

CALIFORNIA DEPARTMENT OF TRANSPORTATION, DISTRICT 4

Cordilleras Creek Bridge Replacement

PROJECT STATUS, OUTREACH,
AND CONSTRUCTION STRATEGY



AGENDA & PRESENTERS



Project Overview



Construction Staging



Traffic Planning



Next Steps



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PROJECT OVERVIEW & STATUS

PURPOSE & NEED OF PROJECT

- The existing bridge is at the end of its service life and needs replacement.
- If not addressed, poor structural conditions could affect the safety of the traveling public.





Location

Cordilleras Creek Bridge on U.S. Highway 101 (U.S. 101) in **Redwood City in San Mateo County** between Whipple and Brittan Avenue exits.

Benefits

- Maintaining connectivity and safety for the public traveling along this stretch of U.S. 101
- Assist in resilience to sea level rise
- Enhancing hydrology function
- Improving fish passage within the channel

Planned Work

- Replace the existing triple box culvert with a single span bridge.
- The replacement bridge will retain a 6-lane configuration.



Environmental Findings

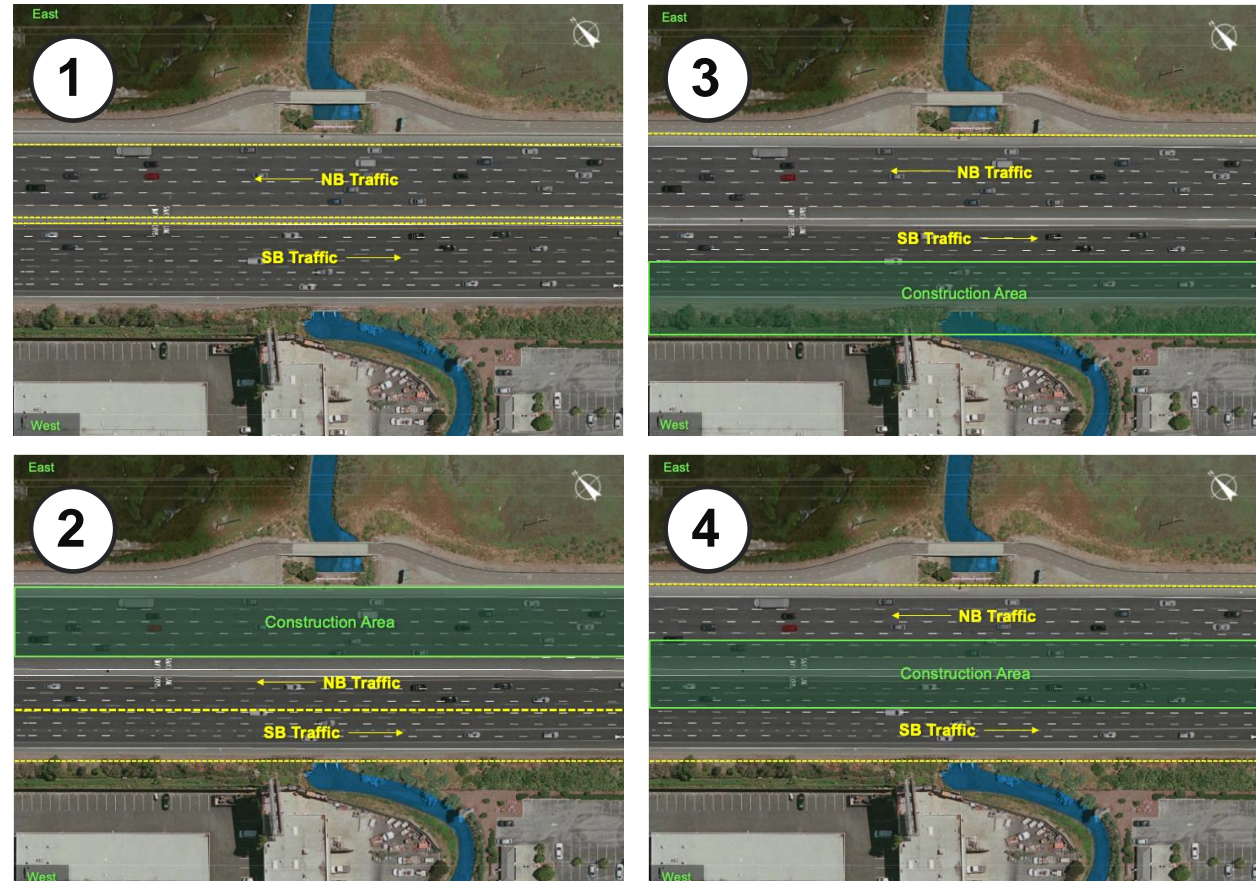
- Environmental studies revealed sensitivities regarding the **creek habitat**.
- Due to these sensitivities, all work in the channel must occur during the dry season: **June through October**.
- **6 environmental permits** were obtained to work in the creek.



