TRANSIT-ORIENTED DEVELOPMENT PEDESTRIAN ACCESS PLAN

NOVEMBER 2022

CITY OF SAN MATEO CALIFORNIA

PUBLIC WORKS
City of San Mateo

FEHR & PEERS

This report reads like a book

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ACKNOWLEDGEMENTS

Developing the San Mateo Transit-Oriented Development Pedestrian Access Plan has been a collaborative effort. It would not be as robust or reflective of community needs without the participation of a wide range of stakeholders and community members. Thank you to the elected officials, City staff and council members, and community members that provided input during this process. Your feedback helped align this Plan with local priorities and existing programs, and it made this a better plan.

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Council Member Joe Goethals
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Outreach Plan Partners

San Mateo Age-Friendly Task Force
San Mateo Senior Citizens Commission
Youth Leadership Institute San Mateo
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Diversity & Equity Council
Office of Diversity and Equity

Focus Group Partners

The Peninsula Regent – Senior Living Facility
The Nueva School
Silicon Valley Bicycle Coalition – San Mateo Local Team
San Mateo County Paratransit Coordinating Council
San Mateo County Latino Collaborative
San Mateo Diversity and Equity Council

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Purpose of this Plan

The San Mateo Transit-Oriented Development Pedestrian Access Plan will serve as a roadmap to enhance pedestrian safety and create comfortable walking routes to transit for all ages and abilities. The scope of the Plan includes the pedestrian path of travel within a half-mile radius of the City's three Caltrain stations and along El Camino Real to account for frequent SamTrans service along this corridor. Caltrain and SamTrans have created new visions for their service in San Mateo County and this plan aims to complement these visions by making it easy to access transit for existing and future residents, employees, and visitors. The San Mateo Transit-Oriented Development Pedestrian Access Plan does not result in changes to the General Plan or Municipal Code, as explained in the Introduction.

Outcome of this Plan

The outcome of this Plan is a list of priority projects and an implementation action plan. This Plan includes planning-level cost estimates for the countermeasures, potential funding sources, and identifies when interagency coordination may be required. This Plan is intended to support the rapid implementation of projects that prioritize walking and transit use, increase safety and comfort for all ages and abilities, and reduce the reliance on single-occupancy automobile travel surrounding high-quality transit stops.

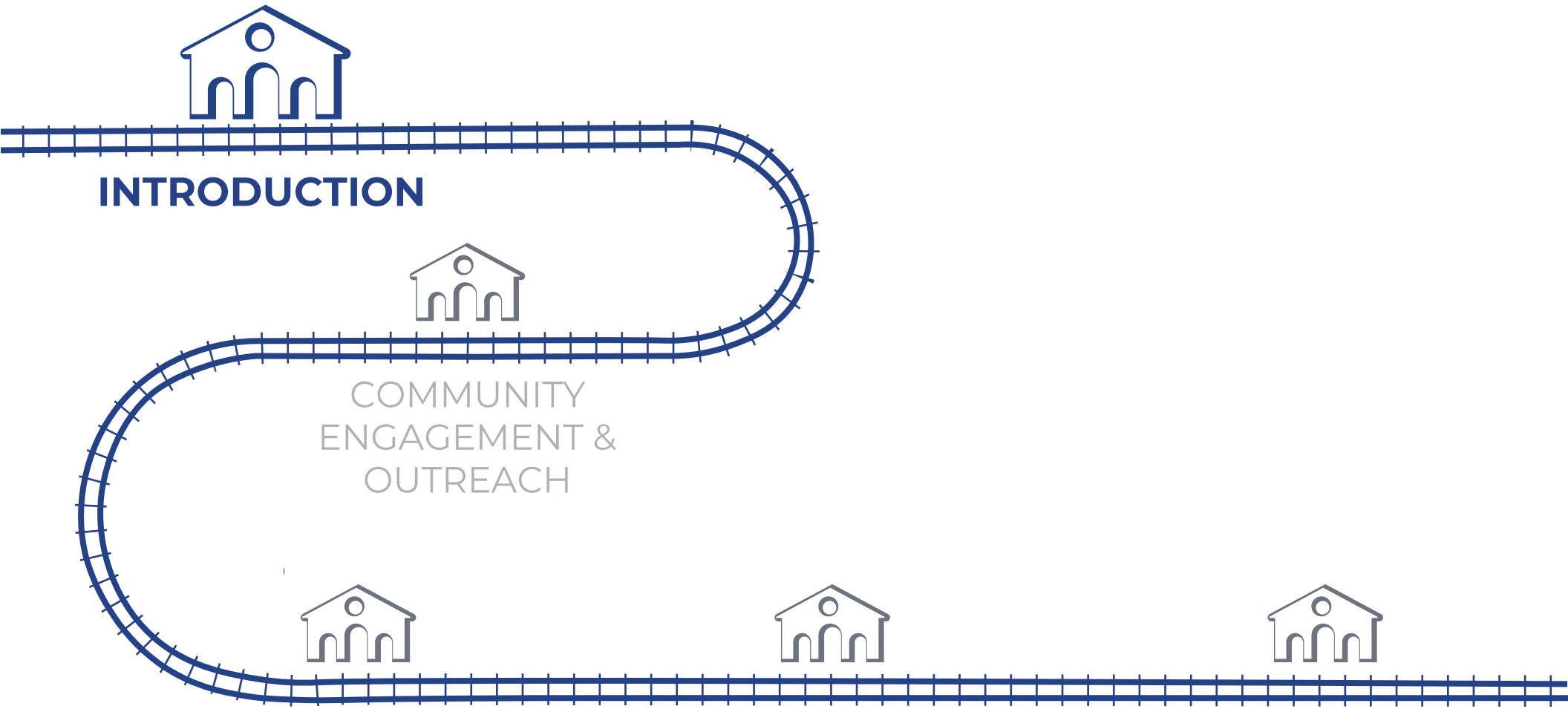
How this Plan was Developed

The process of developing this plan began with an extensive community outreach and engagement effort and builds off the City's recent efforts to improve pedestrian access and safety outlined in the Citywide 2012 Pedestrian Master Plan.

This plan is a result of a collaborative effort with the community, the City of San Mateo, City Council, and the Sustainability and Infrastructure Commission.

What's Included in this Plan

- An introduction to the project and study areas (Chapter 1)
- An overview of the extensive community engagement and outreach process conducted to develop this plan (Chapter 2)
- A needs assessment of the study areas identified through outreach efforts and a review of the existing conditions (Chapter 3)
- An overview of the priority locations, including the prioritization methodology and a toolkit of pedestrian infrastructure treatments (Chapter 4)
- Location-specific recommendations for each priority location (Chapter 4)
- A funding and implementation strategy for priority projects, including a near-term implementation action plan, and planning-level cost estimates for the countermeasures (Chapter 5)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CHAPTER 1
INTRODUCTION

PURPOSE OF THIS PLAN

The San Mateo Transit-Oriented Development Pedestrian Access Plan (Plan) will serve as a roadmap to enhance pedestrian safety and create comfortable walking routes to transit for all ages and abilities. The scope of the Plan includes the pedestrian path of travel within a half-mile radius of the City's three Caltrain stations and along El Camino Real to account for frequent SamTrans service along this corridor. This Plan assesses pedestrian infrastructure needs, creates a list of prioritized projects that address those needs, and develops a funding and implementation strategy to enable the City to nimbly act on the Plan. This document has been developed based on an extensive community outreach and engagement effort, helping ensure it reflects the needs and desires of the community. Additionally, it builds off the City's recent efforts to improve pedestrian access and safety outlined in the Citywide 2012 Pedestrian Master Plan.

The Plan is a guide and policy document, in that no changes to the General Plan or the Municipal Code are made by virtue of adopting the document. In the event of a conflict between this Plan on the one hand, and the General Plan, Municipal Code, Specific Plan, or other planning documents on the other hand, the latter shall govern. This Plan is not intended to create objective standards with which proposed land use development projects must comply. Finally, any proposed action items listed in this Plan are subject to future consideration by City staff, Council action as needed, and appropriate environmental review.

Background Context

Caltrain was originally designed as a diesel-powered commuter rail service that fit into the decades-old and automobile-oriented infrastructure that surrounds San Mateo's stations. Caltrain's electrification and focus on equity, connectivity, and growth provide San Mateo the opportunity to rethink how to best leverage the City's three train stations. SamTrans is also investing in improving service along El Camino Real and throughout San Mateo, providing more opportunities for San Mateo to create communities surrounding high-quality transit services.

Transit-Oriented Development (TOD) is a planning and design strategy that relies on dense, mixed-use, and pedestrian and bicycle friendly environments integrated with high-quality transit to reduce reliance on single-occupancy travel. TOD supports the cultivation of a community with jobs, housing, and daily amenities in and around local and regional transit. Given that housing and traffic are two major issues facing the City as it strives to update its General Plan, this Plan represents a necessary step towards achieving the City's vision to embrace diversity, provide well-designed developments with efficient transportation options, and build a more resilient community.

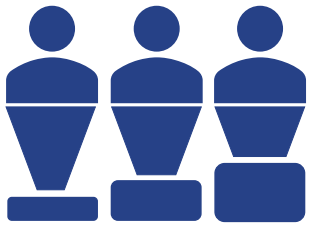
This Plan also directly supports regional planning goals such as reducing regional greenhouse gas emissions through increasing land use density and encouraging walking, bicycling, and transit use. Regional agencies such as MTC and Caltrain recommend prioritizing travel by walking and improving access to transit as key measures to address regional challenges through MTC's Plan Bay Area 2050 and Caltrain's Business Plan. Currently, approximately 45,000 people live or work within one-half mile of the City's three Caltrain stations based on Caltrain's Business Plan, and many live or work along the El Camino Real corridor. This amount is expected to grow by approximately 18,000 by the year 2040 according to the Association of Bay Area Governments 2040 projections, however, the City's General Plan anticipates growth of approximately 35,000 people by 2040. Most of the growth anticipated surround the Hayward Park and Hillsdale stations, which are traditionally more automobile-oriented neighborhoods with lower quality pedestrian facilities compared to Downtown San Mateo. Increased land use density surrounding the station areas is anticipated with adoption of the City's General Plan Update, which is targeted for 2023/2024, and reinforces the need for a systematic approach towards making it easy to walk to transit or other destinations as presented in this Plan.

GOALS & OBJECTIVES

The City of San Mateo envisions a safe, connected, and comfortable public realm that improves access to transit in order to reduce dependency on single-occupancy vehicles. This Plan will help meet the goals of the City's General Plan 2030, Pedestrian Master Plan, Downtown Area Plan, and Rail Corridor Transit-Oriented Development Plan. The following goals and objectives were created as part of this plan to propel the City's vision forward.

Improve access routes to transit for all ages and abilities by creating a comprehensive sidewalk network, enhancing station access streets and station entrances, and building safe crossings and connections across existing barriers such as El Camino Real, Caltrain tracks, and freeways.

Create safe and comfortable paths of travel by identifying specific safety treatments at dangerous locations and developing a toolkit of pedestrian improvements to help the City create great walking neighborhoods in areas targeted for future growth.



Promote equity by prioritizing projects that improve transit access and connections to disadvantaged communities and users.

ABOUT THE CITY OF SAN MATEO

San Mateo is home to more than 104,400 residents who together contribute to vibrant communities. San Mateo offers comprehensive employment opportunities, high-quality public services, and diverse neighborhoods. The City of San Mateo's vision and values set forth in the General Plan Update are to create a better quality of life for all by emphasizing diversity, balance, inclusivity, prosperity, and resiliency.

San Mateo has three Caltrain stations: San Mateo, Hayward Park, and Hillsdale. These stations qualify as "major transit stops", as defined in Public Resources Code, § 21064.3, and are the primary focus of this study. All three stations connect San Mateo to San Francisco, the Peninsula, and South Bay, where Caltrain connects to other regional systems such as BART and Amtrak. SamTrans provides bus service throughout the City, connecting from Caltrain to schools, residential neighborhoods, and major employment areas. SamTrans' most frequent and popular route is the ECR route, which runs along El Camino Real and connects San Mateo residents to other cities throughout San Mateo county from Daly City to Palo Alto. El Camino Real is anticipated to qualify as high-quality transit corridor based on planned service expansion in the future, per Public Resources Code, § 21155, and therefore is a secondary focus of this study.

There are 380 miles of sidewalks in San Mateo, weaved into a largely complete network surrounding the high-quality transit systems at the three Caltrain Stations and SamTrans service along El Camino Real.

Throughout the County, thirty-two percent of Caltrain riders walk to access the stations, while 17% bike and 17% take transit. These percentages are higher for the three stations in the City of San Mateo, with 42% walking to the San Mateo station, 61% to the Hayward Park station, and 34% to the Hillsdale station. Hillsdale is also one of the busiest stations within the Caltrain system.

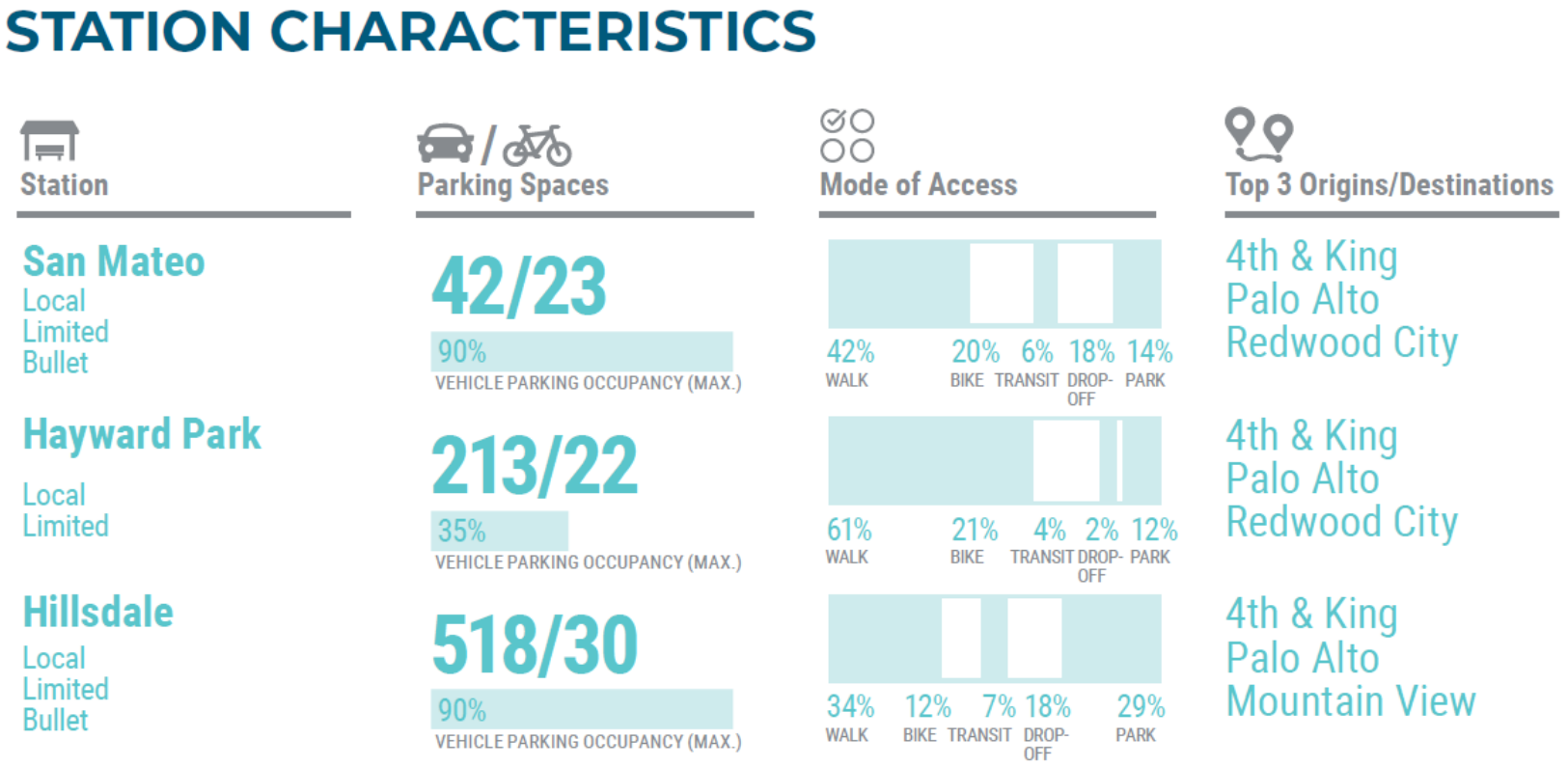
Our Vision:

San Mateo is a vibrant, livable, diverse, and healthy community that respects the quality of its neighborhoods, fosters a flourishing economy, is committed to equity, and is a leader in environmental sustainability.

Source: Strive San Mateo, General Plan Update

SAN MATEO CALTRAIN STATION CHARACTERISTICS

The infographic below from the Caltrain Business Plan shows the Caltrain service, parking capacity, mode of access, and top three origin and destinations from the three San Mateo Caltrain stations. It is important to note that this data is based on pre-COVID travel patterns.



Source: Caltrain Business Plan, May 2019

STUDY AREA

There are three Caltrain stations in the City of San Mateo that qualify as major transit stops per Public Resources Code, § 21064.3: San Mateo, Hayward Park, and Hillsdale.

The primary study areas include ½-mile radius around these Caltrain stations. A ½-mile radius represents the distance that people can typically walk in 10 minutes depending on the directness of the walking routes and walking speeds. For the purposes of this study, the ½ mile radius and 10-minute walkshed are used interchangeably. El Camino Real is considered a secondary study area given the future potential to qualify as a high-quality transit corridor in the future, per Public Resources Code, § 21155. High-quality transit service or stops is used to describe these areas throughout this study.

Given the overlapping walksheds and the similar land use contexts for Hayward Park and Hillsdale, these study areas are combined to simplify the discussion of needs and recommendations throughout this study.

Station Entrance

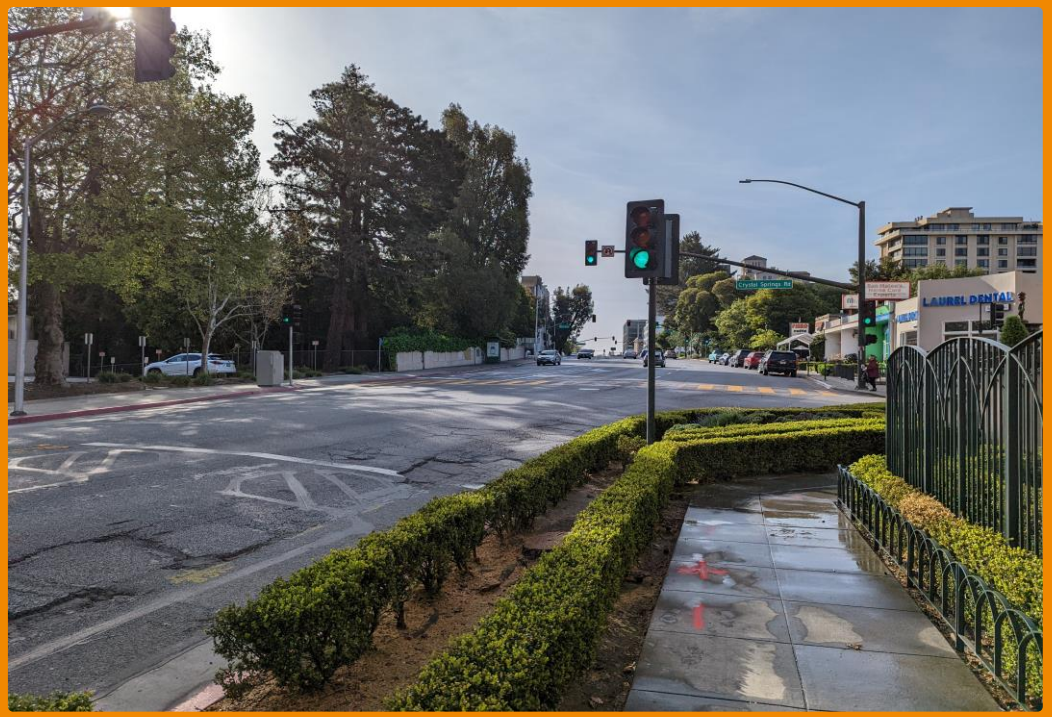
Primary Study Area (1/2-mile radius around Caltrain stations)

Secondary Study Area - El Camino Real Transit Corridor

Caltrain Stations

El Camino Real is an important transit corridor because it serves multiple SamTrans routes with frequent service, providing local and rapid service to other communities along the Peninsula. This plan focuses on spot near-term improvements along El Camino Real to get people to transit; more comprehensive re-envisioning of this corridor will be considered through future City efforts. Pedestrian facilities and issues along El Camino Real through the Secondary Study Area are consistent with the Primary Study Areas so the recommended countermeasures for El Camino Real are applicable throughout the corridor.

Intersection of El Camino Real and Hillsdale Boulevard

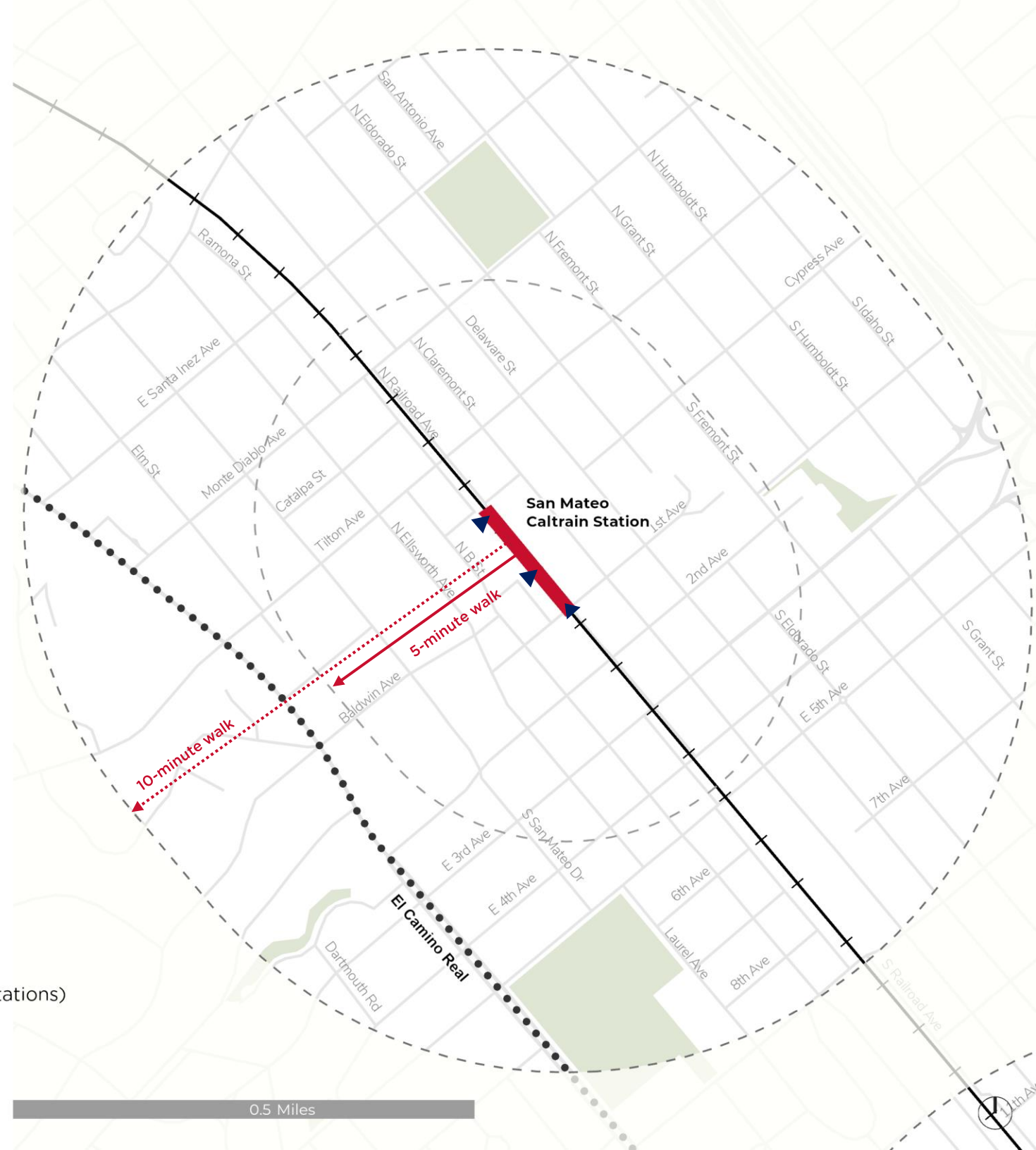


Intersection of El Camino Real and Crystal Springs Road

DOWNTOWN SAN MATEO

Situated in downtown San Mateo, the San Mateo Caltrain station serves both the busy commercial downtown district as well as residential neighborhoods such as North Central. Many older and low-rise land uses surrounding the San Mateo station are redeveloping into denser mixed-uses in alignment with the Downtown Area Plan, Rail Corridor Transit-Oriented Development Plan, and numerous individual developments.

Approximately 21,000 people currently live or work within this study area in addition to the many people who visit Downtown San Mateo for its thriving restaurant and shopping scene. The City's current General Plan anticipates an additional 3,000 residents and employees by 2040.



- Station Entrance
- Caltrain Stations
- Primary Study Area (1/2-mile radius around Caltrain stations)
- Secondary Study Area - El Camino Real Transit Corridor
- 1/4-mile radius around Caltrain Station

HAYWARD PARK & HILLSDALE

The Hayward Park and Hillsdale station areas are in the middle of transforming into mixed-use transit-oriented neighborhoods due to the Bay Meadows and Rail Corridor Transit-Oriented Development plans. Both stations include a mix of large and small commercial or public uses and low-rise residential neighborhoods. Major commercial or public uses include the Concar and Borel Square Shopping Centers and City Hall (Hayward Park station) and the Hillsdale Shopping Center and San Mateo County Event Center (Hillsdale station).

Approximately 23,000 people currently live or work within this study area. The City's current General Plan anticipates an additional 15,000 residents and employees by 2040.

- Caltrain Stations
- Primary Study Area (1/2-mile radius around Caltrain stations)
- Secondary Study Area - El Camino Real Transit Corridor
- 1/4-mile radius around Caltrain Station
- Station Entrance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CHAPTER 2
COMMUNITY ENGAGEMENT & OUTREACH

PURPOSE AND GOALS

During the public engagement phase, a public campaign called “San Mateo Walks to Transit” was developed to raise awareness and seek community input to ensure the San Mateo Transit-Oriented Development Pedestrian Access Plan would be an actionable, community-based plan. The project team engaged a variety of tools, venues, and platforms to facilitate education and information-sharing, gather input, and publicize the planning effort throughout the study process.

Feedback from the community received during the engagement process fed directly into needs assessment (Chapter 3) and the priority projects and recommendations (Chapter 4). The goals of the engagement process were to inform, educate, and listen to all voices in the community.

In collaboration with City staff, the Sustainability and Infrastructure Commission, and representatives from key stakeholder groups, a detailed community engagement plan was developed early in the planning process to guide the outreach effort and ensure that the most appropriate engagement tools were used to reach typically underrepresented populations 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
- Vulnerable users such as seniors, youth, and people with disabilities

Pop-up event poster board and QR code

Community members at North B Street pop-up

Community member at San Mateo Caltrain station

HOW WE REACHED OUT

Engagement included both online and in-person methods to reach the broadest audiences during the COVID-19 pandemic.

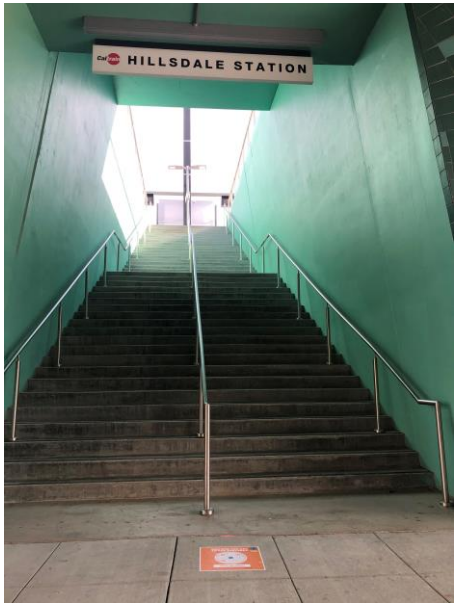
Online: An online survey was promoted through social media posts for Instagram, Twitter, NextDoor, and Facebook and emails that were sent to over 20 local community organizations and all San Mateo Neighborhood and Homeowner's Associations. Sidewalk decals with QR codes that directed to the project webpage were placed at each Caltrain station and three SamTrans bus stops within the study area to promote the online survey to transit riders.

In-person: In-person engagement was held in the form of pop-up events to provide a venue for in-person feedback. Project team members also attended regularly scheduled community groups' meetings to spread the word about the online survey and conduct focus groups.

The online survey, pop-up events, and focus groups are described in more detail in the following pages. Additional detail on all the engagement materials can be found in Appendix A.

Example of survey flyer

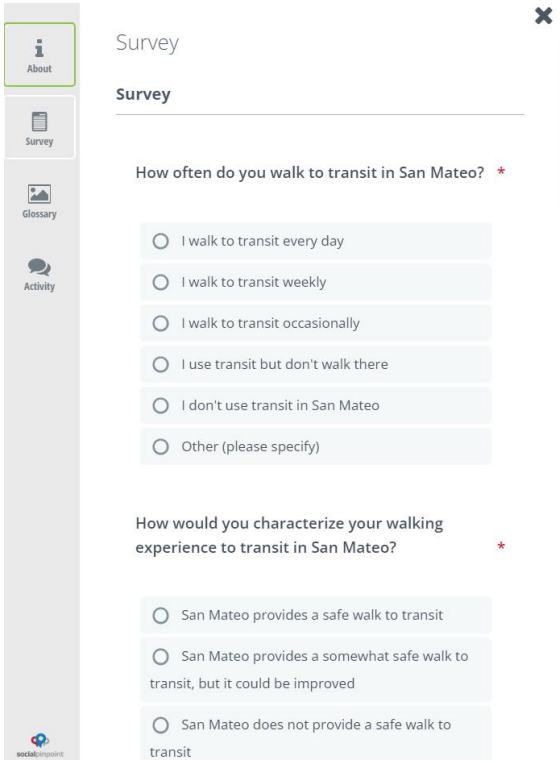
Example of survey poster

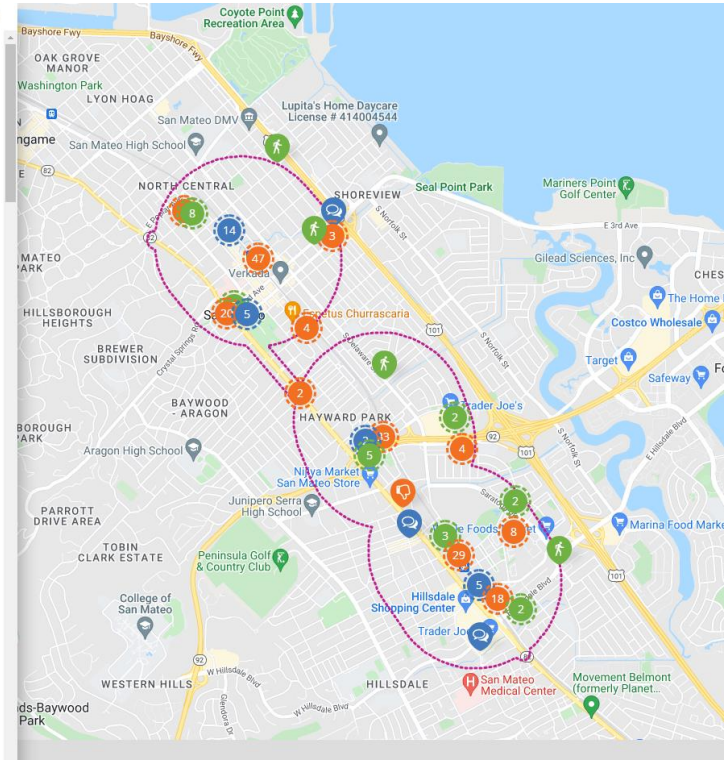


Example of decals placed at Caltrain stations providing a QR code to the survey and webmap

SURVEY & WEBMAP

To expand opportunities to engage with the community, 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, 2021 to October 31, 2021.





Survey and webmap

Spanish version of survey and webmap instructions

POP-UP EVENTS

Two consecutive days of pop-up events were organized across the study area to increase participation and reach people where they already are, such as grocery shopping, grabbing lunch downtown, or heading to the train. The pop-up events included a table with two poster boards showing the study areas, project flyers, and hard-copy versions of the online survey in both English and Spanish. Stickers, post-it notes, and pens to write and mark suggestions, comments, and concerns on the poster boards were also provided.

Pop-Up Event Locations

The Peninsula Regent — Senior Living Facility
October 6, 2021, 11:00 AM – 1:30 PM

The Nueva School (Grades 9-12)
October 6, 2021, 2:00 – 4:00 PM

Hillsdale Caltrain Station
October 6, 2021, 4:00 – 6:00 PM

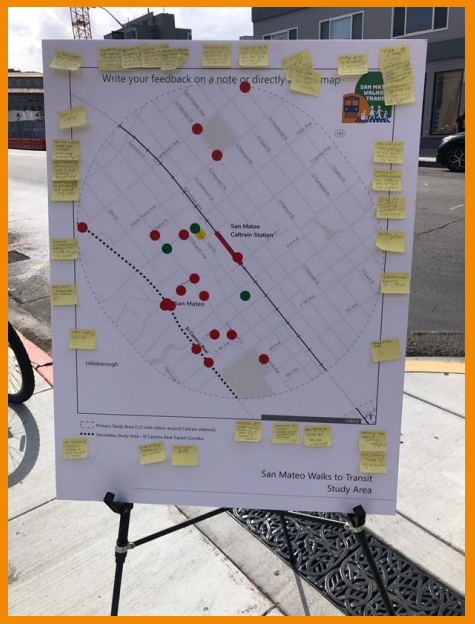
Downtown San Mateo — North B Street
October 7, 2021, 10:00 AM – 12:00 PM
*Spanish speaker available for translation and interpretation at this event.

Downtown San Mateo — South B Street
October 7, 2021, 12:00-2:00 PM

Downtown San Mateo — Caltrain Station
October 7, 2021, 2:00-5:00 PM

We reached many participants at the pop-up events including seniors, youth, the LatinX community, Caltrain riders, families, downtown employees and visitors, and so many more!

Downtown San Mateo pop-up event



Comment board from pop-ups

FOCUS GROUPS

Three focus groups were conducted as part of the engagement process with the goal of reaching groups of vulnerable users and groups not typically involved in the planning process. Due to the COVID-19 pandemic, all focus groups were held virtually. The focus groups were scheduled during previously established group meetings to accommodate the schedules of attendees and maximize participation. Each meeting included an introduction to the project and plan development process, followed by a facilitated group discussion where definitions and examples of improvement options were shared (see the image below for an example of this resource).

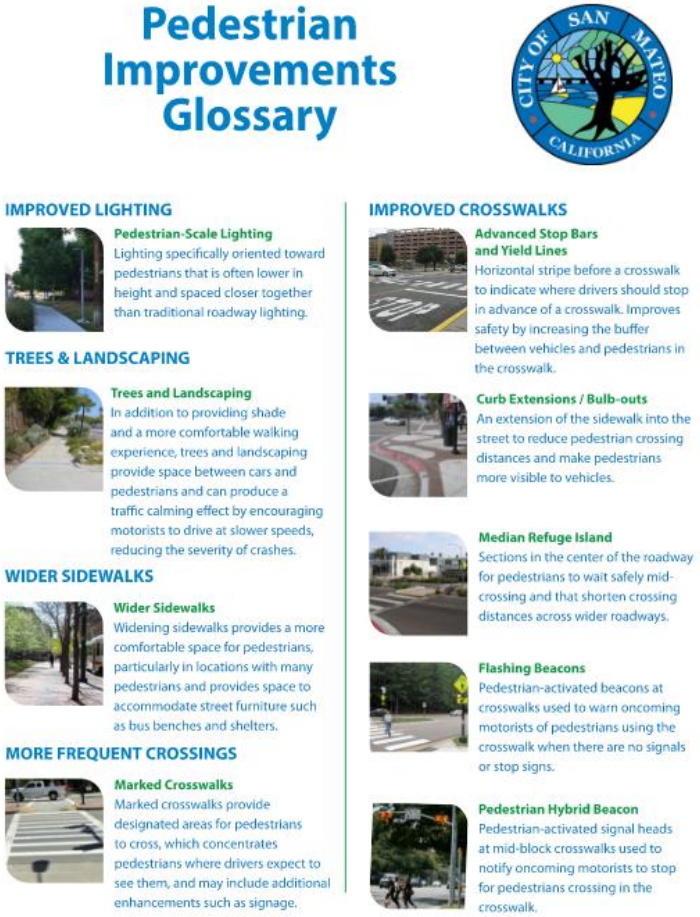
We reached many participants at the focus group events including active transportation users (people who love walking and biking), LatinX community, advocates of people with disabilities, and so many more!

When Did We Meet?

Silicon Valley Bicycle Coalition—San Mateo Local Team
Wednesday, September 15, 2021; 6:00 –7:00 PM

San Mateo County Paratransit Coordinating Council
Tuesday, October 15, 2021; 1:30 – 2:00 PM

San Mateo County Latino Collaborative
Tuesday, October 26, 2021; 3:30 – 4:00 PM



Pedestrian Improvements Glossary

IMPROVED LIGHTING

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

TREES & LANDSCAPING

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.

WIDER SIDEWALKS

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.

MORE FREQUENT CROSSINGS

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.

IMPROVED CROSSWALKS

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.

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.

Flashing Beacons
Pedestrian-activated beacons at crosswalks used to warn oncoming motorists of pedestrians using the crosswalk when there are no signals or stop signs.

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

Snapshot of Pedestrian Improvements Glossary provided during focus groups

OUTREACH SUMMARY

Engagement was conducted online on an interactive map, and in-person at focus groups, pop-up events, and at two of the Caltrain stations within the study area.

During outreach we...

received over 375 comments and reached more than 500 people based on views of the online engagement and people talked to in person.

The **Sustainability and Infrastructure Commission (SIC)** played an important role in the Plan development process. The project team presented to the SIC three times throughout the project to update Commissioners on the Plan progress and community input, as well as to hear their comments, concerns, and preferences so they could be incorporated into the final Plan.

The project team presented to **City Council** in two instances to help finalize the Plan.

