Bicycle and Active Transportation Advisory Committee

11.16.2023

AGENDA

- Program Refresher
- Project Progress
- Delivery Guide
- Next Steps

Caltrain | Corridor Crossings 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

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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*

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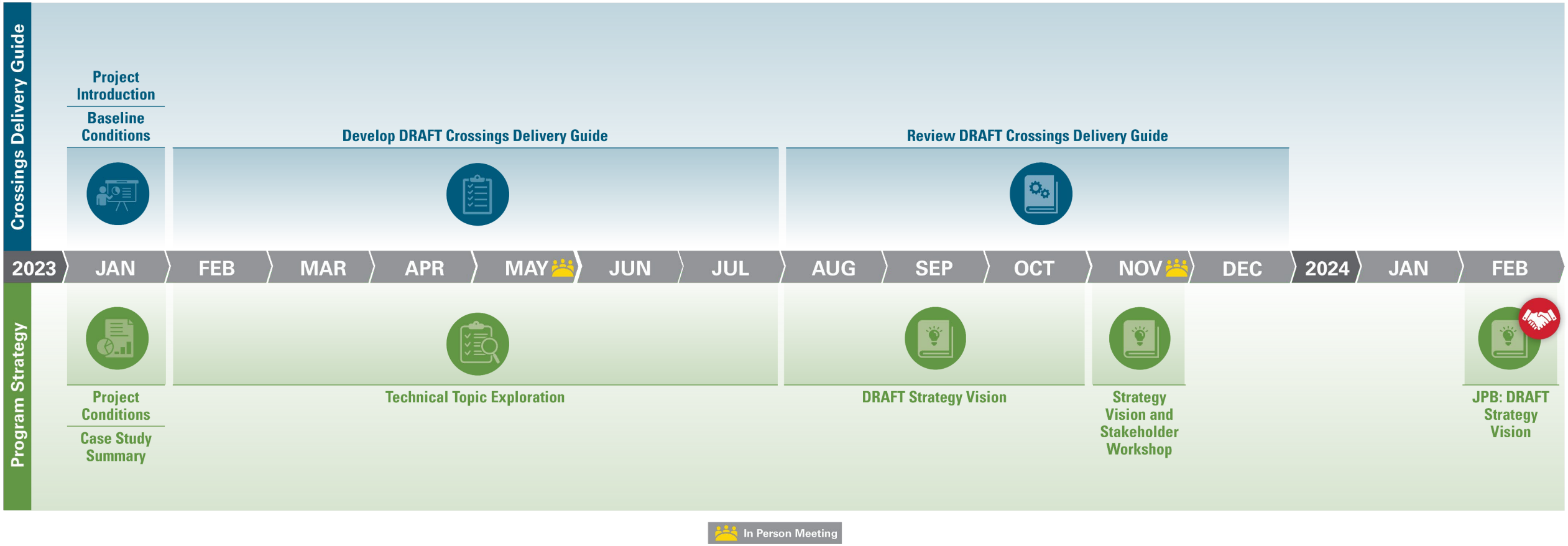
Timeline


Crossings Delivery Guide
Project Introduction
Baseline Conditions
Develop DRAFT Crossings Delivery Guide
Review DRAFT Crossings Delivery Guide
2023
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
2024
JAN
FEB
Program Strategy
Project Conditions
Case Study Summary
Technical Topic Exploration
DRAFT Strategy Vision
Strategy Vision and Stakeholder Workshop
JPB: DRAFT Strategy Vision
In Person Meeting

Recap of March BATAC Presentation

- Illustrated shared strategy development

- Reviewed Case Studies
- Outlined Technical Exploration Topics
- Presented on Program Strategy Goals

