



Sunnyvale

Mary Avenue Caltrain Grade Separation Feasibility Study

Public Meeting
June 8, 2022
6:00 pm



Meeting Purpose

Mary Avenue Grade Separation at Caltrain Corridor

- ◆ Provide Update
- ◆ Obtain Input
- ◆ Provide Recommendation to City Council





Sunnyvale

Agenda

1. Welcome and Introductions
2. Project Background
3. Project Details
4. Questions and Answers
5. Adjourn

Panel Members



Eileen Goodwin
Apex Strategies



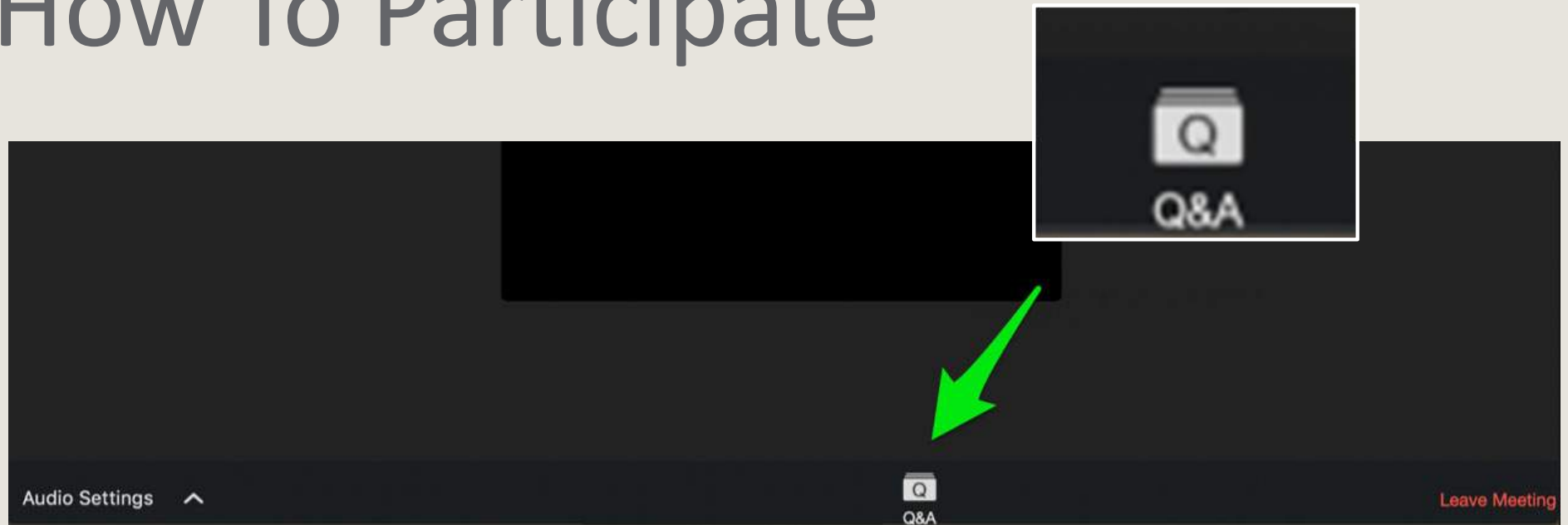
Angela Obeso
City of Sunnyvale



Natalina Bernardi
BKF Engineers

For Question and Answers:
Dennis Ng
City of Sunnyvale

How To Participate



Meeting Information

City of Sunnyvale Grade Separation Projects

- ♦ Mary Avenue – June 8, 2022 Meeting
- ♦ Sunnyvale Avenue – June 9, 2022 Meeting

