



Technical Memorandum

August 13th, 2024

Project# 28476

To: Ozzy Arce, Senior Transportation Planner
City of Palo Alto, Office of Transportation

From: Mobycon & Kittelson

CC: Sylvia Star-Lack, Transportation Planning Manager,
Amanda Leahy, Associate Planner, Kittelson

RE: Bicycle and Pedestrian Transportation Plan Update – Community Engagement Summary
– Phase 2 Needs and Concerns (Draft)

PHASE 2 – NEEDS AND CONCERNS

The City of Palo Alto (City) is updating the 2012 Bicycle and Pedestrian Transportation Plan. This Bicycle and Pedestrian Transportation Plan (BPTP) update will serve as a comprehensive action plan for the City to provide improved bicycle and pedestrian facilities for its residents, employees, and visitors. As part of the BPTP update, the project team is undertaking an extensive community engagement initiative, divided into four phases: 1) Visioning; 2) Needs & Concerns; 3) Recommended Projects and Programs; and 4) Plan Adoption. The community engagement effort includes a combination of digital outreach and in-person events.

Engagement activities associated with Phase 2 Needs and Concerns occurred in Spring 2024 and included a series of committee and working group meetings and a week-long series of events and workshops that included a bicycle network development workshop, a community walking tour, and a community cycle tour. Activities were promoted on the City's website, social media channels, transportation mailing list, Uplift Local newsletter, and at the Committee and Working Group meetings. Themes heard during these outreach efforts included celebration of the best local bike routes; identification of infrastructure gaps; need for creating pedestrian friendly zones; and need for enhanced safety and comfort on specific streets. This memorandum provides a summary of the key insights gathered from these Phase 2 engagement activities.

BICYCLE NETWORK DEVELOPMENT WORKSHOP

Overview

On April 16, the project team held a Bikeway Network Development workshop where the project team guided participants through a bicycle network development exercise. Small groups worked together to identify key destinations for their assigned user types, connect destinations through a schematic “Star” network, and apply the schematic network to the street grid. The workshop was attended by 14 members of the public, three City staff, and four members of the consultant team.

Workshop Agenda

Time	Topic	Details
6:30	Welcome and Introduction	Introduction to the plan and where we are in the process
6:40	Fundamentals of bicycle network design	Presentation on bikeway network design principles and considerations
6:50	Introduction to the Star Analysis Approach	Explanation of the Star Analysis approach for bikeway network development
7:00	Star Bicycle Network Workshop Activity	In small groups conduct the Star analysis activity
7:45	Small Group Report Back	Report back on your group’s network development process and end result.
8:00	Close out and Next Steps	Thank you and wrap up

Workshop Presentations

The consultant team presented on Dutch Bikeway Design Principles and on the “Star” approach to bikeway network development and walked the workshop participants through the process.

Workshop Activities

Participants were divided into three groups to represent different user types — Commuters, Recreational Users, and Residents. The result will be three distinct priority networks, emphasizing unique sets of origins and destinations.



Origins and Destinations Mapping

Participants were first asked to discuss the main origins and destinations for their user groups. They were then asked to place red circle stickers on the origins and blue circle stickers on the destinations (Figure 1, Figure 4, Figure 7).

Link Mapping and Optimization

Following the Origins and Destinations mapping, participants were asked to connect the dots using Wikistix, flexible waxed strings that could easily stick to the map but also move around easily. Participants were then asked to ‘bundle’ some of the links to simplify the map (Figure 2, Figure 5, Figure 8).

Street Network Mapping

In the final step, participants were asked to move the bundle links to align with the existing street network (Figure 3, Figure 6, Figure 9). They were told to ignore the existing bicycle network but to create a new network based on the links they found and the preferences and needs of their assigned user groups.

Presenting and Discussion

Lastly, participants took turns introducing what their maps looked like, including the main origins and destinations and the new routes they created. A group discussion followed each presentation about the similarities and differences of the different maps.



Discussion Notes Summary

The following is the summary of comments and feedback from all the groups.

