



NORTH  
FAIR OAKS

BICYCLE AND PEDESTRIAN RAILROAD CROSSING  
AND COMMUNITY CONNECTIONS STUDY

## Existing Conditions Memorandum

September 2022



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## Overview

The County of San Mateo is preparing the North Fair Oaks Bicycle and Pedestrian Railroad Crossing and Community Connections Study (Study) to assess the potential for a grade-separated pedestrian and bicycle rail crossing of the Caltrain tracks and additional improvements on local roads to support walking and bicycling in North Fair Oaks. The County and project team seek to develop a community-guided transportation plan that reflects the priorities of this culturally diverse neighborhood and defines a path forward for implementing mobility improvements.

Located along the San Francisco Peninsula, between San Francisco and San José, North Fair Oaks is an unincorporated community of San Mateo County. North Fair Oaks borders Redwood City to the north and west and Atherton to the south and east. The community of approximately 14,000 residents is densely populated and is one of the most culturally diverse areas in the county, with 70 percent of the population identifying as Hispanic. According to the Unincorporated San Mateo County Active Transportation Plan (ATP), North Fair Oaks has both the highest potential demand for walking and bicycling – due to its high population density, mix of land uses, and relatively small blocks – as well as the highest concentration of bicycle and pedestrian collisions per square mile of all San Mateo County unincorporated communities.

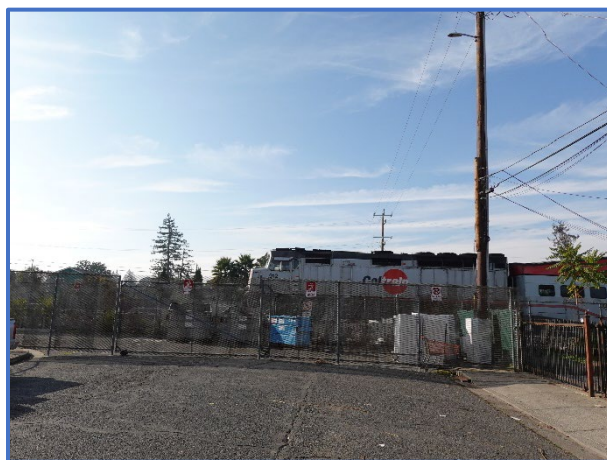
The North Fair Oaks community is bisected by a four-track railroad corridor, owned by the Peninsula Corridor Joint Powers Board (PCJPB) and utilized for the Caltrain commuter rail service. Fifth Avenue is the only existing crossing of this rail corridor in North Fair Oaks, which results in limited connectivity for pedestrians and bicyclists across it for over a nearly 1.2-mile-long span between Fifth Avenue and the northwestern community limits. The railroad tracks separate residents from services and students from local schools, after-school programs, health services, and commercial corridors.

The Study will develop alternatives and other transportation improvements that promote safety, facilitate access, and enhance the mobility of residents throughout the North Fair Oaks community. The Study's limits, as shown in

**Figure 1**, extend between Middlefield Road, State Route 82 (El Camino Real), Fifth Avenue, and the County's jurisdictional border with Redwood City.



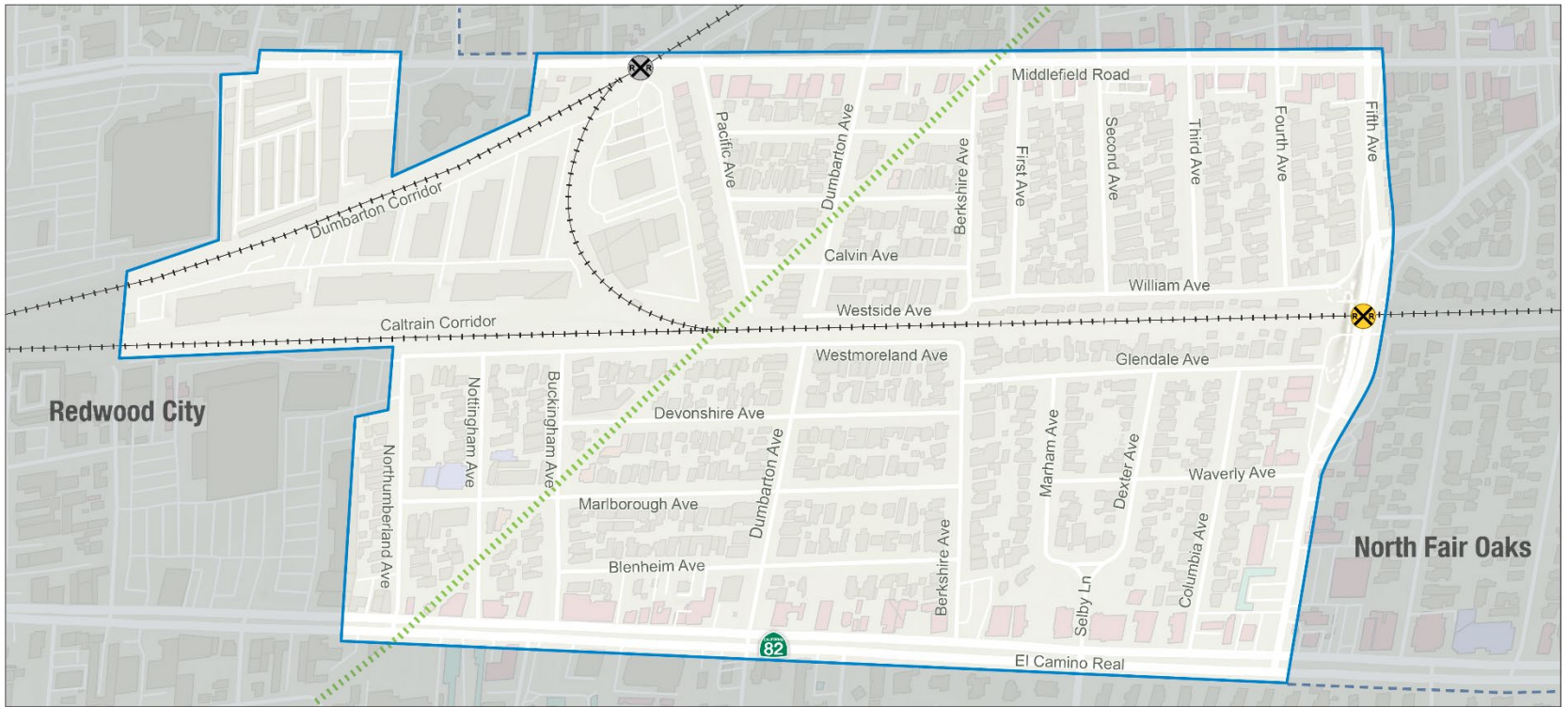
*South-facing view of sidewalk along Northumberland Avenue.*



*View of the Caltrain corridor from Dumbarton Avenue north of the tracks.*



Figure 1: Study Area



## PROJECT STUDY AREA

### LEGEND

- Study Area
- Rail Corridor
- Railroad Crossing At-Grade
- Railroad Crossing Grade-Separated
- SFPUC Hetch Hetchy Corridor
- North Fair Oaks Border



## Study Area

The Study area encompasses the portion of the North Fair Oaks community between Middlefield Road and El Camino Real. **Figure 2** shows the Study area limits, as well as the surrounding areas, roadway network, and points of interest in the area.

### *Local Destinations*

#### Fair Oaks Community Center

Located along Middlefield Road, the Fair Oaks Community Center serves the community with a variety of services, including childcare, crisis intervention, and food programs. The Community Center is located less than 800 feet northeast of the Caltrain corridor, and many of the community members walk or bike to access it. The Community Center is a key community facility that supports vulnerable populations in North Fair Oaks.

#### North Fair Oaks Library

Directly north of the Fair Oaks Community Center, the North Fair Oaks Library serves as another community anchor within North Fair Oaks. The library hosts frequent outreach events for community residents such as computer literacy classes, free meals, and English conversational practice, among others.

#### Fair Oaks Health Center

The Fair Oaks Health Center, located south of the Fair Oaks Community Center, offers a variety of medical and dental services to residents of North Fair Oaks. Notably, the driveway to the medical center is aligned adjacent to the Middlefield Road and Dumbarton at-grade rail crossing and is the subject of improvement recommendations as part of the Middlefield Road Improvement Project. The Middlefield Road Improvement Project is currently under construction, and improvements to the driveway are detailed in the following section.

#### Friendship Park

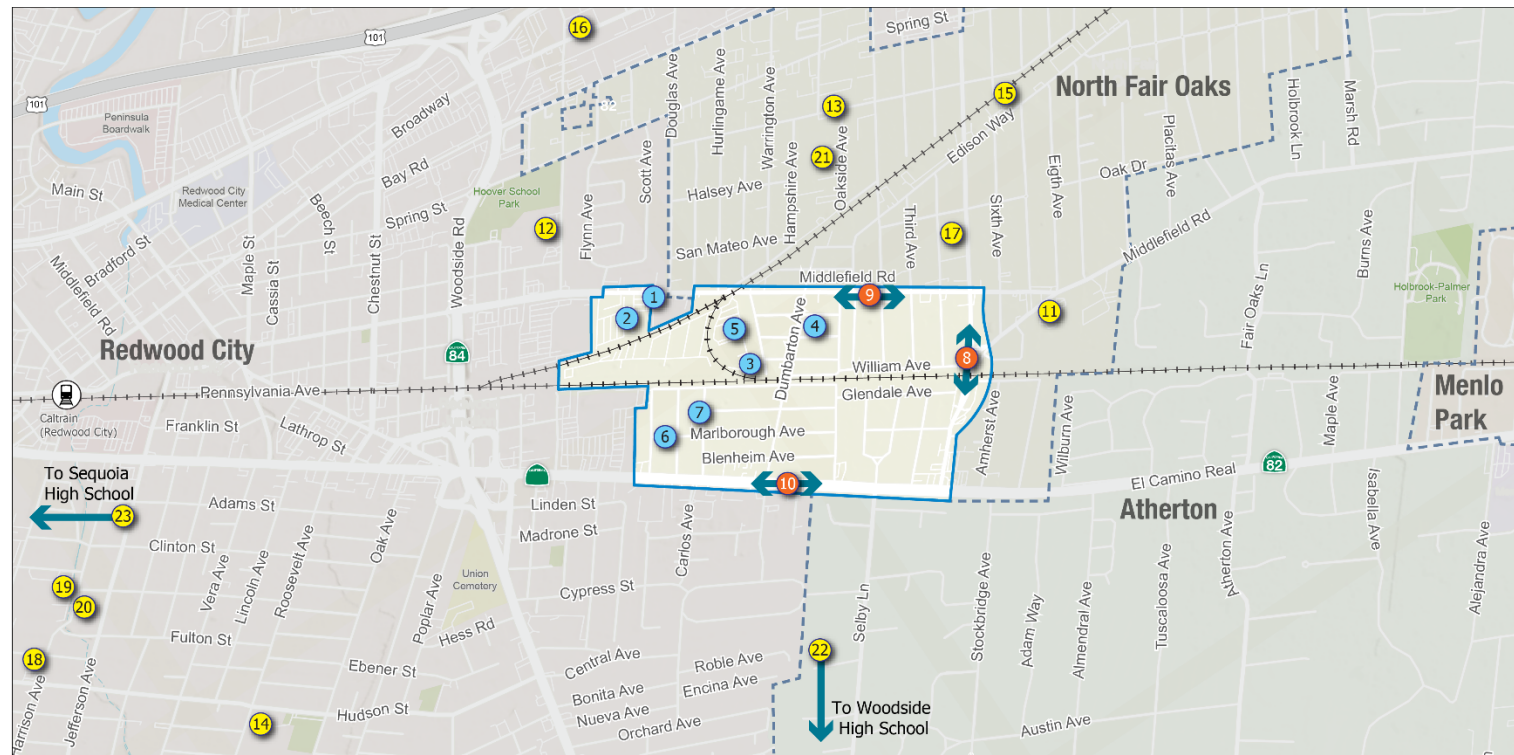
Located southeast of Dumbarton Avenue, between Huntington Avenue and Curtis Avenue, Friendship Park is an approximately 15,000 square-foot public park in the heart of North Fair Oaks. The park features a playground, picnic benches, a community garden, and bicycle racks. This park is located along the San Francisco Public Utilities Commission Hetch Hetchy Reservoir Corridor, which extends through the North Fair Oaks community.