SIC Meeting #1
Outreach Plan
August 11, 2021

SIC Meeting #2
Prioritization Approach
February 9, 2022

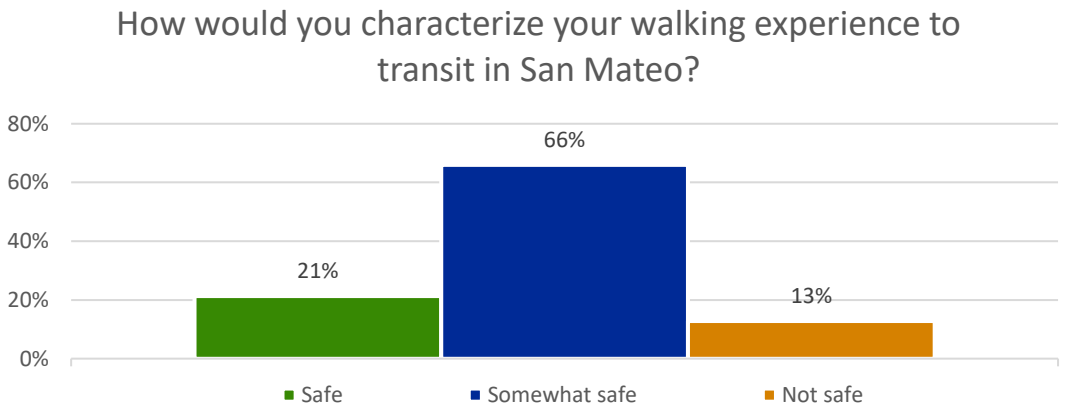
Council Meeting #1
Improvement Recommendations
June 20, 2022

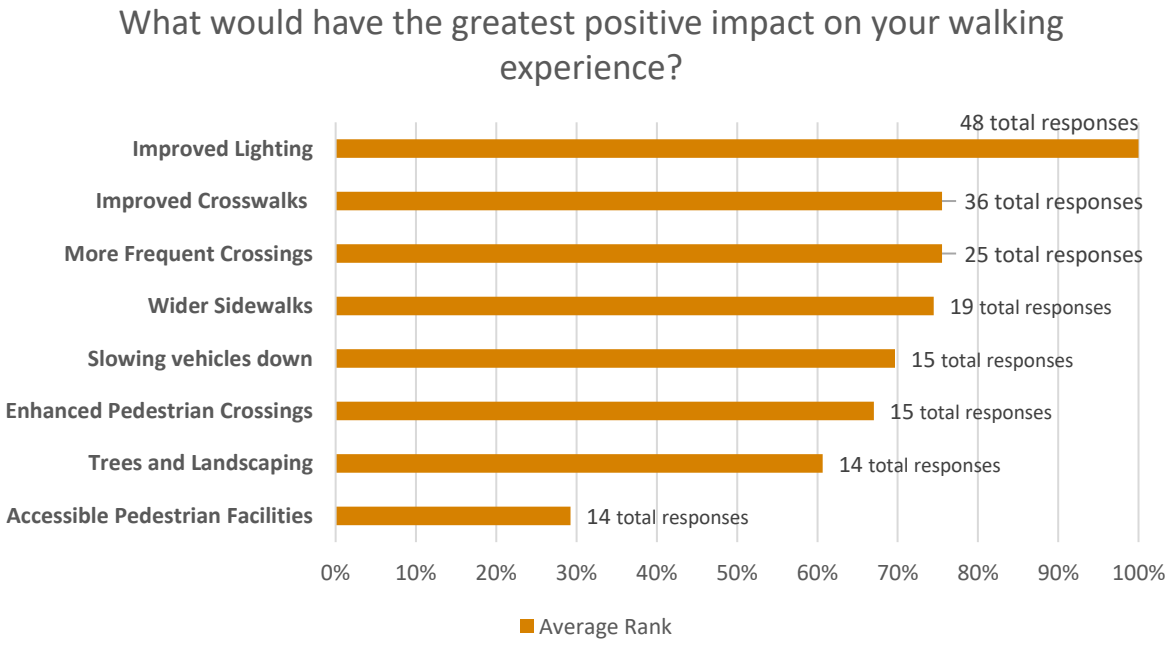
SIC Meeting #3
Draft Plan
October 12, 2022

Council Meeting #2
Plan Adoption
November 21, 2022

COMMUNITY FEEDBACK HIGHLIGHTS

Hearing from a diverse and representative group of City residents and stakeholders was vital for the development of this plan. Generally, San Mateo residents see the most opportunity to improve overall safety through infrastructure improvements such as pedestrian-scale lighting, enhanced and more frequent crosswalks, and traffic calming.





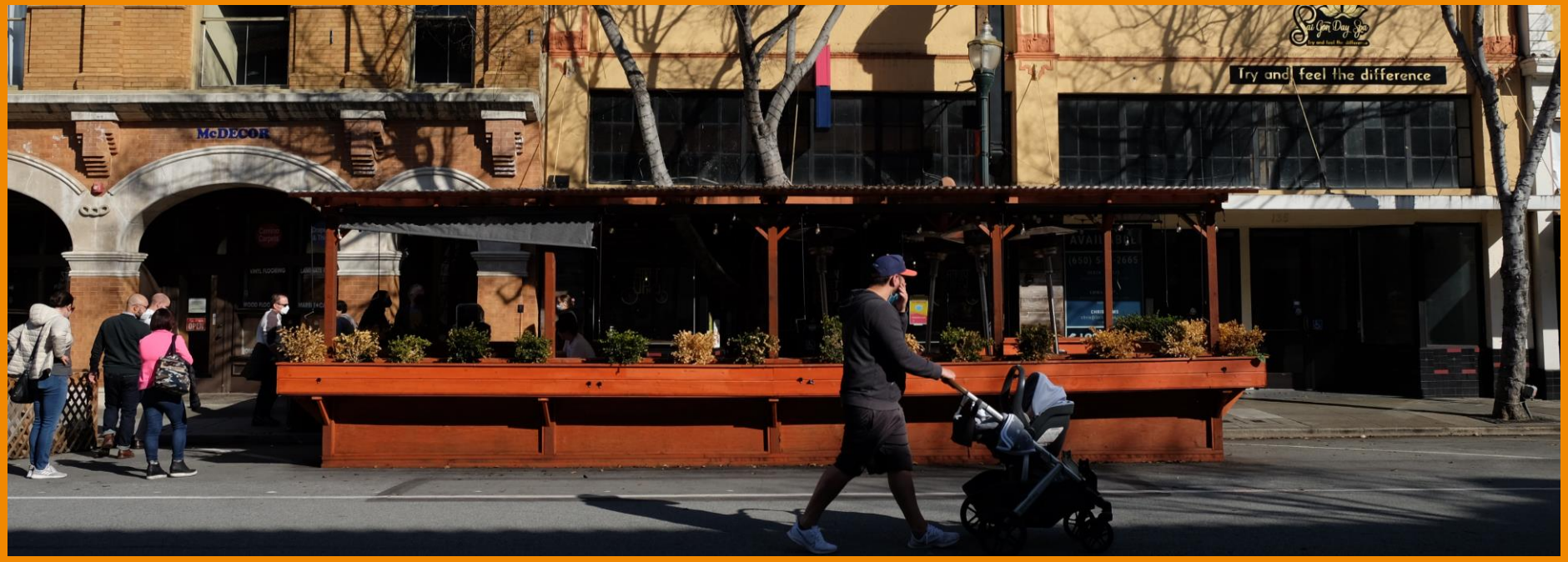
Most voted comments

"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)

"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)

"Crossing El Camino here, even with the light, is scary for pedestrians."—El Camino Real & 17th/ Bovet (8 upvotes)



B Street Closure – Photo credit: Community Design + Architecture

An understanding of what currently works well for the community is just as important as understanding what needs improving. Positive feedback was also collected during the engagement process, highlighting areas where San Mateo currently succeeds at creating a great place to walk to transit.

Celebrating Successes

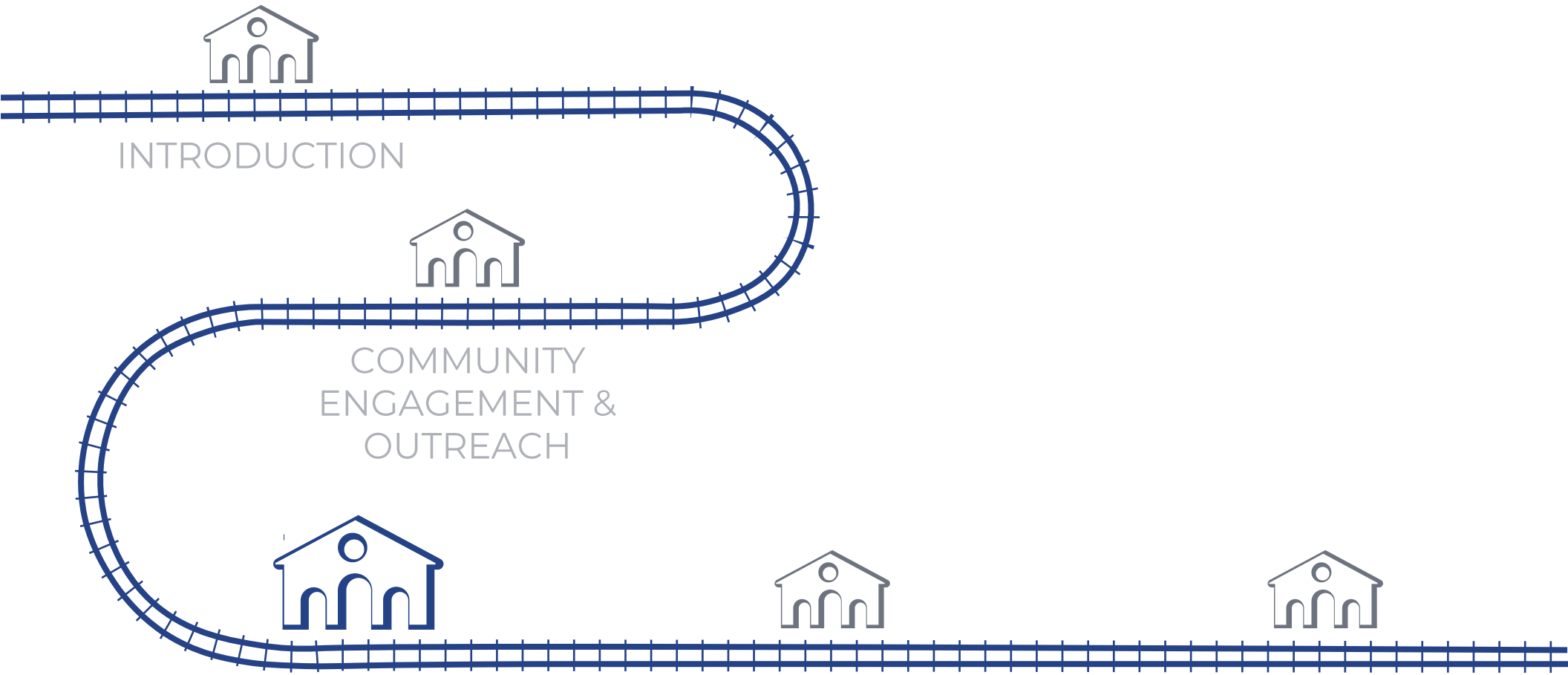
"I love having B St. closed to cars! I hope we do this in more places." (8 upvotes)

"Narrowing San Mateo Drive for bike lanes has also made it feel a bit safer to cross as a pedestrian." (4 upvotes)

"I love how it's easy to walk from my house to Caltrain or downtown!"

"I love that this crossing is open now. It saves a lot of time for those of us in the Park Place area." – 31st Avenue underpass

See Appendix A for a detailed summary of the community feedback.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CHAPTER 3
NEEDS ASSESSMENT

SUMMARY OF WHAT WE HEARD & LEARNED

Several layers of information tell the story of the 'who, what, and where' of pedestrian needs to access transit throughout the study areas. The needs assessment is based on the community feedback described in Chapter 2 and a synthesis of data related to demographics, land use, built environment, and planned improvements and developments. These data sources were translated into maps and visuals that are included in Appendix B. Together, these factors frame the state of the existing pedestrian environment and determine the priorities for the improvements described in Chapter 4.

Addressing pedestrian comfort and safety and supporting vulnerable populations in San Mateo arose as two overarching needs to improve access to transit during the engagement and data review phase. These themes are incorporated within the Key Opportunities described through the rest of this chapter.

Pedestrian Comfort and Safety

A person's walking experience is described by their feeling of comfort and safety, which is affected by factors such as the directness and the roadway characteristics of their travel route, the level of traffic stress, and the exposure to vehicles while crossing roadways. The level of traffic stress is a measure of pedestrian comfort that takes into account roadway characteristics such as the number of vehicle lanes, vehicle speeds, and the quality of pedestrian facilities. For example, if pedestrians, including wheelchair users, can pass each other or walk next to each other, or if pedestrian facilities align with pedestrian desire lines, which is the most convenient and, typically, the shortest route for a person to walk from their origin to their destination. Pedestrian collisions are also valuable data points to assess comfort and safety. However, looking only at collision history is a reactive measure and, thus, various roadway characteristics should be considered to understand the potential for future collisions and proactively implement improvements to prevent them.

Much of downtown and major roads such as El Camino Real and Delaware Street are classified as high stress, meaning they are not very comfortable for pedestrians to walk along due to the high volume and speed of vehicles and the lack of landscape or other buffers for separation. Severe and fatal pedestrian collisions have occurred at intersections along streets such as Tilton Avenue, El Camino Real, and Hillsdale Boulevard. See Appendix B for more detail.

Celebrating Success

The new Hillsdale Caltrain station is aesthetically pleasing with an underpass that feels clean and safe. The tiled walls and wide sidewalks provide a nice entry to the station for pedestrians.

The new Class I multi-use path with landscaping along Concar Drive enhances the bicycle and pedestrian experience accessing the Hayward Park Caltrain station.

The wide sidewalks and large palm tress along Transit Center Way provides a grand, welcoming entry to the San Mateo Caltrain station southbound platform that should be replicated at other entry points to Caltrain stations.

Vulnerable Populations

Vulnerable populations typically include seniors, children, and those with disabilities. San Mateo and west of El Camino Real between the Hayward Park and Hillsdale Caltrain stations have a higher density of senior centers, schools, and other community services such as hospitals and libraries. CalEnviroScreen is another important data source that looks at environmental, health, and socioeconomic information to assesses population characteristics to measure a community's vulnerability to pollution. Lower income, disadvantaged communities tend to bear a greater burden of environmental pollution such as noise and air quality, which directly correlates to travel modes and behaviors. The North Central neighborhood, northeast of the San Mateo Caltrain station shows a high percentage of exposure. This neighborhood is also identified as an Equity Priority Community by MTC in Plan Bay Area 2050.

KEY OPPORTUNITIES

Input from the community and an analysis of the existing conditions in the study areas produced key opportunities for improving access to transit in San Mateo, organized into the three categories as summarized below. The remainder of this chapter explains why these themes are important to improving travel to and from transit and creates the foundation for the project recommendations discussed in Chapter 4.

Caltrain Station Access

Everyone is a pedestrian at some point in their trip, whether walking directly to the station, riding/parking a bicycle, taking a bus or shuttle, or driving/parking a car. Access to station entrances should accommodate pedestrian desire lines and be as short and direct as possible. Pedestrians, including wheelchair users, must be able to pass each other or walk next to each other safely and comfortably everywhere within station areas. In general, streets closest to the Caltrain stations received the highest amount of community input and present the greatest opportunity to achieve the Plan's goals because it is that likely that all riders need to travel on one to reach the stations. These access streets are categorized for each study area as follows:

- Station Access Streets: Every transit rider must walk on one of these to access the station
- Connector Streets: Streets that pedestrians most commonly use to connect to station access streets

El Camino Real Pedestrian Experience

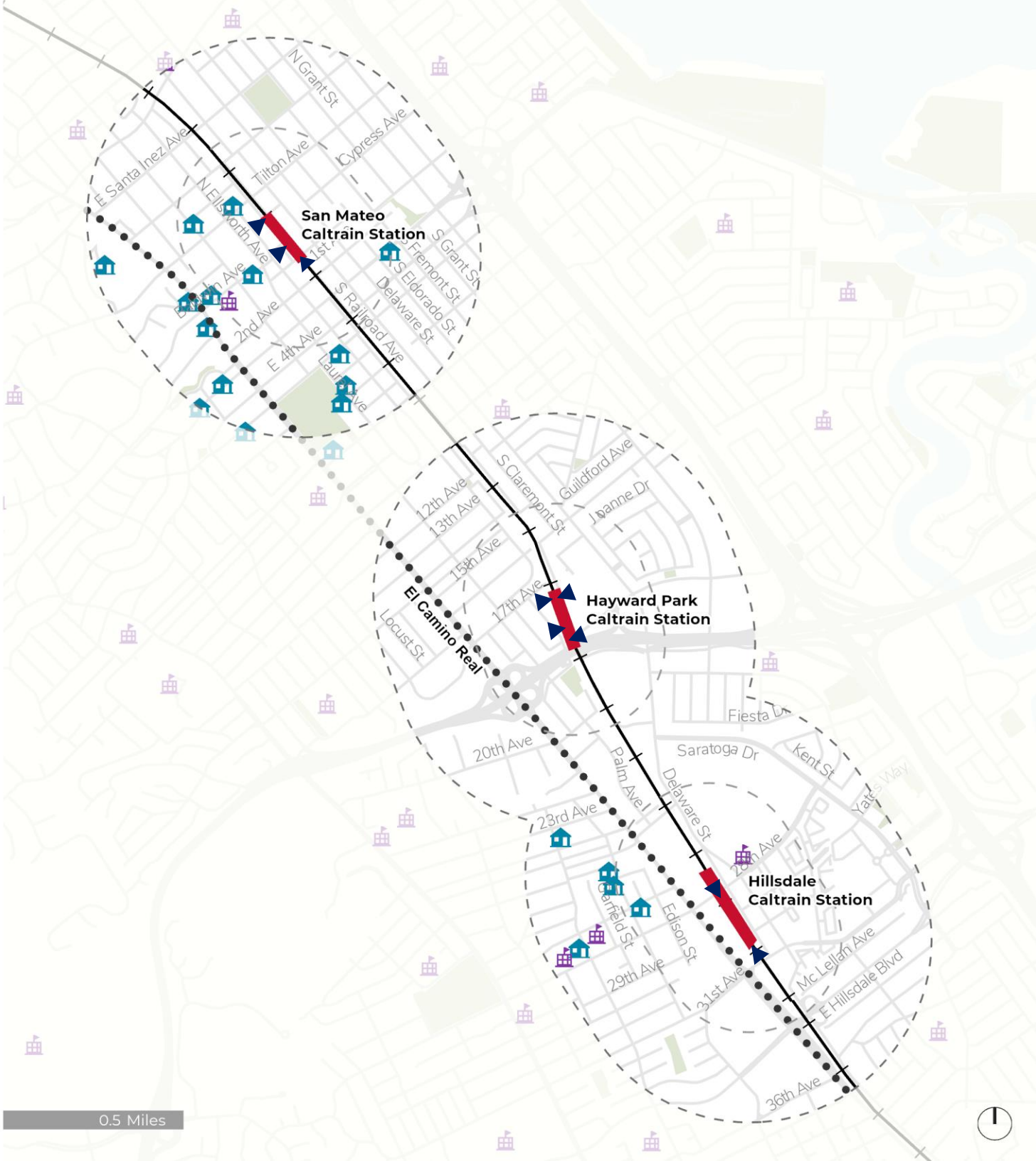
El Camino Real is a major corridor, providing direct access to a diversity of different amenities and neighborhoods. However, walking along and across El Camino Real was often described as uncomfortable by community members. Sidewalks don't always have clear paths of travel and the wide roadway and high vehicles speeds create an uncomfortable feeling for pedestrians given the lack of a buffer. Further, the wait times to cross El Camino Real are long and sometimes conflict with turning vehicles, which create high exposures for pedestrians. These barriers can discourage pedestrians from walking to nearby destinations or trying to access transit along the corridor.

Transit Center Way/main entrance to San Mateo Caltrain station

Station Area Pedestrian Infrastructure

Overall, sidewalks and crossings in San Mateo provide good coverage surrounding the Caltrain stations, and pedestrians are generally able to get from transit to their destination on designated sidewalks and pedestrian paths. However, there are missing links in the network, many pedestrian facilities do not meet the City's pedestrian design standards, and not all pedestrian paths of travel are ADA compliant.

Beyond the station access streets and El Camino Real, which are described above, there are many datasets to help identify key opportunities for pedestrian improvements in the study area. These include community feedback, collision history, presence of sidewalks, and pedestrian-friendly intersection control. Identifying planned improvements from the Citywide Pedestrian Master Plan near land uses that attract pedestrians such as senior centers and schools can help prioritize these opportunities.



Station Entrance
Caltrain Stations
School
Senior Apartments

Caltrain Station Access: Downtown San Mateo

The San Mateo Caltrain station is surrounded by thriving commercial and residential neighborhoods with a mix of small- to medium-sized developments bringing new residents and workers to the area. Connections between Downtown and the west side of the Caltrain station are generally good due to the grid of streets that provide sidewalks and other pedestrian amenities. However, the entrance near Mi Rancho Supermarket at the northwest corner is hard to find and access on the eastside of the station is limited to First Avenue. The lack of an entry on the north-east side of the station creates a barrier to access for the North Central neighborhood. **The five locations identified below have the most opportunity to improve pedestrian access and safety to the San Mateo Caltrain Station.**

Station Access Streets

A) **First Avenue** - provides the only access to the northbound platform at the San Mateo Caltrain station. Narrow sidewalks, the at-grade Caltrain crossing, and multiple driveway crossings reduce pedestrian comfort and increase their exposure to vehicles.

B) **North Railroad Avenue** (west of the tracks) - provides direct pedestrian access to the northwest corner of the San Mateo Caltrain station's southbound platform. To access the entrance, pedestrians must either walk through the Mi Rancho Supermarket parking lot or down the back alley of North Railroad Avenue. Both routes can present challenges due to blocked sidewalks and the community has expressed personal safety concerns due to loitering and poor pedestrian lighting on these streets. Additional challenges for pedestrians at this entrance include the lack of a connection to the northbound station platform and the crossing of North Railroad Avenue at Tilton Avenue, which lacks marked crosswalks and presents visibility issues due to roadway grade changes, parked cars, and poor lighting.

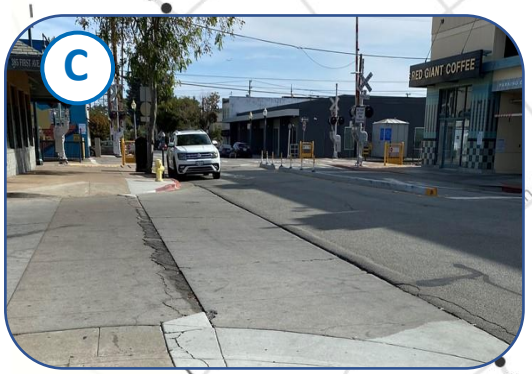
C) **Transit Center Way** – comprised of two short streets that lead to the main entrance of the station. While there are adequate sidewalks, crossings could be improved to prioritize pedestrians. Improved wayfinding and placemaking could also help activate and enhance the main connection between Downtown and the main station entrance.

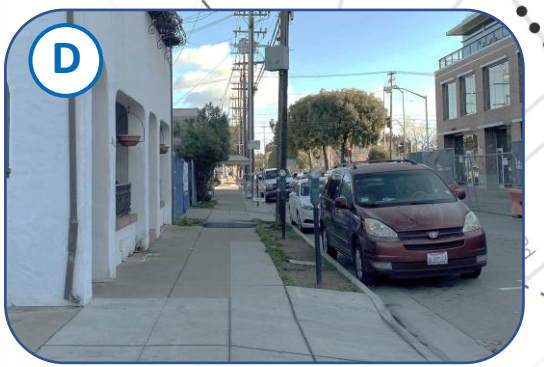
Connector Streets

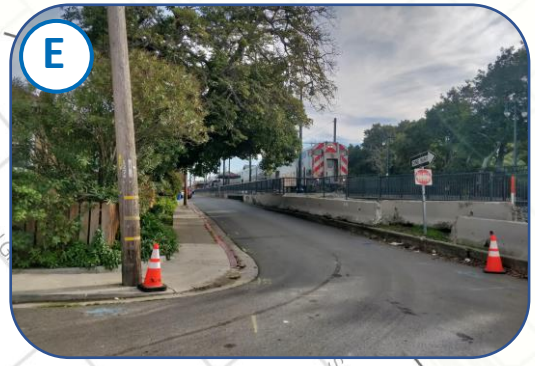
D) **Claremont Street** – Claremont Street is the primary route for pedestrians to and from the station from the east side of the train tracks. Claremont Street provides a more comfortable walking environment due it its lower traffic volumes compared to other parallel streets, such as Delaware Street. Further improvements to enhance the safety and appeal of Claremont Street would improve east side neighborhood connections to the station.

Potential Future Access Streets

E) **Cypress Avenue** - There is no direct access to the Caltrain station from the northeast side. Residents living in the North Central neighborhood currently must walk longer distances to reach the station than those in other adjacent neighborhoods. A new access point at Cypress Avenue would close the existing gap to the North Central neighborhood and across the tracks.







Station Entrance

Caltrain Stations

Station Access Streets

Connector Streets

Potential Future Access Street

0.5 Miles

Caltrain Station Access: Hayward Park & Hillsdale

The Hayward Park and Hillsdale stations are in the middle of rapidly changing neighborhoods with new commercial and residential developments that will host tens of thousands of new residents and employees anticipated by 2040 adjacent to existing lower density residential neighborhoods. New infrastructure that provides direct access to the Caltrain station is either being constructed or has recently been constructed on the east side of the Hayward Park station and on 28th Avenue at the Hillsdale station. However, some challenges remain. The west side of Hayward Park includes narrow sidewalks and limited infrastructure for pedestrians and crossing the Caltrain tracks around Hayward Park is perceived to be challenging. The newly opened Hillsdale Caltrain station sits atop of 28th Avenue. Currently, there are two entry points to the station, at 28th Avenue and on the east side between Derby Avenue and Curiosity Way; there are no entry points from the west side of the station.

The four locations identified below have the most opportunity to improve pedestrian access and safety to the Hayward Park and Hillsdale Stations. Two additional global issues for pedestrian circulation surrounding these stations are identified below.

Station Access Streets

A) **17th Avenue** (Hayward Park) - 17th Avenue has narrow sidewalks, lacks safe and accessible crossing infrastructure, and lacks wayfinding or lighting that can create a transit-oriented environment. The path that connects 17th Avenue to the station entrance is currently a dirt path in poor condition that also lacks lighting and wayfinding.

B) **Leslie Street** (Hayward Park) – Similar to 17th Avenue, Leslie Street has narrow, discontinuous sidewalks, poor lighting, and a lack of ADA curb ramps and crosswalks.

C) **Pathway through parking lot on east side of Hayward Park station** (Hayward Park) - The parking lot does not currently provide a dedicated, accessible pedestrian route to the platform.

D) **28th Avenue** (Hillsdale) - The entrance to the Hillsdale Caltrain Station is located midblock along 28th Avenue, between Delaware Street and El Camino Real. With no midblock crossing at the entrance, pedestrians must cross in advance at the intersections on either end of the block; ADA access to the station is provided only on the north side of 28th. Without a protected on-street bike facility (there are currently sharrows), bicycles conflict with pedestrians on the multi-use pathway.

Connector Streets

Pedestrian facilities on many of the collector streets do not meet the recommendations in the City's pedestrian design standards.

Major Barriers at Hayward Park

Several major barriers present a challenge to pedestrian circulation around the Hayward Park Caltrain station. The Caltrain tracks create a barrier to east-west travel, with limited places to cross that require circuitous pathways for people walking. SR-92 serves as an additional barrier to north-south travel between adjacent land uses.

El Camino Real Pedestrian Experience

El Camino Real is a state highway managed by Caltrans and a key north-south corridor that runs throughout the San Francisco peninsula. Once the peninsula's only highway, El Camino retains the auto-oriented character as when it first emerged in the 1920's. However, with the construction of parallel modern freeway facilities such as US-101 and I-280, El Camino Real today functions more like a local arterial than a state highway, yet it lacks high-quality walking amenities to provide access to the many destinations along it.

Neighborhoods abutting El Camino Real are nearly uniformly single-family neighborhoods, except for areas within the half mile radius of the Caltrain stations. Residents of these lower density neighborhoods can reach the frequent transit services along El Camino Real via neighborhood roadways that intersect with El Camino Real, which have continuous sidewalks and provide adequate connections given the lower traffic volumes and speeds on these roadways. In general, pedestrian issues along El Camino Real are consistent for much of the corridor so the issues described within the primary study areas are applicable for other sections for El Camino Real.

As called for in plans such as the Grand Boulevard Initiative and the City of San Mateo's Sustainable Streets Plan, wider sidewalks, safer crossings, enhanced bus stops, clear walking paths, and strategically placed amenities such as landscaping, trees, and pedestrian-scale street lighting would help El Camino Real fulfill its potential as a community-oriented and walkable street that is a destination rather than a thoroughfare. While long-term visions for the corridor are refined, the City of San Mateo has an opportunity to identify near-term crossing improvements to better connect and serve its residents.

Crossing El Camino Real

El Camino Real provides automobile access to many neighborhoods in San Mateo while creating a barrier for pedestrians walking between the residential communities to the west and the downtown destinations and Caltrain stations to the east. The community expressed challenges crossing El Camino Real due to its long wait times for pedestrian signals, short crossing times, speeding vehicles, and conflicts with turning vehicles. Caltrans has identified crossing issues and potential improvements as a part of the District 4 Pedestrian Plan.

Hillsdale Boulevard at El Camino Real

Narrow Sidewalks

Sidewalk amenities such as street trees to provide shade, benches to stop and wait or rest, and pedestrian-scale lighting can create a more comfortable pedestrian experience for all. El Camino Real has continuous sidewalks within the study area; however, most sidewalks generally lack basic sidewalk amenities. In some cases, the sidewalks are narrow or have obstructions that create barriers for many who may need to walk along the corridor. As new opportunities for improvements arise, such as through individual redevelopment projects or other roadway improvements, the City of San Mateo can identify specific sidewalk enhancements to ensure the creation of a continuous, comfortable corridor. Caltrans has identified sidewalk gap closures for segments of El Camino Real outside of the study area as a part of the District 4 Pedestrian Plan.

Bus Stop Quality

SamTrans has multiple bus stops along the corridor but many of them lack basic amenities such as shelters, adequate lighting, benches, and wayfinding. In some places, the sidewalks are too narrow to accommodate any amenities. SamTrans' ongoing El Camino Real Bus Speed & Reliability Study presents an opportunity for the City of San Mateo to partner with SamTrans to improve transit service along the El Camino Real corridor. Through this study, the City can help identify the specific needs for bus stop improvements on El Camino Real within San Mateo.

Narrow sidewalk along El Camino Real

SamTrans bus stop on El Camino Real

Station Area Pedestrian Infrastructure

The City's Pedestrian Master Plan contains pedestrian design standards that provide the standard for sidewalk widths and features, crossing designs, and pedestrian amenities that would create a comfortable walking environment and encourage travel by walking. In addition to the station access routes and El Camino Real, discrepancies between existing pedestrian infrastructure and the design standards were identified throughout study areas.

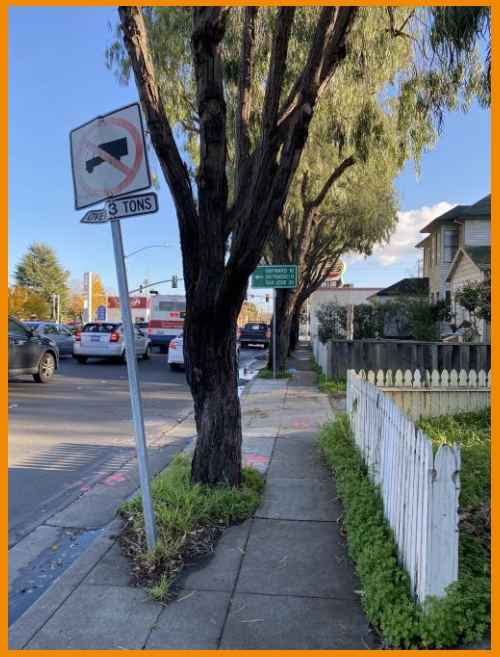
Sidewalks

Currently, most sidewalks are in relatively good condition with few missing links such that sidewalks provide a continuous network that allows pedestrians to reach their destinations with relative ease. However, outside of Downtown San Mateo and adjacent to redevelopment sites around Hayward Park and Hillsdale, many sidewalks are too narrow or do not have a clear path of travel with obstructions such as poles and street furniture in the middle of the sidewalk. Maintaining a clear pedestrian through zone is important for ADA compliance as obstructions to those with disabilities, those with strollers, or those carrying objects may require them to detour off the sidewalk to continue their route. When implementing improvements, consider the City's *Location Inventory of ADA Improvement Needs* dataset.

Similar to El Camino Real, other arterials and collector streets surrounding the high-quality transit services have high vehicle speeds and no buffer, that often make pedestrians feel uncomfortable when walking directly adjacent to a travel lane. Traffic calming tools and buffers between sidewalks and vehicle lanes can create a more pleasant walking environment.

The few missing links to the sidewalk network are generally one to two blocks in length and are shown on the following Sidewalk Network Gap figures. While this plan does not provide specific project recommendations for all sidewalk segments that are missing or do not meet City standards within the study area, improvements to sidewalks should always be considered when the opportunity arises through roadway or development projects as described in Chapter 5 Implementation.

Narrow and missing sidewalks along Leslie Street by the Hayward Park Station



Narrow sidewalk along South Delaware Street

Crossings

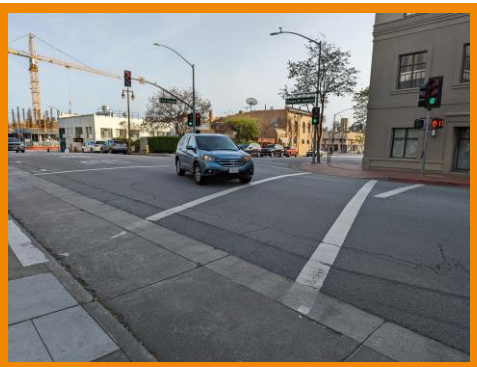
Pedestrians should have direct routes to where they want to go. Ensuring crosswalks and points of interest or station entries are aligned so pedestrians do not have to walk longer distances than necessary reduces the distance barrier to walking. In some cases there are physical gates that bar direct access to the station platforms, requiring pedestrians to walk long blocks to reach an entrance. Many crossing locations are missing ADA-compliant pedestrian push buttons or curb ramps, or have single curb ramps rather than direction curb ramps, which force wheelchair users and strollers into the vehicle travel lane.

High speeds were voiced as a concern during the community engagement process, particularly on major corridors such as East 3rd Avenue, East 4th Avenue, Delaware Street, Hillsdale Boulevard, and El Camino Real. Collisions are another indication that speed may be affecting the safety and comfort of pedestrians crossing the street. High collision locations include Tilton Avenue, East 3rd Avenue, El Camino Real, and Hillsdale Boulevard, the majority of which occur at intersections. See Appendix B for detailed maps of collision locations.

The pedestrian comfort and safety on crossings are primarily related to the exposure of pedestrians to vehicle travel and can be affected by how many travel lanes exist, the average number of vehicles, and the speeds of vehicles on a particular road. Features such as bulb-outs and high-visibility crosswalks reduce pedestrian exposure and already exist in some locations in Downtown San Mateo and at adjacent redevelopment sites around Hayward Park and Hillsdale.

Other Pedestrian Amenities

Other amenities such as lighting, landscaping, and wayfinding also contribute to how comfortable and safe a pedestrian environment feels. Many of the main access routes to the Caltrain stations and transit along El Camino Real lack some or all these amenities. For example, access paths to the Hayward Park station lack consistent lighting, tree coverage, or signage to indicate where the station entrances are located. Providing lighting on paths to transit is important for creating a comfortable and safe environment for people walking at night and a proven safety countermeasure to reduce the number of nighttime collisions. Trees provide shade and create a more pleasant walking experience on sunny days while wayfinding signage reduces barriers to transit and enhances the sense that people are in a transit-oriented district.



Skewed crosswalk without a curb ramp (left); Crosswalk missing a curb ramp (middle); Crosswalk missing a curb ramp (right).

Downtown Sidewalks - Network Gaps

The single missing sidewalk link on this map emphasizes how connected of a network the sidewalks in downtown San Mateo are. The grid network allows for easy north/south and east/west travel between neighborhoods with the only missing sidewalk link along South Claremont Street between East 5th Avenue and East 7th Avenue.

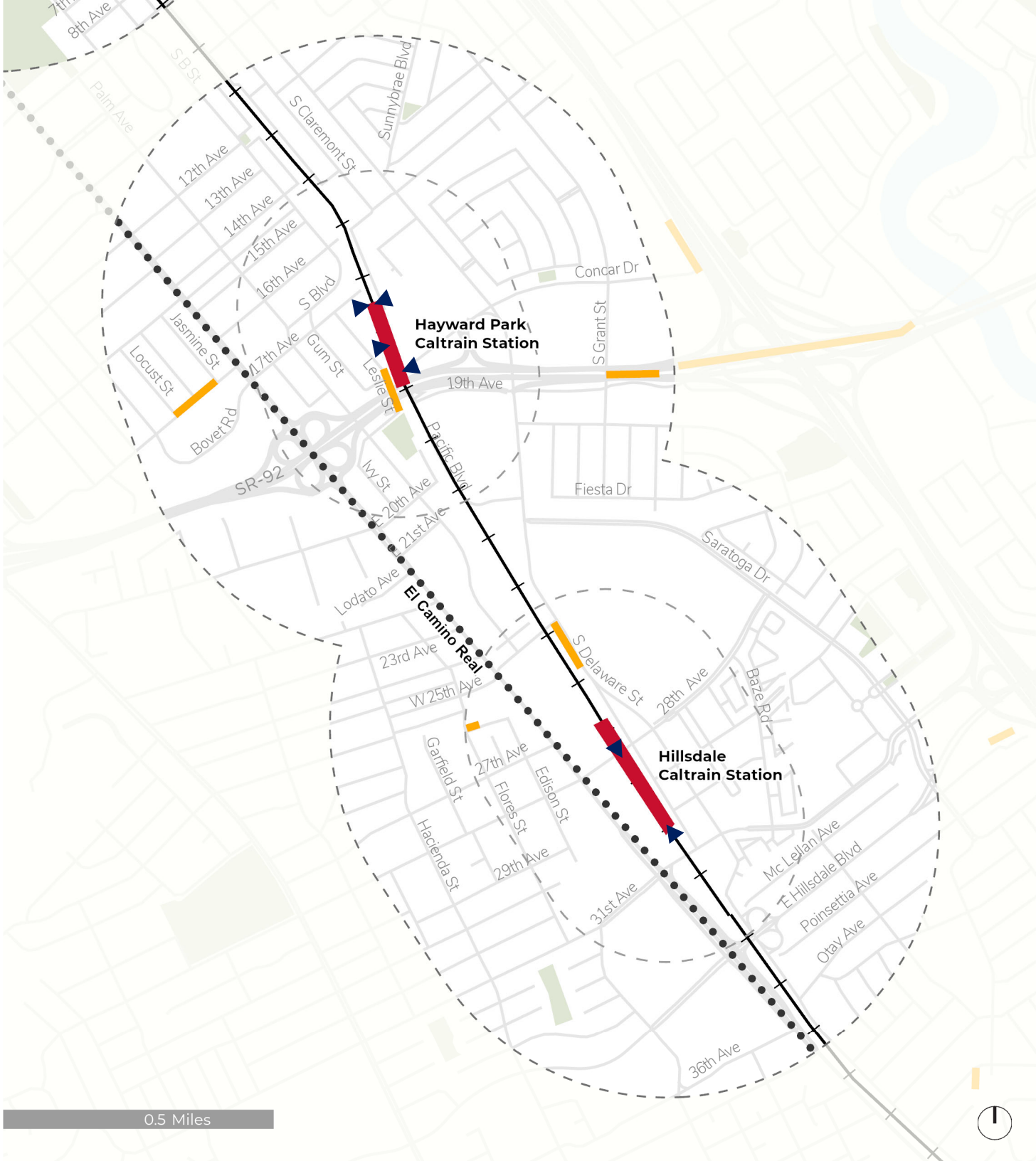
Station Entrance

Caltrain Stations

Missing Sidewalks

Hayward Park & Hillsdale Sidewalks - Network Gaps

There are a few sidewalk gaps surrounding the Hayward Park and Hillsdale Caltrain stations. The two critical missing links are the segment along Leslie Street between Gum Street and 19th Avenue and along South Delaware Street between 25th Avenue and 28th Avenue. The Leslie Street gap is on the east side of the street adjacent to the Hayward Park station, limiting direct access between the western station entrance and the neighborhoods south of SR-92. The South Delaware Street gap on the west side of the street would provide a more direct pedestrian connection from the Hillsdale station to the San Mateo County Event Center.



Station Entrance

Caltrain Stations

Missing Sidewalks


INTRODUCTION
COMMUNITY ENGAGEMENT & OUTREACH
NEEDS ASSESSMENT
PRIORITIES & RECOMMENDATIONS
IMPLEMENTATION

PUBLIC WORKS
City of San Mateo

CHAPTER 4
PRIORITIES & RECOMMENDATIONS

PRIORITY LOCATION SELECTION AND PROJECT DEVELOPMENT

This Chapter discusses the recommended projects developed for priority locations within the study area. The priority locations were grouped into the eleven areas noted below, which were selected using a series of metrics to identify the areas of highest need based on the issues identified in Chapter 2 - Needs Assessment. These metrics apply a systematic approach to evaluate access to transit, community feedback, pedestrian collisions, proximity to vulnerable populations such as seniors and children, and proximity to planned development projects. These metrics are described in detail on the following pages.

Within each of the eleven priority areas listed below, specific recommendations were developed to address the goals outlined in Chapter 1 to improve access for all people walking to and from transit, improve safety for all people walking, and provide equitable access to transit for all.

