



APPENDIX

Appendix A: Community Outreach & Engagement Summary and Materials

Appendix B: Existing Conditions

Appendix C: Prioritization Metrics

Appendix D: Countermeasure Safety Improvements

Appendix E: Detailed List of Location-Specific Project Recommendations

Appendix F: Funding Sources and Implementation Strategy

Appendix G: Improvement Cost Estimates



APPENDIX A: COMMUNITY OUTREACH & ENGAGEMENT SUMMARY AND MATERIALS

SAN MATEO TRANSIT-ORIENTED DEVELOPMENT (TOD) PEDESTRIAN ACCESS COMMUNITY ENGAGEMENT PLAN

The Community Engagement Plan provides a clear path to inform and develop a successful TOD Pedestrian Access Plan by engaging early and often, targeting outreach for underrepresented demographics, and providing a range of engagement activities to solicit feedback. We recommend the following Community Engagement Plan to ensure the final TOD Pedestrian Access Plan reflects community priorities. The engagement process is designed to achieve the following outcomes:

1. The community knows what a TOD Pedestrian Access Plan is and understands the goals and potential impacts of the plan.
2. Community engagement activities reach and celebrate the voices of populations typically underrepresented in the planning process*, including:
 - People who have not previously participated in planning processes
 - The Latinx community
 - Low- and moderate-income households
 - Vulnerable users such as seniors and youth
3. The community sees their input in the final TOD Pedestrian Access Plan.

*These key groups were identified based on historic patterns of exclusion and recognition that infrastructure that serves our most vulnerable users, serves us all. Feedback received during the San Mateo General Plan engagement phase identified the Latinx community, specifically, as a key demographic often left out precluded the planning process.

COMMUNITY ENGAGEMENT PLAN

In order to achieve our project and engagement goals, Fehr & Peers and Urban Planning Partners conducted interviews with key stakeholders in the City of San Mateo. Based on outreach from previous planning processes and discussions with City staff, we focused our interviews with three distinct interest groups within the community: seniors, youth, and the Latinx community. We spoke with key representatives with experience and advocacy for their respective community group. Our interviewees and their affiliations are listed below:

Interest Group	Interviewee and Affiliation	Interview Date
Seniors	Vince Siminitus, Aging and Retirement Activist	July 7, 2021
	Monika Lee, Chair of the San Mateo Senior Citizens Commission	July 15, 2021
Youth	Adam Wilson, Program Manager at Youth Leadership Institute (YLI) San Mateo; Alheli Cuenca, Bay Area Director of Programs at YLI	July 15, 2021
Latinx Community	Frances Lobos, Community Health Planner Co-Chair, Diversity & Equity Council Maria Lorente-Foresti, Director, Office of Diversity and Equity	July 12, 2021

KEY TAKEAWAYS

Each interview provided valuable insight and strategies for how to best reach and elicit participation from participants. Essential feedback from each stakeholder group representative(s) that directly informs our overall community engagement plan is outlined below. The feedback from each key stakeholder group was invaluable in determining the type, time, and agenda for an event or activity.

Senior Community

- Late afternoon and early evening meetings on weekdays are best for this group
- Including a recognizable and well-known individual in the senior community as part of the meeting agenda is a great way to ensure greater attendance
- While some interactive meeting-types can be fun, most seniors feel most comfortable with a community meeting presentation and break-out groups of their peers. Make sure facilitators speak clearly, loudly, and all instructions are easy to read is also essential in these settings.
- The best way to promote events for seniors is through The (San Mateo) Daily Journal, NextDoor, and building lobby message/announcement boards.
- Getting to and from the Hillsdale Shopping Center is an area of particular concern for many seniors; in particular the nearby pedestrian passageways are seen as unsafe

Youth Participants

- Concerns over safety at bus stations and walking even short distances for programs and activities
- Hillsdale Shopping Center is a good place to find youth congregating
- Engaging with San Mateo High School directly; could align with back-to-school activities
- Providing incentives for participation is key
- Youth value equity, social justice, and healthy communities – frame the plan with these values
- Monday nights are not preferred by youth

Latinx Community

- Virtual meetings/events will be better for the Latinx community (lower vaccination rates, higher sickness and death rates among middle-aged Latinos)
- Greater attendance and reception if the events are sponsored or done in partnership with an existing and trusted community group or organization
- Facebook seems to be the best place to reach older Latinx community whereas other social media (TikTok, Instagram) are best for younger generation
- Making sure information is accessible in multiple languages and that the event is easy and straightforward to access
- Evening sessions are typically best (not during the 9-5 workday) and Tuesday/Thursday evenings are usually most successful

All stakeholders expressed confusion with the term “TOD” and suggested that we use a less technical term for outreach purposes. We recommend using “San Mateo Walks to Transit” as the primary header on all outreach materials. The full plan name “San Mateo Transit-Oriented Development Pedestrian Access Plan” would be introduced in smaller text.

COMMUNITY ENGAGEMENT PLAN

Outreach Methods				
Who we're reaching	Senior Community	Youth	Latinx Community	Notes
SM Daily Journal Ad	x			Will complete this if we can get a free ad or low-cost ad
Project Webpage				A project webpage hosted on the City's website will provide information about the project and upcoming outreach events, serve as a landing page for the survey link, and reach the broader community within San Mateo.
NextDoor	x			Announcement for Community Meeting as well as survey QR code and link.
Flyers		x	x	Virtual flyers (message boards, social media—see below); Physical flyers with survey QR code and link around Hillsdale Shopping Center, Downtown businesses, Caltrain stations, SamTrans bus stops/stations, building announcement boards, school announcement boards. Flyers will be translated into Spanish.
Email Blast + Listserv + Text Blast	x	x		Utilize City's existing Transportation Projects and Planning listserv as well as Senior Commission listserv of interested parties/newsletters and YLI text blast to San Mateo participants. Email blast will be translated into Spanish as necessary.
Local Interest Group Meetings (almost all virtual)	x	x	x	Announcements and brief attendance at up to eight existing meetings potentially including: San Mateo County Diversity and Equity Council, Bay Area Community Health Advisory Council, San Mateo County Immigrant Services, San Mateo County Suicide Prevention Committee, Latino Families Group (at SMHS), YLI Fall Cohort Orientation/Training, Senior Commission, Office of Education and Safety Training Traffic Assessment, Pride Center, and San Mateo County Civic Engagement Training. If requested, meeting visit can be conducted in Spanish. Groups will be given the survey link and asked to distribute the survey to their networks.
Social Media (Instagram, Facebook)		x	x	City of San Mateo social media channels on Instagram, Twitter, and Facebook (including Public Works, Library, Parks & Recreation, SMPD). <i>Potential: SamTrans/Caltrain Instagram, Twitter, Facebook; Diversity and Equity Council Facebook.</i> Social media posts will be translated into Spanish.

Engagement Activities				
<i>Who we're engaging</i>	Senior Community	Youth	Latinx Community	Event Materials and Location
Community Meeting¹	x			Downtown Main Library (Room with courtyard), presentation; translation and interpretation services; breakout group questions and prepped facilitators; poster board maps, stickers, markers, feedback cards; food/snacks. A Spanish interpreter will be available to host a Spanish-only breakout group if needed. This will be advertised on promotional materials.
Map Survey²		x		Survey will prioritize areas of concern for the community. Survey will be available in Spanish.
Pop-Up Surveys³		x	x	One each at Hillsdale Shopping Center, Downtown San Mateo, Latinx-community grocery store or faith-based event (e.g., Mass). iPads with survey, poster board with map, markers, and stickers (as needed) (availability TBD)

¹*Community Meeting:* The current plan will be to hold an in-person, indoor/outdoor event at the Main Library in Downtown San Mateo.

However, depending on public health guidelines leading up to the event, there is a possibility the meeting will be held virtually. The meeting will include a presentation with background context on the project purpose, desired outcomes, and primary questions for discussion. The attendees will be separated into 3-4 breakout groups (depending on total attendance) and be asked more specific questions about their experience in San Mateo within the study area. Using maps, stickers, and markers, the group facilitator will capture key information on the map as well as through notetaking. If the meeting is held virtually, we will utilize screen sharing and virtual tools to the same effect. The attendees will come back to a large group for closing thoughts and Q&A. Potential: Senior advocate/local guest speaker to incentivize attendance.

²*Map Survey:* To best capture direct feedback on areas within the study area, UPP/F&P will create an interactive map survey to be taken online. The survey will include an educational introduction and will touch on areas of greatest concern and personal experience as well as a rank-choice 'wish list' section that details out the different types of safety and pedestrian improvement opportunities as part of this plan. The survey will ask optional demographic information to best understand the groups we are reaching and be offered in both English and Spanish. The survey link will be distributed through a QR code on sidewalk decals and flyers (see outreach strategies above).

³Pop-Up Survey: To increase youth participation in the survey, UPP/F&P will do pop-up events/canvassing at the Hillsdale Shopping Center as well as part of Downtown San Mateo (San Mateo Central Park and/or Caltrain station, as available) with iPads for individuals to complete the survey.

KEY QUESTIONS FOR COMMUNITY MEMBERS

1. What are your biggest barriers to walking to transit in San Mateo?
2. What specific streets (within the study area) could have a better pedestrian experience? Why?
3. Which streets, walkways, or connections (within the study area) would be most important for us to improve? / Where are your most important walking routes when accessing transit?
4. Of the types of improvements we are considering in this plan, which are your top priority?

SCHEDULE

SAN MATEO WALKS TO TRANSIT: ENGAGEMENT SUMMARY

Extensive community engagement was planned and performed for the San Mateo Transit-Oriented Development (TOD) Pedestrian Access Plan Initiative (renamed ‘San Mateo Walks to Transit’ for all engagement/public-facing purposes). The following summarizes the purpose and goals of outreach, how outreach was conducted, and who was reached, what was heard, and next steps.

PURPOSE AND GOALS

San Mateo Walks to Transit will prioritize proposed improvements using feedback received from the community during the engagement process. In developing and executing the Community Engagement Plan, key goals included:

1. The community knows what a TOD Pedestrian Access Plan is and understands the goals and potential impacts of the plan.
2. Community engagement activities reach and celebrate all voices, including those of populations typically underrepresented in the planning process *, including:
 - People who have not previously participated in planning processes and/or have been historically excluded from planning processes;
 - The Latinx community;
 - Low- and moderate-income households; and
 - Vulnerable users such as seniors, youth, and people with disabilities.
3. The community sees their input in the final TOD Pedestrian Access Plan.

For the purposes of this engagement and project, the “community” is defined as people that walk to and take transit. While feedback was welcomed from anyone, the Community Engagement Plan was developed to ensure that the improvements prioritized in the final plan directly address the needs of pedestrians and San Mateo transit users.

*These key groups were identified based on historic patterns of exclusion and the recognition that infrastructure that serves our most vulnerable users, serves us all. Feedback received during the San Mateo General Plan engagement phase identified the Latinx community, specifically, as a key demographic often precluded from the planning process.

HOW WE REACHED OUT AND WHO WE REACHED

San Mateo Walks to Transit engagement covered a wide range of platforms, places, and people. Engagement included virtual focus groups, social media, email blasts and phone calls, in-person pop-up events. An ongoing online survey and map platform was publicized at all engagement events, in addition to QR code sidewalk decals placed at each Caltrain station within the study area (Hillsdale, Hayward

Park, and Downtown San Mateo) and three SamTrans bus stops (El Camino Real and 17th Avenue and San Mateo Drive and 2nd Avenue).

BY THE NUMBERS

- Facilitated three focus groups with key stakeholders (28 total attendees across focus groups)
- Spoke with approximately 75 community members at in-person pop-up events
- Collected 90 comments and targeted feedback at in-person events
- Received 237 comments on the online interactive map and 48 survey responses
- Attained 414 individual views on the San Mateo Walks to Transit project page on the City's website
- Totaled 64 scans on QR code sidewalk decals placed strategically across the three Caltrain stations and three SamTrans bus stops within the study area
- Provided 20 community organizations and 32 Neighborhood and Homeowner Associations in San Mateo with web links to the project webpage, survey, and interactive map

FOCUS GROUPS

For each focus group meeting, the project was introduced by defining 'TOD' and explaining the plan development process, followed by a facilitated group discussion. The focus groups were scheduled during pre-existing group meetings to accommodate the schedules of attendees and maximize participation. The groups selected were identified during the Community Engagement Plan development process as groups of potentially vulnerable users and/or groups not typically involved in the planning process. Variations of the following questions were asked to each group:

- Do you walk to transit in San Mateo?
- What are the areas of greatest concern for walking within the study area?
- What walking routes within the study area are your favorite?
- Based on the improvement options, which three (3) improvements would you choose to make walking easier?
- Tell us about walking in San Mateo. Are we missing anything?

A copy of the presentation can be found in Attachment A.

Focus Group Meetings

Silicon Valley Bicycle Coalition—San Mateo Local Team

When: Wednesday, September 15, 2021; 6:00 –7:00 PM

San Mateo County Paratransit Coordinating Council

When: Tuesday, October 15, 2021; 1:30 – 2:00 PM

San Mateo County Latino Collaborative

When: Tuesday, October 26, 2021; 3:30 – 4:00 PM

A list of attendees and notes from each focus group can be found in Attachment B.

POP-UP EVENTS

Two consecutive days of pop-up events were organized across the study area to increase participation, reach those with lesser access or interest in online formats, and to engage with people in their normal day to day activities throughout the study area. In addition to the Caltrain stations in the study area, several of the pop-up event locations were hosted around the key groups identified during the engagement plan phase: seniors, youth, and the Latinx community. The pop-up events included a table with two poster boards showing the study areas, project flyers, hard-copy versions of the online survey in both English and Spanish, as well as stickers, post-it notes, and pens to write and mark suggestions, comments, and concerns on the poster boards.

The Peninsula Regent—Senior Living Facility

When: October 6, 2021, 11:00 AM – 1:30 PM

Location: 1 Baldwin Ave, San Mateo, CA 94401

Who was reached: Seniors living in and around Downtown San Mateo including those that use transit, previously used transit, or have never used transit.

The Nueva School (Grades 9-12)

When: October 6, 2021, 2:00 – 4:00 PM

Location: E 28th Avenue close to S Delaware Street

Who was reached: Nueva School students (many of which use transit).

Hillsdale Caltrain Station

When: October 6, 2021, 4:00 – 6:00 PM

Location: E 28th Avenue by South entrance to the station

Who was reached: Commuters, students, and transit users.

Downtown San Mateo—North B Street*



When: October 7, 2021, 10:00 AM – 12:00 PM

Location: Mi Rancho Supermarket, 80 N B St, San Mateo, CA 94401

Who was reached: Members of the Latinx community (from teens to seniors), people who work and shop in Downtown.

*Spanish speaker available for translation and interpretation at this event.

Downtown San Mateo—South B Street

When: October 7, 2021, 12:00-2:00 PM
Location: Closed off portion of S B Street at 2nd Avenue
Who was reached: People who work, shop, and/or bike in Downtown.



Downtown San Mateo—Caltrain Station

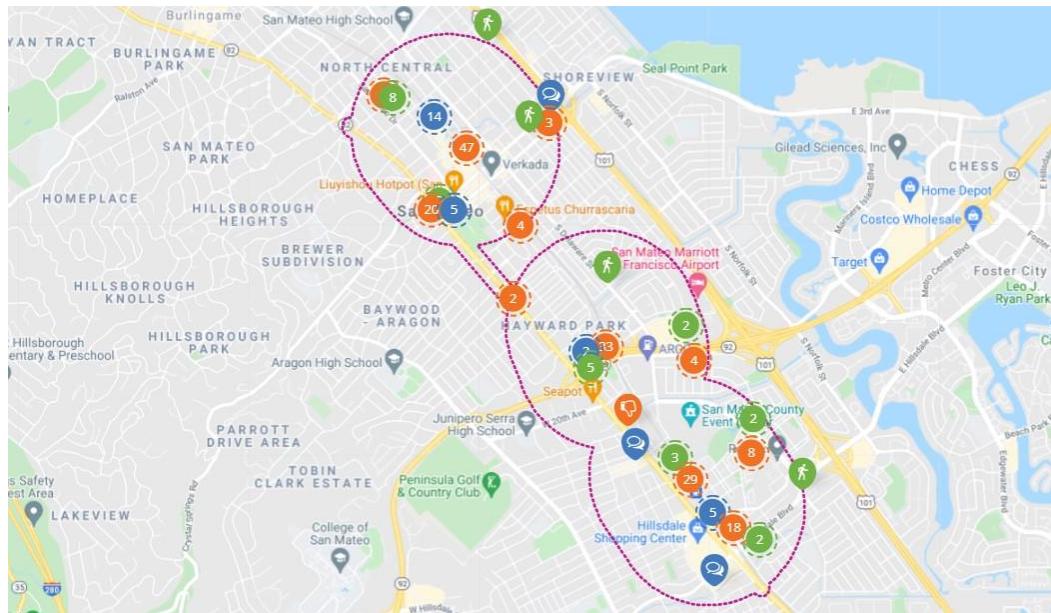
When: October 7, 2021, 2:00-5:00 PM
Location: Caltrain Station southbound platform
Who was reached: Commuters and people who live and/or work in San Mateo.

ONLINE ENGAGEMENT

To complement both the in-person and focus group engagement activities, Social Pinpoint, a mapping and engagement web platform, was used to develop an interactive mapping tool to collect feedback on pedestrian issues, key pedestrian routes, and other general comments about walking in the study area. In addition to the interactive map, an accompanying survey was developed that asked qualitative questions related to walking to transit in San Mateo as well as optional demographic questions to get a sense of who was being reached with this tool. The map and survey were available online in both English and Spanish from September 20 to October 31, 2021.

To promote the survey and Social Pinpoint map, social media posts for Instagram, Twitter, NextDoor, and Facebook were developed to distribute information directly to community organizations and groups throughout San Mateo. The main project webpage on the City's website (www.cityofsanmateo.org/TransitWalk) included a link to the survey and Social Pinpoint Map along with other information about the project.

Online Map and Survey



The Social Pinpoint Map offered three options for interaction as well as an accompanying survey. The three options were: 1) Pedestrian Issue (orange), 2) Key Pedestrian Route (green), or 3) Comment (blue). Users were limited to leaving comments within the study area in order to stay within the scope of work of the project and to focus comments in areas of potential improvement. Users were also able to utilize a tool to up-vote/'like' or down-vote/'dislike' comments that prior users had posted.

The online Social Pinpoint Map and survey can be viewed at the following links:

- [Interactive Mapping Tool \(English site\)](#)
- [Interactive Mapping Tool \(Spanish site\)](#)

The accompanying survey can be found in Attachment C.

Social Media

Social media outreach was conducted using the City's social media accounts and Fehr & Peer's social media accounts. There were two rounds of social media posts to publicize the survey as well as a post announcing a survey extension for additional time to gather feedback. The social media posts were designed to capture people's attention and drive them to the City's website to complete the survey and provide feedback on the Social Pinpoint Map.

Social media posts and accompanying captions can be found in Attachment D.

ADDITIONAL OUTREACH

In addition to focus groups and the pop-up events, the project website link containing the Social Pinpoint Map and survey was distributed via outdoor street decals placed strategically at Caltrain stations and bus stops along El Camino Real and through emails to over 20 community organizations and

all San Mateo Neighborhood and Homeowner's Associations. A comprehensive list of organizations and Neighborhood and Homeowner's Associations that were contacted (including San Mateo High School Latino Families group, San Mateo Pride Center, and Asian Uplift) can be found in Attachment E.

WHAT WE HEARD:

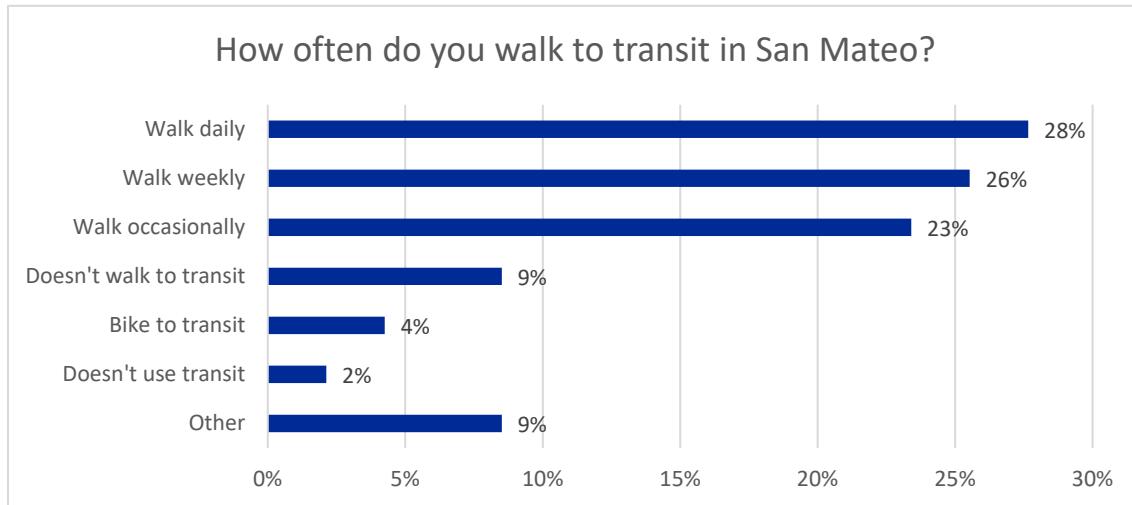
Through a variety of methods as described above, qualitative, and quantitative input was collected from the community. The data collected and the corresponding findings are summarized below.

SURVEY RESULTS

The following three graphs show key results of the 48 survey responses collected. The first five questions were required, followed by optional demographic questions. Full survey results can be found in Attachment F.

Question 1:

The majority of transit users walk daily, weekly, or occasionally to transit in San Mateo as shown in the chart below. It is important to note that the “Other” category for the “How often do you walk to transit” question was primarily individuals who reported walking to transit prior to the COVID-19 pandemic but are no longer commuting to their workplace or have opted to not take transit for the time being.

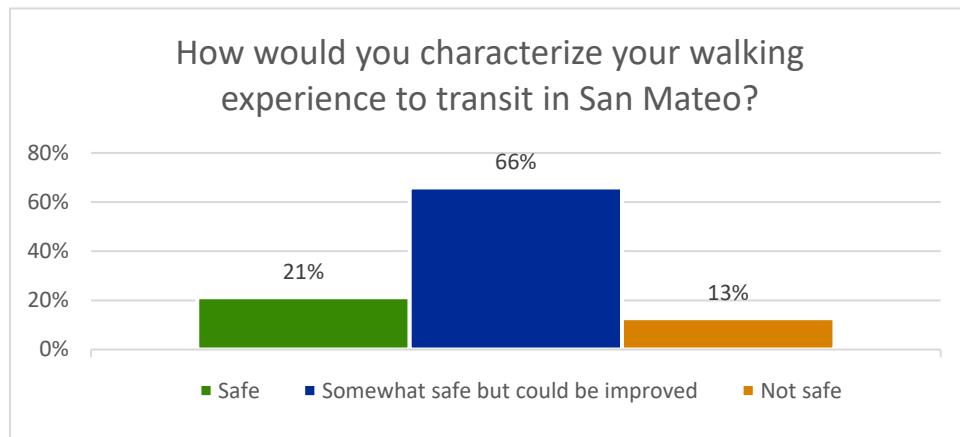


Graph 1: N=48

Question 2:

The majority of transit users feel safe when walking to transit in San Mateo. Of the respondents who answered that “San Mateo provides a safe walk to transit,” more than 70% answered that they walk to transit either daily or weekly for Question 1. Two-thirds (66%) of respondents reported feeling that San Mateo provides a “somewhat safe walk to transit”, but that their experience could be improved. Two-

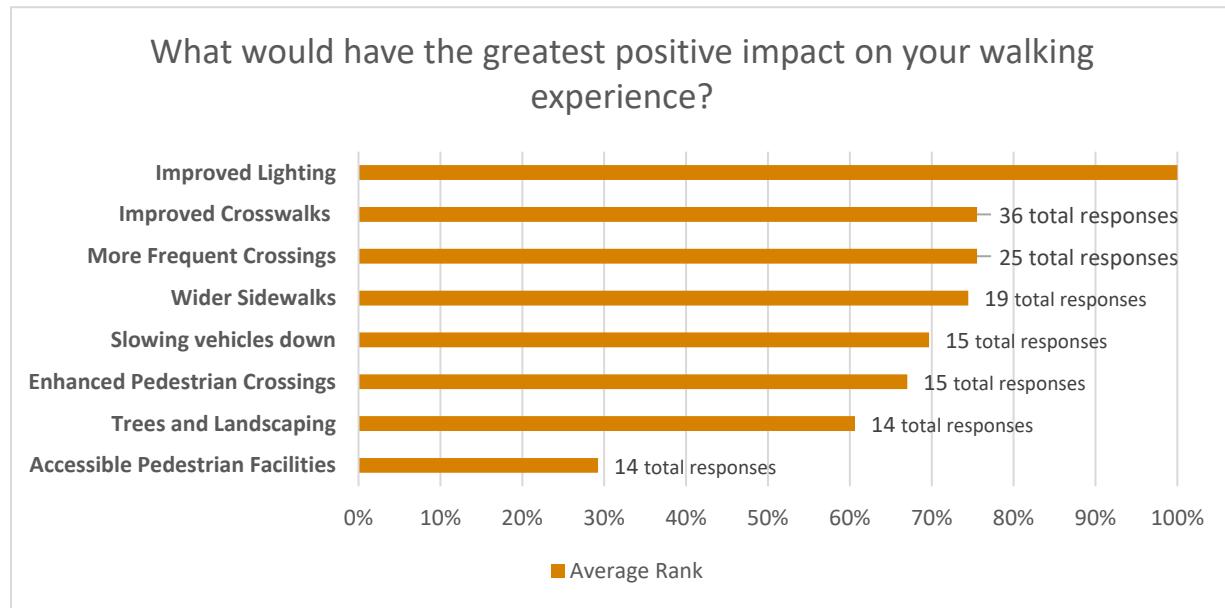
thirds (66%) of respondents who answered that “San Mateo does not provide a safe walk to transit” also responded that they currently do not walk to transit for Question 1.



Graph 2: N=48

Question 3:

All 48 respondents provided a first rank choice that would have the greatest positive impact on their walking experience. However, as shown below, each respective ranking (2nd through 8th choice) received fewer responses. The chart below reflects the average ranking for the categories that affect walking experience.



Graph 3: N=48

Demographics:

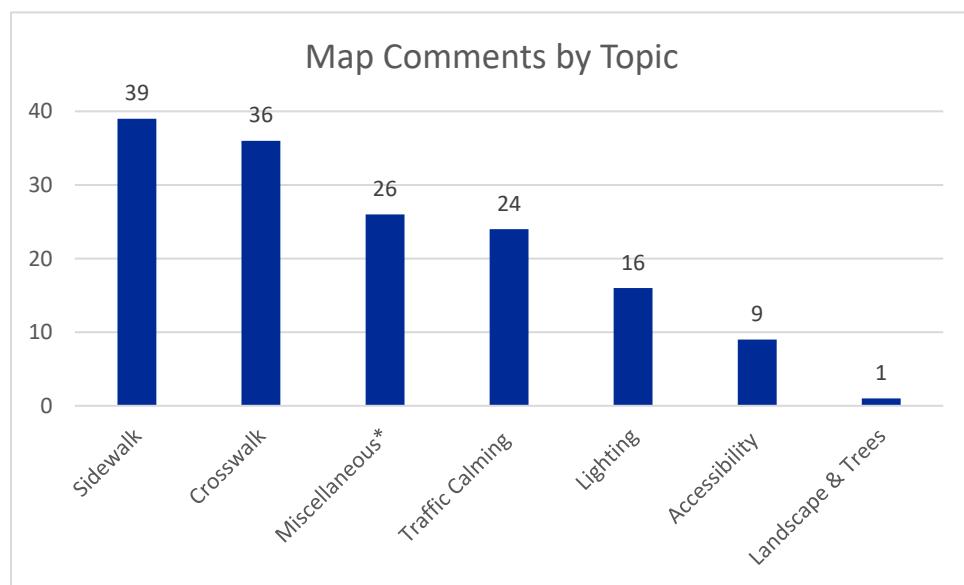
The respondents ages ranged from 14-81 with the majority of respondents being between 20-50. 71% of respondents identified as white, 12% as Asian, 7% as Latino or Hispanic, 7% as other, and 2% as American Indian or Alaskan Native. It is important to note that these responses capture about 10% of

total survey responders and do not reflect the full range of people who took the survey or who were engaged during the additional engagement events and activities.

SUMMARY OF INPUT

A number of observations, suggestions, and points of concern to consider in the San Mateo Walks to Transit Plan were received through the Social Pinpoint Map and in-person pop-up events. Community feedback is one of the most critical pieces to the prioritization process and the following provides an overview of key data, themes, and top areas of concern from the community. The maps in Attachment G provide a visual reference for comments received on the interactive map and pop-up events. The maps present the density of the comments throughout the study area, the location of the comments by topic as well as by improvements needed, and the key pedestrian routes highlighted by respondents.

The comments received on the interactive map fell under the following categories:



*The Miscellaneous category captures comments or map pinpoints that did not fall into a specific category either because of their general content or because of content less applicable to the scope of the San Mateo Walks to Transit Plan.

The following comments had the highest number of up-votes, a feature where people could opt to 'like' or affirm a statement/comment provided by a previous map participant.

- "There is no East-West crosswalk across El Camino at 28th for Pedestrians and Bikes at the north side of the intersection. The north side of E 28 has the bike ramp to the Hillsdale Train Station. This Corner is where Bike and People intersect during commute and is poorly configured for that." (11 upvotes)
- "Currently there are no bike lanes on 28th, and there is no at grade pedestrian crossing across 28th. With three new grade separations supporting 8 net new automobile lanes across town (and zero new bicycle lanes...), the 28th street undercrossing would benefit from a road diet to eliminate bicycle and pedestrian conflicts, and to add a pedestrian crossing at the new Hillsdale Caltrain station." (10 upvotes)
- "Speeding. Poor visibility."—at Franklin Parkway & Mena Drive/Baze Road (9 upvotes)
- "The access from the Michael's parking lot on the West-side of the tracks is blocked by a permanent fence. Walkers and Bikes cannot get access to the Train station. This forces all walkers and bike from the West-side of El Camino to access the Hillsdale Station from 28th Ave entrances or to navigate to the East side entrance." (9 upvotes)
- "I love having B St. closed to cars! I hope we do this in more places." (8 upvotes)
- "Crossing El Camino here, even with the light, is scary for pedestrians."—El Camino Real & 17th/Bovet (8 upvotes)

The following areas and improvement types were highlighted by participants during our focus group discussions:

- El Camino Real feels the most dangerous for pedestrians because of vehicle speed, narrow sidewalk width, short crossing times for pedestrians, unprotected vehicle right turns onto side street, and limited safe crossing routes for pedestrians.
- Improvements should focus on physical changes to streetscape/sidewalk, etc. not just surface paint.
- Better crosswalks needed at Delaware and 1st, 2nd, 3rd, and 4th to support pedestrians downtown.
- Buckled and narrow sidewalk conditions experienced around Downtown San Mateo, specifically the side streets west of El Camino Real leading into Downtown.
- Faster light intervals (i.e., more frequent "walk" signals) requested at 28th and Delaware for people to avoid jaywalking or running across the median farther east on 28th near the Hillsdale Station.
- Longer crossing times needed and more physical buffers (like landscaping and trees) between vehicle traffic and pedestrians at 28th and El Camino Real.

An additional comment that came up often, especially during pop-up engagement events, was the lack of reliability and limited service of SamTrans buses in San Mateo. In addition, several people asked why there are no east-west bus connections in San Mateo. While this is an improvement that is out of the scope of the San Mateo Walks to Transit Plan, it is important to note this barrier and concern with using transit in San Mateo.