CONSTRUCTION STAGING

TRADITIONAL CONSTRUCTION METHOD

This method requires the shifting of lanes depending on which side of the freeway is under construction.



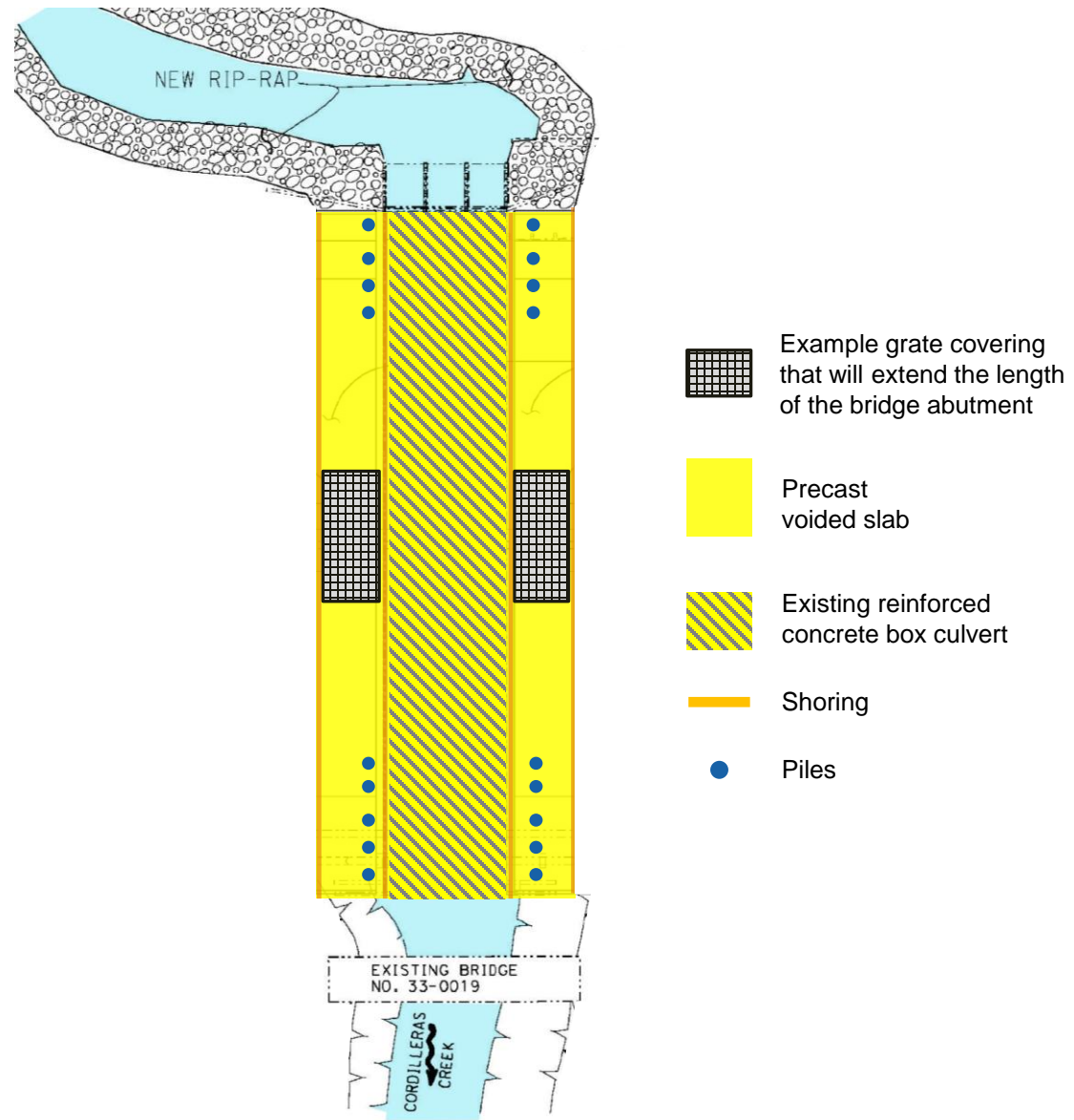
Traditional Construction Example: San Francisquito Bridge