#### Commercial Corridors on Arterials Surrounding the Study Area

Middlefield Road is the central business district containing numerous businesses that serve the North Fair Oaks Community. Fifth Avenue contains numerous businesses that also cater to the local community. El Camino Real contains a mix of local and regional serving commercial businesses, including the Target Shopping Center. Located south of Woodside Road (SR-84), between the Caltrain rail corridor and El Camino Real, the Target Shopping Center is a large commercial center with large and smaller retailers and restaurants. The shopping center features a large surface parking lot and generates a notable amount of traffic demand. SamTrans fixed-route bus service runs along all of these arterials surrounding the Study area with many bus stops. Trunkline bus service is provided along both Middlefield Road and El Camino Real, which provide access to numerous points beyond, especially for those that are transit dependent. These bus stops serve as destinations within the Study area. Further detailed information regarding transit is provided in a separate section of this report.



**Figure 2: Key Destinations within and around the Study Area**



## KEY DESTINATIONS

### LEGEND

- Study Area
- Rail Corridor
- Caltrain Station
- City Boundary

### KEY DESTINATIONS

- 1 Fair Oaks Community Center
- 2 North Fair Oaks Library
- 3 Middlefield Junction
- 4 Friendship Park
- 5 Fair Oaks Health Center
- 6 Siena Youth Center
- 7 St. Francis Center
- 8 5th Ave Corridor Commercial Area
- 9 Middlefield Rd Commercial Area
- 10 El Camino Real Commercial Area

### SCHOOLS

- 11 Garfield Community School
- 12 Hoover Elementary School
- 13 Kipp Excelencia Community Prep
- 14 Rocketship Redwood City Prep
- 15 Synapse School
- 16 Summit Preparatory Charter High School
- 17 Summit Everest Public High School
- 18 Redeemer Lutheran School
- 19 North Star Academy/McKinley Inst. of Technology
- 20 Montessori Community and Family School
- 21 Connect Community Charter School
- 22 Woodside High School
- 23 Sequoia High School



## St. Francis/Siena Youth Center

The St Francis and Siena Youth Centers, located in separate facilities in close proximity to each other between the Caltrain rail corridor and El Camino Real, are non-profit programs. The St. Francis Center provides low-income families with essential services including a food pantry, clothing, adult and youth classes at the Holy Family School, and housing with the management of eight apartment complexes. Stemming from the St. Francis Center, the focus of the Siena Youth Center is to offer youth ages 10 through 17, a positive, safe, happy place to become and stay healthy. The youth can interact with others in the community, receive mentorship, and are given opportunities to provide leadership. Currently, the Siena Youth Center offers only on-street parking to vehicles but has bicycle parking facilities on site.

## Schools

There are many different schools, both public and private schools that surround the Study area. Garfield Elementary School, located on Middlefield Road to the east of the Study area, is a public school (grades K-8) in the Redwood City School District (RCSd) with a neighborhood attendance area that serves the Study area. Woodside High School, south of El Camino Real, is a public high school in the Sequoia Union High School District with an attendance area that serves the majority of the Study area. Students, north of the Caltrain tracks, in the western portion of the Study area have the option of attending Sequoia High School, located along El Camino Real to the northwest in Redwood City. Summit Everest High School is a public charter high school on Fifth Avenue, just north of the Study area. Some schools in the RCSd do not have neighborhood boundaries and are open to residents districtwide. Residents within the RCSd have the option of applying to attend other schools beyond their neighborhood school by application.

## Physical Conditions

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The transportation network within North Fair Oaks consists of roadways, sidewalks, bicycle facilities, and transit facilities. The geometry, classifications, and infrastructure of each of these roadways are described in further detail below.

### *Roadway Network*

Of the collection of roadways within North Fair Oaks, there are three major roadways that service the community: SR 82 (El Camino Real), SR 84 (Woodside Road), and Middlefield Road.

**SR 82 (El Camino Real):** El Camino Real is the southwestern border of North Fair Oaks and runs northwest to southeast, parallel to the Caltrain rail corridor. The roadway is classified by Caltrans as a Principal Arterial and features a six-lane cross-section throughout the North Fair Oaks community. Within the Study area, either side of the roadway includes at least five-foot sidewalks throughout the Study area, except for the western shoulder between Renato Court and Fifth Avenue. Pedestrian crosswalks and signal heads are provided at major intersections. The existing roadway does not have dedicated bicycle facilities.

**SR 84 (Woodside Road):** Woodside Road is located north of North Fair Oaks and runs northeast to southwest. The roadway is classified by Caltrans as a Principal Arterial west of El Camino Real and as a Freeway or Expressway east of El Camino Real. Woodside Road is the closest grade-separated rail crossing north of the study area, but it does not have a continuous sidewalk path for pedestrians. However, there is a narrow, five foot wide, overcrossing for pedestrians and cyclists across the Caltrain tracks located parallel to Woodside Road along its northern side. It should be noted that ramps and curb ramps accessing this crossing are not consistent with current Americans with Disability Act (ADA) standards.



**Middlefield Road:** Middlefield Road travels through the middle of the North Fair Oaks community and runs northwest to southeast. It is currently being improved as a part of the Middlefield Improvement Project. Improvements to the roadway extend from Douglas Avenue to 6<sup>th</sup> Avenue and include reducing the four-lane road into a two-lane road with a center two-way left-turn lane. Parallel parking, Class II bicycle lanes, 12-foot sidewalks, and bus stop improvements will also be included.

### Planned Circulation Network

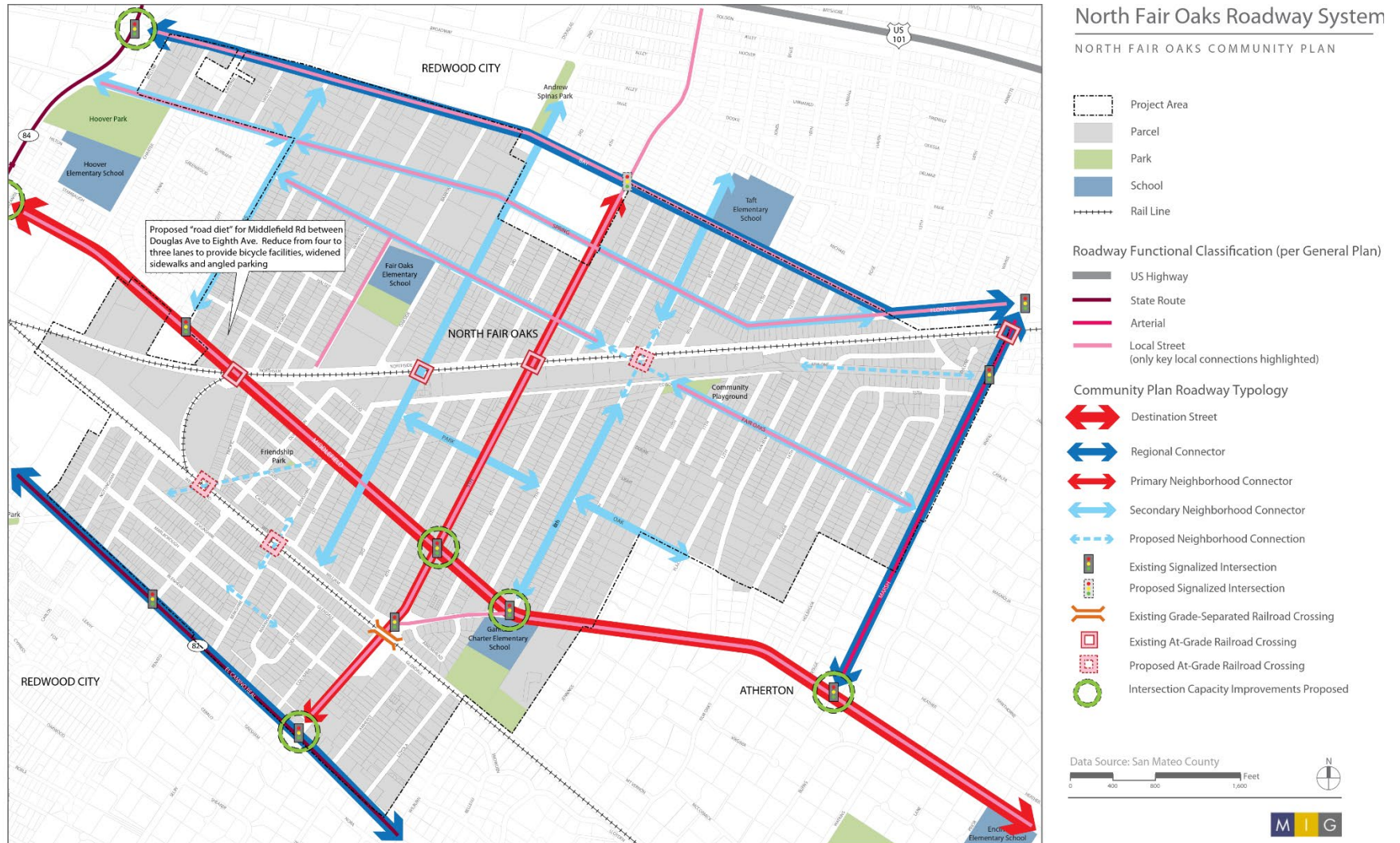
The North Fair Oaks Community Plan, adopted in 2011, recommends supporting the Grand Boulevard Initiative, which would transform the El Camino Real corridor from an auto-oriented corridor to a multi-modal boulevard. The plan supports and reinforces recommendations from the Middlefield Road Improvement Project while also recommending improvements at a number of intersections within the Study area, such as at El Camino Real/Fifth Avenue and Middlefield Road/Fifth Avenue. While some of the roadway improvements, like those from the Middlefield Road Improvement Project, have been implemented or are currently being implemented, others are in the design phase or have not advanced out of planning phases. Overall, the Community Plan supports and encourages changes that improve pedestrian and bicycle activity within North Fair Oaks. **Figure 3** shows the existing roadway network along with proposed and potential transportation projects as outlined in the North Fair Oaks Community Plan.



