



Sunnyvale

Caltrain Grade Separation Feasibility Study: Sunnyvale Avenue Study Issue DPW No. 14-13

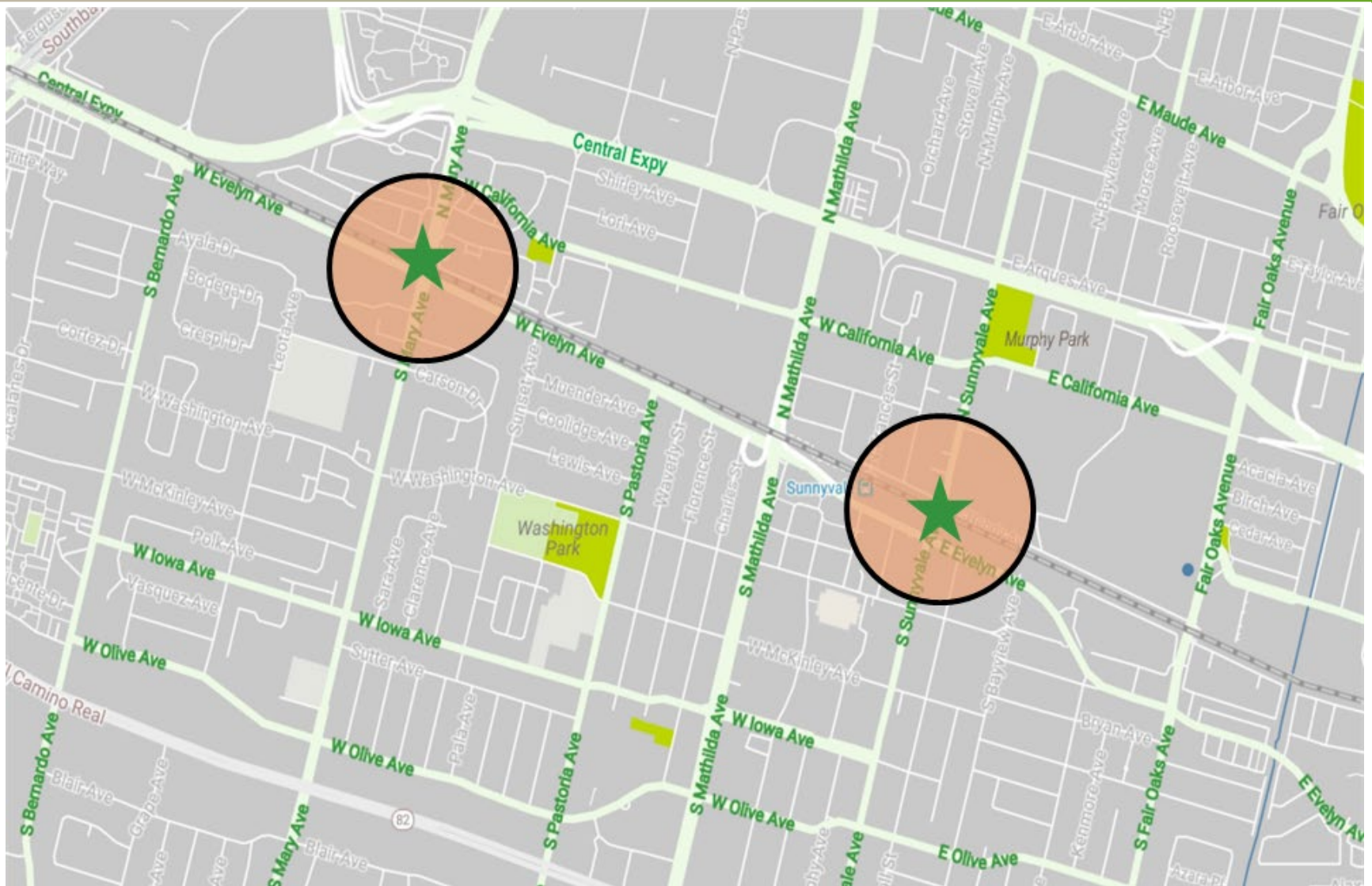
City Council Public Hearing
September 27, 2022





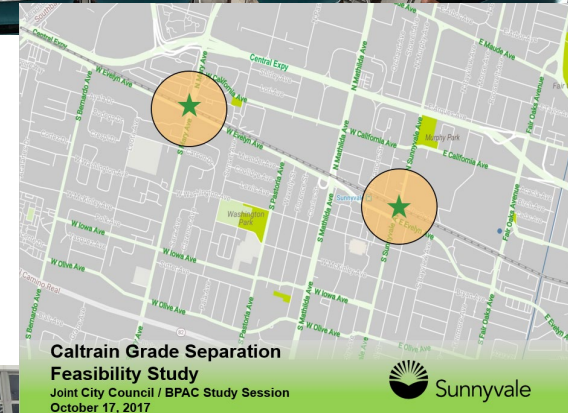
Project Background

Project Locations



Community Outreach & Public Meetings

- Email list created
- Project webpage
- On-going Business Outreach Meetings
- July 12, 2017 – Agency Stakeholder Meeting
- July 26, 2017 – Business Outreach Meeting
- Aug. 10, 2017 - Mary Avenue Community Meeting (100 participants)
- Aug. 17, 2017 - Bicycle and Pedestrian Advisory Commission Meeting
- Aug. 22, 2017 - Mary Avenue Expressions Complex Meeting
- Aug. 24, 2017 - Sunnyvale Avenue Community Meeting (65 participants)
- Sept. 2017 - Mary Avenue Online Survey (128 responses)
- Sept. 2017 - Sunnyvale Avenue Online Survey (77 responses)
- Sept. 6, 2017 - Sunnyvale Downtown Association Meeting
- Oct. 17, 2017 - City Council and BPAC Joint Meeting
- Jan. 23, 2018 - City Council Meeting



Community Outreach & Public Meetings, cont.

- City Council Study Session (April 5, 2022)
- City Manager's Update (May 13, 2022)
- Multiple Email blasts
- Art & Wine Festival booth (June 4-5, 2022)
- Multiple NextDoor posts
- Multiple Facebook posts
- Horizon article (Summer 2022)
- Mary Avenue Community Meeting (June 8, 2022)
- Sunnyvale Avenue Community Meeting (June 9, 2022)
- Survey from June 13 to July 31, 2022 (462 responses)
- Downtown Association Board
- Chamber of Commerce Policy and Business Committee
- Chamber of Commerce Board
- Agency Stakeholder Meetings
- Direct emails, letters and meetings:
 - ◆ Local Businesses
 - ◆ Residents
 - ◆ Property Owners
 - ◆ Impacted Stakeholders
 - ◆ HOAs
 - ◆ Community Groups
 - ◆ Schools
 - ◆ Places of worship
 - ◆ VTA

Seeking Feedback on Caltrain Grade Separation Feasibility Study

The City is studying ways to separate the local roadways from the Caltrain railroad crossings at Mary and Sunnyvale avenues. These Grade Separations would improve safety by removing conflicts with trains. They would also improve bicyclist and pedestrian facilities, further increasing safety. In addition, they would decrease traffic delay and noise caused by the railroad gates.