KEY TAKEAWAYS

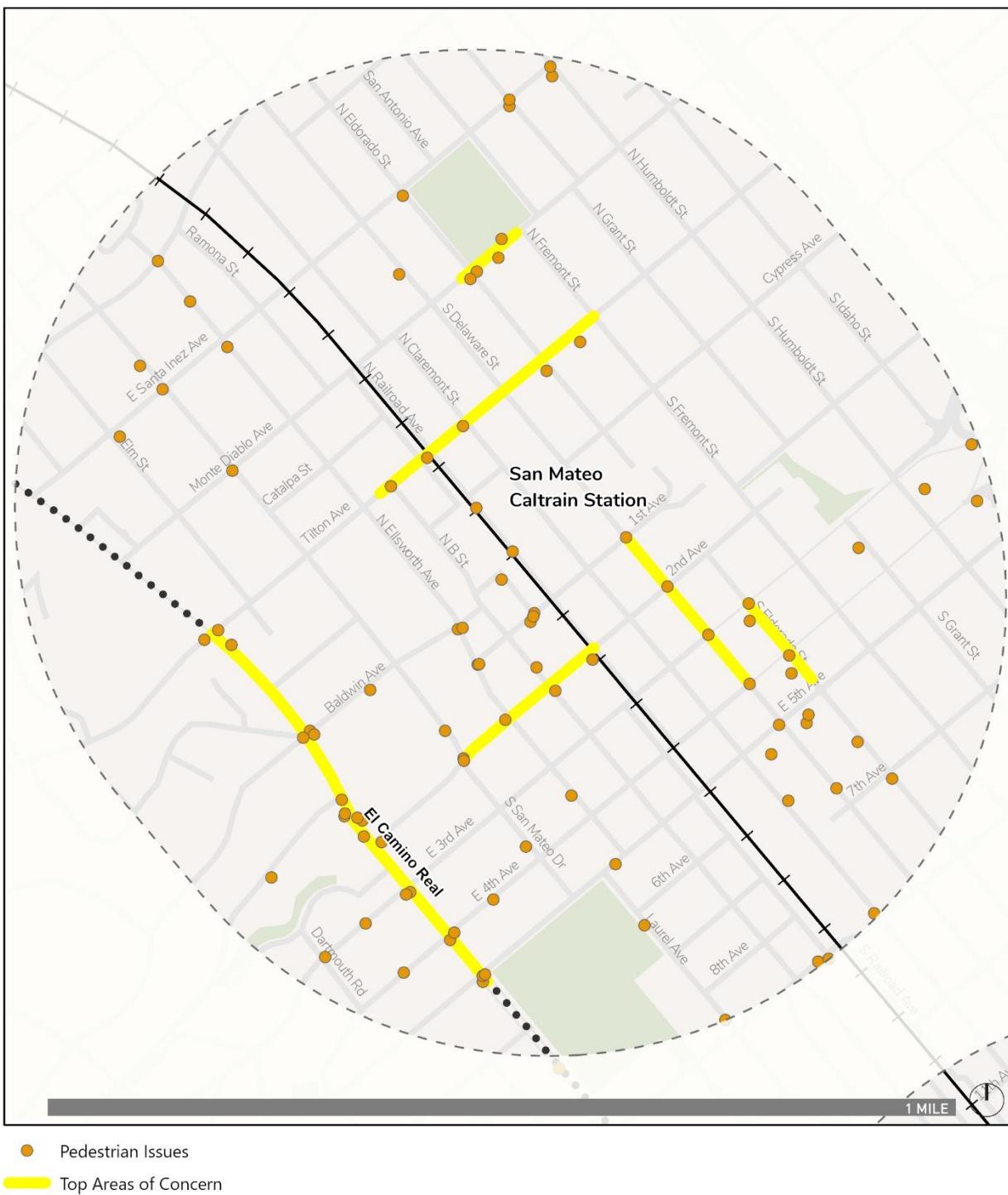
Key Takeaways for this Project

Based on the various platforms used to solicit feedback and comments from the community, the following areas within the study area were flagged as areas of greatest concern:

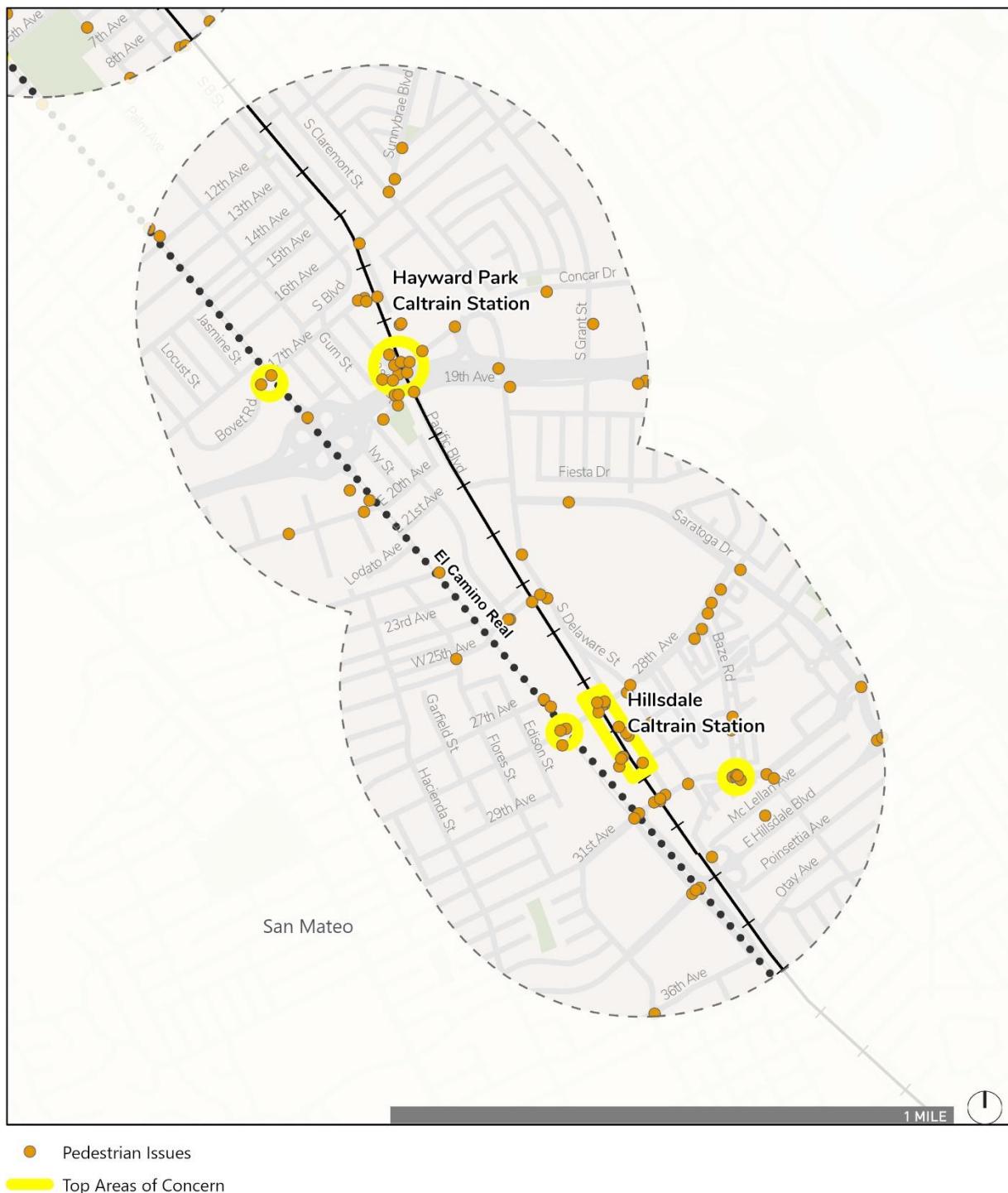
Top Areas of Concern (in descending order):

1. Intersection of 28th Ave and El Camino Real
2. Hillsdale Caltrain Station at 28th Ave, Derby, & Curiosity Way (access & crossing tracks)
3. Franklin Parkway and Baze Rd-Mena Drive
4. Hayward Park Caltrain Station (access & crossing tracks)
5. 17th Ave and El Camino Real
6. Intersections along 2nd Avenue between San Mateo Drive and N Railroad Ave
7. El Camino Real between Tilton Ave and E 5th Ave
8. El Camino Real and 20th Ave
9. Monte Diablo Ave between N Eldorado St and Fremont St
10. Tilton Ave between N B St and S Fremont St
11. Intersections along S Delaware St between 1st Ave and E 4th Ave
12. S Eldorado St at E 3rd Ave and E 5th Ave

The locations specified in this list are reflected on the following maps.



Community Top Areas of Concern



In addition to these top areas of concern, a high number of people participating on the interactive map and at in-person events commented on how much they've enjoyed the portion of S. B Street that is closed off to vehicle traffic and access. While a few concerns about reduced parking in the downtown area were received, the majority of people were thrilled with the change and would like to see it become more permanent (i.e., more defined, and aesthetically complimentary barriers, wider sidewalks, more attractive parklet seating, etc.).

In general, comments provided in-person were typically more positive about walking in San Mateo than the tone of comments provided in the interactive map. While individuals that were engaged in-person provided suggestions for improvements and targeted areas of concern, it is important to note this group of respondents were already opting to walk to or around transit areas in San Mateo.

Key Takeaways from the Engagement Process

The San Mateo Walks to Transit engagement process allowed for opportunities for learning and growing to be applied to future projects going forward. Below is an outline showing what worked well and what could be done in the future to further improve the engagement process and outcomes.

Successes

- A wide range of outreach and engagement methods were utilized which allowed us to reach different people and receive different types of comments with each type of engagement.
- All materials were translated into Spanish and the City's first pop-up event at Mi Rancho Supermarket, a market primarily serviced by Latinx community members and residents, was organized with a Spanish speaker from our staff. As a result, we were able to engage with a large number of people in the Latinx community at this location.
- The City's first pop-up event was held at The Peninsula Regent, a senior residency home in Downtown San Mateo, to ensure seniors were heard (as a key demographic identified early in the process). The City's new partnership with The Peninsula Regent is a resource that can be used for future outreach efforts.

Room for Improvement

While a wide range of individuals was reached through both in-person and virtual means in this process, there is still room for improvement and lessons learned through this engagement process.

1. Allocate additional budget and time to:
 - Include multiple bi- or multi-lingual individuals for certain pop-up events, hold focus groups with a few more region-specific community organizations, and expand text translation to include Chinese in addition to Spanish to reach more groups that have been historically excluded from the planning process.
 - Provide incentives for participating in outreach (raffle prizes, local business coupons, etc.) to encourage greater participation.
2. Partner with additional organizations represented by the Latinx community, such as the Latino Families group at San Mateo High School and organizations represented in the San Mateo County Latino Collaborative, to organize either in-person or virtual events for direct feedback

instead of relying on a more passive online engagement platform. Based on the limited response to the Spanish-language online map, additional outreach methods are recommended to capture responses more comprehensively from the Spanish-speaking community.

3. Engage more directly with youth through either an event or classroom-specific presentation and discussion with San Mateo High School, Aragon High School, and/or the Youth Leadership Institute (YLI). Engage with these groups early in the process to avoid scheduling and time constraints in this effort.

Conclusion

The San Mateo community that we engaged is eager for the San Mateo Walks to Transit Plan to be completed and for these requested improvements to be implemented to ensure a safer, more enjoyable walk to and around transit.

ATTACHMENTS

Attachment A—Focus Group Presentation

Attachment B—Focus Group Attendees List and Notes

Attachment C—Online Survey (English & Spanish)

Attachment D—Social Media Content

Attachment E—Community Organizations and Groups

Attachment F—Online Survey Results

Attachment G—Online Map Results

ATTACHMENT A—FOCUS GROUP POWERPOINT



San Mateo Walks to Transit

October 12, 2021

San Mateo Walks to Transit

What is Transit-Oriented Development?

Transit-oriented development (TOD) includes a mix of land uses centered around a transit station. ***Dense, walkable, mixed-use development near transit attracts people and adds to vibrant, connected communities.***



Plan Development Process



Understand
pedestrian circulation
issues and existing
barriers



Prioritize
improvement
options



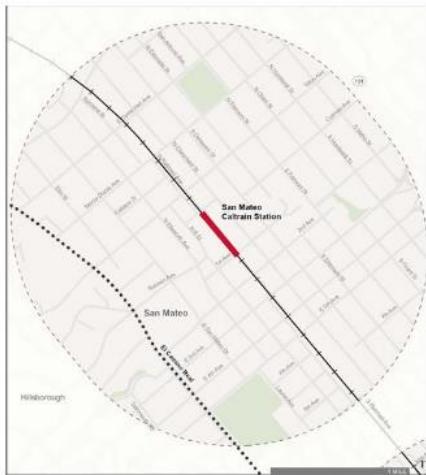
Develop final plan
for
implementation

— CITY OF SAN MATEO —

Study Area – Transit Oriented

Primary Study Area (1/2-mile radius around Caltrain stations)

Secondary Study Area - El Camino Real Transit Corridor



— CITY OF SAN MATEO —

Discussion Questions

— CITY OF SAN MATEO —

Question 1

What are the areas of greatest concern for pedestrians within the study area?

— CITY OF SAN MATEO —

Pedestrian Improvement Measures



Question 2

Based on the improvement options, which three (3) improvements would you choose to make the pedestrian experience easier?

What pedestrian routes within the study area are your favorite?

Question 3

— CITY OF SAN MATEO —

Tell us about being a pedestrian in San Mateo. Are we missing anything?

Question 4

— CITY OF SAN MATEO —

Questions?

— CITY OF SAN MATEO —



Thank You

Nicolette Chan
Assistant Transportation Planner
nchan@cityofsanmateo.org

www.cityofsanmateo.org/publicworks

— CITY OF SAN MATEO —

Glossary (pt. 1)



Marked Crosswalks

Marked crosswalks provide designated areas for pedestrians to cross, which concentrates pedestrians where drivers expect to see them, and may include additional enhancements such as signage.



Wider Sidewalks

Widening sidewalks provides a more comfortable space for pedestrians, particularly in locations with many pedestrians and provides space to accommodate street furniture such as bus benches and shelters.



Trees and Landscaping

In addition to providing shade and a more comfortable walking experience, trees and landscaping provide space between cars and pedestrians and can produce a traffic calming effect by encouraging motorists to drive at slower speeds, reducing the severity of crashes.



Pedestrian-Scale Lighting

Lighting specifically oriented toward pedestrians that is often lower in height and spaced closer together than traditional roadway lighting.

— CITY OF SAN MATEO —

Glossary (pt. 2)



Advanced Stop Bars and Yield Lines

Horizontal stripe before a crosswalk to indicate where drivers should stop in advance of a crosswalk. Improves safety by increasing the buffer between vehicles and pedestrians in the crosswalk.



Curb Extensions / Bulb-outs

An extension of the sidewalk into the street to reduce pedestrian crossing distances and make pedestrians more visible to vehicles.



Pedestrian Hybrid Beacon

Pedestrian-activated signal heads at mid-block crosswalks used to notify oncoming motorists to stop for pedestrians crossing in the crosswalk.

Improved Crosswalks



Median Refuge Island

Sections in the center of the roadway for pedestrians to wait safely mid-crossing and that shorten crossing distances across wider roadways.



Raised Crosswalk

A pedestrian crosswalk that is typically elevated 3-6 inches above the road or sidewalk level. Improves safety by increasing crosswalk and pedestrian visibility and slowing down motorists.



Improved Intersection Sight Distance

Removes parking at intersection approaches to provide increased visibility of motorists and pedestrians entering the intersection, a bicycle or pedestrian in a crosswalk.



Remove Slip Lane

Modifies the corner of an intersection to remove the sweeping right turn lane for vehicles, resulting in shorter crossings for pedestrians, reduced speed for turning vehicles, better visibility, and space for landscaping and other amenities.

— CITY OF SAN MATEO —

Glossary (pt. 3)

Accessible Pedestrian Facilities



Directional Curb Ramps

A separate curb ramp and landing for each direction of crosswalk that allows pedestrians with disabilities to be aligned with the crossing direction while waiting to cross the street.



Audible Push Buttons

Accessible pedestrian signals, including audible push buttons, improve access for pedestrians who are blind or have low vision.

Enhanced Pedestrian Crossings at Traffic Signals



Pedestrian Countdown Signals

Displays "countdown" of seconds remaining for the pedestrian to cross the street safely.



Longer Crossing Times

Increases time for pedestrians to walk across the street, especially to accommodate vulnerable populations such as children and the elderly.



Leading Pedestrian Intervals

A signal timing strategy that allows people to start crossing the street while vehicles still have a red light to give them a head start.

Slowing Vehicles Down (Traffic Calming)



Speed Bumps/Cushions

Rounded and raised areas placed across the road to slow vehicles down. The design includes two-wheel cutouts designed to allow emergency vehicles and buses to pass with minimal slowing.



Speed Feedback Sign

A device that utilizes radar to measure and display the speed of passing vehicles. Improves safety by providing a cue for drivers to check their speed and slow down, if necessary.

— CITY OF SAN MATEO —

ATTACHMENT B—FOCUS GROUP ATTENDEES LIST & NOTES

Silicon Valley Bicycle Coalition Attendees & Notes

- Adam Loraine
- Mike Swire
- Jessica Manzi
- Bry Myers
- Angela Solis
- Raayan Mohtashemi
- Carol Steinfeld

Question 1: Do you walk to transit in San Mateo?

- 100% of the time. Yes walk to transit
- Try and stay active
- Sitting (in a car) is not healthy
- More sustainable
- Get to transit in other methods besides cars – sustainability, safety for others
- Convenience
- Walk within 5 mins
- Walk if other modes like bus or bike is not available

Question 2: What are the areas of greatest concern for walking within the study area?

- Transit doesn't go across the Bay
- Hayward Park area – convenient to walk,
- Hayward Park is dark, trash, homeless, glass everywhere, shopping carts
 - Unsafe feeling, esp. dark out
 - Walking to Safeway across tracks not safe, parking lot is bad
 - 17th path – hard to get to station
 - Driveways, glass
- Hillsdale – sidewalks on 28th to connect to train station – around fieldworks
 - Wider sidewalks more comfortable
 - At underpass there is narrow sidewalk, conflict with bikes that use sidewalk
 - No access to shared use path
 - Conflicts between peds and bikes, and narrow, makes it less comfortable
 - Places with lack of crosswalks less safe
 - Want to cross at 28th at the station instead of walking up to Delaware or ECR
 - Lots of other people cross where there is no crosswalk
- Suggest we walk both stations at dusk and see what that is like

Question 3: What walking routes within the study area are your favorite?

- Walk to Mall
- Library
- Downtown

- Lots of B street closed which is nice
- Love Hillsdale station – sometimes take it downtown and back
- Hard to get past ECR
- Not comfortable crossing ECR
- Cars run red lights – feel safer with more peds
- Enjoy walking around downtown SM
- Live in north central – walk from here and not too bad
- On western side – downtown -closed B street and main street are nice right by the station
- Being able to get dinner and grocery shop, etc. near transit is great
- More destinations make a space more enjoyable and walkable and more comfortable
- Infrastructure is designed to prioritize peds in downtown
- LPIs are nice
- ECR still scary to cross in downtown but having LPIs that are new are helpful
- Some elderly people don't have enough time to cross at 28th
- Schools and libraries downtown – having LPIs across ECR is helpful

Question 4: Based on the improvement options, which three (3) improvements would you choose to make walking easier?

- Ped improvements
- Everything on this list
- Trees and landscaping are nice – shade is very nice esp. on hot day
- Physical barrier helpful for children
- All equally important
- Need flashing beacons from car perspective
- Audible push button -helpful for a lot of people – consider ADA
 - More likely to cross at the right time
- Crosswalks helpful but need the advance limit line
- Median island on 4th Ave – really nice by gateway park by 3rd/4th Ave
- Wider sidewalks – feel like almost all sidewalks in SM are not wide enough
- Narrow sidewalks everywhere. Esp. West side B street
- Burlingame Ave works well
- Trees and landscaping – dual benefit (buffer and wider sidewalk) – esp. ECR where there is not on street parking to buffer
- Median islands
- Flashing beacons
 - Midblock crossing across 28th at Hillsdale station – flashing beacon would be nice here
 - Use strategically
- Context specific solutions
- Lighting at hayward park
- Medians at 28th Ave and 4th Ave
 - Should 4th be a road diet?
- Physical modifications to roadway more than just paint
 - Crosswalks are less helpful if just paint
- Speed bumps

Question 5: Tell us about walking in San Mateo. Are we missing anything?

- Kids, strollers
- Claremont, Delaware – no trees – too hot in summer – more trees would be great
- Wider sidewalks – having to walk off sidewalks in some places
- here in Shoreview, there are no trees along the sidewalks and tiny sidewalks
- Yes, the urban heat island effect is definitely inequitably distributed across neighborhood in San Mateo - I agree that the tree canopy in treeless neighborhoods should be considered a pedestrian improvement.
- 28th btw ECR and Delaware jaywalking
- Usually on ECR where distance between safe crossing locations is so long so ppl jaywalk and very unsafe but people still do it
- Intersections near mall and ECR – make safer
- 31st better with new mall improvements

Questions for us:

- What funding do we have?
- Grant funded project – all projects identified will need to find funding sources
- Part of this project is to identify funding sources
- Private development and grants – group all projects to tie into grant funding applications

Paratransit Coordinating Council Attendees & Notes

- Tina Dubost- SamTrans
- Sammi Riley
- Jane Stahl
- Kathy UHL
- Benjamin McMullan
- Lynn Spicer
- Charles Posejpal
- Enrique Silvas
- Dinae Cruise
- Mike Levinson
- Sandra Lang
- Richard Hedges

Question 1: What are the areas of greatest concern for pedestrians within the study area?

- Ped access to ECR and the SamTrans bus lines
- Timing of street crossings
- Curb cuts
- Paratransit data – Tina could provide some
- Elevator at the Caltrain station – ramp is long and steep – hard to use without an electric wheelchair, hard to use with crutches
- Access from west side of hayward station, next to Norman's hobby shop- north side of 28th (wire fence, hobby shop parking lot) by ECR– easement for direct access to station through lot – access from the housing – level entrance to station
- Some pushback on 28th st bike lane from Baymeadows
- Overall happy with the improvements done around hayward station
- Beyond ½ mile of San Mateo downtown station – lots of different types of housing (seniors, disabled), does this take into consideration people outside of this radius?

Question 2: Based on the improvement options, which three (3) improvements would you choose to make the pedestrian experience easier?

- Audible push buttons (for those legally blind especially)
 - 28th and ECR needs it
 - Can these be countdown, so they know how much time there's left to cross
- Delaware at 1st, 2nd, 3rd, 4th could use better crosswalks with countdowns and better curb cuts (ones that don't throw people out into the middle of the intersection)
 - Will likely see more people crossing Delaware with the new housing developments
 - Suggest leaning on Block 21 development to fund some of these
- Longer crossing time across ECR
- 17th/ECR no protected crossings for left turns – drivers are blind turning there (sun) – several crashes here
- Medians should be wider, so a wheelchair user doesn't block the whole waiting space

Question 3: What pedestrian routes within the study area are your favorite?

- Like all areas of Bay Meadows to walk through
- Bridgepoint is easy walking, easy to get to 250 bus and shuttles
- Downtown

San Mateo County Latino Collaborative Attendees & Notes

- Gloria Gonzales, SMC Health
- Frances Lobos, Diversity and Equity council
- Pati Ramirez, SMC health
- Avery Muniz, RWC Together
- Marissa Aramburo, PCRC
- Stephanie Perez, Catholic Charities
- Mayra Amador, San Mateo County Tobacco Prevention Program
- Belinda Hernandez-Arriaga
- Maria Lorente-Foresti

Question 1: What are the areas of greatest concern for pedestrians within the study area? What have you heard from constituents?

- Any considerations for traffic signals and length of time, ECR
- Questions about bikers
- Will any speed limits change?

Question 2: Based on the improvement options, which three (3) improvements would you choose to make the pedestrian experience easier?

- I have family that live very close to the Hillsdale Station. I might also add walkway barriers on the sidewalk when walking over El Camino. I would be nervous to walk in this area with multiple children.



- Nowhere for elderly to sit to rest while on walks – seating would be helpful
- Elderly Slower pace crossing the street
- Bright neon flags carried from one side to the other at crosswalks?

- Farmers markets by Belmont station – creating more space for events or things to happen to incentivize walking
- Suicide prevention program tied close to stations – any signage in different languages? Any intersections or streets where we know a higher risk of collisions is occurring? to support in other languages provided? Can signage be in other languages?
- Wayfinding
- Why this study area?
- Are there plans to expand this work to other areas of the county?
- Might need to add a N/A option in survey questions
- Suggest Adding race/ethnicity/language questions to our survey questions

ATTACHMENT C—ONLINE SURVEY

English Version

1. How often do you walk to transit in San Mateo? * (Select one)
 - a. I walk to transit everyday
 - b. I walk to transit weekly
 - c. I walk to transit occasionally
 - d. I use transit but don't walk there
 - e. I don't use transit in San Mateo
 - f. Other (Please specify)
2. How would you characterize your walking experience to transit in San Mateo?*
 - a. San Mateo provides a safe walk to transit
 - b. San Mateo provides a somewhat safe walk to transit, but could be improved
 - c. San Mateo does not provide a safe walk to transit.
3. What prevents you from walking to transit more often? Check all that apply.*
 - a. The walk from my house/job/errand is too far from transit
 - b. Transit does not travel when or where I need to travel
 - c. The walk to transit feels unsafe
 - d. The walk to transit is unpleasant
 - e. Other (please specify)

The next question asks about improvements measures. See the Glossary (hyperlink) for a description of each choice.

4. What would have the greatest positive impact on your walking experience?

Please rank the potential improvements below from most to least important by dragging and dropping them.

- Improved Lighting
- Trees and Landscaping
- Wider Sidewalks
- More Frequent Crossings
- Improved Crosswalks (e.g., curb extensions/bulb-outs, median/refuge island)
- Pedestrian Countdown Signals and Longer Crossing Times

- Accessible pedestrian facilities (e.g., curb ramps, audible push buttons)
- Slowing vehicles down (e.g., speed bumps)

5. What else should we know about walking in the study area?

- a. [Comment box]

The following questions are included to help us understand whether we are getting input from a representative sample of San Mateo residents, employees, and visitors. All questions are optional.

6. What is your relationship with San Mateo?

Check all that apply.

- I live in San Mateo
- I work/go to school in San Mateo
- I shop in San Mateo
- Other (Please specify)

7. What is your age? (Optional)

- a. [Text box]

8. What is your racial identity? Check all that apply. (Optional)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Pacific Islander
- Latino or Hispanic
- White
- Other/Unknown

9. What neighborhood do you live in? (Optional)

- 19th Avenue Park
- Aragon
- Baywood
- Baywood Knolls
- Baywood Park
- Beresford Manor
- Bowie Estate Etc.
- Eastern Addition/Downtown

- Edgewater Isle
- Fiesta Gardens
- Foothill Terrace
- Hayward Park
- Hillsdale
- Homestead/ Husing
- Lakeshore
- Laurelwood & Sugarloaf
- Lauriedale
- Los Prados
- Mariner's Isle/ Harbortown
- Shoreview
- Parkside
- San Mateo Highlands
- San Mateo Knolls/ Laurel Creek
- San Mateo Park
- San Mateo Terrace/ Beresford
- San Mateo Village
- San Mateo Woods/ Bayridge
- Westwood Knolls Etc.
- Other (please specify)

10. Interested in updates? Provide your email.

a. [Textbox]

Spanish Version

1. ¿Con qué frecuencia camina al **transporte público (buses o tren)** en San Mateo?*

(Seleccione una respuesta)

- a. Camino al transporte público todos los días
- b. Camino al transporte público cada semana
- c. Camino al transporte público ocasionalmente
- d. Uso el transporte público, pero no camino para llegar a él
- e. Uso el transporte público, pero no camino para llegar a él
- f. Otro (por favor especifique)

2. ¿Cómo describiría su experiencia caminando al transporte público en San Mateo?*

- a. San Mateo proporciona una caminata segura al transporte público.
- b. San Mateo proporciona una caminata algo segura al transporte público, pero podría mejorar.
- c. San Mateo no proporciona una caminata segura al transporte público.

3. ¿Qué le impide caminar al transporte público con más frecuencia? Seleccione todas las que correspondan. *

- a. Es muy largo caminar desde mi casa/trabajo/otros destinos frecuentes al transporte público.
- b. El transporte público no viaja cuando y adonde lo necesito.
- c. La caminata al transporte público se siente insegura.
- d. La caminata al transporte público es desagradable.
- e. Otro (por favor especifique)

La siguiente pregunta corresponde a medidas de mejora. Ver el Glosario para una descripción de cada una de las opciones.

4. ¿Cuáles de estas opciones tendrían el mayor impacto positivo en su experiencia al caminar?

Por favor ordene las siguientes mejorías de la más importante a la menos importante. Para ello, puede arrastrar y soltar las opciones para cambiar el orden.

- a. Mejorías en la iluminación
- b. Árboles y plantas
- c. Aceras más anchas
- d. Cruces peatonales más frecuentes
- e. Mejorías en los cruces peatonales existentes (ej. *curb extensions/bulb-outs, median refuge island*)
- f. Señales peatonales con cuenta regresiva o más tiempo para cruzar la calle
- g. Infraestructura peatonal accesible (ej. rampas, botones peatonales con audio)
- h. Disminuir la velocidad de los vehículos

5. ¿Qué otras cosas deberíamos saber sobre el caminar en el área de estudio? *

[comment box]

Las siguientes preguntas se incluyeron para ayudarnos a entender si estamos recibiendo aportes de una muestra representativa de los residentes, trabajadores y visitantes de San Mateo. Todas las preguntas son opcionales.

6. ¿Cuál es su relación con San Mateo?

Seleccione todas las que correspondan.

- a. Vivo en San Mateo
- b. Trabajo/voy a la escuela en San Mateo
- c. Hago compras en San Mateo
- d. Otro (por favor especifique)

7. ¿Cuántos años tiene? (Opcional)

[comment box]

8. ¿Cuál es su identidad racial? Seleccione toda las que correspondan (Opcional)

- a. Indio Americano o Nativo de Alaska
- b. Asiático
- c. Negro o Afroamericano
- d. Nativo de Hawaii o de las Islas del Pacífico
- e. Latino o Hispano
- f. Blanco
- g. Otro/Desconocido

9. ¿En qué barrio vive? (Opcional)

- 19th Avenue Park
- Aragon
- Baywood
- Baywood Knolls
- Baywood Park
- Beresford Manor
- Bowie Estate Etc.
- Eastern Addition/Downtown
- Edgewater Isle
- Fiesta Gardens
- Foothill Terrace
- Hayward Park
- Hillsdale
- Homestead/ Husing
- Lakeshore
- Laurelwood & Sugarloaf
- Lauriedale
- Los Prados
- Mariner's Isle/ Harbortown
- Shoreview
- Parkside
- San Mateo Highlands
- San Mateo Knolls/ Laurel Creek
- San Mateo Park
- San Mateo Terrace/ Beresford
- San Mateo Village
- San Mateo Woods/ Bayridge
- Westwood Knolls Etc.
- Other (please specify)

10. ¿Quiere recibir actualizaciones del proyecto? Indique su correo electrónico.