Obtain Community Input

- ♦ Community Meetings
- ♦ On-line Survey
- ♦ Project Website





Definitions

Definitions

At-grade Railroad Crossing



Definitions

Grade Separated Crossing

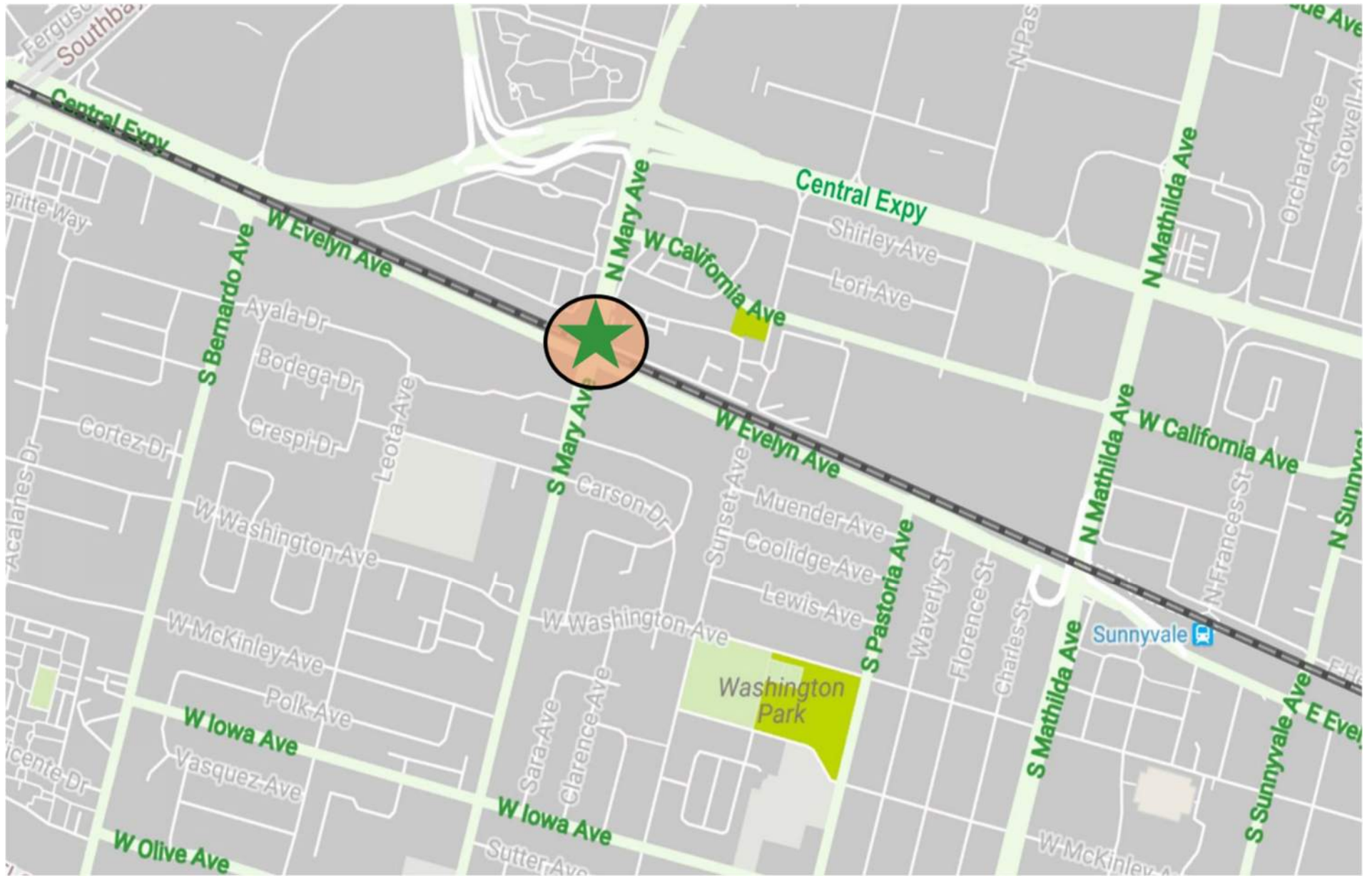




Sunnyvale

Project Background

Project Location

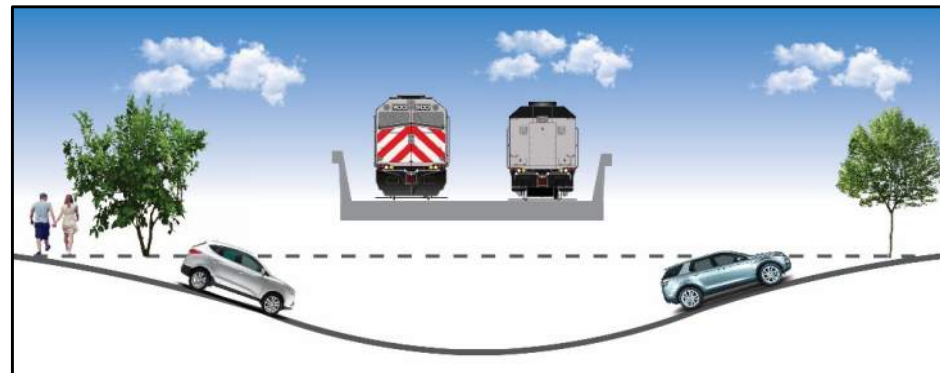
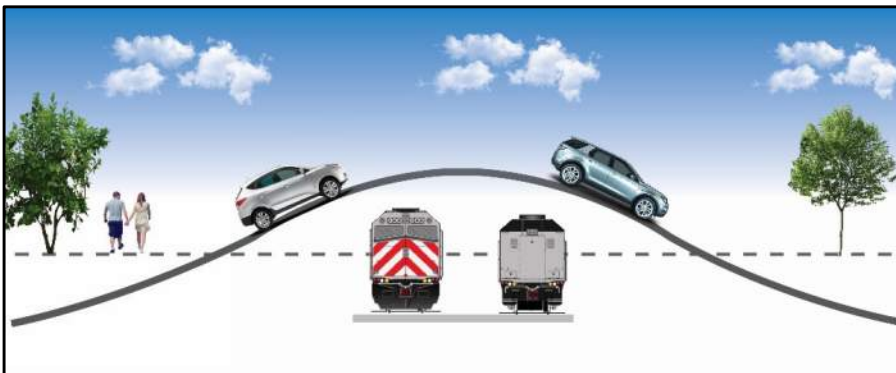
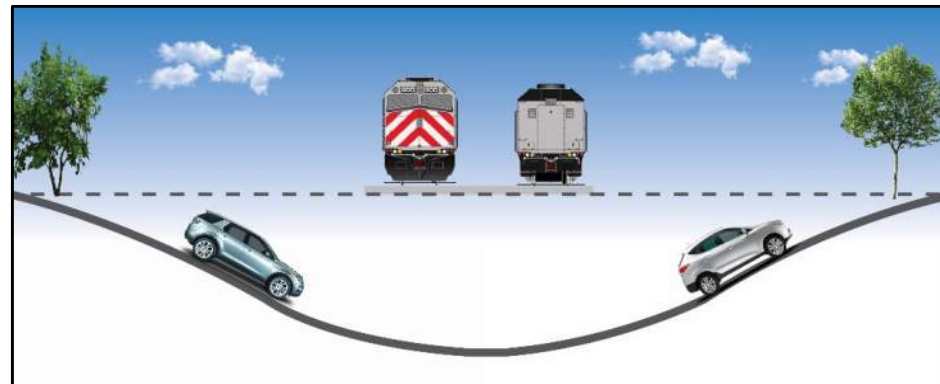


Project Background

- ◆ Mary Avenue Grade Separation at Caltrain Corridor
- ◆ Feasibility Study Initiated in 2017
- ◆ Investigated and Assessed Alternatives
- ◆ Public Outreach
- ◆ Identify Alternatives for Environmental Phase and Secure Funding
- ◆ COVID Delay
- ◆ Complete Study in 2022

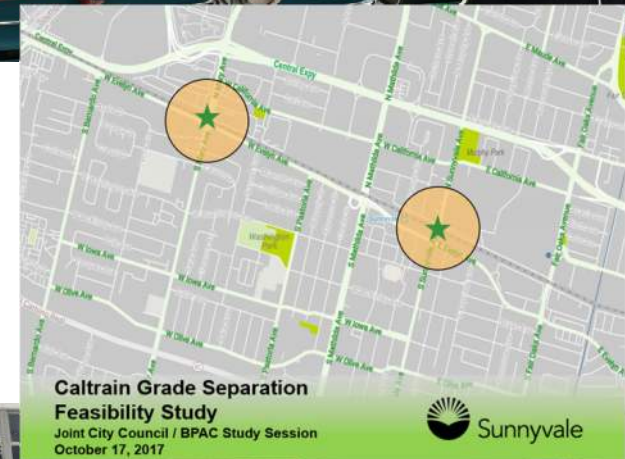


Initial Screening Alternatives



Community Outreach & Public Meetings

- Project Webpage
- Business Outreach Meetings
- 8/10/2017 Mary Avenue Community Meeting (100 participants)
- 8/17/2017 Bicycle and Pedestrian Advisory Commission Meeting
- 8/22/2017 Mary Avenue Expressions Complex Meeting
- 9/2017 Mary Avenue Online Survey (128 responses)
- 10/17/2017 City Council and BPAC Joint Meeting
- 1/23/2018 City Council Meeting