Learn about the project and provide your feedback.





Sunnyvale

City of Sunnyvale - Caltrain Grade Separation Project Meetings

Tell us your preferred Caltrain crossing of

The City plans to lower the roadways at the Mary and Sunnyvale Avenue crossings. The road would go beneath the railroad tracks. This project separation - will:

- Improve safety for all travelers.
- Improve bicycle and pedestrian pathways, and
- Decrease traffic delay and noise caused by the railroad crossing gates.

We are studying two options for each intersection. Your input will help determine the best

Caltrain Grade Separation

Safer, More Convenient Caltrain Crossings

Crossing the Tracks: Current & Future Conditions

	Existing Conditions (2021)	Baseline Scenario (2026)	Midrange Scenario (2031)	High Scenario (2036)
Caltrain grade separation	92	174	268	348
Caltrain grade crossing	7 minutes per vehicle	12 minutes per vehicle	15 minutes per vehicle	20 minutes per vehicle

Mary Ave

Underpass

Underpass Tunnel with Jughandle

Underpass Tunnel

Project Timeline

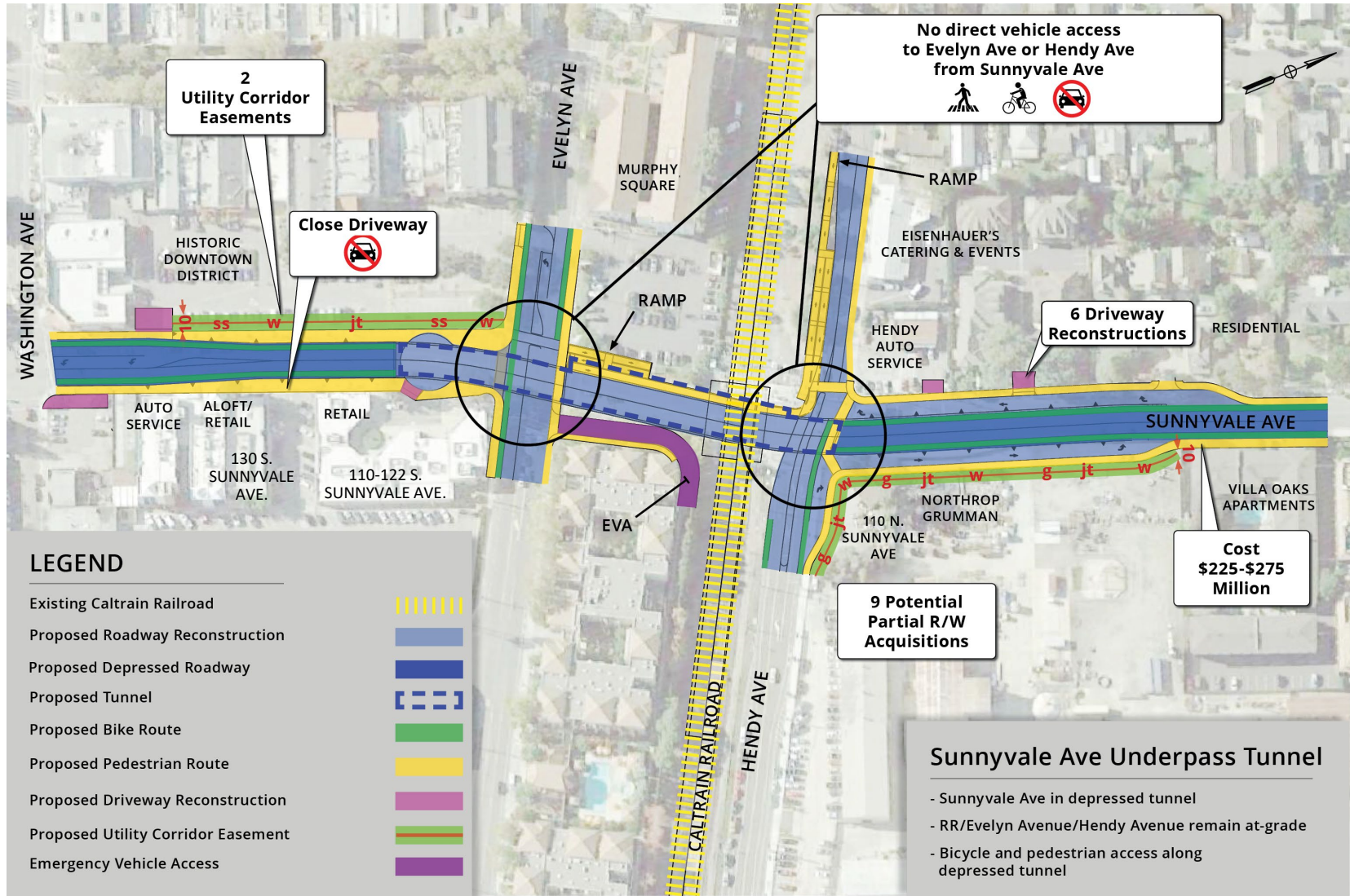
4 - Summer 2022





Sunnyvale Avenue Options

Sunnyvale Avenue Underpass Tunnel

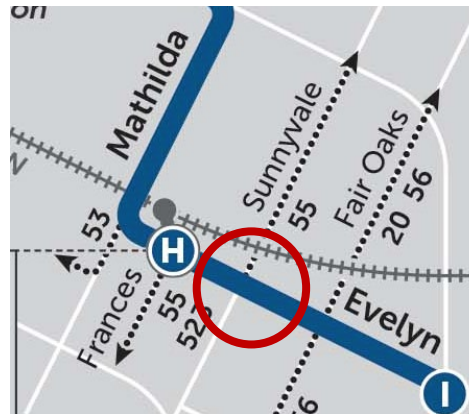


Sunnyvale Avenue Underpass Tunnel Traffic Study Summary

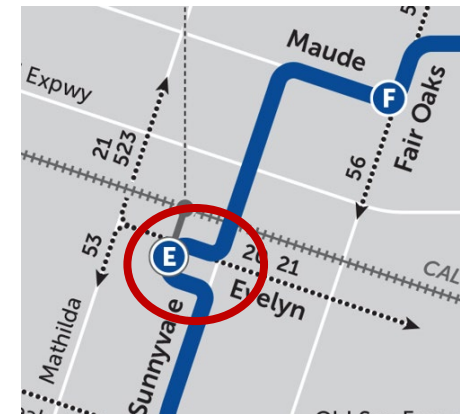
- ◆ Circulation changed from “no build”
 - Sunnyvale and Evelyn disconnected
 - Sunnyvale and Hendy partially disconnected
 - Shifts traffic onto Washington and California
- ◆ Bicycle circulation
 - Bike lanes in roadway
 - Multi-use path
- ◆ Pedestrian circulation
 - Multi-use path
 - Sidewalks at existing elevation
- ◆ Transit circulation
 - Impacts to Routes 20 and 55
 - No impacts to Route 21