[comment box]

ATTACHMENT D—SOCIAL MEDIA CONTENT

San Mateo Walks to Transit
MESSAGING
ENEWSLETTER
<p>Do you walk? Do you take transit? The City of San Mateo needs your feedback and expertise! The City wants to hear how to improve your walk to and from the City's Caltrain stations and bus stops. Visit San Mateo Walks Transit to share ideas, take the survey, and get updates on the San Mateo Walks to Transit project! The survey closes on October 15th.</p>

SOCIAL MESSAGING	
FACEBOOK	Please use Emojis as you wish
	Hi Neighbors, Are you a transit rider who walks to a bus stop or train station? (insert bus and train emoji) If so, the City of San Mateo wants to hear from you! The City is conducting a survey to identify ways to improve walking routes to transit in San Mateo and we need your expertise! Visit San Mateo Walks Transit to share your ideas, take the survey, and get updates on the San Mateo Walks to Transit project!
	#SanMateo #commute #walktotransit #publictransportation @SMwalkstotransit @smdailyjournal @sanmateochamber @sanmateoco @SMCountyCommute @sustainmc @Caltrain
TWITTER	
	Hi neighbors, do you walk to the bus or train? (insert bus and train emoji) Tell us how we can improve your walking experience to transit. (insert walking person emoji) Visit San Mateo Walks to Transit #takeoursurvey
INSTAGRAM	
	Hi Neighbors, are you a transit rider who walks to a bus stop or train station? (insert bus and train emoji) If so, we want to hear from you! The City is conducting a survey to identify ways to improve walking routes to transit in San Mateo and we need your expertise! Visit San Mateo Walks Transit to share your ideas, take the survey, and get updates on the San Mateo Walks to Transit project!
	#Transit #SanMateoCA #commute #Caltrain #publictransportation



ATTACHMENT E—COMMUNITY ORGANIZATIONS AND GROUPS

*Groups with which a focus group was conducted

Community Organizations/ Stakeholders:

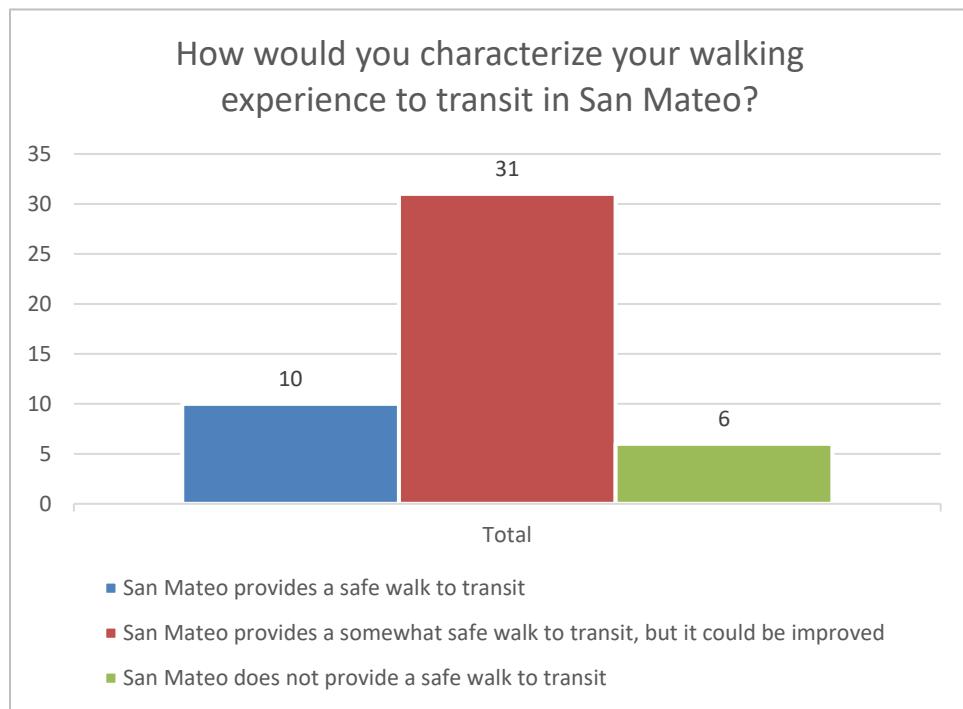
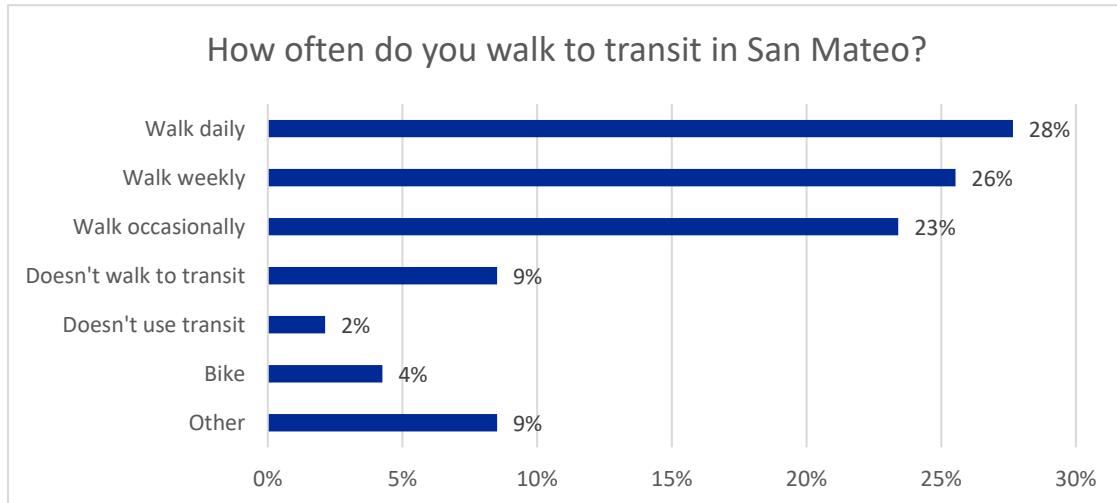
- Silicon Valley Bicycle Coalition San Mateo Local Team*
- Paratransit Coordinating Council (PCC)*
- San Mateo Diversity and Equity Council*
- Latino Families Group (at SMHS)
- Versailles Senior Condominiums
- The Peninsula Regent
- San Mateo County Latino Collaborative
- San Mateo Pride Center
- Nueva School
- Youth Leadership Institute (YLI)
- San Mateo Senior Commission
- Commute.org
- AbilityPath
- San Mateo County Health Commission on Disabilities
- Bay Area Community Health Advisory Council
- San Mateo County Immigrant Services
- San Mateo County Suicide Prevention Committee
- Office of Education and Safety Training Traffic Assessment
- San Mateo Library
- Asian Uplift
- Coalition Z
- Downtown San Mateo Association (DSMA)

Neighborhood and Homeowner's Associations:

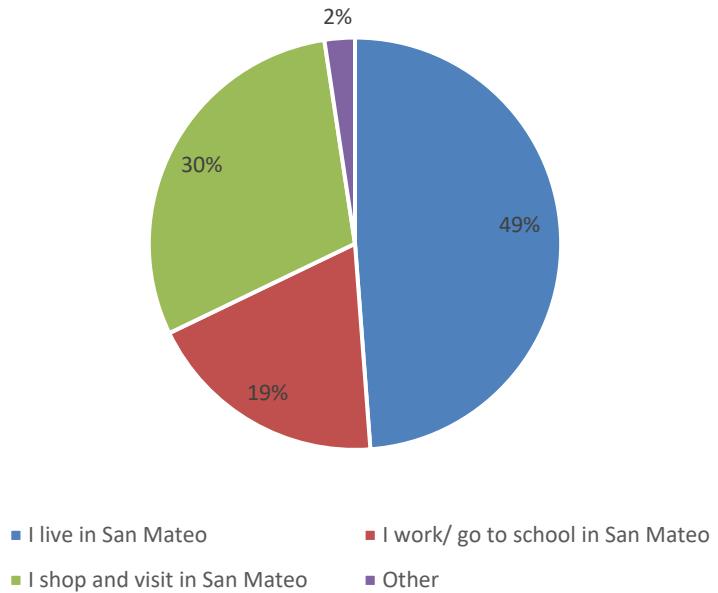
- 19th Avenue Park Association
- 58 N. El Camino Condominium Association
- Bay Laurels Condominium Association
- Bay Meadows Community Association (Master HOA)
- Bay Meadows Neighborhood Alliance
- Baywood Owners Improvement Association
- Baywood Park Homeowners Association
- Beresford Hillsdale Neighborhood Association
- Central Neighborhood Association
- Clearview Homeowners-San Mateo Woods
- Fiesta Gardens Homeowners Association
- Gramercy-Mounds El Cerrito Neighborhood Association
- Hacienda Neighborhood Association
- Harbortown Homeowners Association
- Las Casitas of San Mateo Homeowners' Association
- Lakeshore Neighborhood Association (formerly Hillsdale Manor Neighborhood Association)
- Lansdowne HOA
- Laurelwood Homeowners Association PMB
- Marina Gardens Homeowners Association at 1600 Marina Court
- Mariner's Green #2 HOA
- North Central -- HANCSM (Home Association of North Central San Mateo)
- North Shoreview Neighborhood Association
- Parrott Park Homeowners Association
- Ryland Cedar Bay
- San Mateo Glendale Village Neighborhood Association
- San Mateo Highlands Community Association

- San Mateo Park Neighborhood Association (formerly known as San Mateo Park Association)
- San Mateo United Homeowners Association
- Shoreview-Parkside Neighborhood Association
- Sunnybrae Neighborhood Association
- Sugarloaf Homeowners Association
- Ticonderoga Townhomes Association

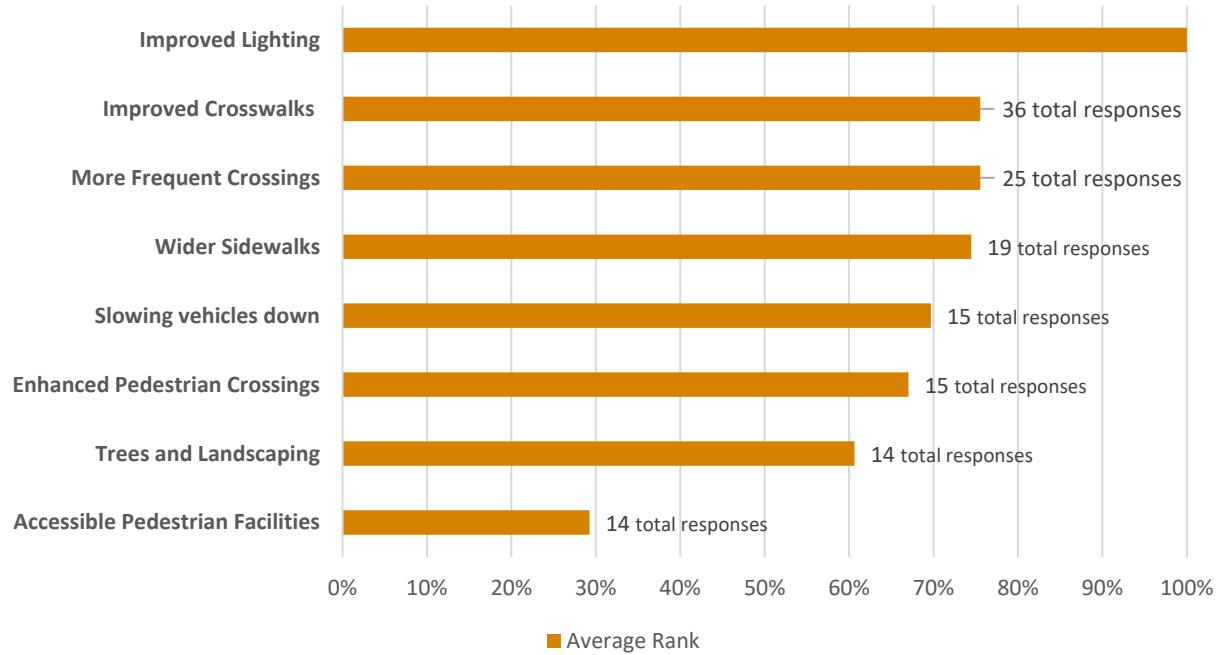
ATTACHMENT F—ONLINE SURVEY RESULTS



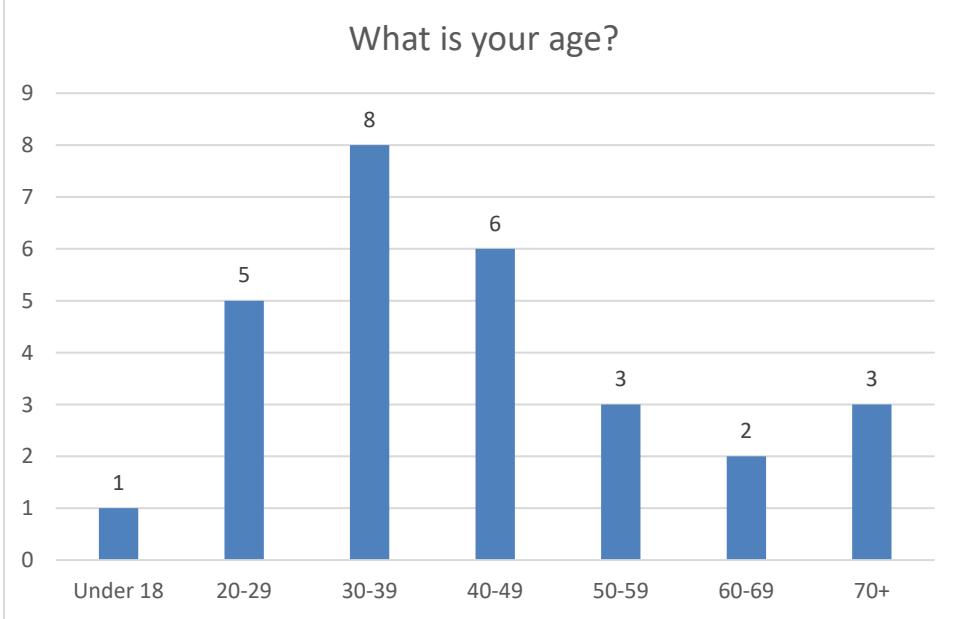
What is your relationship with San Mateo?



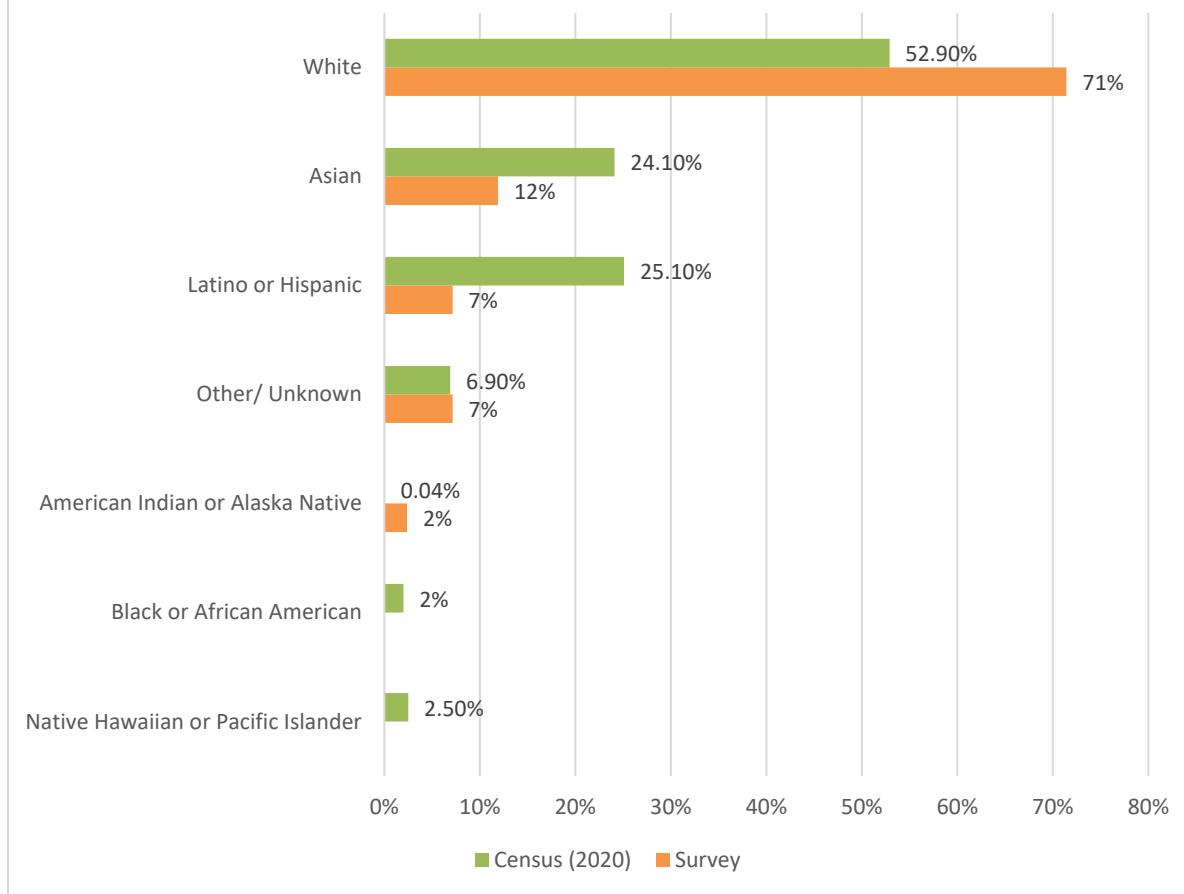
What would have the greatest positive impact on your walking experience?



What is your age?

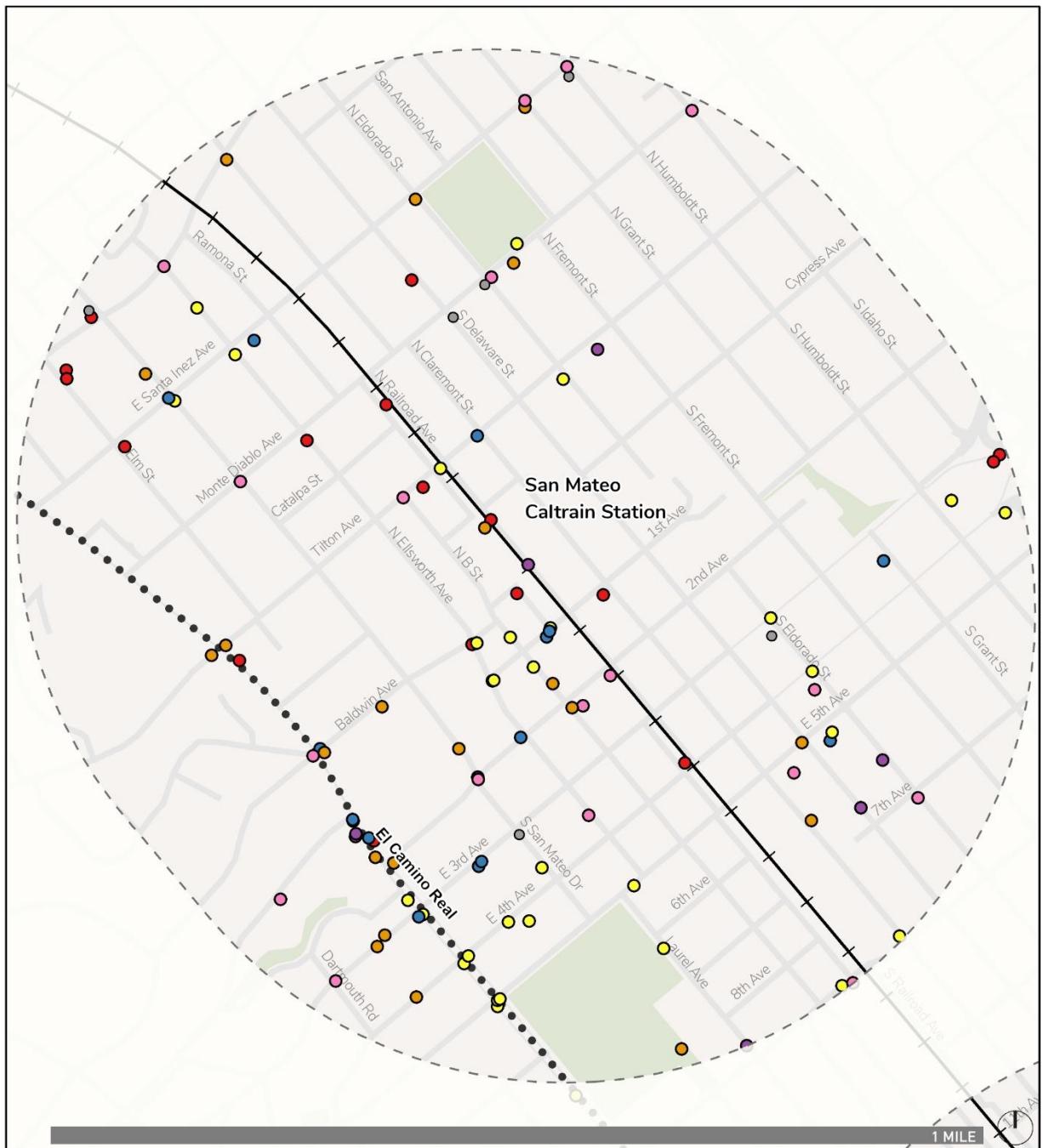


What is your racial identity?



ATTACHMENT G—ONLINE MAP RESULTS





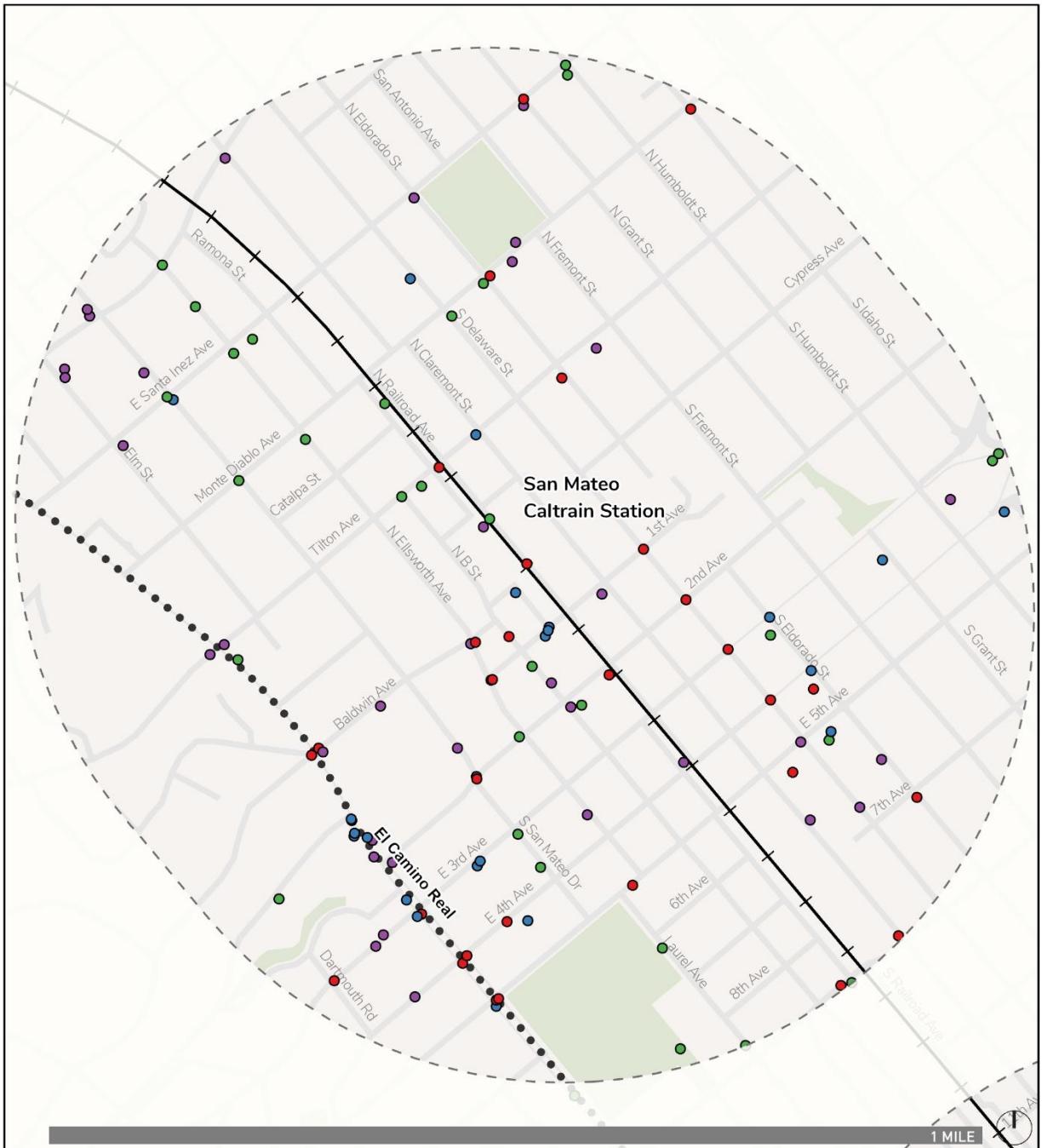
- Accessibility
- Lighting
- Traffic Calming
- Crosswalk
- Pedestrian Crossings
- Misc.
- Landscape & Trees
- Sidewalk

Specific Community Concerns



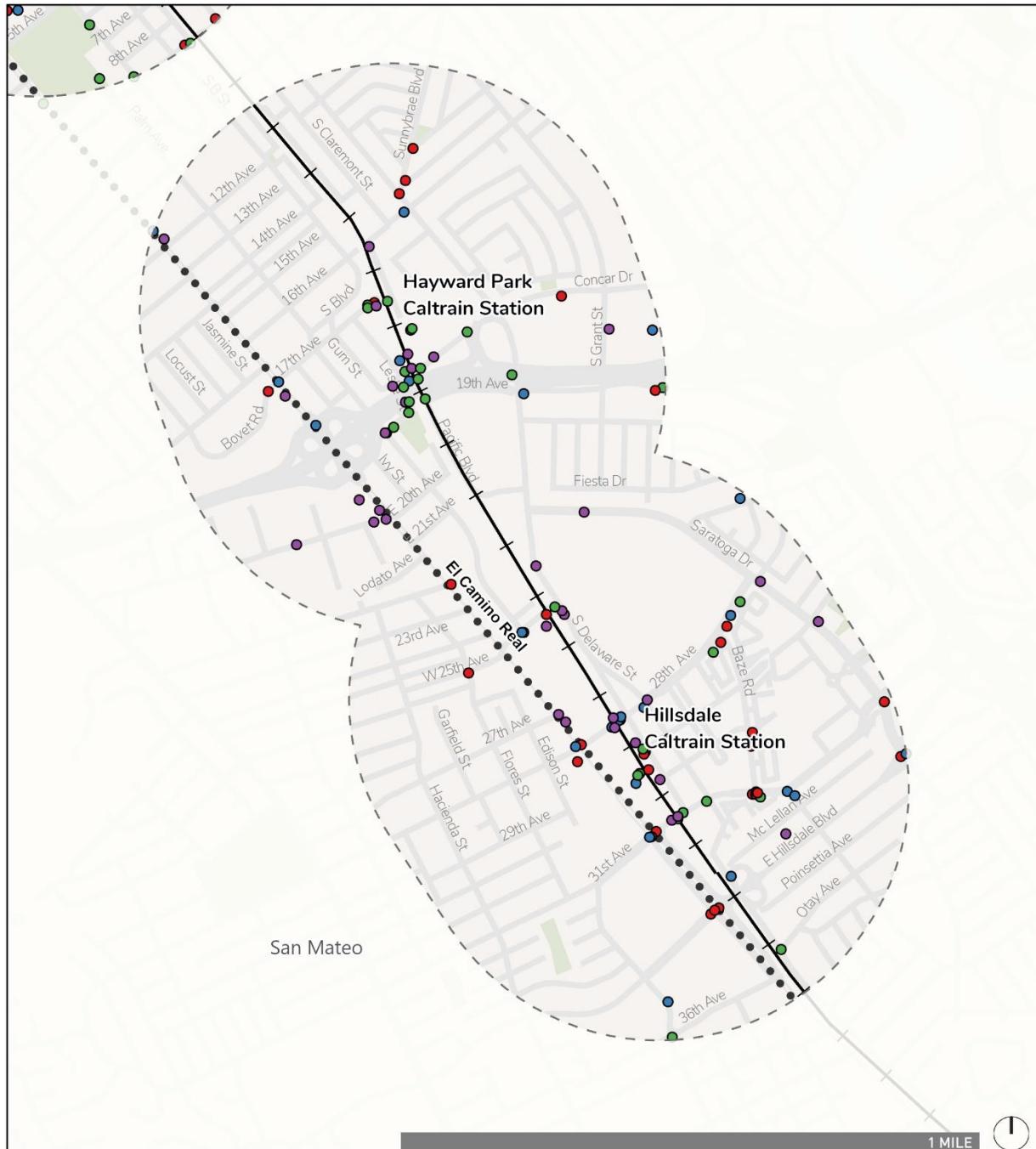
- Accessibility
- Crosswalk
- Landscape & Trees
- Lighting
- Pedestrian Crossings
- Sidewalk
- Traffic Calming
- Misc.

Specific Community Concerns



- Intersection Treatment
- Midblock Crossing
- Sidewalk Improvement
- Other

Categories of Improvements Needed



Categories of Improvements Needed

- Intersection Treatment
- Midblock Crossing
- Sidewalk Improvement
- Other



Number of Responses

- 1
- 2
- 3
- 4

Top Survey Walking Routes



APPENDIX B: EXISTING CONDITIONS

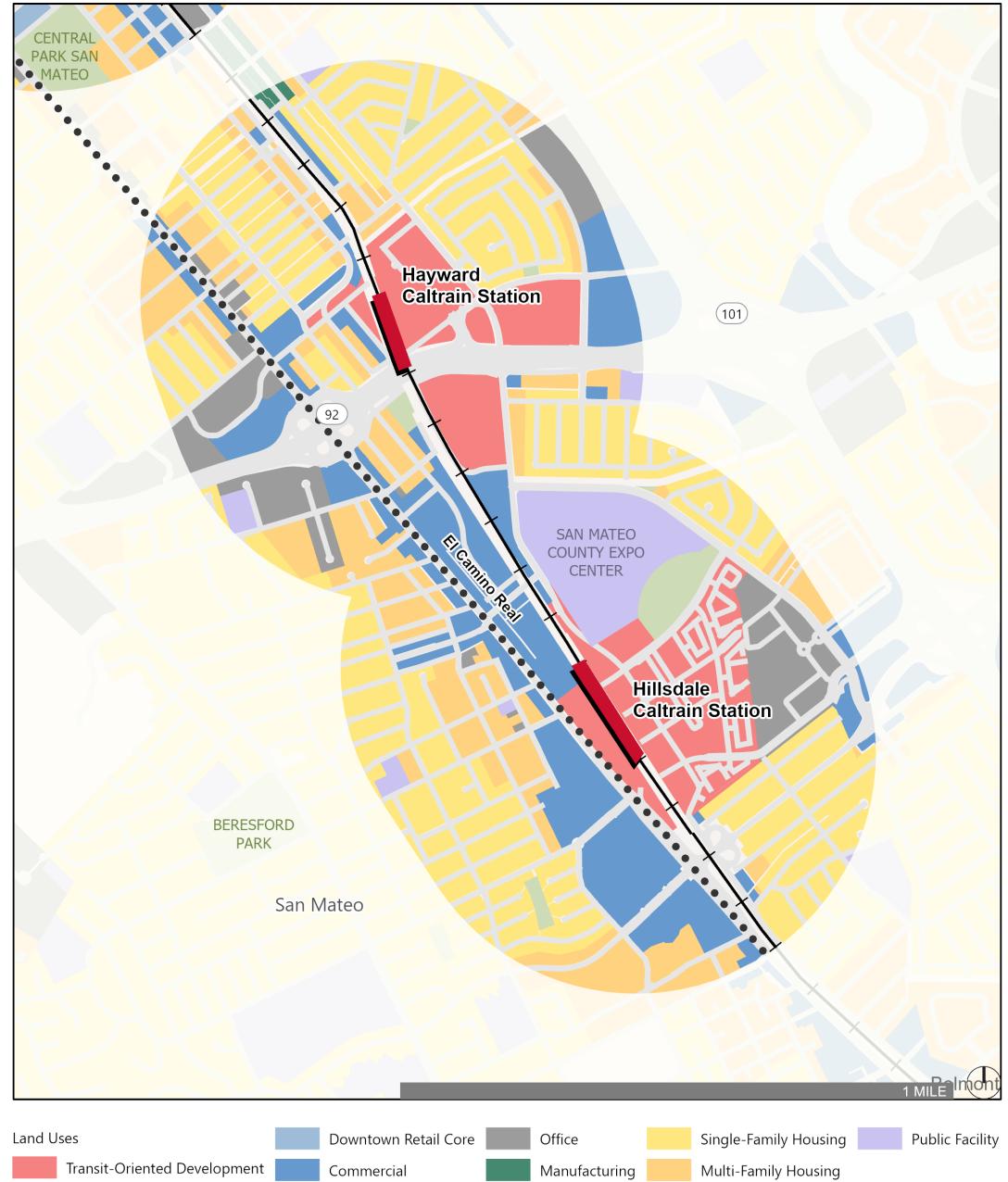
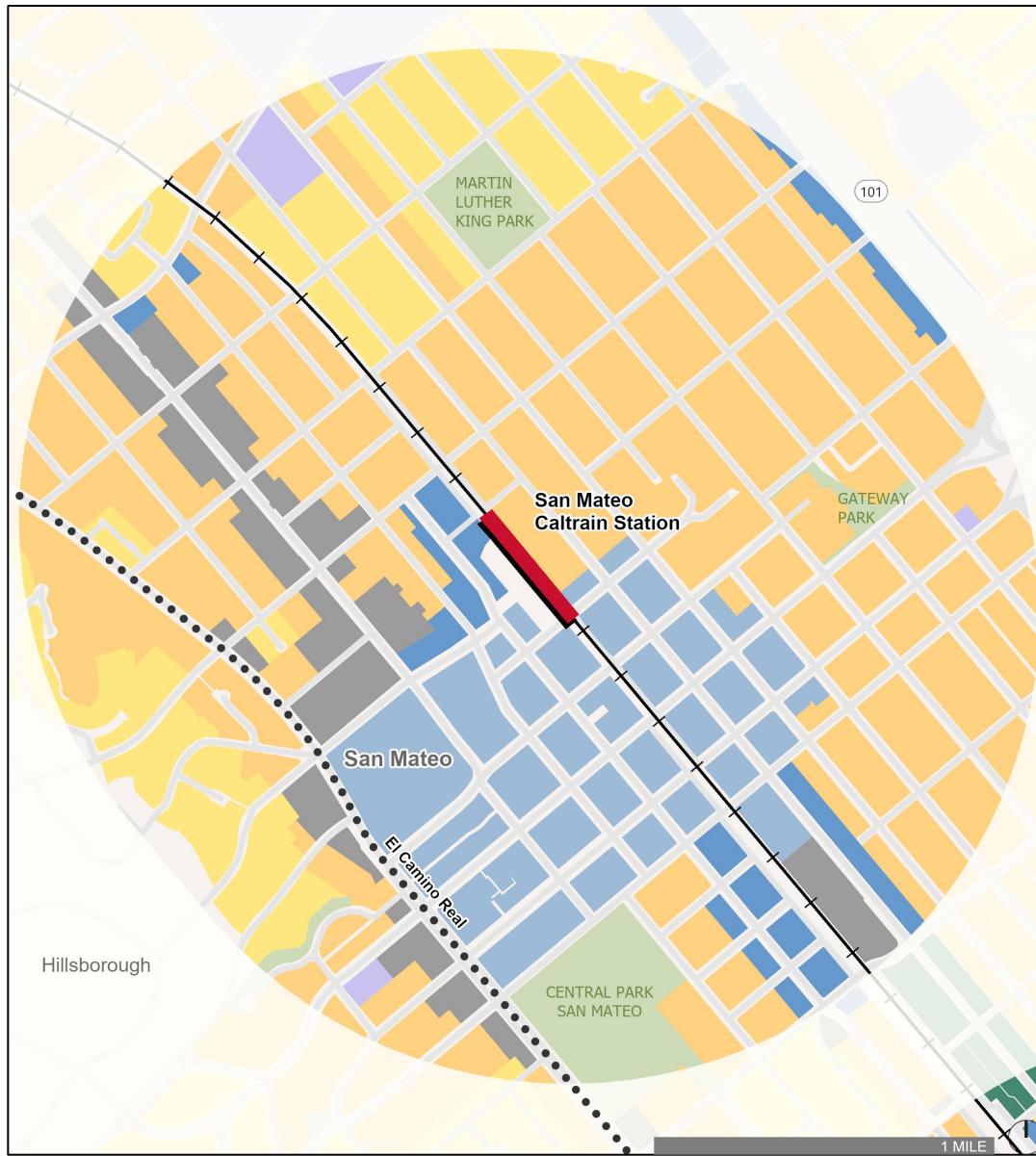
Existing Conditions Maps

Contents

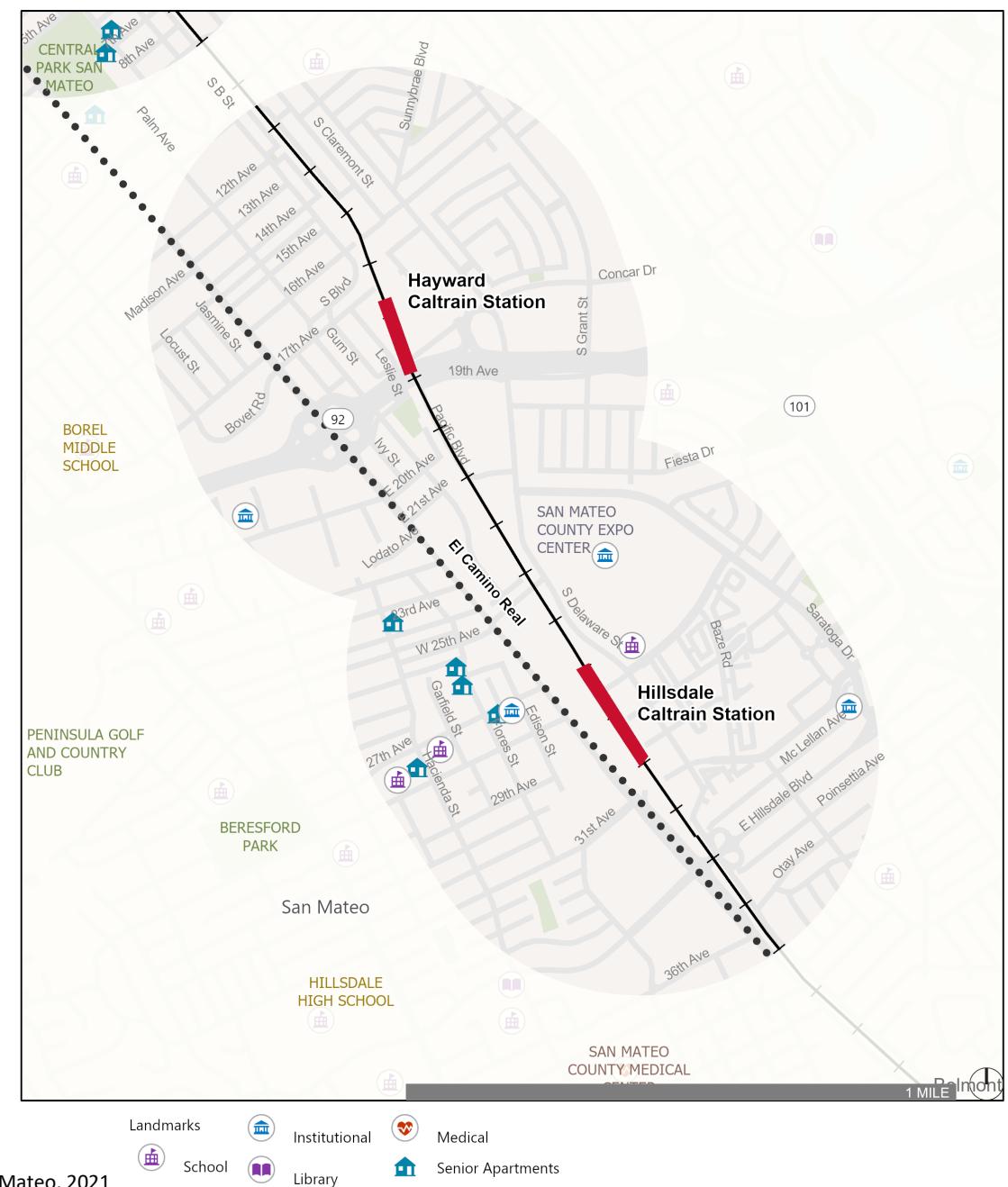
- Land Use & Demographics
 - Land uses
 - Senior centers & landmarks
 - CalEnviroScreen
- Transportation Facilities
 - Roadway typology
 - Signalized Intersections
 - Level of Traffic Stress
 - Pedestrian Collisions
 - Missing sidewalks
- Planned Improvements
 - Development projects
 - Planned pedestrian improvements

Land Use & Demographics

Land Use



Senior Centers and Landmarks



Source: "Age-Friendly Cities – San Mateo Safe Pedestrian Walking Routes for Seniors - and Everyone", City of San Mateo, 2021

CalEnviroScreen

CalEnviroScreen assesses population characteristics and pollution burden to measure community vulnerability to pollution.