Project Progress

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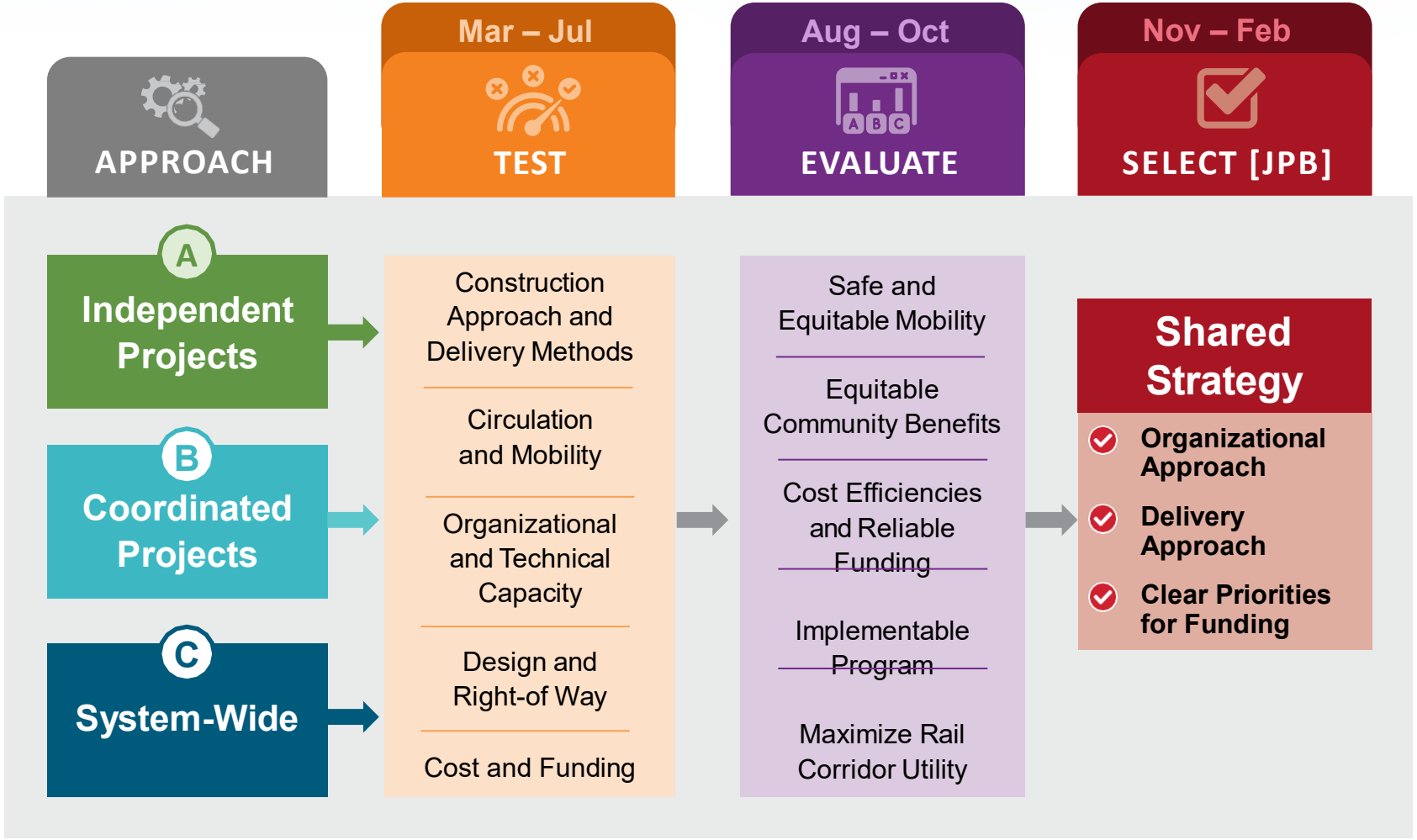
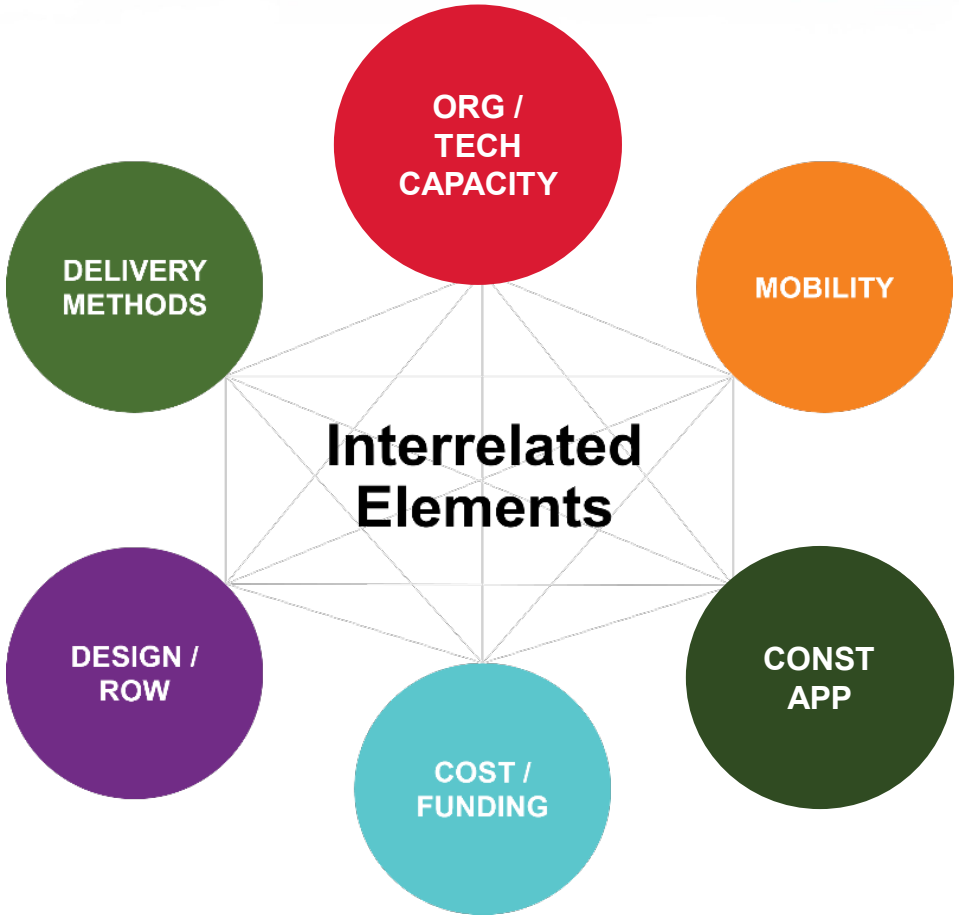
Program Strategy Process