VTA Bus Route 20

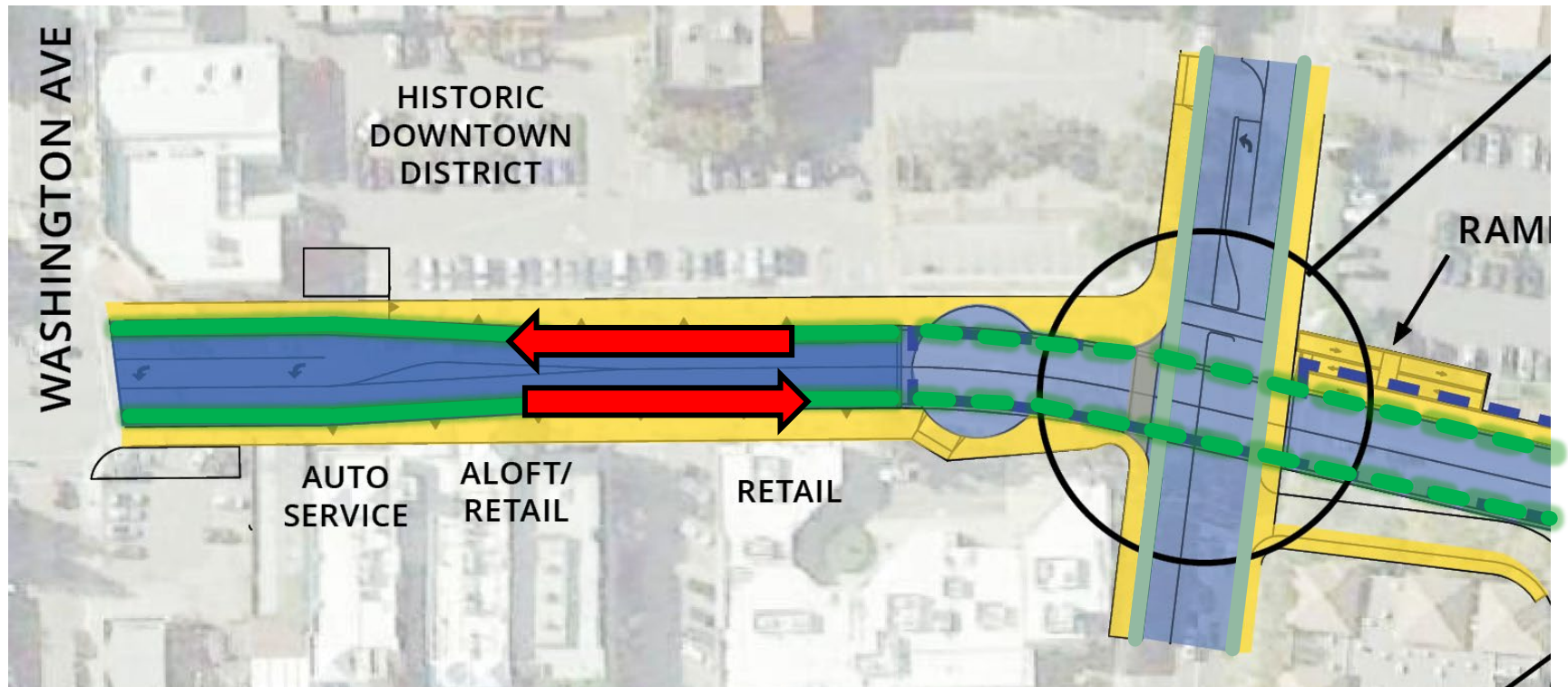


VTA Bus Route 21

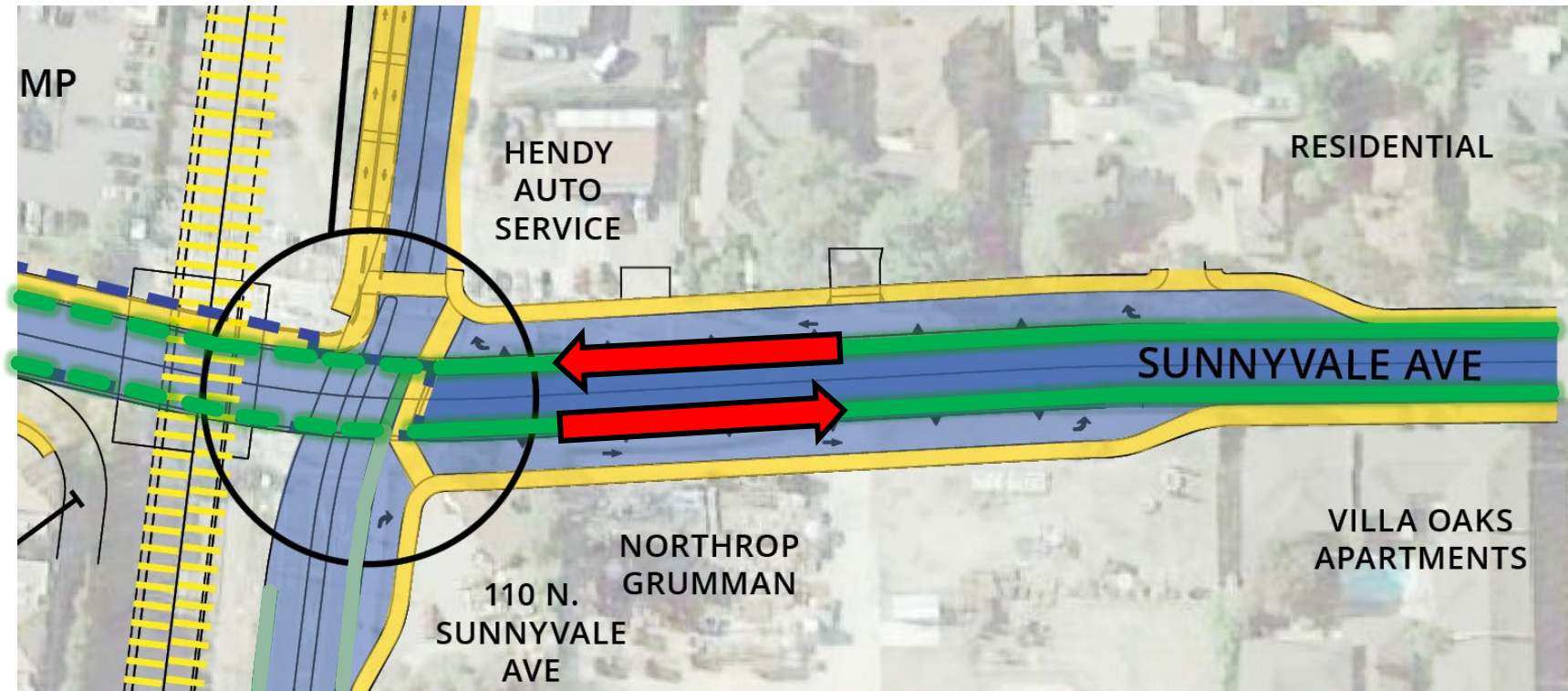