Although this Plan's specific projects are limited to these priority locations, the City should use the countermeasure toolbox and improve pedestrian facilities throughout the study areas by ensuring roadway and development projects provide pedestrian facilities that meet recommendations presented in the City's pedestrian design standards. This approach to global pedestrian improvements is described further in Chapter 5 – Implementation.

Downtown

- Downtown - El Camino Real
- Downtown Gateway
- Downtown North Station Access

Hayward Park

- Hayward Park - El Camino Real
- Hayward Park West
- Hayward Park – Sunnybrae
- Hayward Park East

Hillsdale

- Hillsdale – 25th Avenue
- Hillsdale – 28th Avenue
- Hillsdale – 31st Avenue/Bay Meadows
- Hillsdale Boulevard

PRIORITY METRICS

The priority metrics were developed in coordination with City staff based on a blend of data and stakeholder feedback presented in Chapter 2 - Needs Assessment. The metrics are intended to capture the community values and reflect the overall goals of this Plan to improve pedestrian safety and access to transit, with an emphasis on vulnerable communities.

Each priority metric was assigned a weight based on how closely the metric aligned with the goals of the Plan. Potential projects located on station access streets were assigned the highest priority (primary) to reflect the fact that they will improve access for all people walking to transit. Locations that were identified by the community as needing improvement or with a history of pedestrian collisions were assigned a medium priority (secondary) weight to reflect the existing needs for improvements. The land use context metrics that account for proximity to senior housing and future developments were given a lower weight (tertiary) to reflect future access needs.

To identify priority locations within the study area, the metrics were mapped based on these weights. Locations where the metrics overlap highlight the highest need for pedestrian improvements. To ensure equitable access, station access streets that connect to vulnerable communities were automatically included as a priority location. Eleven priority locations were identified, as shown in the following pages. More details about the priority metrics and prioritization process can be found in Appendix C. Although this study focuses on the top locations that align with the Plan's goals, other locations identified by the community or data should be evaluated for countermeasures during future roadway improvements or planning studies.

Station frontage road with narrow sidewalk

Hillsdale Station entrance

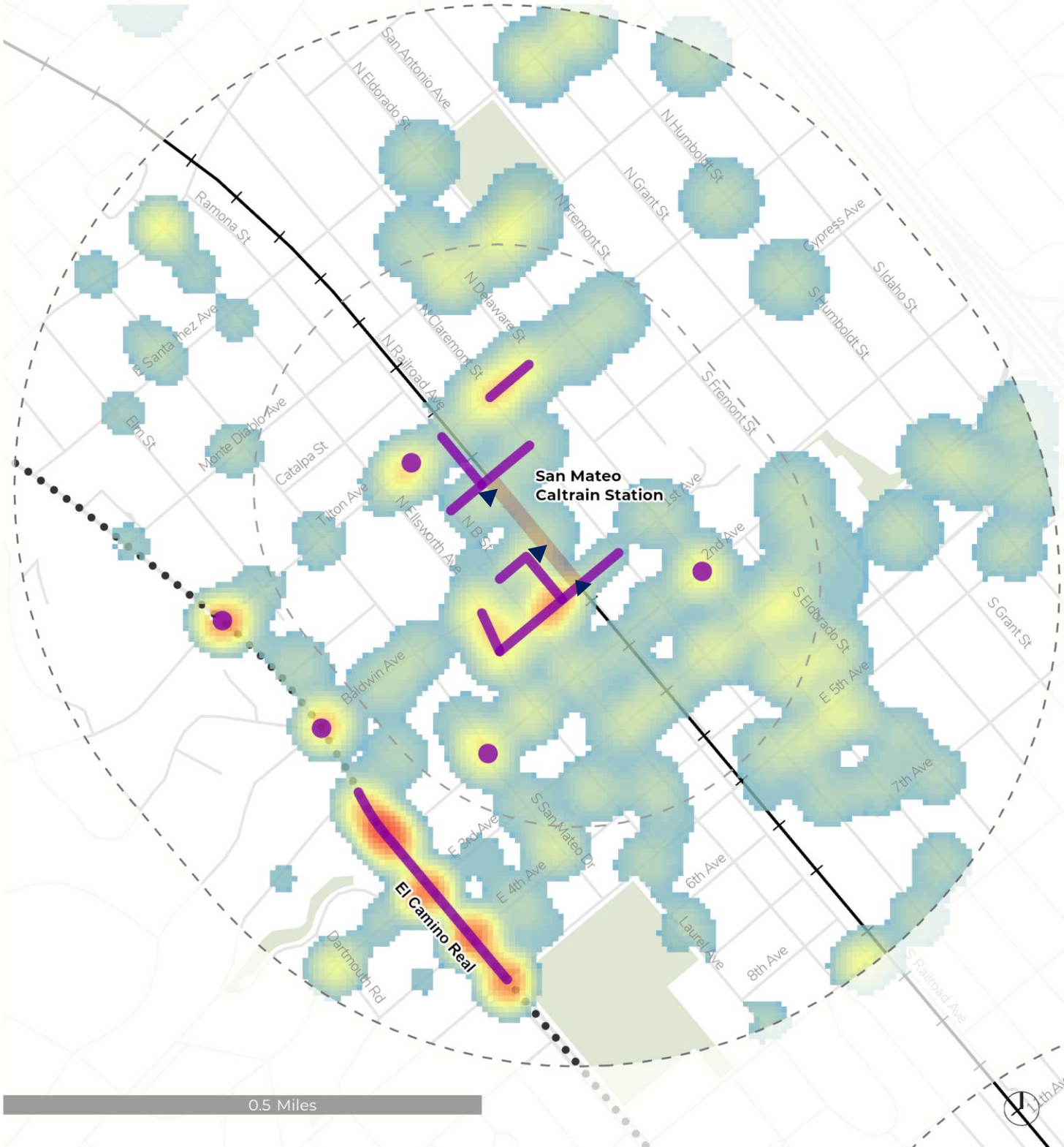
PRIORITY METRICS

Metric	Description	Weight *the importance placed on each metric compared to another to determine priority locations
Access – Streets Providing Access to Stations	Streets identified as main walking connections to the Caltrain Stations such that all transit riders must walk on one of these streets. The directness of the pedestrian path of travel, the character of the street (e.g., street frontage and design of pedestrian realm), and the frequency and design of vehicle crossings determine the quality of the access street.	Primary (Station Access Streets) Tertiary (Connector Streets)
Community - Areas of Concern	Pedestrian issues identified by the community during outreach	Secondary
Pedestrian Collisions	2017-May 2021 Source: City of San Mateo Collision Traffic Data	Secondary
Seniors and Children	Areas within 1 block of Senior Housing Areas within 1 block of Schools	Tertiary
Development Projects	Upcoming Development Projects that are either under review or under construction Source: City of San Mateo	Tertiary

CalEnviroScreen assesses population characteristics and pollution burden to measure community vulnerability to pollution. This metric was applied to the study area to ensure station access streets for vulnerable communities were included as priority projects. This metric highlights the North Central neighborhood, which aligns with the geographic area in the City of San Mateo covered by MTC's Equity Priority Communities.

PRIORITY LOCATIONS

These heat maps visualize the layering of all the priority metrics. The bright orange indicate the locations with the most overlapping metrics while the lighter blue indicates the least. As a result, the areas in orange were identified as having the highest need for pedestrian improvements and form the basis of the final priority locations, which are indicated in purple. Five intersections and eight corridors were identified as priority locations in the downtown Caltrain station study area. For more detail on the various data layers, see Appendix C.



Lower Priority

Higher Priority

Priority Intersections

Priority Corridors

Station Entrance

PRIORITY LOCATIONS

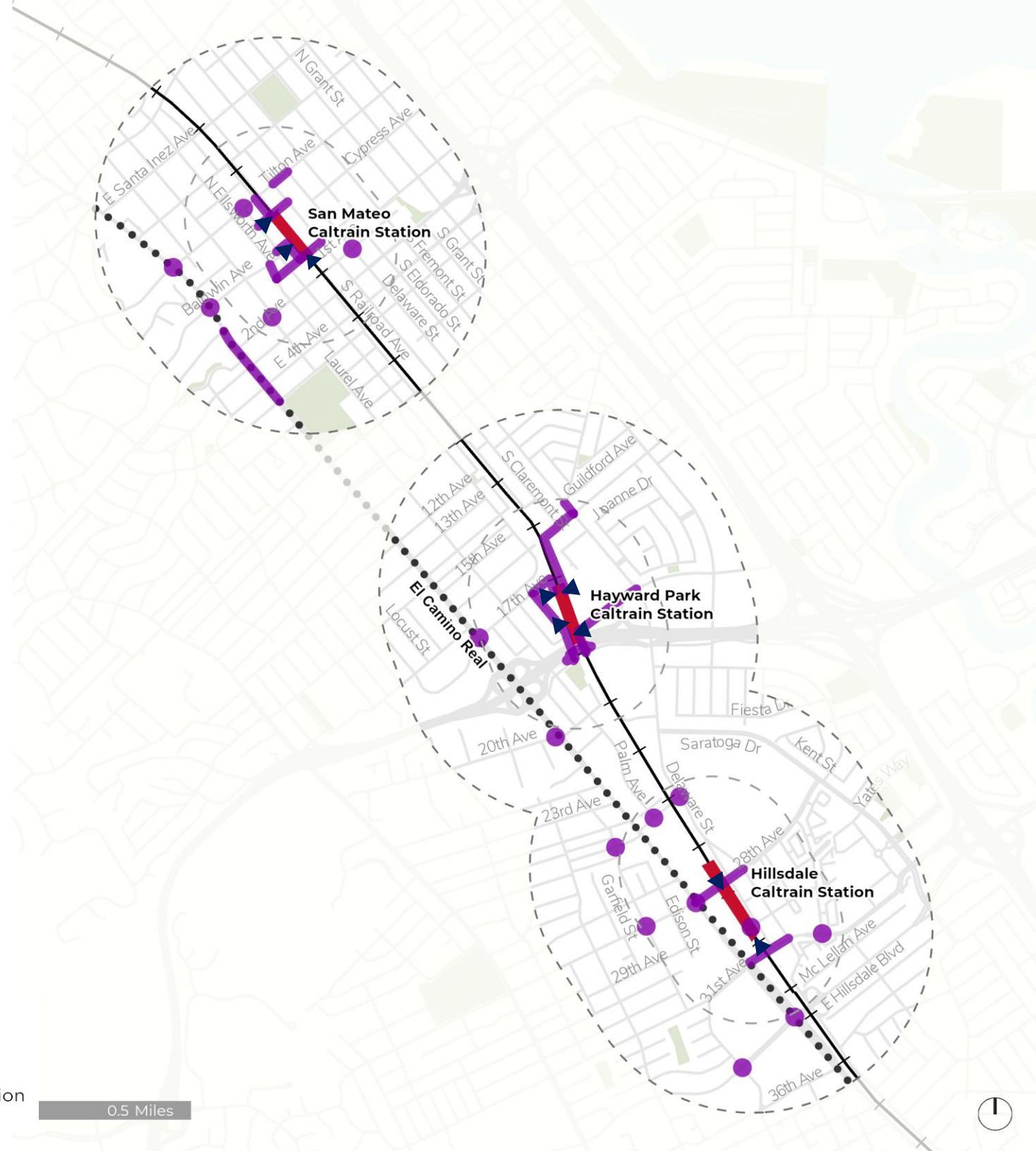
For the Hayward Park station area, the prioritization process yielded two priority intersections and nine priority corridors around the Caltrain station.

In the Hillsdale Caltrain station area, eight priority intersections and two priority corridors were identified.

FINAL PRIORITY LOCATIONS

These priority locations highlight where the highest impact for access to transit are located. Most of the priority locations are within a ¼ mile radius of the three Caltrain stations or are along El Camino Real.

As described in Chapter 5, countermeasures should be evaluated for other corridors and intersections that are lower priorities on the previous pages during future roadway improvements or planning efforts, such as the Local Road Safety Plan or Complete Streets Plan.



PUBLIC WORKS
City of San Mateo

COUNTERMEASURE TOOLBOX

This toolbox presents typical pedestrian safety countermeasures that relate to engineering, education, enforcement, emergency services, and emerging technology. These countermeasures, supported by the descriptions of benefits and applications provided on the following pages and in Appendix D, can be used citywide for future projects in the City of San Mateo and are not limited to the priority project locations. The City should consult this toolbox of improvements as redevelopments occur or as other streetscape projects move forward. Each countermeasure is paired with an icon that appears in subsequent sections of this plan to illustrate location-specific improvements for the priority project locations.

COUNTERMEASURE TOOLBOX

Improved Crossings

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.

Straighten Crosswalk: Straightening crosswalks improves sight lines, making pedestrians more visible to oncoming drivers, and may shorten the crossing distance, reducing the length of time required for pedestrians to cross an intersection.

Install/Upgrade Pedestrian Crossing at Uncontrolled Locations: A pedestrian crossing provides a formalized location for people to cross the street, reducing the risk of people crossing outside crosswalks where drivers are not expecting them. Crosswalk striping, signs, and other enhanced safety features alert drivers that there may be a pedestrian crossing.

Yield to Pedestrians Sign: "Yield to Pedestrians" signs alert drivers about the presence of pedestrians. These signs can be added to traffic signals when the right or left turns are permissive (i.e., turning vehicles have a green light at the same time as pedestrians have a "walk" sign) to increase drivers yielding to pedestrians.

Protected Intersection: Protected intersections use corner islands, curb extensions, and colored paint to delineate bicycle and pedestrian movements across an intersection. Slower driving speeds and shorter crossing distance increase safety for pedestrians. This treatment also separates bicycles from pedestrians through the intersection.

Wider Sidewalks: Widening sidewalks provides a more comfortable space for pedestrians, particularly in locations with many pedestrians. It also provides space to accommodate street furniture like benches or bus shelters.

Raised Crosswalk: A raised crosswalk is a pedestrian crosswalk that is typically elevated 3-6 inches above the road or at sidewalk level. A raised crosswalk improves safety by increasing crosswalk and pedestrian visibility and slowing down motorists.

Add Sidewalks: Adding sidewalks provides a separated and continuous facility for people to walk along the roadway. Wide sidewalks improve safety and comfort by minimizing pedestrian exposure to vehicle travel.

Pedestrian Scramble: A form of pedestrian "WALK" phase at a signalized intersection in which all vehicular traffic is required to stop, allowing pedestrians to safely cross through the intersection in any direction, including diagonally.

Daylighting: Removes parking at intersection approaches to provide increased visibility of motorists and pedestrians entering the intersection.

Raised Intersection: Elevates the intersection to bring vehicles to the sidewalk level. Serves as a traffic calming measure by extending the sidewalk context across the road.

COUNTERMEASURE TOOLBOX

Improved Crossings

Rectangular Rapid Flashing Beacon (RRFB): An RRFB is a pedestrian-activated flashing light with additional signage to alert motorists of a pedestrian crossing. An RRFB improves safety by increasing the visibility of marked crosswalks and provides motorists a cue to slow down and yield to pedestrians.

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.

High-Visibility Crosswalk: A striped pattern with ladder markings made of high-visibility material, such as thermoplastic tape, which improves safety by increasing the visibility of marked crosswalks.

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

Advance Stop Bars: 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.

Pedestrian Countdown Signals: Displays "countdown" of seconds remaining for the pedestrian to cross the street safely.

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

Traffic Calming

Speed Bumps and 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.

Intersection Reconstruction and Tightening: Irregular intersections can be overbuilt and confusing, presenting safety hazards to all users. "Squaring up" an intersection as close to 90 degrees as possible involves intersection reconstruction to provide better visibility for all road users, also reducing high speed turns and reducing pedestrian crossing length.

Lane Narrowing: Lane narrowing reduces lane widths to encourage motorists to travel at slower speeds. Lane narrowing improves safety by lowering the risk of collision among bicyclists, pedestrians, and other motorists.

Road Diet: A road diet reduces roadway space dedicated to vehicle travel lanes to create room for bicycle facilities, wider sidewalks, or center turn lanes. A road diet improves safety by reducing vehicle speeds and creating designated space for all road users.

Lane Removal: A lane removal is the reduction in the number of lanes in one direction of travel. It increases safety by reducing the crossing distance for pedestrians.

COUNTERMEASURE TOOLBOX

Traffic Controls

All-Way Stop Control: An all-way stop-controlled intersection requires all vehicles to stop before crossing the intersection. An all-way stop controlled intersection improves safety by removing the need for motorists, bicyclists, and pedestrians on a side-street stop-controlled intersection to cross free-flowing lanes of traffic, which reduces the risk of collision.

Roundabout: The geometry of a roundabout forces drivers to reduce speeds as they proceed through the intersection, reducing the severity of crashes when they do occur. Pedestrians cross one direction of traffic at a time at roundabouts, thus reducing the potential for vehicle/pedestrian conflicts.

Flashing Yellow Turn Phase: Flashing yellow turn arrow alerts drivers to proceed with caution and decide if there is a sufficient gap in oncoming traffic to safely make a turn.

Prohibit Left Turn: Prohibitions of left turns at locations where a turning vehicle may conflict with pedestrians in the crosswalk or where opposing traffic volume is high. Reduces pedestrian interaction with vehicles when crossing.

Protected Left Turns: Providing protected left-turn phases for signalized intersections significantly improve the safety for left-turn maneuvers by removing the need for the drivers to navigate through gaps in oncoming/opposing through vehicles.

Protected Right Turns: Can help prevent crashes between vehicles turning right on red from one street and through vehicles on the cross street, and crashes involving pedestrians.

Prohibit Right-Turn-on-Red: Can help prevent crashes between vehicles turning right on red from one street and through vehicles on the cross street, and crashes involving pedestrians.

Wayfinding: A network of signs that highlight nearby pedestrian and bicycle facilities. Can help to reduce crossings at locations with poor sight distance or limited crossing enhancements.

Left Turn Pockets: Adding left turn pockets creates a dedicated space for vehicles making left turns to queue. Left turn pockets also allow for protected left turns.

Convert Two-Way Street to One-Way Only: One-way streets have fewer potential conflicts between pedestrians and vehicles than two-way streets.

Leading Pedestrian Intervals: A signal timing strategy that allows people to start crossing the street while vehicles still have a red light to give pedestrians a head start. This strategy can work in tandem with extending the crossing time each cycle or via a pushbutton request.

COUNTERMEASURE TOOLBOX

Bikeways

Class IV Bikeway: Separated bikeways improve safety by reducing conflicts between bicycles and vehicles on the road and by creating a road-narrowing effect with buffers or vertical barriers, which may reduce vehicle speeds.

Class I Shared-Use Path: Class I shared-use paths are facilities with exclusive right-of-way for bicyclists and pedestrians, away from the roadway. They improve safety by creating a space that is physically separated from vehicles on the road.

Bike Boulevard: Streets with low motorized traffic volumes and speeds, designated and designed to give bicycle travel priority.

Improved Lighting

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

Roadway Lighting: Adding lighting at intersections improves safety by increasing visibility of all road users. This countermeasure is most effective at reducing or preventing collisions at intersections at night.

Other

Americans with Disability Act (ADA) Compliance: Ensure that the walkable space on sidewalks and curb ramps meet ADA requirements.

Back-In Angled Parking: Back-in angled parking requires motorists to back into an angled on-street parking spot and to drive forward when exiting a parking spot. Back-in angled parking improves safety by increasing visibility of passing vehicles and bicycles while exiting a spot, particularly if large adjacent vehicles obstruct sight, and allows trunk unloading/loading to happen on the curb instead of in the street.

Parking Restrictions: Parking restrictions limit where vehicles are permitted to park on-street. Parking restrictions improve safety by improving visibility of pedestrians at the curb.

Public Art: Enhancements such as murals, fountains, or other art installation to create a sense of place and define a space or location.

Landscaping: Trees, planters, or other planting to provide an enhanced barrier between pedestrians and vehicles. Landscaping also provides shade for a more comfortable walking experience.

Station Entrance: Create a new station entrance to provide more direct access to surrounding neighborhoods.

COUNTERMEASURE TOOLBOX

Standard Intersection Improvement Recommendations

These standard intersection improvements should be considered for all intersections throughout the City where there is a desire to prioritize a pedestrian-friendly environment. Using the priority metrics as a guide, the City can identify locations citywide where there is a high need for pedestrian improvements. For purposes of the priority project recommendation sheets on the following pages, these icons represent the inclusion of the pedestrian-friendly intersection improvements listed below. Some intersections may only need some of these improvements. Field verification should be conducted prior to implementation.

Stop-Controlled Intersection Standard Improvements

- Directional Curb Ramps
- High-Visibility Crosswalk
- Curb Extensions/Bulb-Outs
- Median Refuge Island
- Advance Stop Bars

Signalized Intersection Standard Improvements

- Directional Curb Ramps
- High-Visibility Crosswalk
- Leading Pedestrian Intervals
- Curb Extensions/Bulb-Outs
- Median Refuge Island
- Advance Stop Bars
- Protected Left Turns
- Pedestrian Countdown Signal
- Accessible pedestrian signals

Project Coordination

These icons indicate whether the recommended countermeasures should be implemented in coordination with other agencies, other City plans, or new developments.

Caltrans

SamTrans

Caltrain

Caltrain Station Entrance

California Public Utilities Commission

San Mateo Plans & Projects

New Development

- *2012 City of San Mateo Pedestrian Master Plan*
- *City of San Mateo Complete Streets Plan (in progress)*
- *Local Roadway Safety Plan (in progress)*
- *Sustainable Streets Plan (for El Camino)*
- *28th Avenue Gap Closure Study*
- *B Street Pedestrian Mall*


Caltrain
Accessible
Route
19

PUBLIC WORKS
City of San Mateo

PRIORITY PROJECT RECOMMENDATIONS

This next section details the priority project recommendations. Each priority area is presented on a cutsheet that includes a summary of existing issues, a summary of project recommendations, location-specific project recommendations, the top key priority metrics for each location, and related upcoming projects to coordinate with.

The **summary of existing issues** for each priority area includes a description of the current conditions based on the needs assessment presented in Chapter 3. The **summary of project recommendations** describes the key takeaways and overarching themes of the project recommendations.

The **location-specific project recommendations** are shown as icons depicting the type of improvement, along with a short description of how the improvement may be best applied to achieve the goals of the plan. Refer to the **Countermeasure Toolbox** on pages 56-61 for a description of each icon. More details on the location-specific project recommendations can be found in Appendix E.

The **key priority metrics** on each cutsheet highlight the top metrics that identified these specific project locations as priority locations.

Project Coordination / Overlap flags other projects or plans with similar goals to ensure coordination and consistency when implementing projects.

There are numerous competing visions for the future of El Camino Real as a Caltrans facility, major SamTrans corridor, and an important consideration in the Sustainable Streets Plan. Thus, this plan only touches on a few intersection-specific and corridor-level suggestions. Any future redesign of El Camino Real will require coordination with Caltrans and should ensure consistency across local and regional plans.


SAN MATEO
SAN MATEO

PUBLIC WORKS
City of San Mateo

PRIORITY PROJECT RECOMMENDATIONS - DOWNTOWN

DOWNTOWN - EL CAMINO REAL

ISSUES

Primary challenges along El Camino Real include uncomfortable crossings with a high number of pedestrian collisions and narrow, obstructed sidewalks. Pedestrian improvements along El Camino Real are supported by a history of completed and ongoing planning efforts, including the 2015 Sustainable Streets Plan, the 2012 San Mateo Pedestrian Master Plan, the 2030 and 2040 General Plan, and the SamTrans Bus Speed and Reliability Study.

SUMMARY

A corridor study is recommended in coordination with Caltrans to address the need for more substantial **long-term improvements** such as wider sidewalks, a holistic review of pedestrian-friendly cycle lengths, and the potential for a road diet to address high vehicle speeds and volumes on the corridor.

In the near term, recommended intersection improvements focus on minor modifications to signal timing – such as adequate pedestrian clearances and automatic pedestrian recall for side-street crossings – and minimizing vehicle conflicts with pedestrians at signalized intersections via turn restrictions, protected phasing, leading pedestrian intervals, or pedestrian yield signage.

To address long crossing distances, curb extensions are also recommended where on-street parking can be "shadowed " as well as median-island pedestrian refuges where feasible. Wayfinding along El Camino Real to the Caltrain stations is also recommended.

All improvements on El Camino Real will require coordination with Caltrans. The projects in this study area are all consistent with Caltrans' guidance for implementing complete streets principles on the state highway system and AB 2264 (2022) that requires leading pedestrian intervals on state highway facilities.

PROJECT COORDINATION / OVERLAP

SamTrans El Camino Real Bus Speed & Reliability Study

RECOMMENDATIONS
DOWNTOWN - EL CAMINO REAL

El Camino Real

Tilton Ave

1st Ave

Baldwin Ave

B St

2nd Ave

San Mateo Dr

Crystal Springs Rd

3rd Ave

4th Ave

5th Ave

Prohibit left turns from El Camino Real at all times of the day. Provide **curb extensions** along Tilton Ave and the west side of El Camino Real to reduce crossing distances and provide space for a bus stop bulbout.

samTrans

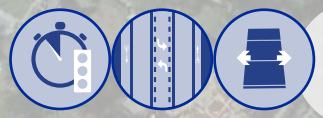
Prohibit left turns from El Camino Real at all times of the day. Provide **curb extensions** on the west leg to **tighten and realign the intersection** to better separate De Sabla Road from El Camino Real. **Protect left turns** from side streets.

Provide **curb extensions** along the west side of El Camino Real to reduce crossing distances and provide space for a bus stop bulbout. Install a left turn **yield to pedestrian sign** for westbound turning vehicles or **consider a flashing yellow arrow**.

samTrans

Provide **curb extensions** along the west side of El Camino Real to **realign the crosswalk** across Crystal Springs Road and tighten the intersection. Move the **stop bar** forward on the north leg to improve sight lines for southbound vehicles turning right from El Camino Real onto Crystal Springs Road.

Protect left-turns to reduce conflicts with crossing pedestrians from side streets.



Long Term Improvements on El Camino Real

Consider **shorter cycle lengths** and **road diet** south of Crystal Springs Road. **Widen sidewalks** to minimum standards.

Caltrans

N

DOWNTOWN GATEWAY

ISSUES

The Downtown Gateway location provides direct pedestrian access to the southern end and west side of the San Mateo Caltrain station via 1st Avenue and Transit Center Way. Narrow sidewalks, at-grade Caltrain crossing, and driveway crossings reduce pedestrian comfort and increase exposure to vehicles. Two key intersections along 2nd Avenue, at San Mateo Drive and Delaware Street, also create challenges with vehicle exposure and long crossing distances.

SUMMARY

As a gateway to the Caltrain Station, Transit Center Way presents opportunities for placemaking and/or public art, which could be implemented as part of the recommended raised intersection and an eastbound lane closure.

To provide a comfortable and accessible pedestrian route to the Caltrain Station, sidewalk widening is recommended along 1st Avenue and Transit Center Way. Intersection improvements are recommended along the route as well as on 2nd Avenue to improve accessibility and visibility, which include directional ADA curb ramps, advanced stop bars, and high visibility crosswalks. Curb extensions, where feasible, would help pedestrian visibility near driveways and reduce crossing distances.

To minimize vehicle/pedestrian conflicts at crossings in the focus area, pedestrian-friendly signal timing is recommended at all signals and RRFBs are recommended at uncontrolled crossings where vehicle speeds and volumes warrant it.

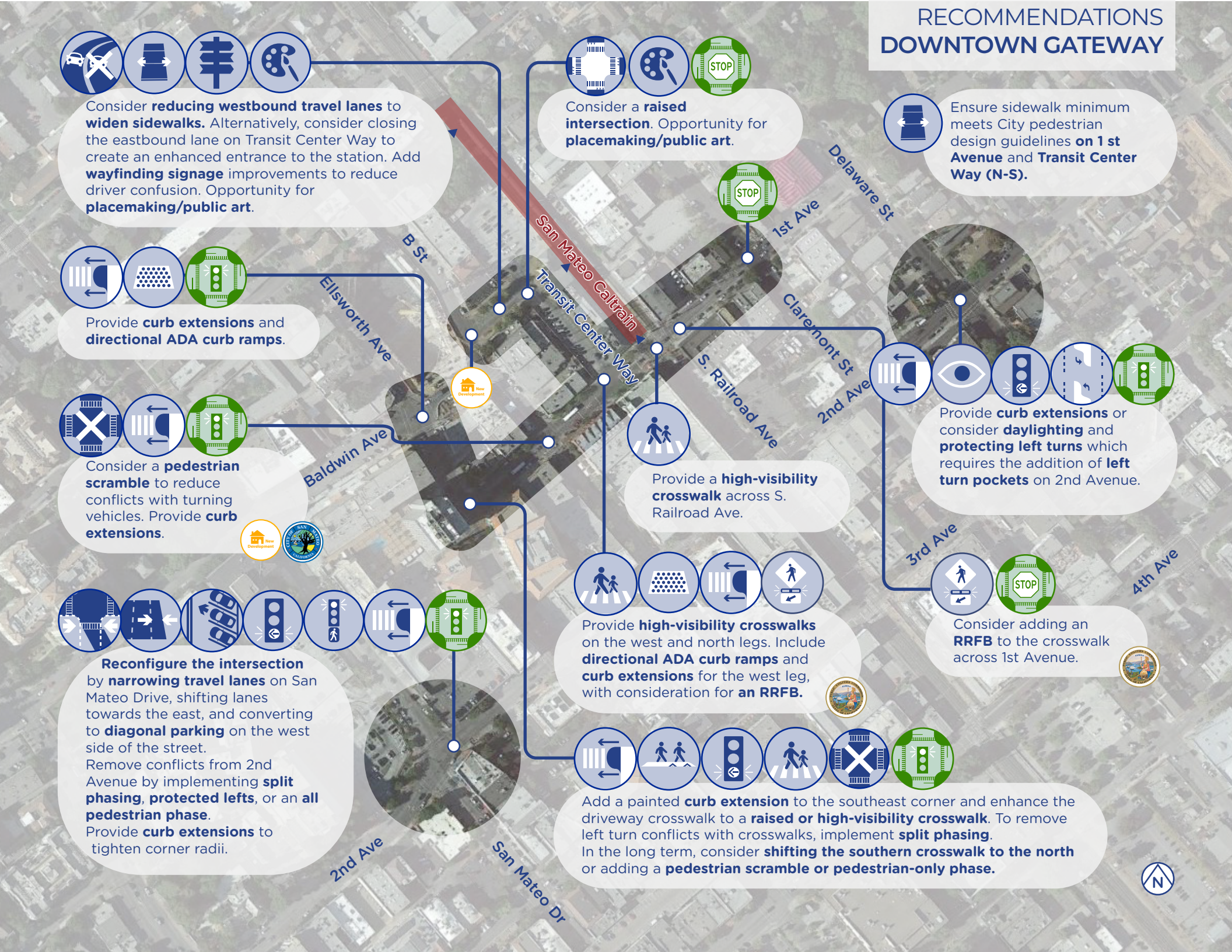
Geometric and parking modifications at 2nd Avenue and San Mateo Drive would reduce the footprint of the intersection and form an offset intersection to organize and separate vehicle and pedestrian movements.

PROJECT COORDINATION / OVERLAP

B Street Pedestrian Mall

303 Baldwin Development Project

RECOMMENDATIONS
DOWNTOWN GATEWAY



DOWNTOWN - NORTH STATION ACCESS

ISSUES

The North Station location provides direct pedestrian access to the northern end of the San Mateo Caltrain station via North Railroad Avenue west of the train tracks. To access the entrance, pedestrians must either walk through the Mi Rancho Supermarket parking lot or walk down the back alley of North Railroad Avenue, neither of which provide access to the northbound platform. Pedestrians coming from the north must cross Tilton Avenue, which presents visibility issues due to roadway grade changes, parked cars, and poor lighting, or walk to 1st Avenue and cross the tracks in order to access the northbound platform.

There is no direct access to the Caltrain station from the northeast side, where the only neighborhoods in San Mateo identified as Equity Priority Communities in MTC's Plan Bay Area 2050 are located.

SUMMARY

These projects focus on improving pedestrian access to the Caltrain station from the north, most critically with a new station entrance from Railroad Avenue/Cypress Avenue that connects both platforms and allows travel to the existing southbound ramp from Mi Rancho Supermarket's parking lot and North Railroad Avenue west of the tracks. This will require improving the lighting and wayfinding on both sides of the tracks, and providing more space for pedestrians by widening sidewalks, restricting parking, implementing shared street concepts, and/or converting Cypress Avenue from two-way to one-way vehicle travel.

Enhancements are recommended at crossings of Tilton Avenue to improve pedestrian comfort for those traveling to and from the north. These include standard visibility improvements such as high visibility markings, advanced stop bars where applicable, improved lighting, and curb extensions where feasible.

Enhanced pedestrian crossings are recommended on Tilton Avenue crossings at Claremont to provide consistent crossing opportunities between Delaware and the Caltrain corridor. Options include an all-way stop, if warranted, a raised crossing or traffic circle.

RECOMMENDATIONS
NORTH STATION ACCESS

Consider implementing an **all-way stop control** for traffic calming along Tilton Avenue if warranted. Otherwise, consider a **raised crosswalk** or **traffic circle**. Provide **pedestrian-scale lighting** and **curb extensions** on all corners.

Provide **pedestrian-scale lighting**.

Make intersections **all-way stop-controlled,** and add **crosswalks** across Tilton Avenue. Provide **pedestrian-scale lighting** under the overpass. Provide pesdestrian **wayfinding** signs to Caltrain station.

Consider converting the street into a shared street/alley with **traffic calming** to ensure a clear path for pedestrians and add **signs** to inform users on how to best use the street. Provide **pedestrian-scale lighting** and consider aesthetic improvements to make it more pedestrian friendly (urban greening, public art, etc.).

Provide a **directional curb ramp** at the southwest corner. Provide a **high-visibility crosswalk** on the southern leg and a **curb extension** on the southwest corner into B Street.

Consider **converting Cypress Avenue to a one-way** westbound street to provide space for vehicles to park on the street and off the sidewalks to provide ADA path of travel on both sidewalks. Provide **pedestrian-scale lighting** and **wayfinding**.

Restrict parking. Provide **pedestrian-scale lighting** and **wayfinding** and consider adding **public art or urban greening** to make this access more comfortable for pedestrians.

Provide a **new entrance** to the Caltrain station from Cypress Avenue/South Railroad Avenue. **Widen sidewalks** to meet ADA standards or consider converting South Railroad Avenue to a shared street/alley with **traffic calming** to limit vehicular travel and ensure a clear path for pedestrians. Provide a **high-visibility crosswalk** on the southern leg of the intersection, with **ADA curb ramp** to connect to the station platform.

Monte Diablo Ave
N. Railroad Ave
N. Railroad Ave
Claremont St
Delaware St
Tilton Ave
Ellsworth Ave
Catalpa St
Cypress Ave
B St
Railroad Ave
San Mateo Caltrain


Caltrain
Hayward Park
Station
P

PUBLIC WORKS
City of San Mateo

PRIORITY PROJECT RECOMMENDATIONS - HAYWARD PARK

HAYWARD PARK - EL CAMINO REAL

ISSUES

El Camino Real and SR-92 create barriers for people walking to transit due to the limited pedestrian crossing locations and sidewalks that are narrower than City standards, and thus provide limited buffer between high-speed vehicles and pedestrians. 17th Avenue-Bovet Road and 20th Avenue are the closest locations to cross El Camino Real for people walking to the Hayward Park Caltrain Station. Both locations have large corner radii and long crossing distances, which allows turning vehicles to do so at high speeds and creates uncomfortable conditions for people walking to Caltrain or to bus stops on El Camino Real.

SUMMARY

Enhancing the safety and comfort for people crossing El Camino Real at 17th Avenue-Bovet Road and 20th Avenue would improve accessibility from destinations such as Borel Square Shopping Center, San Mateo City Hall, and nearby neighborhoods to bus stops and Caltrain. **Near-term improvements** include traffic signal improvements, curb extensions, and realigning the crosswalks to slow vehicle turning speeds and reduce pedestrian exposure to conflicting vehicles. Curb extensions and crosswalk adjustments could be completed using quick-build materials to further expedite these improvements. Unique features include bus stop enhancements and wider sidewalks at El Camino Real and 17th and 20th Avenues in coordination with SamTrans per the SamTrans El Camino Real Bus Speed & Reliability Study. Wayfinding along El Camino Real to the Caltrain stations is also recommended.

A corridor study is recommended in coordination with Caltrans to address the need for more substantial **long-term improvements** such as wider sidewalks, a holistic review of pedestrian-friendly cycle lengths, and the potential for a road diet to address high vehicle speeds and volumes on the corridor.

All improvements on El Camino Real will require coordination Caltrans. The projects in this study area are all consistent with Caltrans' guidance for implementing complete streets principles on the state highway system.

PROJECT COORDINATION / OVERLAP

SamTrans El Camino Real Bus Speed & Reliability Study

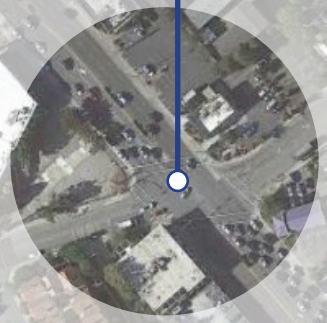
RECOMMENDATIONS
HAYWARD PARK - EL CAMINO

17th Ave
Palm Ave
Gum Ave
Ivy St
Caltrain
Hayward Park
19th Ave
Bovet Rd
SR-92
El Camino Real
20th Ave

Provide **curb extensions** on El Camino Real to shorten pedestrian crossings and provide space for a bus stop. Coordinate with Caltrans to consider a No Right Turn on Red from Northbound El Camino Real to 17th Avenue.

Provide **curb extensions** at the southwest corner on Bovet Road to tighten the corner radius and slow turning vehicles. Consider **narrowing existing travel lanes** on Bovet Road to shorten pedestrian crossings. Consider **protecting eastbound right-turn** movements and implementing **no right turn on red** to remove the pedestrian-vehicle conflict. Provide **protected left turns** from Bovet Road and 17th Avenue. Provide **wayfinding** to Caltrain station.

Straighten crosswalks to address the skewed intersection/pedestrian crossings by providing **curb extensions** on the east side of El Camino Real and **narrowing travel lane widths**. **Widen sidewalks** to minimum widths.



Long Term Improvements on El Camino Real
Consider **shorter cycle lengths** and **road diet**. **Widen sidewalks** to minimum standards.

HAYWARD PARK WEST

ISSUES

The streets approaching Caltrain from the west have narrow sidewalks, lack safe and accessible crossing infrastructure, and lack wayfinding or lighting that can create a transit-oriented environment. The Caltrain tracks create a barrier to east-west travel surrounding the Hayward Park Caltrain Station, with limited places to cross that require circuitous pathways for people walking.

SUMMARY

The streets abutting the Hayward Park Caltrain Station should be upgraded to serve as a gateway to this major transit hub in addition to facilitating east-west travel for people walking between neighboring destinations. **Near-term improvements** include new ADA ramps, enhanced crosswalks, curb extensions, wider sidewalks, lighting, wayfinding, and place making. Curb extensions and crosswalks could be completed using quick-build materials to further expedite these improvements.

Improvements **on Caltrain's right-of-way** include a new Class 1 pathway and entrance to the southern end of the Caltrain station. This would shorten crossing distances across the tracks and provide a more direct path to people walking to the station from south of SR-92 to the northbound trains.

Long-term, as redevelopment occurs on the west side of Hayward Park, all sidewalks should be upgraded to meet City of San Mateo standards.

PROJECT COORDINATION / OVERLAP

Bicycle Master Plan 2020

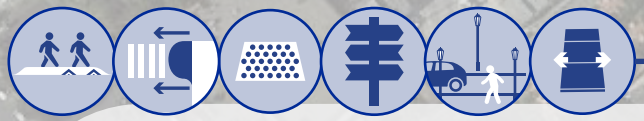
RECOMMENDATIONS
HAYWARD PARK WEST

Provide **high-visibility crosswalks** and **directional ADA curb ramps** across Leslie Street and west side of 17th Avenue. Provide **curb extensions** on north and south sides of 17th Avenue to enhance the new crosswalk and discourage parking/stopping in the intersection.

Improve **wayfinding** between the station and major nearby destinations. Provide **pedestrian-scale lighting** along 17th Avenue. **Widen sidewalks** to minimum standards. **Formalize the existing bicycle/pedestrian path** from 17th Avenue to the station platform. Consider implementing **bicycle boulevard improvements** along 17th Avenue.