Recap of Technical Topic Exploration



- Technical topic conclusions supported a coordinated program approach and the need to identify priority projects

- Key conclusions of the **technical topics** include:
  - **ORG / TECH CAPACITY:** Caltrain staff resources and capacity are constrained and additional resources would be needed to support deeper involvement in a grade separation program
  - **MOBILITY:** There is not corridor-wide consensus on a fully separated corridor; corridor communities want to focus on delivering priority projects
  - **CONSTRUCTION, DESIGN / ROW:** Consolidating crossing projects realizes numerous construction and delivery benefits, as well as potential efficiencies from coordinating project implementation
  - **COST / FUNDING:** Identifying priority projects helps region to identify complete funding for high-impact projects as quickly as possible

Delivery Guide Update

Caltrain | Corridor Crossings STRATEGY

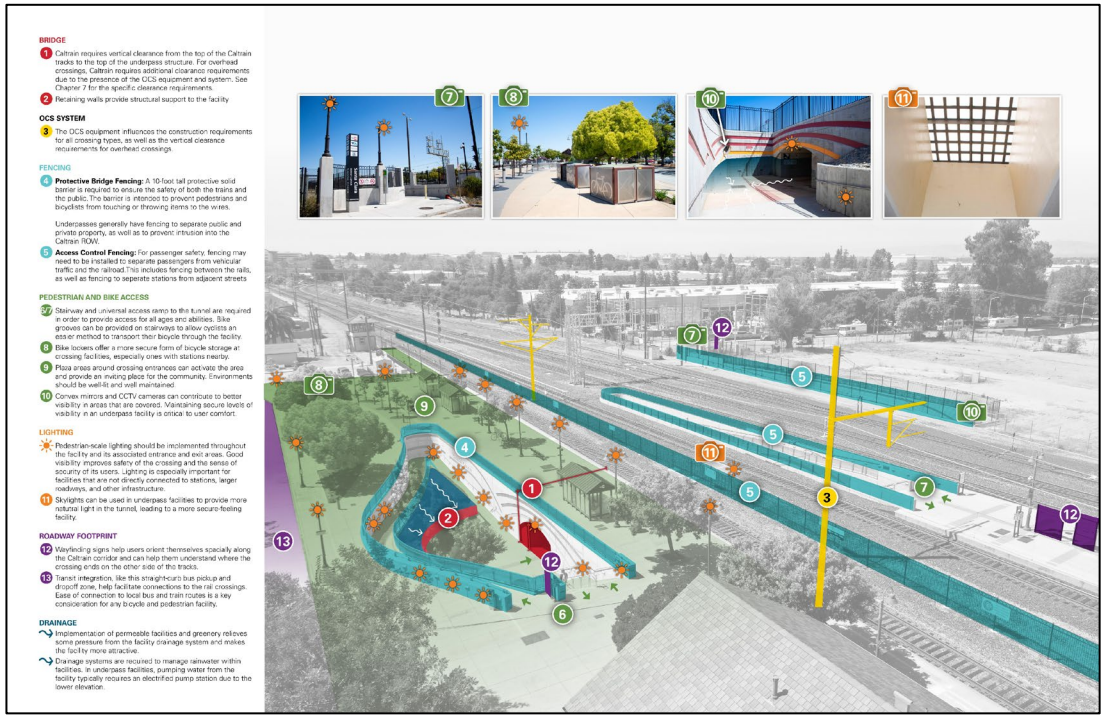
From Numerous Meetings, Partners Desire…