Community Outreach / Public Meetings - 2022

On-going Stakeholder Outreach Activities

City Council Study Session 4/5/22

Mary Avenue Community Meeting 6/8/22

Sunnyvale Avenue Community Meeting 6/9/22

Online Survey 6/13-7/11/22

Bicycle and Pedestrian Advisory Commission Meeting 7/21/22

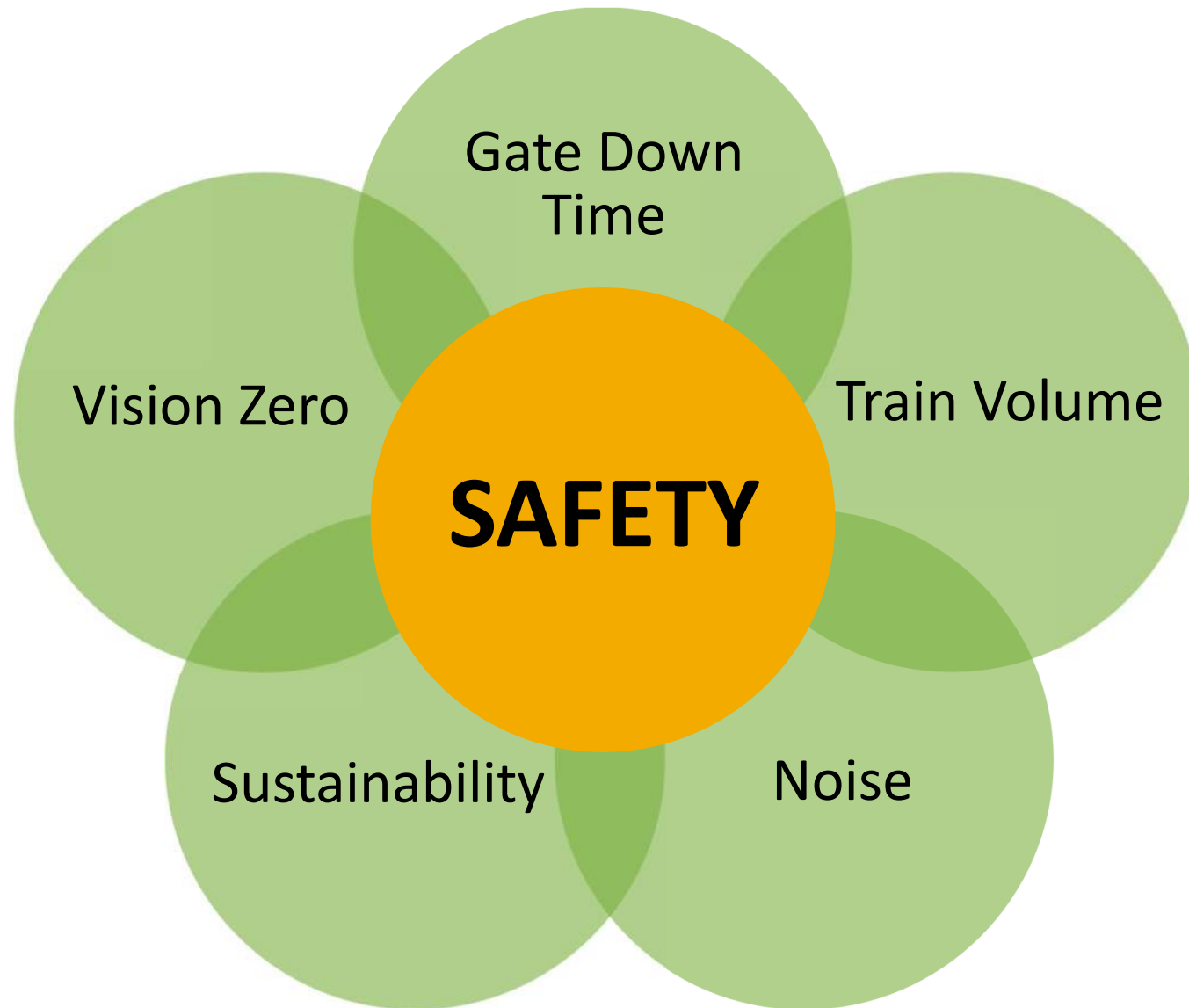
***8/30/22 City Council Public Hearing
Summary of Input and Selection of Alternatives***



Sunnyvale

Project Purpose

Project Purpose



Why is Grade Separation Needed?

HOW MANY TRAINS PER DAY?



Source: Caltrain Business Plan, City of Sunnyvale Booklet, May 2019

Why is Grade Separation Needed?

CROSSING THE TRACKS

Gate down times shown are indicative projections extrapolated from existing crossing performance. They are examples of "worst case" gate downtimes that could occur if no grade separations or grade crossing improvements were made. The financial component of the Caltrain Business Plan is planning for substantial investments in grade separation and crossing improvements across all scenarios.

 Existing Crossings	 Peak Hour Auto Crossings	 Collisions (2008-2018)	 Crossing Gate Downtime (Assuming No Improvements) (min/peak hr)			
	Existing	Existing	Existing	Baseline Growth	Moderate Growth	High Growth
N Mary Ave 	2,290	4	0:07	+74%	+114%	+179%
Sunnyvale Ave 	950	1	0:11	+30%	+92%	+120%

The City of Sunnyvale is studying the separation / elimination of existing at-grade crossings at Mary Ave and Sunnyvale Ave. When implemented these projects would improve safety and eliminate gate downtime delay. The Business Plan is analyzing and incorporating costs associated with these projects.

Source: Caltrain Business Plan, City of Sunnyvale Booklet, May 2019



Project Today

Project Today

- ◆ Move Forward with City Council Direction
- ◆ Refinement of Alternatives
- ◆ Confirm Impacts
- ◆ Considerations
 - Caltrain Modernization and Electrification Project
 - Caltrain Business Plan
 - California High Speed Rail
 - Changing Traffic Conditions
 - Sustainable Traffic Modes
 - Capture Funding Opportunities



