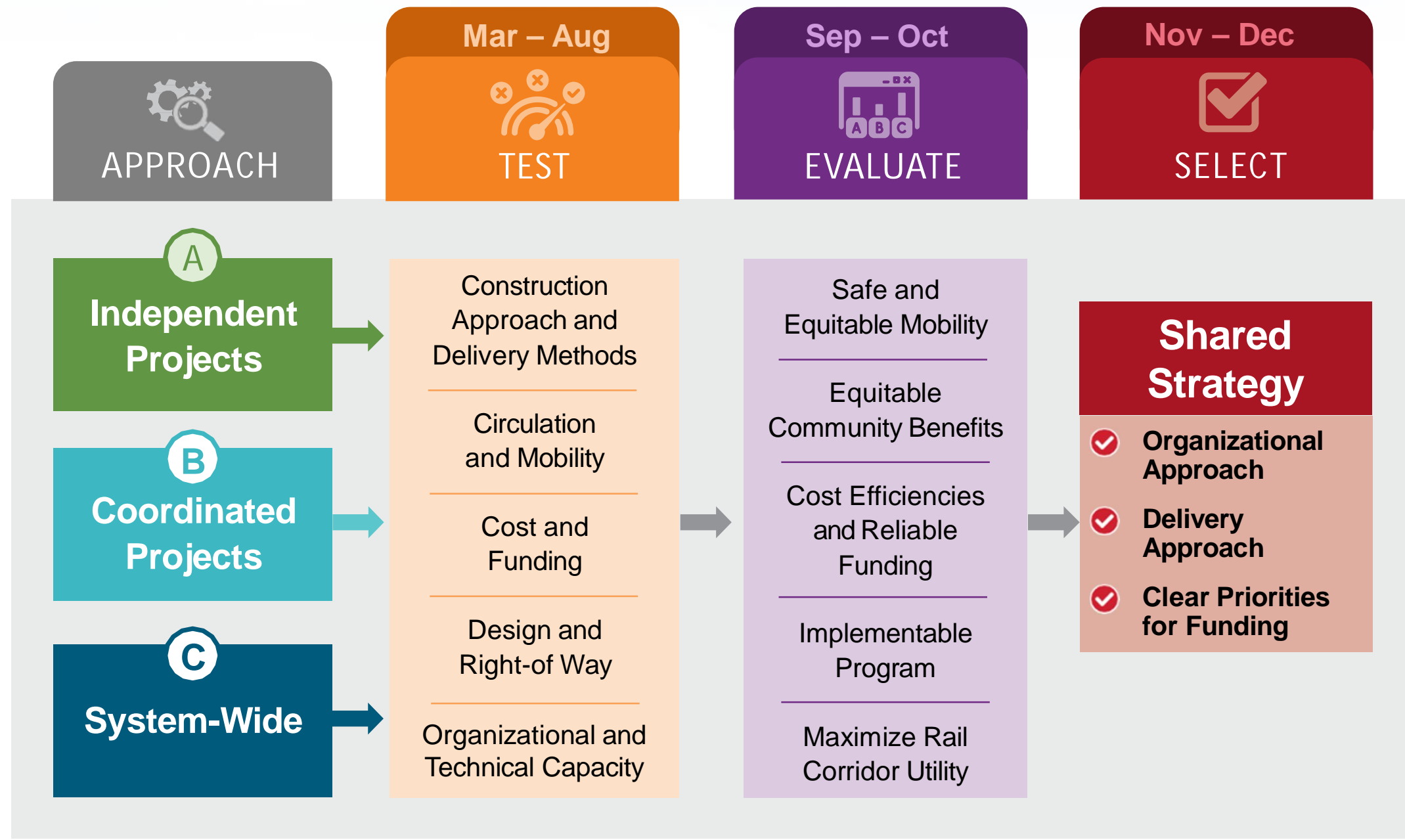
- Funding
- Organization
- Program Delivery

Note: Active grade separation projects will continue in parallel





Program Strategy Process





Meeting Goals and Outcomes



Review of May Workshops Takeaways



Feedback on Cost + Funding Strategy



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.



May Workshop Recap



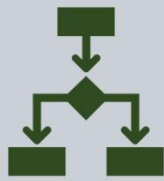
Corridor Crossings
STRATEGY



Mobility & Funding Workshop Purpose



Understanding of relationship between crossing treatments and community circulation.



Discover tradeoffs and considerations of applying crossing treatments.



Identify opportunities and challenges created by the program delivery approaches.



Identify corridor-wide assumptions for crossing treatments to inform a programmatic cost range.





Mobility & Funding Workshop Recap

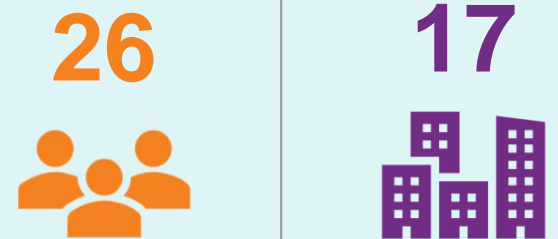
Presentations:

- Current and potential future interactions between Caltrain corridor, regional transportation network, and jurisdictions
- City of Mountain View Transit Center project
 - ✓ *Highlighted considerations and opportunities of Castro Street at-grade crossing closure while maintaining ped/bike connectivity*

