



CITY OF
**PALO
ALTO**

Planning & Transportation Commission Staff Report

**From: Planning and Development Services Director
Lead Department: Transportation**

**Meeting Date: May 14, 2025
Report #: 2503-4441**

TITLE

South Palo Alto Bike/Ped Connectivity: Provide Feedback on Initial Crossing Opportunity Locations and Draft Design Priorities and Evaluation Criteria.

RECOMMENDATION

Staff recommends the Planning and Transportation Commission (PTC) review the Existing Conditions Report (Attachment A) and Draft Design Priorities and Evaluation Criteria Memorandum (Attachment B) for the South Palo Alto Bike/Ped Connectivity Project and provide feedback on the initial crossing opportunity locations and draft design priorities and evaluation criteria.

EXECUTIVE SUMMARY

The purpose of the South Palo Alto Bike/Ped Connectivity Project (Project) is to assess ways to improve bicycle and pedestrian access across the rail corridor in the southern portion of the City. This Project will develop locally preferred locations and design concepts for two new grade-separated bicycle and pedestrian crossings of the Caltrain corridor in south Palo Alto (south of Oregon Expressway) and identify bicycle and pedestrian enhancements that link the proposed crossings sites to the existing/future networks. The goal is to complete 15 percent of designs for two locally preferred alternatives, develop an implementation plan and funding strategy, and secure funding for the next phases of work, including preliminary engineering, environmental documentation, final design and construction.

Staff recommends the PTC review the Existing Conditions Report (Attachment A) and Draft Design Priorities and Evaluation Criteria Memorandum (Attachment B) and provide feedback on the initial crossing opportunity locations and draft design priorities and evaluation criteria.

BACKGROUND

The Caltrain corridor runs north-south, parallel to Alma Street through the City of Palo Alto, resulting in a barrier for east-west travel by all modes. The City of Palo Alto 2030

Comprehensive Plan (2022), Bicycle and Pedestrian Transportation Plan (BPTP) (2012), Rail Corridor Study (2013), and Midtown Connector Feasibility Study (2016) have identified a critical need for additional grade-separated bicycle and pedestrian rail crossings, particularly in the southern portion of the City:

- The 2030 Comprehensive Plan Program T1.19.3 aims to "increase the number of east-west pedestrian and bicycle crossings across Alma Street and the Caltrain corridor, particularly south of Oregon Expressway."
- The 2012 BPTP identifies the 1.3-mile distance between the California Avenue Bike/Ped Tunnel and Meadow Drive as the longest stretch of track barrier in Palo Alto and recommends a grade-separated pedestrian and bicycle crossing of the Caltrain corridor and Alma Street in the vicinity of Matadero Creek/Park Boulevard or between Margarita Avenue and Loma Verde Avenue.
- The 2013 Rail Corridor Study and 2016 Midtown Connector Feasibility Study identify rail crossing opportunities and potential alignments to provide grade-separated crossings for bicyclists and pedestrians.

On September 9, 2024, Council approved a professional services contract (C25191297) with Kittelson & Associates, a transportation planning, engineering, and research services firm, to assist with the Project.¹

The purpose of the Project is to assess ways to improve bicycle and pedestrian access across the rail corridor in the southern portion of the City. This Project scope includes development of locally preferred locations and design concepts for two new grade-separated bicycle and pedestrian crossings of the Caltrain corridor in south Palo Alto (i.e., south of Oregon Expressway). The Project also includes identification of context-sensitive bicycle and pedestrian enhancements that link the proposed grade-separated crossing sites to the existing/future bicycle and pedestrian networks within the neighborhoods adjacent to the railroad tracks. The goal is to complete 15 percent of designs for two locally preferred alternatives, develop an implementation plan and funding strategy, and secure funding for the next phases of work, including final design and construction.

In September 2024, City staff and Kittelson & Associates began this Project and subsequently completed initial tasks, including data collection and analysis, review of background documents, development of a community outreach and engagement plan, preparation of an Existing Conditions Report (Attachment A), and development of a Draft Design Priorities and Evaluation Criteria Memorandum (Attachment B).