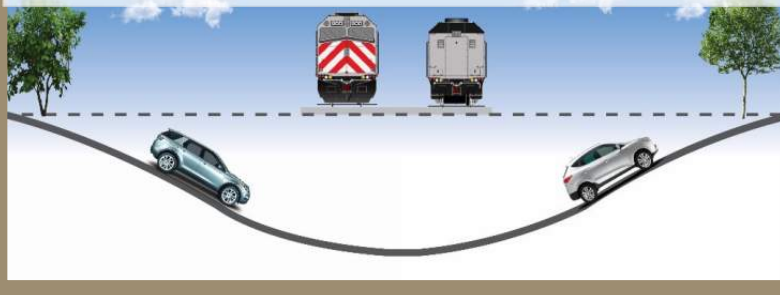


Sunnyvale

Current Alternatives

Mary Avenue Alternatives

Underpass or Underpass w Jughandle



X Overpass



X Depressed Rail



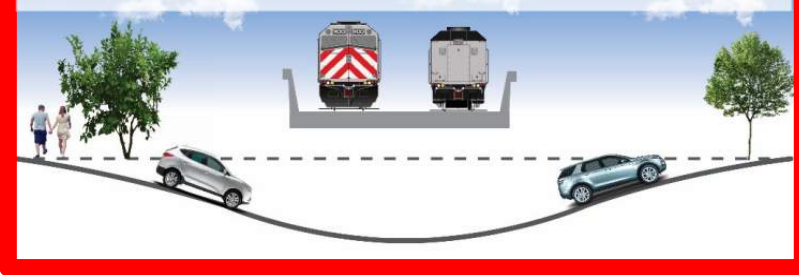
X Elevated Rail



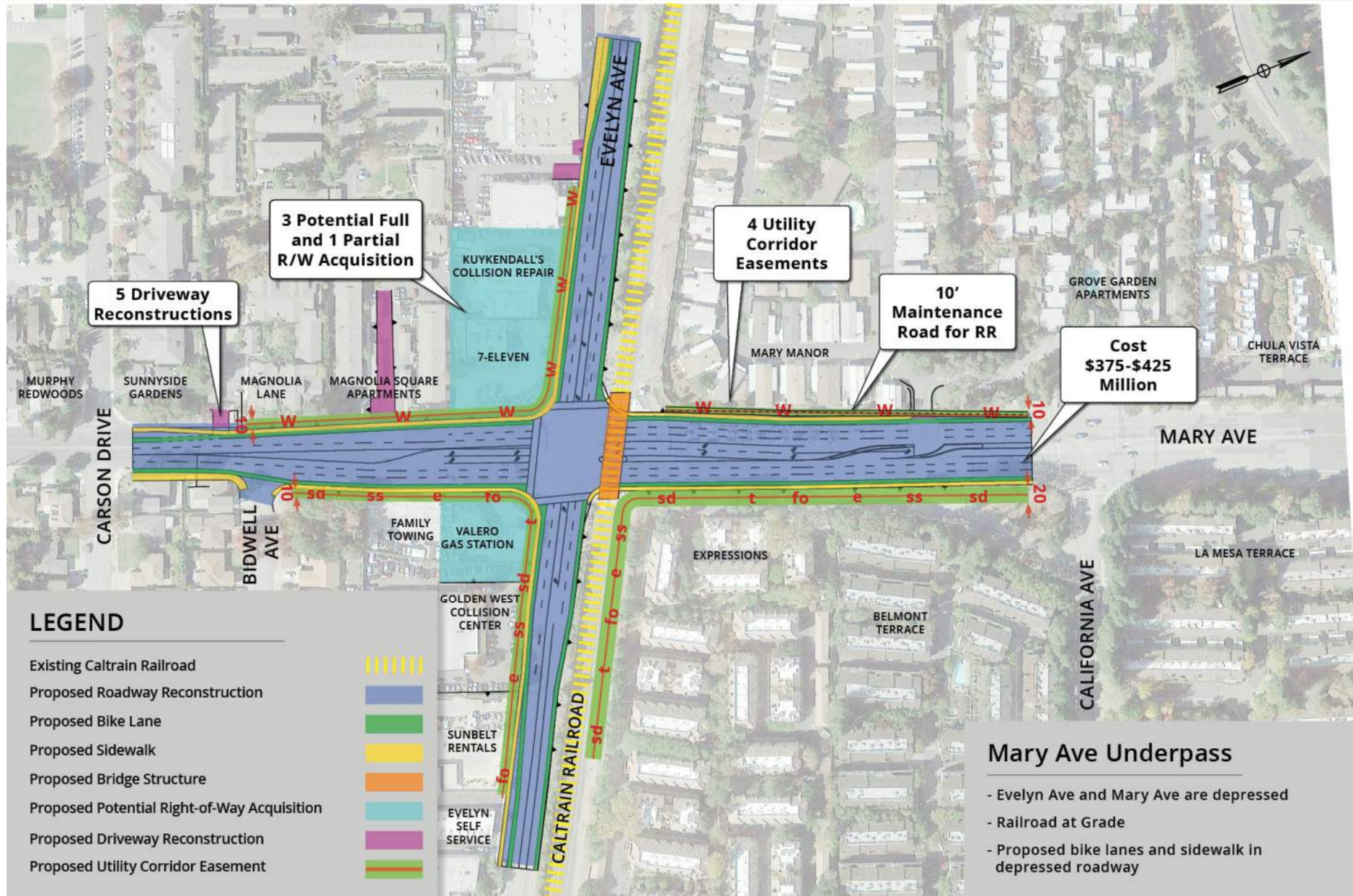