- **Crossing Railway Tracks at Park and Colorado:** Participants discussed the importance of creating safe crossings across the railway tracks to connect Park Blvd and Colorado Ave. This is crucial for pedestrian and cyclist safety and for facilitating better connectivity across different parts of the city.
- **California Avenue Train Station:** The California Avenue train station was highlighted as a significant transit hub, emphasizing its role in commuting and connectivity within the city.
- **Importance of Park Boulevard:** Park Boulevard was recognized as an essential thoroughfare, indicating its significance for transportation, especially as a route for cyclists .
- **Opportunity on Major Routes.** Major routes such as Middlefield Road, El Camino Real, Embarcadero Road were noted as the most direct links between origins and destinations. However, there were mixed feelings about whether they could be comfortable, compared to the adjacent bicycle boulevard routes.
- **Challenges with Residential Density:** Participants acknowledged challenges in marking origins due to the dispersed nature of residential density in Palo Alto. This presents difficulties in identifying specific points of origin for transportation planning purposes.
- **Recreational Connectivity and Regional Planning:** The recreational group emphasized the need for better connectivity with recreational facilities outside Palo Alto's borders, underscoring the importance of regional planning for accommodating diverse recreational needs.
- **Addressing Dangerous Crossings:** Concerns were raised about dangerous crossings, such as the ones over San Antonio Road and Alma Street.
- **Desire for Functional Facilities Over Comprehensive Plans:** There was a sentiment among participants that the priority should be on creating functional facilities rather than just comprehensive plans, emphasizing the need for resources to make tangible improvements in transportation infrastructure.



- **Importance of Additional Safe Crossings for School Children:** The discussion highlighted the importance of potential future safe crossings (like Loma Verde Avenue and Lindero Drive) for school children, emphasizing the need to prioritize their safety in transportation planning.
- **Major Destinations for Commuters:** Participants identified major destinations for commuters, such as Stanford Research Park and the Bay Trail, indicating areas where transportation infrastructure should be optimized to accommodate commuter needs.
- **Origins from Outside Palo Alto:** It was noted that many commuters originate from outside Palo Alto, with train stations serving as key starting points for their journeys.
- **Significance of Nelson Drive:** Nelson Drive was identified as a significant commuter route, suggesting its importance in transportation planning for the city.
- **Discussion on Potential Connections:** Participants engaged in a discussion about potential connections, such as the Embarcadero undercrossing at the railroad, exploring options for improving transportation options and connectivity within the city.
- **Value of the 2012 BPTP.** Participants were familiar with the existing network and the 2012 BPTP. They wanted this update to build on that solid foundation.

Overall, these points reflect a comprehensive discussion on various aspects of transportation planning in Palo Alto, ranging from safety concerns to the identification of key destinations and routes for commuters and recreational users. This Phase 2 feedback will inform development of a unified bike network and be a primary input to the project recommendations identified in the BPTP Update.



