PUBLIC WORKS
City of San Mateo

DOWNTOWN

DOWNTOWN - EL CAMINO REAL

ISSUES

Primary challenges along El Camino Real include uncomfortable crossings and narrow, obstructed sidewalks. The need for improved crossings is also supported by pedestrian collisions that have occurred at all intersections in the study area over the past five years. 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 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.

All improvements on El Camino Real will require coordination with Caltrans. The primary recommendations 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

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development project
- Vulnerable Community

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

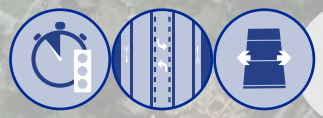
4th Ave

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.

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 from side streets to reduce conflicts with crossing pedestrians.



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

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 if possible.

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**.

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

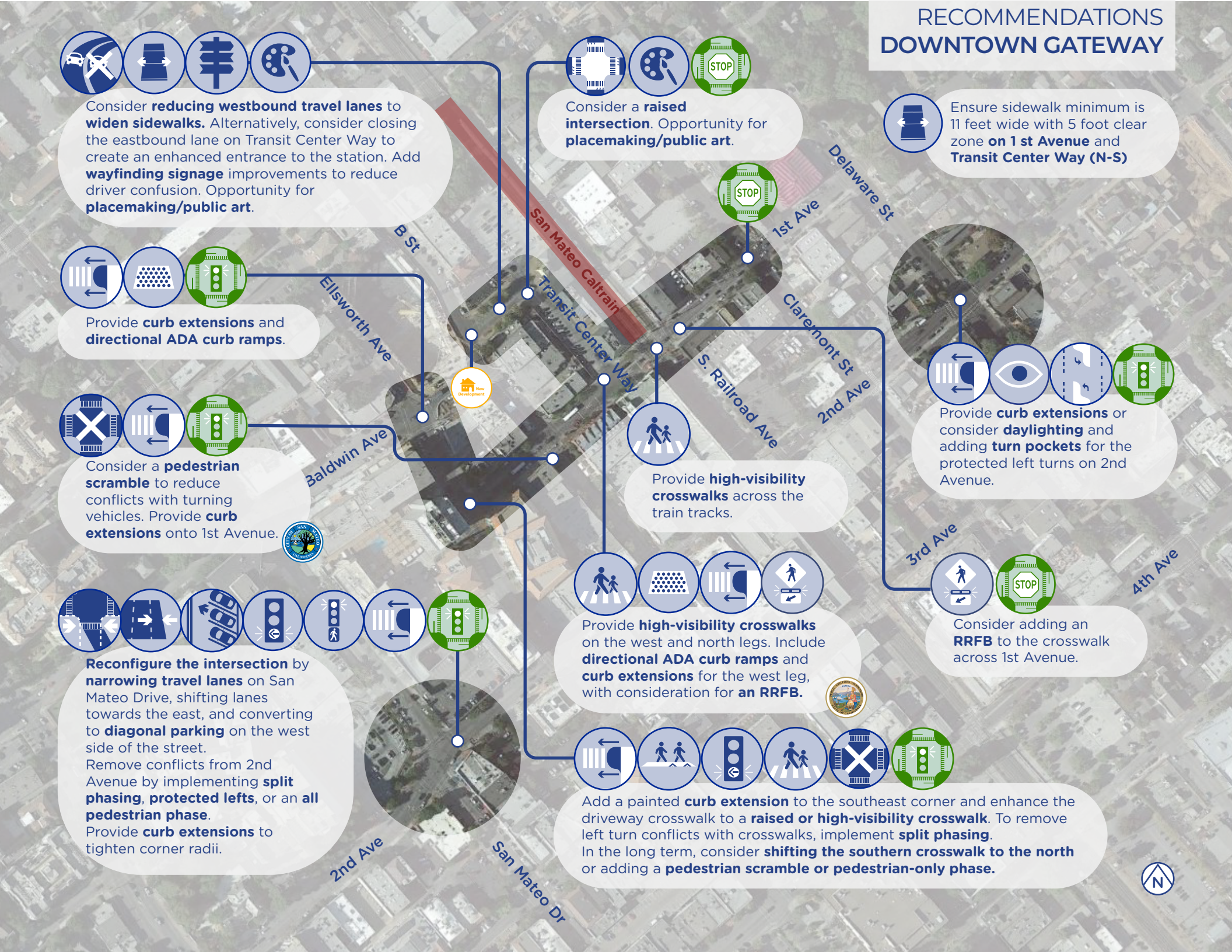
B Street Pedestrian Mall

303 Baldwin Development Project

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development Project
- Vulnerable Community