VTA Bus Route 55

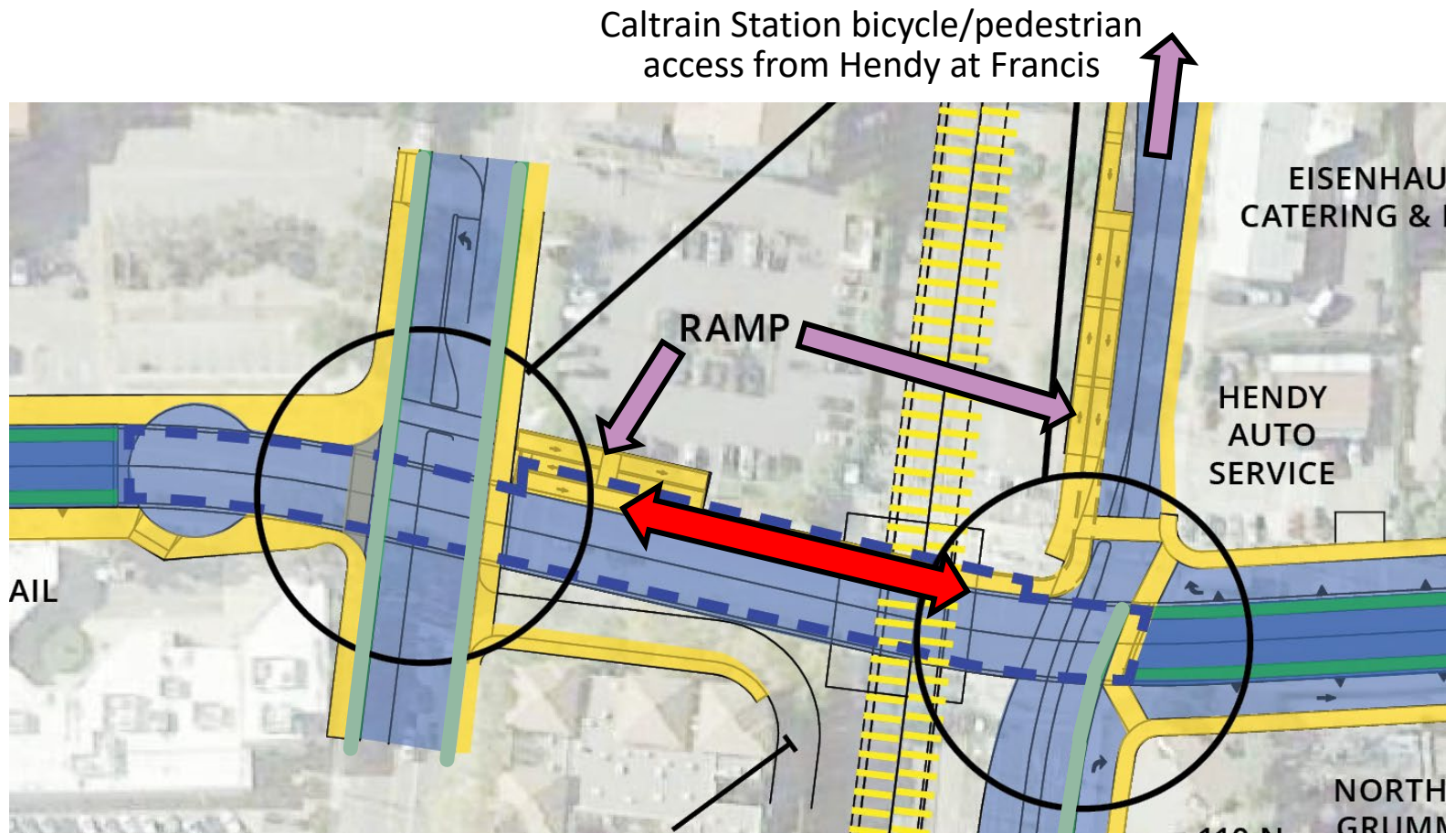
Sunnyvale Avenue Underpass Tunnel Bicycle Circulation