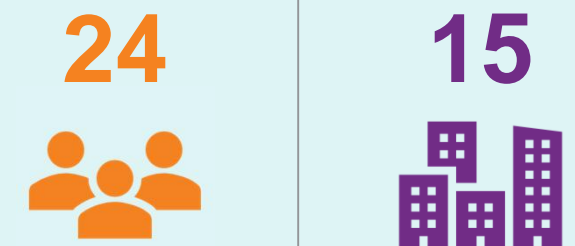
Breakout Exercise:

- Participants collaborated on determining crossing treatments for at-grade crossings
 - ✓ *Considerations and takeaways of crossing treatments*
 - ✓ *Benefits and challenges of program delivery approaches*

CSCG/PPG Workshop



LPMG Workshop





Common Takeaways

Values:

- **In-person, workshop format** to determine shared priorities and discuss the corridor-wide vision

Acknowledgement:

- **Benefits of a corridor-wide approach** but also understand the tensions of jurisdictional ambitions and priorities
- **Complexity and volume of issues, information, and data** to inform a corridor-wide approach
 - *Need for significant data on future conditions to inform the decisions and any prioritization process*





Varying Takeaways

CSCG/PPG

- ✓ Understood the **individual project lens doesn't leverage corridor-wide solutions**
 - Benefits of a corridor-wide approach could be worth the potential jurisdictional tradeoffs
- ✓ Idea of a **largely separated corridor is a newer concept**
 - Multiple participants expressed the importance of community support for this idea
- ✓ **Desire to collaborate** from a regional perspective for funding competitiveness and project coordination

LPMG

- ✓ **Hesitancy on a fully separated corridor** concept, specifically from a funding and resources-constrained environment
- ✓ **Diversity of opinion** on a fully separated corridor was dependent on a community's prior involvement in grade separation projects and different jurisdictional characteristics



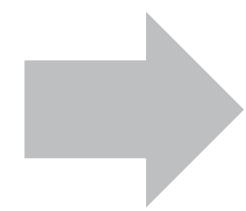
Key Topic Discussion: Future Corridor Conditions

Adopted 2040 Service Vision Moderate Growth Scenario

- 8 Caltrain trains
- 4 High-Speed Rail trains

High Growth Scenario

- 12 Caltrain trains
- 4 High-Speed Rail trains



Implications of increased service for at-grade crossings

- More frequent transit service
- Increased gate down time
- Disruption of circulation and increased delay for all modes
- Increased risk of interactions for all modes

Diversity of opinion on solutions for addressing at-grade crossings based on community context and ambitions:



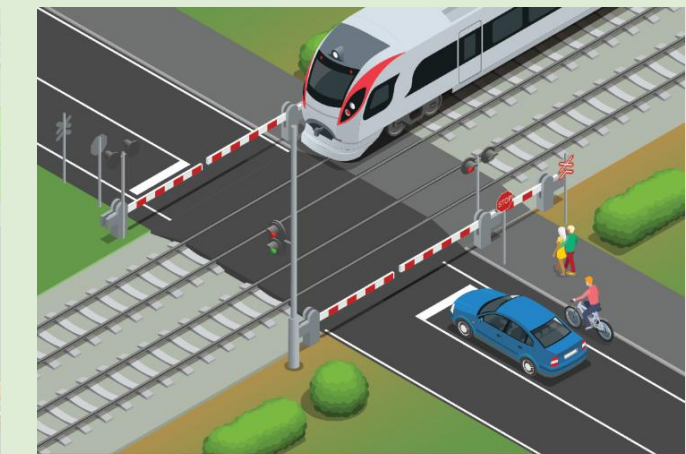
Grade Separated Crossing



Bike/Pedestrian Crossing



Closed Crossing



At Grade Crossing w/Safety Improvements



Program Approach Tracker



Corridor Crossings
STRATEGY



Program Approach Spectrum

Approach A: Independent Projects



- Project-by-project approach/management
- Local funding plan
- Aspirational goal, but no timeline
- Current approach for Caltrain

Approach B: Coordinated Projects



- Regionally coordinated approach to corridor funding
- Interjurisdictional communication about resources and schedule
- Coordinated corridor project delivery
- Aspirational goal with timeline