The map shows community exposure and vulnerability to pollution at the census tract level, using an aggregated percentile index in comparison with the rest of the state. The lowest percentile in green reflects census tracts least impacted by pollution and the high percentiles in yellow show areas with higher pollution impacts.



CalEnviroScreen



Source: CalEnviroScreen 4.0, OEHHA, 2021

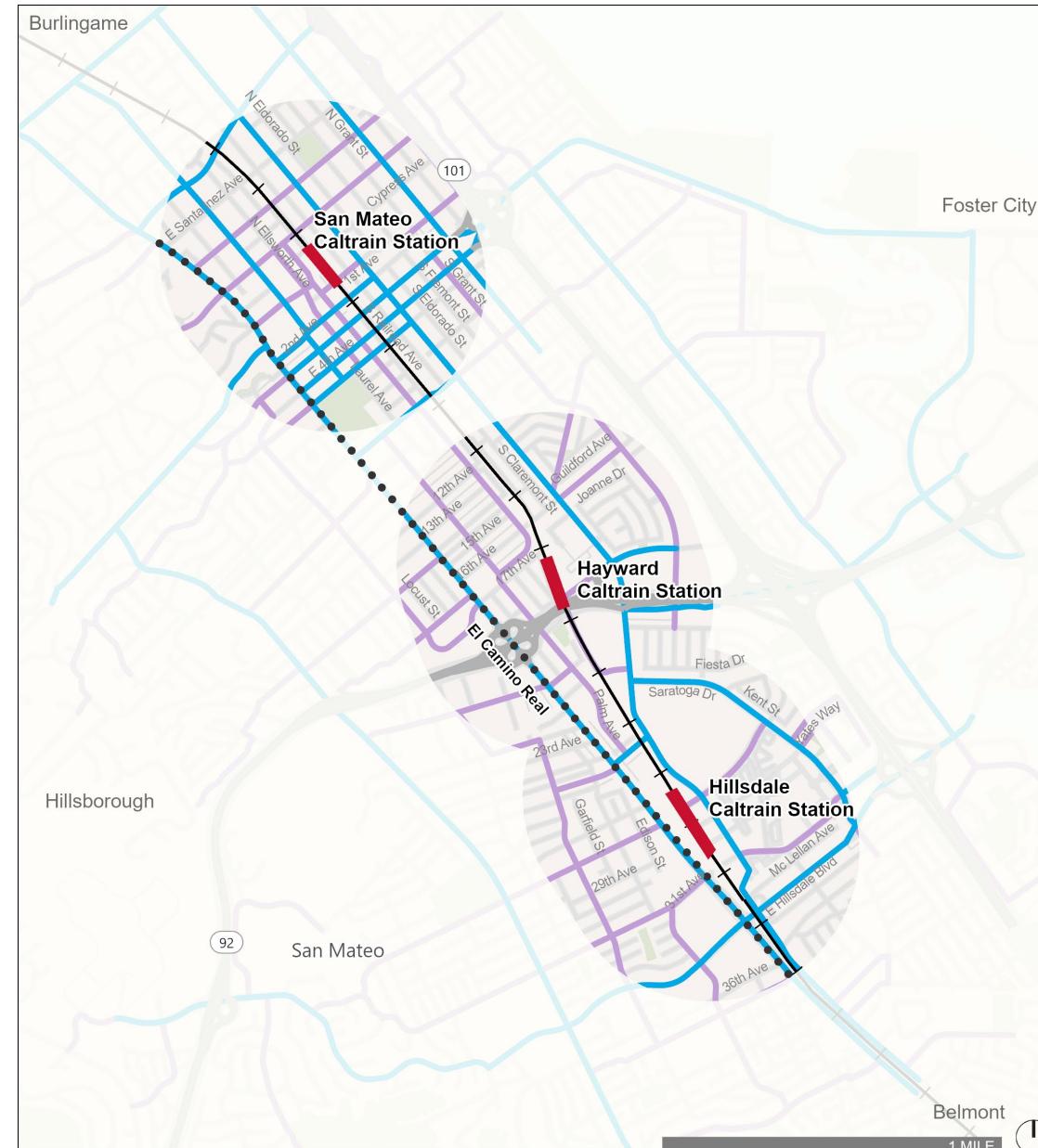


CalEnviroScreen Percentile	51% - 60%	31% - 40%	11% - 20%
61% - 70%	41% - 50%	21% - 30%	0% - 10%

Existing Transportation Facilities

Roadway Typology

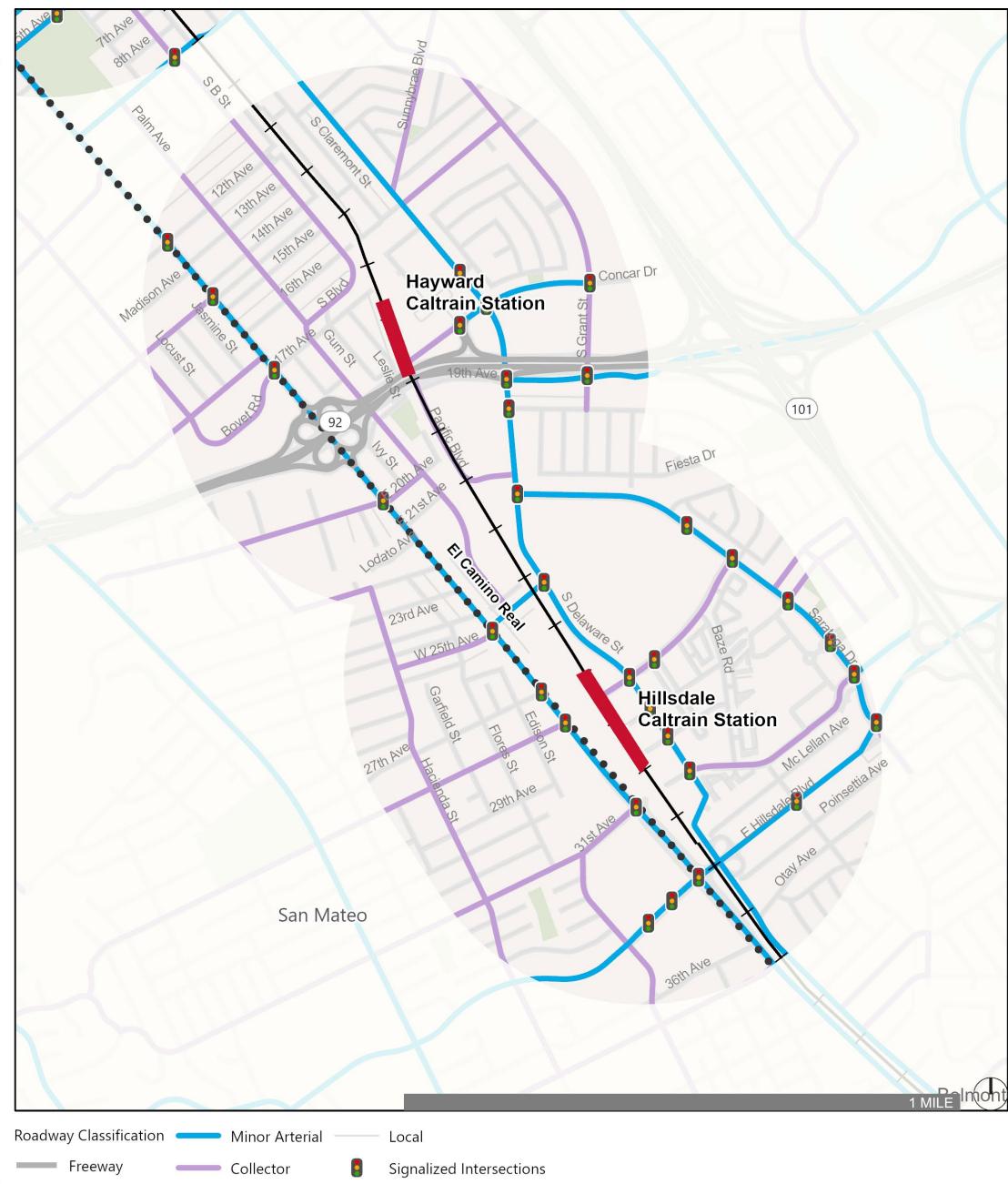
Number of travel lanes can be assumed from Open Street Map or roadway functional classification



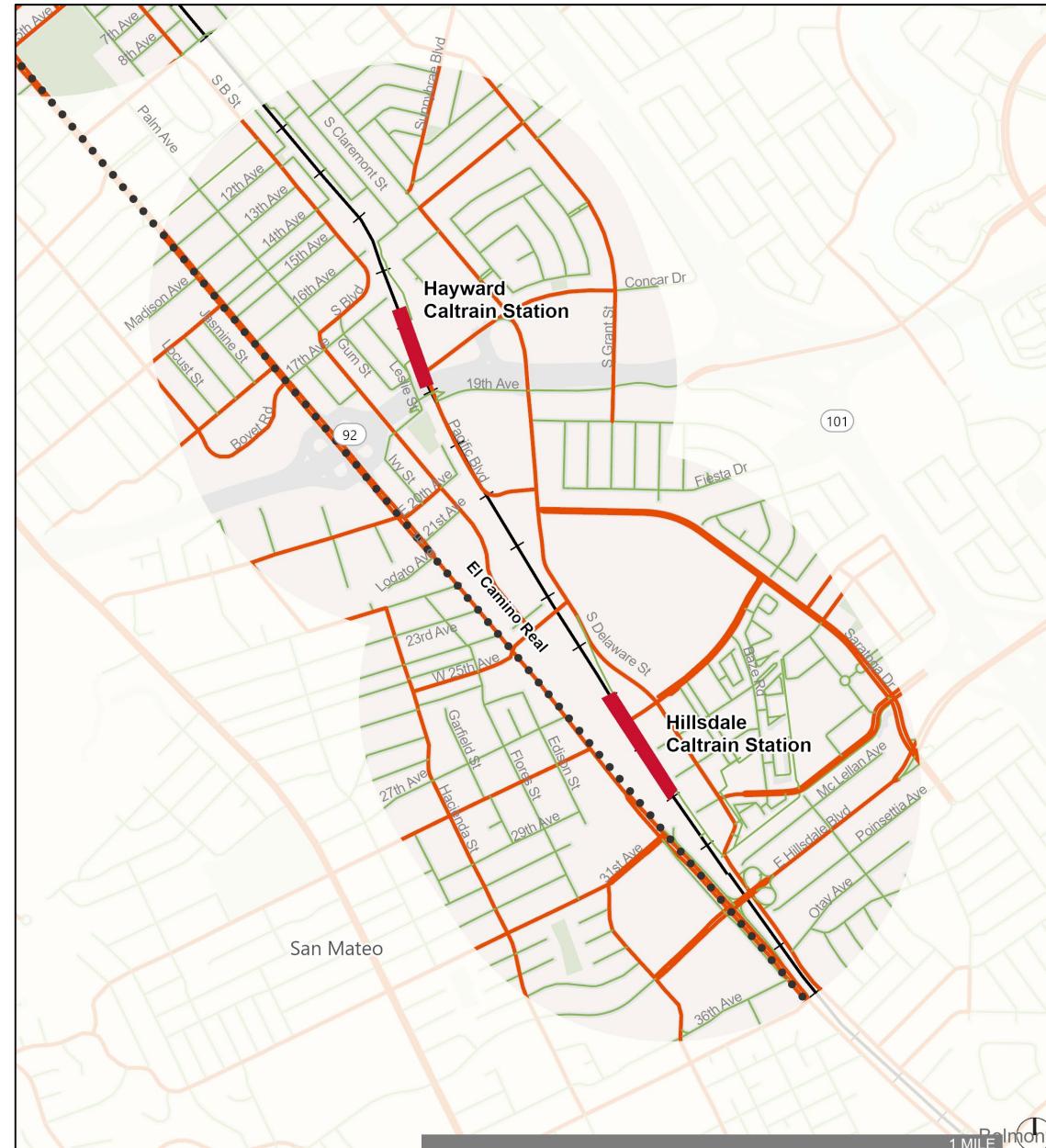
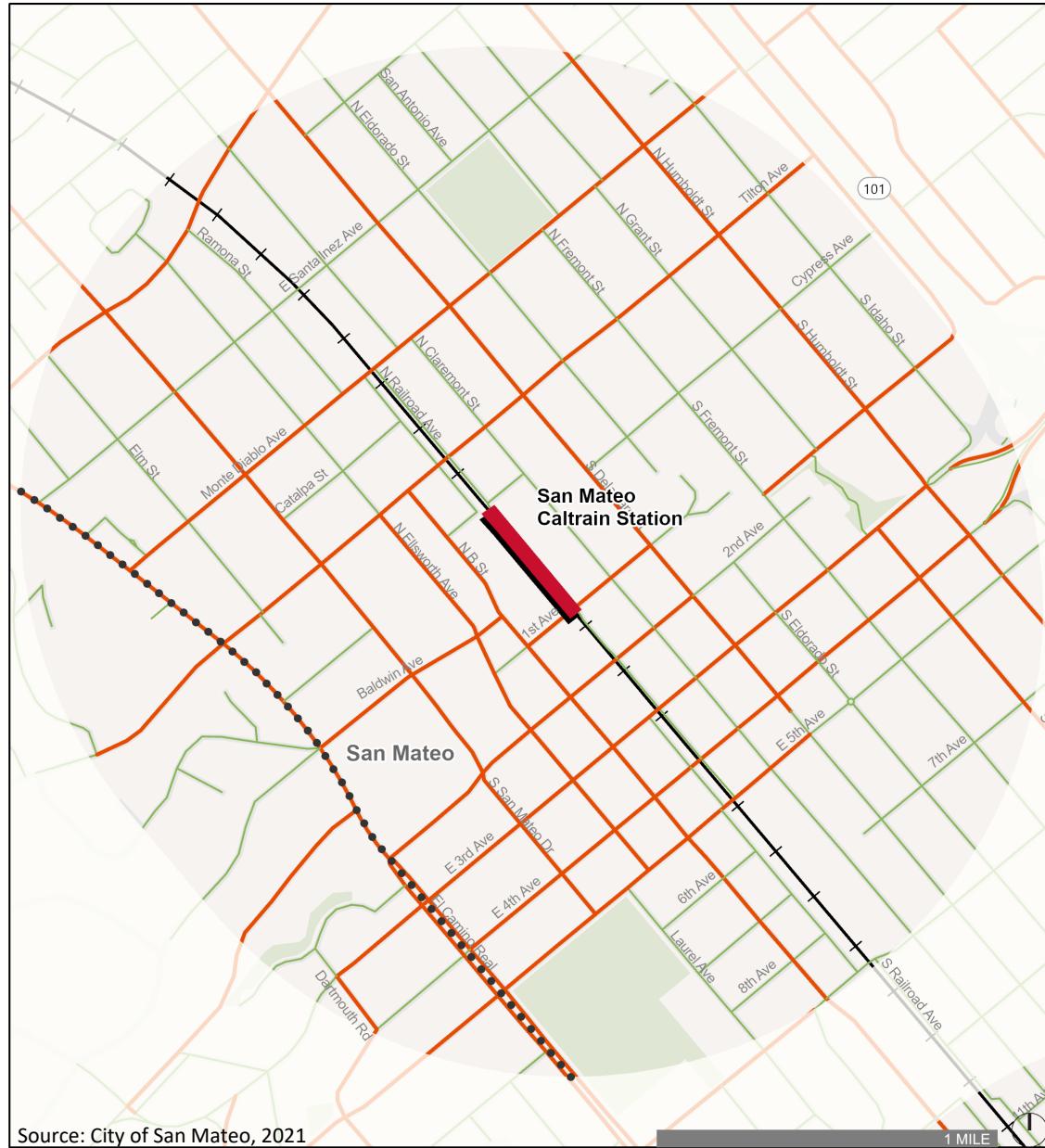
Roadway Classification

- Minor Arterial
- Local
- Freeway
- Collector

Intersection Traffic Control



Level of Traffic Stress



Level of Traffic Stress

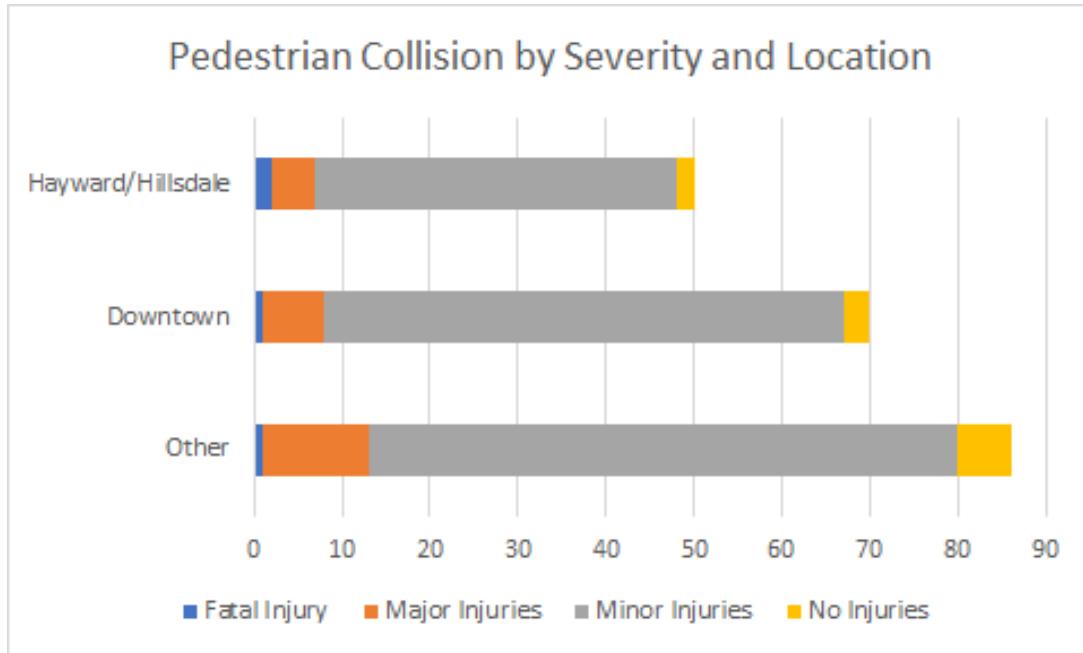
High-Stress

Low-Stress

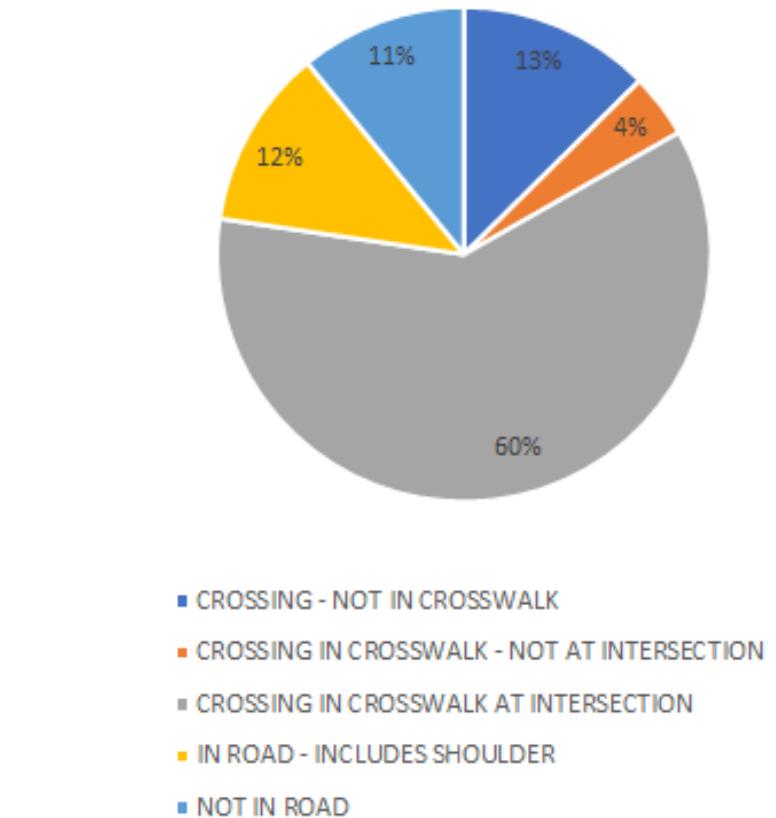
Pedestrian Collisions



Pedestrian Collisions



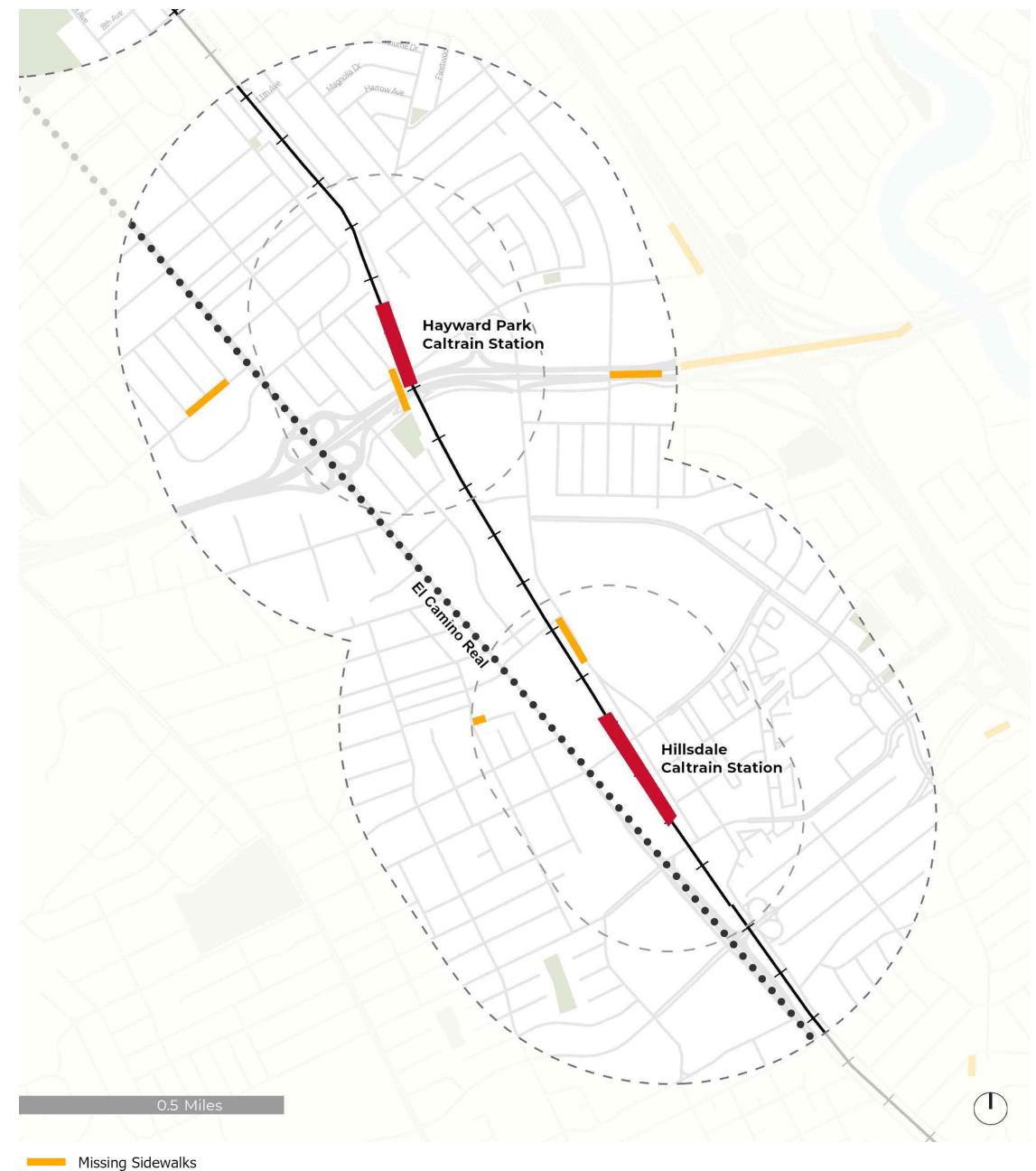
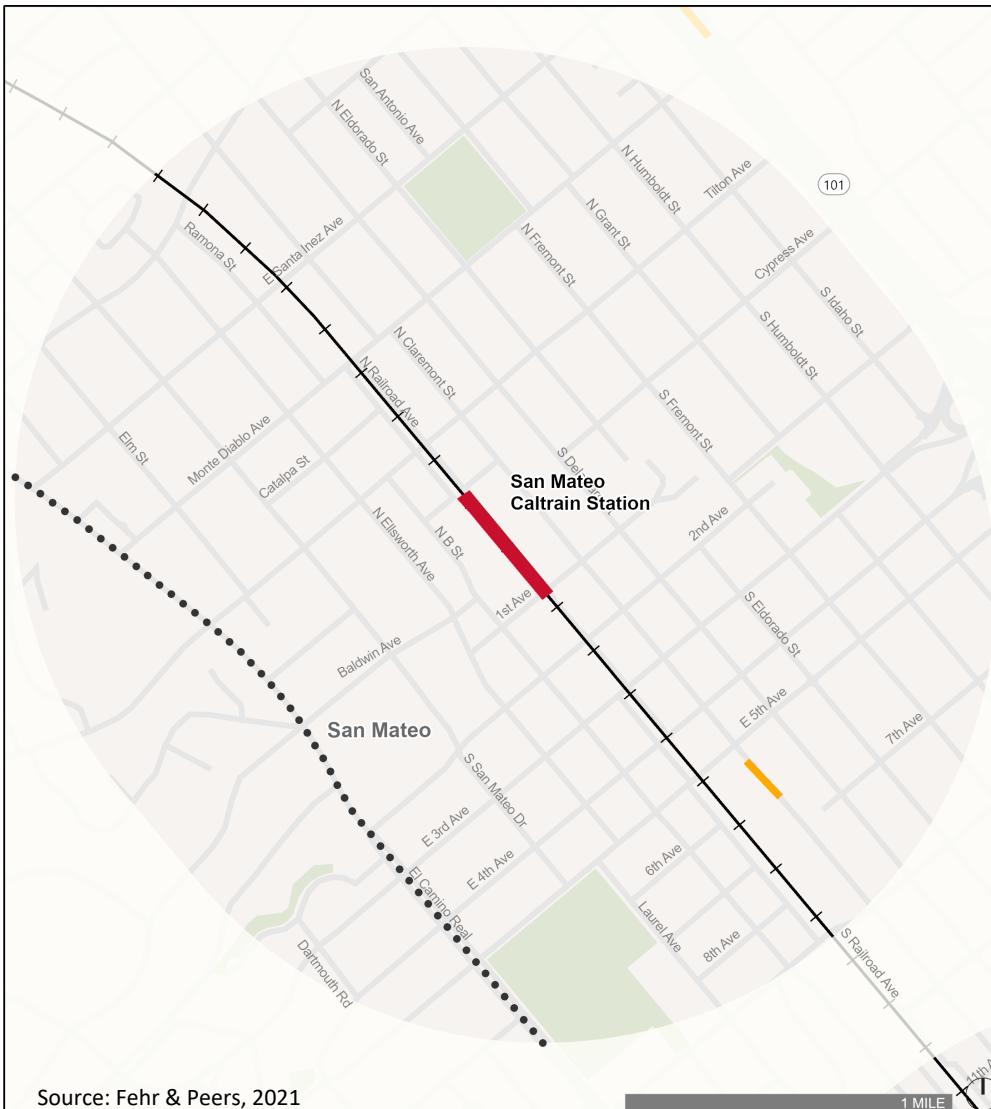
Pedestrian Actions for Ped Collisions in Study Areas



Source: City of San Mateo, 2017-May 2021, [City of San Mateo Collision Traffic Data](#)