*West-facing view of the sidewalk and parking along Westmoreland Avenue.*



Figure 3: North Fair Oaks Roadway System



Source: North Fair Oaks Community Plan, 2011



## Transit Network

The community of North Fair Oaks is served with SamTrans bus and Redi-Wheels paratransit service (provided by the San Mateo County Transit District). Although the Caltrain Corridor runs through the Study area, there is no station in North Fair Oaks.

## Existing Transit Service

### Bus Routes

The San Mateo County Transit District (SamTrans) operates bus routes throughout the County of San Mateo and the County of San Francisco. Within North Fair Oaks, SamTrans provides a range of transit routes, including local, express bus, overnight, and school routes.

**Table 1** provides an overview of the five existing bus routes within the Study area.

**Table 1: SamTrans Bus Routes Summary**

Route Number	Starting and Ending Destinations	Route Description	Location within Study Area	Peak Frequency
<b>72</b>	Marlborough/Dumbarton to Selby Lane School	School-day Only	Northumberland Avenue, Marlborough Avenue, Dumbarton Avenue, El Camino Real	AM – One trip PM – Two trips Mon-Wed and Fri, one trip Thurs
<b>79</b>	Florence/17 <sup>th</sup> to Kennedy Middle School	School-day Only	Middlefield Road, Woodside Road	AM – Two trips PM – Two trips
<b>296</b>	Redwood City Transit Center to Bayshore/Donohoe	South County Route	Middlefield Road	20 minutes
<b>397</b>	San Francisco to Palo Alto Transit Center	Express Bus Route with Limited Overnight Service	Middlefield Road	60 minutes
<b>ECR</b>	Daly City BART to Palo Alto Transit Center	Express Bus Route	El Camino Real	15 minutes

Source: SamTrans, 2022

### Rail Lines

Caltrain, a regional commuter rail system, operates along the north-south corridor from San Francisco to San José, providing rail connectivity along the west side of the San Francisco Bay. While the rail corridor travels through North Fair Oaks, as noted above, there are no Caltrain stops in the community. The Caltrain stations closest to North Fair Oaks are the Redwood City Station approximately 1.8 miles northwest of the Fifth Avenue Caltrain crossing and the Menlo Park Station approximately 1.7 miles southeast of the Fifth Avenue Caltrain crossing.

### Transit Facilities

Generally, existing bus stops are denoted by signage along the sidewalk. Some stops have other stop amenities, including shelters, seating areas, and rider information. At intersections, stops vary between the nearside and far side of the intersection, and are generally spaced between 500 and 1,000 feet apart.



The Redwood City Caltrain Station is located within Redwood City's Transit District. The Transit District is a transit center for trains and buses in Downtown Redwood City. Passengers can connect between Caltrain passenger rail and SamTrans buses at this center.

The Menlo Park Caltrain Station is located just north of Downtown Menlo Park, between Ravenswood Avenue and Oak Grove Avenue. This station is located within walking distance of multiple SamTrans bus stops.

## Planned Transit Service

In 2019, SamTrans began *Reimagine SamTrans*, a comprehensive operational analysis aimed at redesigning the entire SamTrans bus system. In March 2022, the SamTrans Board of Directors adopted the recommendations that came from the study. The proposed recommendations and changes to the current bus system will begin to be implemented in the summer of 2022. The effects that the recommended changes will have on the bus routes serving North Fair Oaks are provided in **Table 2**. A map of the Reimagine routes and stops is shown in **Figure 4**.

**Table 2: Reimagine SamTrans Route Updates**

Route Number	Overview of Changes
<b>72</b>	No change
<b>79</b>	No change
<b>296</b>	Improved frequency (15 minutes)
<b>397</b>	No change
<b>ECR</b>	Bus stop consolidation; Improved peak hour frequency (15 minutes)

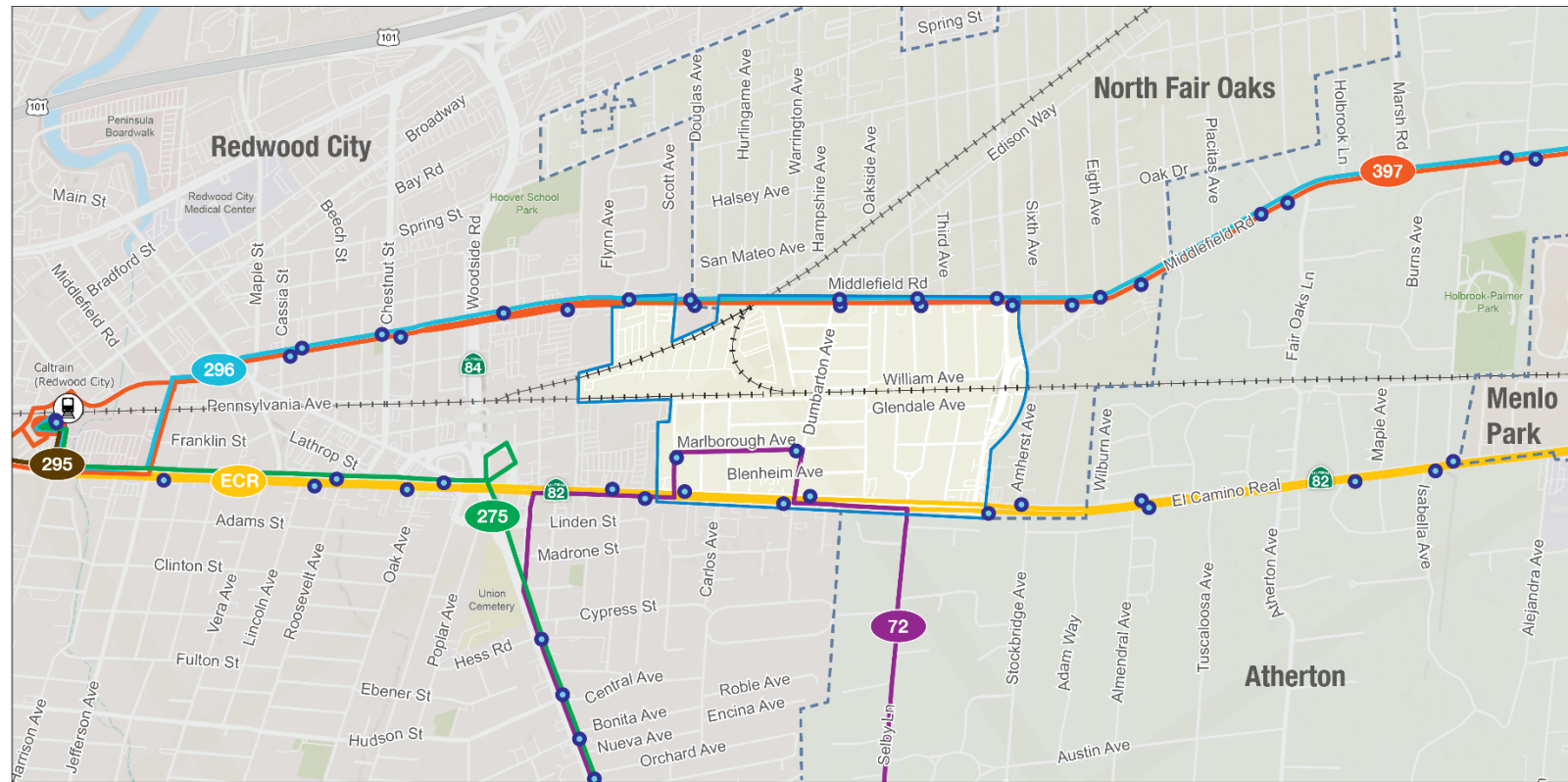
Source: *Reimagine SamTrans*, 2022

The El Camino Real Bus Speed and Reliability Study, which examines the impact of service slowdowns to identify potential changes and achieve faster, more reliable bus service, is currently underway to analyze one of the heaviest-travelled routes within the SamTrans system. The study will remove the existing northbound bus stop at El Camino Real & Northumberland Avenue. No other changes are currently anticipated.

Additionally, the North Fair Oaks Community Plan highlights a few more potential changes to the community's transit network as well as a few recommendations to improve operations. The Caltrain Electrification Plan, for example, will electrify the Caltrain corridor and improve overall operations for the system. Projects like the Dumbarton Rail Corridor, California High-Speed Rail, and the Redwood City Streetcar could present additional transit options to North Fair Oaks residents. The Community Plan also recommends support for future transit projects, like a multi-modal hub within the area with access to new passenger rail service, Bus Rapid Transit on El Camino Real, and a streetcar along Middlefield Road. The future transit network with existing transit and proposed improvements is shown in **Figure 5**. Note that the plan proposed several potential locations for grade separated crossings as well as a new bus/shuttle service along Fifth Avenue.



Figure 4: Reimagine SamTrans Transit Network



## TRANSIT NETWORK

### LEGEND

- |                  |           |           |
|------------------|-----------|-----------|
| Study Area       | Route 72  | Route 397 |
| Rail Corridor    | Route 275 | Route ECR |
| Caltrain Station | Route 295 | Route 296 |
| City Boundary    | Bus Stops |           |