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. To access the entrance, pedestrians must either walk through the Mi Rancho 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.

There is no direct access to the Caltrain station from the northeast side.

SUMMARY

Recommendations in this area focus on improving pedestrian access to the Caltrain station from the north, through a new station entrance near Cypress Avenue and improvements to the existing access on the northwest corner. Specific recommendations include improving the accommodations and experience along the alleyways that provide direct access to the Caltrain station with improved lighting, wayfinding, and generally providing more space for pedestrians by widening sidewalks, restricting parking, or implementing a shared street concept. On Cypress Avenue, this would include considerations for a two-way to one-way street conversion.

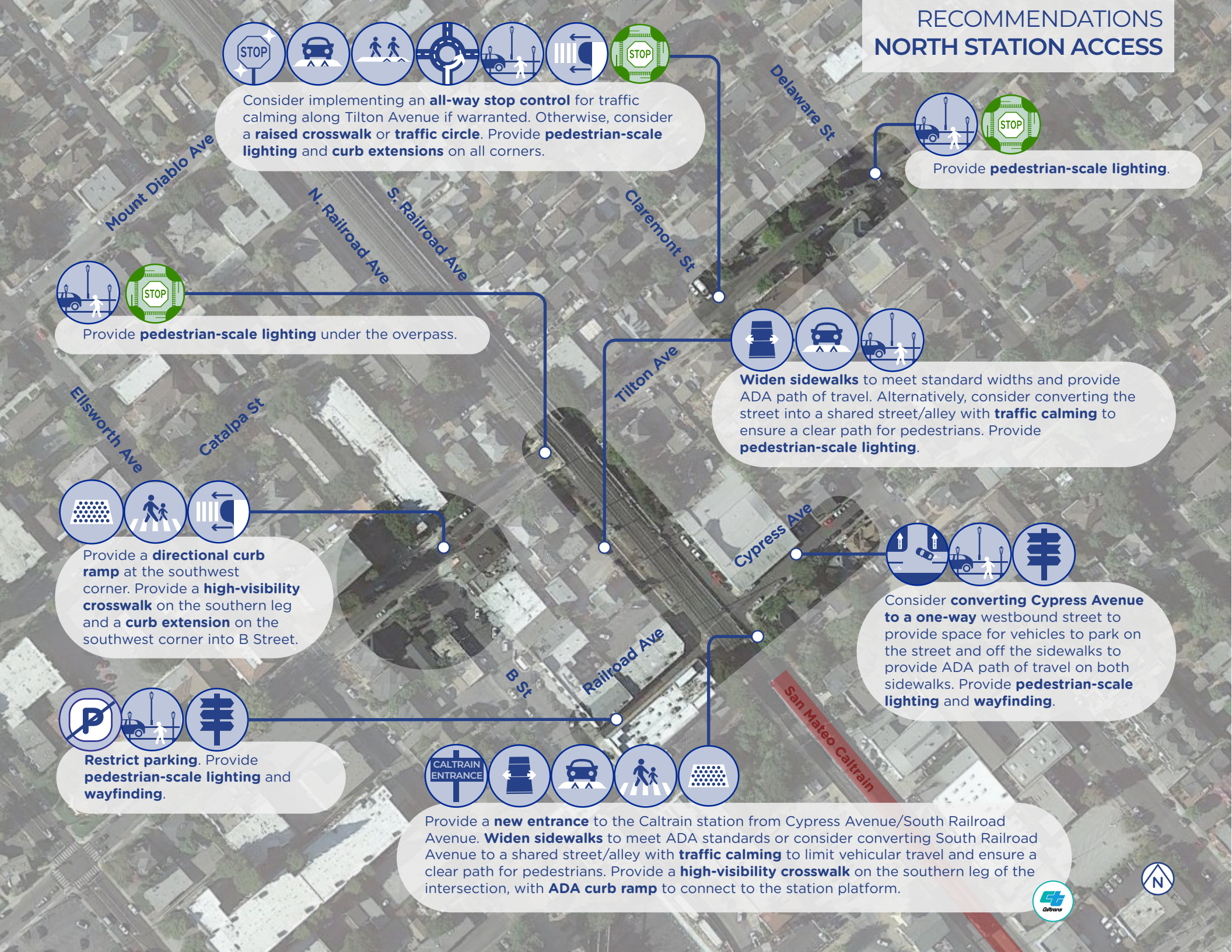
Enhancements are recommended at crossings of Tilton Avenue to improve pedestrian comfort for those traveling to and from the north. These include standard visibility improvements such as high visibility markings, advanced stop bars where applicable, improved lighting, and curb extensions where feasible.