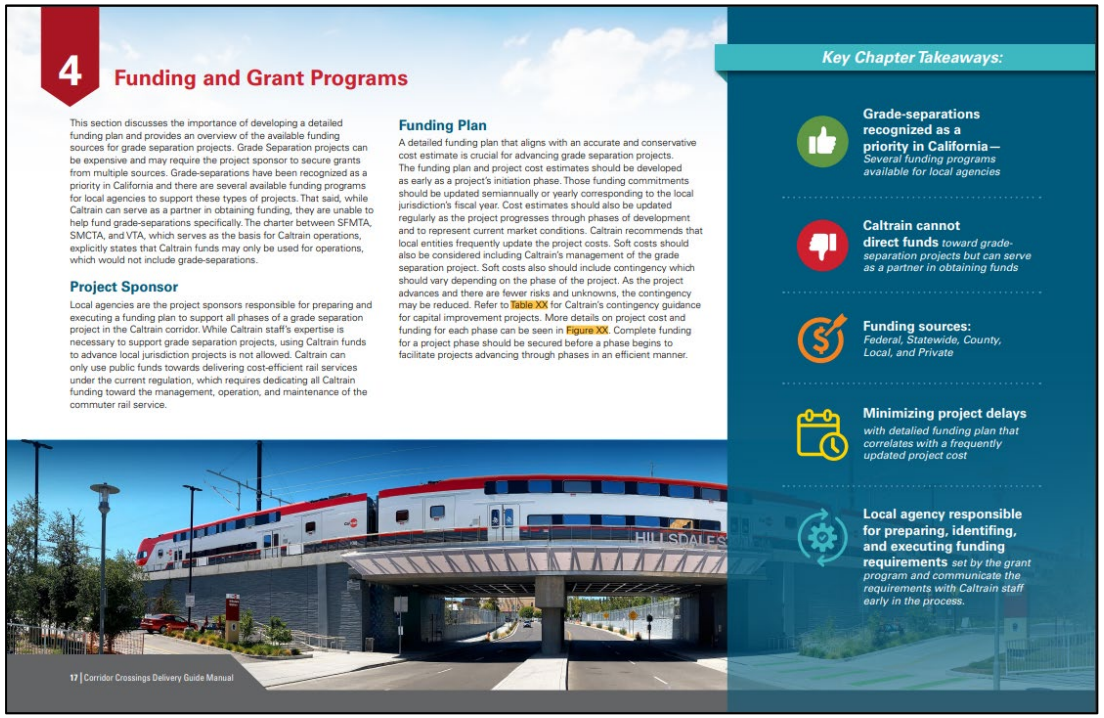
A consolidated and coordinated program to accelerate the delivery of grade separation projects and to strategically pursue funding	That Caltrain take a proactive and consistent role in delivering grade separation projects	**A consistent and transparent grade separation process**	A continued role for cities and a need for a grade separation program to reflect community vision

Caltrain | Corridor Crossings STRATEGY

DRAFT Crossings Delivery Guide

- Graphically engaging, easy to read guidance
- Design standards + project development and delivery





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DRAFT Crossings Delivery Guide – Outline and Structure

Background

- Corridor Overview
- Regulatory Environment
- At-Grade Rail Crossings

Project Initiation

- Project Implementation Process
- Planning a Grade Separation
- Funding and Grant Programs