Cut & Cover Method

This method entails building new structure over the existing box culvert and removing box culvert after completing bridge.

No lane shifting required



Steps to Cut & Cover Method



Remove asphalt and excavate for shoring and installation



Install pilings and prefabricated abutments



Cover the excavated opening at end of each working shift with moveable steel plate/grate

Benefits of Cut & Cover Method



Construction
time spans
just 1 year



No impact on
express lane
operation



Enhance safety
with reduced
exposure to 1 year



1 season of
creek diversion

TRAFFIC PLANNING

REDUCING CLOSURE TIME IS KEY



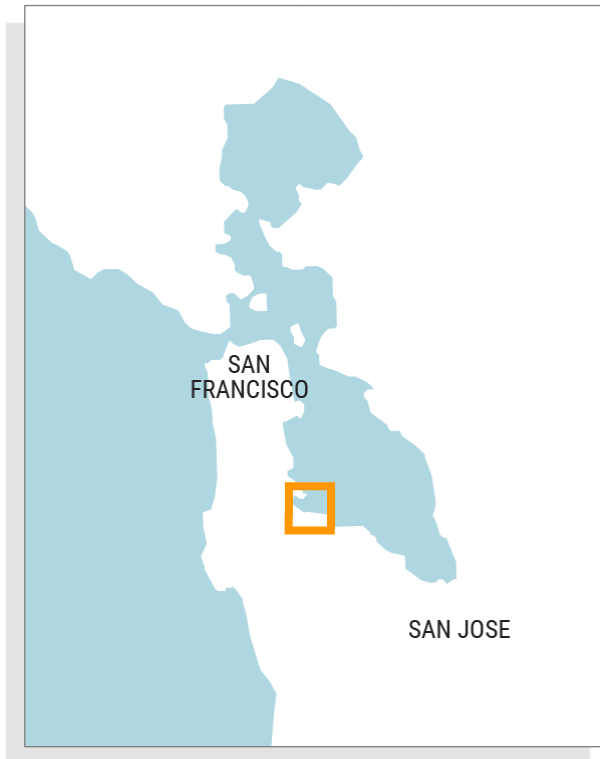
4 weekend closures (10:00 pm
Friday- 5:00 am Monday)
during **summer and fall of 2023**
using Cut & Cover Method.

VS.



Several closures **spanning 3**
years using Traditional
Construction Method.

Traffic Considerations



- Current traffic volume along U.S. 101 in this area averages 240,000 vehicles per day (Annual Average Daily Traffic*).
- There are regional effects to traffic when sections of U.S. 101 are closed.
- Holiday schedule during construction season.

*Table 2.1.7-1 in Section 2.1.7 (AADT; Caltrans 2020a).