Commuter Maps

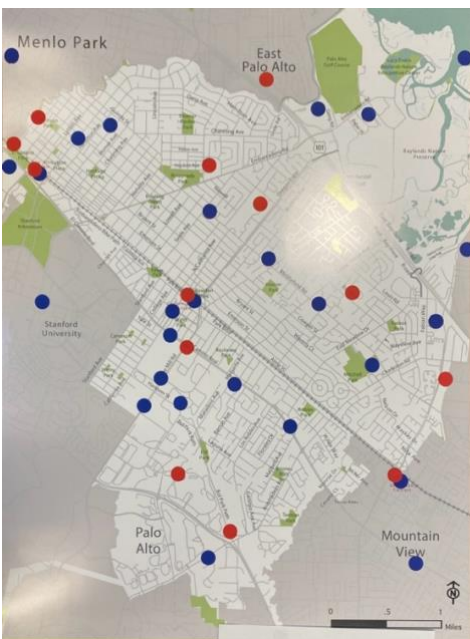


Figure 1: Commuter Origin and Destination Map



Figure 2: Commuter Link Map



Figure 3: Commuter Route Map

Recreation Maps

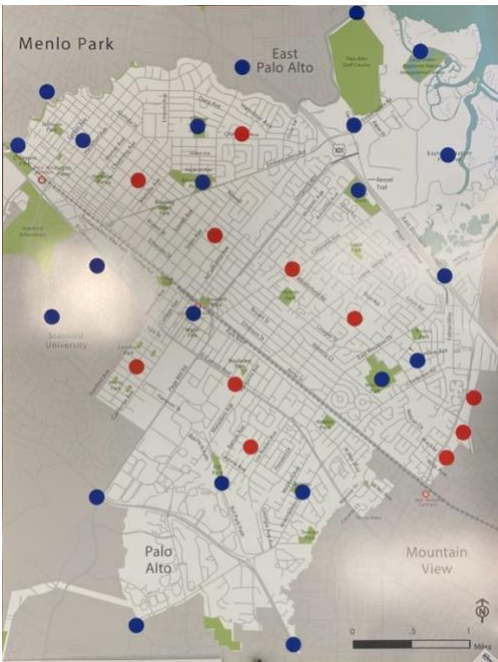


Figure 4: Recreation Origin and Destination Map

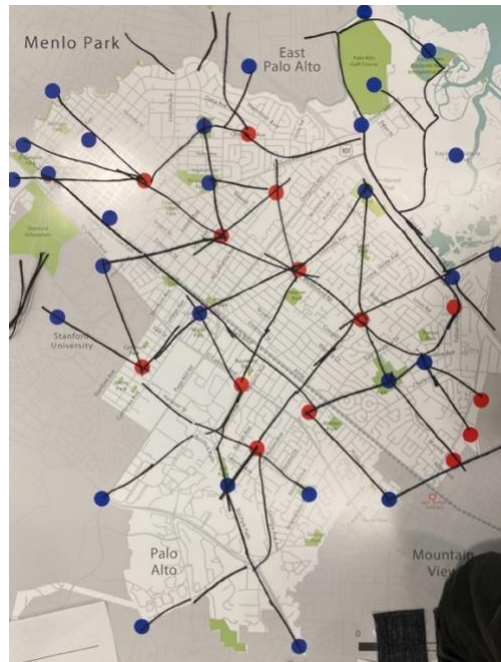


Figure 5: Recreation Link Map

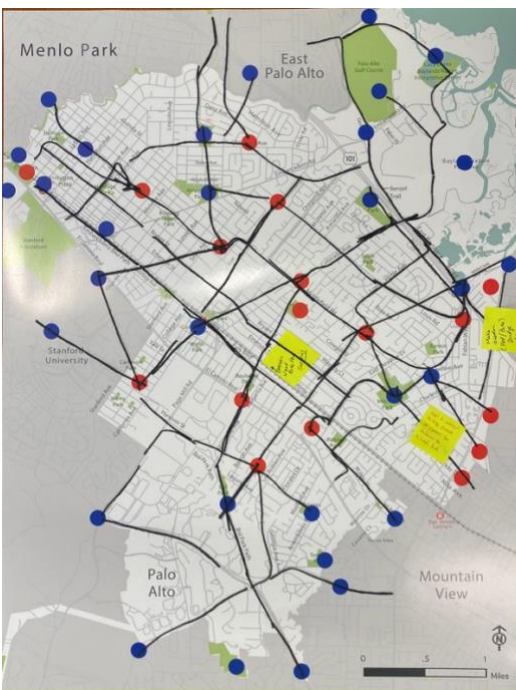


Figure 6: Recreation Route Map

Resident Maps

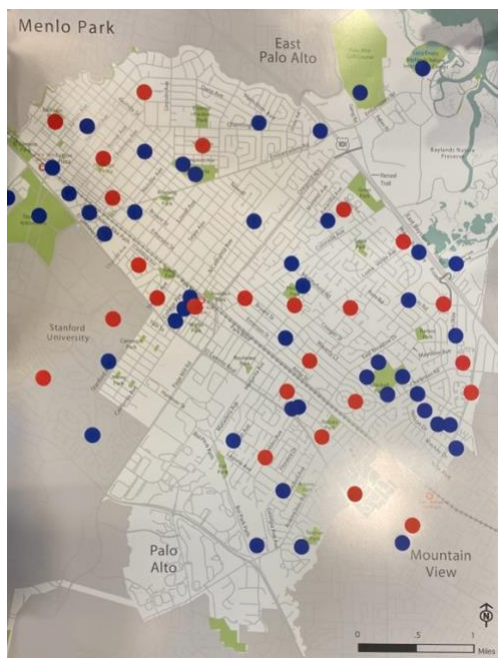


Figure 7: Resident Origin and Destination Map

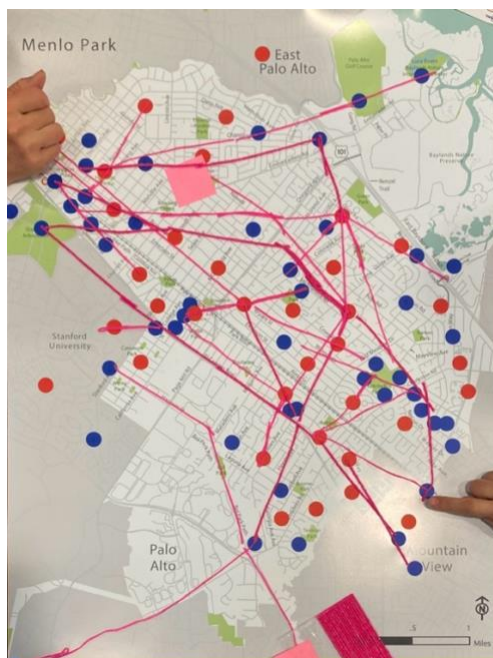


Figure 8: Resident Link Map



Figure 9: Resident Route Map

COMMUNITY WALKING TOUR

On Wednesday, April 17 the project team hosted a walking tour in collaboration with Avenidas, a senior activity center in Downtown Palo Alto. The objective of the community walking tour was to hear from the public and project team about pedestrian issues, considerations and opportunities in pedestrian district areas of Palo Alto.