Consider **reconfiguring the segment and intersections** of Gum Street with 17th and South to improve pedestrian safety at 17th and South.

Provide a **crosswalk** and **directional ADA curb ramps** on Gum Street.



Provide a **raised midblock crosswalk** at the station entrance on Leslie Street. Include **curb extensions** and **directional ADA curb ramps**. Improve **wayfinding** between the station entrance and major nearby destinations. Provide **pedestrian scale lighting** along Leslie Street and under the State Route 92 overpass. **Widen sidewalks** to minimum standards and consolidate driveways north of the station entrance as development on the east side of Leslie Street occurs.

Consider a **sidewalk** along the east side of Leslie Street. Create a **new pedestrian station entrance** to the station platform at the southern end of the station to reduce walking distances between the east and west sides of Hayward Park.

Provide a **high visibility crosswalk**. Provide **curb extensions** to square up the intersection. Continue **pedestrian-scale lighting** from Leslie along 19th Avenue to Palm Avenue. Consider **widening sidewalks** to minimum standards and implementing **bicycle boulevard improvements** along Leslie Street and 19th Avenue.

Provide **curb ramps** at overpass ramp entrances. Provide **pedestrian-scale lighting** leading to and on the overpass. Improve **wayfinding** to/from Caltrain Station.

South Blvd
17th Ave
Leslie St
Hayward Park Caltrain
Concar Dr
Gum St
El Camino Real
Palm Ave
19th Ave
N

HAYWARD PARK – SUNNYBRAE

ISSUES

This focus area provides direct access to the Hayward Park Caltrain Station via 16th Avenue and a pathway that runs along the east side of the Caltrain corridor, ending at the platform in a parking lot to the south. The parking lot does not currently provide a dedicated, accessible pedestrian route to the platform.

SUMMARY

To provide an accessible, clear path of travel from 16th Avenue to the station, the existing path should be formalized through the parking lot with ADA ramps and clear wayfinding at the station and at 16th Avenue. Pedestrian-scaled lighting and wider sidewalks along 16th Avenue and Delaware Street would provide a more comfortable connection to the pathway from the northeast.

Pedestrian crossing safety and route directness could be improved along 16th Avenue by providing high-visibility crosswalks on all legs at intersections, improving visibility with parking removal and/or curb extensions, advanced stop bars, and improved lighting. The multi-lane stop-controlled intersection at 16th Avenue / Delaware intersection should be evaluated for a signal or a roundabout to simplify and organize vehicle movements.

Vehicle speeds at skewed intersections along Sunnybrae Boulevard, including the intersection with Delaware Street, should be addressed as part of the existing Bike Boulevard project along this corridor. Intersections should be squared off to provide tighter turns, shorter crossing distances, and more predictable maneuvers at these locations.

PROJECT COORDINATION / OVERLAP

Hayward Park Station

RECOMMENDATIONS
SUNNYBRAE

Claremont St

Sunnybrae Blvd

16th Ave

S Railroad Ave

15th Ave

Delaware St

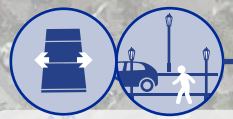
S B Street

Hayward Park

Caltrain

Provide **pedestrian-scale lighting** on the west side of Delaware Street.

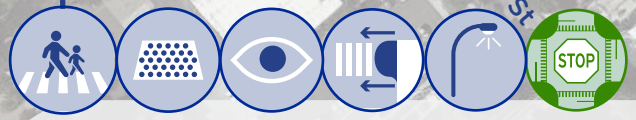
As a part of the existing bicycle boulevard project on Sunnybrae, **address the geometry of the intersection** with Guildford Avenue. Upgrade existing crosswalk to **high-visibility**. Provide **advance stop bars**.



Widen sidewalks to minimum standards by narrowing travel lanes or using more of City ROW. Provide **pedestrian-scale lighting** along 16th Avenue between Delaware Street and South Railroad Avenue.

Evaluate the need for a signal or consider a single lane **roundabout** at this intersection. Provide **high-visibility crosswalks** at all legs. Provide **curb extensions** on 16th Avenue. Consider **narrowing travel lanes** at the intersection on the west leg of 16th Avenue to shorten the crosswalk.

Work with adjacent land owners to **formalize the bicycle/pedestrian path** from 16th Avenue to the Station entrance through the parking lot and provide an **ADA curb ramp** to access the path from the street. Improve **wayfinding** between the station entrance and major nearby destinations. Provide an ADA path of travel through the Caltrain parking lot to the station platforms.



Provide **high visibility crosswalks** and **curb ramps** on all legs, including a new crosswalk on the east leg to minimize how often pedestrians have to cross the street. Provide **daylighting** to improve visibility. Consider **curb extensions** through the entire intersection to discourage parking/stopping. Provide **intersection roadway lighting** for north and west crosswalks.

HAYWARD PARK EAST

ISSUES

Concar Drive and Pacific Boulevard provide direct access to the Hayward Park Caltrain Station. There is no ADA-accessible connection between the west and east side of the tracks via Gum Street and Concar Drive, making it difficult for wheelchairs, strollers, and/or those with bicycles to navigate. Access from the street does not align with the track crossing, creating a circuitous path of travel for Caltrain riders trying to access one side of the tracks from the other.

SUMMARY

A wider sidewalk or a Class I pathway connection on Pacific Boulevard, with intersection improvements at 19th Avenue and Pacific Boulevard, would help improve access to the Caltrain station from the southeast.

This plan recommends protected corner treatments at the intersection of Concar Drive at Delaware Street, which will help to organize bicycle movements and provide accessible crossings that are shorter in length. Additional pedestrian-friendly signal timing should be considered here, such as leading pedestrian intervals, automatic recall, and restricted right turns on red. These improvements should be coordinated with the Concar Passage Development Project.

In the long term, a feasibility assessment should be conducted to reduce the size of the intersections along the Concar Drive corridor and reduce the number of lanes on Concar Drive (east of Station Park Circle) and the off-ramp at Station Park Circle. This would allow the off-ramp to be squared off into Concar Drive, simplifying the intersection and reducing vehicle exposure for pedestrians. Crossings should then be provided on all legs to improve access between the southern developments and the Caltrain station.

PROJECT COORDINATION / OVERLAP

Hayward Park Station Development Project

Concar Passage Development Project

RECOMMENDATIONS
HAYWARD PARK EAST

Ensure Hayward Park station development project addresses existing **ADA** and pedestrian circulation issues.

Implement Concar Passage plans for **protected intersection islands** on northeast and southeast corners to accommodate buffered bike lane turning movements, with **ADA curb ramps**.

Consider the following long-term improvements. Assess feasibility of **reducing the number of lanes** at this intersection, including the off-ramp, in order to **"T" the off ramp** into Concar Drive and help reduce pedestrians' exposure to vehicles by reducing the size of the intersection and the adjacent intersection at Delaware Street. **Crossings** should then be provided on all legs to improve access between the southern developments and the Caltrain station.

Provide **curb extensions, high-visibility crosswalks**, 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.

Widen **the sidewalk** on one side of the street to meet minimum widths.


LOOK BOTH WAYS

PUBLIC WORKS
City of San Mateo

PRIORITY PROJECT RECOMMENDATIONS - HILLSDALE

HILLSDALE – 25TH AVENUE

ISSUES

The 25th Avenue corridor provides ancillary access to the Hillsdale Caltrain Station via Delaware Street and through the station parking lot east of the tracks. 25th Avenue also provides direct access to the San Mateo County Event Center. Community concerns along 25th Avenue include the lack of sidewalk on Delaware Street, poor bicycle and pedestrian access near the event center, and lack of comfortable crossings on the corridor near the commercial attractions.

SUMMARY

Pedestrian access to the event center and Caltrain station could be significantly improved with a continuous sidewalk along the west side of Delaware Street, connecting to the southwest corner of the 25th Avenue / Delaware Street intersection. A protected intersection at this location, in coordination with the South Delaware ATP project, would help to protect and organize bicycle movements in addition to providing pedestrian safety benefits by reducing crossing distances. In lieu of a protected intersection, other options to improve pedestrian safety include separate pedestrian phasing with curb extensions and pedestrian-friendly signal improvements such as automatic recall, advanced limit lines, and right turn on red restrictions.

Access to commercial destinations along 25th Avenue would be improved with crossing enhancements at Palm Avenue and Flores Street, such as directional curb ramps, curb extensions to shadow parking, pedestrian-scaled lighting, and consideration of an RRFB at Palm Avenue.

Corridor-level improvements would also help provide traffic calming along the corridor, reduce crossing distances, and improve pedestrian comfort. Examples include widened sidewalks, landscaping, and/or a road diet.

PROJECT COORDINATION / OVERLAP

South Delaware ATP Project

Bicycle Master Plan 2020

RECOMMENDATIONS
25TH AVENUE

Build a sidewalk on the westside of Delaware Street. Consider a **protected intersection** to protect and organize movements between Class IV on Delaware Street and Class II on 25th Avenue and provide pedestrian safety benefits.

Consider a **road diet** on East 25th Avenue.

Consider **prohibiting southbound left-turns** and adding a **high-visibility crossswalk** across 25th Ave upon review of intersection volumes. Provide **curb extensions** through the intersection to discourage parking/stopping. Provide **pedestrian-scale lighting**.

Provide **curb extensions**, **directional ADA curb ramps** and **pedestrian-scale lighting**. **Widen sidewalks** to minimum standards and provide **landscaping** by converting parking to **parallel parking**. Consider **traffic calming** on 25th Avenue in coordination with the proposed bicycle route and **Class IV bikeway**.

Palm Ave

El Camino Real

25th Ave

Delaware St

Flores St

N

HILLSDALE – 28TH AVENUE

ISSUES

The entrance to the Hillsdale Caltrain Station is located midblock along 28th Avenue, between Delaware Street and El Camino Real. With no midblock crossing at the entrance, pedestrians must cross in advance at the intersections on either end of the block; ADA access to the station is provided only on the north side of 28th. Without a separated on-street bike facility, bicycles conflict with pedestrians on the multi-use pathway.

SUMMARY

A road diet along 28th Avenue could help to provide separate space for pedestrians and bicyclists along the corridor and provide a buffer from vehicles, especially where activity is expected to be high near the entrance to the Hillsdale Caltrain Station. As the main entrance to the Caltrain Station, the feasibility of a midblock high-visibility crosswalk should be considered at the Caltrain underpass, with pedestrian-scaled lighting and other enhancements, similar to the Hillsdale Shopping Center crossing on 31st Avenue.

Visibility enhancements at the intersection of 28th Avenue and Flores Street, where pedestrian collisions have occurred, would help to improve pedestrian safety. These include pedestrian-scaled lighting and curb extensions.

Improvements should be considered for better pedestrian access across El Camino Real, as a key connection to the station and the new multi-use trail, including a separate bike crossing, pedestrian refuge islands, curb extensions, and protected phasing for vehicle turns. A suite of pedestrian-friendly signal enhancements should also be considered, including leading pedestrian intervals, high-visibility crosswalks, directional curb ramps, automatic pedestrian recall, and right turn on red restrictions.

PROJECT COORDINATION / OVERLAP

Hillsdale Caltrain Station Bicycle Access Gap Closure Project

RECOMMENDATIONS
28TH AVENUE

El Camino Real

Delaware St

E 28th Ave

27th Ave

Flores St

28th Ave

Hillsdale Caltrain

Add a new **crosswalk** on the northern leg on El Camino Real to continue the Class I shared bicycle and pedestrian path. Include a median to provide a **pedestrian refuge** on El Camino Real. Consider **protecting the westbound right turn and the left turns** to remove pedestrian conflicts. Provide **curb extensions** on the west side of El Camino Real and into 28th Avenue to shorten crossing distances and provide space for a bus stop. Provide **wayfinding** to Caltrain station.

Consider the feasibility of a **road diet** on 28th Avenue.

Evaluate the feasibility of a **midblock crosswalk** to facilitate access across 28th Avenue between the station entrances. Provide **pedestrian-scale lighting** and consider other safety features similar to the crossing under the Hillsdale Mall on 31st Avenue.

Provide **directional ADA curb ramps** on all corners. Provide **pedestrian-scale lighting** on the north side of the intersection and **curb extensions** on 28th Avenue.

HILLSDALE – 31ST AVENUE / BAY MEADOWS

ISSUES

31st Avenue provides direct access to the Hillsdale Caltrain station via an accessible path along the underpass. This route also provides a critical connection between the Hillsdale Shopping Center and the Caltrain station, where pedestrians must cross El Camino Real. While 31st Avenue and 28th Avenue provide pedestrian access to the south and north ends of the station, there is no direct access provided from El Camino Real to the west side of the station. Community feedback indicated safety concerns at the intersection of Franklin Parkway and Baze Road. Per Figure 6-3 of the 2011 Hillsdale Station Area Plan, pedestrian access under the Hillsdale station near future 29th or 30th Avenues connections would be a part of the redevelopment of the parcels between the station and El Camino Real.

SUMMARY

Pedestrian access to the station along 31st Avenue would be improved by upgrading the signals at Delaware St and El Camino Real with pedestrian-friendly signal timing, curb extensions or tighter radii to shorten crossing distances, and median refuge islands where feasible. Wayfinding should also be considered to direct pedestrians to the station entrance along the new elevated walkway. Landscaping or a public art element could also help make this feel like a welcoming, attractive grand entrance to the station.

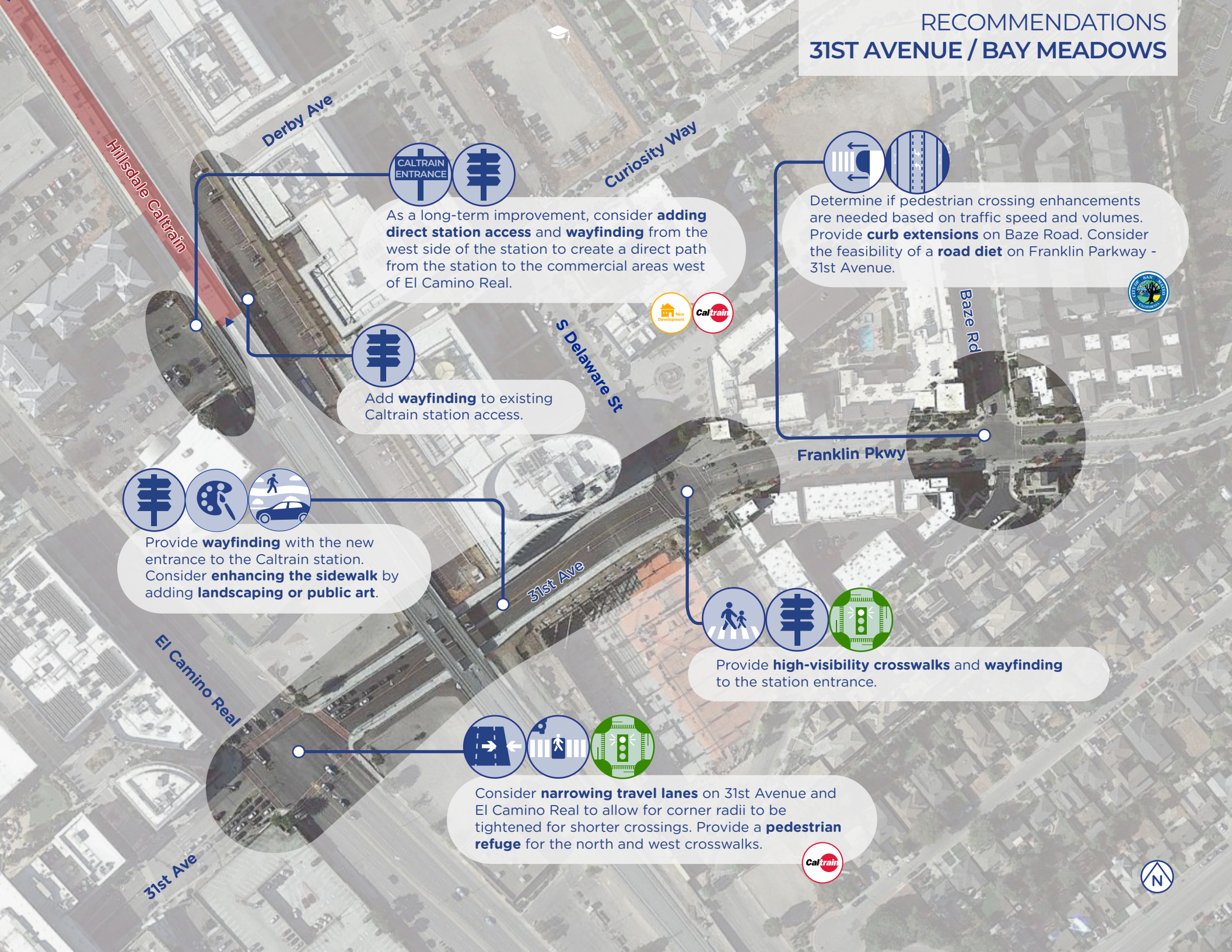
Community feedback indicated that there is a strong desire for direct access to the station along El Camino Real between 28th and 31st Avenues and along the east side, near Derby Avenue, to provide shorter paths of travel for all pedestrians. Direct access from the east side has been addressed with the removal of the temporary fences.

To improve safety and comfort at the intersection of Franklin Parkway and Baze Road, determine if a signal or all-way stop would be warranted to provide more protection for pedestrians. If unwarranted, additional enhancements should be considered for existing uncontrolled crosswalks based on traffic speeds and volumes. A road diet would shorten crossing distances and help to lower speeds and volumes on Franklin Parkway, thus requiring fewer crosswalk enhancements. Curb extensions should be considered to shadow parking on Baze Road.

PROJECT COORDINATION / OVERLAP

Hillsdale Caltrain Station Bicycle Access Gap Closure Project; Bay Meadows Traffic Action Plan; Development consistent with the Hillsdale Station Area Plan

RECOMMENDATIONS
31ST AVENUE / BAY MEADOWS



As a long-term improvement, consider **adding direct station access** and **wayfinding** from the west side of the station to create a direct path from the station to the commercial areas west of El Camino Real.

Add **wayfinding** to existing Caltrain station access.

Determine if pedestrian crossing enhancements are needed based on traffic speed and volumes. Provide **curb extensions** on Baze Road. Consider the feasibility of a **road diet** on Franklin Parkway - 31st Avenue.

Provide **wayfinding** with the new entrance to the Caltrain station. Consider **enhancing the sidewalk** by adding **landscaping or public art**.

Provide **high-visibility crosswalks** and **wayfinding** to the station entrance.

Consider **narrowing travel lanes** on 31st Avenue and El Camino Real to allow for corner radii to be tightened for shorter crossings. Provide a **pedestrian refuge** for the north and west crosswalks.

HILLSDALE BOULEVARD

ISSUES

Pedestrian collisions along this stretch support the need for improved safety for crossings along Hillsdale Boulevard. These two intersections provide access to Hillsdale Shopping Center, El Camino Real bus routes, and the Hillsdale Caltrain station. According to public feedback, high vehicle activity at the intersection of Hillsdale Boulevard and El Camino Real make navigating the intersection as a pedestrian difficult and uncomfortable. Wait times and vehicle exposure is high for pedestrians at this intersection.

SUMMARY

A traffic control assessment should be conducted for the Hillsdale Boulevard / Edison Street intersection to determine whether modifications are feasible to simplify the multi-lane stop-controlled intersection. Options for improvements include removing turn lanes or installing a signal or roundabout. Curb extensions would help to realign crosswalks, providing a more direct path for pedestrians. Standard upgrades should also be considered, such as high visibility crossings, pedestrian-scale lighting, ADA curb ramps, and advanced stop bars.

At El Camino Real and Hillsdale Boulevard, slip lane closures or realignments should be assessed to reduce the size of the intersection and pedestrian exposure to vehicles. Raised crosswalks would help with vehicle speeds and pedestrian visibility if slip lanes remain in place. A Class I multi-use path should be considered if slip lanes are removed, to provide a low-stress connection between the Caltrain station and Hillsdale Shopping Center. Adding a crosswalk on the east leg would provide a more direct route of travel for pedestrians along El Camino Real.

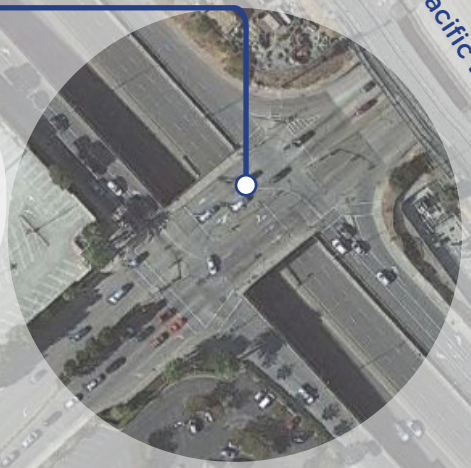
In addition to standard pedestrian-friendly improvements at the intersection, such as high visibility crosswalks, ADA curb ramps, and automatic pedestrian recall, a road diet on Hillsdale Boulevard would help to reduce vehicle exposure, reduce speeds, and provide additional space for landscaping or bicycle facilities.

RECOMMENDATIONS
HILLSDALE BOULEVARD

Consider the feasibility of **removing right turn slip lanes/pockets** northbound and westbound.

Provide **high-visibility crosswalk** and **curb extensions** on north, east, and west legs to allow for more continuous pedestrian connectivity. Consider the feasibility of a **road diet** on Hillsdale Boulevard.

Provide **wayfinding** to Caltrain station and provide **pedestrian-scale lighting**.



Pacific Blvd

El Camino Real

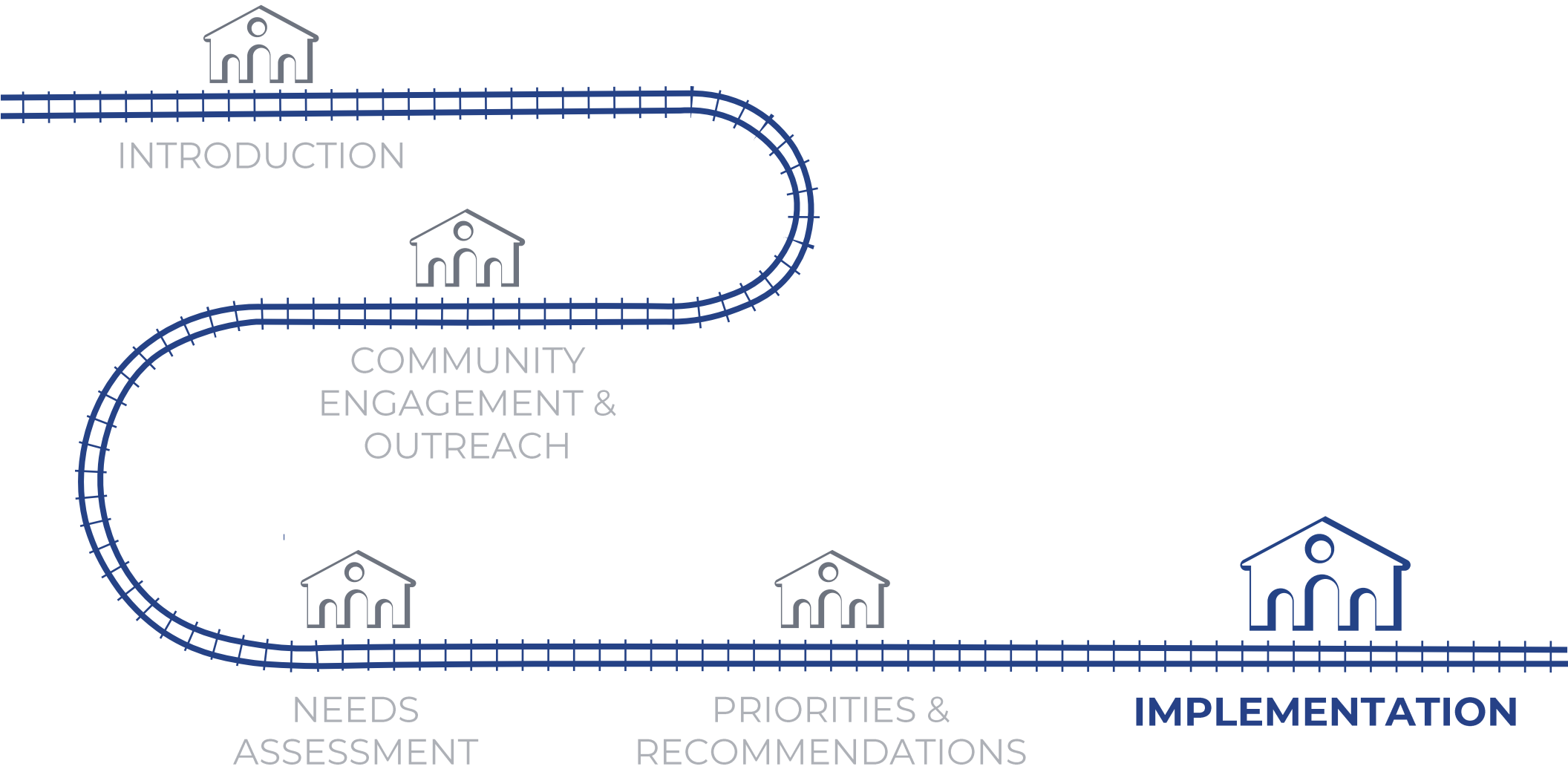
Hillsdale Blvd

Edison St

Provide **curb extensions** on the west side corners to **better align the crosswalk** across Edison Street. Consider **removing the westbound left-turn pocket** onto Edison Street or consider a **signal or roundabout** to simplify the many conflicting movements. Provide **pedestrian-scale lighting**.

36th Ave

N


INTRODUCTION
COMMUNITY ENGAGEMENT & OUTREACH
NEEDS ASSESSMENT
PRIORITIES & RECOMMENDATIONS
IMPLEMENTATION

PUBLIC WORKS
City of San Mateo

CHAPTER 5
IMPLEMENTATION

IMPLEMENTATION STRATEGY

Implementation of San Mateo's TOD Pedestrian Access Plan will require a multi-pronged approach that addresses the specific priority projects in Chapter 4 and allows the City to implement the global pedestrian improvements. The priority projects consist of the countermeasures described in Chapter 4, many of which can be implemented as quick-build projects or capital projects to allow the City to move quickly while addressing longer term infrastructure needs when the opportunity arises. This chapter identifies best practices for funding and implementing the priority projects, provides a near-term implementation action plan for the City, and identifies planning level cost estimates for the countermeasures.

Funding Strategy

The City of San Mateo adopted a robust set of pedestrian design standards as part of the Pedestrian Master Plan in 2012 that, if implemented, could result in the creation of high-quality pedestrian environments and prioritize walking and transit use. Therefore, the list of funding sources and implementation strategy actions identifies internal and external opportunities that could support funding and streamline the construction of pedestrian improvements. The five overarching funding strategies include: (A) leverage other projects or routine maintenance, (B) fund with local resources, (C) apply for grant funding, (D) integrate into transit-oriented development, and (E) incorporate into other plans. These are described in more detail below and near-term actions are identified on the following pages in the **Implementation Action Plan**.

IMPLEMENTATION STRATEGY

Funding Sources

A. **Leverage other projects or routine maintenance**: Include priority projects in roadway resurfacing or striping projects to include crosswalks, striping changes, curb ramps, sidewalk expansions, or other facilities. Traffic signals can be made more pedestrian-friendly when they are installed or upgraded for other reasons. A policy or ordinance that requires the addition of the countermeasure toolbox during all roadway projects could speed up implementation. SamTrans, Caltrans, and Caltrain all have plans to improve pedestrian facilities or access to transit, and therefore San Mateo should work with these agencies to determine timeline, priorities, and funding for these projects, as noted in the Implementation Action Plan on the following pages.

B. **Fund with local resources**: Capital Improvement Program, Traffic Impact Fee, and other local sources earmarked for transportation improvements can pay for projects, particularly those unlikely to attract grant funding or as the local match for grant funding. A fee study could evaluate options for funding these improvements. The City's traffic impact fee, for example, could need to be updated to include the priority projects or could be supplemented or replaced with other types of fees, such as a VMT-based impact fee or in-lieu fee program, potentially in coordination with the City's General Plan 2040 (see Appendix F for more detail on VMT mitigation and funding approaches).

C. **Apply for grant funding:** Countywide transportation authorities, the Metropolitan Transportation Commission and the State of California all offer grant programs that support projects to improve walking and biking, particularly safety projects and those that serve economically disadvantaged communities. The improvements included in the Plan are consistent with the countywide, regional, and statewide plans, such as Caltrans Strategic Management Plan (2015-2020) and the District 4 Pedestrian Plan for the Bay Area. We recommend prioritizing the following funding sources for the relevant priority projects. A detailed list of grant opportunities are presented in Appendix F.
    1. San Mateo County's Measure A and W – Downtown San Mateo quick build projects that prioritize access from the North Central neighborhood should be prioritized for this grant due to equity and quick build focus of these programs. These projects are consistent with the goals for the Pedestrian & Bicycle or ACR/TDM programs, and the ACR/TDM program has a limit of $200,000 for a package of transit-access improvements that would be well suited for the priority projects.
    2. San Mateo County's TDA Article 3 – A package of priority projects up to $400,000, potentially in combination with related projects from the 2020 Bicycle Master Plan (e.g., bike boulevards often share common traffic calming features).
    3. One Bay Area Grant (OBAG) – All the priority projects fall within MTC designated PDA's and thus would be eligible. However, physical infrastructure projects coordinated with other agencies, such as the direct North Central platform connection, would be highly competitive.
    4. Caltrans' State Highway Operations and Protection Program (SHOPP) – Projects on El Camino Real that overlap with the D4 Pedestrian Plan are well suited for this grant.

IMPLEMENTATION STRATEGY

Funding Sources

D. **Integrate into transit-oriented development:** Transit-oriented developments (TOD) in San Mateo 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. However, people may be less likely to use these transit services if the path of travel connecting to the TOD does not meet the City's design standards . These standards define the amenities that provide a safe and accessible path of travel, including 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 . As described in more detail in Appendix E, the City should consider reviewing and updating the following components of the City's development review process to ensure people can access high-quality transit services:
    - On-site / project frontage improvements: The City should consider updating design standards and City ordinances so that all qualifying development projects are required to ensure pedestrian facilities along the project frontage. This includes evaluating different options to meet these standards, such as but not limited to changes to circulation, roadway widths, easements, or setbacks.
    - Off-site / path of travel improvements: The City should consider evaluating and creating development fair share fees to pay for improvements needed along the path of travel to the TOD.

E. **Incorporate into other plans:** The City will be embarking on a Complete Streets Plan and Local Road Safety Plan (LRSP) in the coming years. A comprehensive citywide safety action plan such as a LRSP will create funding opportunities for overlapping priority projects through the Highway Safety Improvement Program (HSIP) grants and Safe Streets and Roads for All (SS4A). The Complete Street Plan can expand the opportunities presented in option A to ensure all streetscape projects incorporate the recommended pedestrian facility improvements. In addition to these plans, the adoption of a Vision Zero policy would help City decision makers assess trade-offs when then arise between safety improvements and vehicle capacity or parking.

IMPLEMENTATION ACTION PLAN

In general, **priority projects closest to the stations should be prioritized first since they benefit the highest number of transit riders**. As noted below, the priority projects surrounding the Downtown San Mateo Caltrain station are recommended as the top priority for grant funding given the highest existing need based on current population, walking counts, collisions, and presence of economically disadvantaged communities. Other planning efforts (e.g., the Hillsdale Gap Closure project) and on-going redevelopment projects present opportunities to prioritize those funding sources for the recommended improvements around the Hillsdale and Hayward Park stations in the first year of implementation. The recommended projects are conceptual in nature and therefore feasibility studies and engineering details would be required for projects that include features that are not a part of routine City operations or maintenance. Feasibility studies would include community engagement and outreach to nearby and affected residents, businesses, and community groups.

All the below actions should be completed within one year of adopting the TOD Pedestrian Access Plan. Subsequent years would include construction of projects that received grants or funding and identifying priority projects or other corridors for additional funding.

IMPLEMENTATION ACTION PLAN

Category	Action	Responsible Department	Priority Projects
A – Leverage other Projects	Identify whether any upcoming resurfacing, maintenance, or other streetscape projects overlap with the priority project list or other corridors identified as low priorities on pages 50-51, and whether countermeasures can be incorporated.	Public Works	Global, although more opportunities will benefit Hillsdale station
	Conduct outreach to Caltrans, SamTrans, and Caltrain to determine whether there are any planned projects that could incorporate the priority projects or whether they can partner on funding opportunities. For example, Caltrans SHOPP program has a few San Mateo projects in process that could include the priority projects.	Public Works	Primarily projects on El Camino Real or those that require Caltrain ROW (such as North Central Access or Hayward Park West)
	Adopt a policy or ordinance that require upgrading pedestrian facilities to meet the City's pedestrian design standards during future resurfacing, maintenance, other streetscape projects, or development projects.	Public Works and Community Development	Global
B – Local Funding	Identify CIP funds for the priority projects to serve as matching funds for grant applications or full funding projects.	Public Works	Global
	Conduct a fee study to identify the appropriate mechanism for determining and calculating fees to fund off-site pedestrian improvements.	Public Works, Community Development, and City Attorney	Global

IMPLEMENTATION ACTION PLAN

Category	Action	Responsible Department	Priority Projects
C – Grants	Create a package of quick build projects to apply for Measure A/W funding (up to $200K for transit last mile improvements)	Public Works	Downtown San Mateo quick build projects that prioritize access from northeast due to equity and quick build focus of Measure A.
D – Transit-Oriented Development (TOD)	Consider options to ensure that all qualifying development projects within ½ mile of high-quality transit (as defined through Pub. Resources Code, § 21155) construct pedestrian facilities along the project frontage to meet the City's design standards, inclusive of the projects identified in this Plan (see example language in Appendix E).	Community Development and Public Works	Global for facilities adjacent to future redevelopment sites. This will be particularly important on El Camino Real given the challenges with reducing vehicle travel lanes until a more comprehensive design is complete.
	Conduct internal training with Public Works and Planning staff to increase awareness and support for incorporating pedestrian design best practices.	Public Works	Global
E – Incorporate into other Plans	Ensure needs assessment and priority projects are incorporated into upcoming LRSP and Complete Streets Plan	Public Works	Global, Priority projects that overlap with LRSP recommendations and do not qualify for quick-build grants will be well suited for SS4A and HSIP grants.

IMPLEMENTATION COST ESTIMATES

The following tables present planning-level construction costs in current (2022) dollars. Additional analysis, design, and engineering would be required for each project to better estimate the potential cost to implement each of these improvements. See Appendix G for additional information on what is included and excluded in these estimates.

Quick-Build Costs indicate lower-cost, semi-durable materials that allow for flexible designs. Hardscape/Capital costs represent permanent infrastructure that often requires additional considerations, like drainage or utilities.

The costs are based on recent projects of similar nature in the Bay Area, including publicly bid infrastructure projects, and Caltrans cost data. All costs include a 25% allowance for planning, preliminary design, final design, and construction management.

COST ESTIMATES

Improved Crossings

Countermeasure	Quick Build Cost	Hardscape/ Capital Cost	Notes
Remove Slip Lane	More than $1M		At recommended location, slip lane requires full intersection redesign.
Straighten Crosswalk	Less than $6,000		Cost per crosswalk. Cost includes removal of existing striping and does not include costs associated with curb ramps.
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.
Yield to Pedestrian Sign	$600 to $6,000		Cost per sign, either static ($500) or LED extinguishable/blank-out sign (up to $5,000).
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.
Wider Sidewalks	$400 per square foot		Cost includes reconstruction of curb and gutter.
Add Sidewalks	$400 per square foot		Cost includes reconstruction of curb and gutter.
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.
Pedestrian Scramble	$25,000		Includes new pedestrian signal heads for four (4) diagonal crossing and mounting assemblies.
Daylighting	Less than $1,300		Cost per approach. Includes cost to install red paint on curb and one “no parking” sign.
Raised Intersection	$250,000		Cost includes roadway excavation, new pavement, and transitions to existing elements, with allowance for drainage and utilities.
Rectangular Rapid Flashing Beacon (RRFB)	$6,000		Cost per crosswalk. Includes removal of existing markings, restriping, and other surface treatment.
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.

COST ESTIMATES

Improved Crossings

Countermeasure	Quick Build Cost	Hardscape/ Capital Cost	Notes
 High-Visibility Crosswalk	Less than $6,000		Cost per crosswalk. Includes removal of existing markings.
 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.
 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.
 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

Countermeasure	Quick Build Cost	Hardscape/ Capital Cost	Notes
 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.
 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.
 Lane Removal	$7 per linear foot		Cost includes removing traffic stripes and installing hatching and surface mounted channelizers.

COST ESTIMATES

Traffic Controls

Countermeasure	Quick Build Cost	Hardscape/ Capital Cost	Notes
All-Way Stop Control	Less than $6,000		Cost of signage and striping.
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.
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.
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 form the CA MUTCD.
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).
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 reprograming the traffic signal controller only.

COST ESTIMATES

Bikeways

Countermeasure		Quick Build Cost	Hardscape/ Capital Cost	Notes
	Class IV Bikeway	$1,600 per linear foot		Cost accounts for striping and separation along corridor.
	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.
	Bike Boulevard	$25 per linear foot		Cost accounts for striping and signage along corridor.

Improved Lighting

Countermeasure		Quick Build Cost	Long-Term Cost	Notes
	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

Countermeasure		Quick Build Cost	Long-Term Cost	Notes
	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.
	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.


SAN MATEO
DAILY DOSE

PUBLIC WORKS
City of San Mateo

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

PUBLIC WORKS
City of San Mateo

APPENDIX A: COMMUNITY OUTREACH & ENGAGEMENT SUMMARY AND MATERIALS

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WWW.UP-PARTNERS.COM

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 a 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). *Potential: SamTrans/Caltrain Instagram, Twitter, Facebook; Diversity and Equity Council Facebook.* Social media posts will be translated into Spanish.

Engagement Activities				
Who we're engaging	**Senior Community**	**Youth**	**Latinx Community**	**Event Materials and Location**
Community Meeting[1]	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 Survey[2]		x		Survey will prioritize areas of concern for the community. Survey will be available in Spanish.
Pop-Up Surveys[3]		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).

[3]*Pop-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

	12-Jul-21	19-Jul-21	26-Jul-21	2-Aug-21	9-Aug-21	16-Aug-21	23-Aug-21	30-Aug-21	6-Sep-21	13-Sep-21	20-Sep-21	27-Sep-21	4-Oct-21	11-Oct-21	.....	21-Feb-22
Task 3 - Community Outreach and Engagement																
3.1 Community Engagement Plan	Draft		Final													
3.2 Phase I - Inform, Listen, and Understand																
Prepare Survey and Outreach Content				X												
Survey Live						Open				Close						
Outreach Blasts																
Community Meeting				Schedule	Schedule			Ideal week								
Flyering, Meetings, Pop-ups				Schedule	Schedule											
3.3 Phase II - Report Back & Next Steps																
Commmunity Engagement Summary												X		X		
Email, Social Media, and Website Report Back to Community (February with Draft Plan)																X

	F&P/UPP work period
X	F&P/UPP submittal
	City review period

URBAN PLANNING PARTNERS INC.

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:

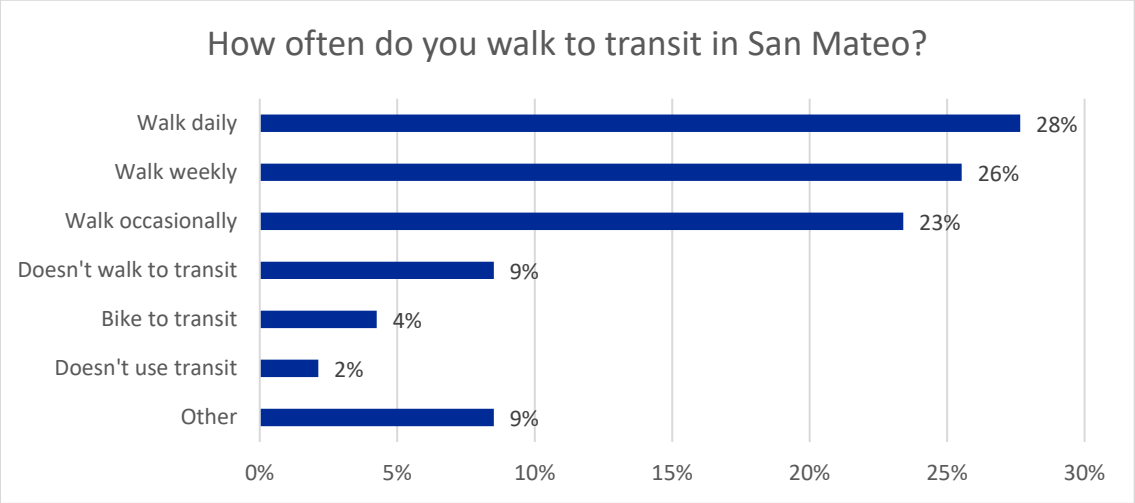
Through a variety of methods as described above, qualitative, and quantitative input was collected from the community. The data collected and the corresponding findings are summarized below.