X Split Overpass



X Split Underpass



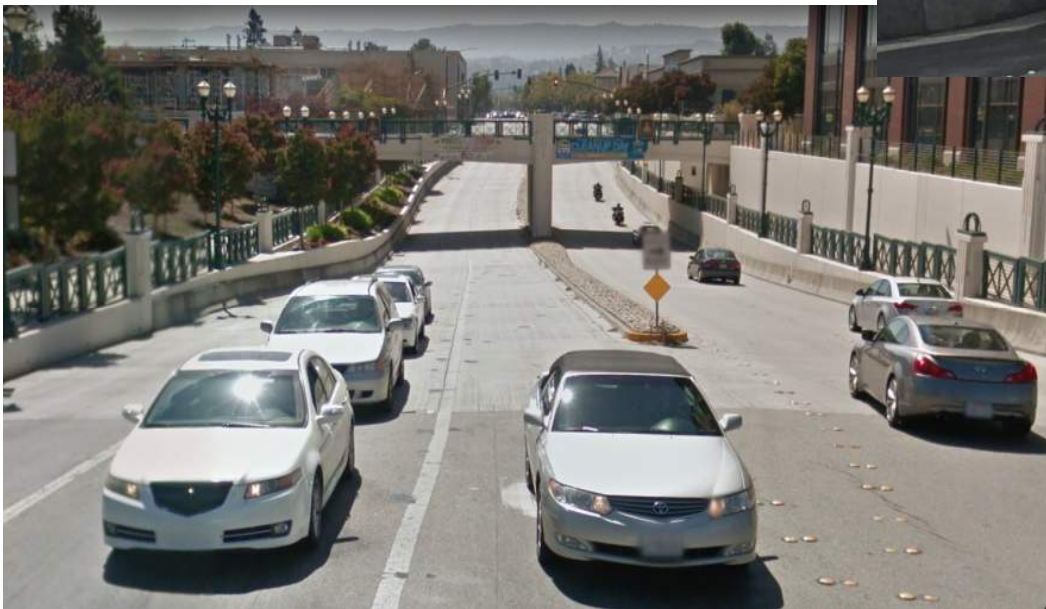
Mary Avenue Underpass



Roadway Underpass

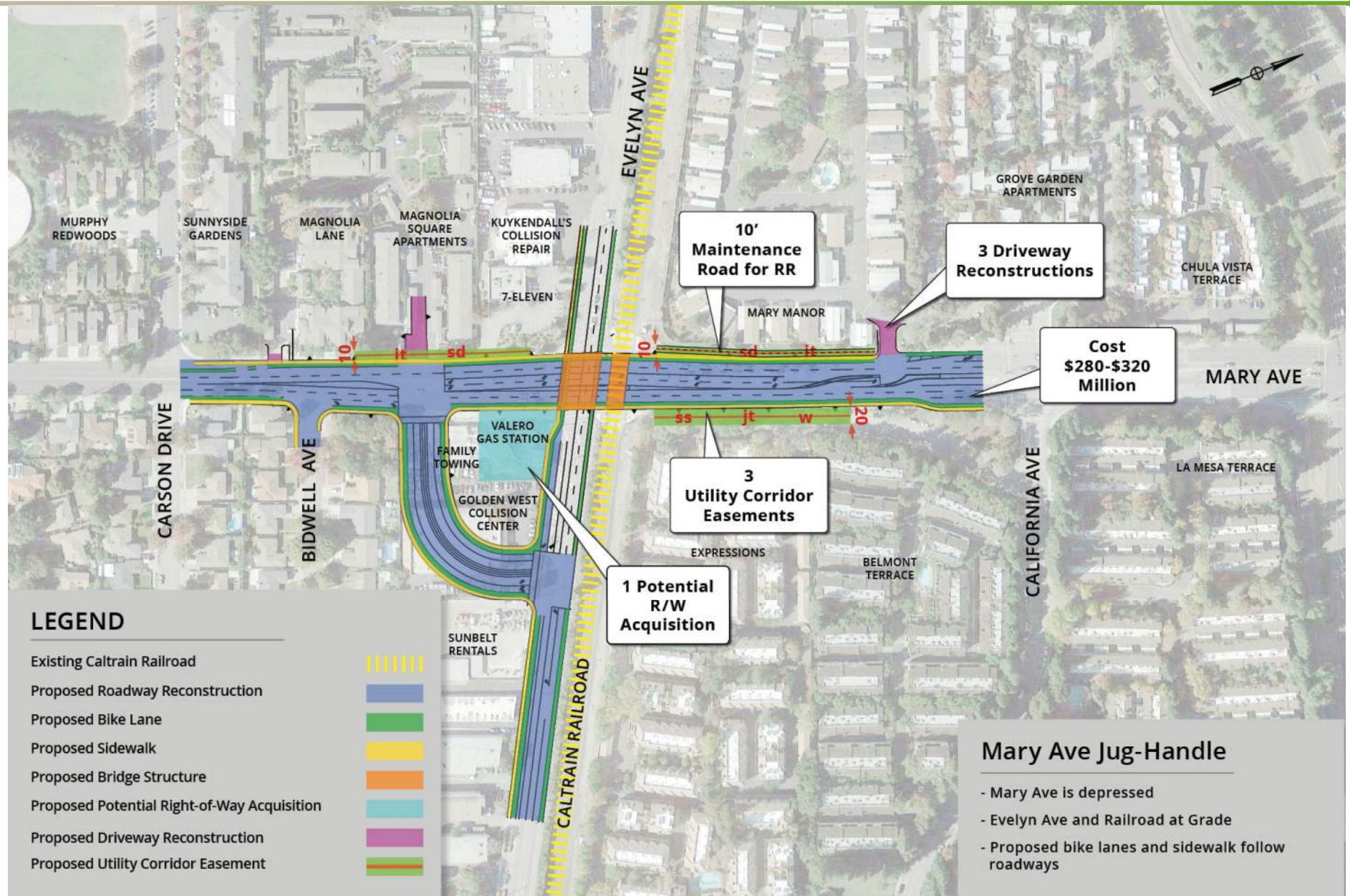


Marina Bay Parkway, Richmond (BKF)

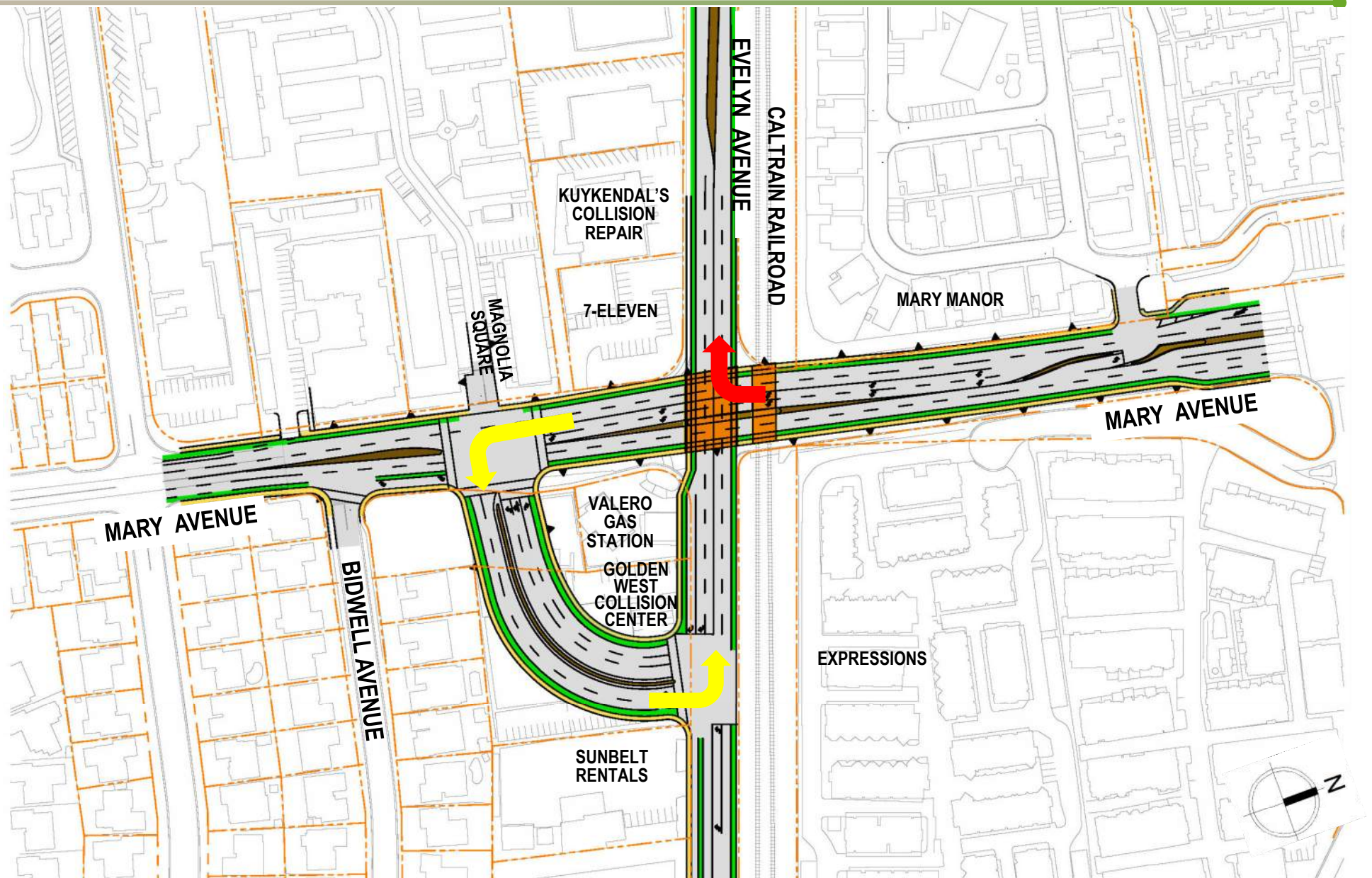


Jefferson Avenue, Redwood City (Google Maps)