The feedback received on this tour will help inform the creation of Pedestrian Design Guidelines as a part of the Palo Alto Bicycle and Pedestrian Transportation Plan Update. The event was promoted by City Staff via a website posting, shown in Figure 10, and direct invitation shared out at the Committee and Working Group meetings. The route explored University Ave and the surrounding area, including the Palo Alto Caltrain Station area, as shown in Figure 11. Joining the tour were several community members, City staff, and project consultant team members.

Figure 10: Community Walking Tour Web Posting

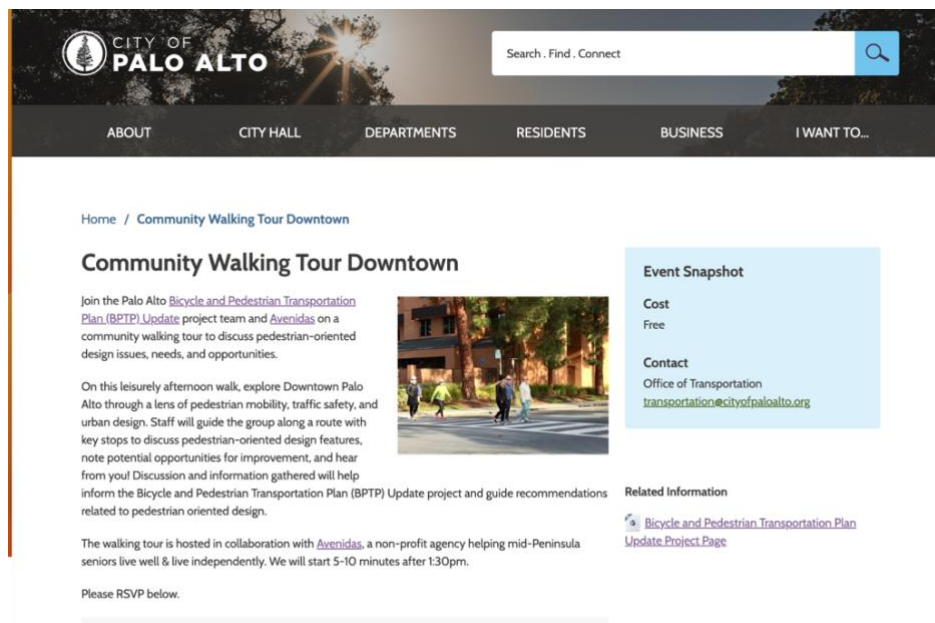
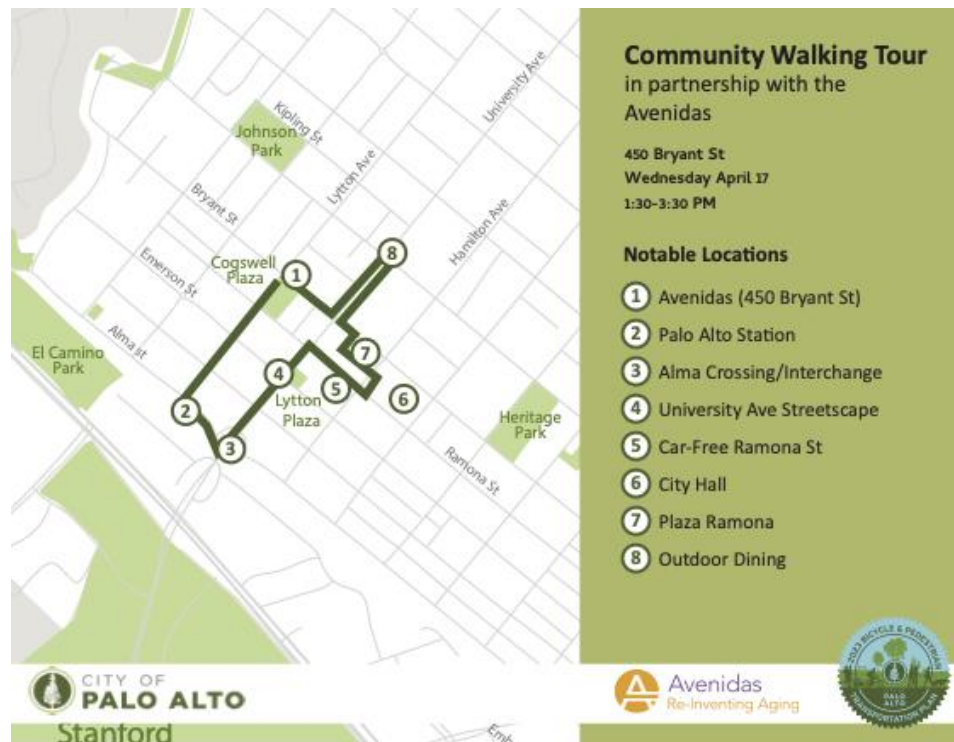