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.

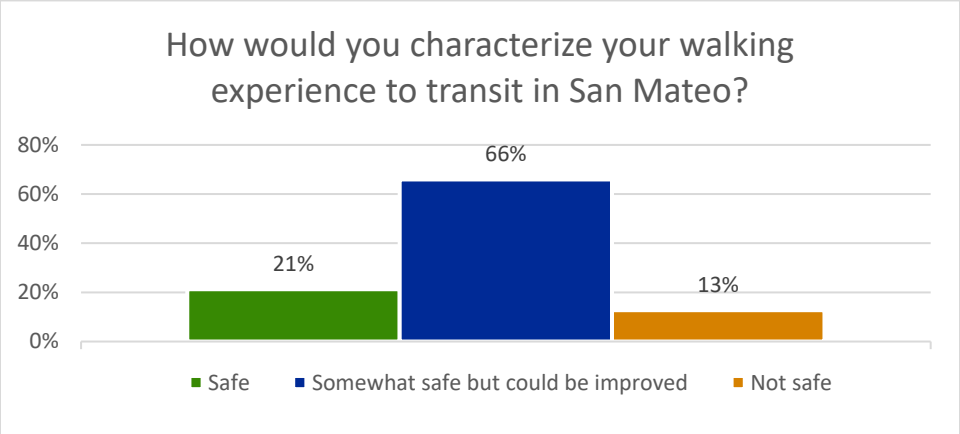


Graph 1: N=48

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-

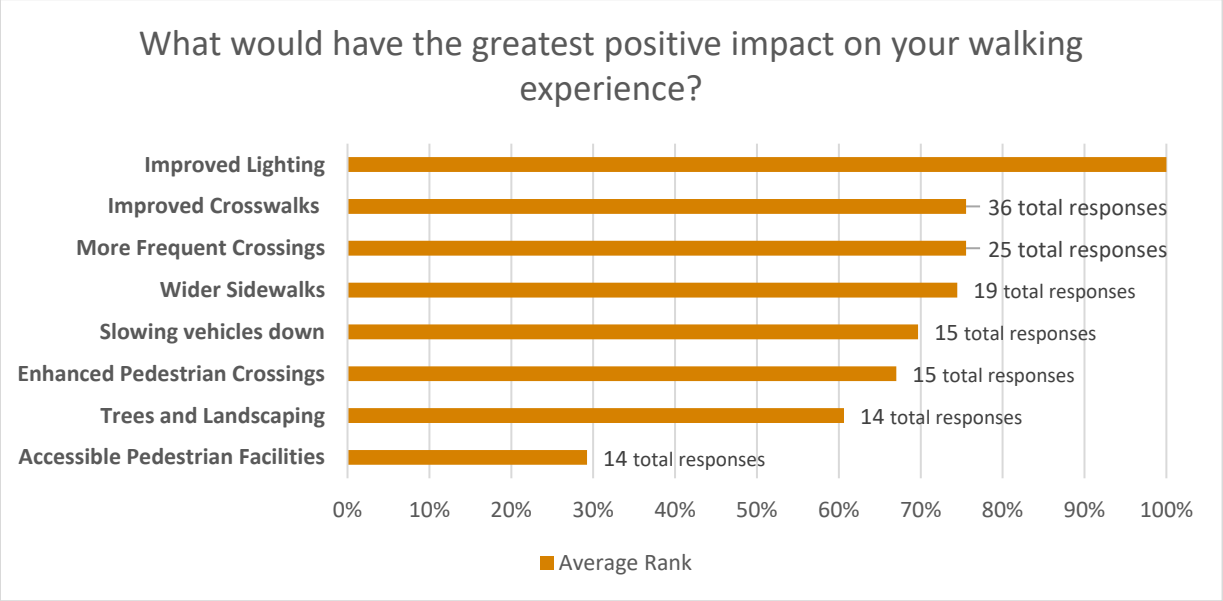
thirds (66%) of respondents who answered that "San Mateo does not provide a safe walk to transit" also responded that they currently do not walk to transit for Question 1.



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:

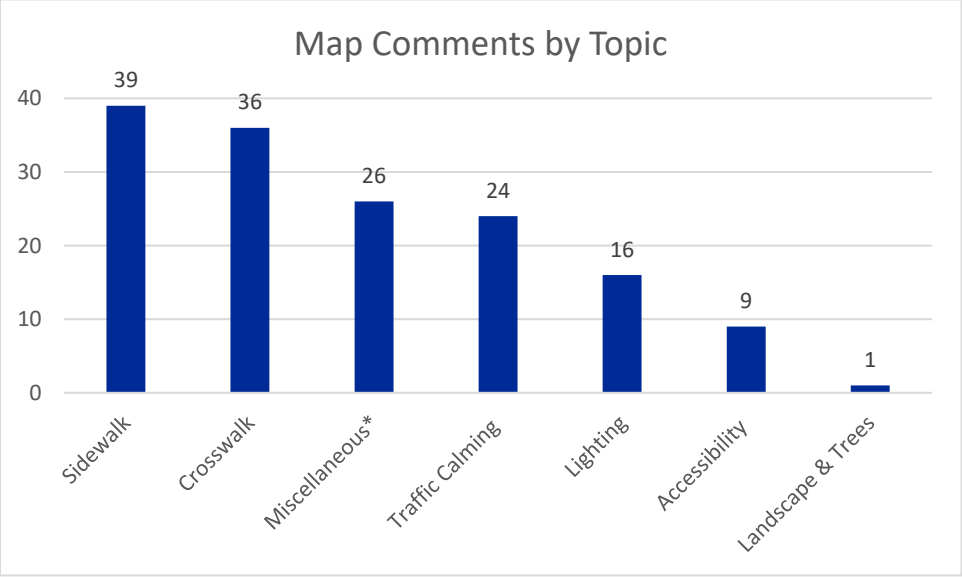
The respondents ages ranged from 14-81 with the majority of respondents being between 20-50. 71% of respondents identified as white, 12% as Asian, 7% as Latino or Hispanic, 7% as other, and 2% as American Indian or Alaskan Native. It is important to note that these responses capture about 10% of

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):

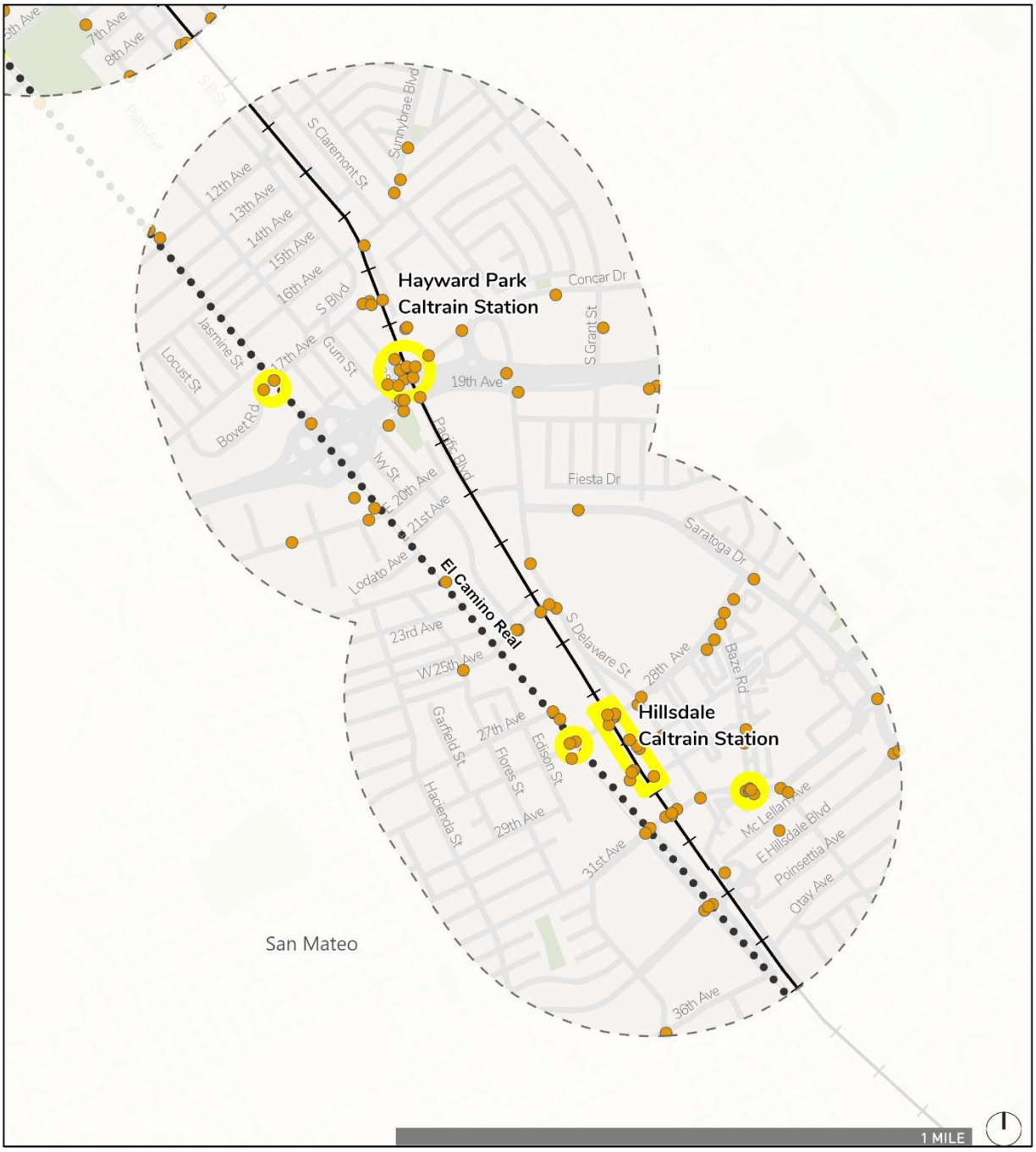
1. Intersection of 28th Ave and El Camino Real
2. Hillsdale Caltrain Station at 28th Ave, Derby, & Curiosity Way (access & crossing tracks)
3. Franklin Parkway and Baze Rd-Mena Drive
4. Hayward Park Caltrain Station (access & crossing tracks)
5. 17th Ave and El Camino Real
6. Intersections along 2nd 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.

Pedestrian Issues

Top Areas of Concern

Community Top Areas of Concern



Pedestrian Issues

Top Areas of Concern

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

PUBLIC WORKS
City of San Mateo

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

PUBLIC WORKS
City of San Mateo

Understand pedestrian circulation issues and existing barriers

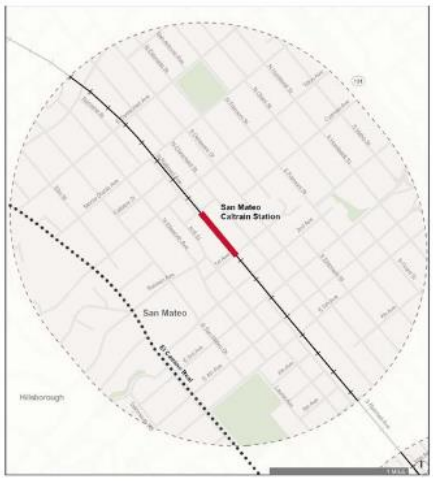
Prioritize improvement options

Develop final plan for implementation

Study Area – Transit Oriented

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

Secondary Study Area - El Camino Real Transit Corridor



Discussion Questions

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?

CITY OF SAN MATEO

Question 3

What pedestrian routes within the study area are your favorite?

Question 4

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

Questions?

CITY OF SAN MATEO

PUBLIC WORKS
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.

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.

Flashing Beacons
Pedestrian-activated beacons at crosswalks used to warn oncoming motorists of pedestrians using the crosswalk when there are no signals or stop signs.

Raised Crosswalk
A pedestrian crosswalk that is typically elevated 3-6 inches above the road or at 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.

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.

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 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.

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:

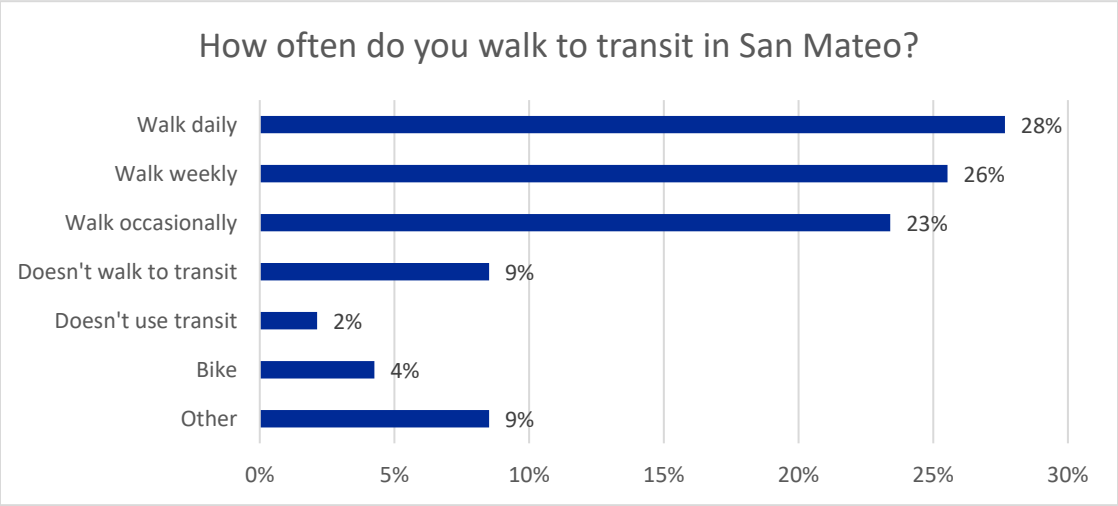
- Silicon Valley Bicycle Coalition San Mateo Local Team*
- Paratransit Coordinating Council (PCC)*
- San Mateo Diversity and Equity Council*
- Latino Families Group (at SMHS)
- Versailles Senior Condominiums
- The Peninsula Regent
- San Mateo County Latino Collaborative
- San Mateo Pride Center
- Nueva 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)

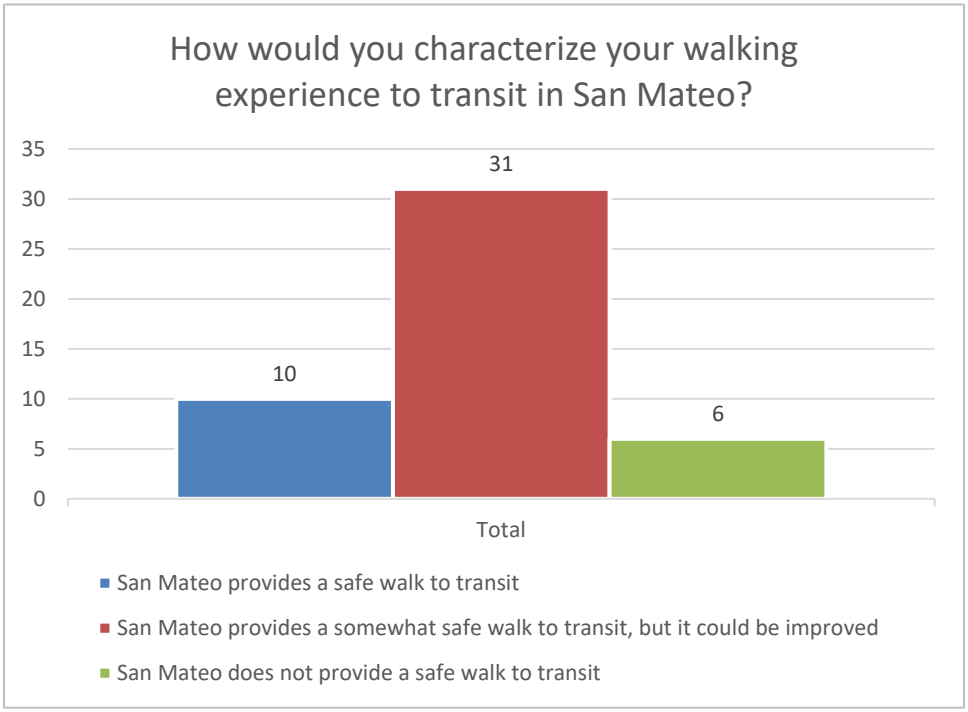
Neighborhood and Homeowner's Associations:

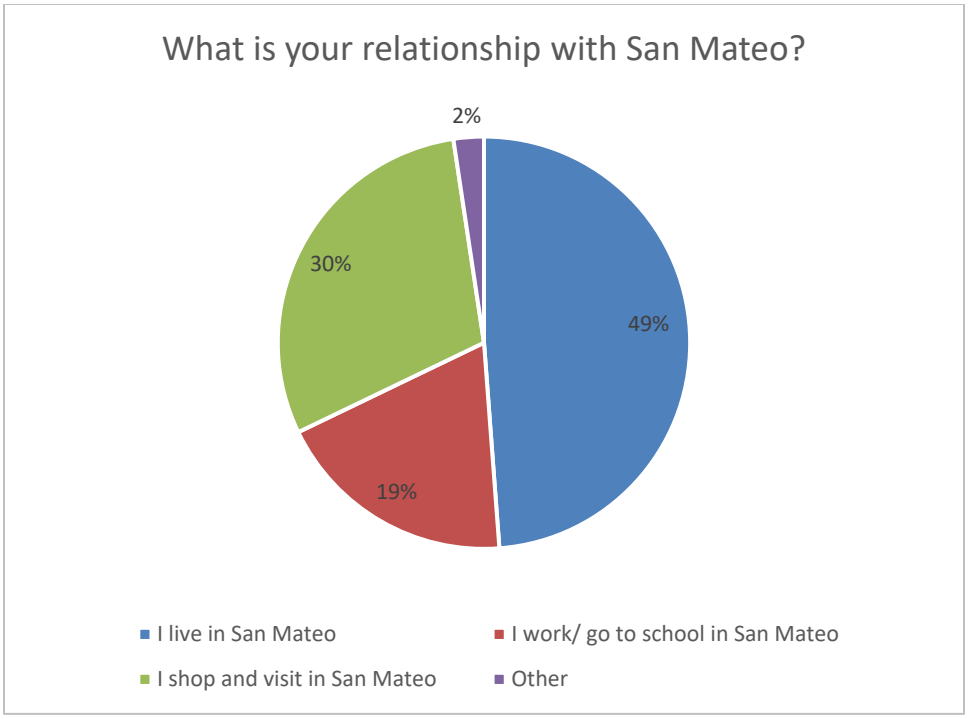
- 19th Avenue Park Association
- 58 N. El Camino Condominium Association
- Bay Laurels Condominium Association
- Bay Meadows Community Association (Master HOA)
- Bay Meadows Neighborhood Alliance
- Baywood Owners Improvement Association
- Baywood Park Homeowners Association
- Beresford Hillsdale Neighborhood 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)
- Landsdowne 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

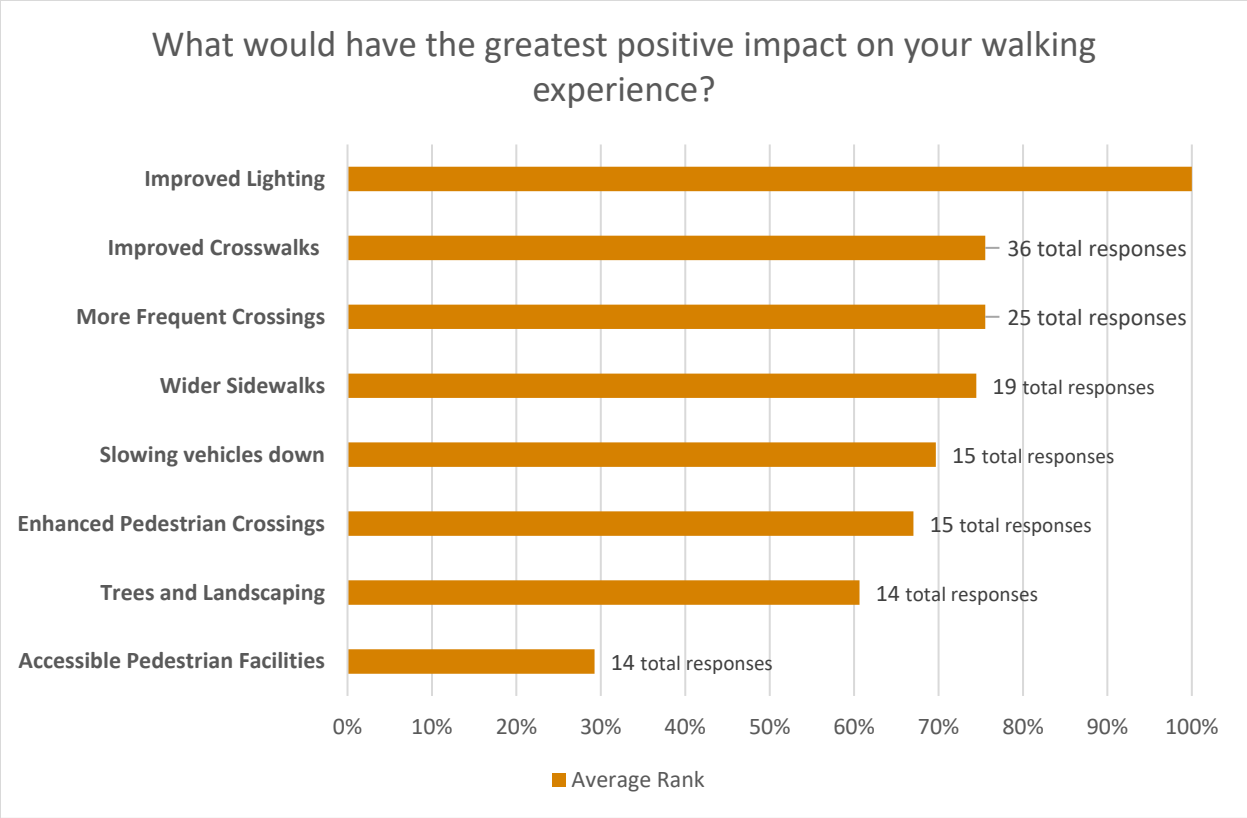
- San Mateo Park Neighborhood Association (formerly known as San Mateo Park Association)
- San Mateo United Homeowners Association
- Shoreview-Parkside Neighborhood Association
- Sunnybrae Neighborhood Association
- Sugarloaf Homeowners Association
- Ticonderoga Townhomes Association

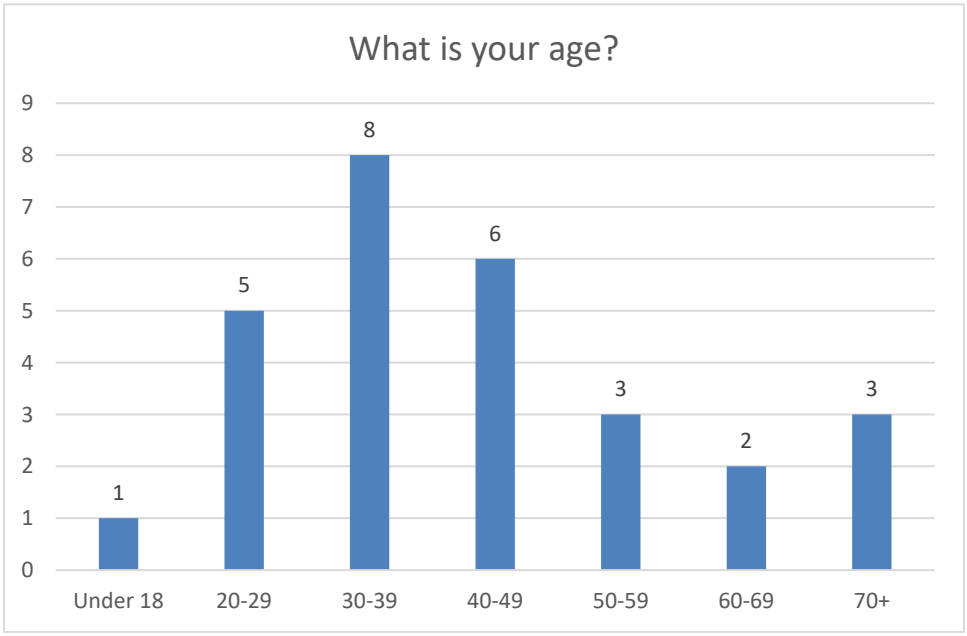
ATTACHMENT F—ONLINE SURVEY RESULTS

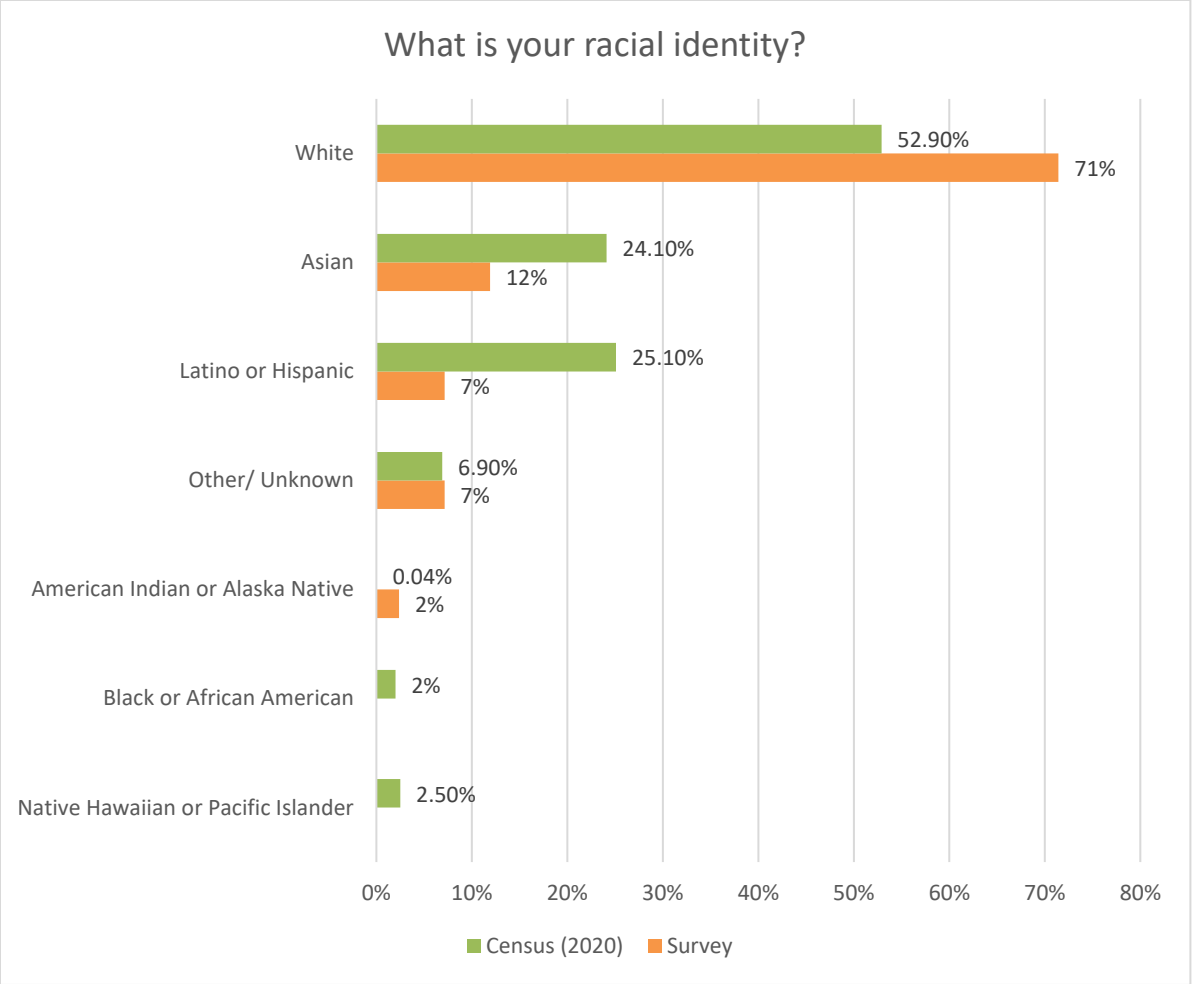





What is your relationship with San Mateo?
2%
30%
49%
19%
I live in San Mateo
I work/ go to school in San Mateo
I shop and visit in San Mateo
Other


What would have the greatest positive impact on your walking experience?
Improved Lighting
Improved Crosswalks
More Frequent Crossings
Wider Sidewalks
Slowing vehicles down
Enhanced Pedestrian Crossings
Trees and Landscaping
Accessible Pedestrian Facilities
36 total responses
25 total responses
19 total responses
15 total responses
15 total responses
14 total responses
14 total responses
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Average Rank

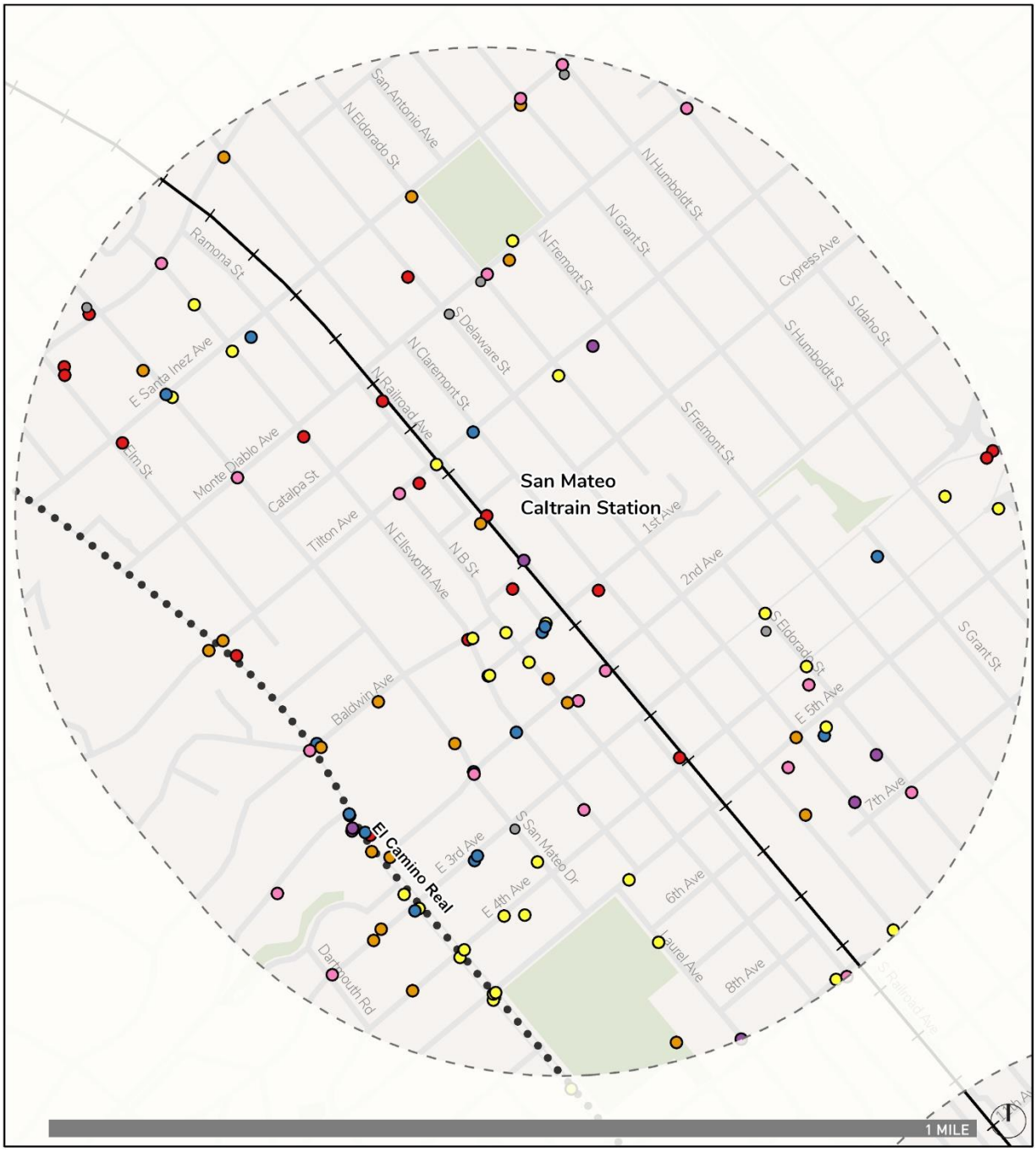

What is your age?
9
8
7
6
5
4
3
2
1
0
1
5
8
6
3
2
3
Under 18
20-29
30-39
40-49
50-59
60-69
70+


What is your racial identity?
White
52.90%
71%
Asian
24.10%
12%
Latino or Hispanic
25.10%
7%
Other/ Unknown
6.90%
7%
American Indian or Alaska Native
0.04%
2%
Black or African American
2%
Native Hawaiian or Pacific Islander
2.50%
0%
10%
20%
30%
40%
50%
60%
70%
80%
Census (2020)
Survey

ATTACHMENT G—ONLINE MAP RESULTS

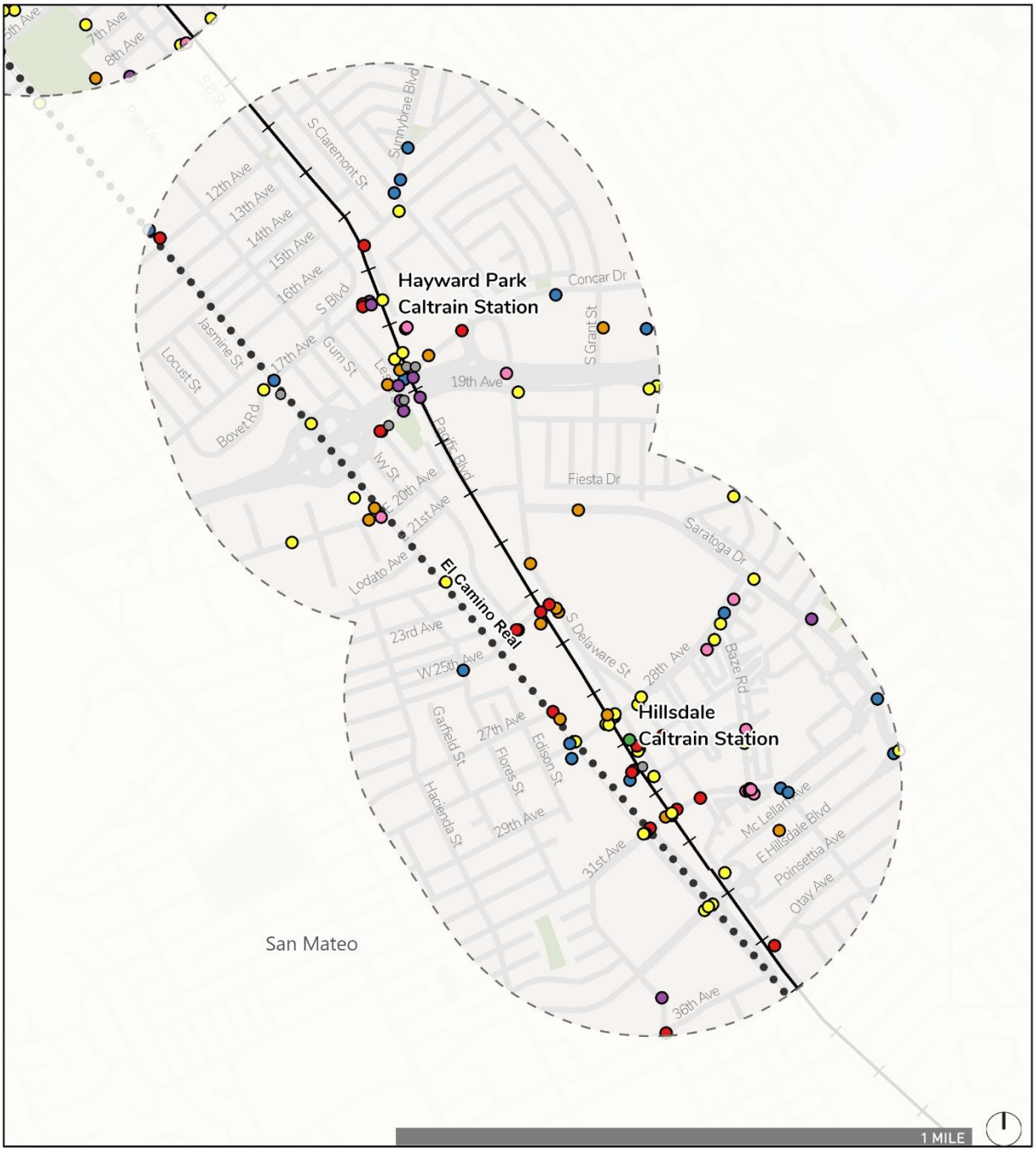
Less Comments — More Comments

Density of Community Comments on Webmap



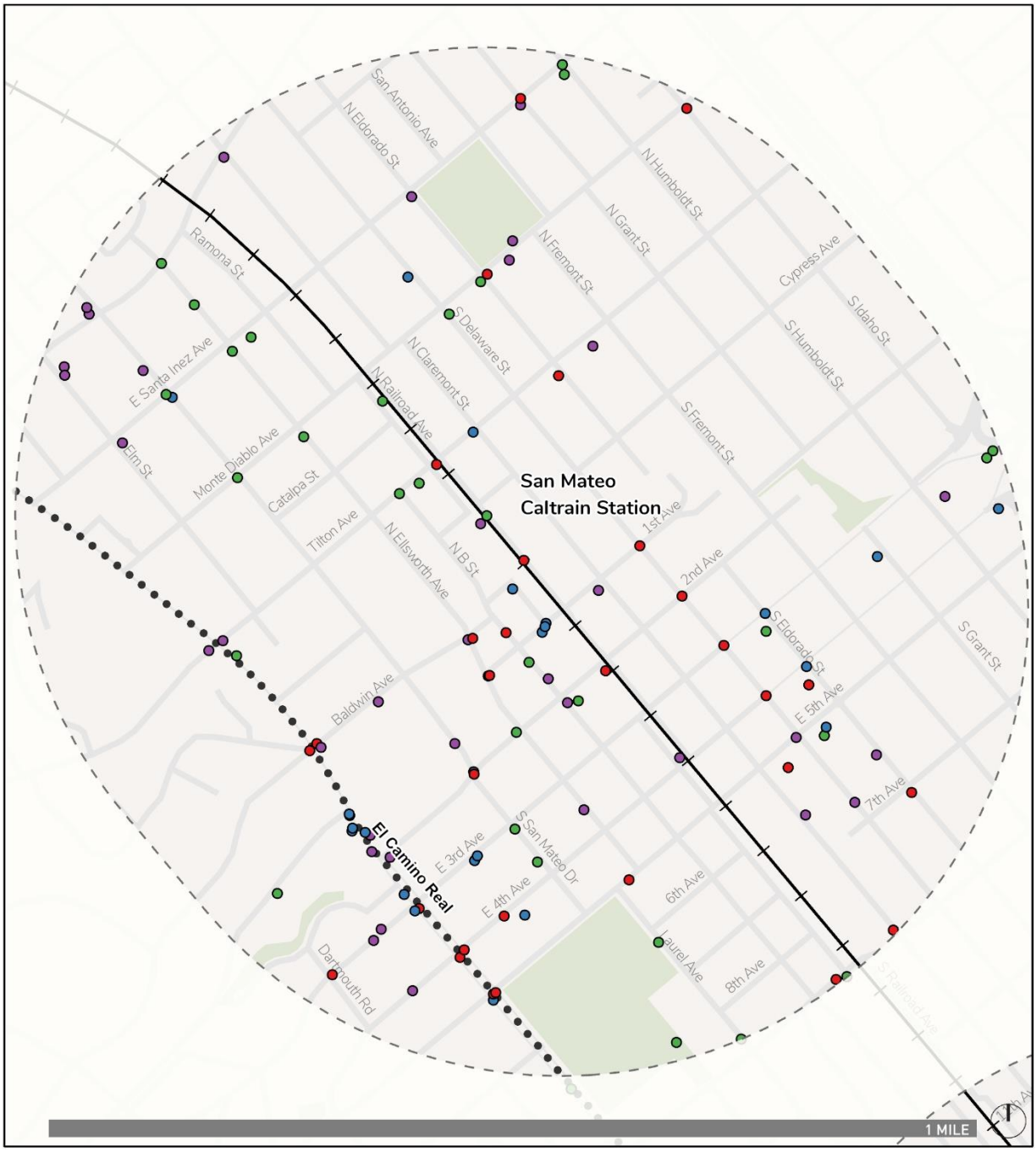
Accessibility
Crosswalk
Landscape & Trees
Lighting
Pedestrian Crossings
Sidewalk
Traffic Calming
Misc.