Grade Separations

- Key Considerations and Caltrain Design Criteria
  - *Governing Design Standards*
  - *Vertical Clearances for Overpasses*
  - *Vertical Clearances for Underpasses*
  - *Profile Grade*
  - *Horizontal Clearances*
  - *Structural Design*
  - *Design Variances*
  - *Operational Impacts*
  - *Grade Separation Components*
- Grade Separation Types

Project Delivery and Implementation

- Delivery Methods
- Construction methods

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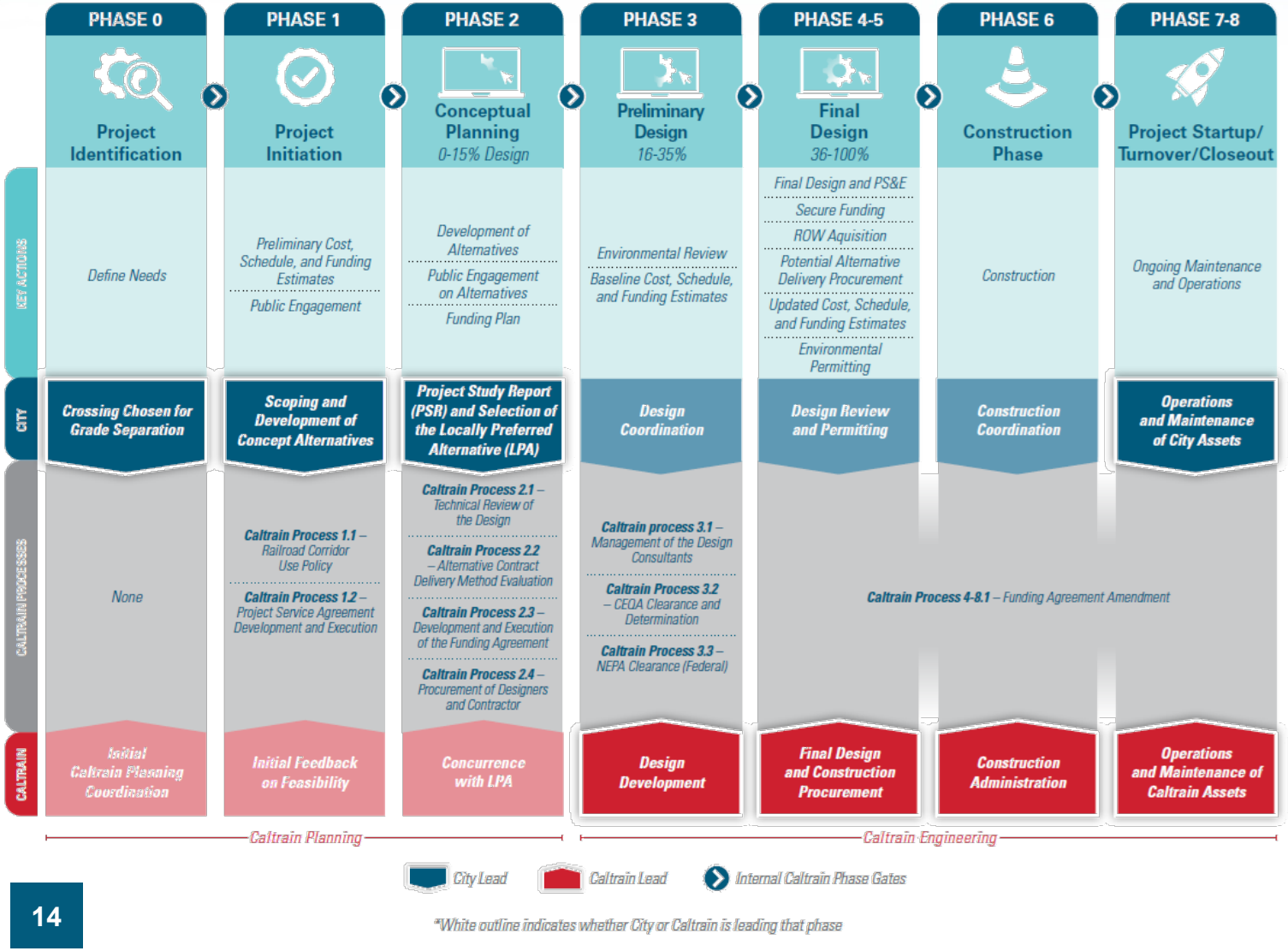
DRAFT Crossings Delivery Guide – Process Overviews