Traffic calming is 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, or an enhanced crossing in the form of a raised crossing or traffic circle.

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development Project
- Vulnerable Community

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**.

Provide **pedestrian-scale lighting** under the overpass.

Widen sidewalks to meet standard widths and provide ADA path of travel. Alternatively, consider converting the street into a shared street/alley with **traffic calming** to ensure a clear path for pedestrians. Provide **pedestrian-scale lighting**.

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**.

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.

PUBLIC WORKS
City of San Mateo

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 along El Camino Real. 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 wide 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 between 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.

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 primary recommendations in this study area are all consistent with Caltrans' guidance for implementing complete streets principles on the state highway system.

PROJECT COORDINATION / OVERLAP

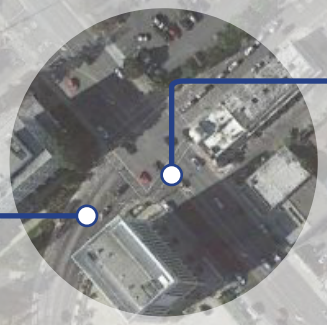
SamTrans El Camino Real Bus Speed & Reliability Study

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development Project
- Vulnerable Community

RECOMMENDATIONS
HAYWARD PARK - EL CAMINO

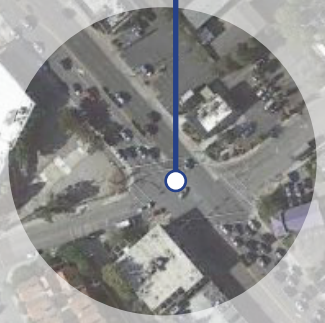
17th Ave
Palm Ave
Gum Ave
Hayward Park Caltrain
Ivy St
19th Ave
Bovet Rd
SR-92
El Camino Real
20th Ave



Provide **curb extensions** on El Camino Real to shorten pedestrian crossings and provide space for a bus stop.

Provide **curb extensions** at the southwest corner on Bovet Road to tighten the corner radius and slow turning vehicles. Consider **removing the dedicated right turn lane** or **narrowing existing travel lanes** on Bovet Road to shorten pedestrian crossings. Provide **protected left turns** from Bovet Road and 17th Avenue.

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

Key priority metrics

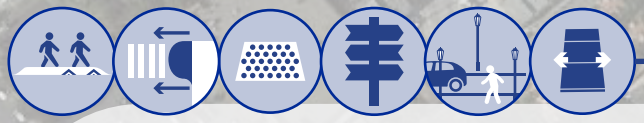
- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development Project
- Vulnerable Community

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. Use curb extensions to realign driveways.

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.

Provide a **crosswalk** and **directional ADA curb ramps** at 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 **Class 1 shared bicycle and pedestrian path** 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** on the west leg at 19th Avenue and Leslie Street to connect the overpass entrance to the ballpark and sidewalks. Provide **curb extensions** to square up the intersection. Implement an **all-way stop**. 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

Sunnybrae's Bike Boulevard Project

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development project
- Vulnerable Community

RECOMMENDATIONS
SUNNYBRAE

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** 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 Avenue 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.