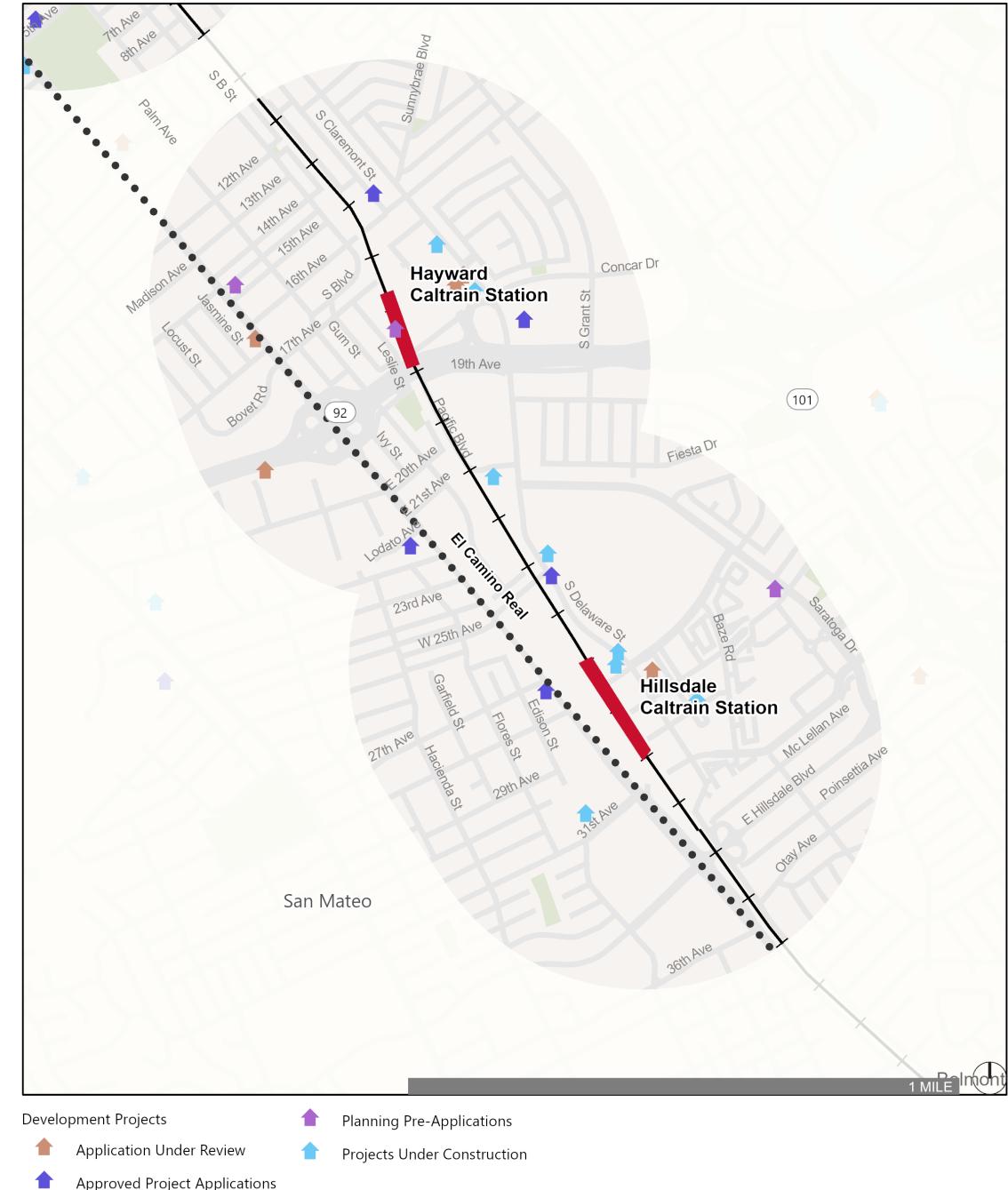
Sidewalks

Missing Sidewalks



Planned Improvements

Development Projects



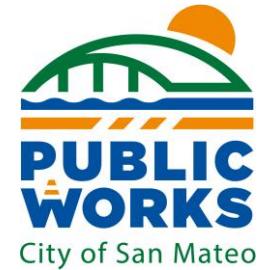
Planned Pedestrian Improvements



Source: City of San Mateo, San Mateo
Pedestrian Plan, 2012

Planned Pedestrian Improvements

- Advance Stop Bars
- Curb Extensions
- Advance Yield Line
- High Visibility Crosswalk



APPENDIX C: PRIORITIZATION METRICS

San Mateo Walks to Transit

Priority Corridors

December 3, 2021



FEHR  PEERS

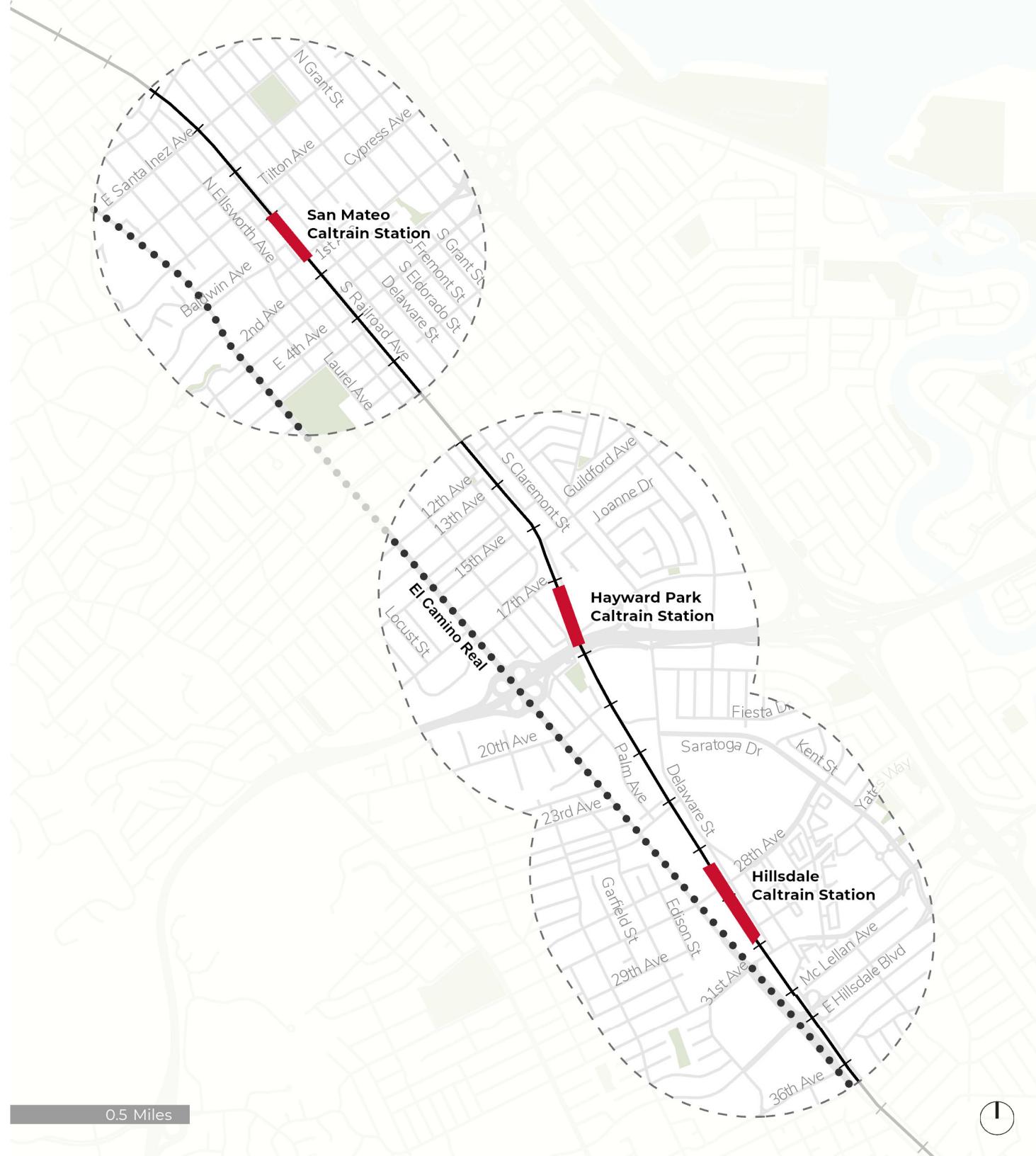
CONTENTS

- Study Area
- Priority Locations
- Downtown San Mateo: Priority Locations
- Hayward Park & Hillsdale: Priority Locations



STUDY AREA

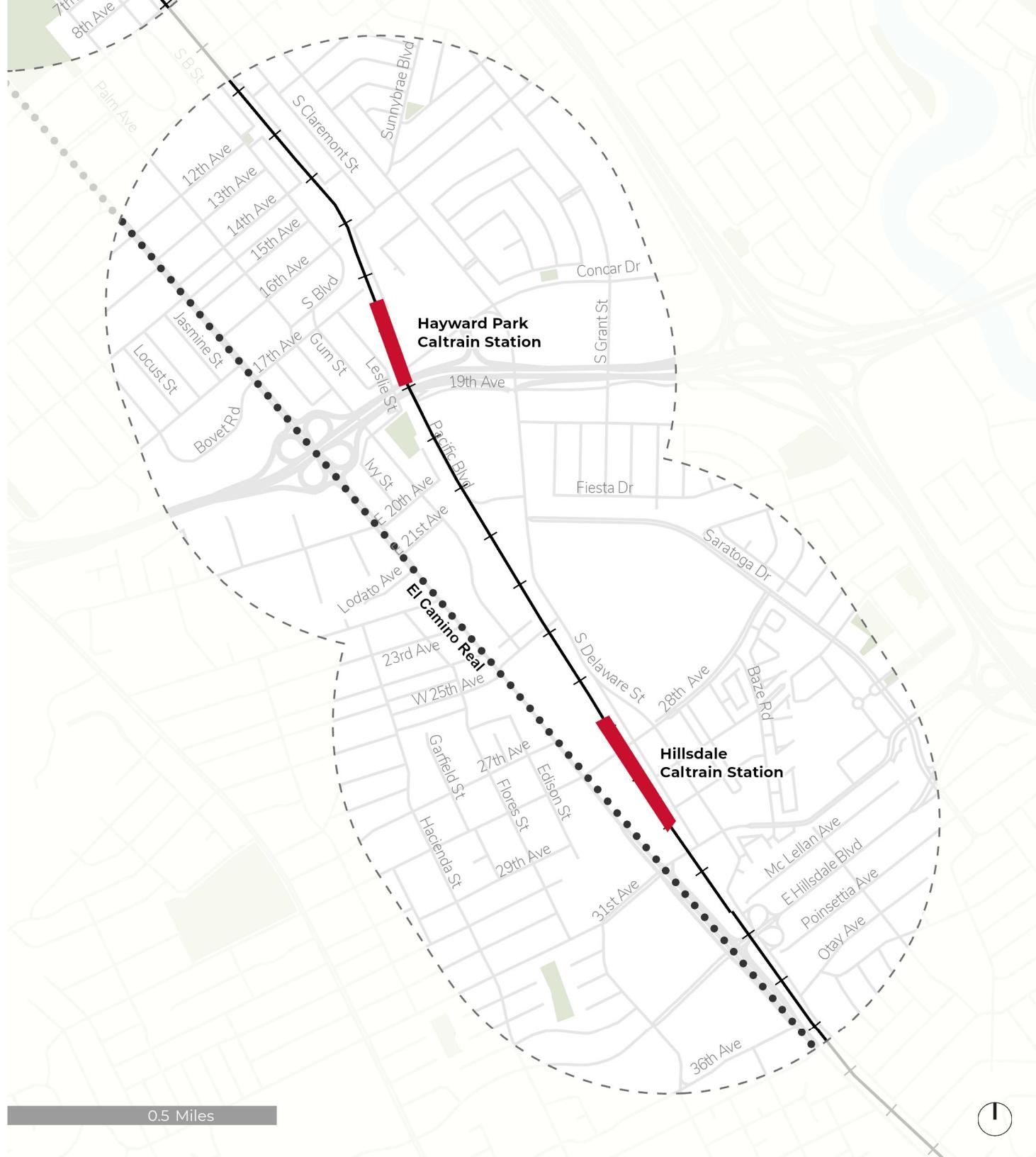
STUDY AREA



DOWNTOWN SAN MATEO



HAYWARD PARK & HILSDALE

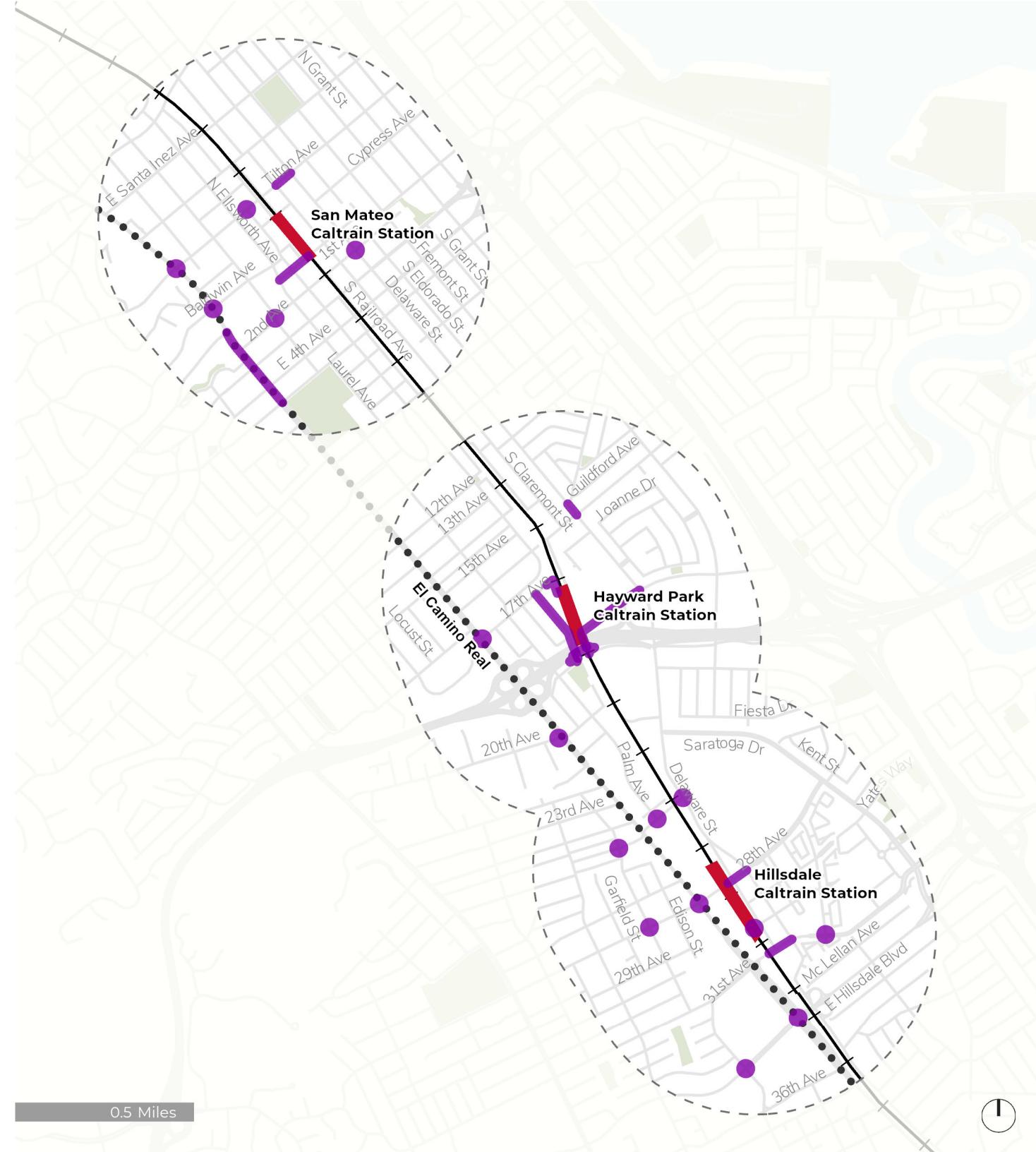




PRIORITY LOCATIONS

PRIORITY LOCATIONS

Specific improvements will be identified for these priority locations based on collisions, community feedback, and an engineering assessment. These will be combined with previously identified pedestrian improvements and result in a list of prioritized projects for which we'll prepare cost estimates and identify potential funding sources.



- Priority Intersections
- Priority Corridors

0.5 Miles



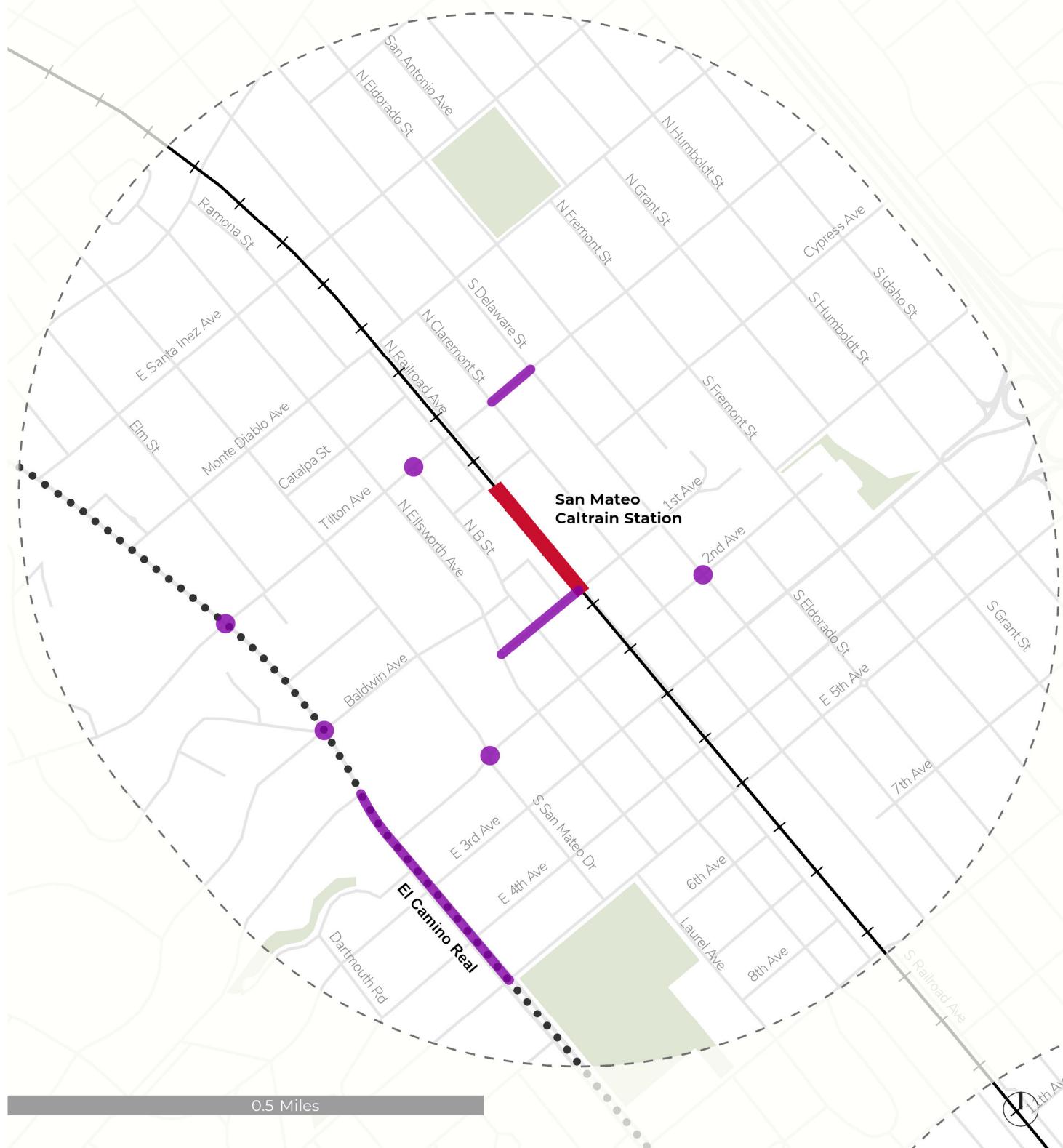
PRIORITY METRICS

Metric	Description	Weight *the importance placed on each metric compared to another to determine priority locations
Vulnerable Communities	<p>CalEnviroScreen</p> <ul style="list-style-type: none"> CalEnviroScreen assesses population characteristics and pollution burden to measure community vulnerability to pollution. The map shows community exposure and vulnerability to pollution at the census tract level, using an aggregated percentile index in comparison with the rest of the state. The lowest percentile in green reflects census tracts least impacted by pollution and the high percentiles in yellow show areas with higher pollution impacts. <p>Areas within 1 block of Senior Housing Areas within 1 block of Schools</p>	Low
Collisions	2017-May 2021 Source: City of San Mateo Collision Traffic Data	High
Community - Areas of Concern	Pedestrian issues identified by the community during outreach	High
Access - Streets Providing Access to Stations	Streets identified as main walking connections to the Caltrain Stations	Medium (Station Access) Low (Connectors)
Development Projects	Upcoming Development Projects that are either under review or under construction Source: City of San Mateo	Low



DOWNTOWN SAN MATEO PRIORITY LOCATIONS

DOWNTOWN PRIORITY LOCATIONS



● Priority Intersections

— Priority Corridors

VULNERABLE COMMUNITIES

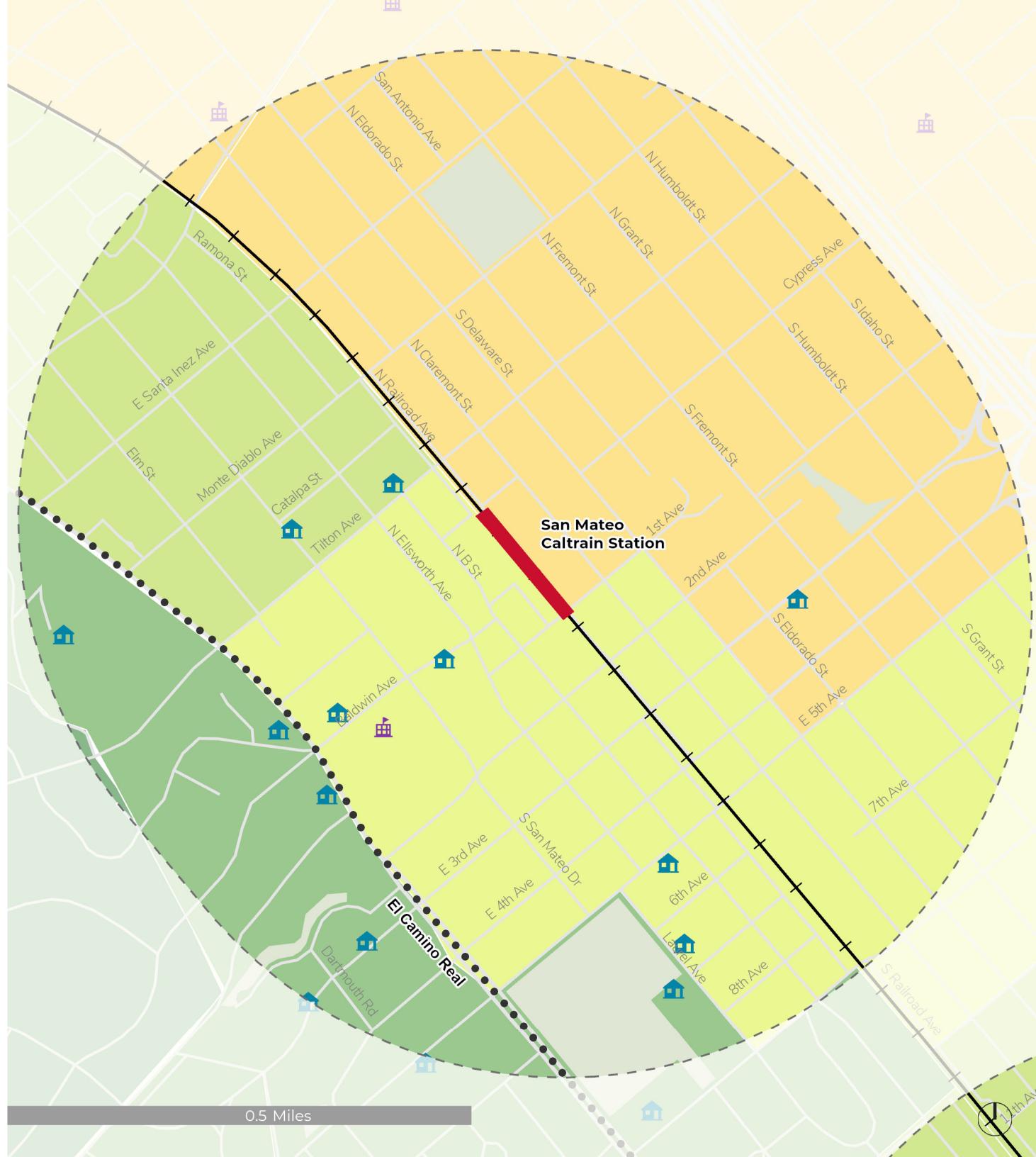
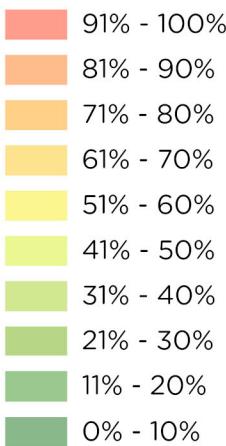
Northeast quadrant, mostly Bowie Estate neighborhood, is most vulnerable.

Predominantly Hispanic population (~50%) with about 20% white, 16% Asian*.