The City is in the process of updating the Bicycle and Pedestrian Transportation Plan (BPTP Update), which began in 2023 and will be finalized by the end of 2025. The BPTP Update addresses the citywide bicycle and pedestrian network, including in the southern portions of Palo Alto. This Project will implement recommendations of the current BPTP and will advance

¹ [September 9, 2024 City Council Meeting for Contract Authorization \(Consent Calendar Item 7\)](#)

designs and provide connections to the citywide bike and pedestrian network to be identified in the BPTP Update. As a result, this Project is being completed in close collaboration with the ongoing BPTP Update.

ANALYSIS

Existing Conditions Report

The Existing Conditions Report (Attachment A) establishes a detailed baseline condition for the Project using a combination of quantitative and qualitative data from various sources. The technical information presented in the Existing Conditions Report is being used to identify opportunities, inform design options, and evaluate alternatives for potential grade-separated bicycle and pedestrian crossings of the rail corridor in south Palo Alto. Key findings from the Existing Conditions Report include:

- **Local Destinations:** Many local destinations such as parks, community centers, libraries, bus lines, residential areas, shopping centers, after-school destinations, and schools may be served by additional bike and pedestrian rail crossings. Key destinations within the Study Area include, but are not limited to, Mitchell Park, Robles Park, Hoover Park, Cubberley Community Center, El Carmelo Elementary School, Jane L. Stanford Middle School, and Herbert Hoover Elementary School. Other major destinations outside the Study Area include Stanford University, Stanford Research Park, downtown and commercial corridors, and Caltrain stations.
- **Literature Review:** A review of 35 relevant planning documents, programs, and policies was conducted to understand the current planning context for walking and biking in south Palo Alto as well as prior efforts completed in the Study Area.
- **Demographics:** According to American Community Survey 2022 Five-Year Estimates, approximately 19,700 residents live in the Study Area, representing roughly 29% of the City of Palo Alto's total population. Of the Study Area population, 46% is White, approximately 8% Hispanic or Latino, 41% Asian, and 3% other race.
- **Land Use and Population Growth:** Key growth areas within and near the Study Area include the Midtown and Ventura neighborhoods, San Antonio Road corridor, and along El Camino Real.
- **Transportation Network:** Distances between existing bike and pedestrian crossings of the Caltrain corridor in south Palo Alto are as follows:
 - 1.3 mile between the California Avenue Bike/Ped Tunnel and Meadow Drive;
 - 0.3 mile between Meadow Drive and Charleston Road; and
 - 0.8 mile between Charleston Road and the San Antonio Caltrain Station Bike/Ped Underpass.

Several notable on-going and upcoming transportation improvement projects in the Study Area include the rail grade separation projects for vehicles, bicyclists, and

pedestrians at Meadow Drive and Charleston Road, and the El Camino Real bikeway currently being installed by Caltrans in Palo Alto, Mountain View, and Los Altos.

- **Commuting Behavior:** Around 59% of workers living in the Study Area commute by car (drive-alone and carpool combined), which is more than 56% of total residents citywide that commute by car.
- **Bike/Ped Counts at At-Grade Crossings:** On weekdays, pedestrian activity is generally highest in the afternoon hours between 3:00 pm and 6:00 pm. On weekends, pedestrian activity is more variable, with the highest activity levels in the morning and early afternoon. On weekdays, bicycle activity peaks during the morning and afternoon peak periods (7:00-9:00 am and 4:00-6:00 pm), with a jump in activity around 8:00 am on Meadow Drive westbound. On weekends, bicycle activity remains relatively steady throughout the day. Similar to pedestrian activity, there is higher bicycle activity on Meadow Drive than Charleston Road.
- **Bike/Ped Accessibility:** Pedestrians using the existing rail crossings in and near the Study Area must travel further to access destinations near Park Boulevard, Margarita Avenue, and Loma Verde Avenue. Bicyclists using existing rail crossings in and near the Study Area are generally able to travel anywhere throughout the Study Area in less than 30 minutes (round trip).
- **Big Data Analysis:** Approximately 30% of all trips using the existing rail crossing in and near the Study Area are less than five miles in length. Origins and destinations of shorter distance trips (under five miles) for all travel modes currently using the existing rail crossings in and near the Study Area are more concentrated near the California Avenue Caltrain Station, California Avenue, Ventura Neighborhood, and San Antonio Center in Mountain View.
- **Safety:** Oregon Expressway, Meadow Drive, Charleston Road, Middlefield Road, and El Camino Real are designated as High-Injury Corridors due to their disproportionately high number of crashes.
- **Environment:** Several creeks flow through the Study Area, classified as a Moderate Risk zone for flooding.