Approach C: System-wide

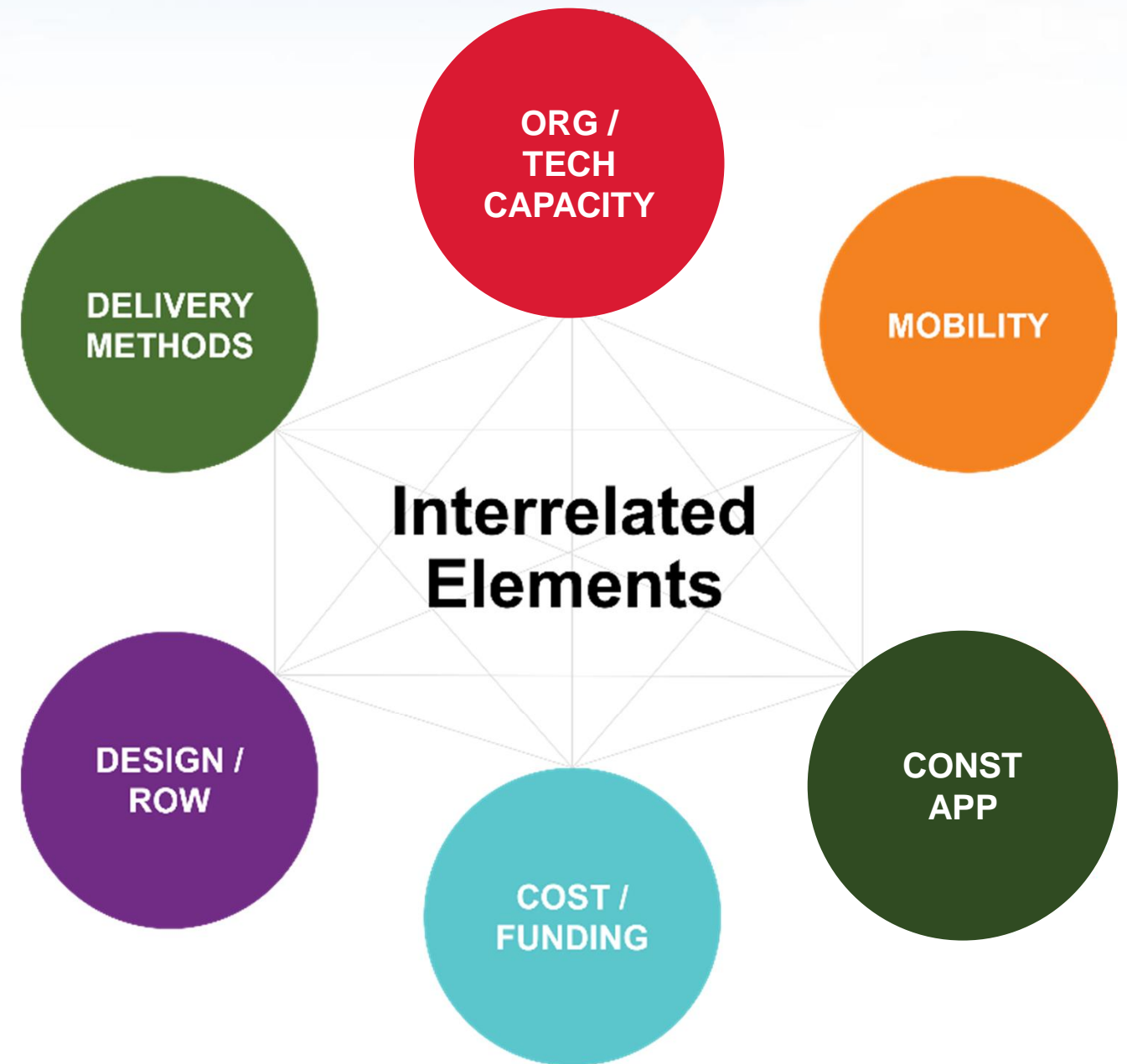


- Transparent and consistent methodology
- Robust and centralized project delivery
- Corridor-wide and regional funding
- Consistent project champion
- Aggressive goal with timeline



Program Approach Tracker

- ✓ **Approach Tracker** helps visualize the feedback received for each topic and lead to a recommended program delivery approach
- ✓ **Ultimate Goal:** Identify recommended program delivery approach
- ✓ Interrelated topics evaluated through the lens of three delivery approaches





Program Approach Tracker

Approach A:
Independent Projects

Approach B:
Coordinated Projects

Approach C:
System-wide

	Approach A: Independent Projects	Approach B: Coordinated Projects	Approach C: System-wide
Construction Approach + Delivery Methods		[Green bar]	
Circulation + Mobility	[Orange bar]		
Organizational + Technical Capacity			
Cost + Funding			
Design + ROW			

Based on feedback from Caltrain and stakeholders, which approach seems best aligned to deliver the corridor's vision?



DRAFT Program Cost Range





DRAFT Program Cost Purpose and Assumptions

PURPOSE

Develop understanding of corridor-wide cost range to inform:

1. Approach to program delivery
2. Scale of funding need

ASSUMPTIONS

- Fully separated corridor
 - Largest potential scale of program
- Current active projects + other existing grade crossings
- Cost range to be reported in \$2022
 - Uncertain timing of projects



Active Projects

15 active grade separation, closure, and undercrossing projects *(displayed in table)*