The Concar Passage Development project 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.

To further reduce the size of the intersections along the Concar Drive corridor, a feasibility assessment should be conducted to 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

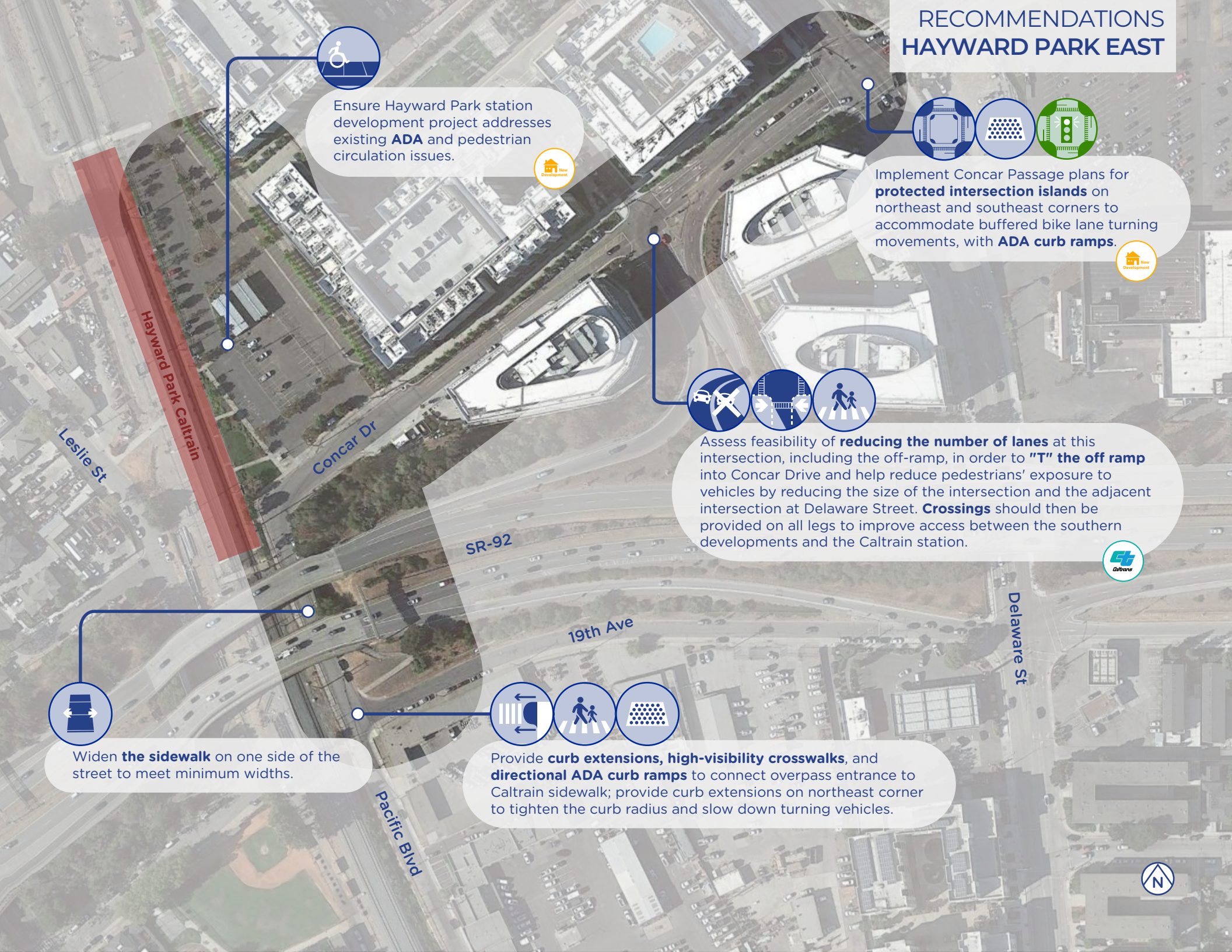
Hayward Park Station Development Project

Concar Passage Development Project

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development project
- Vulnerable Community

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**.