Specific Community Concerns



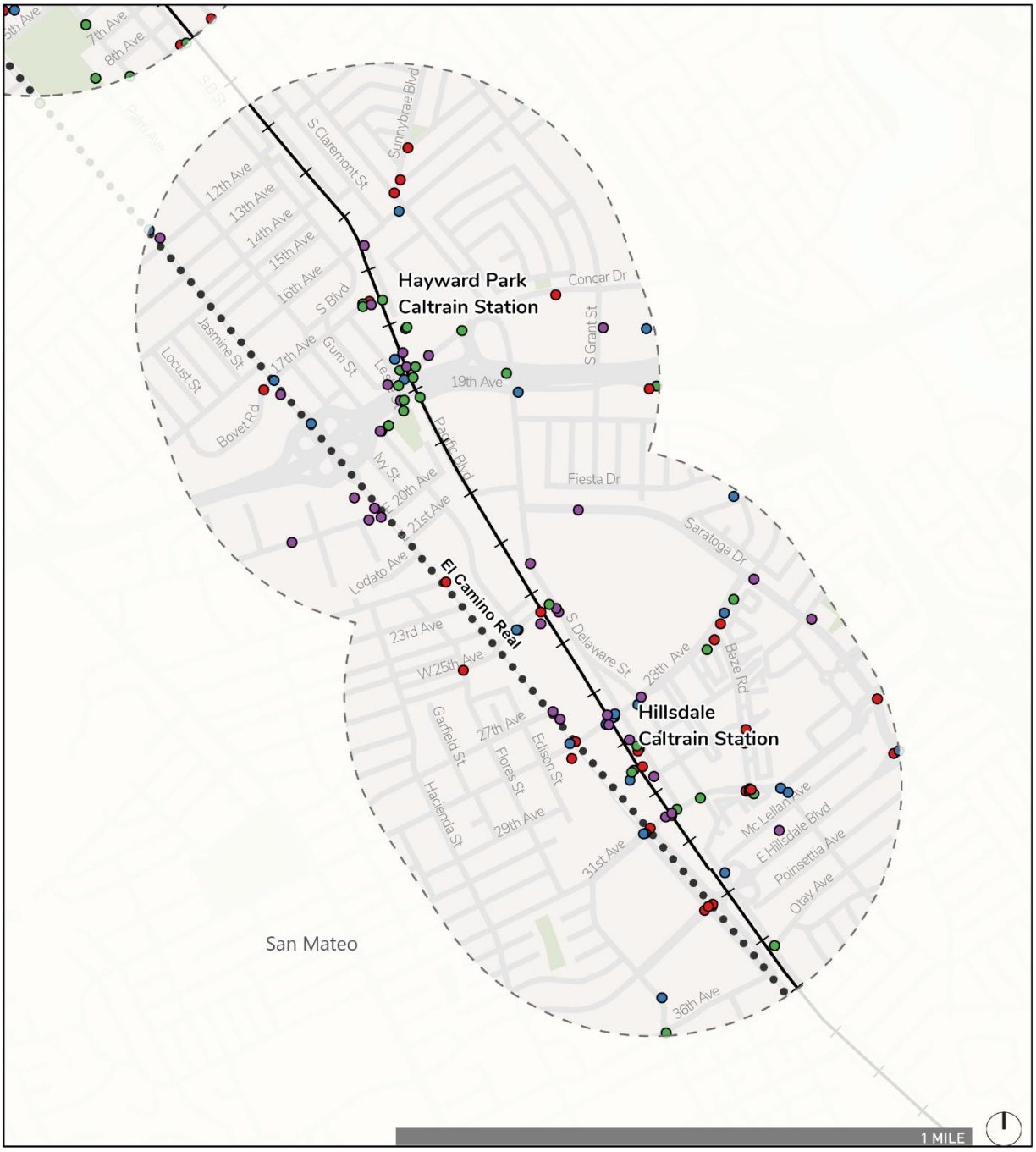
- Accessibility
- Crosswalk
- Landscape & Trees
- Lighting
- Pedestrian Crossings
- Sidewalk
- Traffic Calming
- Misc.

Specific Community Concerns



- Intersection Treatment
- Midblock Crossing
- Sidewalk Improvement
- Other

Categories of Improvements Needed



- Intersection Treatment
- Midblock Crossing
- Sidewalk Improvement
- Other

Categories of Improvements Needed

Number of Responses

- 1
- 2
- 3
- 4

Top Survey Walking Routes

PUBLIC WORKS
City of San Mateo

APPENDIX B:
EXISTING CONDITIONS

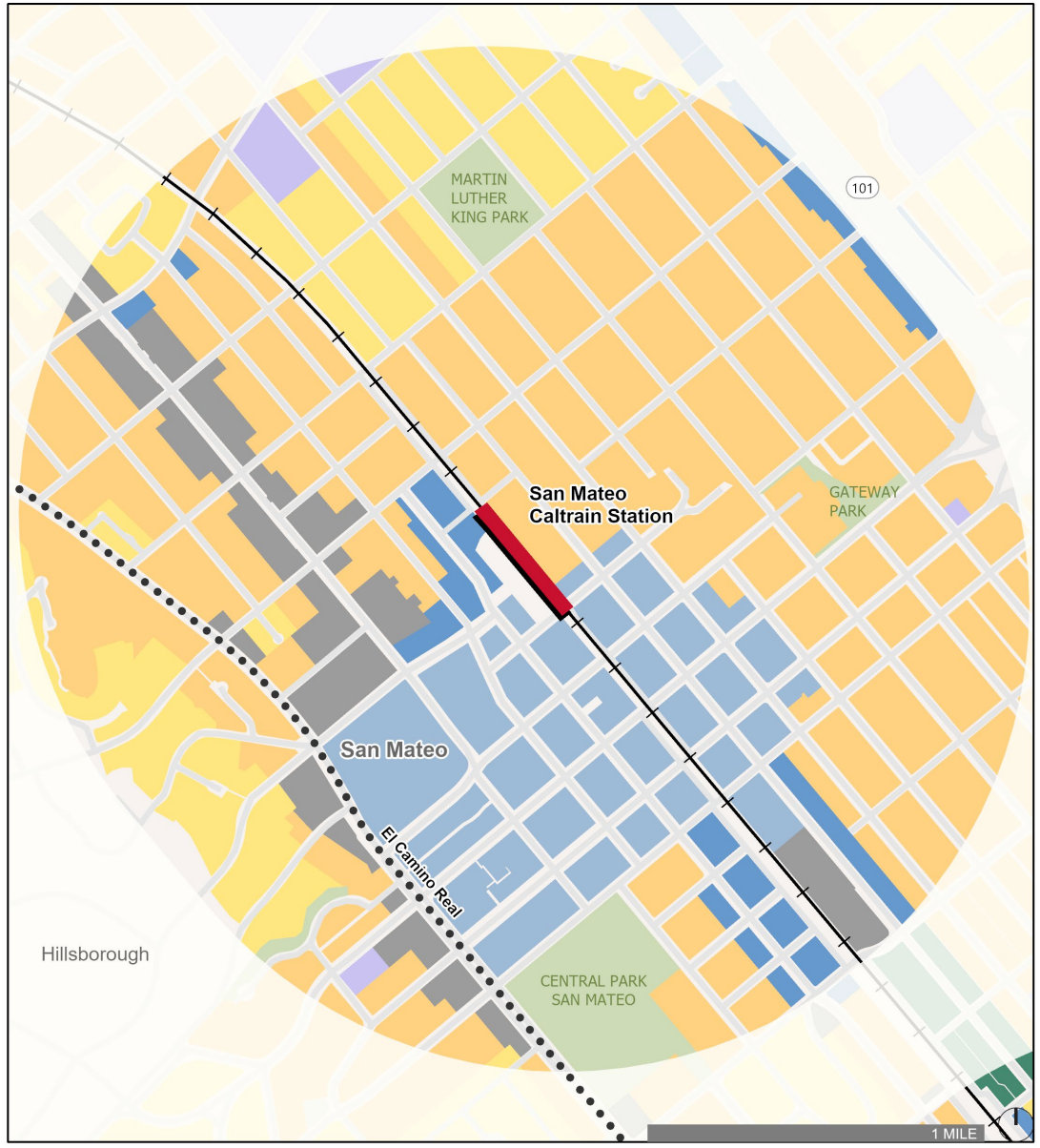
Existing Conditions Maps

Contents

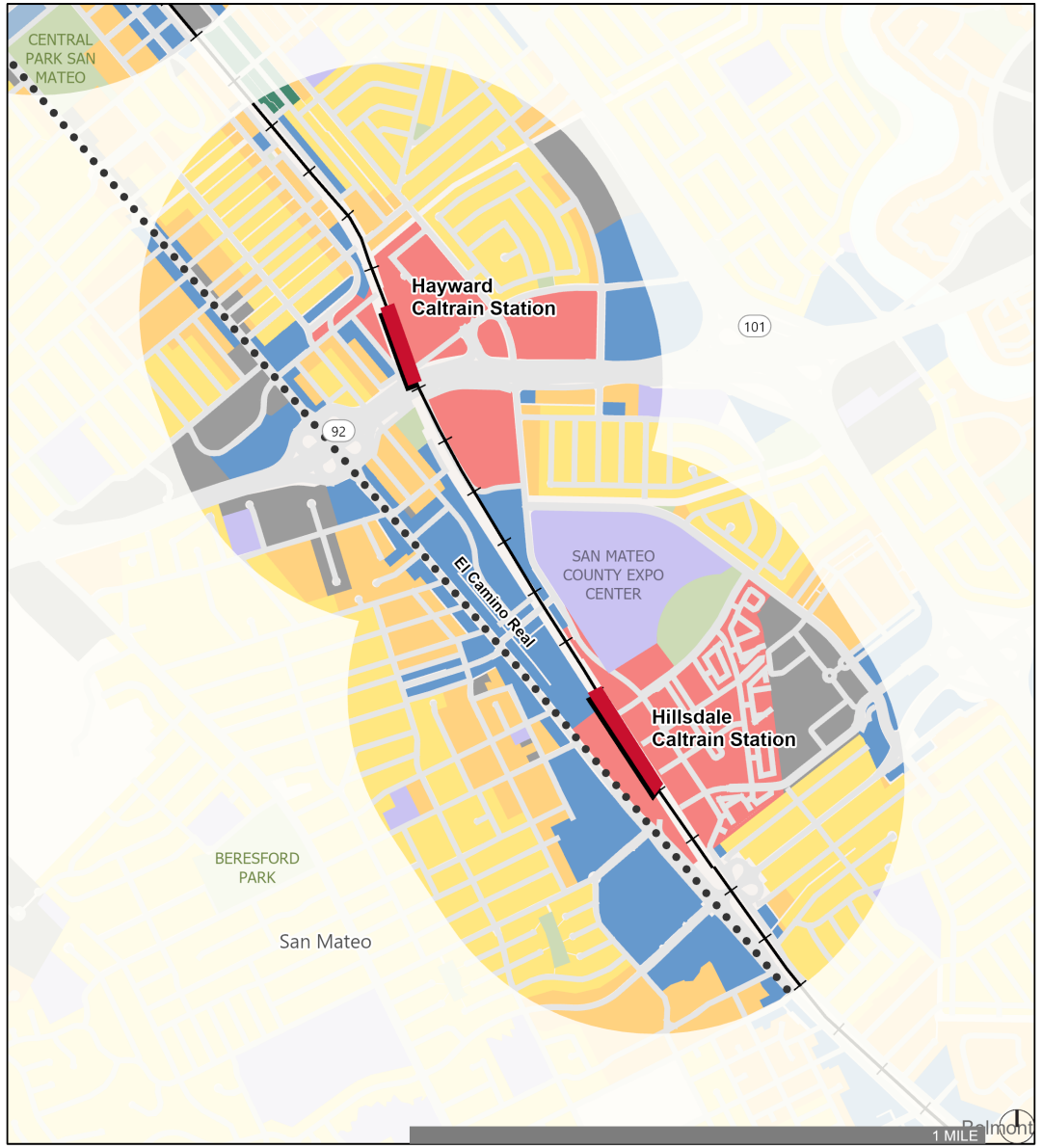
- Land Use & Demographics
  - Land uses
  - Senior centers & landmarks
  - CalEnviroScreen
- Transportation Facilities
  - Roadway typology
  - Signalized Intersections
  - Level of Traffic Stress
  - Pedestrian Collisions
  - Missing sidewalks
- Planned Improvements
  - Development projects
  - Planned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

Land Use & Demographics

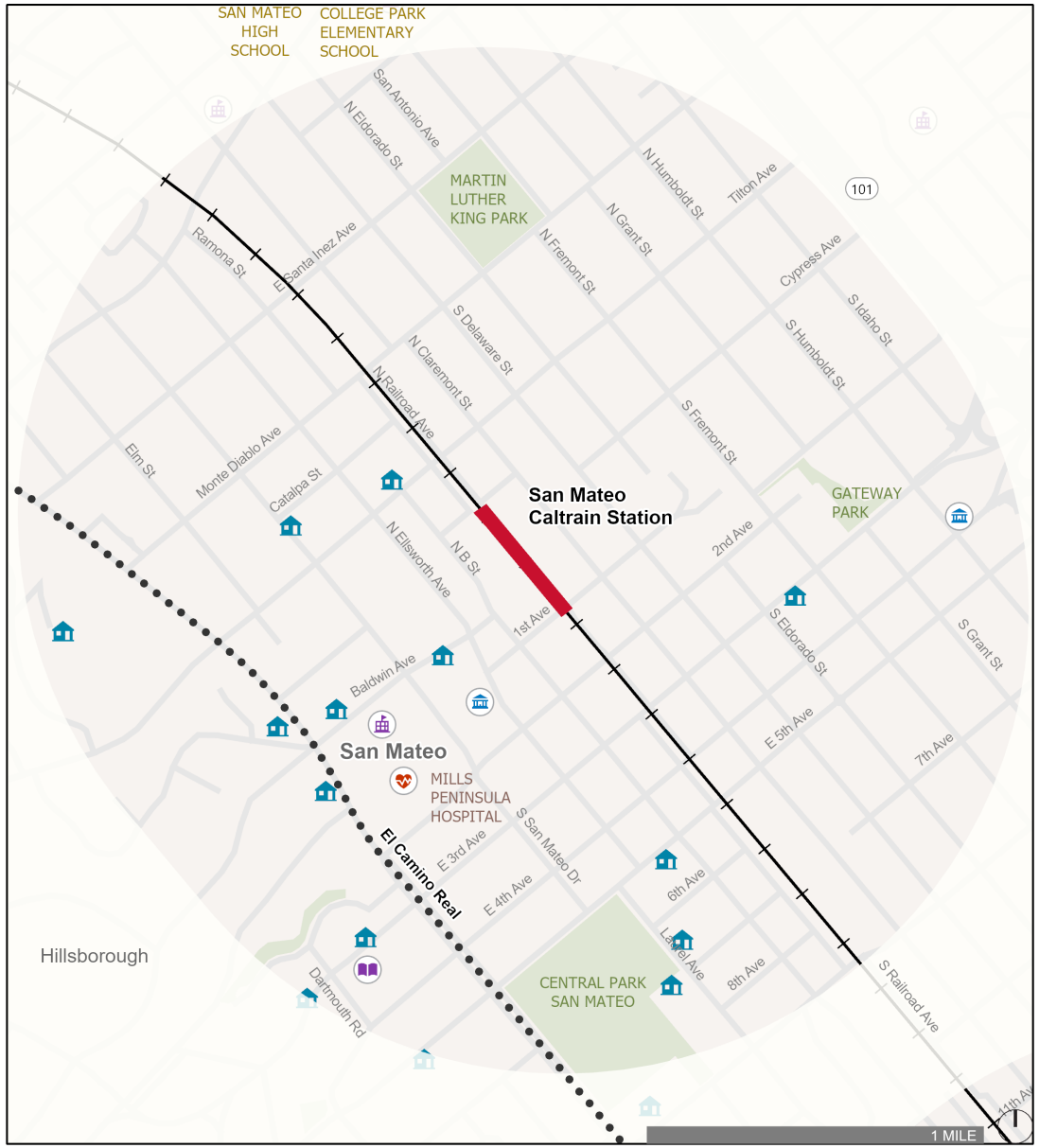
Land Use

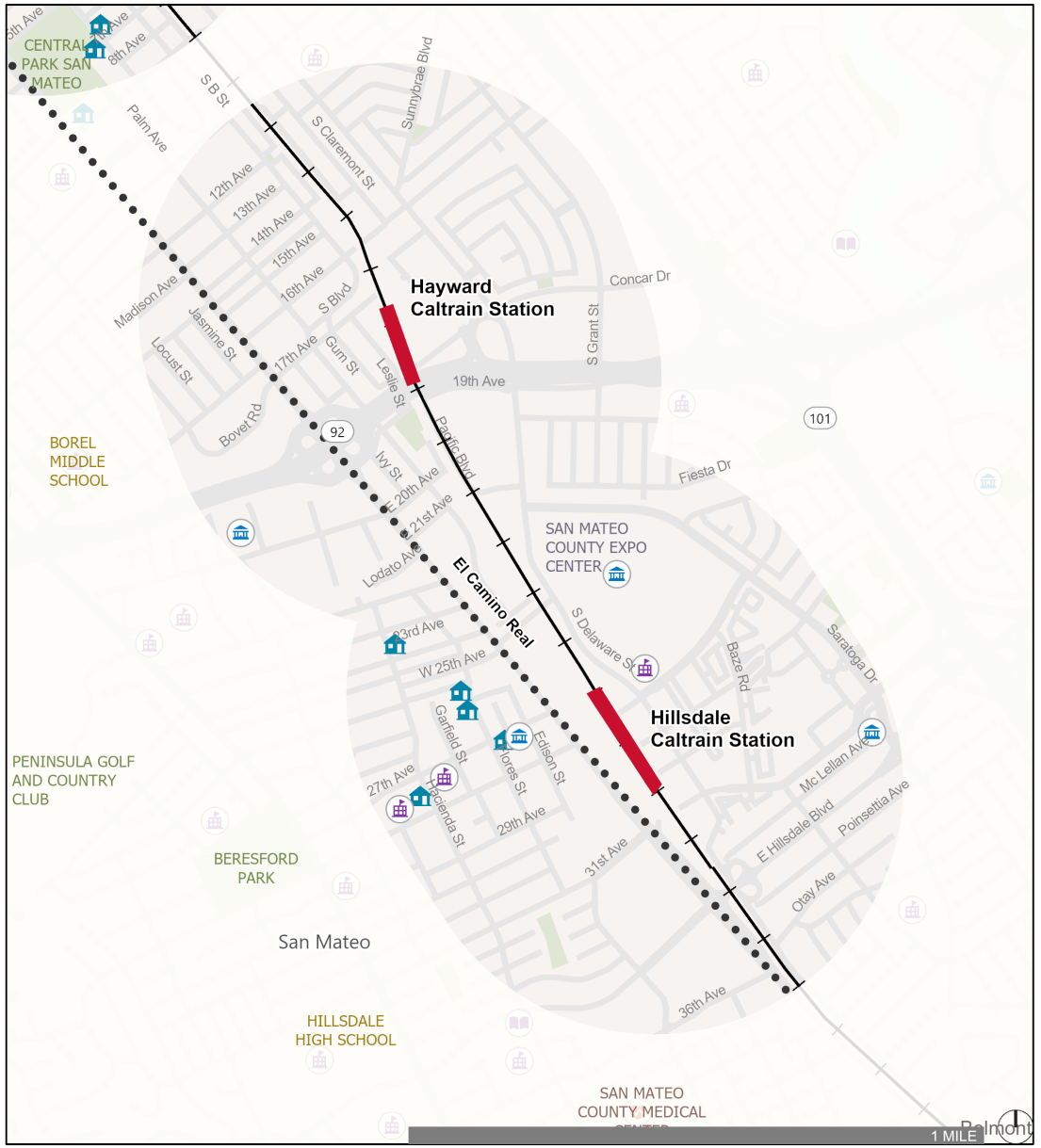


Source: City of San Mateo, 2021



Senior Centers and Landmarks





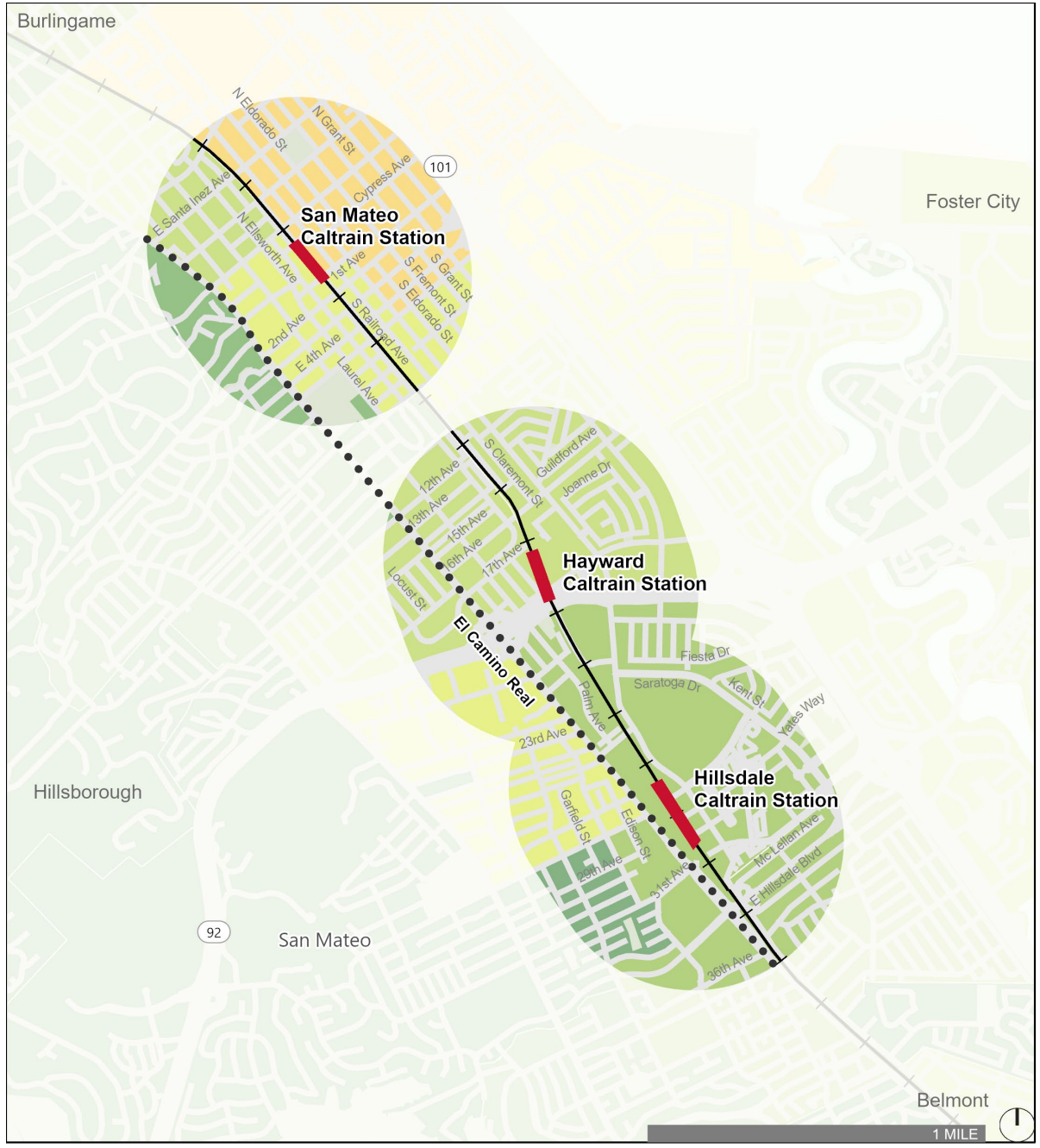
Landmarks
School
Institutional
Library
Medical
Senior Apartments

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.



Source: CalEnviroScreen 4.0, OEHHA, 2021

CalEnviroScreen

CalEnviroScreen Percentile

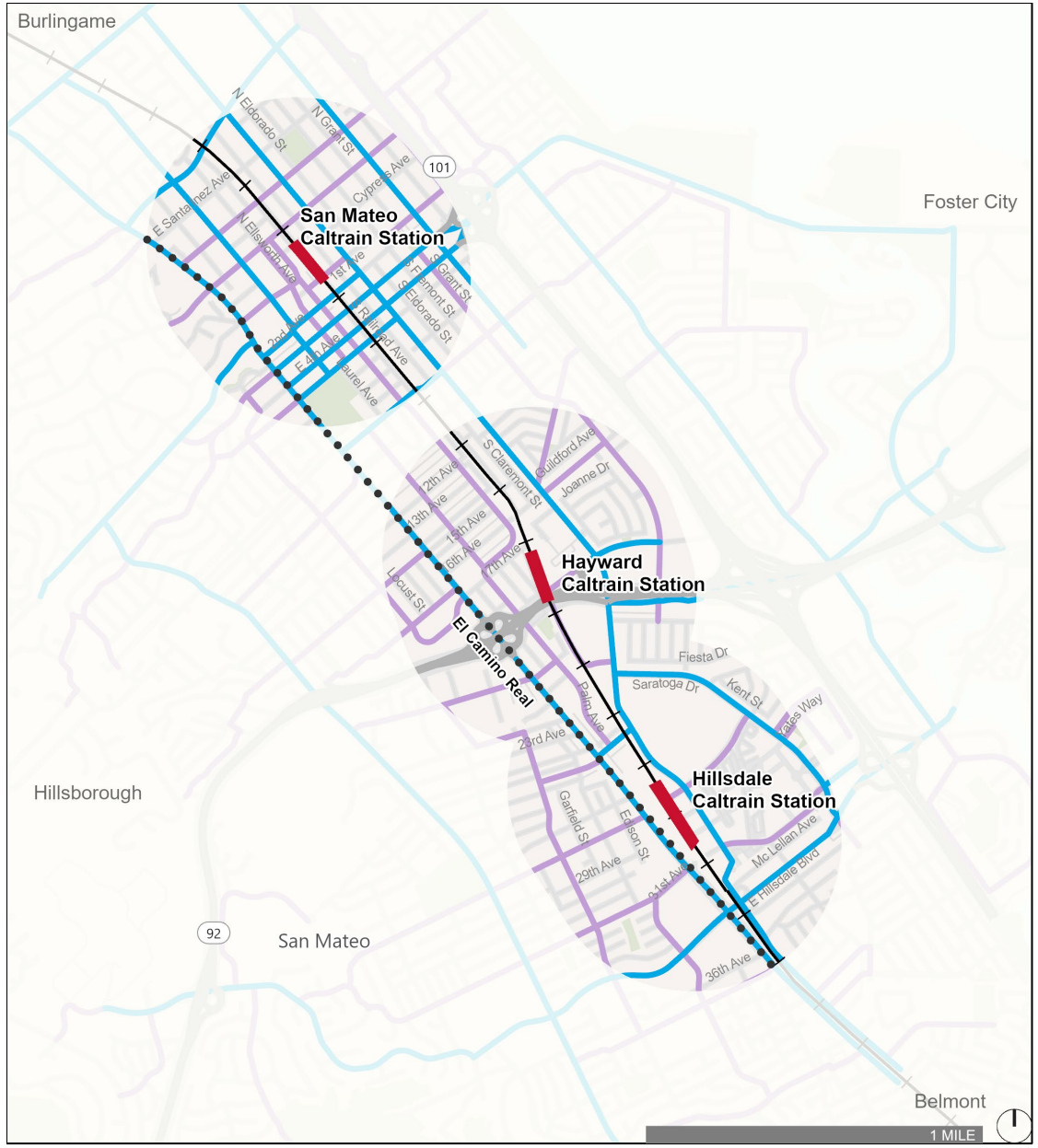
61% - 70%	51% - 60%	31% - 40%	11% - 20%
	41% - 50%	21% - 30%	0% - 10%

Source: CalEnviroScreen 4.0, OEHHA, 2021

Existing Transportation Facilities

Roadway Typology

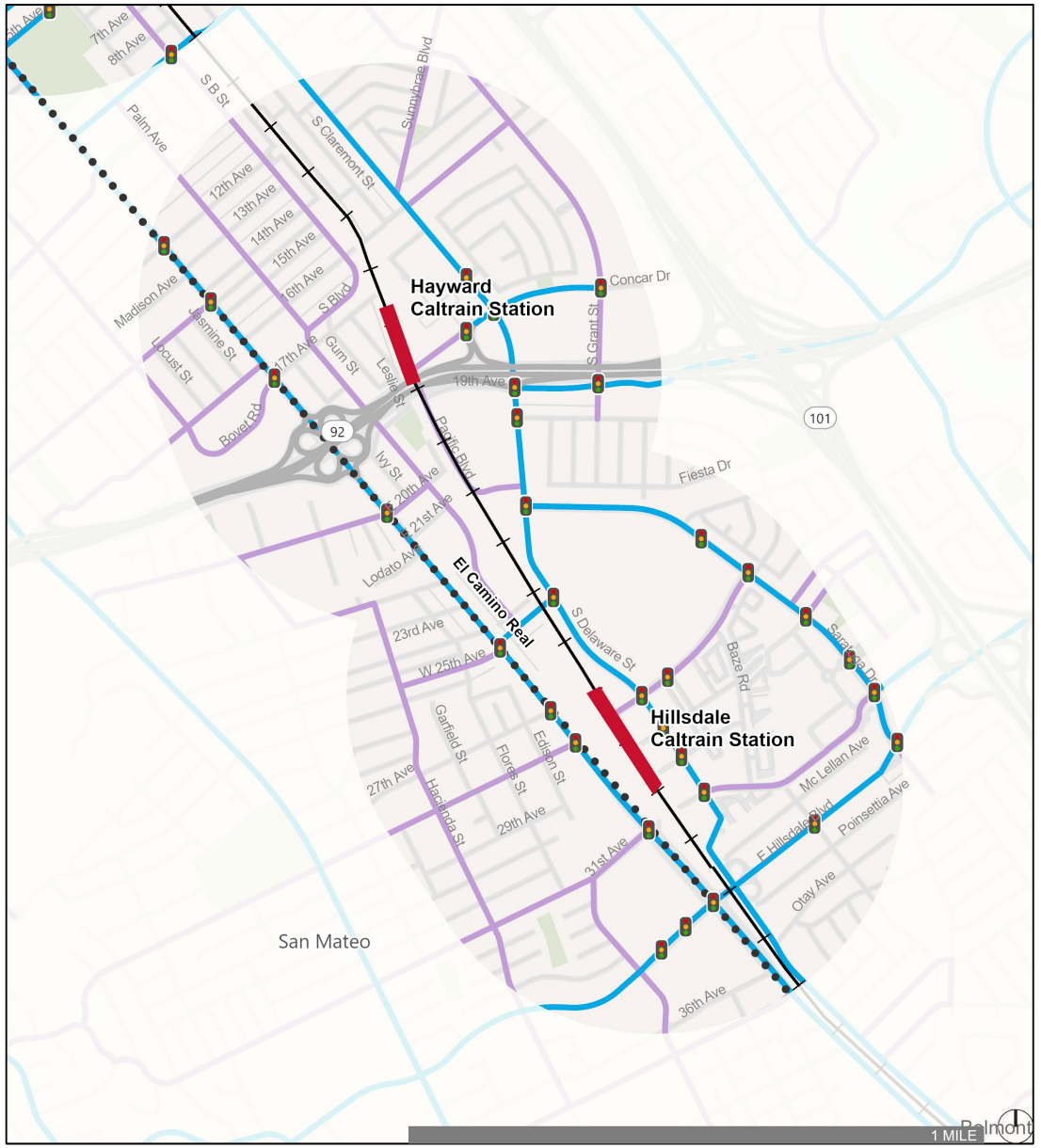
Number of travel lanes can be assumed from Open Street Map or roadway functional classification



Source: City of San Mateo, 2021

Intersection Traffic Control

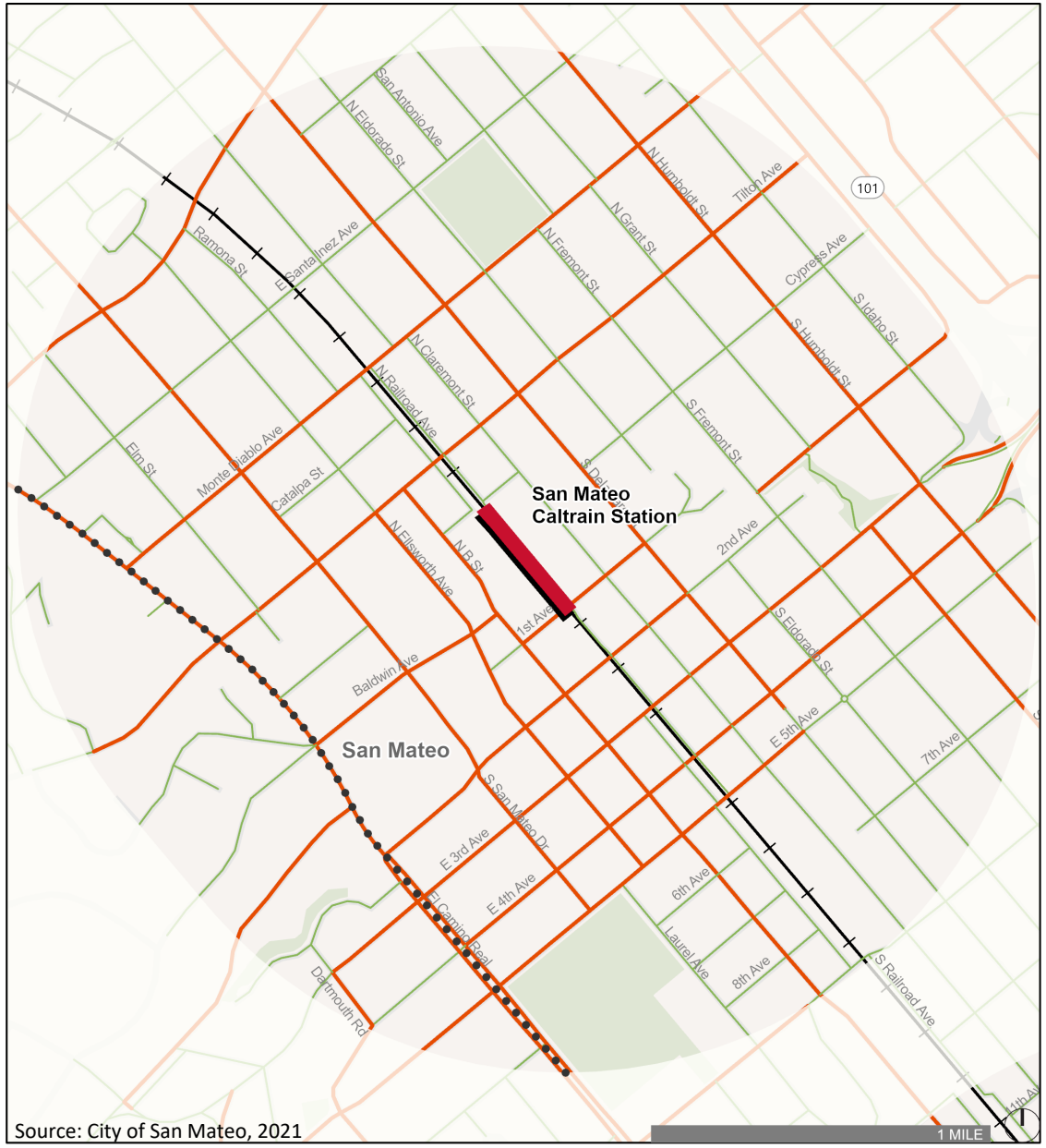
Source: City of San Mateo, 2021

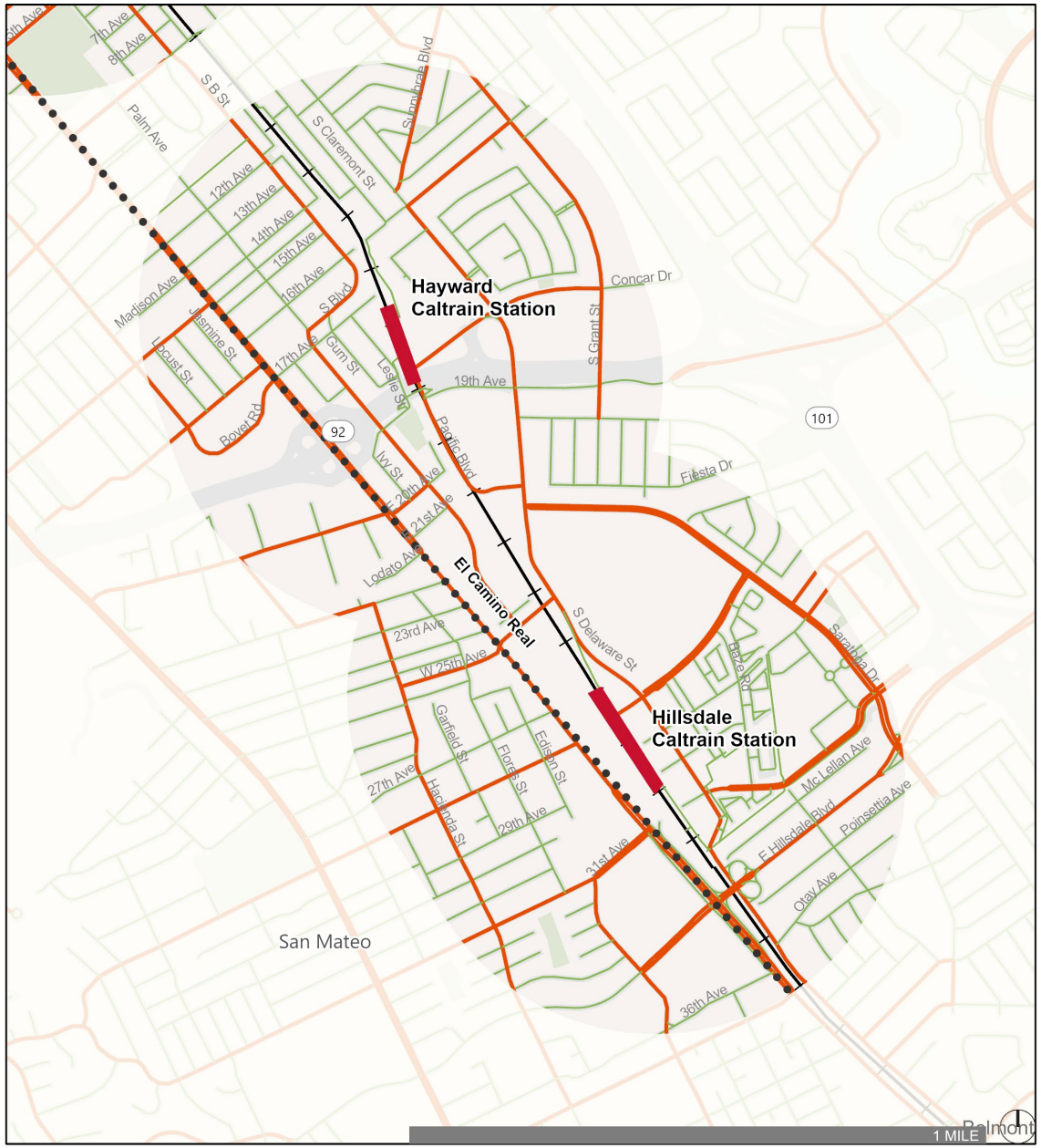


Roadway Classification
Minor Arterial
Local
Freeway
Collector
Signalized Intersections