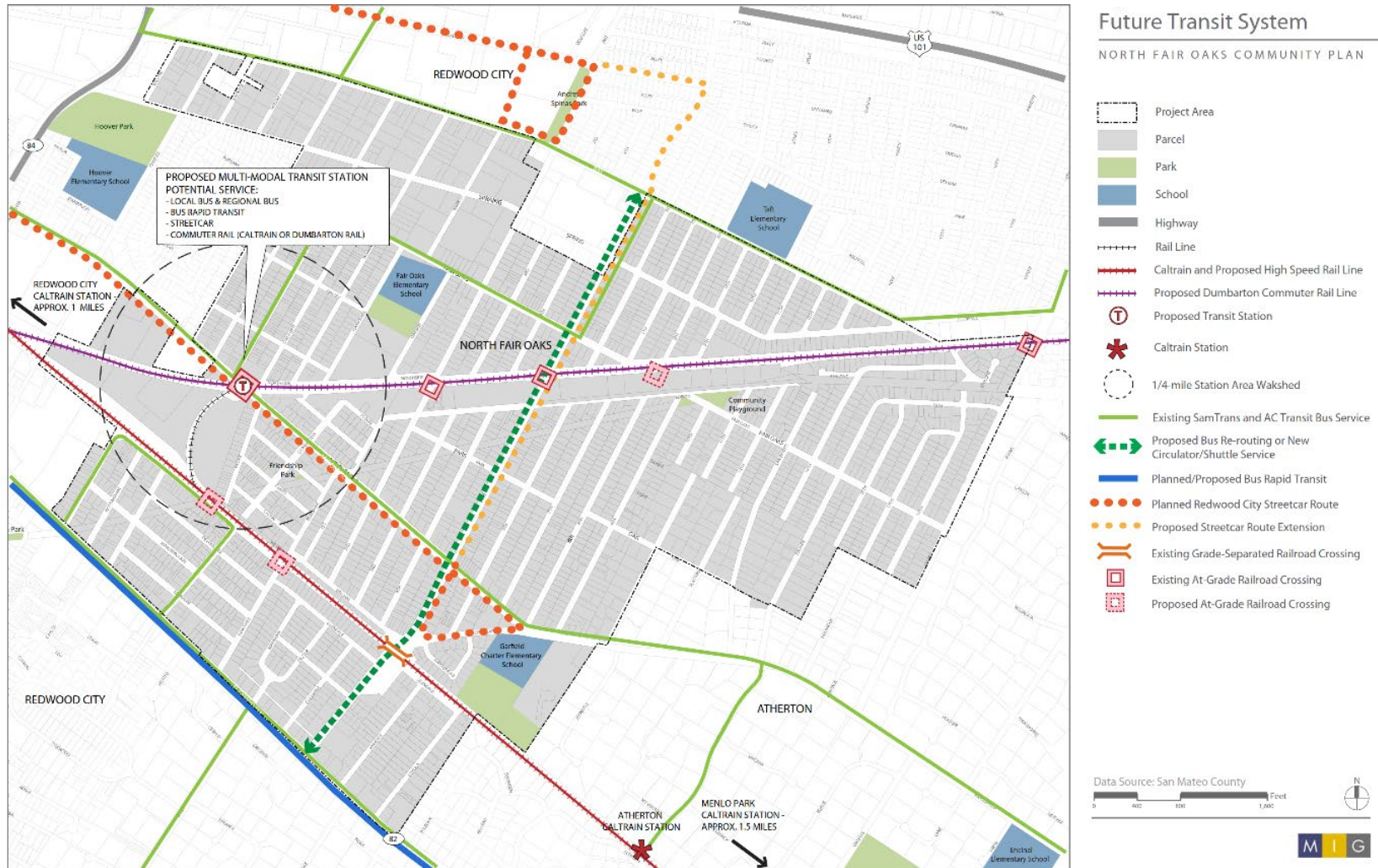
0 0.3 0.7 1 Miles

Source: SamTrans, 2022.

Note: The route alignment for 79 was not provided by SamTrans.



Figure 5: Future Transit System



Source: North Fair Oaks Community Plan, 2011



## *Bicycle and Pedestrian Network*

North Fair Oaks has the highest rate of car-free households, at 3.4 percent, of all Census-designated places in San Mateo County. Sufficient pedestrian and bicycling infrastructure is necessary for the community to have safe transportation options.

### **Existing and Planned Bicycle Facilities**

The North Fair Oaks community has limited bicycle infrastructure but has plans for new facilities throughout the community. New Class II bicycle lanes are currently under construction on Middlefield Road, south of Hurlingame Avenue, to provide north-south bicycle access. They will connect with a Class III bicycle route with sharrows north of Hurlingame Avenue. Fifth Avenue serves as the key east-west bicycle connector within the community and has Class II buffered bike lanes east of Waverly Avenue and has a Class III bicycle route with sharrows west of Waverly Avenue to El Camino Real.

While bicycle infrastructure implementation is in its early stages in the North Fair Oaks community, the North Fair Oaks Community Plan and the unincorporated San Mateo County Active Transportation Plan offer a long-term vision for bicycle travel in the area. Class III bicycle boulevards are proposed on many of the residential streets within the adjacent neighborhoods on both sides of the Caltrain tracks. The collection of existing and planned bicycle facilities is shown in **Figure 6**. Notably, the Plan proposes Class III bicycle boulevards for Pacific Avenue, Calvin Avenue, William Avenue, Second Avenue, Berkshire Avenue, Westmoreland Avenue, Marlborough Avenue, and Northumberland Avenue, as well as a Class IV separated bicycle lane on El Camino Real.



*A cyclist on Berkshire Avenue looking northeast toward Westmoreland Avenue.*



Figure 6: Existing and Planned Bicycle and Pedestrian Facilities



## EXISTING AND PLANNED BICYCLE AND PEDESTRIAN FACILITIES

### LEGEND

- |                                   |  |
|-----------------------------------|--|
| Study Area                        | North Fair Oaks Border                     |
| Rail Corridor                     | Traffic Signal                             |
| Railroad Crossing At-Grade        | Pedestrian Crossing                        |
| Railroad Crossing Grade-Separated | Pedestrian Hybrid Beacon Crossing          |
| SFPUC Hetch Hetchy Corridor       | Rectangular Rapid Flashing Beacon Crossing |

### PROPOSED BIKEWAYS

- Class I Shared Use Path
- Class II Bicycle Lane
- Class III Bicycle Boulevard
- Class IV Separated Bicycle Lane

### EXISTING BIKEWAYS

- Class I Shared Use Path
- Class II Bicycle Lane
- Class II Buffered Bicycle Lane
- Class III Bicycle Boulevard

Sources: County of San Mateo, Department of Public Works;  
Unincorporated San Mateo County, Active Transportation Plan (2021);  
County of San Mateo, Middlefield Road Improvement Plans



## Existing and Planned Pedestrian Facilities

As a densely-populated area, North Fair Oaks features sidewalks on nearly all of its streets. Generally, smaller residential streets have four- to five-foot-wide sidewalks on both sides of the road in the Study area. Major streets also typically have sidewalks on both sides, except for one segment of El Camino Real between Renato Court and Fifth Avenue, which does not have a sidewalk along its western shoulder. Sidewalk width on Middlefield Road, El Camino Real, and Fifth Avenue range from four feet to 10 feet.

Generally, major arterials, such as El Camino Real and Middlefield Road, feature street lighting focused on the roadway. Fifth Avenue has decorative lighting along the roadway. However, some segments on those streets are not lit, and with few exceptions, lighting, where it exists, is not oriented towards pedestrians. Collector and residential roadways within the Study area have minimal to no street lighting. Street-adjacent trees on private property are common throughout the Study area. Most sidewalks in the Study area are not buffered from the traffic lanes and do not include street trees.

There are a few planned or proposed pedestrian improvements adjacent to or near the study area. One is the Middlefield Road Improvement Project, which is currently under construction. This project will widen sidewalks to 12 feet and underground all utilities, removing them from sidewalks and improving pedestrian conditions along the corridor. Another is a proposed shared-use path along the Dumbarton rail line through the community, is under consideration by SamTrans, the owner of this corridor. A shared-use path is designated along it in the County's Unincorporated San Mateo County Active Transportation Plan. This Plan also lists Fifth Avenue as a priority destination area and a series of pedestrian crossing improvements are proposed along it north of Middlefield Road. Some of which have recently received grant funding. Both the 2011 North Fair Oaks Community Plan and the County's Unincorporated San Mateo County Active Transportation Plan identify the need for a new crossing of the Caltrain Corridor, which this Study aims to identify.

### Sidewalks

Sidewalks within the Study area are largely continuous, and most streets within the community feature at least four- to five-foot wide sidewalks on both sides of the roadway. Obstructions, such as utility poles and signs, narrow the effective sidewalk width to less than ADA standards in many locations. In limited locations, sidewalks have landscape strips separating the sidewalk from the roadway; however, in most locations there is no landscaping or trees in the public right-of-way.

### Street and Rail Crossings

Generally, within North Fair Oaks, street crossings are short and occur primarily at unsignalized intersections. These crossings are typically the width of the average roadway, which is about 40 feet in North Fair Oaks. Longer crossings exist across the community's major thoroughfares like Middlefield Road and El Camino Real. Typical crossing length is different for each roadway, ranging from 50 to 80 feet on Middlefield Road and 80 to 110 feet on El Camino Real. Notably, shorter crossing distances along Middlefield Road are associated with the pedestrian bulb-outs that will be constructed as part of the Middlefield Road Improvement Project.

The two closest Caltrain rail corridor crossings occur at Woodside Road and Fifth Avenue. The Woodside Road overcrossing features two narrow pedestrian ramps and sidewalk that travel adjacent to the right-of-way. Cyclists need to dismount from their bicycle to make this crossing. The Fifth Avenue undercrossing has dedicated bike lanes with four-foot striped buffers, four-foot sidewalks, and a shared use path on either side of Fifth Avenue. The Caltrain Corridor spans one mile between these two crossings, creating a large gap in connectivity between the north and south portions of the North Fair Oaks community. The width of the rail corridor right-of-way is a consistent 75 feet.



to 80 feet, although the number of tracks expands from two to four tracks just northwest of Fifth Avenue. Two additional siding tracks are added for freight storage and service northwest of the Dumbarton Corridor rail spur. Per Caltrain track charts, the sidings are classified as “UPRR Designated Freight Trackage Located on JPB Right-of-Way”. There is an elevated pedestrian crossing of Fifth Avenue just to the northeast of the Caltrain rail corridor, accessible via William Avenue on the west side and Semicircular Road on the east side.

The Dumbarton rail corridor crosses through the Study area at Middlefield Road. The corridor, which features two parallel tracks, is approximately 100 feet wide throughout North Fair Oaks. The Middlefield Road Improvement Project will convert the adjacent unsignalized intersections at both Hurlingame Avenue and Pacifica Avenue into signalized intersections

### Intersections

Signalized intersections exist along El Camino Real, Middlefield Road, and Fifth Avenue. Each of the intersections provides at least one crosswalk and pedestrian signal heads; however, crosswalks are not provided for all legs at several locations, including at El Camino Real and Fifth Avenue intersection. Crosswalks at signalized intersections along the major arterials are detailed further below:

- El Camino Real: most of the crosswalks at signalized intersections do not feature any visibility enhancements, aside from one with ladder striping at Dumbarton Avenue.
- Middlefield Road: most crosswalks currently feature ladder striping, and some currently feature bright yellow striping. Notably, the Middlefield Road Improvement project, which is currently under construction, will implement new crosswalks and improve existing crosswalks. Each new or improved crosswalk will have ladder striping, and bulb-outs will be constructed along Middlefield Road to shorten the effective walking distance at the north/south crosswalks. Some of the crosswalks will feature new advanced stop bars.
- Fifth Avenue: all of the crosswalks along Fifth Avenue feature ladder striping, except for those at the intersection with El Camino Real. The crosswalks at the Fifth Avenue and Middlefield Road intersection have advanced stop bars.

The unsignalized intersections throughout the Study area are primarily two-way or all-way stop-controlled. Most do not have marked crosswalks. Along El Camino Real, there is an unsignalized pedestrian crossing at Selby Lane. The pedestrian crossing at Northumberland Avenue was recently converted into a Pedestrian Hybrid Beacon (PHB), with ladder striping, to provide protection to pedestrians via signalization. Along Middlefield Road, Rapid Rectangular Flashing Beacons (RRFBs) will be installed at Dumbarton Avenue, Second Avenue, and Fourth Avenue as a part of the Middlefield Road Improvement Project. Along Fifth Avenue, there is a grade separated pedestrian and bicycle crossing between Glendale Avenue and William Avenue/Semicircular Road.