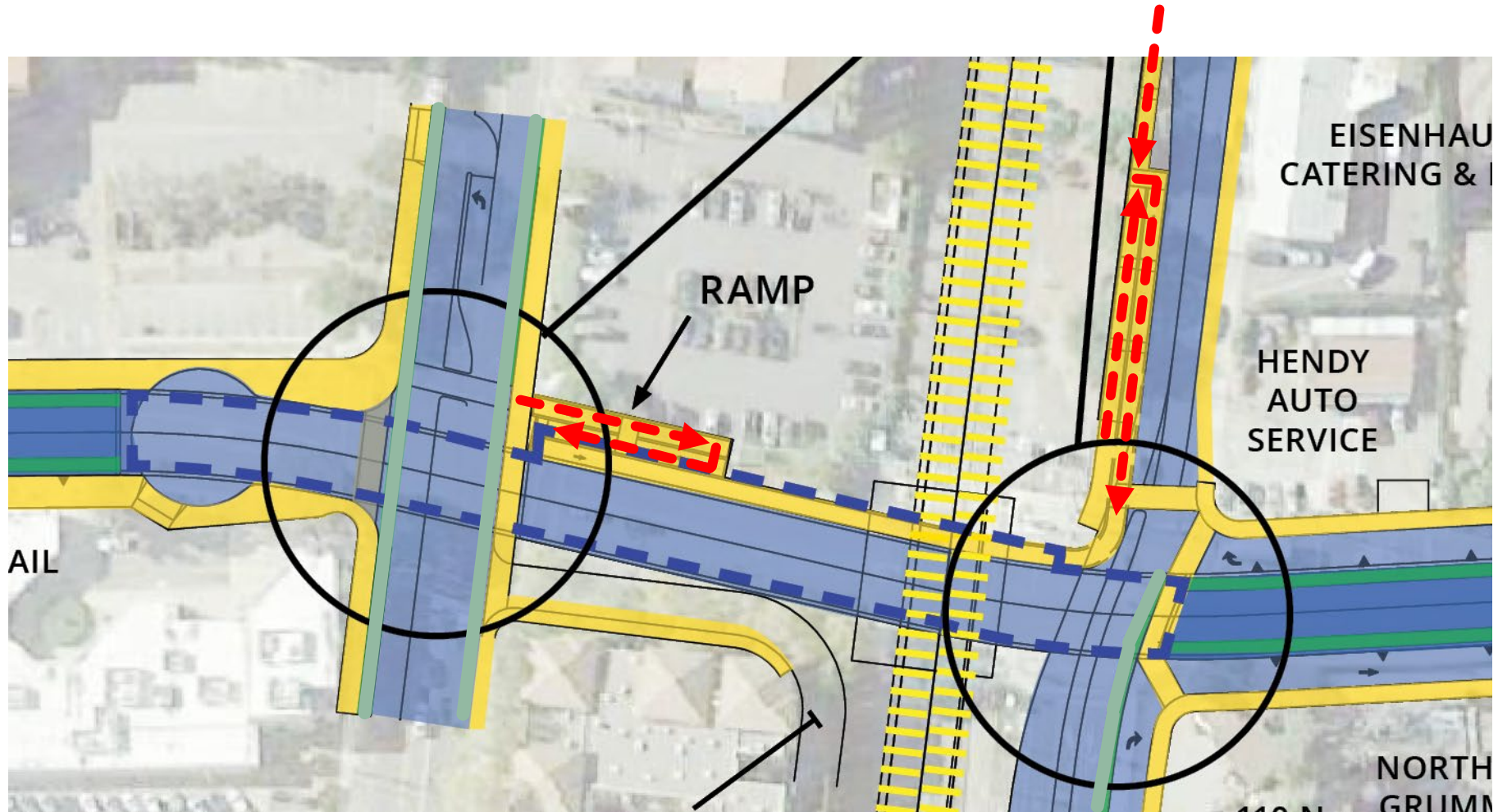
Sunnyvale Avenue Underpass Tunnel Bicycle Circulation



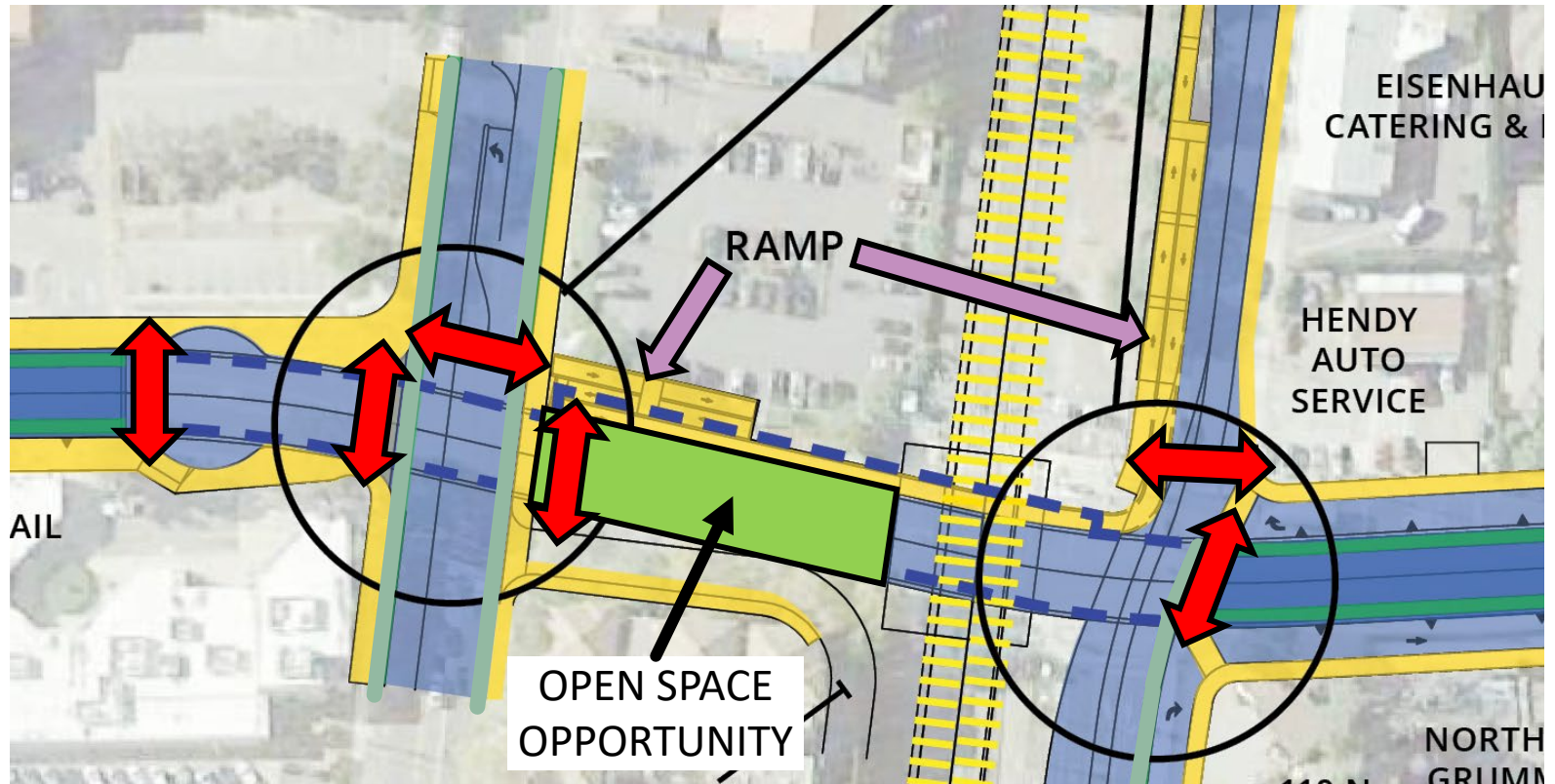
Sunnyvale Avenue Underpass Tunnel Bicycle and Pedestrian Circulation