**Castro Street: Crossing Closure and Construction of New Bike/Ped Undercrossing*

***Middle Avenue: New Bike/Ped Only Undercrossing*

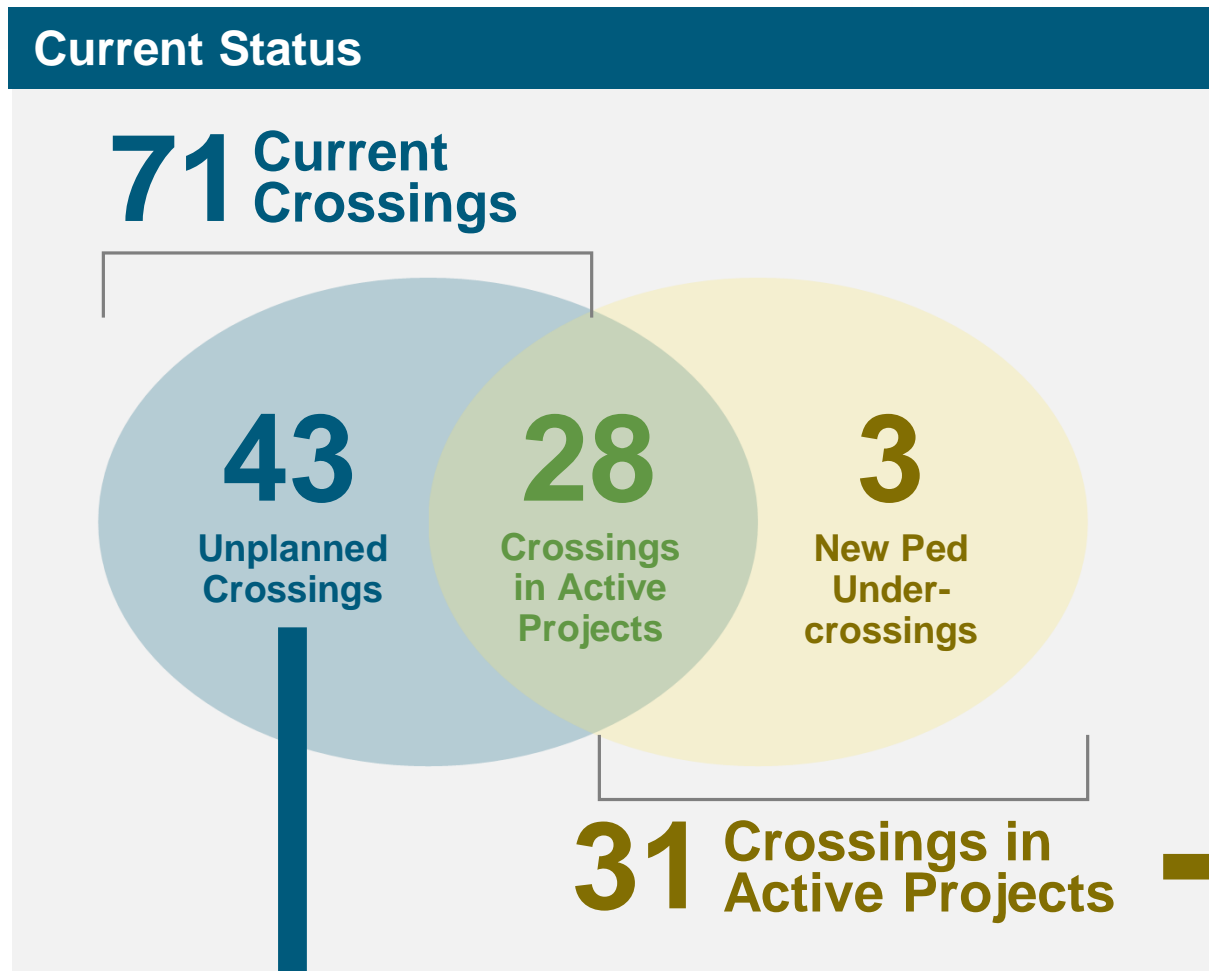
***Bernardo Avenue: New Bike/Ped Only Undercrossing*

COUNTY	PROJECT NAME	CROSSING STREET	PROJECT STAGE			
			PLANNING	ENVIRONMENTAL	DESIGN	CONSTRUCTION
San Francisco	Pennsylvania Avenue Extension	<ul style="list-style-type: none"> Mission Bay Dr 16th St At 7th 	✓			
San Mateo	South Linden Avenue and Scott Street Grade Separation	<ul style="list-style-type: none"> S Linden Ave Scott St 			✓	
	Burlingame Broadway Grade Separation	<ul style="list-style-type: none"> Broadway 			✓	
	Redwood City Grade Separation Study	<ul style="list-style-type: none"> Whipple Ave Brewster Ave Broadway Maple St Main St Chestnut St 	✓			
	North Fair Oaks Bicycle and Pedestrian Railroad Crossing and Community Connections Study	<ul style="list-style-type: none"> Under Evaluation 	✓			
	Menlo Park Grade Separation Project	<ul style="list-style-type: none"> Encinal Ave Glenwood Ave Oak Grove Ave Ravenswood Ave 	✓			
	Middle Avenue Undercrossing**	<ul style="list-style-type: none"> Middle Ave 			✓	
Santa Clara	Connecting Palo Alto	<ul style="list-style-type: none"> Palo Alto Ave Churchill Ave Meadow Dr Charleston Rd 	✓			
	Rengstorff Grade Separation	<ul style="list-style-type: none"> Rengstorff Ave 			✓	
	Mountain View Transit Center and Grade Separation*	<ul style="list-style-type: none"> Castro St 			✓	
	Bernardo Avenue Undercrossing**	<ul style="list-style-type: none"> Bernardo Ave 	✓			
	Mary Avenue Grade Separation	<ul style="list-style-type: none"> N Mary Ave 	✓			
	Sunnyvale Avenue Grade Separation	<ul style="list-style-type: none"> N Sunnyvale Ave 	✓			
	Diridon Integrated Station Concept Plan	<ul style="list-style-type: none"> Auzerais Ave West Virginia St 	✓			
	Southern San José Grade Separations Project (Union Pacific Rail Road)	<ul style="list-style-type: none"> Skyway Dr Branham Ln Chynoweth Ave 	✓			

*Crossing Closure and Construct Bike/Pedestrian Only Crossings **Bike/Pedestrian Only Crossings