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.

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

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.

PUBLIC WORKS
City of San Mateo

HILLSDALE

HILLDALE – 25TH AVENUE

ISSUES

The 25th Avenue corridor provides ancillary access to the Hillsdale Caltrain Station via Delaware Street and 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 of 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/pr a road diet.

PROJECT COORDINATION / OVERLAP

South Delaware ATP Project

Bicycle Master Plan 2020

Key priority metrics

- Access Street
- **High Community Concern**
- Pedestrian Collisions
- **Vulnerable Pedestrians**
- **Development Project**
- Vulnerable Community

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.

Provide **enhanced crosswalks such as a RRFB**. 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

STOP

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 an 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 only entrance to the Caltrain Station, a raised high-visibility crosswalk should be considered at the Caltrain underpass, with pedestrian-scaled lighting and other comfort measures similar to the Hillsdale Mall 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 distinct trail 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

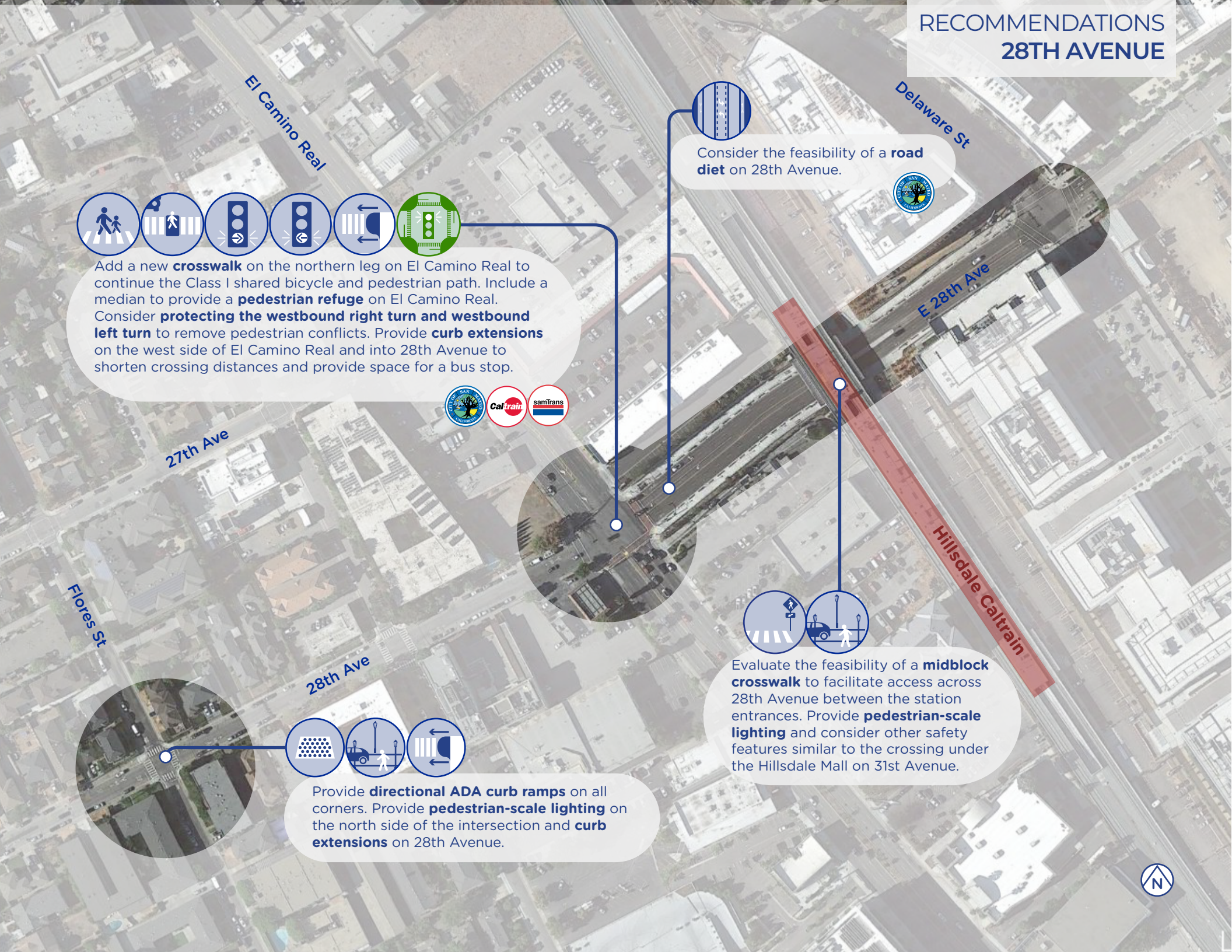
Hillsdale Caltrain Station Bicycle Access Gap Closure Project