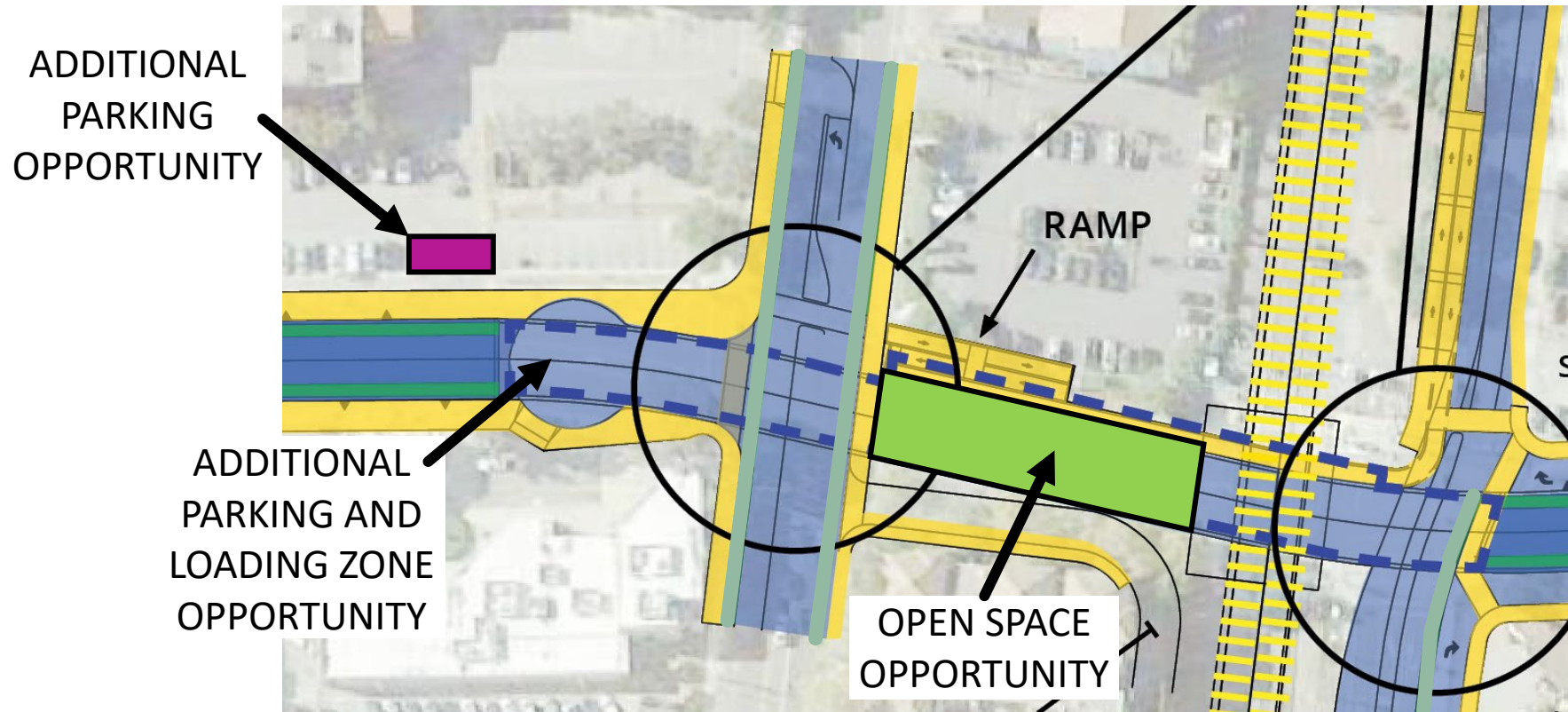
Sunnyvale Avenue Underpass Tunnel Bicycle and Pedestrian Circulation



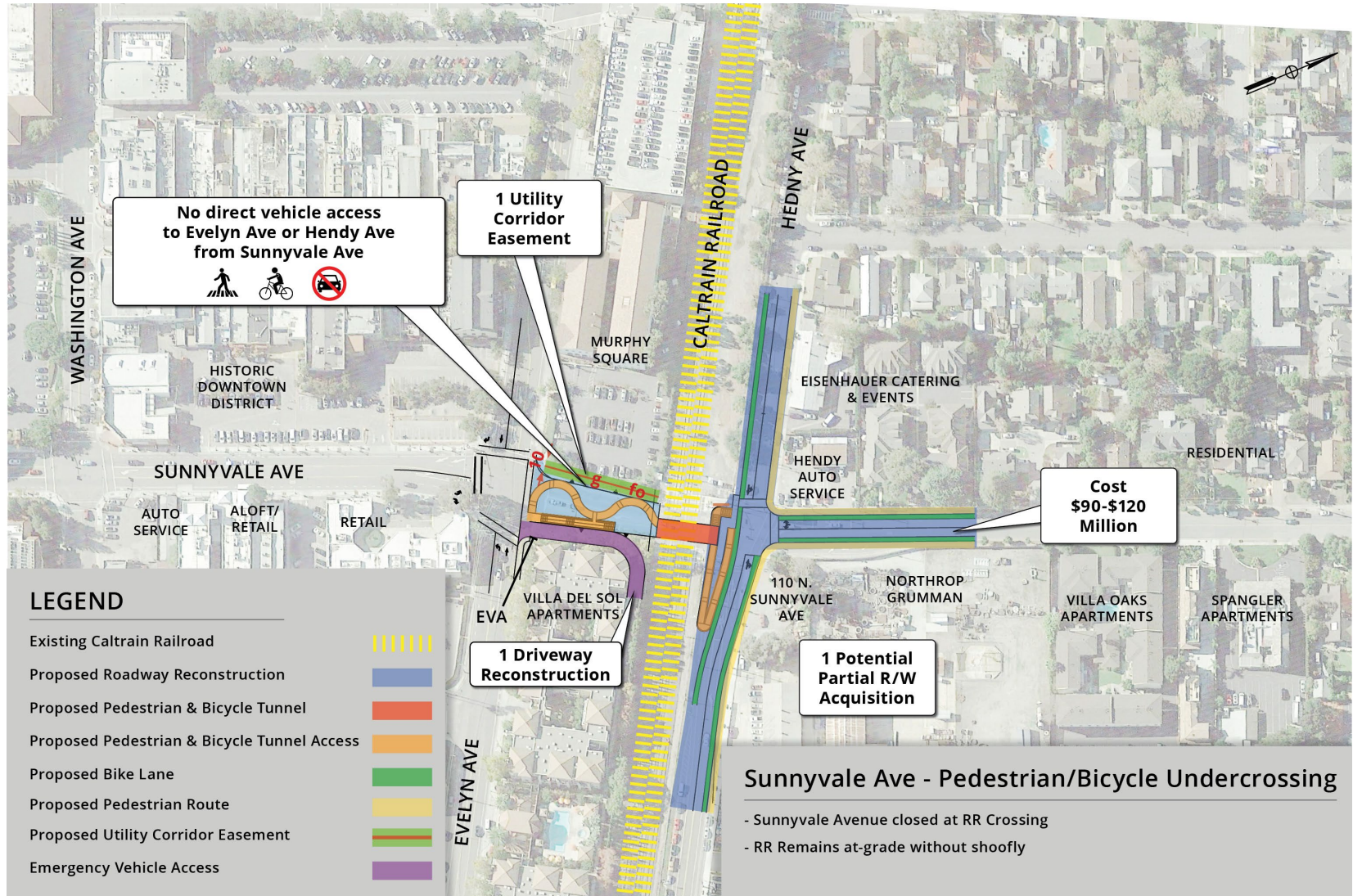
Sunnyvale Avenue Underpass Tunnel Bicycle and Pedestrian Circulation