DRAFT Program Cost Assumptions



45 Crossings used to Identify full program cost range

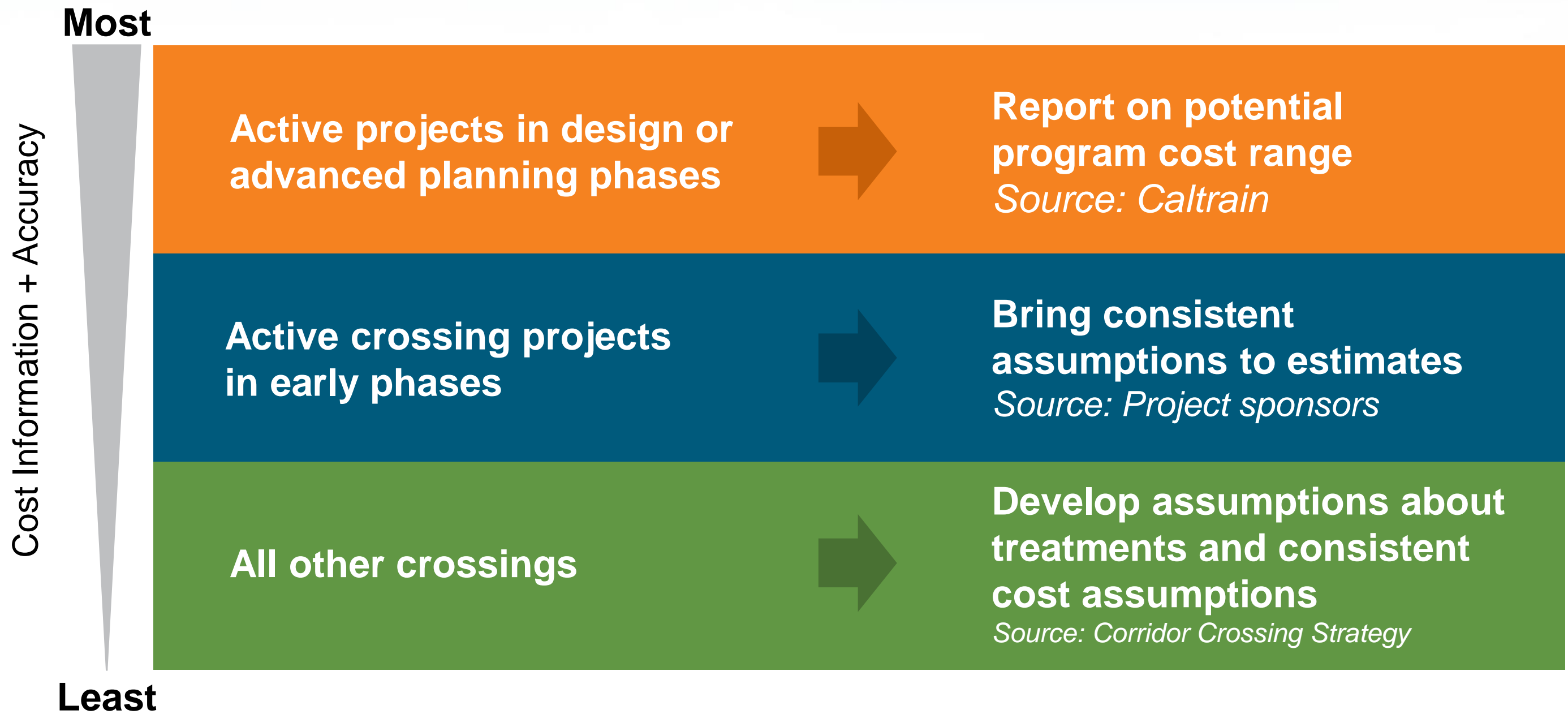
9 in Advanced Planning or Design stages

20 in Active Projects in early planning stages

2 not recommended for closure in Active Projects

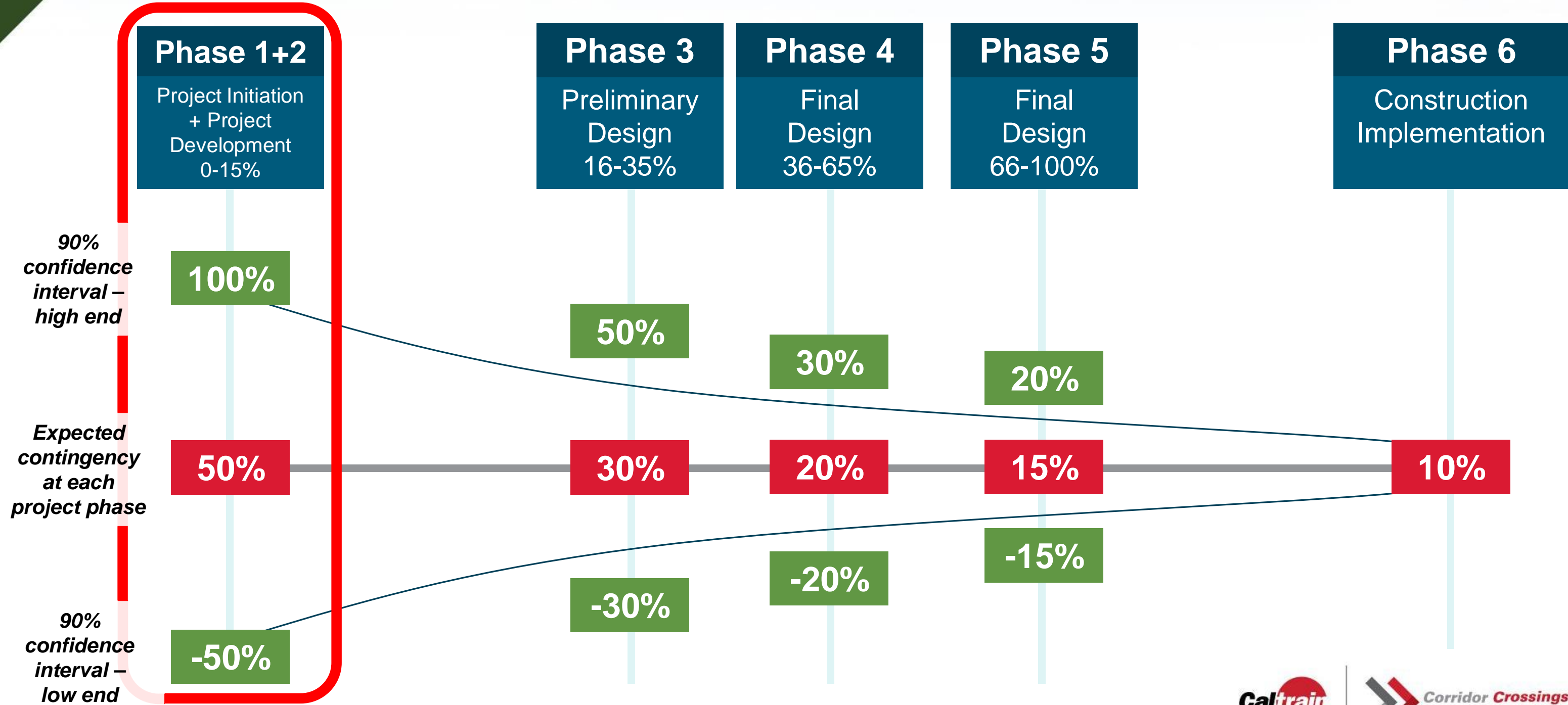


Developing *DRAFT* Program Cost Range





Developing *DRAFT* Program Cost Range



American Association of Cost Engineers





Developing *DRAFT* Program Cost Range

All program costs are preliminary and subject to change

Why is it challenging to be precise now?

- Most projects don't have LPA's – scope is still unknown
- Implementation timing is uncertain. Program costs based on \$2022 will increase – funding strategy will need to keep pace
- Long-term vision for corridor still needs to be defined
- Scale of program still needs to be determined



Align stakeholder ambitions into balance with an implementable program



Implications for Organization and Technical Capacity



Updated program cost range used as a base to develop funding strategy



Developing *DRAFT* Program Cost Range

9

Crossings in active projects in design or advanced planning phases

- **7 existing grade crossings removed;**
- **2 new bike/ped grade-separate crossings created**
(project designs create opportunity for 2 additional grade-separated crossings)
- Reflect best understanding of current project status
- Consistent contingencies are included

Projects in this category:

- South Linden Ave and Scott Street Grade Separation
- Burlingame Broadway Grade Separation
- Middle Ave Undercrossing
- Rengstorff Grade Separation
- Mountain View Transit Center and Grade Separation
- Bernardo Avenue Undercrossing
- Mary Avenue Grade Separation

Program Cost Range: \$0.9B - \$2.2B



Developing *DRAFT* Program Cost Range

20 Crossings addressed in projects in early phases

- 19 existing grade crossings removed;
- 1 new bike/ped grade-separated crossing created; project designs may create additional separated connection opportunities
- Reflect best understanding of current project status
- Project costs inflated to \$2022

Projects in this category:

- Pennsylvania Avenue Extension (PAX)
- Redwood City Grade Separation
- North Fair Oaks Bicycle and Pedestrian Railroad Crossing
- Menlo Park Grade Separation Project
- Connecting Palo Alto
- Sunnyvale Avenue Grade Separation
- Diridon Integrated Station Concept (DISC)
- Southern San Jose Grade Separation Project