**Figure 7** shows the existing and planned bikeways, as well as the existing and in-construction signalized intersections and pedestrian crossings.

### Other Data Collected

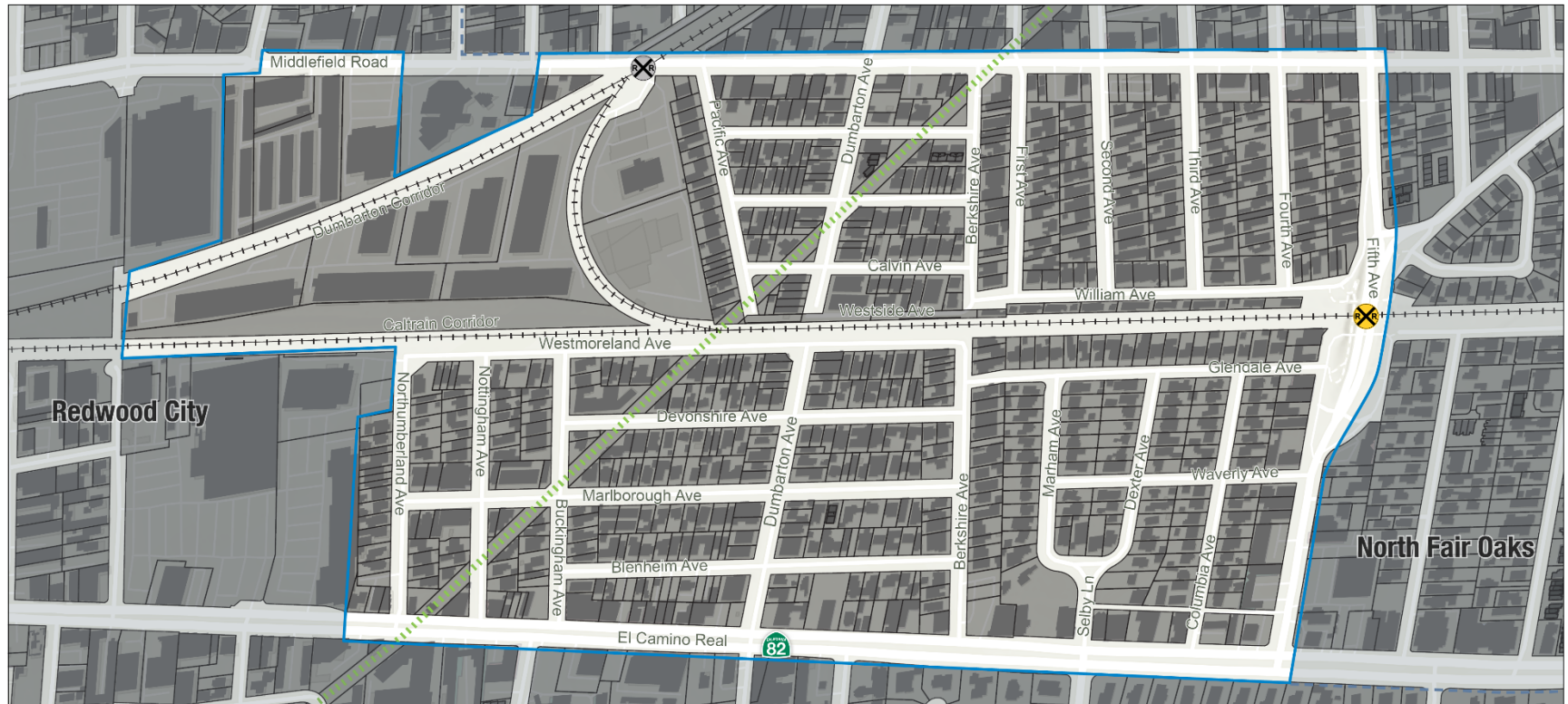
To establish a deeper understanding of potential constraints to a new grade-separated crossing of the Caltrain corridor, other relevant data was collected during the initial Study phases. Existing utility data has been collected and mapped to inform improvement feasibility and costs in later phases of the Study. In addition to utility data, parcel boundary and building footprint data was collected and mapped to provide insight on ownership and location of the land parcels and buildings that may be associated with the different alternatives. Building footprint and parcel



information is shown in **Figure 7**. As shown in the figure, there is no County-owned land abutting the Caltrain corridor west of Fifth Avenue in the Study area.



Figure 7: Building Footprints and Parcel Boundaries



## BUILDING FOOTPRINTS AND PARCEL BOUNDARIES



0 0.1 0.2 0.3 Miles

Source: County of San Mateo GIS Data

### LEGEND

- |                                   |                    |
|-----------------------------------|--------------------|
| Study Area                        | Building Footprint |
| Rail Corridor                     | Assessed Parcel    |
| Railroad Crossing At-Grade        |                    |
| Railroad Crossing Grade-Separated |                    |
| SFPUC Hetch Hetchy Corridor       |                    |
| North Fair Oaks Border            |                    |



## Collision History and Trends

The collision data in the Study area was evaluated to understand if there were collision trends or locations with multiple collisions. Data was obtained through the Statewide Integrated Traffic Records System (SWITRS) database available online and maintained by the California Highway Patrol. The collisions analyzed occurred between January 1, 2015 and December 31, 2021 (note that all 2021 data is provisional at the time of this analysis). Injuries suffered by involved parties are categorized into five categories: fatal injury, severe injury, other visible injury, complaints of pain, and Property Damage Only (PDO). Collisions along Middlefield Road, El Camino Real, and 5<sup>th</sup> Avenue were not included as there are other improvement projects that are either recently implemented, under construction, or being planned for these streets that will address safety concerns. This Study is focusing on the improvement of the local neighborhood streets within the Study area between these arterials. Overall, clear trends and patterns within the obtained collision data are difficult to identify. Crashes have generally occurred sporadically across the Study area, with few to no clusters of collisions that would point to specific roadway, lighting, or other issues.

### Pedestrian-and Bicyclist Involved Collisions

Between 2015 and 2021, there were five (5) collisions in which a pedestrian was struck by an automobile. Each of these collisions resulted in minor injuries, and none were severe injuries or fatalities. Also during this period, there were six (6) collisions in which a bicyclist was struck by an automobile. None of these collisions resulted in a severe injury or a fatality.

The most common cause of the pedestrian- and bicycle-involved collisions was due to unsafe speeds, followed by improper passing. **Figure 8** shows a summary of the primary collision factor.

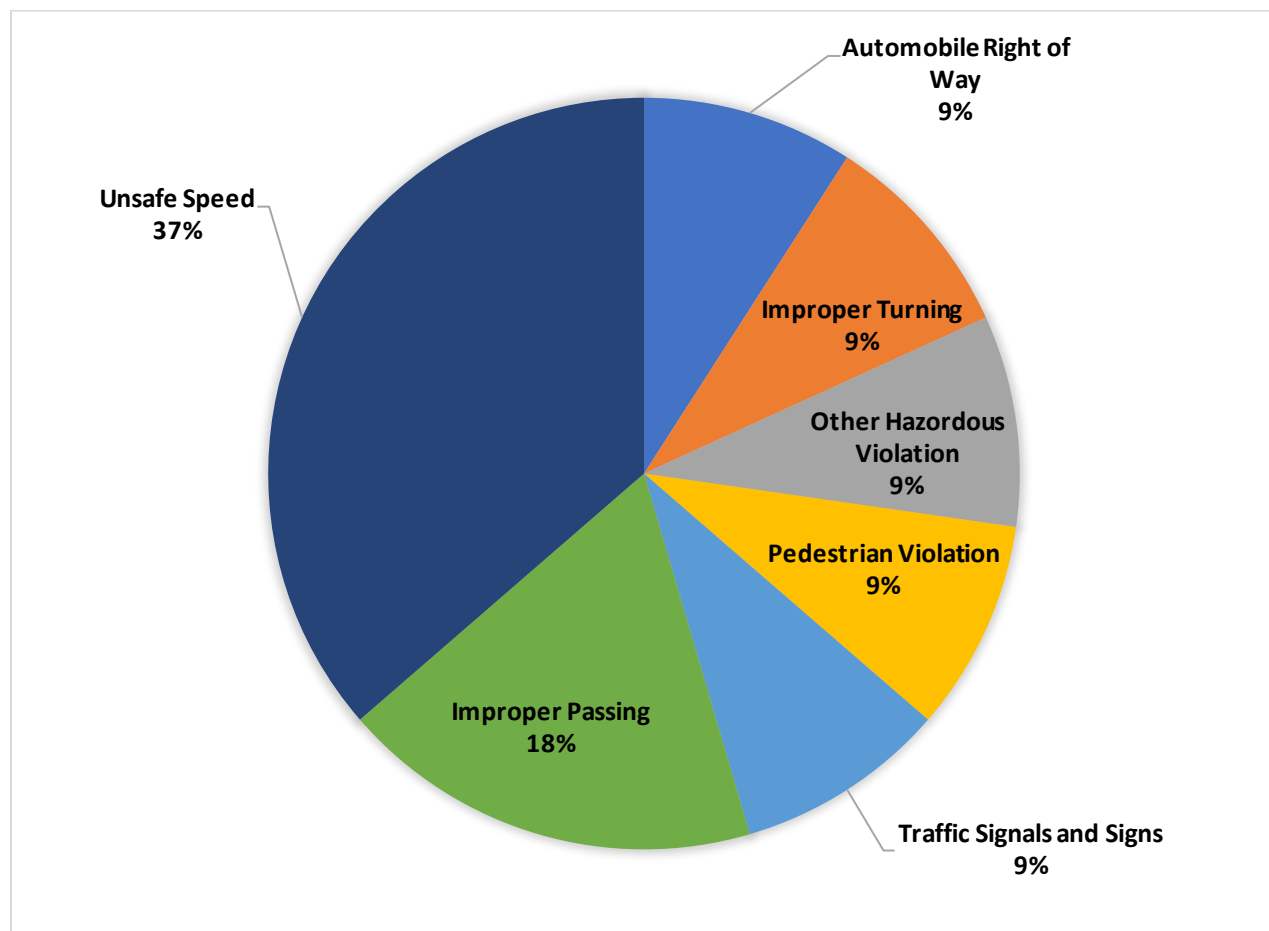
**Figure 9** shows the location of all reported pedestrian-and bicycle-involved automobile collisions that occurred within the Study area.