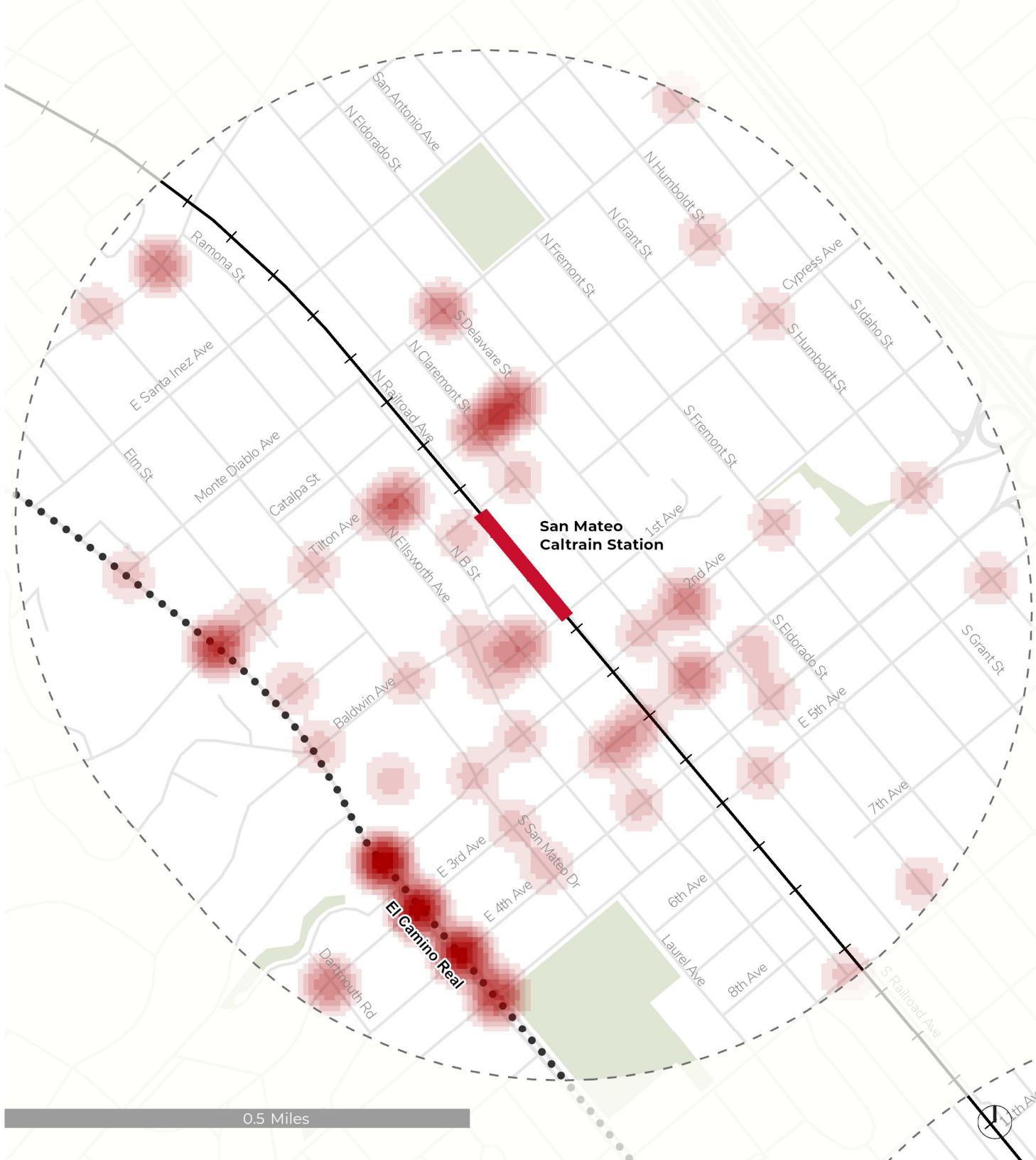
 School

 Senior Apartments

CalEnviroScreen Percentile



COLLISIONS

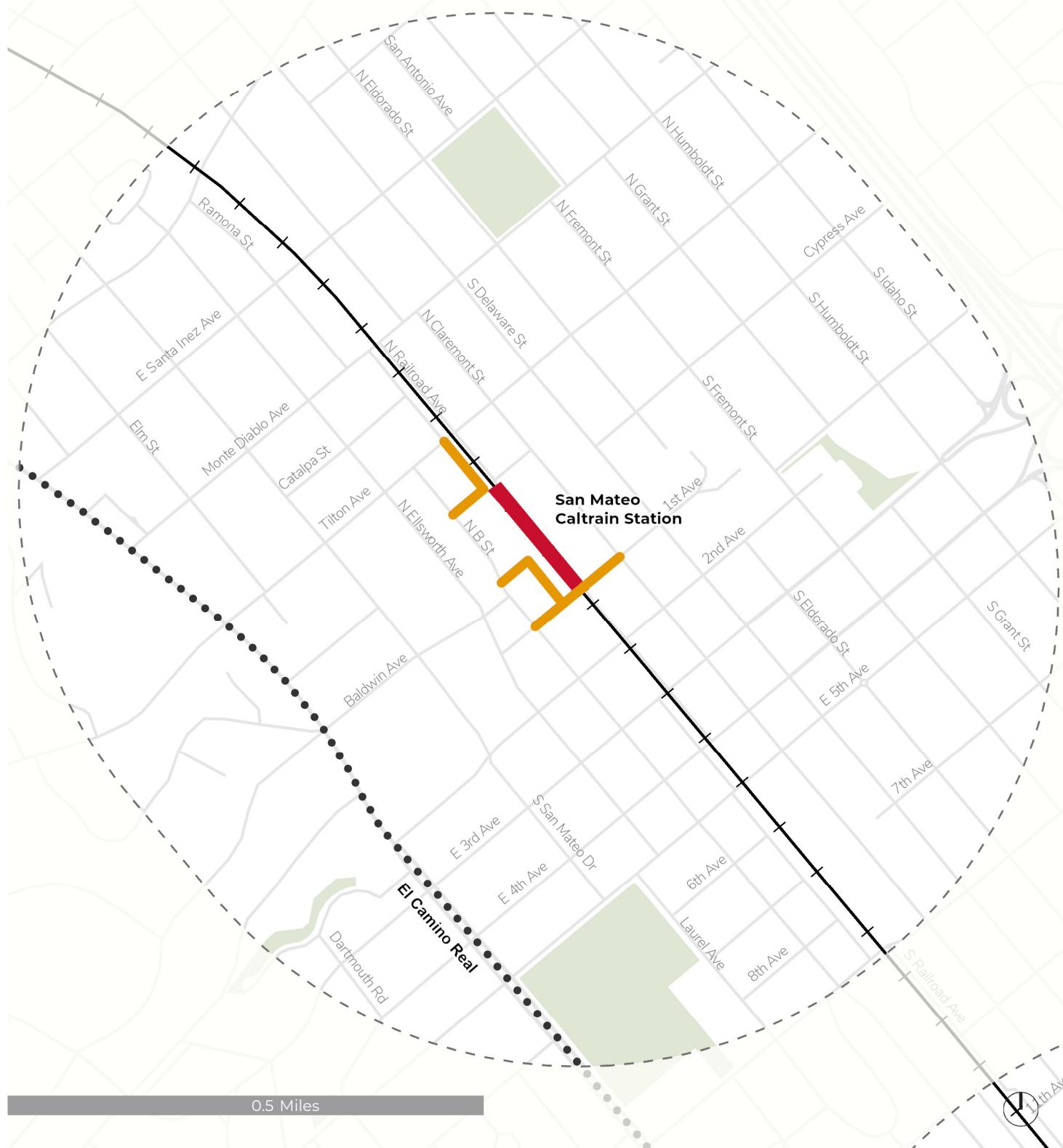


COMMUNITY AREAS OF CONCERN

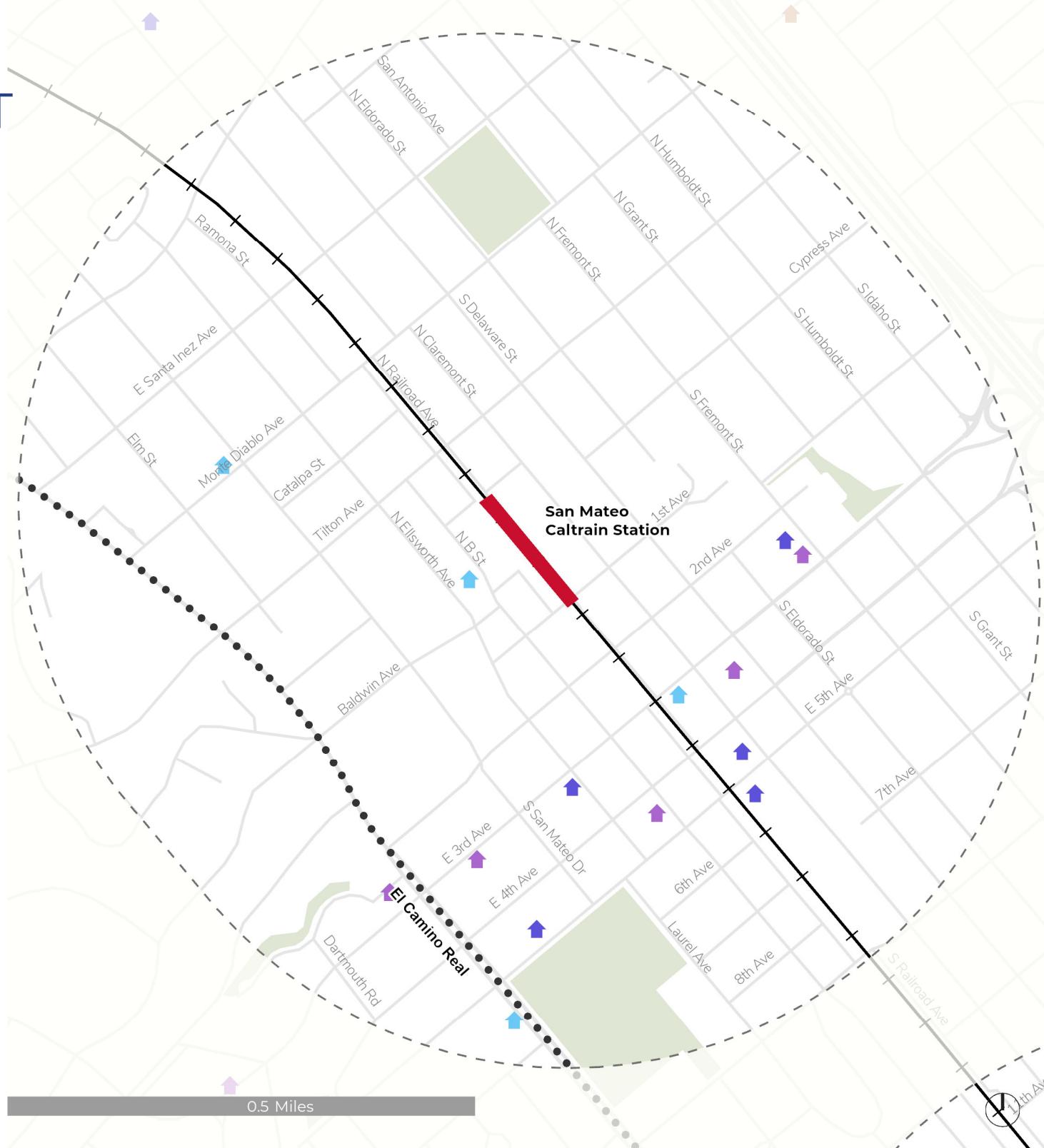


ACCESS STREETS PROVIDING ACCESS TO STATIONS

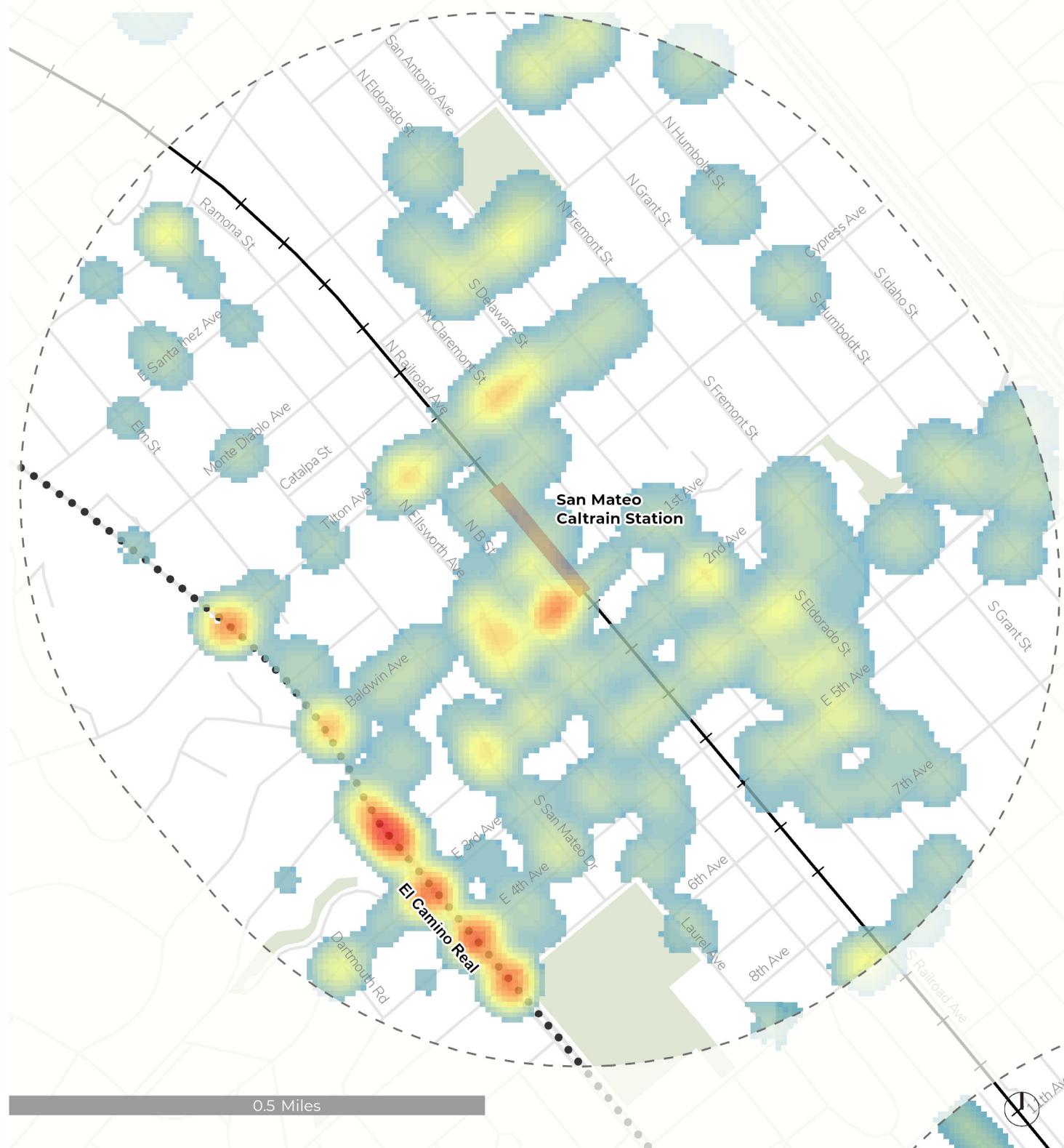
Station Access Streets -
Every transit rider must walk
on these to access the station



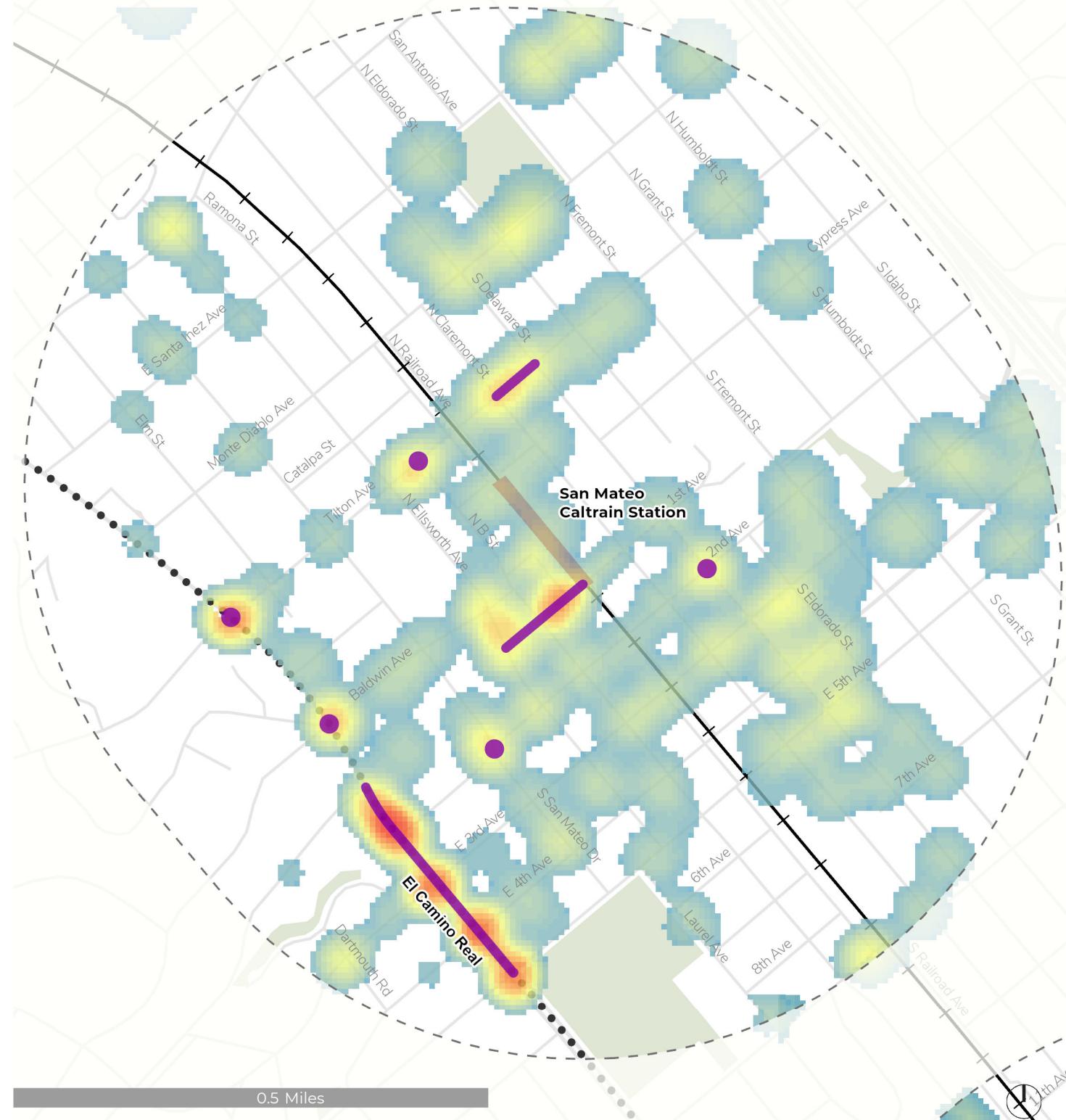
UPCOMING DEVELOPMENT PROJECTS



COMBINED METRIC EVALUATION



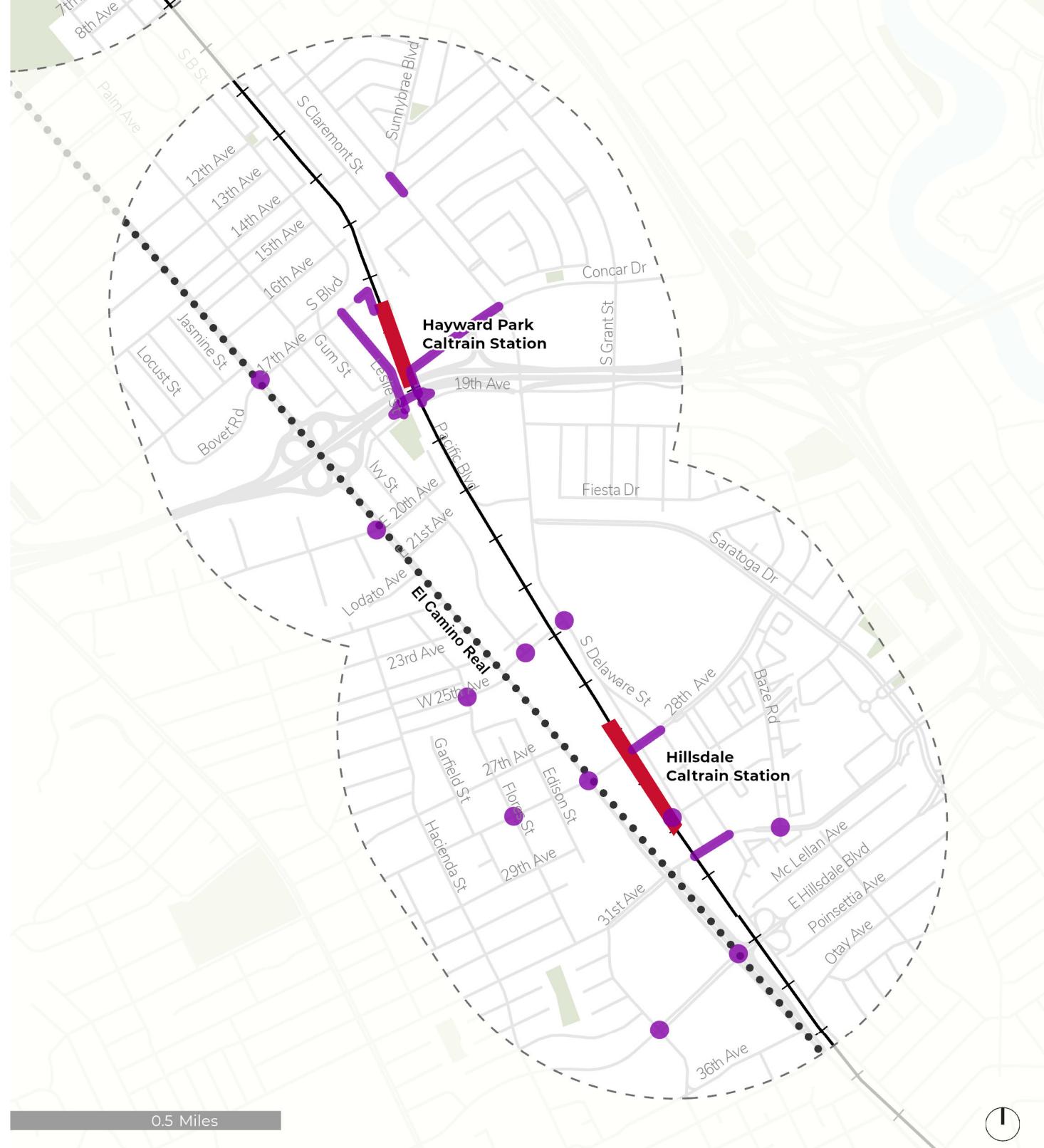
PRIORITY LOCATIONS





HAYWARD PARK & HILLSDALE PRIORITY LOCATIONS

HAYWARD PARK & HILLSDALE PRIORITY LOCATIONS

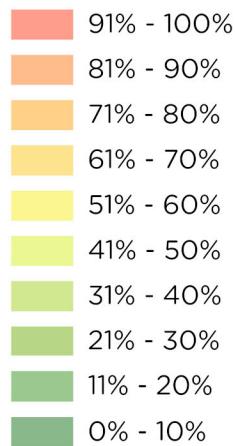


VULNERABLE COMMUNITIES

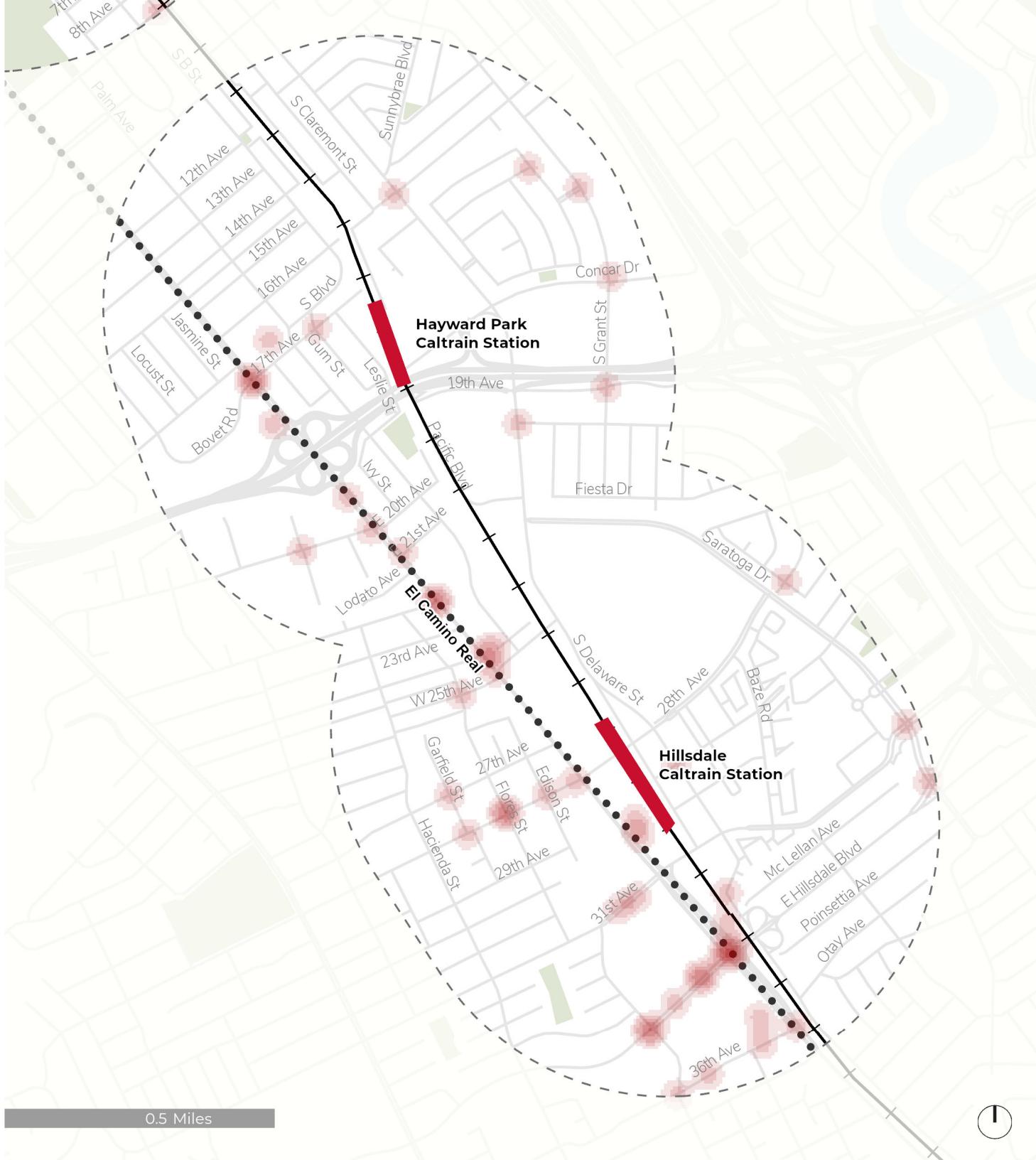
 School

 Senior Apartments

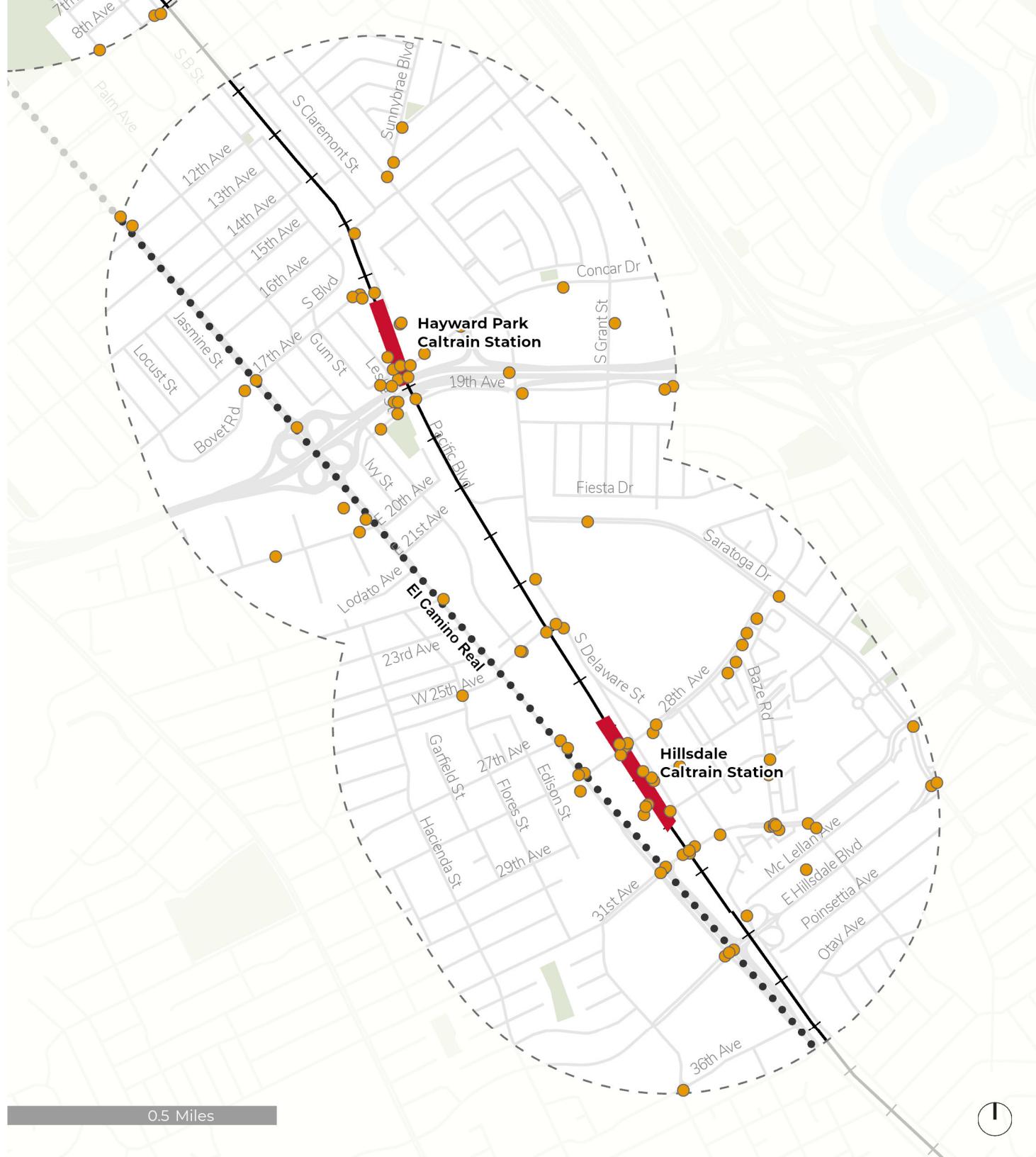
CalEnviroScreen Percentile



COLLISIONS



COMMUNITY AREAS OF CONCERN



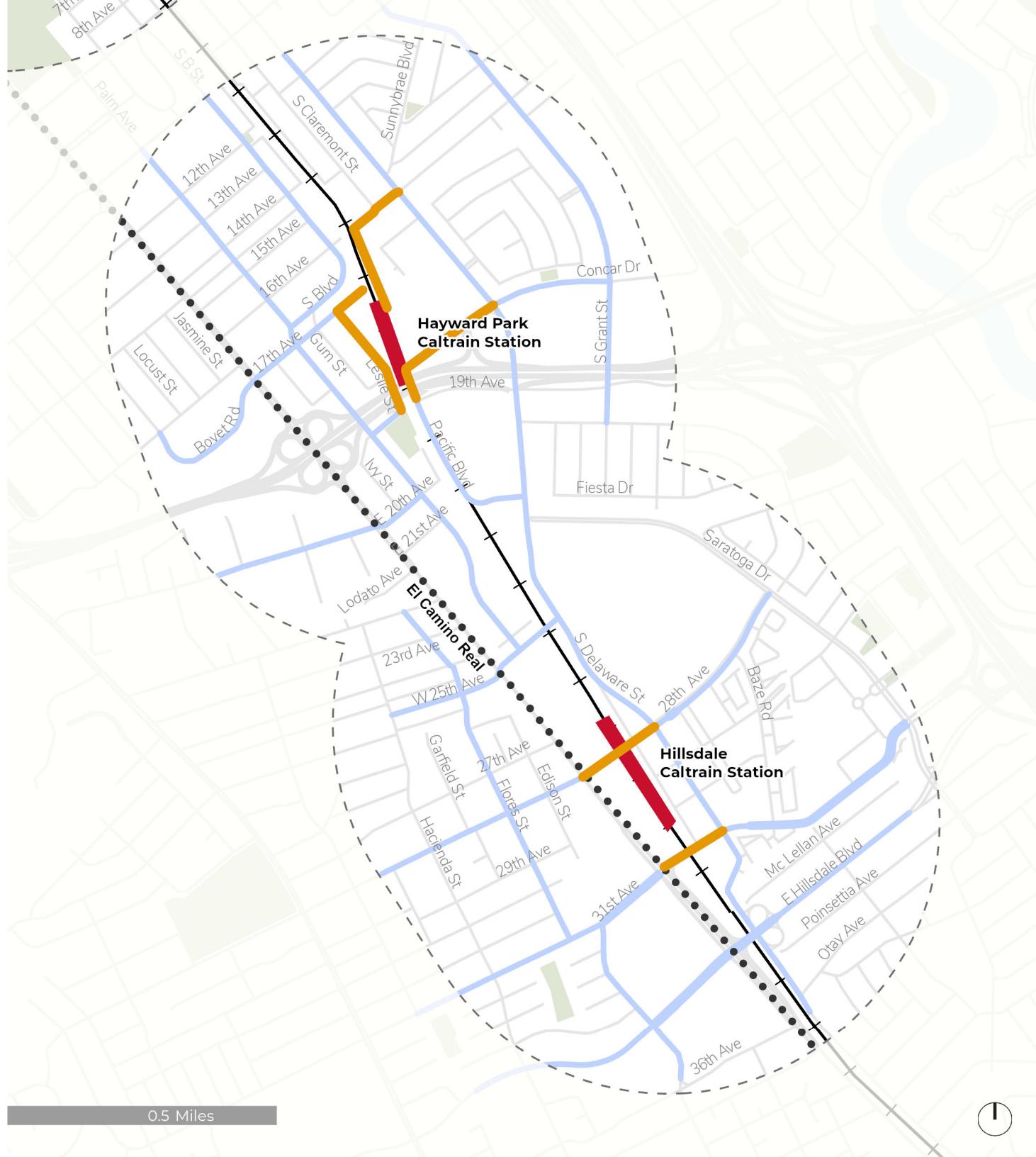
● Pedestrian Issues



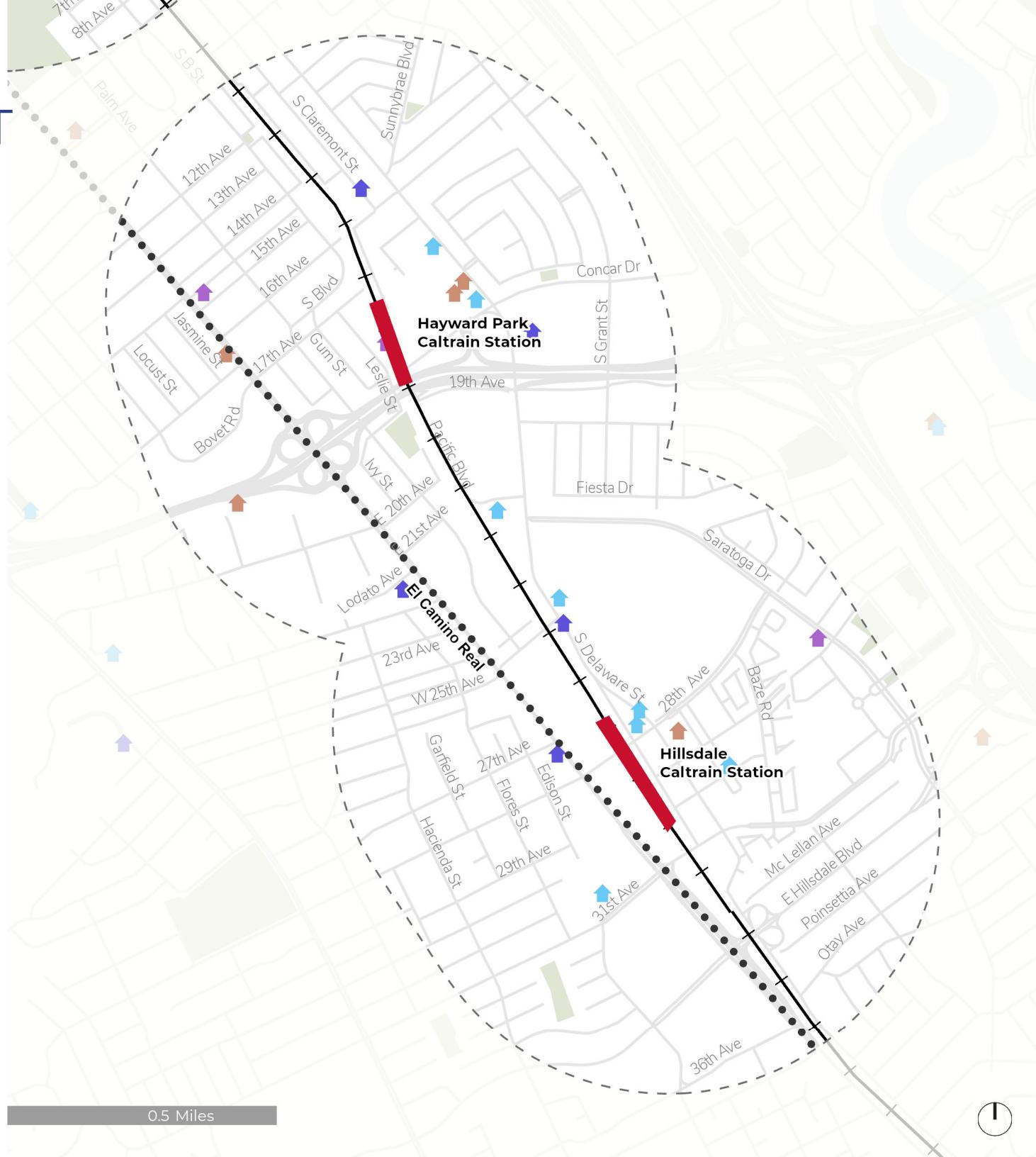
ACCESS STREETS PROVIDING ACCESS TO STATIONS

Station Access Streets -
Every transit rider must walk
on these to access the station

Connector Streets -
Key streets that pedestrians
use to connect to station
access streets



UPCOMING DEVELOPMENT PROJECTS



Development Projects

- Application Under Review
- Approved Project Applications
- Planning Pre-Applications
- Projects Under Construction

COMBINED METRIC EVALUATION



PRIORITY LOCATIONS





APPENDIX D: COUNTERMEASURE SAFETY IMPROVEMENTS

Appendix D: Countermeasure Safety Improvements

Countermeasure	Crash Type	Unprotected Left Turn	Dual Right Turn/High Right Turn Volume	Single-Family Residential Area	Senior- and Child-Serving Land Uses	Skewed Intersection	Free Right/Presence of Slip Lane
Bike Lane	Ped and Bike						
Separated Bikeway							
Parking Buffer							
All-Way Stop Control	All						
Close Slip Lane	All						X
Median Barrier	All				X		
Roundabout	All				X	X	
Signal	All	X	X		X		X
Intersection Reconstruction and Tightening							X
Lane Narrowing							
Paint and Plastic Median					X		
Partial Closure/Diverter	All						
Protected Intersection							
Raised Crosswalk	Ped and Bike			X	X	X	X
Raised Intersection	Ped and Bike						
Raised Median	All						
Refuge Island	Ped and Bike				X		
Reduced Left-Turn Conflict Intersection	All						
Road Diet	All			X	X		
Speed Hump or Speed Table							
Straighten Crosswalk							
Back-In Angled Parking							
Intersection Lighting	Night						X
Segment Lighting	Night						
Remove Obstructions For Sightlines	All						
Audible Push Button Upgrade	Ped and Bike				X		
Add Sidewalk	Ped and Bike						
Install/Upgrade Pedestrian Crossing at Uncontrolled Locations (Signs and Markings Only)	Ped and Bike						

Curb Extensions	Ped and Bike				X		
Extended Time Pushbutton						X	
High-Visibility Crosswalk	Ped and Bike	X	X				X
Pedestrian Countdown Timer	Ped and Bike		X				
Landscape Buffer							
Leading Pedestrian Interval and Pedestrian Recall	Ped and Bike					X	X
Restripe Crosswalk					X		X
Upgrade Curb Ramp				X	X		
Widen Sidewalk							
Rectangular Rapid Flashing Beacon	Ped and Bike				X		
Extend Pedestrian Crossing Time	All				X		
Flashing Yellow Turn Phase					X		
Pedestrian Scramble	All						
Prohibit Left Turn	All						
Protected Left Turns	All	X			X		
Prohibit Right-Turn-on-Red			X			X	
Separate Right-Turn Phasing		X					X
Shorten Cycle Length							
Upgrade Signal Head	All						
Advance Stop Bar	Ped and Bike	X	X	X		X	
Advance Yield Markings							X
LED-Enhanced Sign	All						
Upgrade Striping							
Wayfinding							
Yield To Pedestrians Sign	All						X