The Existing Conditions Report identifies the following crossing opportunity locations for further exploration based on the review of previous plans and studies, right-of-way constraints, and on-site field visits conducted by the Project team.

- A. Near Colorado Avenue and Page Mill Road
- B. Around Matadero Creek (El Dorado Avenue to Loma Verde Avenue)
- C. Near Barron Creek
- D. Between Meadow Drive and Charleston Road
- E. Near Adobe Creek
- F. Near San Antonio Road

Figure 1: Potential Crossing Locations



Draft Design Priorities and Evaluation Criteria Memorandum

The Draft Design Priorities and Evaluation Criteria Memorandum (Attachment B) presents the initial design priorities and evaluation criteria that will be used to guide the development and selection of rail crossing designs and bicycle and pedestrian infrastructure options (“alternatives”) for the Project. It also outlines the engagement and evaluation processes that will be utilized to inform the assessment of designs and subsequent selection of two locally preferred alternatives.

The following draft design priorities were identified based on the Project needs, goals, benefits, and themes documented in several plans and studies previously prepared by the City, which are summarized in the Literature Review Section (starting on page 11) of the Existing Conditions Report (Attachment A).

- **Improve Mobility:** Prioritize locations and designs that integrate with surrounding networks, provide access to critical destinations, serve the most users, and accommodate current and future transportation needs.
- **Enhance User Experience:** Design facilities guided by the prioritization of the most vulnerable populations, and create safe, well-lit spaces that are comfortable to access and utilize.
- **Maximize Ease of Construction:** Minimize potential for disruption during construction and complexity of design, while ensuring that construction costs and maintenance costs are feasible to implement given reasonably expected project funding.

- **Enhance Visual Appeal:** Ensure that newly constructed facilities enhance the sense of community by incorporating public art, public spaces, and attractive structures.
- **Minimize Community Impacts:** Limit potential impacts on existing neighborhoods, including the amount of space needed (parking spaces, roads, and buildings are minimally affected) and impacts on the environment.

Draft evaluation criteria presented in the following table are grounded in key community priorities and linked to specific evaluation criteria, with measurable outcomes, that are proposed to be used for the analysis of alternatives. The proposed design priorities and draft evaluation criteria are presented in the following table.

Table 1. Draft Design Priorities and Evaluation Criteria

Draft Design Priority	Draft Evaluation Criteria**	Description
Improve Mobility	Accessibility	Walk and bike access within 5-, 10-, and 15-minutes
	Demand [#]	Projected number of users during the weekday peak hour
	Capacity [#]	Width of facility and ability of rail crossing to accommodate people walking and biking
Enhance User Experience	Crossing length [#]	Total length of the crossing facility
	Crossing elevation [#]	Total change in elevation of the crossing facility
	Pedestrian and bicyclist comfort	Extent to which existing bicycle and pedestrian network would provide low-stress access to the rail crossing(s)
	Personal security	Alignment of rail crossing facility and approaches with Crime Prevention Through Environmental Design (CPTED) best practices
Maximize Ease of Construction	Utility and right-of-way impacts	Level of disruption to existing and planned utilities, extent of relocations required, extent of right-of-way impacts
	Construction cost [#]	Rough order of magnitude of project construction cost
	Operations and maintenance cost	Magnitude of projected annual cost of operations and maintenance
Enhance Visual Appeal	Public space and green infrastructure	Potential to create new public spaces and implement green infrastructure
Minimize Community Impacts	Environmental impacts	Extent to which crossing impacts the environment - impervious areas, creeks/drainage, sea level rise, wetlands, and sensitive habitats
	Parcel impacts [#]	Number of parcels needed, all or in part, to construct crossing and approach facilities