Figure 11: Community Walking Tour Route



Summary of Key Themes and Actions

The Palo Alto Station is the busiest train station outside of San Francisco and therefore University Ave and its surrounding areas are first thing that many visitors see and experience when coming to Palo Alto. Overall, the pedestrian experience was positive but the team had many ideas on how to enhance the experience. Below are the key themes summarized from the walking tour:

- **Maintenance** at Palo Alto Station and sidewalk upheavals
- Increased **wayfinding** at Palo Alto Station and along University Ave that is clear and consistent
- Providing **continuous sidewalks** at the Alma Interchange and along University Ave
- Extending the **main street feel** beyond University Ave to the surrounding streets
- Interest in implementing more **car-free** streets
- **Enhancing alleyways** near Ramona Street and Lytton Plaza

The observations and reflections from the walking tour will inform the Pedestrian Design Guidelines portion of the plan update. The tour identified strategies such as continuous



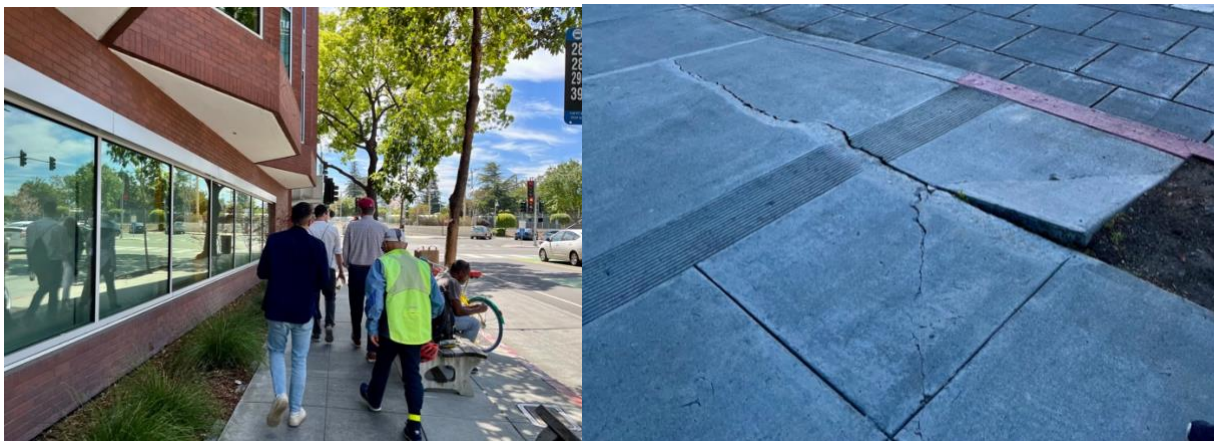
sidewalks and raised parking lanes and specific projects such as alleyway activations near Ramona Street for consideration. The project team will explore these strategies and recommendations and incorporate the most promising solutions into the Pedestrian Design Guidelines.

Observations

Discussion focused on reflection of existing conditions, identifying what works well and what could be improved. Key observations from the tour are listed below in reference to their stop along the tour:

Lytton Ave

- Lytton Ave is a street parallel to University Ave and doesn't have the same "main street" character in street design or building interface.
- The group discussed the need for three lanes and considered its role as a transit street.
- When walking past the Elinor Cogswell Plaza, one participant said "I didn't even notice there was a park" because they typically drive down this street.
- We did note sidewalk upheaval from trees as a known maintenance issue.
- Right now, there is a bike box and a bike signal (Lytton Avenue and Alma Street), it gives you a "head start" which can be helpful but only if there are a few bikers.



Palo Alto Station

- Palo Alto Station is the busiest Caltrain station outside of San Francisco, in part due to high usage by Stanford students and staff. It also functions as the gateway to University Ave and Palo Alto for those arriving to the city by rail.