Sunnyvale Avenue Underpass Tunnel Parking and Loading Opportunities



Sunnyvale Avenue Bicycle/Pedestrian Undercrossing

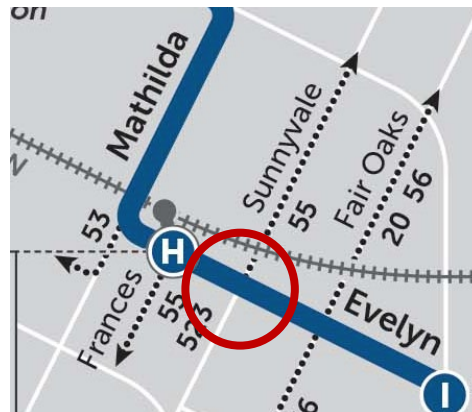


Sunnyvale Avenue Bicycle/Pedestrian Underpass Traffic Study Summary

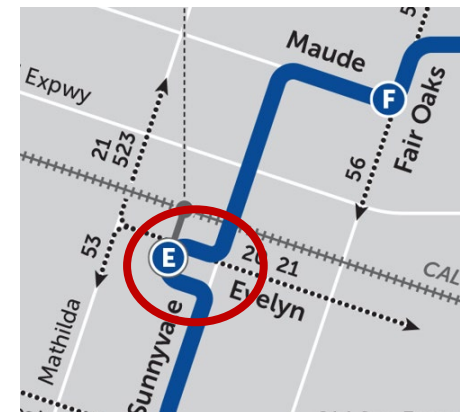
- ◆ Circulation changed from “no build”
 - T-intersections at Evelyn and Hendy
 - Sunnyvale Ave. vehicles rerouted to Mathilda or Fair Oaks
- ◆ Transit circulation
 - Impacts to Route 55
 - No impacts to Routes 20 and 21
- ◆ Bicycle and Pedestrian circulation
 - Dedicated undercrossing
 - Ramps at Evelyn and Hendy



VTA Bus Route 20



VTA Bus Route 21



VTA Bus Route 55

2035 Vehicular Traffic Volumes (AM/PM Peak Hour)

	Northbound (AM/PM)	Southbound (AM/PM)	Total (AM/PM)
Mathilda Avenue	3212 / 1358	1489 / 3317	4701 / 4675
Sunnyvale Avenue	824 / 672	650 / 1082	1474 / 1754
Fair Oaks Avenue	1824 / 1354	1113 / 1887	2937 / 3241

Mathilda Avenue vehicular delays in seconds (AM/PM peak periods)

	No Build 2035	Underpass	Bike/Ped
Mathilda/ California	<u>201.3</u> / 271.8	99.8 / 263.1	123.8 / <u>273.0</u>
Mathilda SB ramp/Evelyn	<u>446.2</u> / <u>158.2</u>	14.1 / 14.5	33.5 / 25.8
Mathilda NB ramp/Evelyn	<u>270.2</u> / <u>71.4</u>	11.6 / 26.4	12.8 / 39.8
Mathilda/ Washington	<u>270.2</u> / 71.4	159.0 / <u>72.0</u>	135.9 / 63.3

Fair Oaks Avenue vehicular delays in seconds (AM/PM peak periods)

	No Build 2035	Underpass	Bike/Ped
Fair Oaks/ California	50.0 / 129.2	35.6 / 115.7	<u>63.0 / 220.7</u>
Fair Oaks/Kifer	44.9 / 110.5	12.1 / 132.3	<u>90.5 / 314.4</u>
Fair Oaks/ Evelyn	74.8 / 82.5	95.6 / 110.7	<u>139.9 / 231.4</u>

Vehicular Travel Times in seconds – Mathilda and Fair Oaks (AM / PM peak periods)

	No Build 2035	Underpass	Bike/Ped
SB Mathilda (Indio to Washington)	<u>181</u> / 565	178 / 582	174 / <u>622</u>
NB Mathilda (McKinley to California)	367 / 161	374 / 162	<u>389</u> / <u>175</u>
SB Fair Oaks (Arques to Evelyn)	160 / 466	126 / 428	<u>291</u> / <u>660</u>
NB Fair Oaks (McKinley to California)	389 / 213	431 / 329	<u>624</u> / <u>362</u>

