



Public Works Department

DATE: May 15, 2023

TO: Council Transportation Committee

FROM: Darwin Galang, Senior Traffic Engineer

Lorenzo Lopez, City Traffic Engineer

Edward Arango, Assistant Public Works Director/City Engineer

VIA: Dawn S. Cameron, Public Works Director

SUBJECT: El Monte Avenue Corridor Study, Project 19-61

RECOMMENDATION

Review the El Monte Avenue Corridor Study alternatives and forward a recommendation to the City Council to approve Alternative 3, a road diet from four lanes to three lanes with buffered bike lanes, as the preferred concept for the El Monte Avenue Corridor Study.

BACKGROUND AND ANALYSIS

El Monte Avenue is a four-lane street with two travel lanes and a bicycle lane in each direction, a posted speed limit of 35 miles per hour (mph), and an Average Daily Traffic (ADT) volume of approximately 20,000 vehicles per day (vpd) based on data collected in 2019. Recent data collected in March 2023 shows an ADT of approximately 14,000 vpd.

The El Monte Avenue Corridor Study (Study) focuses on nine intersections: two intersections along El Camino Real at Escuela Avenue and El Monte Avenue and seven intersections along El Monte Avenue from El Camino Real to the City limits at Springer Road and Jay Street (see Figure 1). The Study also includes evaluating various improvements throughout the corridor.

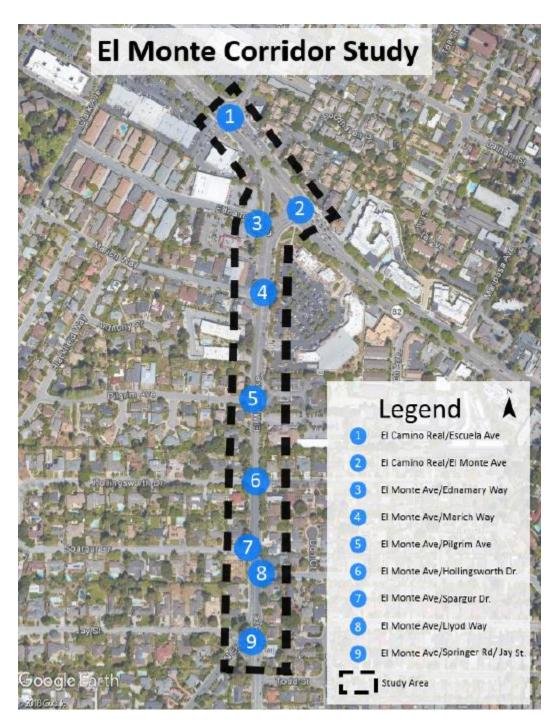


Figure 1: Project Area

The main goals of the Study are to develop a multi-modal transportation conceptual plan for pedestrian and bicycle safety and improve traffic operations along the corridor. The conceptual plans are intended to evaluate the corridor to determine space allocation for new improvements within the available roadway width.

On <u>December 2, 2020</u>, staff presented two proposed corridorwide alternatives to the Bicycle/Pedestrian Advisory Committee (BPAC). Consistent with the design concept from the El Camino Real Streetscape Plan, both alternatives provided the same suggested improvements on El Camino Real between Escuela Avenue and El Monte Avenue that include: high-visibility crosswalks at each intersection, Americans with Disabilities Act (ADA)-compliant curb ramps, green bike lanes at conflict areas, and striping and signage improvements. Additionally, the right-turn vehicular movement from eastbound West El Camino Real to southbound El Monte Avenue currently operates as "free right-turn" that poses potential conflicts with pedestrians and bicyclists. Both alternatives remove this free right-turn and redirect right-turning vehicles to turn onto El Monte Avenue with a much tighter turn radius, resulting in one less crossing for pedestrians and encouraging reduced speeds of vehicles turning right from West El Camino Real to El Monte Avenue (see Figure 2). During the design phase, staff will evaluate implementing protected intersection treatments, where feasible.