Traffic Mitigation Measures



USE OF PORTABLE
CHANGEABLE
MESSAGE SIGNS
(PCMS)



COORDINATION
WITH NAVIGATION
APPS

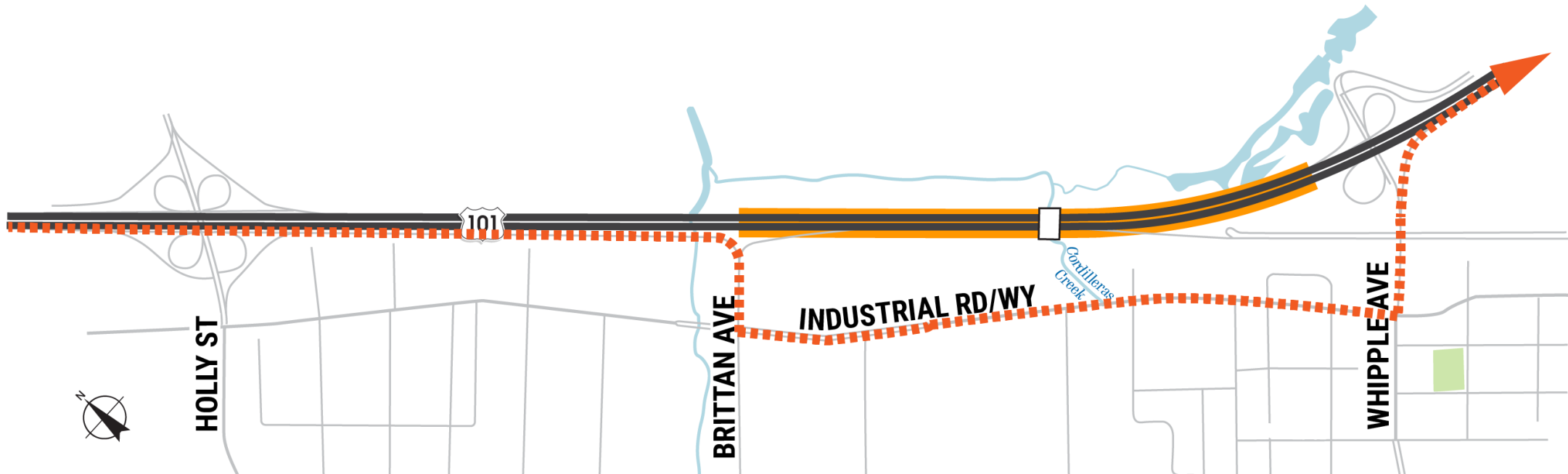


OUTREACH
TO AIRPORTS

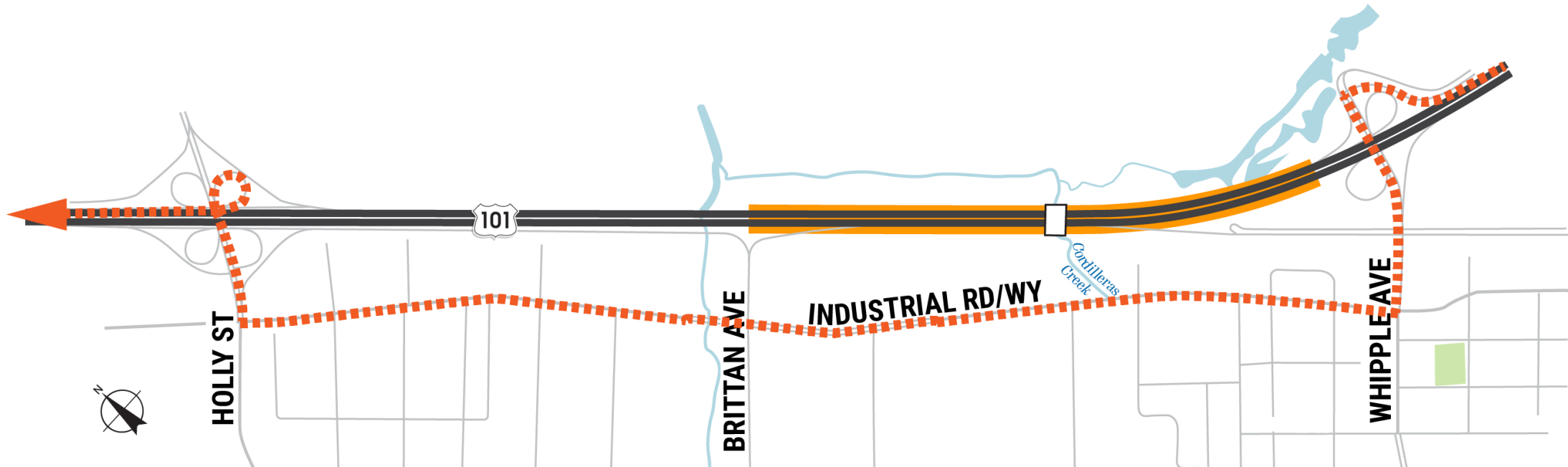


COORDINATION
WITH FOURTH OF
JULY AND LABOR DAY
EVENT ORGANIZERS

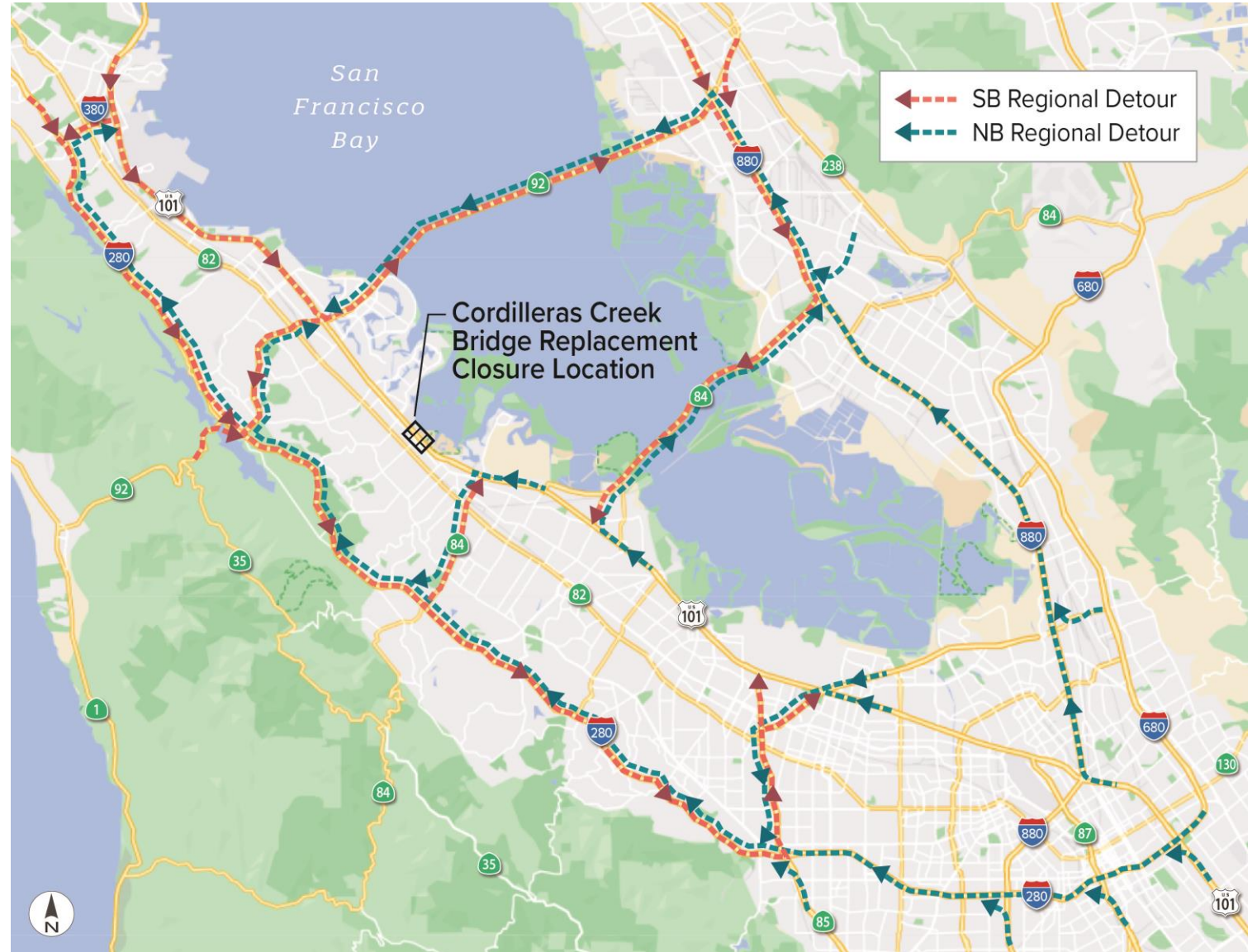
Southbound Designated Detour



Northbound Designated Detour