Sunnyvale Avenue Option Comparison

	<u>Underpass Tunnel</u>	<u>Ped/Bike Undercrossing</u>
Safety	<ul style="list-style-type: none"> Improved over “no build” 	<ul style="list-style-type: none"> Improved over “no build”
Noise	<ul style="list-style-type: none"> Decreased from “no build” 	<ul style="list-style-type: none"> Decreased from “no build”
Circulation - Vehicle	<ul style="list-style-type: none"> Reduced or similar delays Shorter travel times – Sunnyvale Shorter travel times – Mathilda Shorter travel times – Fair Oaks Potential to add parking and loading zone 	<ul style="list-style-type: none"> Increased or similar delays Longer travel times – Sunnyvale Longer travel times – Mathilda Longer travel times – Fair Oaks
Circulation – Bicycle and Pedestrian	<ul style="list-style-type: none"> Separated facility Open space opportunity At-grade connectivity 	<ul style="list-style-type: none"> Separated facility
Circulation – Transit	<ul style="list-style-type: none"> Local VTA bus rerouting 	<ul style="list-style-type: none"> Farther VTA bus rerouting
Potential Private Property Impacts	<ul style="list-style-type: none"> More property impacts 	<ul style="list-style-type: none"> Less property impacts
Construction Impacts	<ul style="list-style-type: none"> More driveway impacts – minor More utility impacts More roadway reconstruction More construction time 	<ul style="list-style-type: none"> Less driveway impacts Less utility impacts Less roadway reconstruction Less construction time
Construction Cost Estimate	<ul style="list-style-type: none"> Higher cost: \$225M - \$275M 	<ul style="list-style-type: none"> Lower cost: \$90M - \$120M

Sunnyvale Avenue – Survey Summary

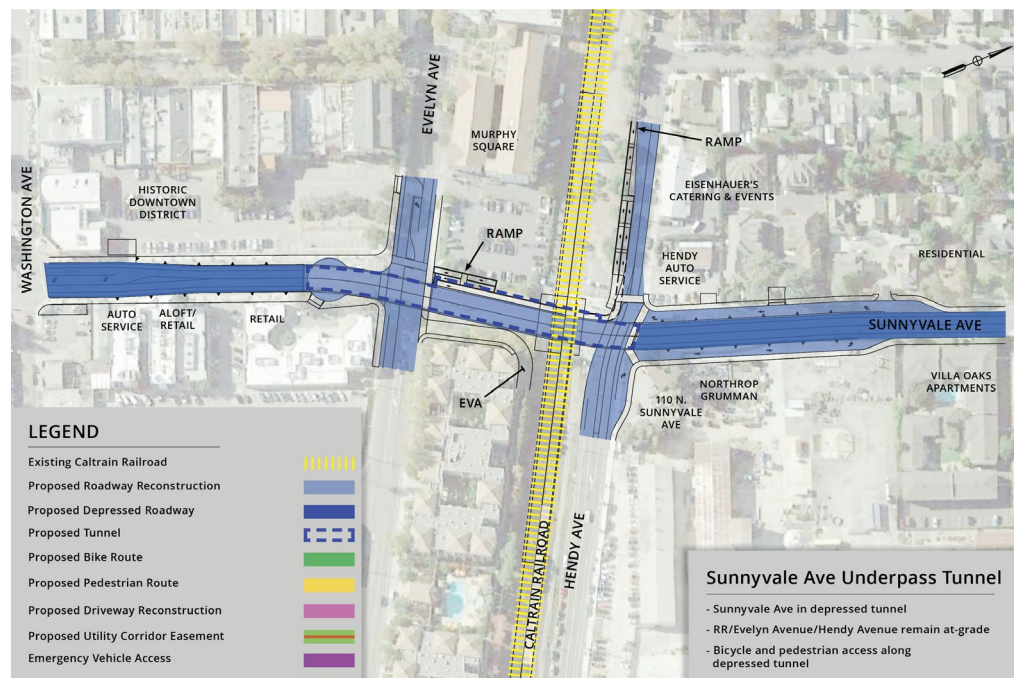
- 462 responses
- Most use local businesses (34%) or Downtown (25%)
- Most travel by car (61%) or bicycle (23%)
- Highest secondary mode is walking (42%)
- Option Preferences:
 - ♦ Bike/Ped Tunnel (56%)
 - ♦ Underpass (29%)
 - ♦ Dislike both (13%)
 - ♦ Like both equally (3%)
- Reasons for preferences:
 - ♦ Better circulation for bikes
 - ♦ Safest
 - ♦ Better circulation for vehicles
 - ♦ Lower cost
 - ♦ Better circulation for pedestrians
 - ♦ Less property impacts
 - ♦ Less private property and construction impacts
- Comments
 - ♦ Bike/pedestrian friendly
 - ♦ Access for those who must drive
 - ♦ Transit rerouting
 - ♦ Downtown connectivity
 - ♦ Security in tunnels
 - ♦ Construction impacts

Sunnyvale Avenue – Community Feedback

- Bicyclists and Pedestrians
 - ◆ Most prefer Bicycle and Pedestrian Only Tunnel
 - ◆ For Underpass, prefer separated bike lanes
 - ◆ Interest in creating direct connections
- Businesses
 - ◆ Some prefer Bike/Ped Tunnel – less property impacts
 - ◆ Some prefer Underpass Tunnel – maintain vehicle access
 - ◆ Concerns about construction duration and impacts, accessibility into their businesses
 - ◆ Concerns about connectivity between east and west of Sunnyvale Ave.
- Sunnyvale Downtown Association
 - ◆ Opposed to Underpass

Sunnyvale Avenue – Staff Recommendation

- Select the Sunnyvale Avenue Underpass Tunnel option to be defined as the Proposed Project for the grade separation of the Sunnyvale Avenue crossing of the Caltrain railroad tracks for the Environmental Review



Sunnyvale Avenue – Bicycle and Pedestrian Advisory Commission Recommendation

- Recommend to City Council the selection of the Sunnyvale Avenue Bicycle and Pedestrian Only Tunnel option to be defined as the Proposed Project for the grade separation of the Mary Avenue crossing of the Caltrain railroad tracks for the Environmental Review
- Amendment:
 - ◆ If Underpass selected, bicycle facilities in tunnel should be physically separated and protected by concrete



Sunnyvale Avenue Bicycle/Pedestrian Underpass Trial Project Idea

- ◆ Bicycle and pedestrian only at-grade crossing
- ◆ Close Evelyn to Hendy avenues to vehicles
- ◆ Experience unanticipated impacts
- ◆ Considerations
 - Traffic signals modifications
 - VTA Bus Route modifications
 - Caltrain and CPUC coordination
 - Coordination with service providers
 - Timing and duration
 - Community notifications
 - Environmental clearance
 - Grade Separation funding opportunities
 - Prioritization with other projects
 - Goals and criteria for success



Sunnyvale Avenue Bicycle/Pedestrian Underpass Trial Project Idea

- ◆ Staff recommendation:
 - Do not approve the trial project at this time
- ◆ Considerations
 - Create project with CIP budget process
 - Staffing and resource availability
 - Workload/project priorities
 - Funding to complete trial
 - Funding opportunities for final project





Thank You