- City Staff noted the special tree-well design on Alma St., where the trees are planted directly in the parking lane, creating parking bays. This also includes curb extensions and special pavement materials in the parking lane, clearly delineating the travel area. This was noted as something to consider in other locations.
- Could the current Caltrain ‘drop off’ zone be located to the northwest, and the space repurposed as pedestrian area? The current design has poor accessibility and what feels like unnecessary space.
- The group discussed the overall transit experience as one that is dirty, smelly, and unsafe feeling and the need to make these spaces into locations that people want to be in. Ideas for improvement included a café or secure bike parking inside the station.
- The group discussed an opportunity for increased wayfinding as it can be unclear how to get to Palo Alto or Stanford as a visitor.



Alma Interchange

- The tunnel under the Caltrain and the interchange with Alma St. is an overwhelming presence that negatively impacts people walking and biking. Bicyclists must travel in the tunnel, creating awkward interactions with pedestrians.
- City-led pedestrian wayfinding seemed effective due to its location and more effective than existing pedestrian wayfinding installed along University Ave.
- Discussion explored whether the roadway could continue its one-lane configuration in order to provide a protected bike lane in the roadway.
- Could the ramps onto University Ave. be configured with a continuous walkway design to prioritize people walking to the Caltrain station? This idea was well received.

- The morning commute is quite busy along this sidewalk, and it can become congested right on the corner where the wayfinding post/street light is. People will walk around the post on the street, to pass people, putting them into an unsafe condition.



University Ave Streetscape

- University Ave has seen heavy investments in the past into streetscape features. Discussion explored some new ideas:
 - Centerline removal
 - Raised parking lane/integrated with sidewalk
 - Alleyway activation
 - Continuous crossings
 - Permeable pavement
 - Increased bike parking
 - Clear wayfinding for bicycles and pedestrians
- Discussions were had about outdoor dining parklets on the street vs. tables on the sidewalk and which is a more pleasant experience for users and pedestrians.



Ramona St and Ramona Plaza Alleyways

- Discussion of these corridors was positive, and participants wanted to explore other ways to enhance downtown alleys.
- A midblock crossing from the Ramona Plaza alley to City Hall is worth exploring.
- There is a large interest from the merchants in keeping this a car-free street, and people want more of them. Participants expressed that people will “figure out” where to park and drive if more car-free streets are established.
- Opportunities to improve the alleyways surrounding Ramona St. and the plaza include increased lighting, wall murals, programming (music), shading



COMMUNITY BIKING TOUR

On Thursday April 18th, the project team led a community bicycle tour as their last event in the April work session week. The objective of the community biking tour was to hear from the public and project team about biking issues, considerations, and opportunities in Palo Alto. The feedback received on this tour will inform the creation of Bicycle Network Plan Guidelines as a part of the Palo Alto BPTP Update.

Overview

The project team hosted the evening community cycling tour in collaboration with the Silicon Valley Bicycle Coalition (SVBC), a local bicycle advocacy organization. The event was promoted by City Staff via a [website posting](#) (Figure 12), direct invitation to the Pedestrian and Bicycle Advisory Committee (PABAC), and SVBC shared the event with its members at meetings and on their website. There were five project team members, and 24 community members on the tour. The route (Figure 13) began at 499 California Ave and ended at the California Ave Caltrain station. The route covered a variety of different types of bicycle facilities such as bike lanes, green painted bike lanes, and bike boulevards. It took an hour and a half and had three scheduled stops along the route where people discussed what they saw and experienced.