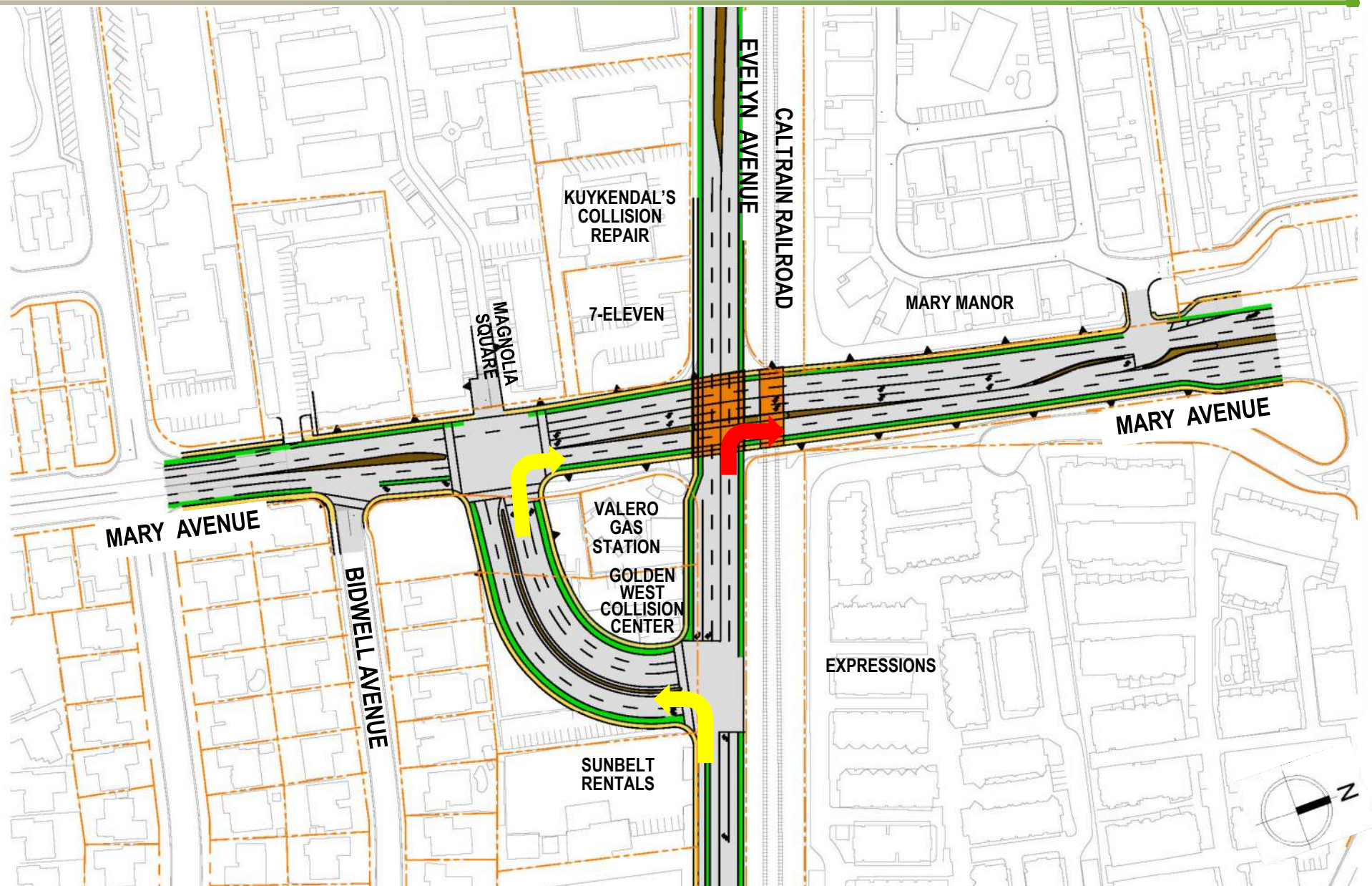
Mary Avenue Underpass Tunnel with Jughandle