FEHR PEERS

Level of Traffic Stress





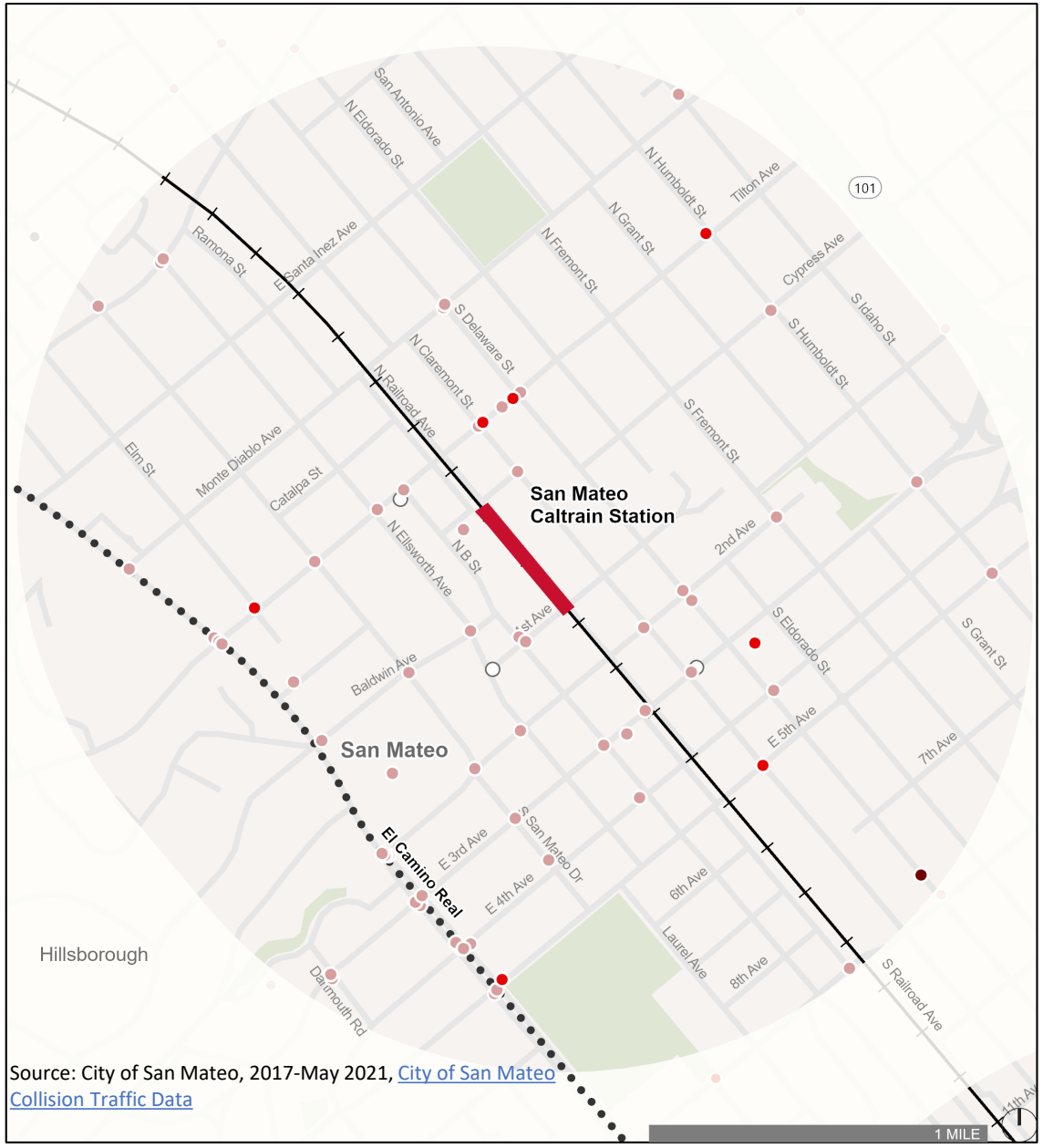
Source: City of San Mateo, 2021

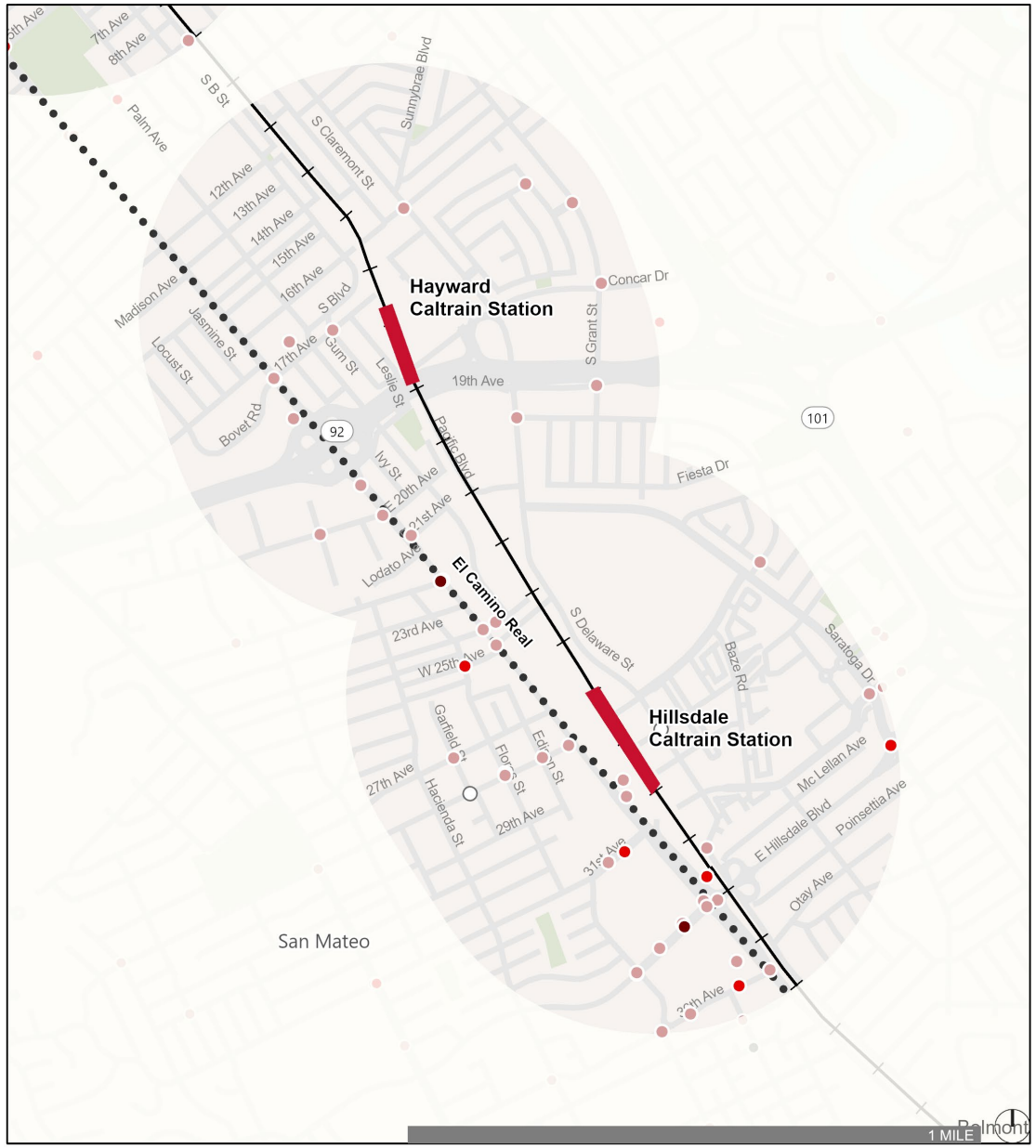
Level of Traffic Stress

High-Stress

Low-Stress

Pedestrian Collisions

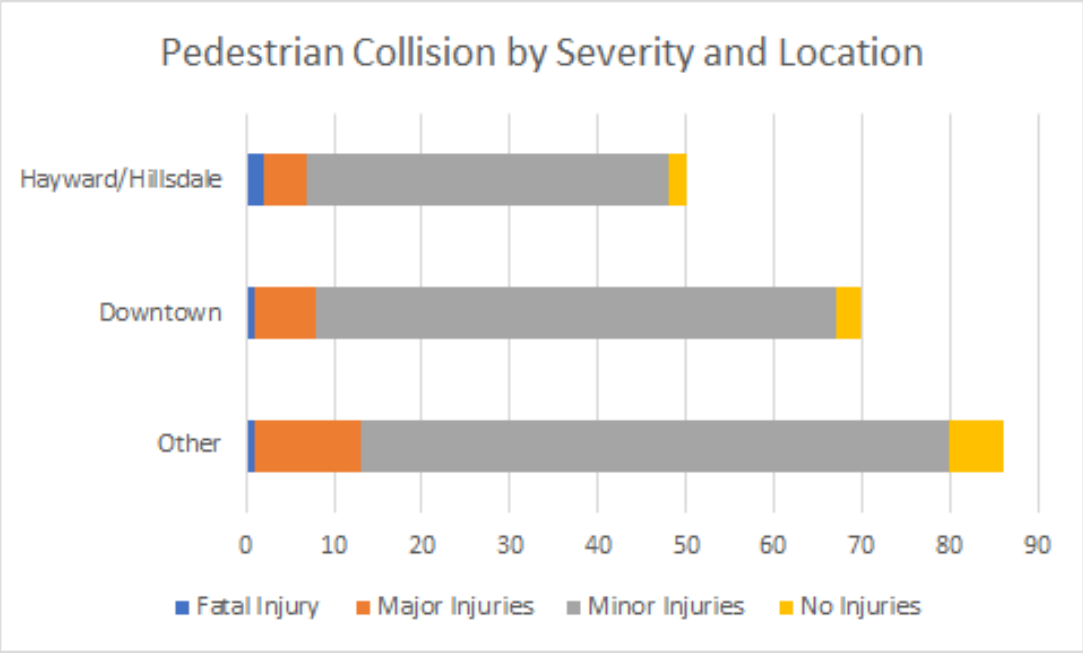


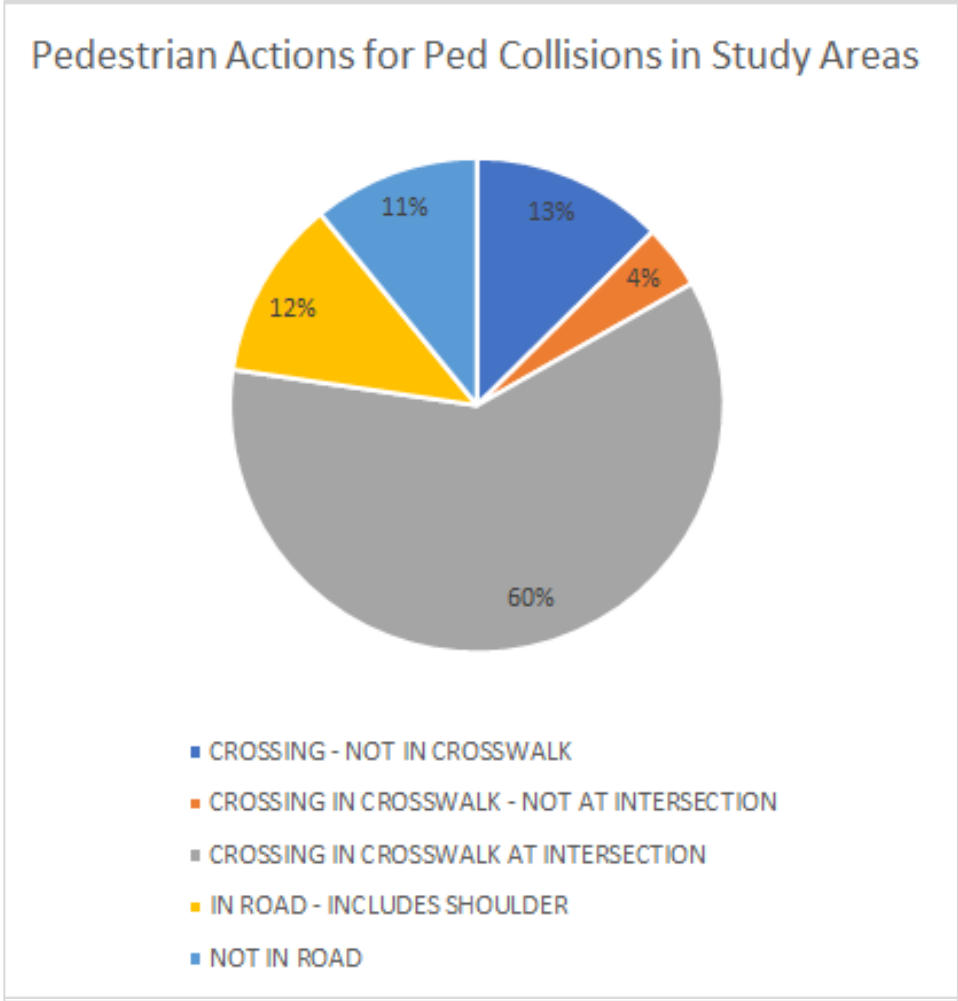


Source: City of San Mateo, 2017-May 2021, City of San Mateo Collision Traffic Data

Pedestrian Collisions
Fatal
Major Injuries
Minor Injuries
No Injuries

Pedestrian Collisions



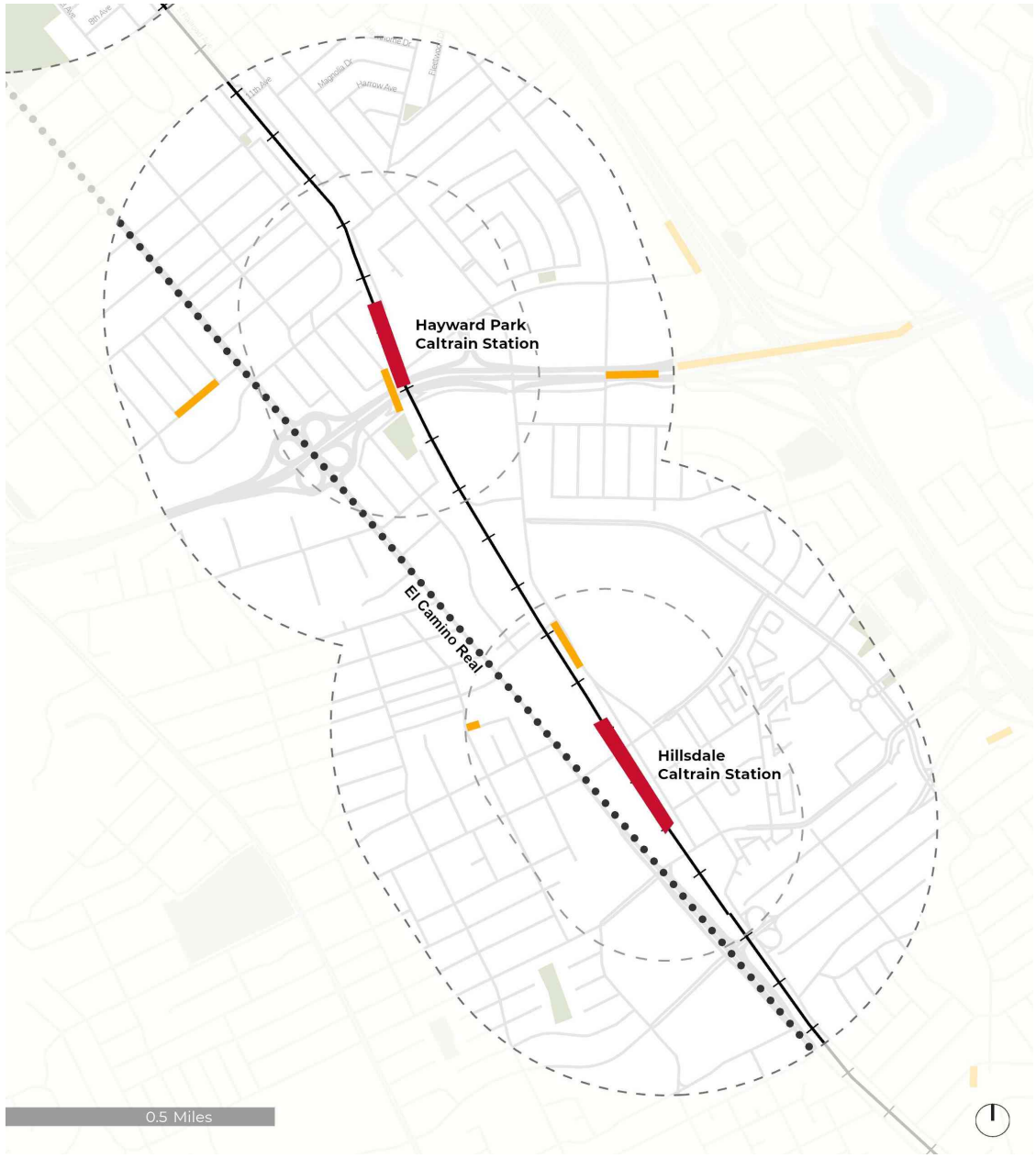


Source: City of San Mateo, 2017-May 2021, City of San Mateo Collision Traffic Data

Sidewalks

Missing Sidewalks

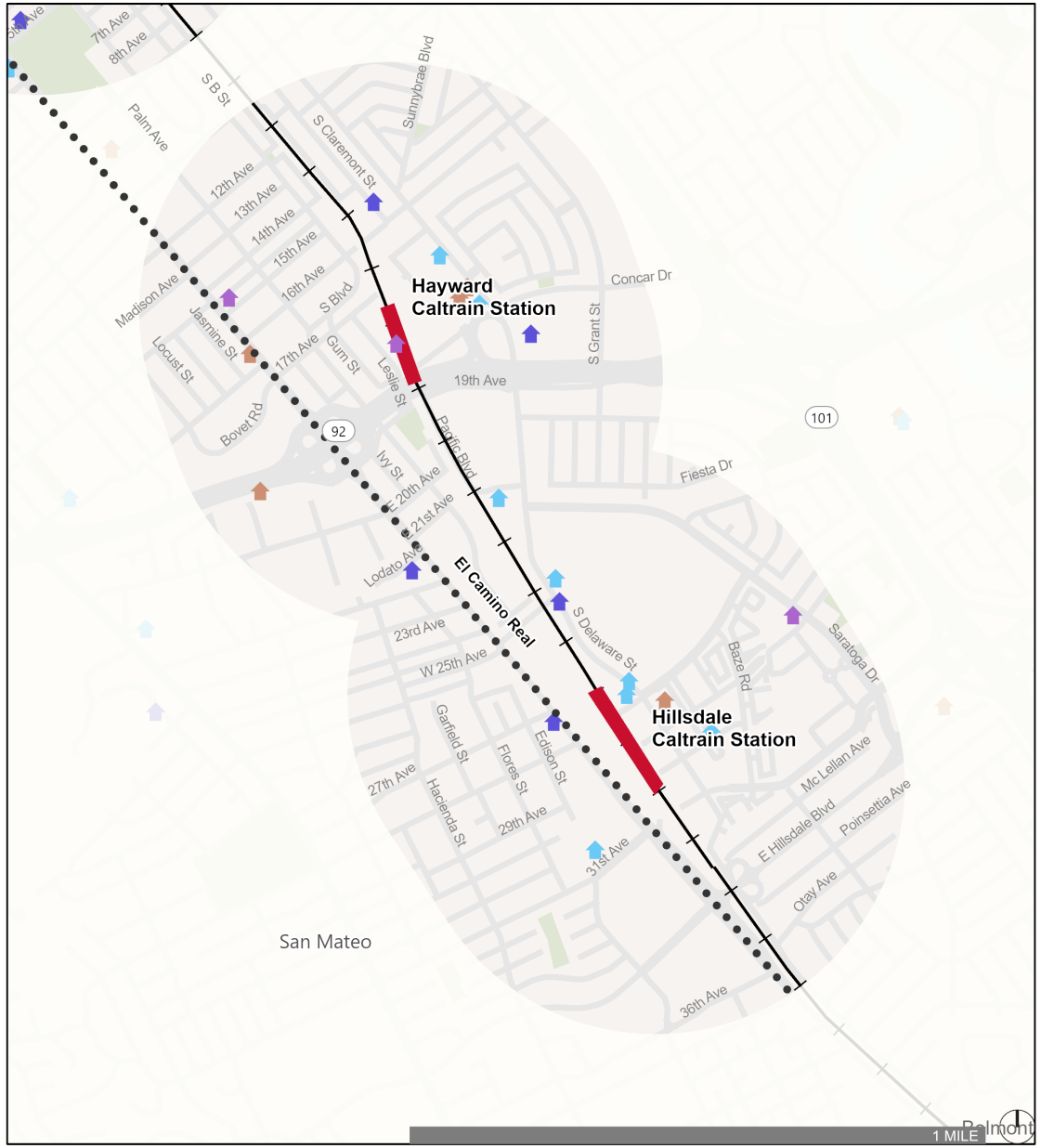
Source: Fehr & Peers, 2021



Planned Improvements

Development Projects

Source: City of San Mateo, 2021



Development Projects

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

FEHR PEERS

Planned Pedestrian Improvements

Planned Pedestrian Improvements

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

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

PUBLIC WORKS
City of San Mateo

APPENDIX C:
PRIORITIZATION METRICS

San Mateo Walks to Transit

Priority Corridors

December 3, 2021

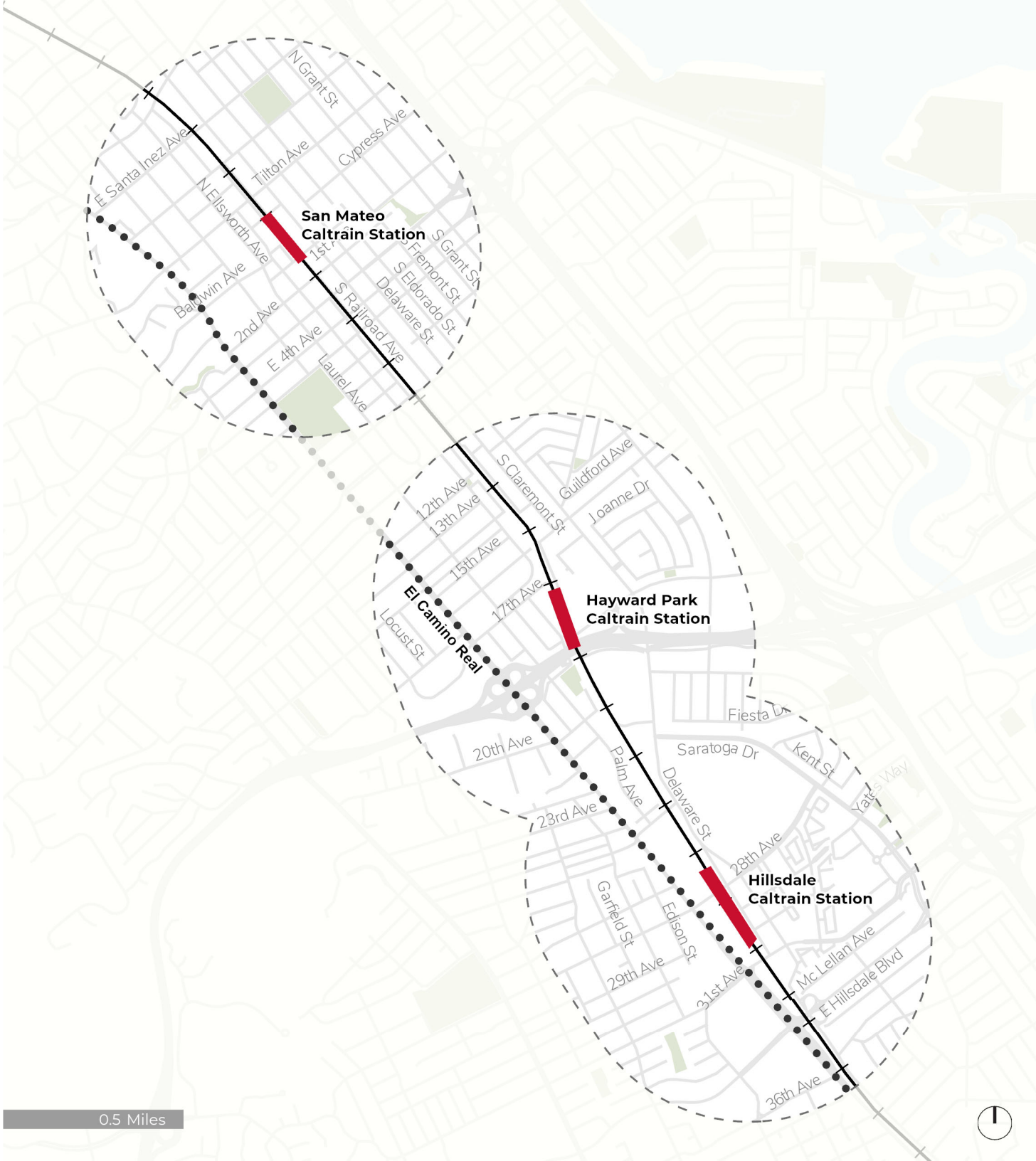
FEHR PEERS

CONTENTS

PUBLIC WORKS
City of San Mateo

STUDY AREA

STUDY AREA

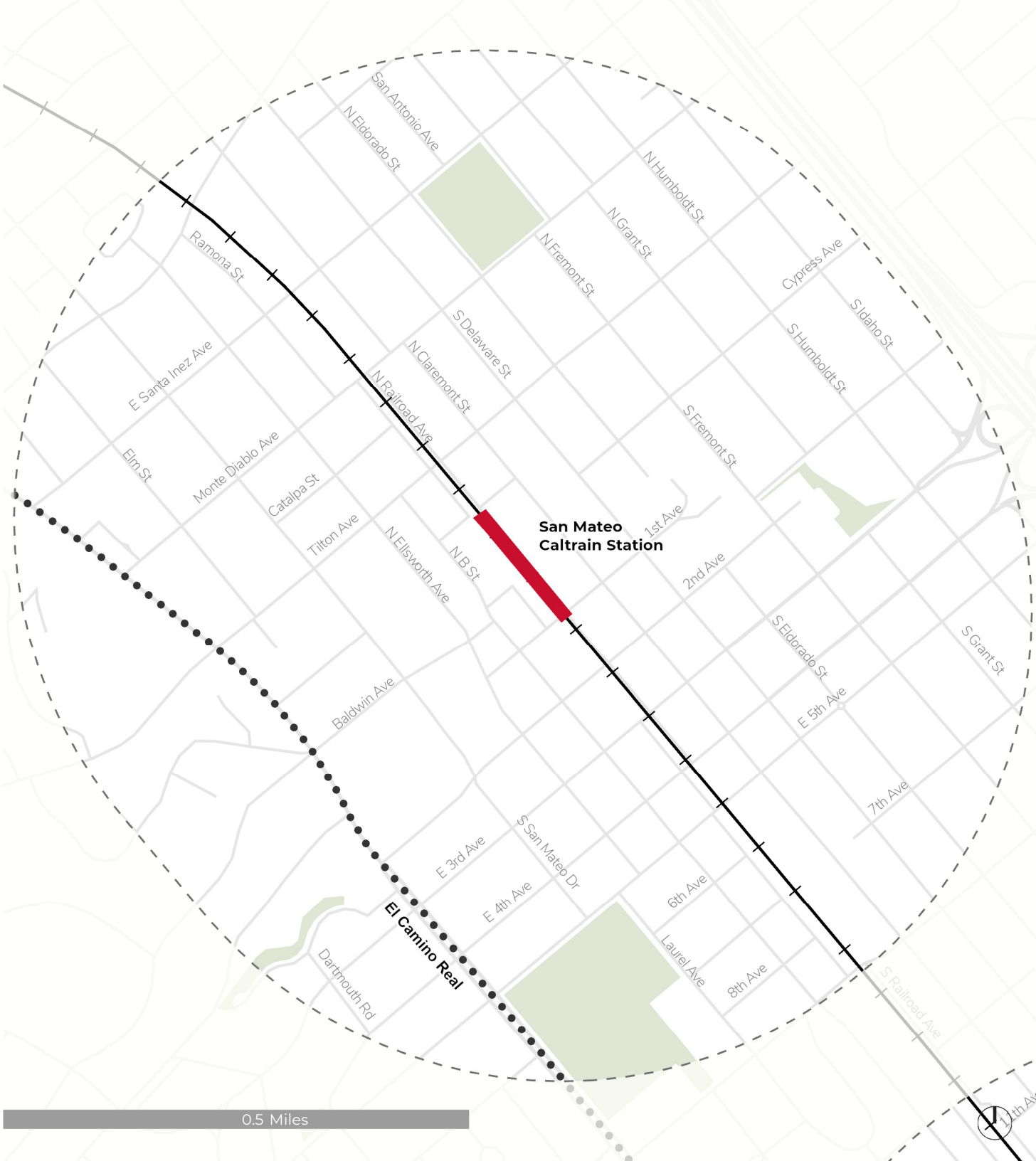


Primary Study Area
(1/2-mile radius around
Caltrain stations)

Secondary Study Area -
El Camino Real Transit Corridor

Caltrain Stations

DOWNTOWN SAN MATEO

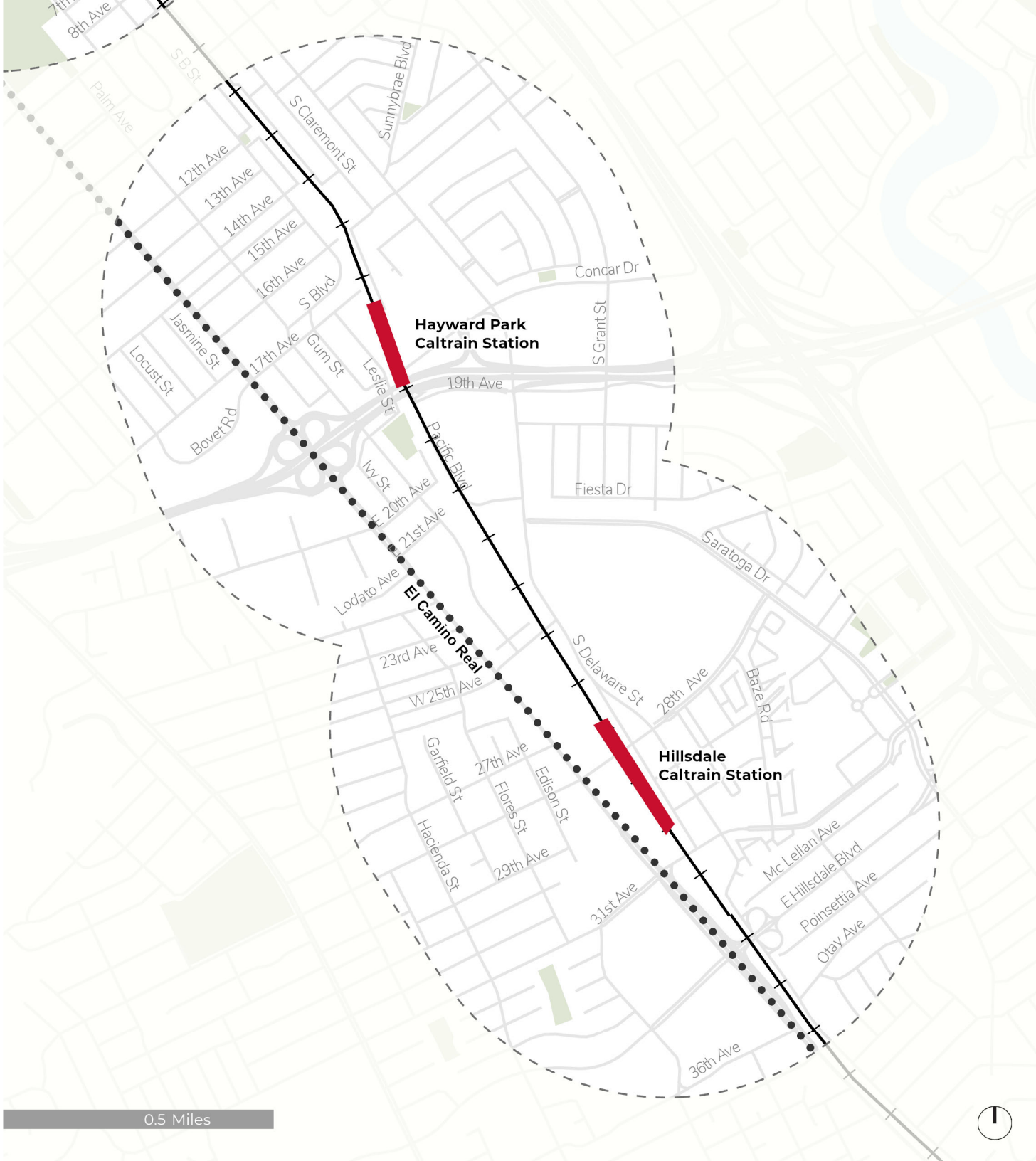


Primary Study Area
(1/2-mile radius around
Caltrain stations)

Secondary Study Area -
El Camino Real Transit Corridor

Caltrain Stations

HAYWARD PARK & HILLSDALE



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

Secondary Study Area -
El Camino Real Transit Corridor

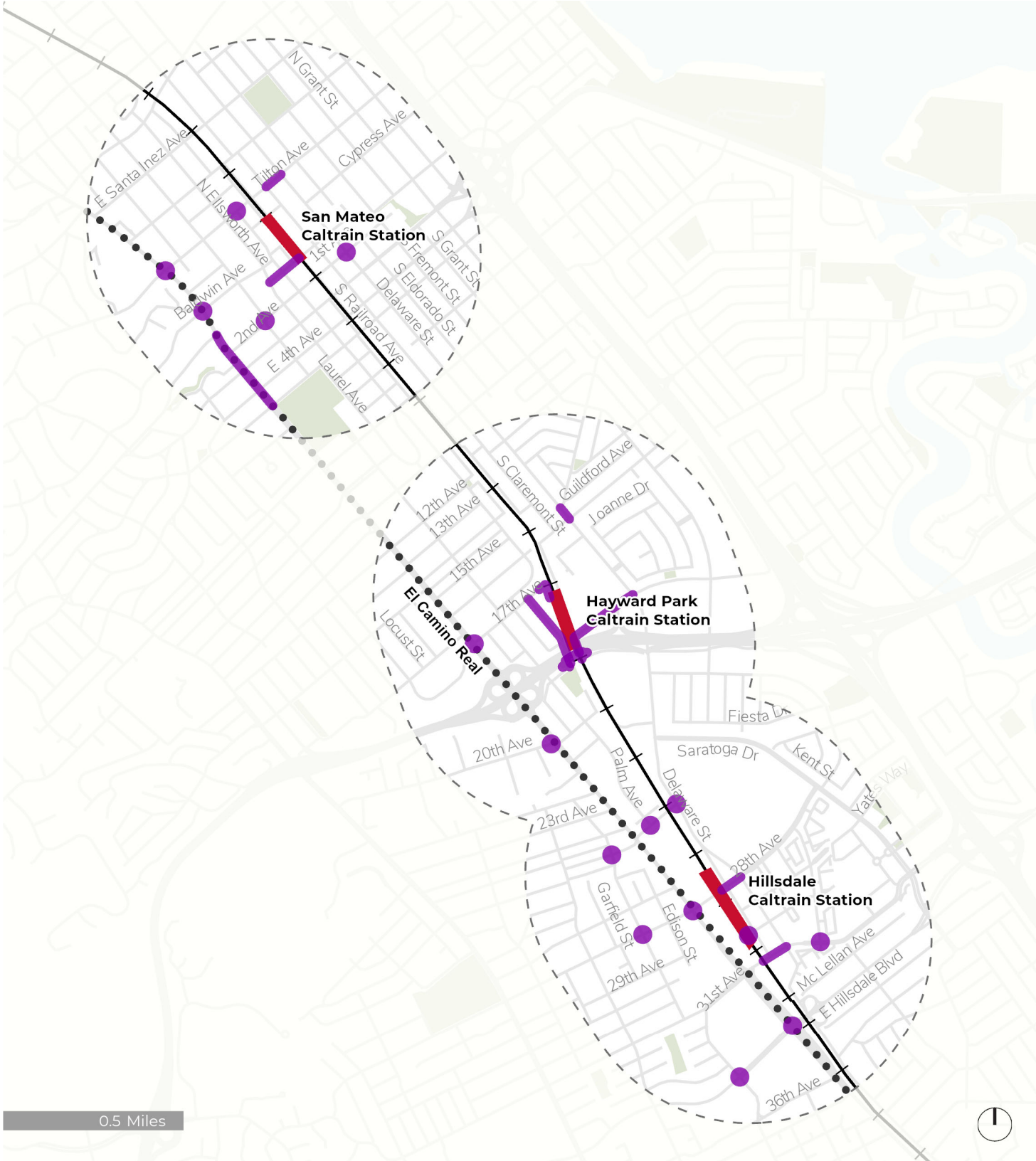
Caltrain Stations

PUBLIC WORKS
City of San Mateo

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

PRIORITY METRICS

Metric	Description	Weight *the importance placed on each metric compared to another to determine priority locations
Vulnerable Communities	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. Areas within 1 block of Senior Housing Areas within 1 block of Schools	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