Other city studies

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development Project
- Vulnerable Community

RECOMMENDATIONS
28TH AVENUE



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

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 westbound left turn** 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.

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 Mall 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 end of the station, there is no direct access provided from El Camino Real to the west side of the station or from eastern side streets such as Derby Avenue. Community feedback indicated safety concerns at the intersection of Franklin Parkway and Baze Road.

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.

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

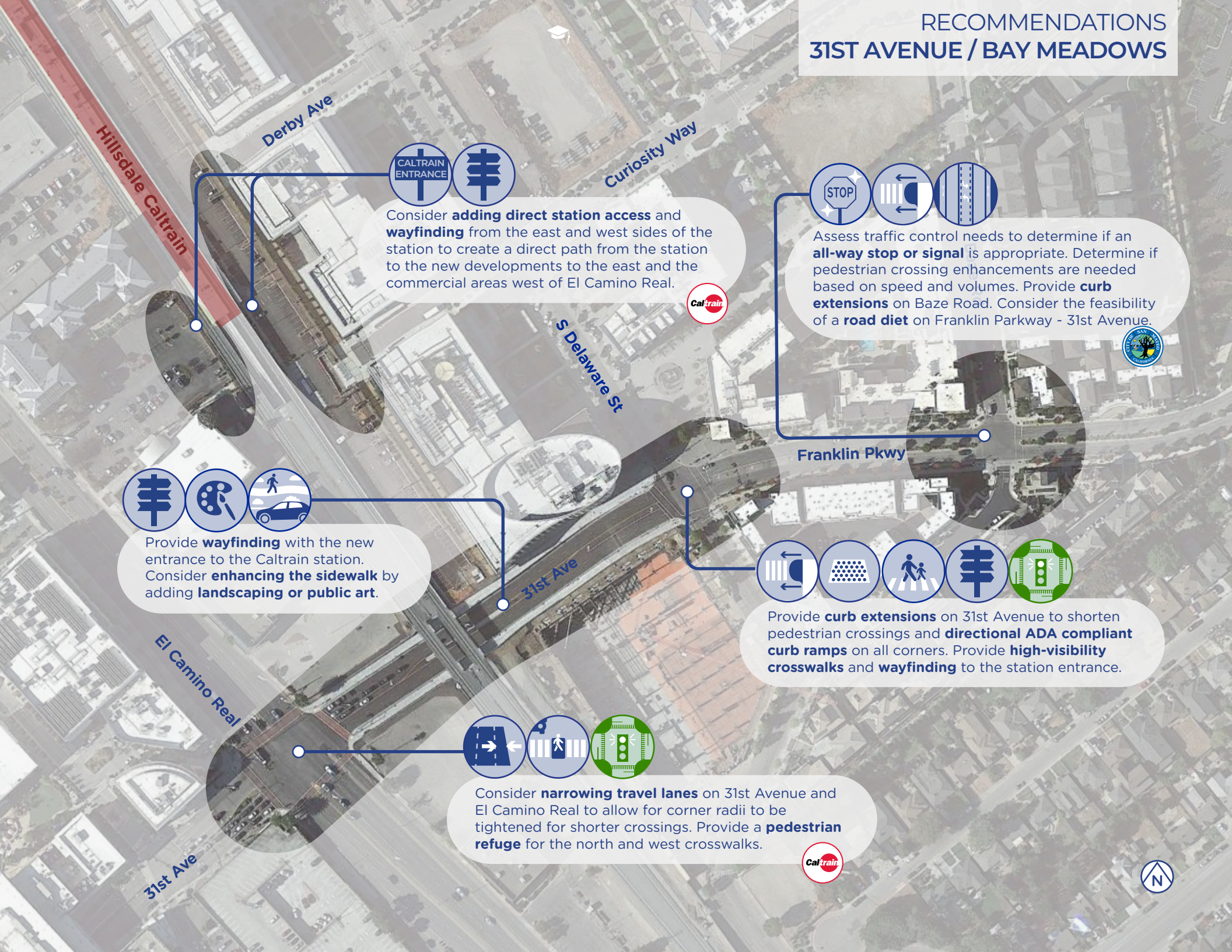
Hillsdale Caltrain Station Bicycle Access Gap Closure Project