Mary Avenue Underpass Tunnel with Jughandle



Mary Avenue Underpass Tunnel with Jughandle

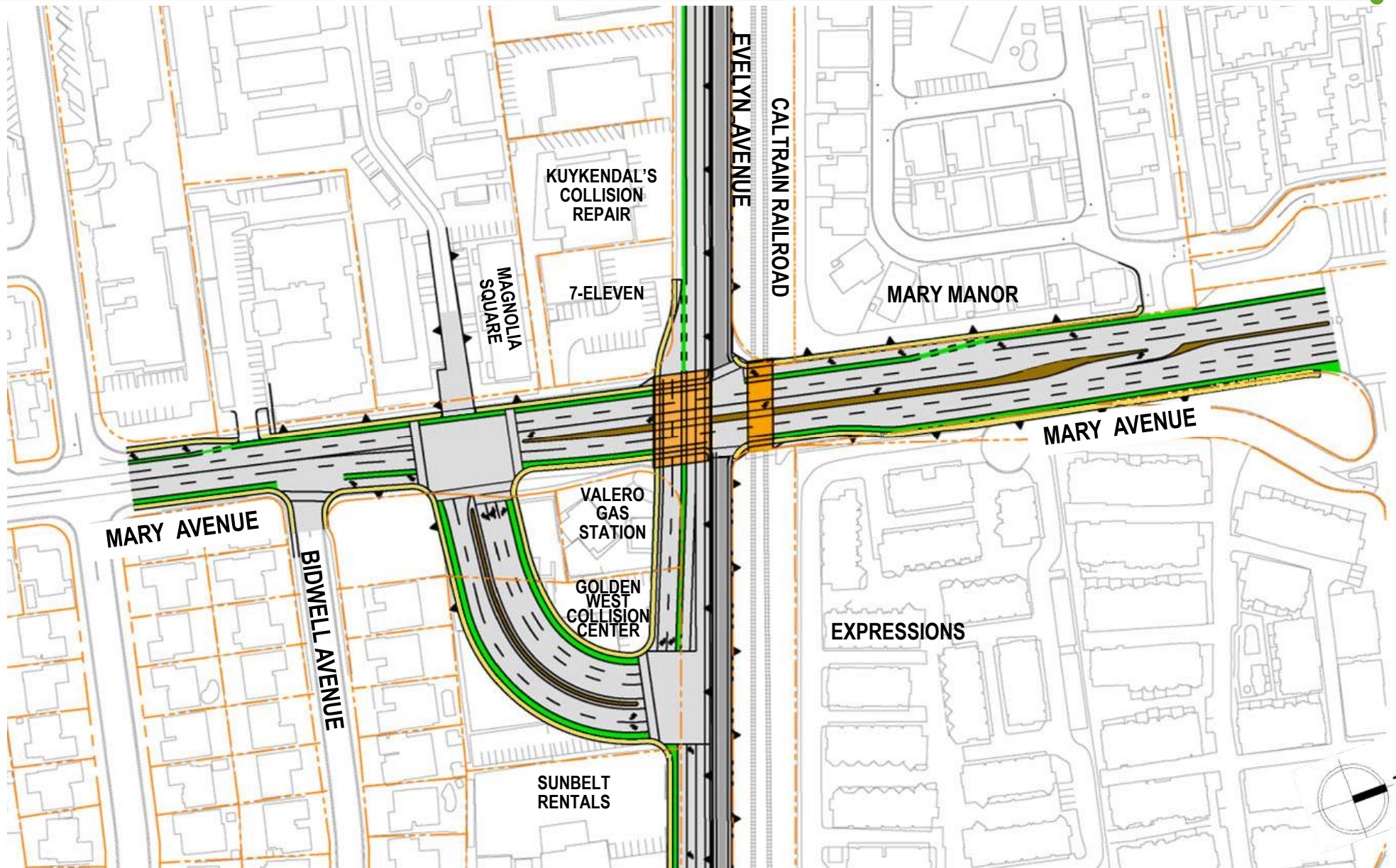


Mary Avenue Underpass Tunnel with Jughandle

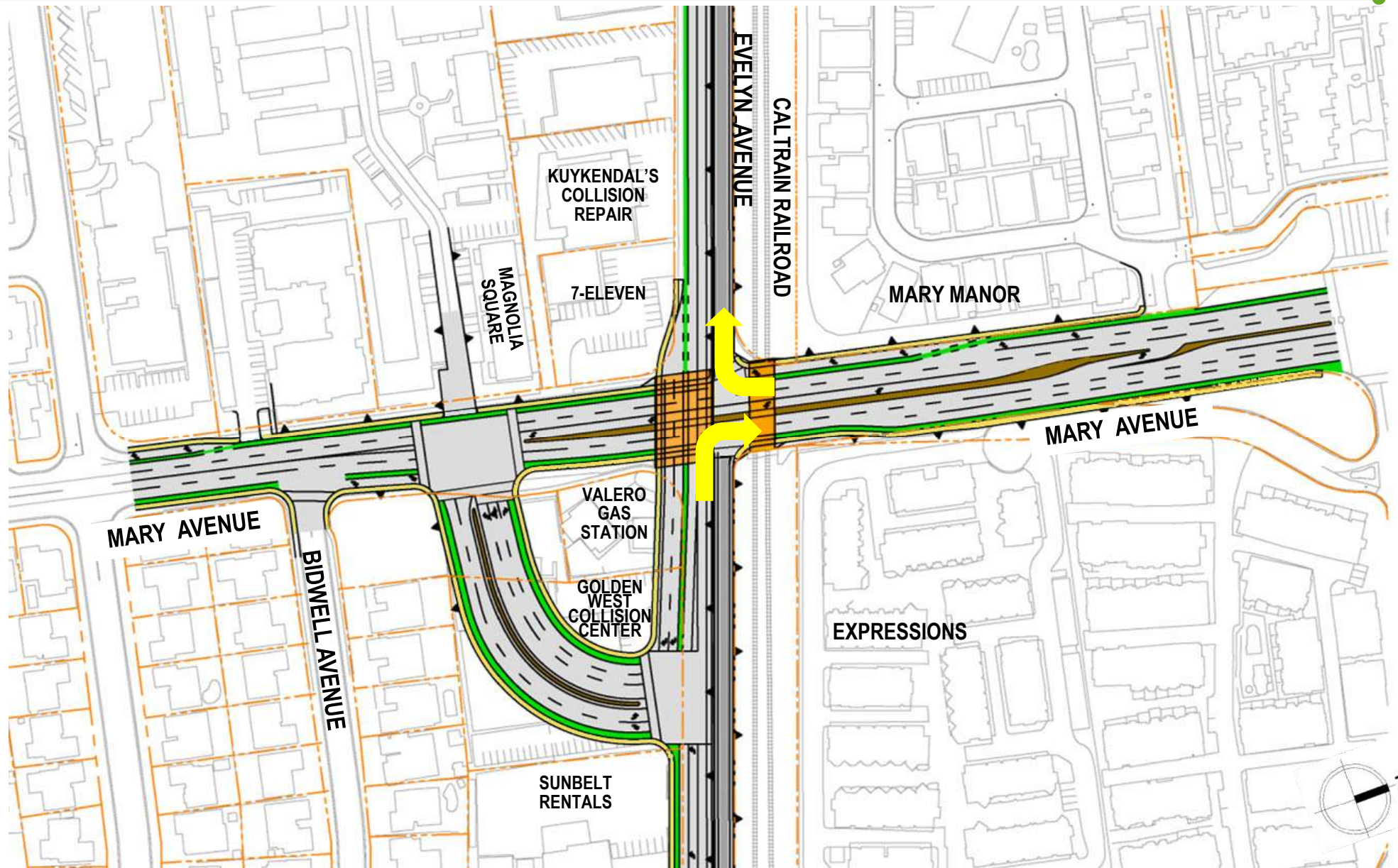


Simulation

Mary Avenue Underpass Tunnel with Jughandle with Ramps



Mary Avenue Underpass Tunnel with Jughandle with Ramps



Alternative Comparison



	Underpass Mary Ave and Evelyn Ave Depressed	Underpass Tunnel with Jughandle Mary Ave Depressed
Safety	Rail conflict removed	Rail conflict removed
Noise	Reduced noise impacts	Reduced noise impacts
Circulation - Vehicular	Same circulation pattern	Altered circulation patterns
Circulation – Non-motorized	Improved & safer facilities	Improved & safer with altered circulation
Potential ROW	3+ full and 1+ partial parcel	1+ full parcel
Construction Impacts	5+ driveways 4 utility corridors RR maintenance road Roadway reconstruction Stage Construction	3+ driveways 3 utility corridors RR maintenance road Roadway reconstruction Stage Construction
Cost	\$375M - \$425M	\$280M - \$320M