PUBLIC WORKS
City of San Mateo

DOWNTOWN SAN MATEO
PRIORITY LOCATIONS

DOWNTOWN PRIORITY LOCATIONS

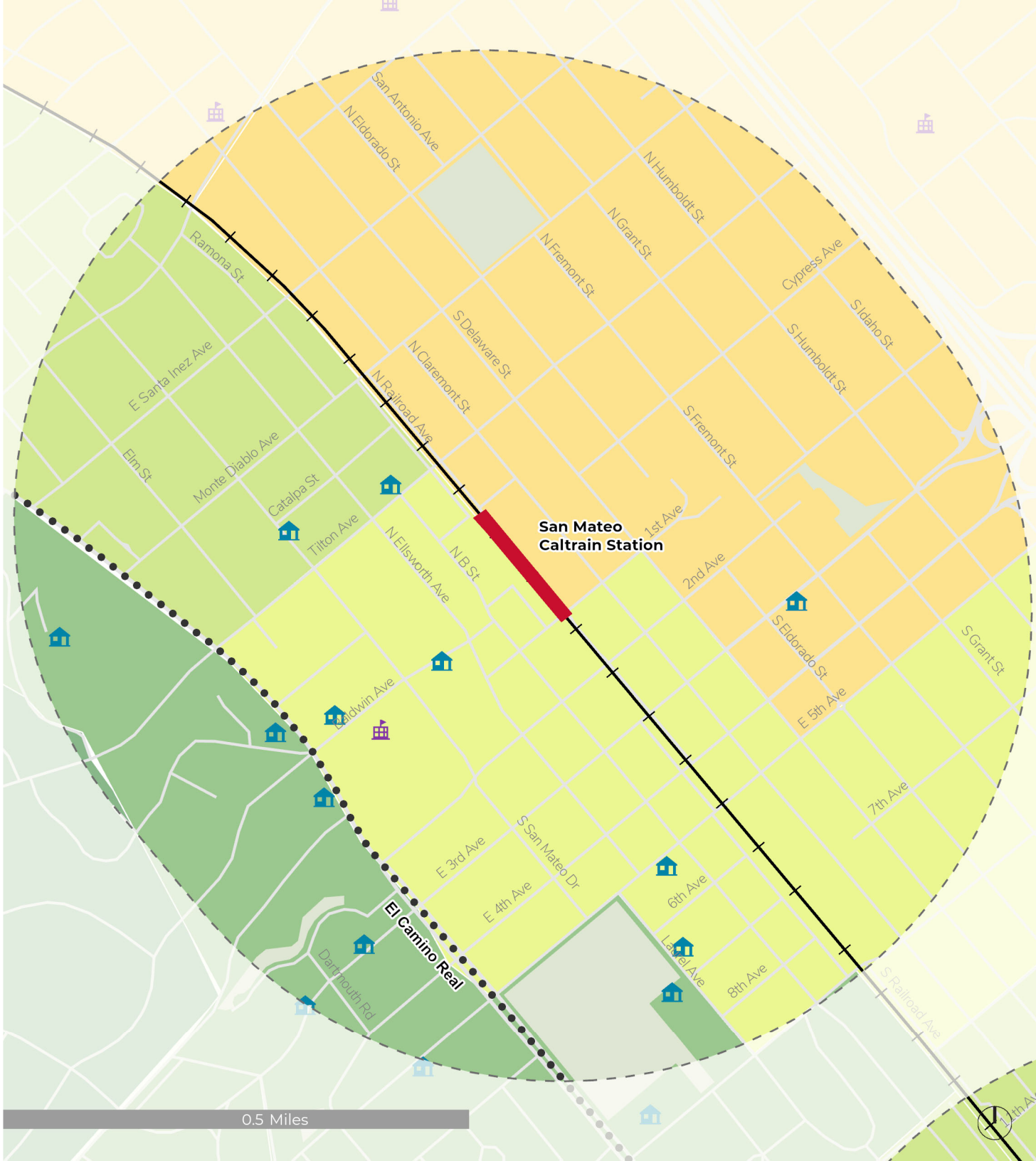
Priority Intersections

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

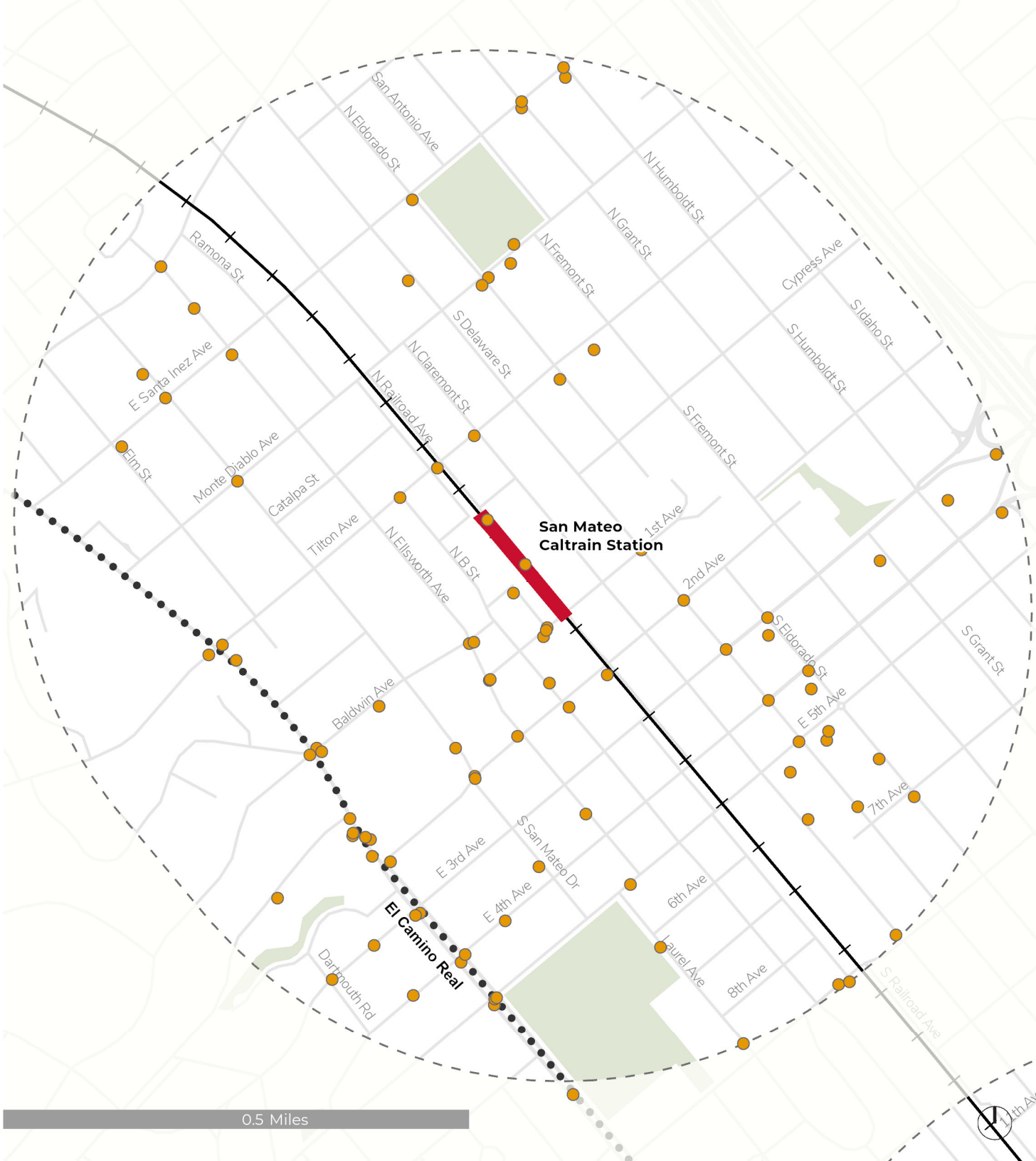
- 91% - 100%
- 81% - 90%
- 71% - 80%
- 61% - 70%
- 51% - 60%
- 41% - 50%
- 31% - 40%
- 21% - 30%
- 11% - 20%
- 0% - 10%

COLLISIONS

Fewer Collisions

More 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

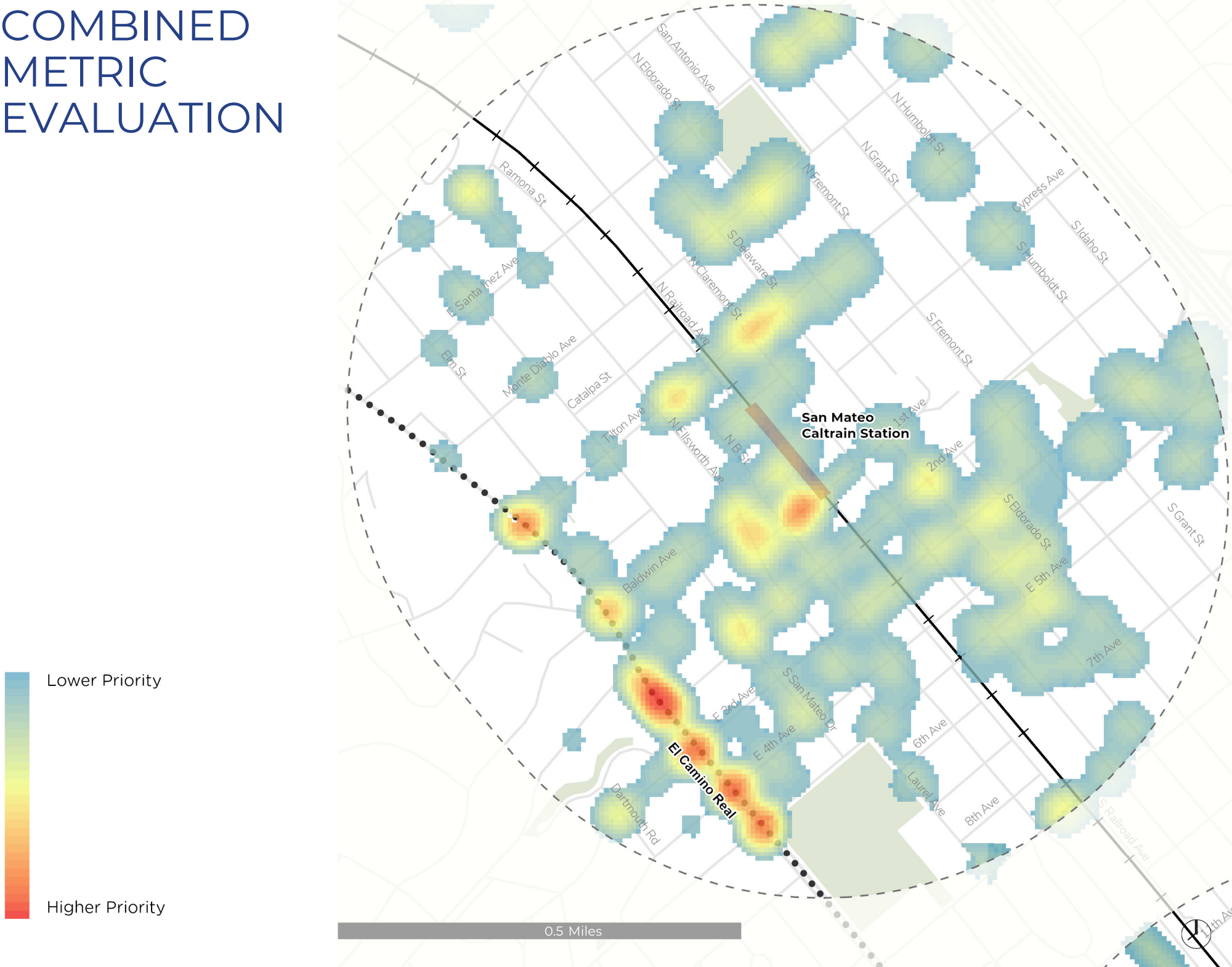
Station Access Streets

UPCOMING DEVELOPMENT PROJECTS

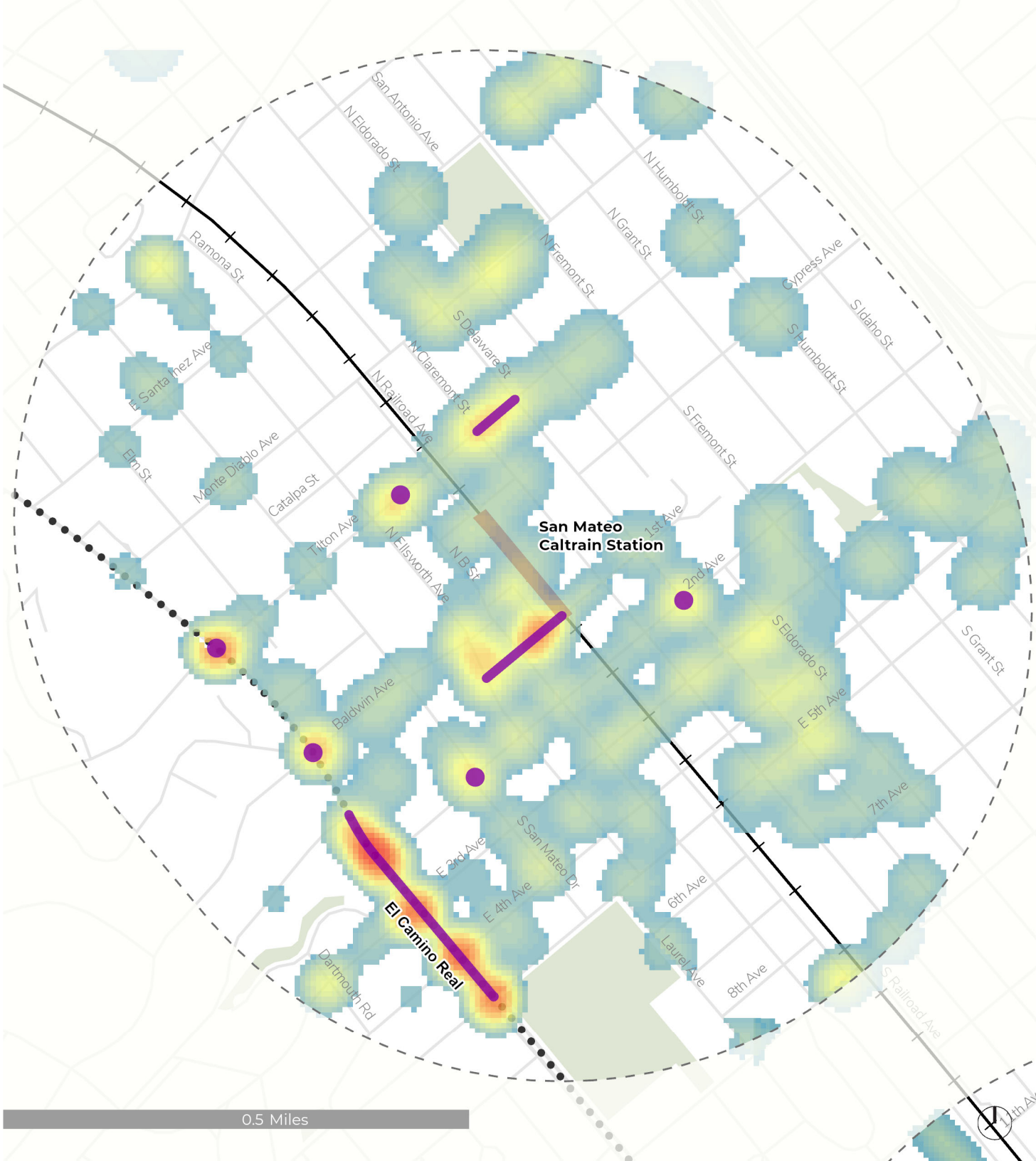
Development Projects

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

COMBINED METRIC EVALUATION



PRIORITY LOCATIONS



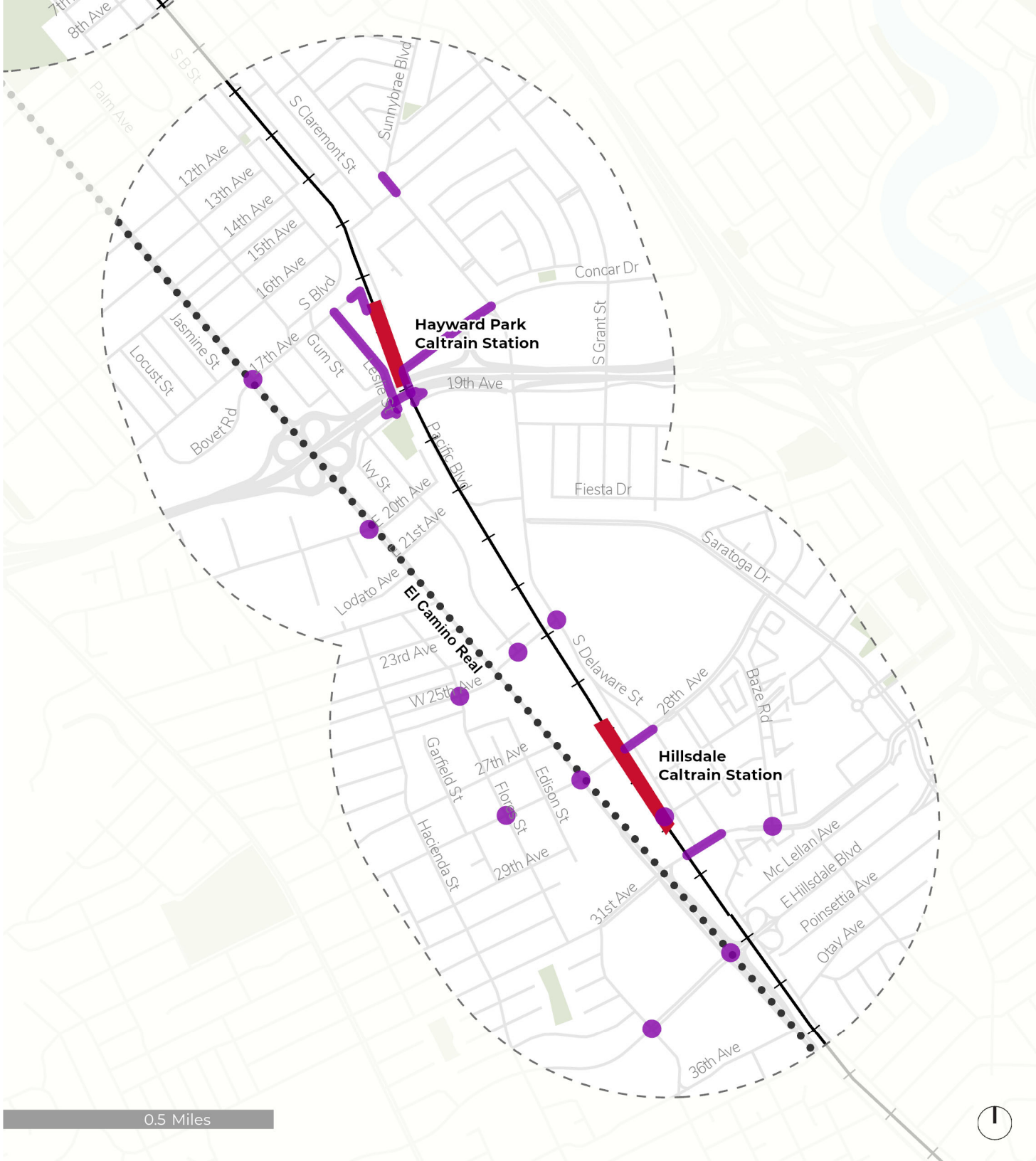
Priority Intersections

Priority Corridors

PUBLIC WORKS
City of San Mateo

HAYWARD PARK & HILLSDALE
PRIORITY LOCATIONS

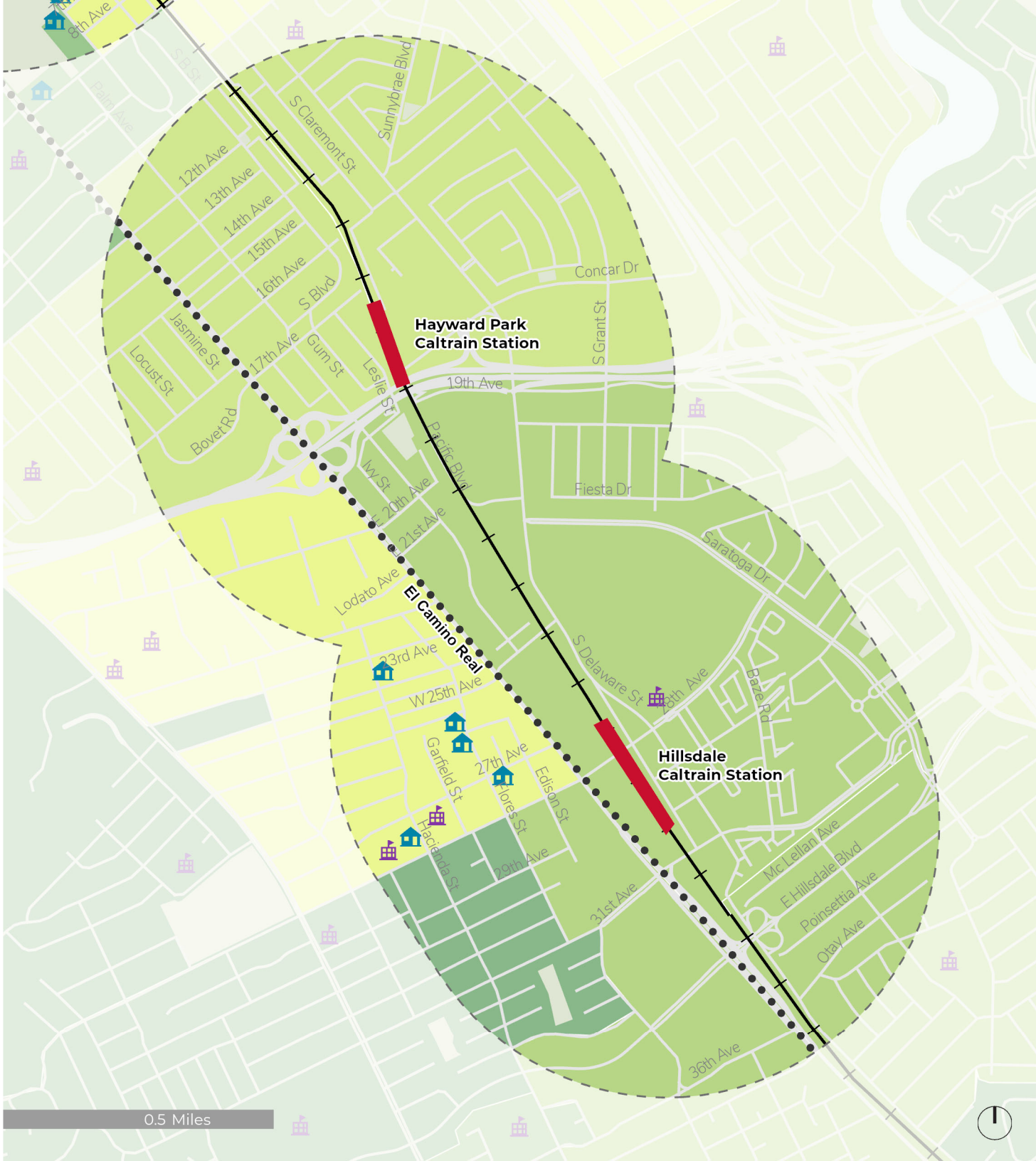
HAYWARD PARK & HILLSDALE PRIORITY LOCATIONS



Priority Intersections

Priority Corridors

VULNERABLE COMMUNITIES



School

Senior Apartments

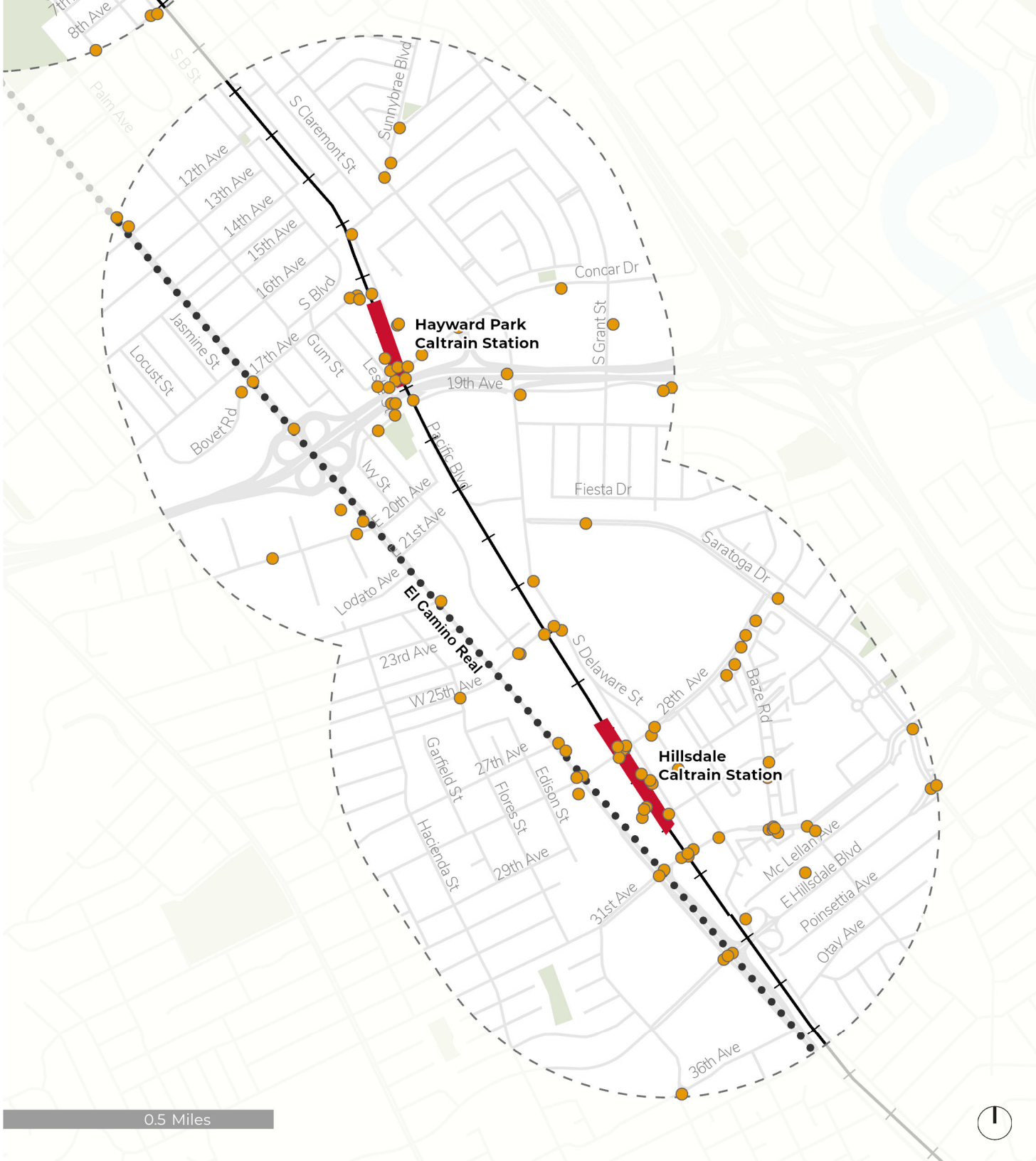
CalEnviroScreen Percentile

- 91% - 100%
- 81% - 90%
- 71% - 80%
- 61% - 70%
- 51% - 60%
- 41% - 50%
- 31% - 40%
- 21% - 30%
- 11% - 20%
- 0% - 10%

COLLISIONS


Hayward Park
Caltrain Station
Hillsdale
Caltrain Station
El Camino Real
S Claremont St
Sunnybrae Blvd
12th Ave
13th Ave
14th Ave
15th Ave
16th Ave
17th Ave
19th Ave
20th Ave
21st Ave
23rd Ave
W 25th Ave
27th Ave
28th Ave
29th Ave
31st Ave
36th Ave
S B St
Palm Ave
S Blvd
Jasmine St
Locust St
Gum St
Leslie St
Bovet Rd
Concar Dr
S Grant St
Pacific Blvd
Fiesta Dr
Saratoga Dr
Lodato Ave
S Delaware St
Baze Rd
Garfield St
Flores St
Edison St
Hacienda St
Mc Lellan Ave
E Hillsdale Blvd
Poinsettia Ave
Otay Ave
Fewer Collisions
More Collisions
0.5 Miles

COMMUNITY
AREAS OF CONCERN

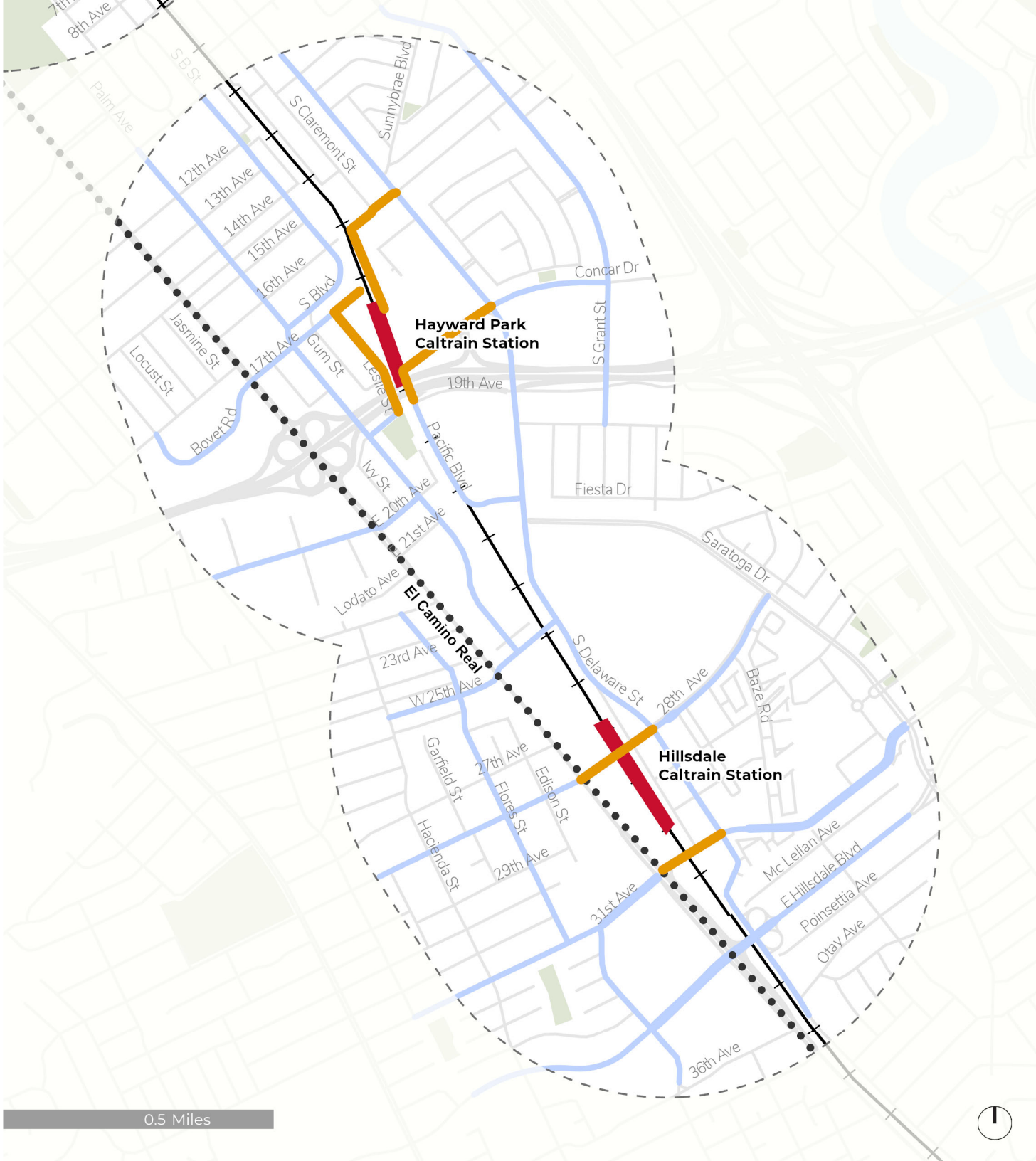


- Pedestrian Issues

ACCESS
STREETS PROVIDING ACCESS TO STATIONS

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

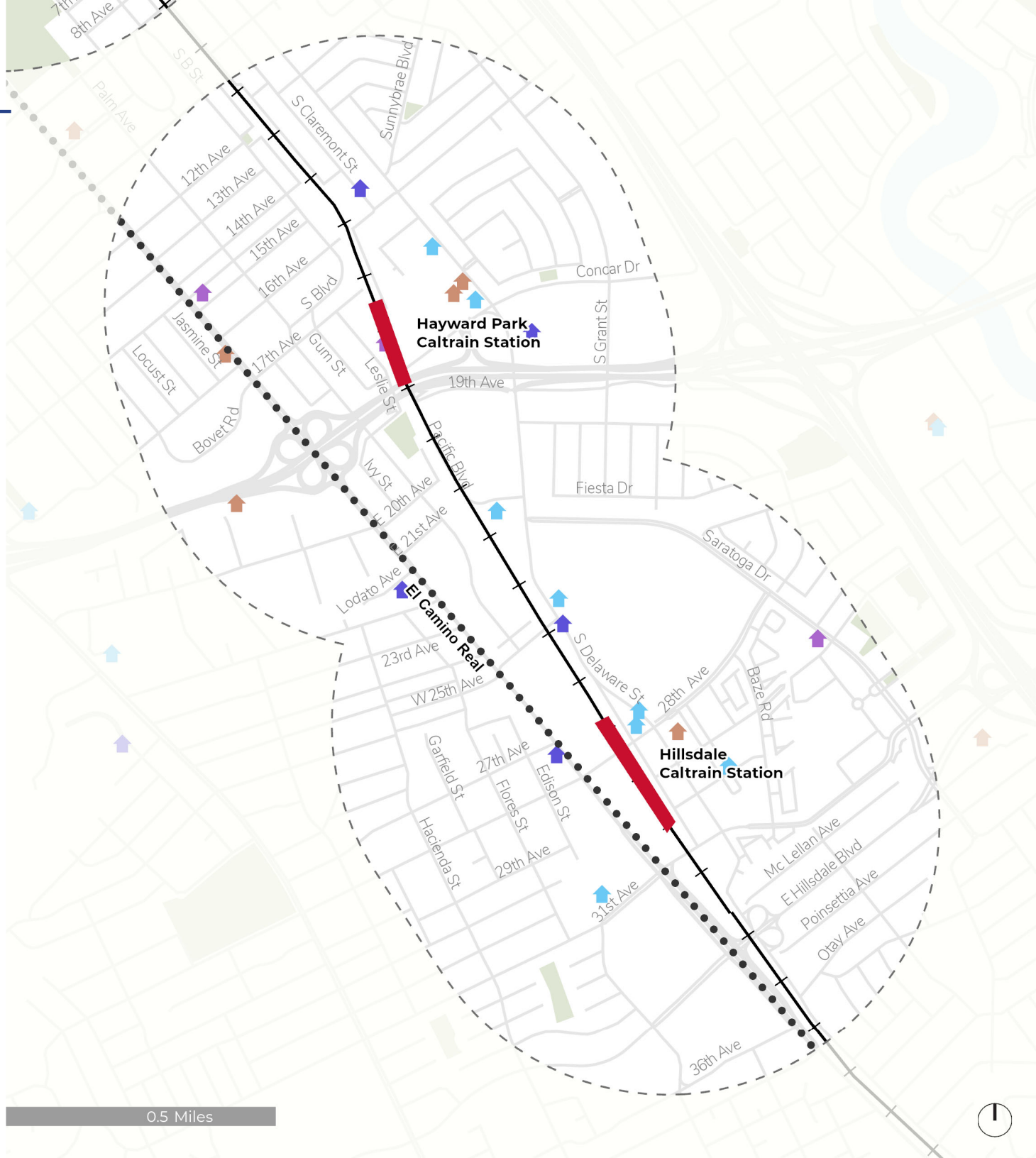
Connector Streets –
Key streets that pedestrians use to connect to station access streets



Station Access Streets

Connector Streets

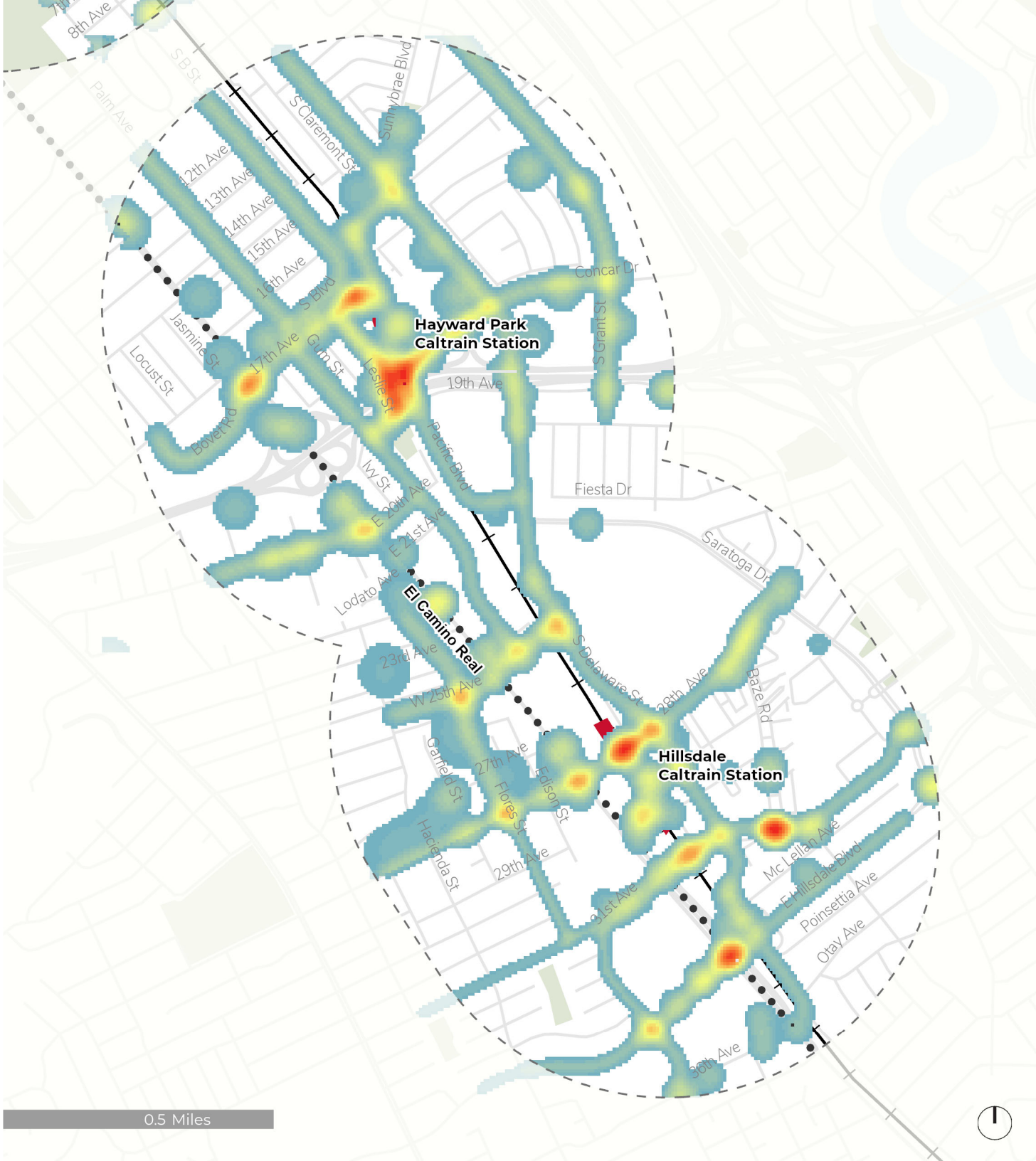
UPCOMING DEVELOPMENT PROJECTS



Development Projects

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

COMBINED METRIC EVALUATION



PRIORITY LOCATIONS

Priority Intersections

Priority Corridors

PUBLIC WORKS
City of San Mateo

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

PUBLIC WORKS
City of San Mateo

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	**In coordination with Caltrans** short term: - 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 medium term: - 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	- 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	**In coordination with Caltrans** short term: - 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 Medium term: - 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) **- coordination with SamTrans** - 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	**In coordination with Caltrans** short term: - 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 medium term: - 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	**In coordination with Caltrans** short term: - 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 medium term: - 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	**In coordination with Caltrans** short term: - 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 medium term: - 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	-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	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." "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."
DT-2-1	Downtown Gateway	2nd Ave	S Delaware St			Signal	- 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	- reduce/remove vehicle/ped conflicts: * 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		- 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	- 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 **- coordination required with Donut Delight Building (57 S. B Street) development project and City's B Street Pedestrian Mall project**	field review	
DT-2-2	Downtown Gateway	1st Ave	at Transit Center Way			Uncontrolled	- 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		- 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		- 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		- 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	- 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	- 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	- 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	- 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	- 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			- 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 implement with new developments	San Mateo Pedestrian Plan 2012 Field review	
DT-2-3	Downtown Gateway	1st Ave	at Caltrain tracks			train signal	- 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		- 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		- 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	- 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		If Cypress Ave is decided to be the best pedestrian path of travel to the new Caltrain station access: - 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	- 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 If Cypress Ave is decided to be the best pedestrian path of travel to the new Caltrain station access: - 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 If S Railroad Ave is decided to be the best pedestrian path of travel to the new Caltrain station access: - 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). **-- coordination with Caltrain required**	field review	
DT-3-3	North Central Equity Access	Tilton Ave	at N B St			SSSC	- 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	- 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 -If Cypress can't be improved consider extending the shared street recommendation on Railroad to Tilton to provide this pedestrian access		
DT-3-3	North Central Equity Access	Tilton Ave	at Claremont St			SSSC	- 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	**In coordination with Caltrans** - 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	**In coordination with Caltrans** - 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	**Coordinate the below improvements with adjacent planning application**, if possible: - 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		- 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 **Related Bike Improvements** - Bike Blvd improvements on 17th and Leslie **Caltrain ROW** - 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	0.2 mi		**City Actions** '- 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. **Caltrain ROW** - 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	- 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 **Related Bike Improvements** - Bike Blvd improvements on Leslie and 19th Ave	field review
HP-2-4	Hayward Park West	Gum St	South Blvd	17th Ave			- 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			-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		- 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	Sunnybra	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		~~- 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		- 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	**In coordination with Caltrans** '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: - 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	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) Additional pedestrian improvements for all intersection legs include: - 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	- add curb extensions to shadow on-street parking - directional ADA curb ramps - lighting - widen and landscape sidewalks on Flores with new development **Coordination with Bicycle Master Plan** (which calls for bike lanes on 25th east of Flores and bike route west of Flores) - 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	- 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	**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)* - 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 if a protected intersection is not feasible: - 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	- 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	**In coordination with Caltrans & Hillsdale Caltrain Station Bicycle Access Gap Closure Project** - 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 Delawar	845 ft		- 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	**In coordination with Caltrans** - 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				- 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	- 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		- 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			- Add wayfinding to existing Caltrain station access on the east side of the station (from parking lot between Derby Ave & Curiosity Way). **Caltrain ROW, coordination needed** - 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	**In coordination with Caltrans** - 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	- 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

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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.

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[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 services[3], 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

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[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

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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 extnguishable/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 feastures 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 supplenental 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 form 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 undergound conduits can accommodate additonal 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 reprograming 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.	