*A pedestrian crossing Middlefield Road at Pacific Avenue looking north toward northside Avenue.*



Figure 8: Pedestrian and Bicycle Collision Summary



Source: CHP SWITRS Database, 2015-2021

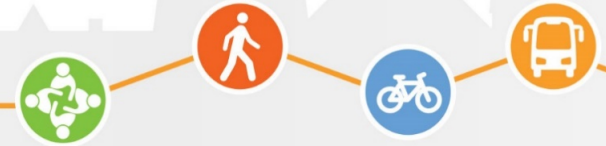
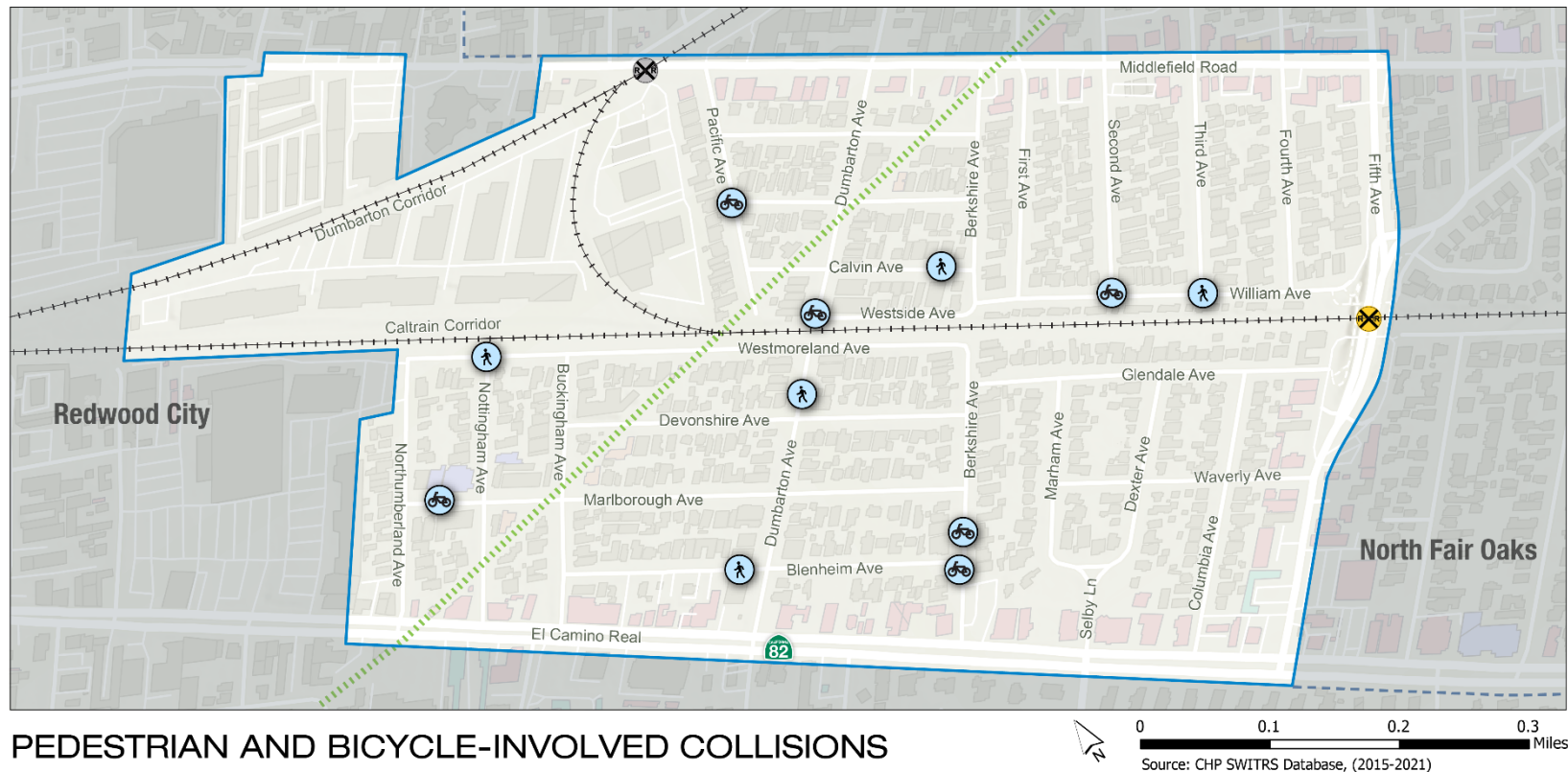


Figure 9: Pedestrian and Bicycle-Involved Collisions



### LEGEND

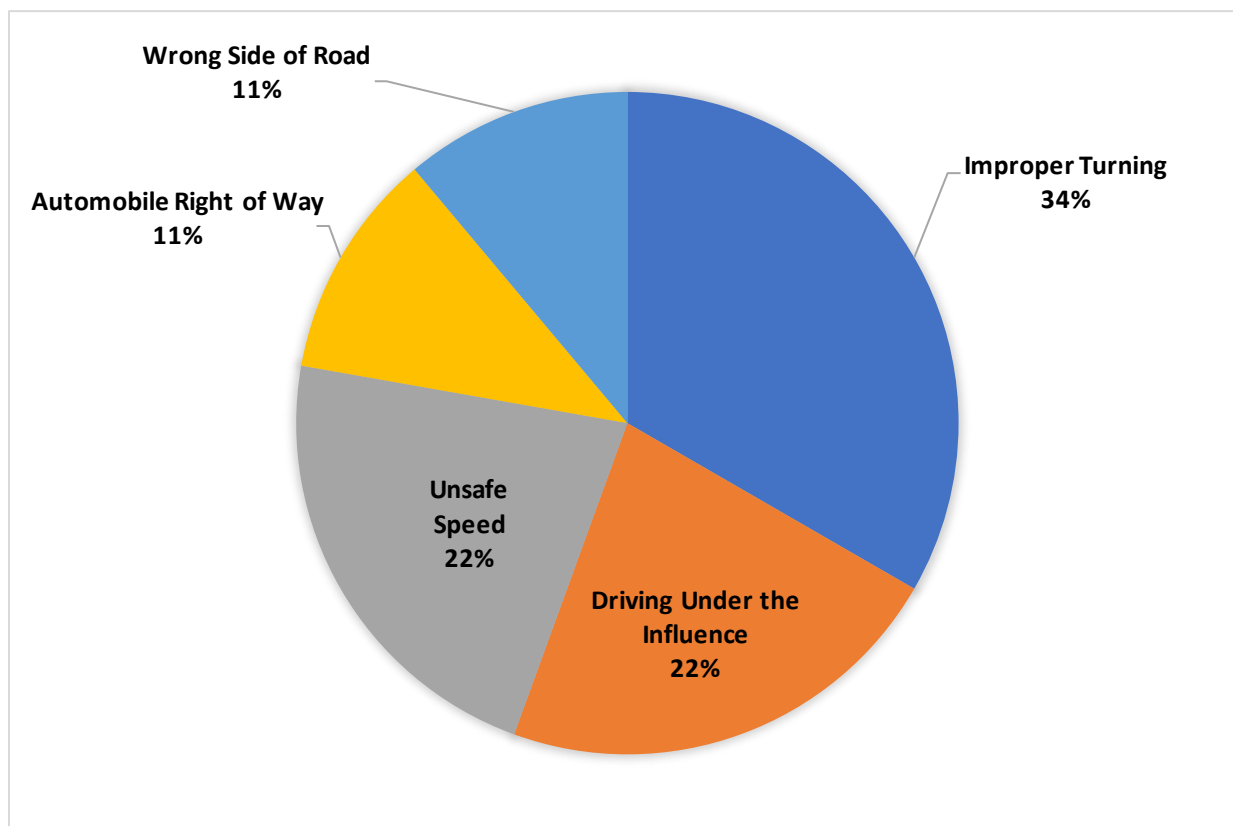
- Study Area
- North Fair Oaks Border
- Rail Corridor
- Railroad Crossing At-Grade
- Minor Bicycle Injury Collisions
- Railroad Crossing Grade-Separated
- Minor Pedestrian Injury Collisions
- SFPUC Hetch Hetchy Corridor



### Auto-only or Motorcycle-Involved Collisions

Between 2015 and 2021, there were nine (9) recorded auto-only or motorcycle-involved collisions resulting in injuries in the Study area. There were no fatalities resulting from auto-only or motorcycle-involved collisions. The most common cause of the collisions was related to improper turning, followed by unsafe speed and driving under the influence. **Figure 10** shows a summary of the primary collision factor. **Figure 11** shows the location of all reported auto-only or motorcycle involved collisions that occurred within the Study area.

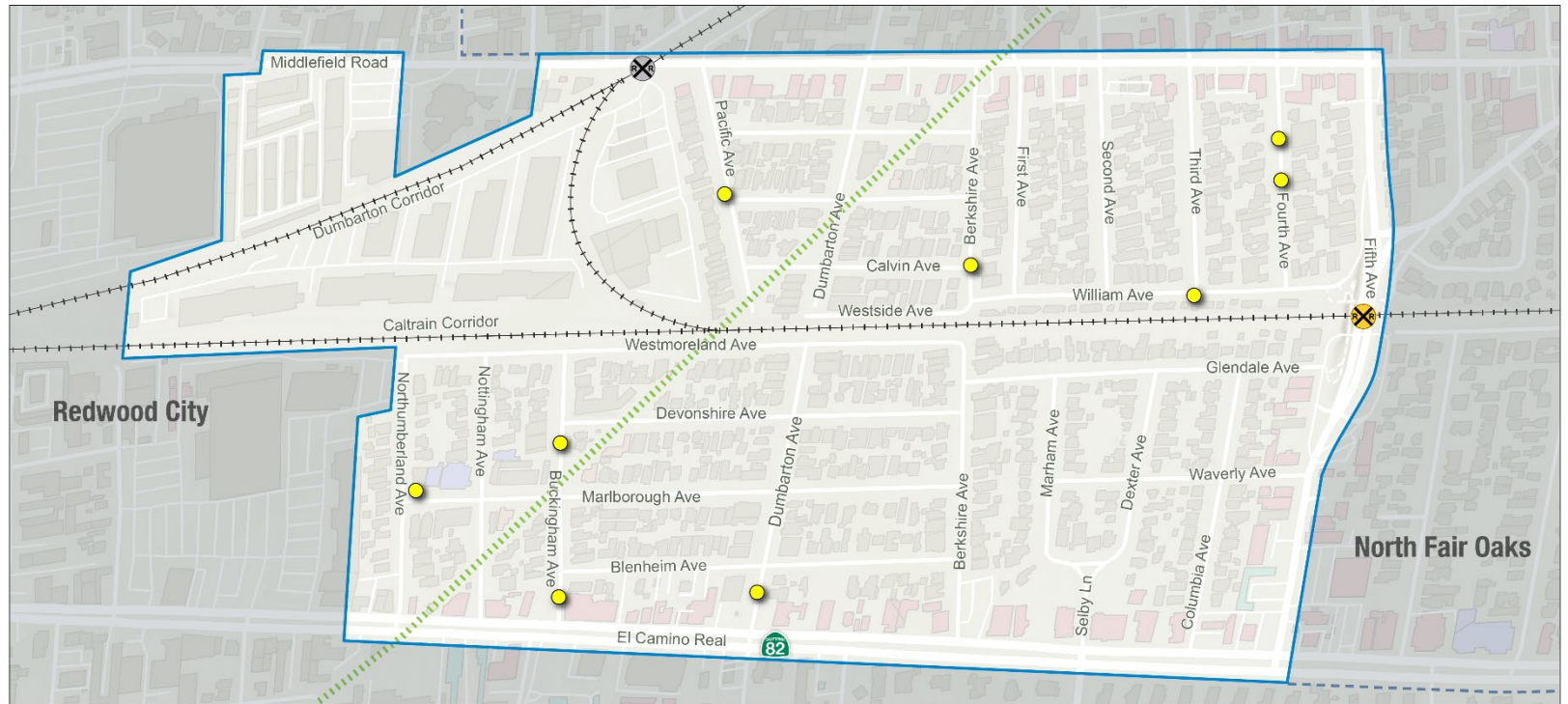
**Figure 10: Auto-only or Motorcycle-Involved Collision Summary**



Source: CHP SWITRS Database, 2015-2021



Figure 11: Auto-Only or Motorcycle-Involved Collisions



## AUTO-ONLY OR MOTORCYCLE-INVOLVED COLLISIONS

0 0.1 0.2 0.3 Miles  
Source: CHP SWITRS Database, (2015-2021)

### LEGEND

- Study Area
- North Fair Oaks Border
- Rail Corridor
- Injury Collisions
- ✕ Railroad Crossing At-Grade
- ✕ Railroad Crossing Grade-Separated
- |||| SFPUC Hetch Hetchy Corridor



## Relevant Plans/Studies, Projects, and Policies

The North Fair Oaks community has been the subject of multiple planning studies conducted by various agencies over the past decade, with each successive document building on the previous studies and plans. The findings of relevant plans, existing policies and proposed projects are summarized below and will be referred to throughout the Study.