Funding

Funding Opportunities

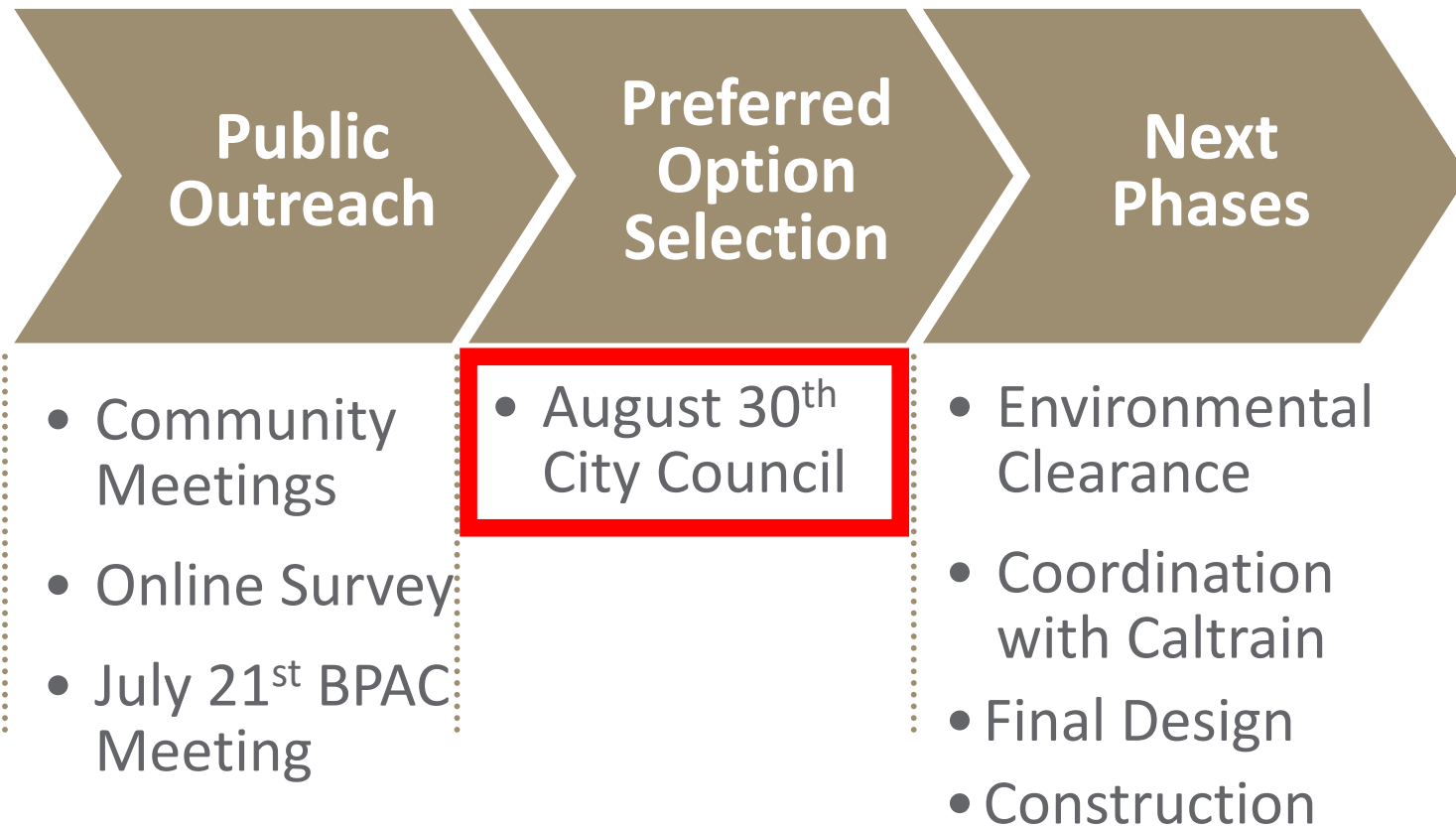
- VTA 2016 Measure B Grade Separation Program
- California Section 190 Grade Separation Prioritization Program
- One Bay Area Grant (OBAG)
- Federal Funding Opportunities





Next Steps

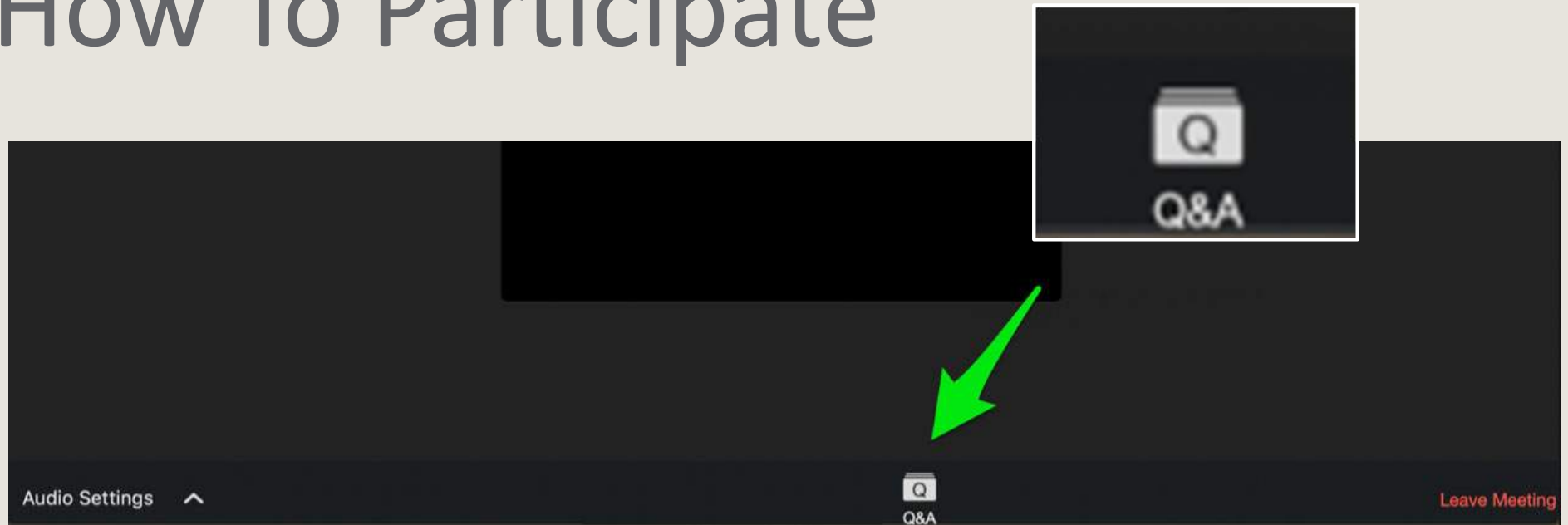
Next Steps



Overall Schedule and Process



How To Participate





Sunnyvale

Questions

Website:

Sunnyvale.ca.gov

Search: Caltrain Grade Separation

Information

Website



Sunnyvale.ca.gov
Search: Caltrain Grade Separation

Input



On-line Open House and Survey
Open June 13, 2022 through July 11, 2022

Contact



Angela Obeso, P.E.
Principal Transportation Engineer
(408) 730-7557
aobeso@sunnyvale.ca.gov



Sunnyvale

Thank you