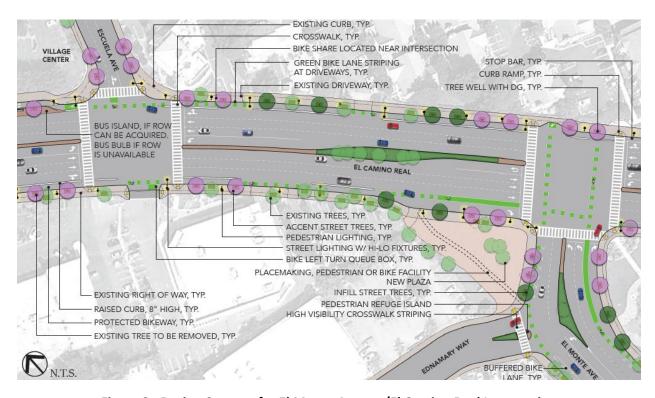


Figure 2: Design Concept for El Monte Avenue/El Camino Real Intersection from El Camino Real Streetscape Plan

The differences between the two alternatives were to El Monte Avenue and are described as follows:

• <u>Alternative 1</u>: This alternative keeps all existing four vehicle lanes and bicycle lanes, adds a buffered area to the bicycle lanes by narrowing the widths of the vehicle lanes, and maintains the intersections as unrestricted to traffic movement, similar to current conditions (see Attachment 1). Figure 3 shows a typical cross-section of Alternative 1.

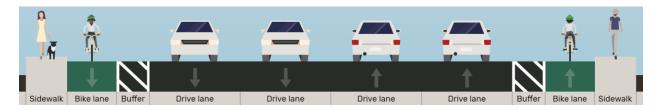


Figure 3: Typical Cross-Section—Alternative 1 (No Side Street Restriction)

• <u>Alternative 2</u>: This alternative also keeps all existing four vehicle lanes and bicycle lanes and adds concrete median islands at some of the intersections to restrict access in and out of those side streets (see Attachment 2). Figure 4 shows a typical cross-section of Alternative 2 at some intersections where left-turn access is prohibited.

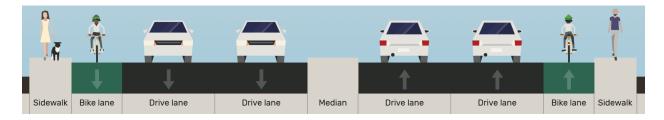


Figure 4: Typical Cross-Section—Alternative 2 (Some Side Street Restriction)

Both Alternatives 1 and 2 provide El Monte Avenue with narrower travel lanes. In addition, corridorwide improvements, such as ladder-style crosswalks, enhanced street lighting, ADA-compliant curb ramps, green bike lanes at conflict areas, and striping and signage at all intersections, are included.

During the December 2020 BPAC meeting, to address the community's concerns with high vehicle speeds and volumes, the BPAC requested staff explore the feasibility of a road diet alternative along El Monte Avenue, between El Camino Real and the City limits at Springer Road and Jay Street.

In September 2021, the City's design consultant conducted a road diet analysis. The road diet alternative envisions a three-lane cross-section consisting of one vehicular travel lane and buffered bicycle lane in each direction with a center median two-way left-turn lane and median islands at the intersection of El Monte Avenue and Hollingsworth Drive. This alternative allows

the vehicle lane space to be reallocated for other uses—in this case, bicycle buffer areas and pedestrian crossing median islands. The buffered area would be raised in locations that do not conflict with driveways or crossings. Attachment 3 provides the full layout of the corridor improvements, and Figure 5 shows a typical cross-section of the road diet alternative.