Bay Meadows Traffic Action Plan

Key priority metrics

- Access Street
- High Community Concern
- Pedestrian Collisions
- Vulnerable Pedestrians
- Development project
- Vulnerable Community

RECOMMENDATIONS
31ST AVENUE / BAY MEADOWS



Consider **adding direct station access** and **wayfinding** from the east and west sides of the station to create a direct path from the station to the new developments to the east and the commercial areas west of El Camino Real.

Assess traffic control needs to determine if an **all-way stop or signal** is appropriate. Determine if pedestrian crossing enhancements are needed based on 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 **curb extensions** on 31st Avenue to shorten pedestrian crossings and **directional ADA compliant curb ramps** on all corners. 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 those crossing Hillsdale Boulevard. These two intersections provide access to Hillsdale Mall, 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 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 vehicle exposure for pedestrians. 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 Mall. 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.

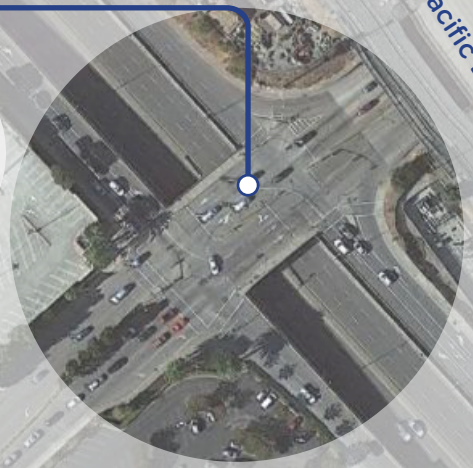
Key priority metrics

- Access Street
- **High Community Concern**
- **Pedestrian Collisions**
- Vulnerable Pedestrians
- Development project
- Vulnerable Community

RECOMMENDATIONS
HILLSDALE BOULEVARD

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

Provide **high-visibility crosswalk** on east leg to allow for a continuous pedestrian connection along the east side of El Camino Real. Consider the feasibility of a **road diet** on Hillsdale Boulevard.



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

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COUNTERMEASURE GLOSSARY

COUNTERMEASURE GLOSSARY

Improved Crosswalks

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 Here to Pedestrians" signs alert drivers about the presence of pedestrians. These signs are required with advance yield lines. Other sign types can be placed on the centerline in the roadway.

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. Separates bicycles from pedestrians.

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.

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. Adding sidewalks improves safety by minimizing collisions with pedestrians walking in the road.

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.

Rectangular Rapid Flashing Beacon (RRFB): A rectangular rapid flashing beacon (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.

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

COUNTERMEASURE GLOSSARY

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 only have to 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 them a head start. This strategy can work in tandem with extending the crossing time each cycle or via a pushbutton request.

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 GLOSSARY

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 intersection 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 through zone 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 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 the station entrance.

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 GLOSSARY

Standard Intersection Improvements

The following two sets of improvements are countermeasures that are recommended to be applied to intersections throughout the City.

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
- Audible Push Buttons

Project Coordination

The following icons indicate whether the recommended countermeasures require coordination with other agencies, other San Mateo plans, or new development.

Caltrain

SamTrans

Caltrans

California Public Utilities Commission

San Mateo Plans & Projects

New Development