Program Cost Range: \$2.0B - \$8.1B

Note: ~50% of costs in this category come from PAX and DISC

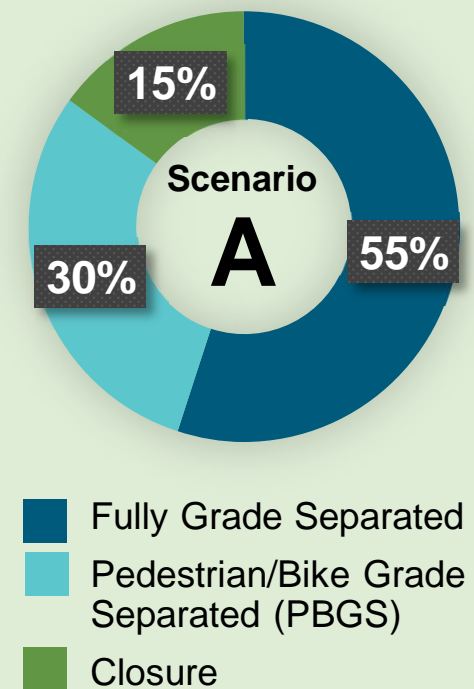


Developing *DRAFT* Program Cost Range

45

Crossings not planned in active projects

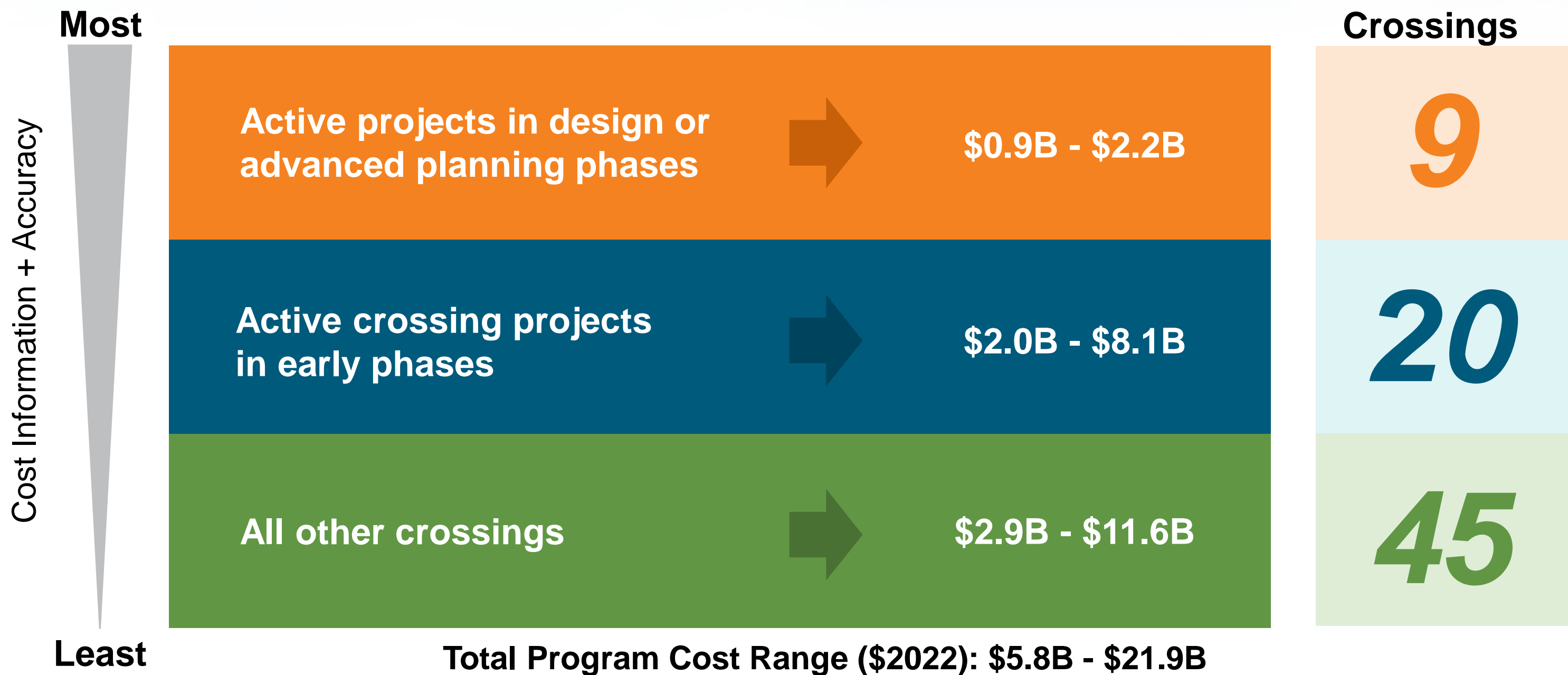
- Mobility + Circulation Scenarios provide a framework for estimating range of crossing treatments
- Cost assumptions based on recent/ongoing project cost estimates (not location specific)



Program Cost Range: \$2.9B - \$11.6B

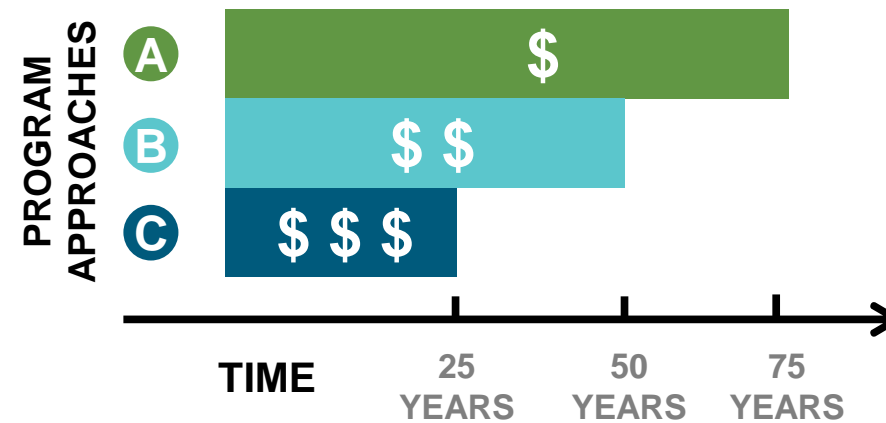


Developing *DRAFT* Program Cost Range





Implications for Organization and Technical Capacity



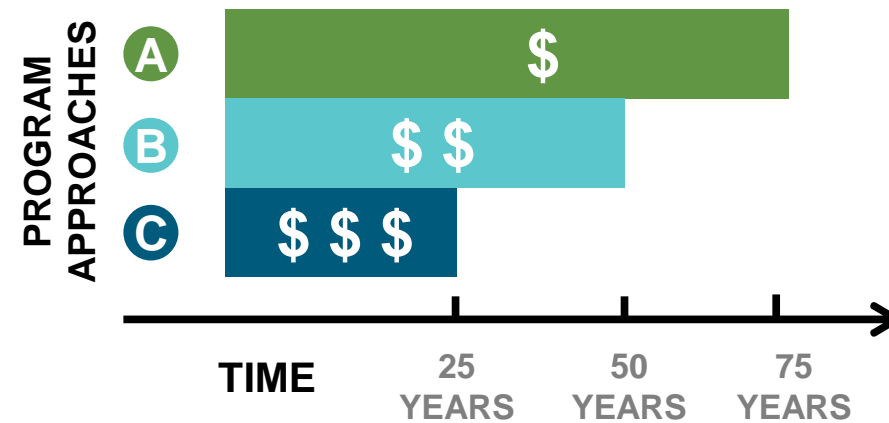
Program Delivery Approach

Potential Timeline

APPROACH A: Independent Projects	75 Years
APPROACH B: Coordinated Projects	50 Years
APPROACH C: System-Wide	25 Years