Figure 12: Web Posting for Community Bicycle Tour

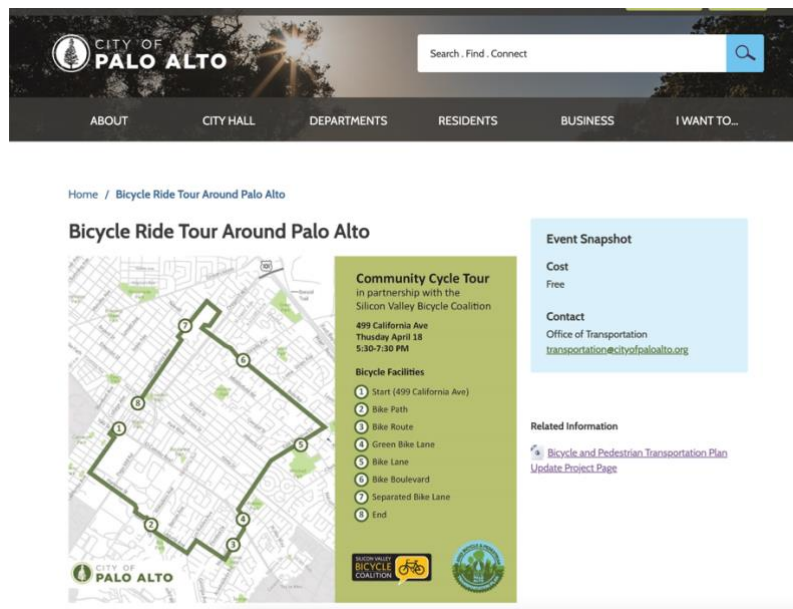
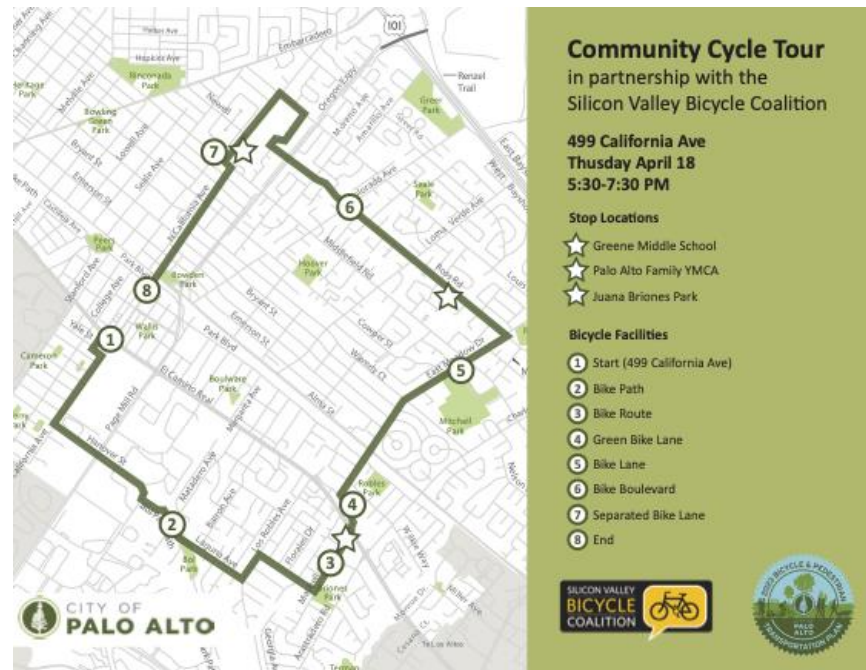


Figure 13: Community Bicycle Tour Route



Summary of Key Themes and Actions

Palo Alto is a leading cycling city and has made great strides in their cycling network. Participants in the tour were proud of where the city was but were eager to keep improving and were excited that the city was updating their Bicycle network. There was an emphasis on safety and comfort of cycling facilities for children who cycle to school. The project team learned much from the participants and community partners during this tour. Below are the key themes summarized from the cycling tour:

- **Upgrades to existing infrastructure** can make a large difference
- **Transition from arterial road to residential street** can be often sudden and unclear – opportunity for continuous sidewalks
- **Connector bike paths** are done really well and are integral part of the bike network
- **Clarity** on bicycle boulevards needed
- Interest in seeing **more protected bicycle lanes**

The feedback about general facility types will inform facility selection recommendations, the feedback about specific routes will inform network refinement, and the thoughts on design may inform future implementation approaches. The project team raised potential design interventions to consider, and the most promising solutions are expected to be considered into the BPTP update.

Observations

Discussions during the tour focused on reflection of existing conditions, identifying what works well and what could be improved. Key observations from the tour are listed below in reference to their stop along the tour:

Start: California Avenue



- A participant noted that a child was killed at the intersection of California Ave and El Camino Real, reminding the team and participants of the real human impact of our work.
- The placement of the temporary mini-golf course at the end of California Ave car-free street does not leave a lot of space for those who are cycling and want to cycle down California Ave and cross El Camino Real.