Project Phases and Tasks	City/Local Jurisdiction	Funding Agency	Caltrain	County
PHASE 3: 16-35% PRELIMINARY DESIGN			LEAD	
3.1: Develop Project Management Plan (PMP)	C	C	R A	I
3.2: Submit Complete Streets Checklist (for VTA 2016 Measure B funds only)	R A	C	C	I
3.3: Update the funding plan	R A	C	R	I
3.4: Advance design to 35% development	C	C	R A	C
3.5: Evaluate alternate Project Delivery Approaches (DBB, CM/GC, PDB) and make findings in a public meeting (JPB Board)	C	C	R A	I
3.6: Formation of a Technical Working Group (TWG)	C	C	R A	C
3.7: Develop Preliminary Public Art Plan	R A	C	C	I
3.8: Attend and present to City Councils as needed	R A	C	R A	I
3.9: Lead ongoing community outreach	R A	C	R	I
3.10: Lead the Environmental Clearances (CEQA, NEPA as required)	C	C	R A	I
3.11: Risk Assessment	C	C	R A	I
3.12: Update Project Cost /Budget	C	C	R A	I
3.13: Amend Cooperative Agreement / MOU for Final Design (if applicable)	R A	R A	R A	I
3.14: Issue RFP or Exercise Option for Final Design	C	C	R A	I
3.15: Review the bid	R A	R A	R A	I
3.16: Select consultant and issue Notice to Proceed (NTP) for Final Design	R A	R A	R A	I
3.17: Environmental Documentation	C	C	R A	I
3.18: Update Funding Plan	R A	C	R A	I
3.19: 35% Phase Gate Management Committee	C	C	R A	I
3.20: Prepare Staff Report and Board Resolution for JPB Board for Funding Agreement to advance the design to 100%	C	C	R A	I
3.21: Evaluate and Execute Alternate Project Delivery Pre-Construction Services Contract, or PDB, if applicable	C	C	R A	I

Caltrain | Corridor Crossings STRATEGY

Active Transportation Components

- Freight rail access still needs to be accommodated during a closure. This right to access is codified in the Trackage Rights Agreement between Caltrain and UPRR.
- Full track closure windows will only be allowed during non-revenue hours.

Active Transportation

Pedestrian, Bike, and Micro-Mobility Access

Facilities for people walking and biking should be considered for all grade-separated crossings. Critical elements to support these modes include accessible sidewalks, bicycle lanes, multi-use trails, and crosswalks.

For the purposes of this discussion and simplicity, "pedestrians" or "people walking" also includes people using strollers, wheelchairs, or other mobility assistance devices; "cyclists" or "people biking" also includes people using scooters or other active transportation and micro-mobility modes. Active transportation modes are the most vulnerable roadway users, and care should be taken to provide safe, convenient facilities for people walking and biking. **These facilities should be designed in a way to support intuitive, comfortable, and secure use and should be identified and prioritized in the early planning stages of a project.**

Given the scale of grade separation projects, these projects offer a prime opportunity to increase active transportation access for the surrounding community. Improvements to surrounding infrastructure should be prioritized and closely coordinated with local partners.

Access Priorities

Caltrain has clarified access priorities through it's Comprehensive Access Program Policy, dated May 2010. In accordance with this policy, access to Caltrain facilities (including grade separations) should be prioritized by the following transportation modes:

Shared and Separated Bike Facilities

Where a crossing serves as the only protected bicycle crossing within 0.5-miles or could serve as a link in the local agency's or region's bike plan, the facility should be designed to allow for through-bike-movements without dismounting.

If there are reasonable alternative routes and the site is extremely constrained, requiring bikers to dismount and walk their bike may be acceptable. However, designing facilities to work with how people want to travel will increase correct usage and safety for all users. Additionally, providing comfortable, convenient, active transportation facilities will help encourage more active transportation travel, contributing towards local, regional, and state greenhouse gas reduction goals.

Accommodation Selection

People driving, biking, and walking typically have different speeds and needs. To minimize potential conflicts and improve the user experience, separate facilities for each user group should be provided when feasible. Where accommodating all transportation modes is appropriate, facility types are noted in order of preference below:

1. Separate vehicle, bike, and pedestrian facilities
2. Separate vehicle facilities and a widened shared use path
   a. Provide a widened shared use path that allows for bikes to travel through the grade-separated crossing without dismounting
3. Separate vehicle and pedestrian facilities
   a. Bikes must dismount and walk their bike along a widened sidewalk

Location Selection

When parallel to roadways, pedestrian and bike facilities at grade-separated crossings may be placed on one or both sides of the roadway depending on the adjacent land uses and network configuration. Typically, providing pedestrian and bike facilities on each side of the roadway will increase convenience, safety, and correct usage.