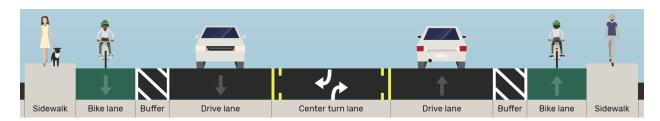


Figure 5: Typical Cross-Section—Alternative 3 (Road Diet)

The analysis generally found value to applying a road diet and included the following conclusions:

- While vehicular capacity is reduced, benefits may include reduced weaving, left-turn
 conflicts, and vehicle interactions along with calming traffic along the corridor. This can
 result in a reduction in the number and severity of vehicle-to-vehicle collisions.
 Additionally, the vehicle speed differential (i.e., the vehicle speeds between two adjacent
 through lanes) would be eliminated, and the lane speed would be limited to the speed of
 the lead vehicle in the single through lane.
- Easier pedestrian crossings would be facilitated where pedestrians have one fewer vehicle lane to cross and, in turn, a shorter time of exposure to moving vehicles.
- Traffic may divert to parallel corridors and local streets.
- The use of multi-modal facilities provides a dedicated space for different users, which can increase motorists' recognition and, with the addition of buffered bicycle lanes and pedestrian refuge islands, provides cues that can improve driver awareness.

Staff agrees with the conclusions of the road diet analysis.

Community Feedback

Prior to conducting the road diet analysis, staff held two public outreach meetings in 2020. Feedback received from these meetings was incorporated into the concept for the first two corridorwide alternatives.

On July 21, 2022, staff held a third community meeting for the residents immediately adjacent to and accessing El Monte Avenue to present the road diet alternative and obtain community

feedback and comments. In general, the community showed great support for the road diet alternative, with approximately 30 members of the public attending the meeting.

Following the community meeting, on December 16, 2022, staff launched a public online survey to gain information on the public's support and feedback to the alternatives. The survey was sent to approximately 10,000 households within approximately one-half mile of the Study area and posted on the City's Facebook page and website. The 30-question survey included commute and travel modes/patterns along the corridor, traffic-related concerns, support of or opposition to proposed improvements, and measures to improve safety. Responses received provided staff with wider feedback and information to recommend to the BPAC, Council Transportation Committee (CTC), and City Council a preferred alternative. Staff received a total of 448 online survey responses with key feedback summaries outlined in Table 1.

Table 1: Online Survey Summary

Rate the following contributing factors to traffic safety issues along El Monte Avenue in order of concern importance: Vehicular Speeds 30% **HIGHEST CONCERN Pedestrian Crossing Challenges** 26% 11% Bike Lanes Left-Turning vehicles 9% Vehicular Volumes 9% Lack of Signage/Striping 4% 3% Number of Vehicular Lanes Width of Vehicular Lanes **LEAST CONCERN** 1%

Other Concerns: Driver Behavior, Design of the Intersection

Rate the following traffic-related concerns along El Monte Avenue in order of concern				
importance:				
Safety of Pedestrians	HIGHEST	26%		
	CONCERN			
Safety of Bicyclists		23%		
Speed of Vehicular Traffic		23%		
Volume of Vehicular Traffic	LEAST CONCERN	8%		

Other Concerns: Noise, Transit Access, Road Surface Condition

Do you support a two-way median left-turn lane along El Monte Avenue?		
Yes	69%	
No	31%	

Do you support reducing the number of left-turn lanes from		
westbound El Camino Real to southbound El Monte Avenue?		
Yes	25%	
No	75%	
Do you support left-turn access restriction to/from Pilgrim Avenue,		
Ednamary Way, and Spargur Drive along El Monte Avenue?		
Yes	34%	
No	66%	

Rank the following design concepts in order of preference:		
Option C: Road diet option—two-lane section (and center turn lane) with buffered bikes lanes (no access restriction on sidestreets).	MOST PREFERRED	42%
Option B: Four-lane section with buffered bike lanes (some access restriction on side streets).		31%
Option A: Four-lane section with buffered bike lanes (no access restriction on side streets).	LEAST PREFERRED	27%

As shown in Table 1, the key community concerns identified were vehicle speeds and safety of pedestrians and bicyclists. A large majority supported a center median two-way left-turn lane on El Monte Avenue but did not support reducing the number of left-turn lanes from westbound El Camino Real to southbound El Monte Avenue or restricting left-turn access along El Monte Avenue to/from side streets. Lastly, the most preferred alternative was the road diet alternative, Alternative 3.