### North Fair Oaks Community Plan

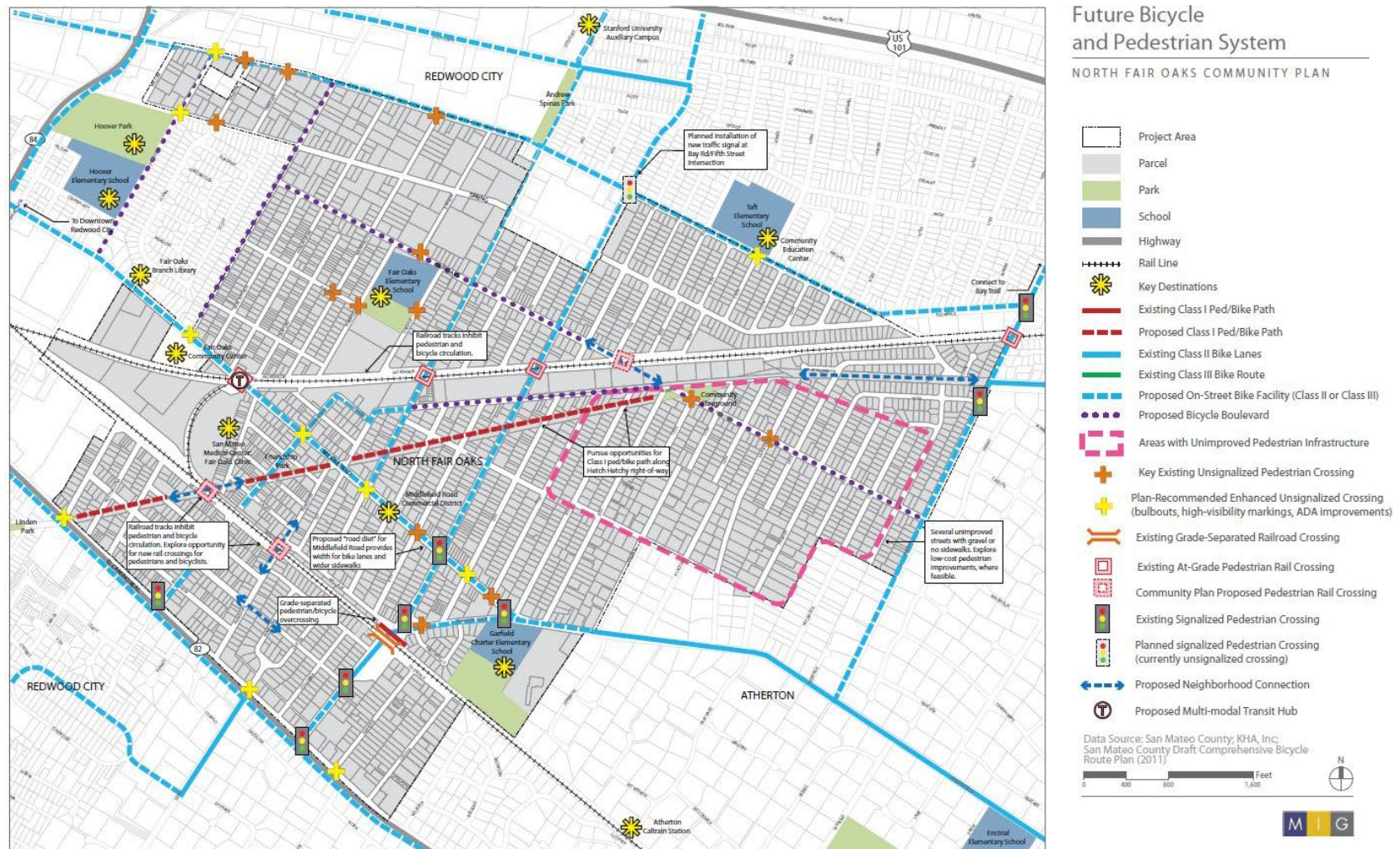
Adopted in 2011, the *North Fair Oaks Community Plan* is a comprehensive planning document intended to establish a long-term vision for the North Fair Oaks Community. The Plan offers an assortment of near-, mid-, and long-term goals to improve quality of life for residents of North Fair Oaks. Chapter 3 of the Plan, Circulation & Parking, evaluates mobility in the community and identifies gaps within the North Fair Oaks network. These gaps include:

- Long rail corridor spans with limited crossing opportunities create significant barriers to pedestrian, bicycle and transit circulation, and overall community connectivity
- While most streets in North Fair Oaks feature proper sidewalk facilities, several streets lack them, and some streets are at risk of flooding due to poor stormwater drainage
- Lack of rail transit stations within walking distance despite the Dumbarton and Caltrain rail corridors travelling through the community
- Lack of bicycle facilities within the community despite heavy bicycle use
- Some of the transit routes in the community are hard to access from certain areas

Recommendations made by the North Fair Oaks Community Plan regarding the community's bicycle and pedestrian network are shown in **Figure 12**.



Figure 12: Future Bicycle and Pedestrian System



Source: North Fair Oaks Community Plan, 2011



## North Fair Oaks Rezoning and General Plan Amendment

Initiated by recommendations from the *North Fair Oaks Community Plan*, the County adopted mixed-use designations, standards, and procedures as a part of its Zoning Regulations. In response to difficulties with the application and administration of these adopted standards, the County currently is working on the North Fair Oaks Rezoning and General Plan Amendment Project. The Project is currently in the process of preparing a Draft Environmental Impact Report (EIR).

The project's goals are to adopt more effective zoning by revising provisions that are difficult to administer and/or implement, replacing provisions necessitating subjective interpretation with objective standards, refining development application and review procedures, and incorporating professional practices that better promote Community Plan policies. The project also hopes to increase capacity for housing in the Study area by modifying General Plan designations and zoning standards to potentially allow taller buildings, greater density, reduced building setbacks, modified parking requirements, and/or other strategies, while simultaneously protecting and expanding equitable access to opportunities, community livability, and desirable aspects of community character.

## Middlefield Junction

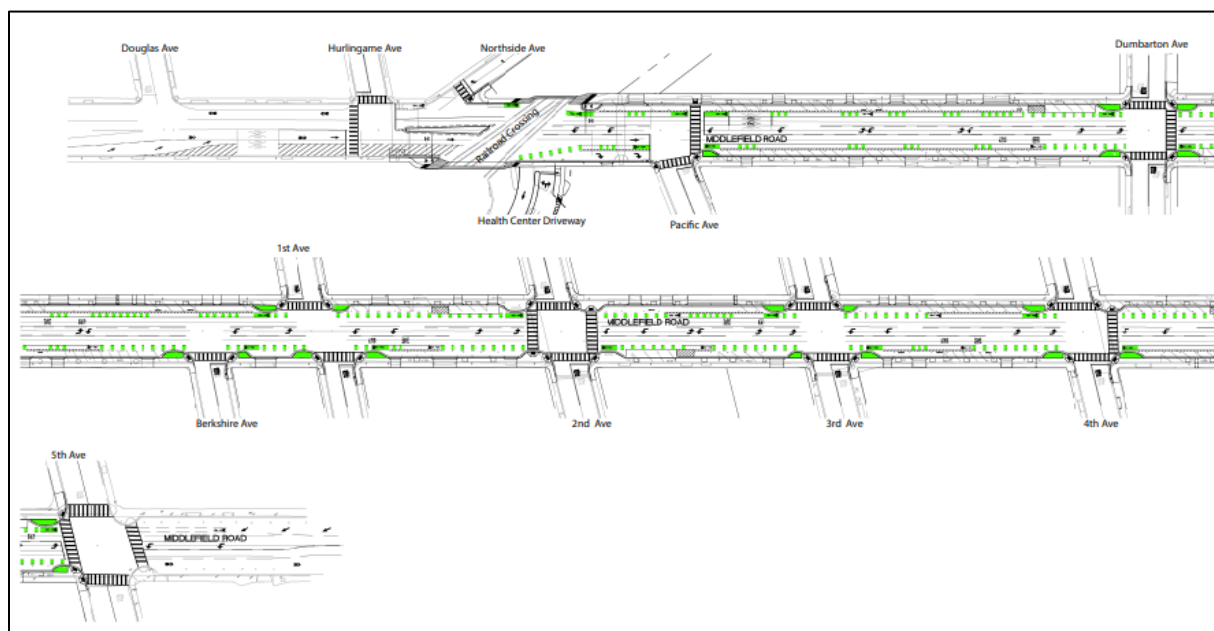
Middlefield Junction is a three-acre site located behind the Fair Oaks Health Center and directly adjacent to the Caltrain tracks that will be developed into an approximate 180-unit affordable housing apartment building with space for childcare and a community childcare center. Community members earning 30% to 80% of the area median income will be eligible to live in the units. The County Department of Housing (DOH) recently received an Affordable Housing and Sustainable Communities (AHSC) grant award for this development project, which is currently in the design phase. DOH staff have noted they are open to the consideration of a potential grade-separated bicycle and pedestrian crossing that connects to this site, if feasible with the housing project design plans.

## Middlefield Road Improvement Project

Middlefield Road is a key northwest-southeast thoroughfare located in the center of North Fair Oaks. The Middlefield Road Improvement Project builds on previous recommendations, like those identified in the *North Fair Oaks Community Plan*. This project will significantly transform this road into a more bicycle and pedestrian friendly environment with pedestrian, bicycle, transit, and auto changes to the study area along and around Middlefield Road from Fifth Avenue to Douglas Avenue, as shown in **Figure 13**. The improvements are adding Class II bicycle lanes, wider sidewalks, conversion of existing on-street angled parking to parallel parking, curb extensions at intersections, improved bus stops, landscaping, and other streetscape amenities. Construction on this project is currently under construction.