Regional Northbound & Southbound Alternate Routes

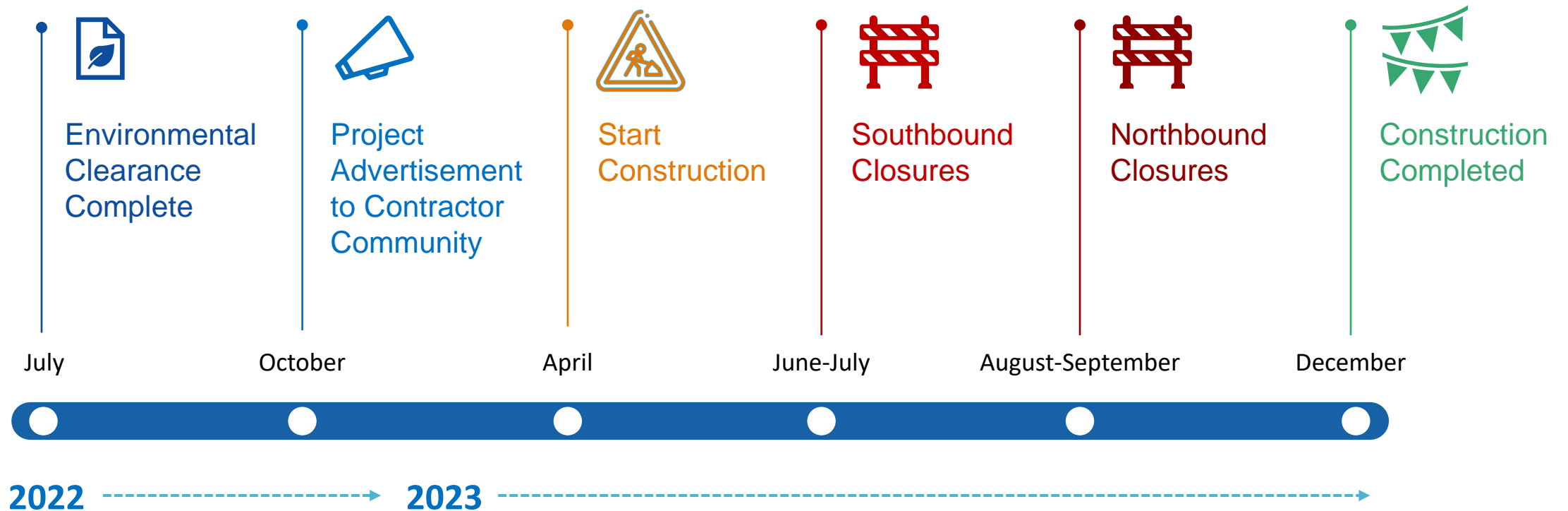


Outreach Efforts

- **City/County Engineers Association:** Presentation to Board – 3/16
- **SFO and San Carlos Airports:** Presentation to key staff – 3/23
- **CHP:** Presentation to key staff – 3/23
- **SMCTA:** Presentation to Board – 4/6
- **C/CAG:** Presentation to Board – 4/13
- **San Mateo Chamber of Commerce:** Outreach partnership
- **Redwood City:** Coordination with staff & neighborhood associations
- **San Carlos:** Coordination with staff
- **Project website and factsheet:** CordillerasBridgeReplacement.com

NEXT STEPS

PROJECT MILESTONES





Thank You

CordillerasBridgeReplacement.com

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