Implications for Organization and Technical Capacity



Program Delivery Approach	Potential Timeline	Projected Annual Expenditure by Program Approach	Roughly Comparable Program
APPROACH A: Independent Projects	75 Years	\$150M/year	1 crossing removed/year
APPROACH B: Coordinated Projects	50 Years	\$224M/year	~ Caltrain Annual Operating Budget
APPROACH C: System-Wide	25 Years	\$449M/year	~ PCEP program

Note: All program costs indicated in \$2022



Active Projects Only (37% of current grade crossings)

		Crossings	Potential Timeline
Active projects in design or advanced planning phases	\$0.9B - \$2.2B	9	15 Years
Active crossing projects in early phases	\$2.0B - \$8.1B	20	20 Years
			25 Years

Active Project Cost Range (\$2022): \$2.9B - \$10.3B



Active Projects Only (37% of current grade crossings)

		Crossings	Potential Timeline	Projected Annual Expenditure
Active projects in design or advanced planning phases → \$0.9B - \$2.2B		9	15 Years	\$362M/year
			20 Years	\$271M/year
Active crossing projects in early phases → \$2.0B - \$8.1B		20	25 Years	\$217M/year

Active Project Cost Range (\$2022): \$2.9B - \$10.3B



Funding Overview



Corridor Crossings
STRATEGY



Funding: Current Committed Funds

Active Project Cost Range: \$2.9B – \$10.3B

County Measures	\$884M
Local Funds	\$29M
Discretionary Grants	\$31M
Total	\$944M

Funding Gap for Active Projects: \$2.0 – 9.4B



Funding: Recent / Pending Discretionary Grants

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



RCE Funding Case Studies

Planning study for LA County (California)

- Rail crossing elimination master plan – study will identify all railroad crossings and corridors within unincorporated areas of LAC (Up to \$600 K)

Broward MPO (Florida)

- **Final design and construction for enhancements to 21 grade crossings along Florida East Coast Railway (freight corridor shared with Brightline's intercity passenger rail). This corridor project includes Broward MPO and six local municipalities (Up to \$15.4 M)**

Redevelopment Authority of the County of Berks (Pennsylvania)

- Project development, final design, ROW acquisition, and construction for 10 crossings. Improvements set to eliminate one at-grade crossing, and improve several other unprotected at-grade crossings, and eliminate severe clearance and sight-line issues by raising three bridges. (Up to \$16 M)




Funding: Next Steps

- ✓ Develop strategy for a coordinated funding effort
- ✓ Work with corridor communities to develop a more fine-grained funding approach
- ✓ Discuss program delivery approach, including organizational capacity and funding strategy in October workshop

Look Ahead



Upcoming Stakeholder Engagement

Stakeholder Group	Name	Timeframe	Content
PPG	Project Partner Group		
CSCG	City/County Staff Coordinating Group		NO JULY MEETINGS
LPMG	Local Policy Makers Group		
SAT	Stakeholder Awareness Team	July	 Program Update
AMP	Advocacy and Major Projects (JPB Subcommittee)	September	
JPB	Joint Powers Board	October	

Website Updates and Contact Information

- Website is regularly updated with new deliverables:
 - *Program Overview brochure*
 - *Funding Opportunities brochure*
 - *Community Fact Sheets*
 - *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: June 22, 2023

To: Local Policy Maker Group (LPMG)

From: Boris Lipkin, Northern California Regional Director

Re: California High-Speed Rail Program Update

STATEWIDE UPDATE

Infrastructure Week in D.C



Authority CEO **Brian Kelly** and Director of Planning and Sustainability **Margaret Cederoth** participated in a panel discussion and provided a project overview at the U.S. High-Speed Rail Association's High-Speed Rail Conference. Notable speakers included: Speaker Emerita **Nancy Pelosi**, White House Senior Advisor & Infrastructure Implementation Coordinator **Mitch Landrieu**, FRA Administrator **Amit Bose**, and California State Transportation Secretary **Toks Omishakin**.

PRNews Digital Award

The Authority was awarded PRNews's [Video Series Award](#) for the San Francisco to San Jose Project Section Overview [video](#) and the San Jose to Merced Project Section Overview [video](#). The digital award honored the best use of a video or multi video campaign to get a message across.

The overview videos were designed to inform the public about the work that California High-Speed Rail Authority is doing to advance high-speed rail in California by completing the environmental clearance process, moving project sections closer to construction, and providing the public with important details of what will soon be coming to their region. These videos were an in-house production.

Spring 2023 Quarterly Newsletter

This quarter's newsletter is packed with updates. In Northern California, the newsletter features a profile on California College of the Arts Associate Professor Neeraj Bhatia's course, "The Territorial City," which focuses on the potential for high-speed rail to connect once-distant cities and regions, an interview with Director of Transportation of the San Francisco Municipal Transportation Agency Jeffrey Tumlin on transit ridership, and more! Read the newsletter [here](#).

RECENT & UPCOMING OUTREACH ACTIVITIES IN NORTHERN CALIFORNIA

- [North Beach Festival](#) – June 17 & 18, 10:00am – 6:00pm
- SF Pride at Caltrain 4th & King Station – June 25, 9:00am – 12:00pm
- [38th National Garden Railway Convention](#) – July 6-8, times vary