Figure 13: Middlefield Road Improvement Project



Source: County of San Mateo, Middlefield Road Improvement Project Traffic Operations Analysis Report, 2019

### City/County Association of Governments (C/CAG) of San Mateo County Comprehensive Bicycle and Pedestrian Plan

Developed as an update to the 2011 San Mateo County Comprehensive Bicycle and Pedestrian Plan, the 2021 C/CAG Comprehensive Bicycle and Pedestrian Plan builds upon bicycle and pedestrian network recommendations from years prior. The Countywide Bicycle and Pedestrian Plan (CBPP) update sets forth detailed goals and objectives to provide an interconnected system of safe, convenient, and universally accessible bike and pedestrian facilities within San Mateo County. The goals of this plan align with this Study and include establishing a connected network of facilities for bicyclists and pedestrians, improving safety for walking, bicycling, and accessing transit, and developing, prioritizing, and funding projects to advance equity.

The Plan outlines a comprehensive list of improvements and recommendations throughout the entirety of San Mateo County. In general, these improvements include El Camino Real Corridor improvements for pedestrians, providing bicycle and pedestrian crossings of major barriers, safe routes to school, and access to County activity centers.

### City/County Association of Governments (C/CAG) of San Mateo Southeast County Community Based Transportation Plan (CBTP)

C/CAG is currently conducting Community-Based Transportation Plans (CBTPs) in Southeast San Mateo County, including North Fair Oaks, and Daly City. CBTPs are community-guided plans that will improve mobility options for struggling communities. Each CBTP will establish solutions to transportation gaps identified during diverse outreach campaigns and coordination with local community groups. The final Plans will include a series of transportation solutions designed to benefit low-income residents, the disabled, senior citizens, those without vehicles and other disadvantaged communities.



## San Mateo County Green Infrastructure (GI) Plan - September 2019

To limit harmful externalities of urban development on San Mateo County's waterways, counties and cities within the Bay Area are required to shift from traditional ("gray") stormwater infrastructure to "green" infrastructure systems over time. The *San Mateo County Green Infrastructure (GI) Plan*, prepared in September 2019, outlines strategies and plans for implementing green stormwater infrastructure throughout San Mateo County, including in North Fair Oaks. The plan highlights previous plans published to improve mobility and quality of life within North Fair Oaks, noting that GI can and should be integrated into future transportation and open space improvement projects identified by other planning efforts within the area, such as the Middlefield Road Improvement Project.

## San Mateo County Sea Level Rise Vulnerability Assessment

Published in March 2018, the *San Mateo County Sea Level Rise Vulnerability Assessment* set out to evaluate the vulnerabilities of San Mateo County to climate change and to identify impacts of flooding and erosion on people, places, and critical infrastructure. The goal is to provide a menu of actionable solutions to protect places and people by determining risk levels using three flooding and sea level rise scenarios of increasing intensities.

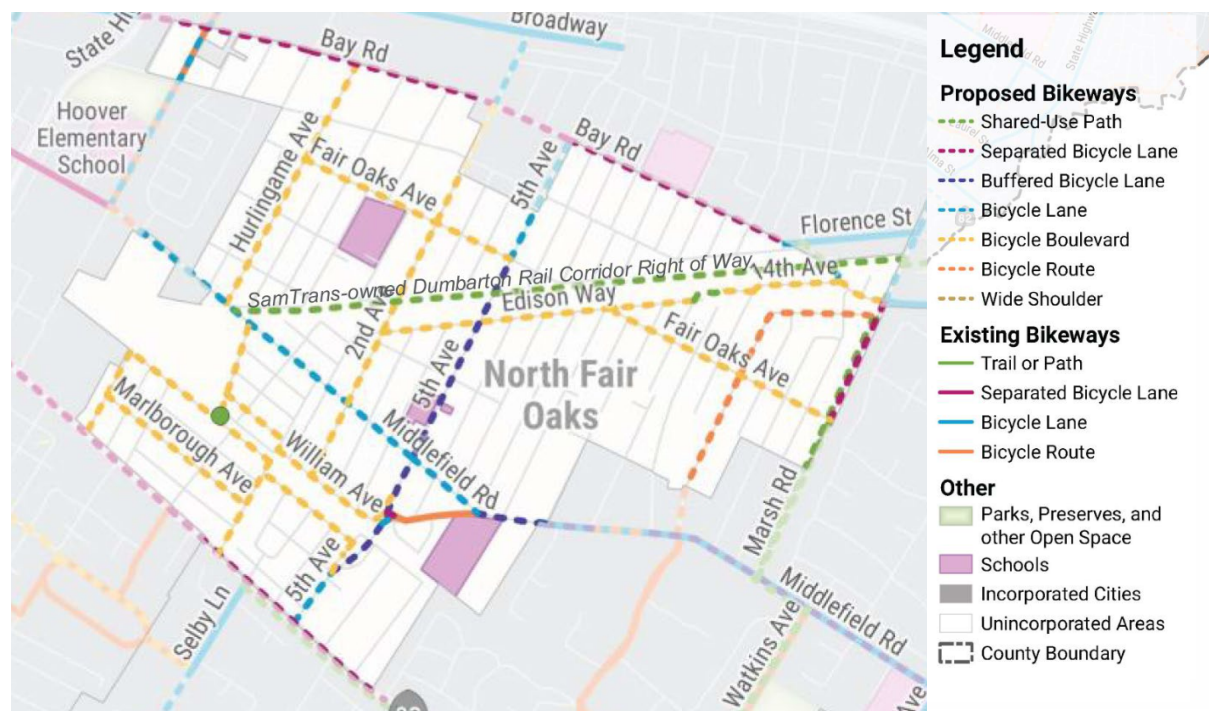
The North Fair Oaks region faces both direct and indirect impacts from sea level rise, with 35 parcels and portions of Bay Road inundated in the baseline flooding analysis. Around 2% and 4% of roads and storm drains are also vulnerable in the mid-level scenario, though less than 1% of the neighborhood's population is vulnerable under the mid-level scenario. The Study area is not within the area that is vulnerable to effects from sea level rise.

## Unincorporated San Mateo County Active Transportation Plan

Approved by the San Mateo County Board of Supervisors in February 2021, the *Unincorporated San Mateo County Active Transportation Plan* focuses on the unincorporated areas within San Mateo County, including North Fair Oaks. The Plan provides a comprehensive framework to guide the development of projects and programs for people of all ages and abilities throughout unincorporated County communities. It synthesizes nearly two years' worth of community engagement, existing conditions and data analyses, and concept planning work. The Plan provides contains overarching goals, identifies a proposed bicycle facility network and a series of pedestrian priority destination areas with specific recommendations to improve safety and access, and a section on implementation that includes project prioritization criteria, implementation methods and considerations, planning-level cost estimates, and a list of potential funding sources. Equity is a key goal and project prioritized criteria outlined in the Plan and it is important to note that proposed bicycle projects in North Fair Oaks and other disadvantaged communities rank among the top tier priority projects. Based on a demand analysis, North Fair Oaks was identified as having some of the greatest potential demand for walking and bicycling in all of the County's unincorporated communities. The need for a new bicycle and pedestrian grade-separated crossing of the Caltrain tracks in North Fair Oaks was identified as a way to improve connectivity, closing a key gap in the active transportation network in North Fair Oaks and beyond. It also identifies a series of proposed bicycle boulevards in North Fair Oaks, as shown in **Figure 14**.



**Figure 14: Proposed Bicycle Network – North Fair Oaks, Menlo Oaks, West Menlo Park**



Source: Unincorporated San Mateo County Active Transportation Plan, 2021

### Bay to Sea Trail Conceptual Trail Corridor

The Bay to Sea Trail is a conceptual multiuse trail project proposed by the Bay Area Trails Collaborative initiative. As part of a much larger proposed and existing network of multiuse trails, the Bay to Sea Trail would traverse through the North Fair Oaks region along the Dumbarton rail corridor, travelling west to intersect with the Bay Area Ridge Trail and the California Coastal Trail. Implementation of this portion of the trail network would create the first east-west trail on the San Francisco Peninsula, connecting the San Francisco Bay and the Pacific Ocean. A new bicycle and pedestrian grade-separated crossing of the Caltrain tracks in North Fair Oaks, combined with bicycle and pedestrian enhancements on local streets could help further east west access beyond the Dumbarton Corridor for this Trail.

### Caltrans Safety Project Initiation Document on El Camino Real

Caltrans is proceeding with a project initiation document (PID) that will explore the provision of Class IV separated bike lanes or Class II bike lanes and the improvement of existing intersections on El Camino Real that will also benefit pedestrians from Shelby Lane, north into Redwood City. Existing on street parking or the right most travel lane on some segments will be removed for the bike lanes. The purpose of this project is to address bicyclist-involved high collision concentration locations to improve bicycle safety with the goal of reducing bicyclist fatalities and serious injuries.

### Dumbarton Rail Corridor Project

South of the Dumbarton Highway Bridge (traversed by SR 84) is the Dumbarton Rail Bridge, which carried freight rail traffic between Newark and Menlo Park until 1982. In August 2018 the San Mateo County Transit District (SamTrans) began partnering with the Cross Bay Transit Partners (a joint venture of Meta (formerly Facebook) and Plenary) to explore options to enhance mobility along the Dumbarton rail corridor. That effort explored the feasibility of



reopening the corridor for passenger service and promoting transit-oriented development at existing and future stations. The study analyzed alternative transit modes, including bus, rail, and autonomous transit, in the Dumbarton Rail Corridor, extending between the Redwood City Caltrain station and Union City BART. The study identified the potential for two stops in North Fair Oaks at Marsh Road and Middlefield Road and consideration for a continuous bicycle path along the corridor that traverses North Fair Oaks. SamTrans is currently evaluating next steps for further study and environmental analysis in this corridor.

### 2040 Caltrain Business Plan

Caltrain's ridership has doubled over the last 15 years, and it is now the 7<sup>th</sup> largest commuter rail system in the country. By 2040, it is anticipated that there will be a 40% increase in population within 2 miles of Caltrain stations. Caltrain created and adopted a business plan in September 2020 with 2040 in mind, with detailed analysis and public outreach efforts to determine the future of service throughout the Bay Area. Some of the major goals of the project are to offer more frequent service, more flexible schedules, and faster travel times. Caltrain is proceeding with projects to allow for an increase in service along the Caltrain corridor. Part of Caltrain's expansion is the Peninsula Corridor Electrification Project, which is currently under construction. This will allow for the ultimate conversion of the Caltrain fleet to electric motorized units.

## Next Steps

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This Study will next engage with North Fair Oaks community as part of Outreach Round 1 during late Spring/early Summer 2022 to introduce them to the Study and learn about their current transportation needs around the Caltrain tracks. Feedback from the Community Advisory Committee and community will be used to develop project goals, priorities, and evaluation criteria that will guide the Study. The information contained within this memorandum will be synthesized with the data from the ongoing outreach efforts, including an online survey, which will be summarized in a separate deliverable, to inform the development of project alternatives and evaluation criteria to assess those alternatives later in 2022.