APPENDIX E: DETAILED LIST OF IMPROVEMENTS

San Mateo TOD PAP - Improvement Project List - Downtown Area

Project #	Project Name	Roadway Name	From	To	Miles (if corridor)	Existing Traffic Control (if intersection)	Improvements List/Project Description	Source	Other Notes
DT-1	El Camino Real - Downtown	El Camino Real	E 5th Ave	Crystal Springs Road	0.25		In coordination with Caltrans (long term) Complete Streets corridor analysis needed. Corridor treatments: - consider shorter cycle lengths and overall review of signal phasing and timings to improve pedestrian conditions - consider road diet - sidewalk width to match City's standard widths outlined in 2012 Pedestrian Master Plan	- Sustainable streets plan 2015 - General Plan includes three circulation alternatives (figures 18-20)	- collisions at all intersections - sidewalk (narrow & blocked) & crossing issues from community feedback
DT-1	El Camino Real - Downtown	El Camino Real	at 5th Ave			Signal	In coordination with Caltrans <u>short term:</u> - high-visibility Xwalks - Ensure there is a 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI in all directions; prioritize turns onto ECR from side streets - add curb extensions along 5th to shadow on-street parking at the northeast & northwest corners to shorten the pedestrian crossing ("paint & plastic" for short term; concrete for medium term) - advance stop bars - place pedestrian signal on auto recall for crossing 5th Ave <u>medium term:</u> - directional ADA curb ramps (all corners) - add median noses/pedestrian refuge islands on ECR; median should be 6 feet wide at minimum, so it would require widening to the edge of the travel lane (existing yellow line) - protect left turns from 5th Ave - add pedestrian countdowns - upgrade push-buttons to latest ADA standards	field review	
DT-1	El Camino Real - Downtown	El Camino Real	at 4th			Signal	In coordination with Caltrans <u>short term:</u> - high-visibility Xwalks - Ensure there is a 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI in all directions; prioritize turns onto ECR from side streets - add curb extensions along 4th to shadow on-street parking on northeast and southeast corners ("paint & plastic" for short term; concrete for medium term) - advance stop bars - place pedestrian signal on auto recall for crossing 4th Ave <u>medium term:</u> - directional ADA curb ramps (all corners) - add median noses/pedestrian refuge islands on ECR; median should be 6feet wide at minimum, so it would require working with Caltrans to agree on approach, widen the median to the edge of the travel lane (existing yellow line) or narrow travel lanes - protect left turns from 4th Ave, if feasible, which would require adding a left-turn pocket for the eastbound approach. If not feasible, include split phase - add pedestrian countdowns - upgrade push-buttons to latest ADA standards	field review	- San Mateo Pedestrian Plan 2012 called for curb extensions for southern crosswalk across ECR, but that's not feasible without removing travel lanes

DT-1	El Camino Real - Downtown	El Camino Real	at 3rd Ave		Signal	<p>In coordination with Caltrans</p> <p><u>short term:</u></p> <ul style="list-style-type: none"> - Ensure there is a 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI in all directions; prioritize turns onto ECR from side streets - add curb extensions along 3rd to shadow on-street parking on northeast and southeast corners and to close the extra receiving lane space at the NW corner ("paint & plastic" for short term; concrete for medium term) - advance stop bars - place pedestrian signal on auto recall for crossing 3rd Ave <p><u>medium term:</u></p> <ul style="list-style-type: none"> - directional ADA curb ramps (all corners) - add median noses/pedestrian refuge islands on ECR; median should be 6feet wide at minimum, so it would require working with Caltrans to agree on approach, widen the median to the edge of the travel lane (existing yellow line) or narrow travel lanes - protect left turns from 3rd Ave - add pedestrian countdowns - upgrade push-buttons to latest ADA standards 	field review	<ul style="list-style-type: none"> - San Mateo Pedestrian Plan 2012 identifies a curb extension at SW corner, but that requires removal of RT pocket on 3rd which is unclear to us if that's feasible/recommended - curb extension on SE corner not recommended because it would conflict with Class IV bikeway recommended by Bike Master Plan on 3rd, east of ECR
DT-1	El Camino Real - Downtown	El Camino Real	at 2nd Ave		Signal	<p>In coordination with Caltrans</p> <p><u>short term:</u></p> <ul style="list-style-type: none"> - advance stop bars - curb extension into 2nd Ave for Southeast corner ("paint & plastic" for short term; concrete for medium term) - LPIs + 3.5 ft/sec walking ped clearance; particularly important for the southern crosswalk (to minimize conflicts with left-turning vehicles) - extinguishable NRTOR during LPI - extinguishable LT yield to ped sign (for WB) or consider flashing yellow arrow for WB lefts - place pedestrian signal on auto recall for crossing 2nd Ave <p><u>Medium term:</u></p> <ul style="list-style-type: none"> - curb extensions (that also benefit bus stops) along west side of ECR (SamTrans study proposes relocating southbound bus stop to far side) and northeast corner (bus bulb on ECR and shadow parking on 2nd Ave) - <p>coordination with SamTrans</p> <ul style="list-style-type: none"> - directional ADA curb ramps (all corners) - add median nose on south side of ECR to create a ped refuge island; median should be 6feet wide at minimum, so it would require working with Caltrans to agree on approach, widen the median to the edge of the travel lane (existing yellow line) or narrow travel lanes - add pedestrian countdowns - upgrade push-buttons to latest ADA standards 	San Mateo Pedestrian Plan 2012 & SamTrans ECR Bus Speed & Reliability Study Field review	
DT-1	El Camino Real - Downtown	El Camino Real	at Crystal Springs Rd		Signal	<p>In coordination with Caltrans</p> <p><u>short term:</u></p> <ul style="list-style-type: none"> - curb extension on southwest and northwest corner to align the crosswalk across Crystal Springs. With the curb extensions, the west crosswalk across Crystal Springs can be shifted towards the center of the intersection to create more visibility for pedestrians ("paint & plastic" for short term; concrete for medium term) - Move stop bar forward on north leg to improve sight lines for southbound vehicles turning right from ECR onto Crystal Springs (sight line currently obstructed by the fountain) - advance stop bar - extinguishable NRTOR during LPI - Ensure there is a 3.5 ft/sec walking ped clearance - place Crystal Springs pedestrian crossing on automatic recall <p><u>medium term:</u></p> <ul style="list-style-type: none"> - directional ADA curb ramps (SW and SE) - add pedestrian countdowns 	field review	

DT-1	El Camino Real - Downtown	El Camino Real	at Baldwin Ave- Baywood Ave		Signal	<p>In coordination with Caltrans</p> <p><u>short term:</u></p> <ul style="list-style-type: none"> - prohibit left turns from ECR all day because this is a school crossing and there will be kids crossing outside of peak hours. We want to be sure we are protecting some of the most vulnerable populations. Additionally, when restrictions are only for certain periods of time, compliance decreases. - curb extensions to shadow parking on the SW corner into ECR and SE corner into Baldwin ("paint & plastic" for short term; concrete for medium term) - consider removing RT pocket on Baywood - advance stop bars at all approaches - LPIs + 3.5 ft/sec walking ped clearance on side streets - place pedestrian signal on auto recall for crossing Baldwin Ave & Baywood Ave - location of ped countdown sign on SW corner is blocked by street signs - reposition for visibility <p><u>medium term:</u></p> <ul style="list-style-type: none"> - curb extensions on west crosswalk -- recommend curb extension at NW corner (would need to be designed such that SB right turns into De Sabla Rd are still feasible), consider building out the median at De Sabla Road to serve as a pedestrian refuge for the west crosswalk and more clearly make vehicles exiting De Sabla Rd T into Baldwin Ave (This would need to be confirmed during design but would help shorten crosswalk and slow vehicles down) - Consider a "keep clear" stencil on Baywood for De Sabla exiting traffic - add pedestrian countdowns - protect left turns from Baldwin Ave and Baywood Ave - upgrade push-buttons to latest ADA standards 	San Mateo Pedestrian Plan 2012 Field review	
DT-1	El Camino Real - Downtown	El Camino Real	at Tilton Ave		Signal	<p>In coordination with Caltrans</p> <p><u>short term:</u></p> <ul style="list-style-type: none"> - prohibit lefts from El Camino Real, consider all-day prohibition for consistency with Baldwin/Baywood intersection and since when restrictions are only for certain periods of time, compliance decreases. - high-visibility Xwalks across ECR - Ensure there is a 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI in all directions; prioritize turns onto ECR from side streets - advance stop bars - place pedestrian signal on auto recall for crossing Tilton Ave <p><u>medium term:</u></p> <ul style="list-style-type: none"> - curb extensions on Tilton Ave and west side of ECR (bus bulbout) - coordination with SamTrans - directional ADA curb ramps (all corners) - add pedestrian countdowns - upgrade push-buttons to latest ADA standards 	field review - bus bulbout on ECR is consistent with recommendations from SamTrans ECR Bus Speed & Reliability Study (which also includes moving the bus stop to far side)	

DT-2-1	Downtown Gateway	2nd Ave	at San Mateo Dr		Signal	<ul style="list-style-type: none"> -ideally narrow San Mateo Dr south of 2nd Ave and shift it as far to the east as we can to slow speeds and then create a diagonal crosswalk from the SE corner to the NE corner to improve sight lines - with the extra space, could convert to diagonal parking on the west side of San Mateo Dr south of 2nd Ave - consider split phase or protected lefts for 2nd Ave (which would require a turn pocket on 2nd), or all pedestrian phase to separate left turn vehicles from pedestrians crossing San Mateo Dr. - curb extensions all corners (if not feasible, daylight the intersection) - NW corner radius should be tightened - advance stop bars - prohibit parking in intersection (currently allowed on south side). 24 minute meters will be replaced nearby - directional ADA curb ramps (all corners), would be feasible with the curb extension recommendation - high-visibility Xwalks (all) - extinguishable NRTOR during LPI - place pedestrian signal on auto recall 	San Mateo Pedestrian Plan 2012 Field review	<p>Community comments on social pinpoint: "Crossing 2nd Ave northbound, is a bit of a nightmare at this giant intersection. This particular crosswalk is really far from the others, and since there's street parking, it's difficult for cars making a right turn onto 2nd to see pedestrians."</p> <p>"This intersection is very wide. It was designed with left turn pockets. These turn pockets could be removed, and bulb-outs added, to reduce the crossing distance/time required."</p>	
DT-2-1	Downtown Gateway	2nd Ave	S Delaware St		Signal	<ul style="list-style-type: none"> - add curb extensions to shadow on-street parking - consider adding turn pockets for protected left turns on 2nd in lieu of curb extensions if left-turn vehicle volumes (and pedestrian crossings) merit it - directional ADA curb ramps (all corners) - Ensure there is a 3.5 ft/sec walking ped clearance with LPI - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns 			
DT-2-2	Downtown Gateway	1st Ave	at S Ellsworth Ave		Signal	<ul style="list-style-type: none"> - reduce/remove vehicle/ped conflicts: <ul style="list-style-type: none"> * near term improvement: change signal to split phase for EB/WB to protect EB left turns conflicts and add a painted curb extension on the SE corner; enhance crosswalk across the driveway (high-visibility or raised) * long term improvement: shift south leg crosswalk to north of the driveway or to the north leg of the intersection (to avoid left-turn conflicts and be on the side of the Caltrain station); consider a scramble or ped only phase - curb extension to shadow on-street parking on NE corner - prohibit parking at intersection and add curb extension on west side to shadow on-street parking (between two driveways), spaces will be replaced nearby - directional ADA curb ramps (all corners) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - place pedestrian signal on auto recall 	field review		
DT-2-2	Downtown Gateway	1st Ave	S Ellsworth Ave	Caltrain tracks	0.1		<ul style="list-style-type: none"> - Per Pedestrian Plan, ensure sidewalk is minimum 11 feet wide with a 5-foot through zone; consider widening to the recommended 15-foot wide sidewalk with a 7-foot through zone. Prioritize north sidewalk as it provides the most direct access to the station 	San Mateo Pedestrian Plan 2012 Field review	

DT-2-2	Downtown Gateway	1st Ave	at S B St		Signal	<ul style="list-style-type: none"> - with the B St pedestrian mall this becomes a T intersection; implement a pedestrian scramble to reduce conflicts from turning vehicles - curb extensions at north corners (into both 1st Ave & B Street) - directional ADA curb ramps (all corners) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns <p>- coordination required with Donut Delight Building (57 S. B Street) development project and City's B Street Pedestrian Mall project</p>	field review		
DT-2-2	Downtown Gateway	1st Ave	at Transit Center Way		Uncontrolled	<ul style="list-style-type: none"> - add high-visibility crosswalks on west and north legs; consider RRFB for new uncontrolled crosswalk on west leg as additional safety measure for an uncontrolled crosswalk (may require CPUC approval) - directional ADA curb ramps on SW, NW and NE corners (3) (would require tree removal on south side) - curb extension on south side between Main St & parking garage driveway and on NW corner (will also help increase safety of new uncontrolled crosswalk on west leg) 	field review		
DT-2-2	Downtown Gateway	1st Ave	S Ellsworth Ave	Caltrain tracks	0.1		<ul style="list-style-type: none"> - ensure sidewalk is minimum 11 feet wide with a 5-foot through zone; consider widening to the recommended 15-foot wide sidewalk with a 7-foot through zone 	San Mateo Pedestrian Plan 2012	2020 Bike Master Plan calls for a bike lane
DT-2-2	Downtown Gateway	Transit Center Way (N-S)	1st Ave	Transit Center Way (E-W)	150 ft		<ul style="list-style-type: none"> - widen sidewalk on west side to ensure ADA path of travel and width matching standards outlined in 2012 Ped Master Plan (11-ft wide minimum (15-ft recommended) with a 5-ft through zone (7-ft recommended) as it is in the downtown retail core) 	San Mateo Pedestrian Plan 2012	
DT-2-2	Downtown Gateway	Transit Center Way (E-W)	N B St	Transit Center Way (N-S)	150 ft		<ul style="list-style-type: none"> - consider reducing travel lanes from two to one westbound and widen sidewalks with that space (this will also help make the Transit Way/Transit Way intersection smaller and more pedestrian-friendly). Alternatively, consider closing eastbound lane on Transit Center Way to create a nicer entrance to the station - add wayfinding signage improvements at Transit Center/B Street to reduce driver confusion and orient pedestrians to main Caltrain station entrance - if eastbound lane remains on Transit Center Way, consider adding additional signage here and at Transit Center Way/Transit Center Way to deter vehicles from turning onto Transit Center Way (N-S) 	field review	
DT-2-2	Downtown Gateway	Transit Center Way (E-W)	at Transit Center Way		AWSC	<ul style="list-style-type: none"> - advance stop bars - high-visibility crosswalks all legs - directional ADA curb ramps (all corners) - consider a raised intersection, perhaps with a decorative element 	field review		
DT-2-2	Downtown Gateway	Transit Center Way (E-W)	at N B St		SSSC	<ul style="list-style-type: none"> - no additional improvements, all suggestions are being implemented with 303 Baldwin development project (project under construction) 	field review		
DT-2-2	Downtown Gateway	Ellsworth Ave	at Baldwin Ave		Signal	<ul style="list-style-type: none"> - curb extensions on northwest, southwest, and southeast corners; daylighting if curb extensions are not feasible - directional ADA curb ramps on southwest, southeast, northwest corners - high-visibility crosswalks on west and south legs - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns - place pedestrian signal on auto recall 	field review	Coordinate with parklets on Baldwin that may become permanent/long-term	
DT-2-3	Downtown Gateway	1st Ave	at S Claremont St		AWSC	<ul style="list-style-type: none"> - extend curb extensions into Claremont on west side and add at NE & SE corners - high-visibility crosswalks (all legs) - advance stop bars - directional ADA curb ramps (all corners) 			

DT-2-3	Downtown Gateway	1st Ave	at S Railroad Ave			SSSC	<ul style="list-style-type: none"> - advance stop bar on S Railroad Ave - high-visibility crosswalks - directional ADA curb ramps (all corners) - consider adding an RRFB to crosswalk across 1st Ave (east leg) to enhance the safety of the uncontrolled crosswalk based on vehicle & pedestrian volumes and vehicle speeds -- RRFB installation may require CPUC approval 	San Mateo Pedestrian Plan 2012 Field review	
DT-2-3	Downtown Gateway	1st Ave	Claremont St	Caltrain tracks			<ul style="list-style-type: none"> - check and ensure clear width for ADA path of travel provided on north sidewalk - ensure sidewalk is minimum 11 feet wide with a 5-foot through zone; consider widening to the recommended 15-foot wide sidewalk with a 7-foot through zone (would likely require parking removal) -- may be a longer term improvement to be implemented with new developments 	San Mateo Pedestrian Plan 2012 Field review	
DT-2-3	Downtown Gateway	1st Ave	at Caltrain tracks			train signal	<ul style="list-style-type: none"> - high-visibility crosswalk across tracks - ensure path across tracks is ADA accessible 	San Mateo Pedestrian Plan 2012 Field review	
DT-3-1	North Station Access	N Railroad Ave (west of tracks)	Tilton Ave	Caltrain station access point (Mi Rancho supermarket)	400 feet		<ul style="list-style-type: none"> - consider converting street into a shared street/alley with traffic calming so that pedestrian path of travel is ensured on the street; if this is implemented, consider signs to inform users on how to best use the street given this would be a new treatment in the city - provide pedestrian scale lighting - add aesthetic improvements to make it more pedestrian friendly. (Urban greening, public art, etc.) 	field review	
DT-3-1	North Station Access	Railroad	N B St	N Railroad Ave	180 ft		<ul style="list-style-type: none"> - restrict parking along this block - add pedestrian scale lighting - provide wayfinding signage to direct people through Railroad Ave (to use public ROW) instead of the Mi Rancho parking lot - consider adding public art or urban greening considered to make this access more comfortable for pedestrians 	field review	
DT-3-1	North Station Access	Tilton Ave	at N Railroad Ave (west & east of tracks)			AWSC	<ul style="list-style-type: none"> - add stop control the westbound approach west of the tracks/underpass and eastbound approach east of the tracks - add high-visibility crosswalks across Tilton on west leg west of the tracks and on east leg, east of the tracks - advance stop bar (eastbound, west of tracks) - add curb extensions into Tilton for new proposed crosswalks - ensure adequate lighting in the underpass - Provide pedestrian wayfinding signs to Caltrain station 	field review	
DT-3-2	North Station Access	Cypress Ave	Claremont St	S Railroad Ave	250 ft		<p>If Cypress Ave is decided to be the best pedestrian path of travel to the new Caltrain station access:</p> <ul style="list-style-type: none"> - Suggest converting Cypress to a one-way westbound to provide space for vehicles not to park on the sidewalks, therefore providing more space for pedestrians on the existing sidewalks - Provide pedestrian scale lighting to enhance sense of safety - provide wayfinding direction to Caltrain station access - Alternatively, suggest removing parking to widen sidewalks and provide ADA path of travel on both sides of the street - 2012 Ped Master plan requires a 7-ft minimum sidewalk with a 5-ft minimum through zone (based on adjacent land use) 	San Mateo Pedestrian Plan 2012 Field review	

DT-3-2	North Station Access	S Railroad Ave	at Cypress Ave		Uncontrolled	<ul style="list-style-type: none"> - provide a new Caltrain station access from Cypress Ave/S Railroad Ave - add an ADA ramp on Caltrain track side to connect to the station platform <p>If Cypress Ave is decided to be the best pedestrian path of travel to the new Caltrain station access:</p> <ul style="list-style-type: none"> - upgrade sidewalk on S Railroad Ave to provide an ADA path of travel from Cypress to the station access point. If sidewalk widening not feasible, consider converting street into a shared street/alley with traffic calming so that pedestrian path of travel is ensured on the street (including diverters every 1-2 blocks so only bikes and pedestrians can go through) - add a crosswalk at the intersection on the south leg <p>If S Railroad Ave is decided to be the best pedestrian path of travel to the new Caltrain station access:</p> <ul style="list-style-type: none"> - upgrade sidewalk on S Railroad Ave to provide an ADA path of travel from Tilton Ave to the station access point. If sidewalk widening not feasible, consider converting street into a shared street/alley with traffic calming so that pedestrian path of travel is ensured on the street (including diverters every 1-2 blocks so only bikes and pedestrians can go through) - after new Caltrain station access has been established, connect it to the southbound platform as well, allowing travel to the existing southbound ramp from Mi Rancho Supermarket's parking lot and North Railroad Avenue west of the tracks. Ensure the connection/crossing across the tracks has all the appropriate safety features (e.g., pedestrian gates). <p>-- coordination with Caltrain required</p>	field review	
DT-3-3	North Central Equity Access	Tilton Ave	at N B St		SSSC	<ul style="list-style-type: none"> - directional curb ramp at SW corner - high-visibility crosswalk on south leg - curb extension on southwest corner to shadow parking on B Street 	field review	Ped Plan improvements already implemented
DT-3-3	North Central Equity Access	Tilton Ave	at Delaware St		AWSC	<ul style="list-style-type: none"> - high-visibility Xwalk markings - curb extensions (nice to have but not as necessary at a less heavily utilized intersection, but could help reduce vehicle speeds on Tilton); if not, add daylighting (all approaches, near side) - advance stop bars - directional ADA curb ramps - additional lighting <p>-If Cypress can't be improved consider extending the shared street recommendation on Railroad to Tilton to provide this pedestrian access</p>		
DT-3-3	North Central Equity Access	Tilton Ave	at Claremont St		SSSC	<ul style="list-style-type: none"> - consider AWSC for traffic calming along Tilton; if it doesn't meet an AWSC warrant, add one crosswalk across Tilton Ave and enhance. Consider raising the crosswalk for traffic calming or add a traffic circle. - lighting - curb extensions on all corners - high-visibility Xwalk markings across Claremont (and Tilton based on first bullet point) - advance stop bars - directional ADA curb ramps 		community social pinpoint map comment "Crossing Tilton on Claremont is a death trap. There is no stop sign or crosswalk there, and seeing around parked cars is close to impossible with Tilton's grade change under the train bridge. The lighting is poor at night, too. This is a highly trafficked sidewalk, but it's still very dangerous. The sidewalk is also very narrow and there's always a ton of trash."

San Mateo TOD PAP - Improvement Project List - Hayward Park

Project #	Project Name	Roadway Name	From	To	Miles (if corridor)	Existing Traffic Control (if intersection)	Final Improvements List	Source
HP-1	El Camino Real - Hayward Park	El Camino Real	at 17th Ave-Bovet Rd			Signal	<p>In coordination with Caltrans</p> <ul style="list-style-type: none"> - prioritize SW corner radius tightening and protected left-turns on Bovet/17th - curb extensions to shadow on-street parking at SE corner, & NE corner into ECR -- northeast corner would be a bus bulb if/when bus stop is moved closer to intersection (per SamTrans study) - in coordination with SamTrans - directional ADA curb ramps (all corners) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns - place pedestrian signal on auto recall for crossing Bovet & 17th - upgrade push-buttons to latest ADA standards - consider narrowing lanes on Bovet EB to shorten crossings - consider adding a protected EBR overlap phase with the NBL phase and removing the permissive EBR phase (add 'no EBR' blankout sign during EBT phase) to remove the pedestrian-vehicle conflict - add wayfinding to Caltrain station - coordinate with Caltrans to consider a no right turn on red from NB El Camino Real to 17th Ave 	field review - SamTrans ECR Bus Speed & Reliability Study

HP-1	El Camino Real - Hayward Park	El Camino Real	at E 20th Ave		Signal	<p>In coordination with Caltrans</p> <ul style="list-style-type: none"> - address skew (long crosswalks, high speed turns) and straighten crosswalks by narrowing lane widths and providing curb extensions on SE corner and curb extension on NE corner into ECR, which would be a bus bulb if/when bus stop is moved closer to intersection (per SamTrans study) - in coordination with SamTrans - restrict truck turns if needed to address skewed geometry (e.g. NBR and SBR) - directional ADA curb ramps (all corners) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns - place pedestrian signal on auto recall for crossing 20th - upgrade push-buttons to latest ADA standards - widen sidewalk on 20th (both north & south sides and east & west of El Camino Real) -- per 2012 Ped Master Plan sidewalk should be 11-ft wide minimum (15-ft recommended) with a 5-ft through zone (7-ft recommended) as it is adjacent to commercial land uses -- coordination with redevelopment of the northwest parcel - add median noses/pedestrian refuge islands on ECR; median should be 6feet wide at minimum, so it would require working with Caltrans to agree on approach, widen the median to the edge of the travel lane (existing yellow line) or narrow travel lanes - address cross-slope on long driveway with redevelopment on NW Corner/ Xmas tree lot 	field review - SamTrans ECR Bus Speed & Reliability Study - 2012 San Mateo Pedestrian Plan
HP-2-1	Hayward Park West	Leslie St	at 17th Ave		Uncontrolled	<p>Coordinate the below improvements with adjacent planning application, if possible:</p> <ul style="list-style-type: none"> - convert to AWSC if warranted. If not, consider traffic calming treatments on 17th. - add high-visibility crosswalk across Leslie St (south leg) and on west side of 17th Ave, and consider additional enhancements for new crosswalk across 17th Ave - add curb extensions to shadow on-street parking on south corners and along north side for new crosswalk and through intersection to discourage parking/stopping in intersection, daylight if curb extensions not feasible - directional ADA curb ramps for two proposed marked crosswalks 	field review
HP-2-1	Hayward Park West	17th Ave	Leslie St	Station 575 ft		<ul style="list-style-type: none"> - improve wayfinding between station entrance and major nearby destinations - provide pedestrian scale lighting along 17th - widen existing sidewalks to meet requirements and recommendations from 2012 Pedestrian Master Plan; at least ensure continuous ADA path of travel is provided <p>Related Bike Improvements</p> <ul style="list-style-type: none"> - Bike Blvd improvements on 17th and Leslie <p>Caltrain ROW</p> <ul style="list-style-type: none"> - Work with Caltrain to formalize existing bike/ped trail from 17th Ave to the Station 	San Mateo Pedestrian Plan 2012 field review

HP-2-2	Hayward Park West	Leslie St	17th Ave	19th Ave			<p>City Actions</p> <ul style="list-style-type: none"> - provide raised midblock crossing at station entrance north of driveway on east side of Leslie; include curb extensions and ADA curb ramps; provide additional enhancements based on volumes and speeds (currently unavailable) - address potential ADA cross-slopes across driveways - improve wayfinding between station entrance and major nearby destinations - provide pedestrian scale lighting along Leslie, including most critically under the SR 92 underpass. Enhance underpass wall with mural or other placemaking devices. - provide a crosswalk and curb ramps to cross Gum St along west side of Leslie St - If redevelopment occurs on east side of Leslie north of Caltrain station entrance, widen existing sidewalk to meet 2012 Pedestrian Master Plan [11' min (15' recommended) with 7' min through zone width (5' recommended; based on adjacent land use of commercial with parallel parking) and consolidate driveways north of the main station entrance. - If sidewalk or Class 1 path is infeasible on Caltrain property on east side of Leslie, widen west sidewalk to meet 2012 Pedestrian Master Plan standards. <p>Caltrain ROW</p> <ul style="list-style-type: none"> - Work with Caltrain to provide sidewalk to meet requirements and recommendations from 2012 Pedestrian Master Plan or Class 1 multi-use path on the east side of Leslie Street south of the current entrance to 19th Ave. - Create a new pedestrian gateway entrance to Caltrain platform at the southern end of the station to reduce walking distances to platform and between east and west sides of Hayward Park. 	field review
HP-2-2	Hayward Park West	Leslie St	at 19th Ave			Uncontrolled	<ul style="list-style-type: none"> - provide high-visibility crosswalk diagonally at the apex of the curve so that it provides good visibility for vehicles approaching in both directions; consider additional crosswalk enhancements upon review of vehicle speeds and volumes - provide curb extensions for crossings to square up the intersection - continue pedestrian-scale lighting from Leslie along 19th Ave to Palm - Consider widening sidewalk on one side of the street on 19th Ave to meet City standards, if feasible with trees/utilities <p>Related Bike Improvements</p> <ul style="list-style-type: none"> - Bike Blvd improvements on Leslie and 19th Ave 	field review
HP-2-4	Hayward Park West	Gum St	South Blvd	17th Ave			<ul style="list-style-type: none"> - Consider reconfiguring the segment and intersections of Gum St with 17th Ave and South Blvd to improve pedestrian safety. 	public comment
HP-2-3	Caltrain overpass	Overpass over tracks (at 19th Ave)	Leslie St	Pacific Ave			<ul style="list-style-type: none"> -ADA curb ramps at overpass ramp entrances - ped scale lighting leading to and on the overpass - improve wayfinding 	field review
HP-3	Sunnybrae	S Railroad Ave	E 16th Ave	Station		900 ft	<ul style="list-style-type: none"> - Work with adjacent land owners to formalize bike/ped trail from 16th Ave to the Station entrance through the parking lot - improve wayfinding between station entrance and major nearby destinations -include an ADA curb ramp to access the path from street - include ADA path of travel through Caltrain parking lot to station platform 	field review

HP-3	Sunnybrae	E 16th Ave	S Railroad Ave	Delaware	570 ft		-widen sidewalks within City ROW, if possible to meet requirements and recommendations from 2012 Pedestrian Master Plan -- 7' minimum width with 5' minimum through zone width (based on adjacent residential land use, constrained scenario) -- by narrowing travel lanes or using more of City ROW, not removing parking. - pedestrian scale lighting	San Mateo Pedestrian Plan 2012 field review
HP-3	Sunnybrae	E 16th Ave	at S Claremont			AWSC	- provide high-visibility crosswalk on east leg as well to minimize how often peds cross the street - make existing crosswalks high-visibility - Daylighting at all corners to improve visibility, consider curb extensions to shadow parking (all corners) if feasible - rebuild NE curb extension to allow for E leg crosswalk to land outside of a driveway (lower priority) - advance stop bar on north leg - prohibit parking in intersection; consider a curb extension through the entire intersection on the south side to discourage parking/stopping - add lighting for north and west crosswalks	field review
HP-3	Sunnybrae	E 16th Ave	at Delaware			AWSC	- evaluate the traffic control at this intersection and consider a signal (City is currently evaluating) or roundabout (if roundabout, then it would be only 1 lane approaches) - high-visibility crosswalks all legs - curb extensions to shadow parking into 16th Ave for east leg - consider narrowing travel lanes at the intersection on west leg to shorten crosswalk	field review
HP-3	Sunnybrae	S Delaware St	at Sunnybrae			SSSC	- As a part of existing bike Blvd. project on Sunnybrae, address geometry of cross-streets such as Guildford Ave (T it up) to slow turning speeds coming into Sunnybrae/Delaware. And then T Sunnybrae into Delaware. - make existing crosswalk high-visibility - advance stop bars	field review
HP-3	Sunnybrae	S Delaware St	E 16th Ave	Sunnybrae	200 ft		- ped scale lighting on west side of street (to complement the east side of the street)	field review
HP-4-1	Hayward Park East						Ensure Hayward Park redevelopment addresses existing ADA and ped circulation issues. If redevelopment doesn't occur, the specific recommendations are provided below. -- coordination with Hayward Park redevelopment (project not approved yet)	
HP-4-1	Hayward Park East	Path across tracks					- ADA curb ramp from parking lot to curb connecting to station platform - consider adding ADA parking spaces near this path since this is the only path to connect to the west (southbound) platform from the east side, so someone in a wheelchair does not next to wheel from the south end of the platform, all the way to the north end, just to cross to the west platform - consider designating pedestrian path of travel through parking lot - add wayfinding and consider how paths on the other side of this connect into the ped network	field review
HP-4-1	Hayward Park East	Station Park Cir	at Station parking lot				- Remove fence and provide access from residential buildings-	field review

HP-4-3	Hayward Park East	Pacific Blvd - Concar Dr	19th Ave	East edge of Caltrain Parking lot	340 ft	<ul style="list-style-type: none"> - provide ADA ramp to platform next to steps - ped scale lighting - widen sidewalk on east side of street - improve wayfinding - continuing existing Class 1 on Concar (north side) from edge of existing development to Station and down Pacific (west side) to 19th Ave (either remove parking or make this a one-way street to get the extra space) 	field review
HP-4-3	Hayward Park East	Pacific Blvd	Concar Dr	19th Ave	0.2 miles	<ul style="list-style-type: none"> - widen sidewalk on one side of the street (west side likely better) to meet City standards - provide improvements at 19th/Pacific intersection similar to those identified for Leslie/19th: provide high-visibility crosswalks, curb extensions, and directional ADA curb ramps to connect overpass entrance to Caltrain sidewalk; provide curb extensions on northeast corner to tighten the curb radius and slow down turning vehicles. 	field review
HP-4-2	Hayward Park East	Concar Dr	at Station Park Cir-92 on/off-ramps		Signal	<p>In coordination with Caltrans</p> <p>'As a long-term improvement, consider the following in the future to improve ped crossing at Concar / Delaware, if possible to reduce the size of the intersection size and ped crossing distances with additional curb or protected extensions:</p> <ul style="list-style-type: none"> - if lanes can be reduced to one or two lanes, we could then T up the off-ramp into Concar to help tighten up the intersection and provide pedestrian crossings on all legs and better connect the developments on the south side to the station (per recommendation above). If reducing to 1 lane is feasible, you could also consider a roundabout. The off-ramp lane reduction would also allow the intersection at Delaware/Concar intersection to be smaller 	field review
HP-4-2	Hayward Park East	Concar Dr	at Delaware		Signal	<p>Implement Concar Passage plans for protected intersection islands on northeast and southeast corners to accommodate buffered bike lane turning movements, with ADA curb ramps included. - coordination with Concar Passage development project (approved project but building permits not yet filed)</p> <p>Additional pedestrian improvements for all intersection legs include:</p> <ul style="list-style-type: none"> - advance stop bars - high-visibility crosswalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - upgrade push-buttons to latest ADA standards - place pedestrian signal on auto recall 	field review