Bike Facility Design

Bike facility type (i.e. Class II, III, IV) should be selected using NACTO's "Choosing an All Ages & Abilities Bicycle Facility," which considers vehicle speeds and volumes to make a facility type recommendation,

Shared Use Path Design

Shared use paths (also referred to as Class I or multi-use paths) along crossings must be designed to meet local, state, and ADA requirements, including maximum grades. Accessible curb ramps with truncated domes must be provided at intersections, as applicable. The path geometry should be designed to allow bikes to safely navigate turns at appropriate speeds. Signs or pavement markings encouraging bikes to yield to pedestrians and travel at appropriate speeds should be provided.

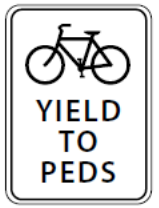
Shared use path width should consider the daily and peak hour number of anticipated pedestrians and cyclists and user comfort. General recommended and minimum clear widths are noted below.

- Minimum: 8-foot path with 2-foot clear shoulders on each side of path
- Preferred: 12-foot plus path with 2-foot clear shoulders on each side of path
- Alternative Minimum: 2-foot shoulder, 8-foot bike path, 6-foot pedestrian path

Alternatives to Bikes Dismount Signs

It is important to consider alternatives to requiring bikers to dismount and walk their bikes at crossings. There is a delicate balance between meeting all user needs and protecting vulnerable roadway users. Signage and pavement markings may be used to encourage slower bicycle speeds and pedestrian priority, allowing people to continue biking slowly through the overhead or underpass crossing. A few examples are included below:

- "Pedestrian Priority Zone, Ride Slowly"
- "Bikes Yield to Peds"
- "Shared Path, Please consider other path users"
- "Bike at Walking Speed"
- "5 MPH"



Additional Pedestrian and Bicycle Facility Elements and Bike Accommodation

While sidewalks, bike lanes, and shared-use paths serve as the foundation of the pedestrian and bicycle experience leading up to and along a crossing, there are additional elements that are essential to creating a safe and inviting active transportation experience. The following elements should be considered in the crossing design, either along or leading up to the crossing, and should be included in the design as contextually appropriate:

- Station access routes
- Access to adjacent properties
- Intersection treatments (curb extensions, leading bike and pedestrian intervals, crossing refuge islands, crossing treatments, crosswalks, conflict markings, bike signals, dedicated/protected intersections, etc.)
- Pedestrian scale lighting
- Landscaping
- Bike racks and bike lockers
- Placemaking features, such as art, shade, and street furniture

These elements should be designed in a way to support comfortable and secure use of the facilities. These elements should be identified and prioritized in the early planning stages of a project so that all crossing users can be accommodated.

Active Transportation Components

- Delivery Guide instructs that facilities for people walking and biking should be designed in a way to support intuitive, comfortable, and secure use and should be identified and prioritized in the early planning stages of the project.
- Delivery Guide provides information on
  - Access priorities
  - Shared and separated bike facilities
  - Accommodation and location selection
  - Bike facility and pedestrian facility design
  - Shared use path design
  - Alternative to bikes dismount signs
  - Additional pedestrian and bicycle facility elements and bike accommodation

Look Ahead

Caltrain | Corridor Crossings STRATEGY

From Numerous Meetings, Partners Desire…

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NOVEMBER WORKSHOPS

Caltrain | Corridor Crossings STRATEGY

November CSCG Workshop Agenda

Topic:

- Organization and Coordinated Program Approach

Logistics:

- In-Person Meeting
  - *During regularly scheduled meeting date (11/15)*
  - *10:00 AM – 12:00 PM*

Location:

- Mountain View City Council Chambers

Caltrain | Corridor Crossings STRATEGY

November LPMG Workshop Agenda

Topic:

- Identifying Priority Projects and Funding Strategy

Logistics:

- LPMG In-Person Meeting
  - *11/30*
  - *4:00 PM – 6:00 PM*
  - *Open to the public!*

Location:

- Mountain View City Council Chambers

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Q&A

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