Draft Design Priority	Draft Evaluation Criteria**	Description
	Parking and driveway impacts	Extent to which rail crossings affect existing vehicle parking and access to existing driveways

Notes:

**Criteria marked with an “#” are quantitative and a specific value will be presented. Criteria without a “#” are qualitative and will be scored using a scale of high, medium, and low, for its performance.

These initial design priorities and evaluation criteria are presented for feedback as part of Phase 1 engagement activities. Based on the feedback received, the Project team will refine the design priorities and corresponding evaluation criteria that will guide subsequent efforts.

Next Steps

With input from community and the PTC, City/School Transportation Safety Committee (CSTSC), Pedestrian and Bicycle Advisory Committee (PABAC), Rail Committee, Parks and Recreation Commission (PRC), and City Council, the Project team will develop and present concept designs and corresponding network modifications for up to eight alternatives at various locations along the rail corridor. The Project team will evaluate each alternative using the selected design priorities and evaluation criteria established in Phase 1. The final evaluation criteria will be selected based on how well they facilitate evaluation against the overarching set of established priorities and how effectively they differentiate alternatives. Each of the eight crossing alternatives will be evaluated against the same subset of criteria and scored quantitatively with a specific value reported or qualitatively using a scale of high, medium, and low, for its performance. The results of this evaluation will be presented in Phase 2 engagement activities, and community input will be sought to inform refinement and selection of the two preferred alternatives for the rail crossing and associated bicycle and pedestrian infrastructure improvements in south Palo Alto.

FISCAL/RESOURCE IMPACT

On September 9, 2024, Council approved the professional services contract (C25191297) with Kittelson & Associates for a not-to-exceed amount of \$499,491 for the Project for a term of two-years. Sufficient funding for anticipated expenses is available in the FY 2025 Bicycle and Pedestrian Transportation Plan Implementation project (PL- 04010) in the Capital Improvement Fund.

STAKEHOLDER ENGAGEMENT

Overview

The City is organizing and facilitating community outreach and engagement efforts with the intent to engage residents and key stakeholders and solicit input at various phases of the project. Community engagement will include a series of workshops, pop-ups, surveys, and

other strategies that will be structured to include property owners, residents, businesses, local business employees, representatives of private and public schools, agencies providing services in the area, and visitors.

Community outreach and engagement will occur over four phases:

- Phase 1 Community Engagement: Establish Design Priorities (Spring 2025)
- Phase 2 Community Engagement: Feedback on Alternatives (Fall 2025)
- Phase 3 Community Engagement: Review Public Draft Report (Spring 2026)
- Phase 4 Community Engagement: Council Adopt Final Report (Summer 2026)

Community Engagement Phase 1 Establish Design Priorities (Spring 2025)

Phase 1 is currently in progress. During the first phase of engagement, the Project team is seeking input from the community to confirm crossing opportunity locations and establish design priorities and evaluation criteria to be applied in the evaluation of alternatives. The outcome of Phase 1 will be prioritization of crossing opportunity locations and a final set of design priorities and evaluation criteria to be applied in Phase 2. A summary of Phase 1 activities and engagement themes heard so far is provided in this section.