Stop 2: Bol Park

- There are upgrades that can be made to existing infrastructure that would make a large difference such as adding physical separation to buffered bike lanes
- When making a wide sidewalk for bikes and peds, consider adding a sign
- West of El Camino Real, California Ave has bike lanes next to parking. The placement of a bicycle lane next to a parking lane makes it an uncomfortable riding experience when travel speeds and/or volumes are high. When the parking lane is empty, it is more comfortable to ride in that and have the bicycle lane be a buffer space.
- The bike lane on Hanover Street is very narrow, and there appears to be room in the roadway to scale back and provide more biking space.
- At Hanover Street the transition from the fast arterial in the office park onto the bicycle path is unclear and uncomfortable. There should be signs indicating that there is a bicycle path, and there should be a raised intersection or raised crossing to get cars to slow down.
- Bike paths like the connector bike path between Hanover Street and Laguna Way are really nice ways to connect neighborhoods; Palo Alto has a lot of them, and does them

really well. They are safe connections for kids on their way to school. But maintenance tends to be low, and signage is hard to understand if you do not know where to look.

- The overall maintenance of bike lanes is low, and it is hard to keep up with construction and changes, but it can make an uncomfortable riding experience and when you try to avoid cracks in the road you could go into the travel lanes which would be unsafe.
- Shared roadway environments like Laguna Way can help with capacity for when large groups of students are cycling to school.
- What are the speed limits for sharrows? Is there clarity on when and where to use sharrows within Palo Alto?
- There are discussions for changing the speed limit to 20mph, but changes to the design of the street need to be done as well, not just installing speed limit signs.



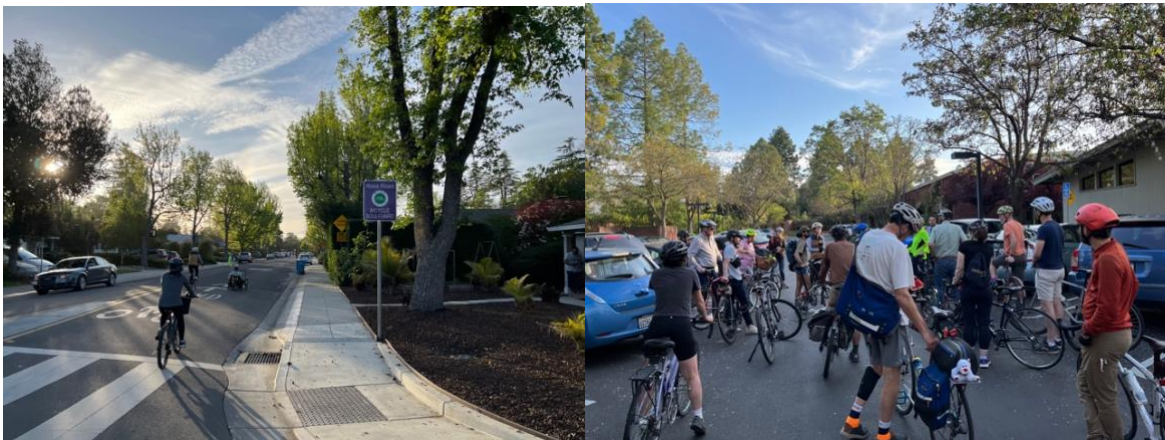
Stop 2: Mitchell Park

- El Camino Way has a bike lane in only one direction, with shared lane markings in the other. Participants expressed that this doesn't meet the community needs, and that a bike lane should be provided in both directions for consistency.
- Participants expressed a need for wayfinding on El Camino Real indicating there were bike lanes or bike boulevards that visitors could take instead of El Camino.
- W/E Meadow Drive is a busy street with bike lanes. However, when parking is light it's much more comfortable to ride in the parking lane.
- City staff noted that E Meadow Dr is planned for a restriping pilot project to implement protected bike lanes in some sections.



Stop 3: Palo Alto Family YMCA

- There were mixed reviews of the roundabout/traffic circle at Ross Rd, with general agreement that it has slowed movements and interactions down. There were participants who noted that some people did not like the Ross Road Bicycle Boulevard because one has to share the road, and they heard that some parents urge their children to bike elsewhere with painted bike lanes.
- One participant, new to Palo Alto, asked “What is a Bicycle Boulevard?” Prompting a discussion of the facility type and its role in the network branding or wayfinding for bicycle boulevards including sharrows and the purple street signs.
- Participants discussed that they liked roundabouts, but that placing it on a commuter street was challenging because commuting motorists don’t slow down.



Stop 4: Greene Middle School

- Louis Rd has time-limited bike lanes. Tour discussion revealed support for full time bike lanes.
- Participants were supportive of protective bicycle lanes and wanted to see more of them.
- Participants like the two-way protected bike lane and noted the overall safety improvements.
 - Left turns onto Middlefield Rd are easier, it slows cars down turning onto N California Ave, crossing Middlefield Rd to get to the rest of N California Ave is easier



End: California Avenue

- Tour leaders thanked the riders for joining the tour and provided information on how to continue to be involved in the process.