Bicycle/Pedestrian Advisory Committee

On April 26, 2023, staff presented the Study at a joint BPAC and City of Los Altos' Complete Street Commission meeting, with the inclusion of the road diet concept. The BPAC unanimously recommended Alternative 3, a road diet from four lanes to three lanes with buffered bike lanes, as the preferred alternative for the Study to the CTC. As part of the recommendation, the BPAC provided the following comments:

- Assess options to provide protected bicycle lanes, where feasible.
- Include green street elements into the project.
- If possible, reduce posted speed limit prior to project construction.
- Evaluate bicycle access from eastbound Marich Way to northbound El Monte Avenue.

As part of a second recommendation, the BPAC voted 3-0-1 to have staff consider the feasibility of restricting left-turn movement from northbound El Monte Avenue to westbound Ednamary Way.

As recommended by BPAC, protected bike lanes and green street elements will be incorporated into the project, where feasible. Staff will evaluate bicycle access from Marich Way to northbound El Monte Avenue to ensure bicyclists have the ability to safely cross El Monte Avenue as well as evaluate restricting northbound El Monte Avenue left-turn movement to Ednamary Way to reduce conflict points along El Monte Avenue. On the item of reducing the posted speed limit, speed limits are established on the basis of an Engineering and Traffic Survey (E&TS) and is dependent on speeds of actual free-flow traffic conditions. Staff has analyzed the recently passed Assembly Bill 43 (AB 43) related to traffic safety and speed limit reduction. AB 43 does provide agencies greater flexibility in setting speed limits and includes that an E&TS is still required to establish and enforce speed limits. Upon the implementation of roadway changes for El Monte Avenue, and once the improvements have been in place for a few months, staff will conduct a new E&TS to determine if El Monte Avenue is eligible for a speed limit reduction, including applying those applicable reduction provisions under AB 43.

Based on an analysis identifying several benefits to the road diet alternative, including trafficcalming effects of reduced speed and conflicts, improved safety for other modes of travel, and the strong support from the third community meeting, survey results, and BPAC, staff recommends Alternative 3, a road diet from four lanes to three lanes with buffered bike lanes, as the preferred alternative for the Study. Alternative 3 includes:

El Camino Real, from Escuela Avenue to El Monte Avenue:

- High-visibility crosswalks at each intersection;
- Green bike lane striping at conflict areas;
- Removal of the slip lane from eastbound El Camino Real to southbound El Monte Avenue;
- Maintaining two left-turn lanes from westbound El Camino Real to southbound El Monte Avenue; and
- Protected intersection treatments and green street elements, where feasible.

El Monte Avenue, from El Camino Real to the City limits at Springer Road and Jay Street:

- Road diet from four vehicle lanes to three lanes, consisting of one vehicle lane in each direction and a center median two-way left-turn lane;
- Buffered bicycle lanes with green striping at conflict areas;

- High-visibility crosswalks and pedestrian refuge islands at the intersection of El Monte Avenue and Hollingsworth Drive;
- Lighting improvements;
- No access restrictions on side streets; and
- Green street elements, where feasible.

NEXT STEPS

Staff will take the CTC-recommended alternative to Council for approval in June 2023. The Study completion date is anticipated in summer 2023. Design and construction of the improvements would be combined with the recent successful One Bay Area Grant (OBAG) Cycle 3 program grant received for the El Camino Real/El Monte Avenue/Escuela Avenue Intersection Improvements that include those improvements outlined above as part of the Study. Design is anticipated to start in 2024 and construction in late 2025.

PUBLIC NOTICING

In addition to agenda posting, notices were mailed to the residents and property owners along the El Monte Avenue corridor and residents of the City of Los Altos who live adjacent to the Study area.

Project information can also be found on the project webpage at mountainview.gov/emcs.

DG-LL-EA/LL/6/PWK 979-05-15-23M

Attachments: 1. Conceptual Plan Alternative 1

- 2. Conceptual Plan Alternative 2
- 3. Conceptual Plan Alternative 3

cc: PWD, APWD—Arango, CTE, STE—Galang, File