- **Project Website:** A dedicated project webpage (paltoalto.gov/bikepedcrossings) was created in September 2024 where City staff will continue to post the latest information and provide regular updates on upcoming meetings/events and ways to engage on the Project.
- **Project Fact Sheet:** A project fact sheet was made available on the project webpage in March 2025.
- **Small Group Discussions:** Eight small group discussions were held virtually from November through December 2024 at the start of this Project. These one-hour virtual meetings included members of the CSTSC and PABAC, and representatives of Caltrain, Palo Alto Unified School District, Californians Advocating Responsible Rail Design (CARRD), Silicon Valley Bicycle Coalition (SVBC), and Stanford University. The discussions covered a range of topics including: background and vision, alignments and design, evaluation criteria, community engagement, challenges and opportunities. There was unified support for easy, well-lit, accessible, safe crossing of the railroad tracks and Alma Street that is suitable for all ages (8-80), reducing the long distances between crossings that exist today. Participants encouraged the team to think about crossing locations from a network perspective to consider not only the crossing location but how to get to/from that point. Participants also shared a list of criteria and priorities for consideration in the evaluation of alternatives.
- **Community Workshop:** A Transportation Planning Workshop was held at Palo Alto's Mitchell Park Community Center (El Palo Alto Room) on April 2, 2025, from 6:00-7:30 pm, where participants were able to provide feedback on the Bicycle and Pedestrian Transportation Plan Update and South Palo Alto Bike/Ped Connectivity Project. Nearly 50 community members were in attendance. The majority of community members

prioritized crossings that improved mobility, with additional comments emphasizing their general support for the project and interest in its fast completion. A crossing around Matadero Creek (El Dorado Avenue to Loma Verde Avenue) was the most popular location amongst attendees, followed by a crossing between Meadow Drive and Charleston Road.

- **Online Survey:** An online survey is currently available to share input that will help select preferred crossing locations, designs, and improvements. The survey will be open from April 1, 2025 through May 15, 2025 and is available on the project webpage at paltoalto.gov/bikepedcrossings. As of April 30, 2025, over 290 responses have been submitted.
- **Pop-Up Events:** Pop-up events have included and will continue to include tabling participation at community-wide events, such as California Ave Third Thursdays, Earth Day Festival, and Bike to Work Day.
- **Presentations at Standing Meetings (tentative):** Staff will engage with standing committees, including the PABAC, CSTSC, Rail Committee, PTC, and PRC in April and May 2025, with a City Council meeting planned to occur later this Summer.

Feedback from Phase 1 will be used to establish design priorities and evaluation criteria for crossing alternatives presented in Phase 2 (Fall 2025). Sketch-level concept designs for eight alternatives will be presented for feedback in Phase 2 along with the results of the evaluation.

Phase 2 Community Engagement Feedback on Alternatives (Fall 2025)

During the next phase of engagement, Phase 2, the Project team will present concept designs and corresponding network modifications for up to eight alternatives and evaluate each alternative using the selected design priorities and evaluation criteria established in Phase 1. The initial eight alternatives and completed evaluation will be shared with the community for review and feedback during Phase 2 via small group discussions, pop-up events, a second online survey, a second community workshop, and discussions at standing meetings in Fall 2025. The feedback received during this phase will result in the refinement and selection of two preferred alternatives that will be carried forward for 15 percent concept design.

Phase 3 Community Engagement Review Public Draft Report (Spring 2026)

The Public Draft Report will include a funding and implementation plan and will be shared for feedback as part of a third phase of engagement, Phase 3 Review Public Draft Report, in Spring 2026.

Phase 4 Community Engagement Council Adopt Final Report (Summer 2026)

The Final Report will be shared in Summer 2026 in Phase 4 for community review and Council adoption.

ENVIRONMENTAL REVIEW

This study session is not a project as defined by California Environmental Quality

Act (CEQA) because it does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. CEQA Guidelines section 15378(b)(4).

ATTACHMENTS

Attachment A: Existing Conditions Report

Attachment B: Draft Design Priorities and Evaluation Criteria Memorandum

AUTHOR/TITLE:

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