San Mateo TOD PAP - Improvement Project List - Hillsdale

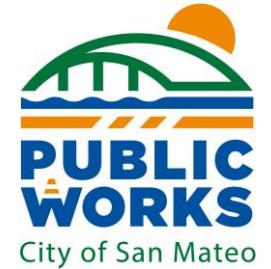
Project #	Project Name	Roadway Name	From	To	Miles (if corridor)	Existing Traffic Control (if intersection)	Final Improvements List	Source
H-1	25th Avenue	W 25th Ave	at Flores St			AWSC	<ul style="list-style-type: none"> - add curb extensions to shadow on-street parking - directional ADA curb ramps - lighting - widen and landscape sidewalks on Flores with new development <p>Coordination with Bicycle Master Plan (which calls for bike lanes on 25th east of Flores and bike route west of Flores)</p> <ul style="list-style-type: none"> - consider traffic calming on 25th for the bike route/ future bike lane (per Bike Master Plan) - Convert parking to parallel parking to widen sidewalks or to potentially add parking separated Class IV bikeways 	field review Bike Master Plan
H-1	25th Avenue	E 25th Ave	at Palm Ave			SSSC	<ul style="list-style-type: none"> - consider prohibiting southbound-left turns and adding a high-visibility crosswalk across 25th Ave (west side of Palm) with enhancements for uncontrolled crosswalk based on traffic speeds and volumes - consider feasibility of a road diet on E 25th; if not feasible, consider addition of a median in place of the parking to allow for a median island and RRFBs - directional ADA curb ramps - curb extensions to shadow on-street parking on Palm Ave and 25th Ave (full length of T intersection on south side to discourage stopping/parking); if not feasible, daylight all approaches - high-visibility crosswalk markings - advance stop bars - lighting 	field review

H-1	25th Avenue	E 25th Ave	at S Delaware St		Signal	<p>Coordinate with South Delaware ATP project (ATP Cycle 5 grant to design and construct a Class IV bike lane, bike boulevard, and pedestrian facilities, including crosswalks, along South Delaware from 19th Ave. to Pacific Boulevard)</p> <ul style="list-style-type: none"> - sidewalk needed on southwest corner and south along Delaware - consider a protected intersection to coordinate bike movements between Class IV on Delaware and Class II on 25th and provide all the pedestrian safety benefits that come with that design <p>if a protected intersection is not feasible:</p> <ul style="list-style-type: none"> - consider feasibility of a road diet on E 25th; if not, consider pedestrian-only phase to separate left-turning vehicles from 25th from pedestrians crossing Delaware and the double SBR-turns from pedestrians crossing 25th - curb extension into Delaware at SW corner - curb extension on east side of Delaware through intersection to discourage vehicles parking/stopping in intersection; must be designed in coordination with/to allow planned Class IV bikeway per Bike Master Plan - directional ADA curb ramps (all corners) - high-visibility Xwalks - add NRTOR - advance stop bars - place pedestrian signal on auto recall - upgrade push-buttons to latest ADA standards 	field review Bike Master Plan
H-2	28th Avenue	W 28th Ave	at Flores St		AWSC	<ul style="list-style-type: none"> - directional ADA curb ramps (all corners; if feasible) - curb extensions to shadow on-street parking on 28th (low priority) - consider additional lighting on north side 	field review

H-2	28th Avenue	El Camino Real	at E 28th Ave		Signal	<p>In coordination with Caltrans & Hillsdale Caltrain Station Bicycle Access Gap Closure Project</p> <ul style="list-style-type: none"> - add crosswalk on northern leg (continuation of shared path) and add median nose on ECR to create pedestrian refuge -- median should be 6feet wide at minimum; if not, lanes would need to be narrowed (if wider than 11ft) - consider adding a protected WBR overlap phase with the SBL phase and removing the permissive WBR phase (add 'no WBR' blankout sign during EBT phase) to remove the pedestrian-vehicle conflict - curb extensions at NW and SW corners to shadow parking on 20th and narrow travel lane/widen sidewalk slightly on ECR; curb extension into ECR at SW corner may serve as a bus bulbout if/when SamTrans relocates bus stop there (per SamTrans study) - in coordination with SamTrans - directional ADA curb ramps (all corners, except NW already exists) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI and permanent NRTOR from 28th onto ECR - advance stop bars - add pedestrian countdowns - place pedestrian signal on auto recall for crossing Bovet & 17th - upgrade push-buttons to latest ADA standards - protect left turns from 28th (requires adding an eastbound left-turn pocket), if feasible. If not feasible, include split phasing so that left-turning vehicles are separate from conflicting pedestrians. If not feasible, add LED/extinguishable left turn vehicles yield to peds sign. - consider feasibility of a road diet on 28th Ave 	field review - SamTrans ECR Bus Speed & Reliability Study
H-2	28th Avenue	28th Ave	ECR	S Delaware	845 ft	<ul style="list-style-type: none"> - evaluate the feasibility of a midblock high-visibility crosswalk to facilitate access across 28th between station entrances with good lighting and other enhancements needed based on traffic volumes and speeds, similar to the crossing under the Hillsdale mall on 31st Ave - consider feasibility of a road diet on 28th - in coordination with other City studies 	field review
H-3-1	31st Avenue/Bay Meadows	El Camino Real	at 31st Ave		Signal	<p>In coordination with Caltrans</p> <ul style="list-style-type: none"> - Narrow lane widths on 31st (and ECR) to allow for corners to be expanded/ radius slowed/ crossings shortened (all lanes seem to be 12ft, consider narrowing to 10 or 11ft) - add median nose on north and west crosswalks to create pedestrian refuge; median should be 6feet wide at minimum, so it would require working with Caltrans to agree on approach, widen the median to the edge of the travel lane (existing yellow line) or narrow travel lanes - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns for all crossings - place pedestrian signal on auto recall for crossing 31st Ave - upgrade push-buttons to latest ADA standards 	field review

H-3-1	31st Avenue/Bay Meadows	31st Ave	S Delaware St			<ul style="list-style-type: none"> - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - add pedestrian countdowns - place pedestrian signal on auto recall - upgrade push-buttons to latest ADA standards - add wayfinding 	
H-3-1	31st Avenue/Bay Meadows	Franklin Pkwy	at Baze Rd		SSSC	<ul style="list-style-type: none"> - assess if further pedestrian crossing enhancements needed for uncontrolled crossings across Franklin (e.g., advance yield markings, median pedestrian refuges, or even advance flashing) based on traffic speeds and volumes [Bay Meadows TAP included similar recommendations at this location based on which RRFB was installed] - confirm directional curb ramps are ADA compliant - high-visibility Xwalks - curb extensions for northern crosswalk on both sides to shadow parking on Baze Rd - extend median noses, median should be 6feet wide at minimum; if not, lanes would need to be narrowed (if wider than 11ft) - consider feasibility of a road diet on Franklin Pkwy - coordination with City's Gap Closure Study 	field review
H-3-1	31st Avenue/Bay Meadows	31st Ave	ECR	S Delaware St	725 ft	<ul style="list-style-type: none"> - provide wayfinding with new access to the station - consider enhancing sidewalk with landscape strip or public art to make this feel like a primary ped entrance route 	field review Hillsdale Station Implementation Plan 2012
H-3-2	31st Avenue/Bay Meadows	Caltrain Station (west side)	Curiosity Way	Derby Ave		<ul style="list-style-type: none"> - Add wayfinding to existing Caltrain station access on the east side of the station (from parking lot between Derby Ave & Curiosity Way). <p>Caltrain ROW, coordination needed</p> <ul style="list-style-type: none"> - as a long-term improvement, consider adding direct station access (and wayfinding) from the west side of the platform (e.g., next to Michael's/as new development occurs in those parcels) to avoid pedestrians having to go all the way to 28th to access the station -- in coordination with new developments along the west edge of the Caltrain station platform 	field review Hillsdale Station Implementation Plan 2012

H-4	Hillsdale Boulevard	El Camino Real	at Hillsdale Blvd		Signal	<p>In coordination with Caltrans</p> <ul style="list-style-type: none"> - for WB and NB: remove right turn pocket/lane if feasible based on further study; if the right turn pocket is needed, consider keeping the slip lane and building out the pork chop islands (i.e., make them larger to narrow the right-turn lanes to slow vehicles down, shorten crossings, and provide more space for pedestrians), and raise the crosswalk across the channelized turn. - if slip lanes can be removed, consider repurposing the space to a wider sidewalk - add high-visibility crosswalk on east, west, and north leg to allow continuous pedestrian connection N-S along east side of ECR - add median noses on Hillsdale; median should be 6feet wide at minimum; if not, lanes would need to be narrowed (if wider than 11ft) - directional ADA curb ramps (all corners) - high-visibility Xwalks - LPIs + 3.5 ft/sec walking ped clearance - extinguishable NRTOR during LPI - advance stop bars - add pedestrian countdowns - place pedestrian signal on auto recall for crossing Hillsdale Blvd - upgrade push-buttons to latest ADA standards - consider feasibility of a road diet on Hillsdale - provide pedestrian scale lighting 	field review - removal of WBR slip lane is consistent with recommendations on SamTrans ECR Bus Speed & Reliability Study
H-4	Hillsdale Boulevard	W Hillsdale Blvd	at Edison St		AWSC	<ul style="list-style-type: none"> - curb extensions to shadow parking on southwest and northwest corners - adjust curb extension/corner radius at southeast corner to better align crosswalk across Edison St - consider removing westbound left-turn pocket onto Edison if volumes don't merit it and narrow Hillsdale Blvd and better align northern crosswalk; if not, consider a signal or roundabout as there are too many movements/conflicts for AWSC - advance stop bars - high-visibility crosswalks all legs - directional ADA curb ramps - pedestrian scale lighting 	San Mateo Pedestrian Plan 2012 field review



APPENDIX F: FUNDING SOURCES AND IMPLEMENTATION STRATEGY

Appendix F – Funding Sources and Implementation Strategy

Implementing the City of San Mateo's TOD Pedestrian Plan will require funding from various sources to support follow on studies and construction. This appendix presents additional information on the applicable grants and funding sources related to development projects described in Chapter 5.

Grant Funding Sources

California And Federal Funding Programs

Caltrans Active Transportation Program (ATP): ATP is a statewide and regional grant funding source for pedestrian and bicycle projects. It is notoriously competitive, although the El Camino Real corridor in Colma may be a strong contender for funding due to its overlapping goals of increasing travel by active modes, increasing safety and mobility for active modes, reducing GHG, and benefiting disadvantaged communities. The ATP application is open approximately every two years, with the last grant cycle in the summer of 2022.

Caltrans Highway Safety Improvement Program (HSIP): HSIP provides funding to jurisdictions to help them address documented safety concerns through engineering projects. The primary metric for funding is a cost-benefit ratio that looks at the project's injury prevention benefits and implementation costs. This grant is primarily used to fund specific safety countermeasures such as those identified within the Plan. Thus, this grant may be a good fit for individual elements of this Plan, particularly if these projects can provide safety benefits for the collision types identified in the City's upcoming Local Road Safety Plan (LRSP). The HSIP allow one grant application for a similar set of treatments across multiple locations, which can streamline the grant application process for projects that remain to be completed. The HSIP application is open approximately every two years, with the last grant cycle having a deadline in September 2022.

Safe Streets and Roads for All (SS4A): SS4A is a discretionary federal program created with the 2021 Bipartisan Infrastructure Law that will provide \$1 billion in grant funds annually over the next 5 years. Similar to the HSIP program, this grant is primarily used to fund specific safety countermeasures such as those identified within the Plan after the City completes a LRSP that demonstrates the safety benefits for specific collision types. This grant would likely require more effort than the HSIP program.

Caltrans' SHOPP Program: The State Highway Operation and Protection Program (SHOPP) is the State Highway System's "fix-it-first" program that funds the repair and preservation, emergency



repairs, safety improvements, and some highway operational improvements on the State Highway System (SHS). Caltrans doesn't typically consult cities how they use these funds and has a few on-going projects in San Mateo.¹ Given the Agency's focus on complete streets and pedestrian safety for El Camino Real, this provides the opportunity for Caltrans to wrap in the recommended projects in this plan and address issues identified in the District 4 Pedestrian Plan.²

Affordable Housing and Sustainable Communities (AHSC) program: The AHSC funds land use, housing, transportation, and land preservation projects that support infill and compact development and reduce greenhouse gas (GHG) emissions. Funds are available in the form of loans and/or grants in two kinds of project areas: Transit Oriented Development (TOD) Project Areas and Integrated Connectivity (ICP) Project Areas. This grant program follows an annual competitive funding cycle. The last AHSC grant cycle was February 2022 and the next one is in February 2023.

San Mateo County Funding Programs

City/County Association of Governments (C/CAG) of San Mateo County's Transportation Development Act (TDA) Article 3: The goal of the TDA Article 3 Pedestrian and Bicycle Program is to fund projects that encourage and improve bicycling and walking conditions in San Mateo County. Bicycling and walking are sustainable forms of transportation and contribute to the overall goals of the TDA Article 3 to reduce commute corridor congestion, make regional connections, enhance safety, and meet local mobility needs. The program is funded every two to three years.

San Mateo County Transportation Authority's Measure A and W Programs: The goal of the Measure A Pedestrian and Bicycle Program is to fund projects that improve bicycling and walking accessibility and safety in San Mateo County, helping to encourage more residents to participate in active transportation. Historically, the call for projects has occurred biennially. The measure, which went into effect in July of 2019, includes funds for highway projects, local street repair, grade separations for Caltrain tracks that intersect local streets, expanded bicycle and pedestrian facilities, and improved transit connections, including last-mile facilities such as those proposed by the Plan. These projects are consistent with the goals for the Pedestrian & Bicycle or Alternative Congestion Relief & TDM programs, which are released every one to two years.

City/County Association of Governments (C/CAG) of San Mateo County's Transportation Fund for Clean Air (TFCA): The TFCA provides funding for arterial traffic management utilizing advanced technology and traffic calming projects, including quick build bicycle and/or pedestrian improvement projects.

¹ The 2022 list of projects in San Mateo is noted here: <https://dot.ca.gov/programs/financial-programming/state-highway-operation-protection-program-shopp-minor-program-shopp>

² <https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-bike-plan>



One Bay Area Grant (OBAG): The OBAG program is one of the primary mechanisms through which Metropolitan Transportation Commission (MTC) implements the vision laid out in Plan Bay Area 2050, in partnership with C/CAG in San Mateo County. As a part of OBAG funding, priority is given to projects either fully or partially within a MTC designated Priority Development Area (PDA) or providing access within 0.5 miles of a PDA, which includes all the plan's projects. The third round of OBAG funding was adopted in January 2022, funding projects through 2026. The program follows approximately a five-year cycle.

Development Funding, Impact Fees, and VMT Mitigation

As noted in Chapter 5's funding source "D. Integrate into transit-oriented development," San Mateo should ensure pedestrian facilities are upgraded to meet the City's design standards as areas are redeveloped. Given the City's focus on concentrating land use growth around high-quality transit services³, this will be a critical piece to supporting a walking and transit-oriented built environment. This section provides additional information and recommendations for how to incorporate on-site and project frontage improvements and off-site improvements into the City's development review process.

On-Site / Project Frontage Improvements

Currently, the City of San Mateo's Municipal Code SMMC 27.39.090 requires zero-setbacks in Downtown San Mateo unless a setback is provided for landscaping. With limited public right-of-way and zero-setbacks, it may be difficult to require developments to provide sidewalks that meet the City's design standards. The City should consider reviewing and updating City ordinances and standards to ensure that all qualifying development projects are required to ensure pedestrian facilities along the project frontage meet the City's design standards. This includes sidewalk widths, curb ramps, bulb outs, lighting, or other amenities. As many sidewalks do not currently meet the City's design standards, the City should evaluate options to meet these standards, such as but not limited to changes to circulation, roadway widths, easements, or setbacks.

Off-Site Improvements

In accordance with California Senate Bill SB 743, the City of San Mateo now assesses the impact of development and transportation projects on the environment using vehicle miles traveled (VMT). VMT measures the amount of driving produced by a project and provides a measure of travel

³ High-quality transit services or stops include major transit stops and high-quality transit corridors, as defined in Public Resources Code, § 21064.3 and § 21155. "Major transit stop" means a site containing any of the following: (a) An existing rail or bus rapid transit station, (b) A ferry terminal served by either a bus or rail transit service, (c) The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. "A high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."



efficiency of a land use project. The shift to VMT policies is intended to help achieve climate commitments, preserve the environment, improve health and safety, create sustainable communities, and provide more travel choices for each jurisdiction, as well as for the region and state.

The projects and countermeasures recommended in this Plan contribute to reducing the amount of VMT generated by the City of San Mateo and can be used to mitigate VMT impacts of land use or transportation projects. The California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021)⁴ presents the latest state guidance for quantifying VMT reductions. The Plan's improvements fall under TDM measure T-17, Provide Pedestrian Network Improvement, presented within CAPCOA 2021, a strategy that focuses on creating pedestrian networks that connect the project to nearby destinations, and is calculated based on the community-level VMT to account for the benefits associated with improving accessibility more broadly.⁵ The Plan's projects could be funded through VMT impact fees by transit-oriented developments that benefit from the accessibility provided by these off-site improvements and/or by developments that cannot reduce their VMT impact to less than significant levels through on-site measures alone, and thus would need to off-set their VMT impacts through off-site projects.

Transit-Oriented Development

Transit-oriented developments in San Mateo receive a streamlined CEQA assessment because they are presumed to have a less-than-significant VMT impact based on the ability for residents, employees, and visitors to easily access nearby high-quality transit services. This presumption is based on the evidence from the Environmental Protection Agency that people replace vehicle trips with walking, bicycling, or transit trips when they live or work near convenient amenities and high-quality transit services.⁶ However, people may be less likely to use these transit services if there is not a safe and accessible path of travel connecting to the TOD. The City's design standards define the amenities that provide safe and accessible path of travel, including

⁴ California Air Pollution Control Officers Association, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, December 2021. <https://www.caleemod.com/handbook/index.html>

⁵ This measure can be accessed here: https://www.caleemod.com/documents/handbook/ch_3_transportation/measure_t-18.pdf

⁶ For more information on the evidence supporting vehicle trip reductions associated with transit and other built environment factors, see the EPA and American Planning Association led memorandum "Getting Trip Generation Right: Eliminating the Bias Against Mixed Use Development" by Jerry Walters, Brian Bochner, and Reid Ewing (May 2013). This paper can be accessed here: https://www.fehrandpeers.com/wp-content/uploads/2019/11/APA_PAS_May2013_GettingTripGenRight-2.pdf. These methodologies were revalidated as documented in the November/December 2020 issue of the APA's PAS Memo, entitled "Still Getting Trip Generation Right: Revalidating MXD+".



recommended designs for sidewalk widths, curb ramps, bulb outs, lighting, and other pedestrian amenities. Many streets surrounding the City's high-quality transit stops do not provide the features presented in City design standards. Therefore, the nexus between individual development projects and off-site improvements is related to whether the TOD Pedestrian Access Plan addresses deficiencies within the path of travel to high-quality transit, such that improvements to the path of travel would therefore contribute to replacing some vehicle trips with walking trips (per CAPCOA and EPA evidence cited above) and facilitate improved pedestrian access to high-quality transit.

Non-Transit Oriented Development / VMT Mitigation

For development projects not located in transit-oriented areas or otherwise have a significant VMT impact, projects must first implement all feasible on-site mitigation measures to reduce this impact to less than significant levels. If on-site VMT mitigation is infeasible, cities or developers could propose off-site VMT mitigation, which could include funding the projects proposed in this Plan given that VMT is a regional issue and is not confined to the project site location. Given the challenges associated with individual developments constructing off-site improvements, a citywide program would be best suited to mitigate VMT impacts.

VMT Impact Fee Options

As noted in Chapter 5, the City should conduct a fee study to determine the fair share contribution for TOD projects to off-site pedestrian improvements. The format for this fee program could take make forms (e.g., impact fee, in-lieu fee, Mello-Roos district, etc.) and this fee study would identify the best fit. This fee study could also address off-site VMT mitigation for development projects, or a separate fee study could be completed for these projects.

Given the CEQA streamlining opportunities that are provided through a programmatic impact fee approach, additional information for several options are presented in more detail below:

- Local VMT Impact Fees
- Regional VMT mitigation

Local VMT Impact Fees

A local VMT impact fee is an option to ensure new developments are paying their fair share for improvements needed to create transit-oriented pedestrian networks. This fee could provide a local source of funding and contribute to the local match required for the grant funding sources noted above. The City currently collects impact fees, through the AB-1600 traffic impact fee program. This program includes some funding for pedestrian and bicycle projects that assigns responsibility based on the proportional increase in population associated with development. The City could consider the following alternate approaches to increasing funding for pedestrian and bicycle improvements:



- Revising the AB-1600 impact fee program with VMT reduction as its nexus. Impact fees are intended to cover the proportional cost of having to expand public infrastructure to accommodate the 'burden' placed by new growth. VMT reduction programs could include construction of this Plan, the City's Bicycle Master Plan, and used for improving transit access as identified by Caltrain and SamTrans. However, VMT impact fee programs that create a CIP based on VMT reducing projects such as bicycle and pedestrian network expansion may not meet a strict burden definition.
- Create the in-lieu fee program by ordinance to be used at the City's discretion. This could be used for VMT mitigation purposes or for all qualifying projects. The City of San Mateo has several existing in-lieu fee programs, such as for affordable housing and parking requirements, and examples exist, such as in San Diego, of transportation off-site in-lieu fee programs.

Whether the pedestrian and bicycle improvements will be used for VMT mitigation is an important consideration on which approach is appropriate. Given that AB-1600 impact fee programs are typically mandatory, if the program's CIP is fully funded these improvements should be included in the cumulative impact analysis as probable improvements and therefore are not available for VMT mitigation, although VMT generation rates may be lower under cumulative than baseline conditions. However, if there is a VMT impact in the 2040 General Plan Update EIR, the EIR could identify the need to require on-site VMT mitigation strategies for individual development projects (e.g., TDM and the frontage requirements described above) and off-site pedestrian improvements through a new fee program. Individual development projects that tier off the General Plan would then be required to comply with this program to be consistent with the General Plan mitigation. Alternatively, individual development projects that have a VMT mitigation could contribute to a discretionary in-lieu fee program that funds citywide infrastructure.

Other local VMT mitigation options such as exchanges or banks could also be investigated as a part of this fee study.⁷

Regional VMT Mitigation

C/CAG is considering developing a regional VMT mitigation exchange or bank, which would allow funding pedestrian, bicycle, and transit improvements to provide VMT mitigation for land use or transportation projects throughout San Mateo County. For example, the induced VMT associated with highway expansion projects, or by residential or commercial buildings in high-VMT areas of the County, could be partially offset by pedestrian projects in neighborhoods surrounding Caltrain stations. Therefore, the projects described in this Plan could qualify for new regional funding sources if a regional VMT mitigation exchange or bank is created.

⁷ For more information on VMT exchanges and banks, see the UC Berkeley white paper from August 2022: <https://www.law.berkeley.edu/wp-content/uploads/2022/08/Implementing-SB-743-August-2022.pdf>



APPENDIX G: IMPROVEMENT COST ESTIMATES

Appendix G: Cost Estimates

Countermeasure	Quick Build Cost	Hardscape/Capital Cost	Notes	Additional Notes
Intersection Improvements				
Remove Slip Lane	More than \$1M		At recommended location, slip lane requires full intersection redesign.	The removal of this slip lane would require removal of the porkchop island to accomodate right turns. It would also likely require a new pole. This would likely trigger the need for a new signal and ADA upgrades. The signal poles are also seemingly on top of a bridge deck in Caltrans ROW. This is a major capital project. An alternative option is to signalize the slip lane, which may require the removal of one pole and potential electrical upgrades.
Straighten Crosswalk	Less than \$6,000		Cost per crosswalk. Cost includes removal of existing striping and does not include costs associated with curb ramps.	Cost is dependent on the distance of the crosswalk. Specific costs include pavement removal with sandblasting (\$3/SF) and new striping (\$5/SF).
Install/Upgrade Pedestrian Crossing at Uncontrolled Locations	More than \$25,000		Cost includes markings, traffic stripes, signage, and an allowance for accessibility improvements and safety countermeasures.	Cost is dependent on existing infrastructure including the number of lanes on the roadway, whether a median exists, and whether there are existing curb ramps.
Yield to Pedestrian Sign	\$600 to \$6,000		Cost per sign, either static (\$500) or LED extinguishable/blank-out sign (up to \$5,000).	Cost per R10-15 sign, could be static or LED extinguishable/blank-out sign.
Protected Intersection	30,000	More than \$1M	Quick build treatments include signing and striping improvements; long-term investment includes all necessary traffic signal equipment and utility and drainage allowance.	Quick build treatments includes signing and striping improvements, including some allowance for pavement grinding, slurry, and other surface treatments for installation of pavement markings, traffic stripes, surface-mounted posts, and other signage. Long term investment includes new traffic signal equipment, new curb extensions/bulbouts, splitter islands, and an allowance for drainage and/or utility modifications.
Wider Sidewalks	\$400 per square foot		Cost includes reconstruction of curb and gutter.	Excludes cost of utilities, lighting, and other sidewalk features.
Add Sidewalks	\$400 per square foot		Cost includes reconstruction of curb and gutter.	Cost includes removal of existing sidewalk, asphalt, sub-base, and installation of new sidewalk, curb and gutter, excludes cost of utilities, lighting, and other sidewalk features.
Raised Crosswalk	\$30,000		Long term investment includes drainage improvements, roadway excavation, and installation of asphalt raised hump wide enough to accommodate a marked crosswalk and approach ramps.	Quick build treatments includes a modular system similar that meets ADA requirements and doesnt require substantial drainage improvements. Long term investment includes drainage improvements, roadway excavation, and installation of asphalt raised hump wide enough to accomodate a marked crosswalk and approach ramps.
Pedestrian Scramble	\$25,000		Includes new pedestrian signal heads for four (4) diagonal crossing and mounting assemblies.	Includes new pedestrian signal heads for diagonal crossings (4) and new mounting assemblies (4) with supplemental signs. Assumes intersection controller and conduits can accommodate phasing changes.
Daylighting	Less than \$1,300		Cost per approach. Includes cost to install red paint on curb and one "no parking" sign.	Does not include lost revenue from any parking meter removal.

Raised Intersection	\$250,000		Cost includes roadway excavation, new pavement, and transitions to existing elements, with allowance for drainage and utilities.	Cost includes about \$60 to \$80 per square foot, which includes some roadway excavation, new pavement, and transitions to existing elements. Also includes allowance for drainage and utility work related and replacing curb ramps with raised sidewalk and truncated domes
Rectangular Rapid Flashing Beacon (RRFB)	\$6,000		Cost per crosswalk. Includes removal of existing markings, restriping, and other surface treatment.	Assumes solar-powered system, two flashing beacons per approach, three poles per crosswalk. Does not include overhead mast arm mounted features or roadway safety lighting.
Directional Curb Ramps	\$15,000		Cost per ramp. A typical four-legged intersection requires eight curb ramps. Cost includes upgrading ramps to be ADA compliant.	-
High-Visibility Crosswalk	Less than \$6,000		Cost per crosswalk. Includes removal of existing markings.	Cost per crosswalk includes removal of existing markings and modest assumption for surface preparation (grinding, sandblasting, slurry seal, or other surface treatment).
Curb Extensions/ Bulb-Outs	12,500	\$60,000 to \$125,000	Cost per corner. Quick build cost includes signage, markings, and surface-mounted materials; long term cost includes reconstruction of sidewalks and necessary drainage.	Quick build cost includes signage, markings, and surface-mounted materials such as rubber curbs, delineators, free-standing planters, etc. Long term costs include reconstruction of sidewalk, curb ramps, roadway excavation, regrading, and pavement rehabilitation.
Pedestrian Refuge Island/Median Nose	Less than \$6,000	More than \$20,000	Quick build cost includes bolted down rubber curbs; long term cost includes installation of concrete median island. Median Nose assumes an existing median.	Quick build pedestrian refuge includes bolted down rubber curbs in a bullet-shaped island, with delineator posts and truncated domes, minimum of 6 feet wide. Long term improvement includes excavation to aggregate base and installation of concrete median island, delineators, and new truncated domes. Costs are dependent on the size of the median islands. For this estimate we assumed about 200SF of median island
Advance Stop Bars	\$70		Cost per lane. Includes installation of 12" traffic stripe and removal of conflicting striping.	-
Pedestrian Countdown Signals	\$6,000		Cost per pedestrian countdown signal head.	
Accessible Pedestrian Signal	\$40,000		Cost per intersection. Assumes four crosswalks and eight accessible push buttons.	

Traffic Calming

Speed Bumps and Cushions	\$1,250	\$6,000 to \$25,000	Quick build treatment includes installation of bolt-down rubber speed humps; long-term improvement includes roadway excavation and installation of new asphalt, along with necessary signage and markings.	Quick build treatments includes installation of a bolt-down rubber speed hump system and associated advanced markings and signage. Long term improvement includes roadway excavation, installation of new asphalt, and associate advanced markings and signage.
Intersection Reconstruction and Tightening	-		Cost estimate is specific to each location and is only feasible after initial concept design is developed.	-
Lane Narrowing	\$15 per linear foot		Cost accounts for the restriping of edge lines.	-
Road Diet	\$200 per linear foot		Cost assumes a road diet from a 4-lane facility to a 3-lane facility.	Cost accounts for removal of all traffic stripes on a 4 lane roadway, slurry seal, and replacing with a buffered bike lane in each direction, one through lane in each direction, and a two-way left turn lane.

Lane Removal	\$7 per linear foot	Cost includes removing traffic stripes and installing hatching and surface mounted channelizers.	-
--------------	---------------------	--	---

Traffic Controls				
All-Way Stop Control	Less than \$6,000		Cost of signage and striping.	Cost does not include crosswalk markings, curb ramps, or other supplemental improvements that may be required based on actual site conditions. Cost assumes conversion from a side-street stop to an all-way stop.
Roundabout	\$250,000	More than \$1M	Hardscape improvements require full intersection redesign. Quick build estimate reflects a traffic circle design and is recommended for intersections with one-lane approaches.	A quick build roundabout is not feasible. A quick-build traffic circle can be implemented, but they are only recommended for intersections with one-lane approaches.
Flashing Yellow Turn Phase	Less than \$6,000		Cost of signal head reconfiguration and replacing standard three section signal head with one with a flashing left arrow face.	Cost includes replacing standard three section signal head for a signal head with a flashing left arrow face. Does not include cost of any additional striping or signage.
Prohibit Left Turns	\$650		Cost of signage only. Assumes that there is a location above the lane where the sign can be placed that meets requirements from the CA MUTCD.	Cost is dependent on location. Locations recommended in this plan do not allow for a concrete median to prohibit left turns but at other locations not included in this plan, this may be possible.
Protected Left Turns	\$30,000		Cost per approach. Cost assumes a new signal head pole with a longer mast arm for heads to be positioned over the turn lane(s).	Cost assumes new signal pole with longer mast arm for heads to be positioned over turn lane(s) and associated conductors. Assumes underground conduits can accommodate additional conductors.
Protected Right Turns	\$12,500		Cost per approach. Cost includes two new signal heads and mountings onto existing traffic signal pole(s).	-
Prohibit Right-Turn-on-Red	\$650 to \$6,000		Cost per sign, either static (\$500) or LED extinguishable/blank-out sign (up to \$5,000).	-
Wayfinding	\$650		Cost per sign. Assumes individual signage and not part of a larger wayfinding program.	-
Left Turn Pockets	\$25 per linear foot		Cost includes converting a two lane roadway to include a turn pocket at intersections, which includes parking removal (paint curb) and striping a turn pocket.	-
Convert Two-Way Street to One-Way Only	\$4,000		Cost only accounts for signage and striping, does not account for signal modifications. This cost is specific to the location recommended in this plan and costs for this countermeasure will vary significantly by street.	-
Leading Pedestrian Intervals	-		No capital cost; requires reprogramming the traffic signal controller only.	-

Bikeways			
Class IV Bikeway	\$1,600 per linear foot	Cost accounts for striping and separation along corridor.	Dependent on existing facility.
Class I Shared-Use Path	\$650 per linear foot	Cost accounts for signage and separation along corridor. Cost does not account for new concrete or asphalt.	Dependent on existing facility.
Bike Boulevard	\$25 per linear foot	Cost accounts for striping and signage along corridor.	Dependent on existing facility.

Improved Lighting			
Pedestrian Scale Lighting	\$6,000 to \$25,000	Cost varies by quality and design of light. Distance between streetlight varies by quality of light and design of roadway.	-
Roadway Lighting	\$6,000 to \$25,000	Cost varies by quality and design of light. Distance between streetlight varies by quality of light and design of roadway.	-

Other			
Back-In Angled Parking	Less than \$2,500	Cost of signage and striping per 10 (ten) parking spaces, with one "back-in angled parking" sign every 5 (five) spaces.	
Parking Restrictions	\$650	Cost of signage and red paint on curb.	Does not include lost revenue from parking meter removal.
Public Art	-	Cost needs to be determined by project.	
Landscaping	\$75 to \$300 per linear foot	Cost varies depending on type of landscaping. Lower cost accounts for minimal grass while higher cost accounts for a concrete planted median.	