

El Camino Real Grand Boulevard Initative Action Plan



Acknowledgments

SAMTRANS PROJECT TEAM

Millie Tolleson, Planning Director Cassie Halls, Project Manager

Nicholas Yee, Deputy Project Manager

Ana Vasudeo, Manager, Government and Community Affairs

Charlsie Chang, Government Affairs Officer
Michaela Petrik, Government Affairs Officer

GBI EXECUTIVE STEERING COMMITTEE

California Department of Transportation
City/County Association of Governments
of San Mateo County

Metropolitan Transportation Commission
SamTrans

San Mateo County Transportation Authority

SPECIAL THANKS

The GBI Action Plan and coordinated
Project Initiation Document are funded
by SamTrans general operating funds, a
grant from the Metropolitan Transportation
Commission, and local transportation
sales tax dollars from the San Mateo
County Transportation Authority.

GBI TASK FORCE MEMBERS

TASK FORCE MEMBERS: LOCAL JURISDICTIONS

Atherton

Belmont

Burlingame

Colma

Daly City

Hillsborough

Menlo Park

Millbrae

Palo Alto

Redwood City

San Bruno

San Carlos

San Mateo

South San Francisco

San Mateo County

TASK FORCE MEMBERS: AGENCIES

City/County Association of Governments of San Mateo County

California Department of Transportation

Caltrain

Commute.org

Metropolitan Transportation Commission

SamTrans

San Mateo County Office of Education Safe Routes to School

Sale Roules to School

San Mateo County Parks Department

San Mateo County Transportation Authority

Valley Transportation Authority

TASK FORCE MEMBERS: STAKEHOLDERS

Chamber San Mateo County

Housing Leadership Council of San Mateo County

Paratransit Advisory Council

Peninsula Open Space Trust

Rails to Trails Conservancy

San Mateo County Economic

Development Association

San Mateo County Commission on Aging

Silicon Valley Bicycle Coalition

South San Francisco Chamber of Commerce

Stanford University

Sustainable San Mateo County

Youth Leadership Institute

SAMTRANS BOARD OF DIRECTORS

Jeff Gee, Chair

Marie Chuang, Vice Chair

David Canepa

Brooks Esser

Marina Fraser

Rico E. Medina Josh Powell

Peter Ratto

Jackie Speier

SAN MATEO COUNTY TRANSPORTATION AUTHORITY BOARD OF DIRECTORS

Carlos Romero, Chair

Julia Mates, Vice Chair

Noelia Corzo

Anders Fung

Rico E. Medina

Mark Nagales

Jackie Speier

CONSULTANT TEAM

FEHR & PEERS

Daniel Jacobson

Molly Sun

Ingrid Ballús Armet

Alex Murray

Kevin Zamzow-Pollock

Katherine Turner

Manvi Nigam

Melody Wu

Amy Deng

Krystle Li

MARK THOMAS

Shawn O'Keefe

INFRASTRATEGIES

Joshua Schank

Emma Huang

Photos & Illustrations by SamTrans and Fehr & Peers unless otherwise noted.

Letter from the General Manager



Over the past year, SamTrans and the San Mateo County Transportation Authority (SMCTA) created a partnership with Caltrans, C/CAG, MTC, cities, advocates, and business groups to develop a countywide plan to modernize El Camino Real. Redesigning a 25-mile state highway will be one of San Mateo County's largest transportation projects, requiring creativity and collaborative spirit.

The forum for this momentous effort is the Grand Boulevard Initiative (GBI), a program led by SamTrans since 2006 to transform housing, land use and transportation infrastructure on El Camino Real. Beginning last year, a GBI Task Force of over 50 participants met in a series of seven workshops to chart a path for multi-modal transportation improvements along the corridor. Together, they crafted a transformative vision for El Camino Real as a safe and vibrant corridor that supports all modes of travel and enables people of every age and ability to travel comfortably.

GBI goes beyond visioning: with grant funding support from the Metropolitan Transportation Commission (MTC), SamTrans and SMCTA will advance locally-supported design alternatives into the multi-year Caltrans project development process. This will help streamline project approvals and reduce the burden and cost for cities to make improvements.

The GBI Action Plan lays the groundwork for this major effort. With SamTrans and SMCTA Board of Directors adopting this Plan, we are taking an important step in delivering on our vision of transforming El Camino Real into a safe and vibrant multimodal boulevard for all.

Sincerely,

APRIL CHAN
GENERAL MANAGER/CEO AND EXECUTIVE DIRECTOR





TABLE OF CONTENTS

TABLE OF CONTENTS

Table of Contents



Introduction & Executive Summary

PAGE 10



Planning & Policy Framework

PAGE 46



Goals & Actions

PAGE 72



Funding & Implementation

PAGE 94



Needs Assessment

PAGE 20



Working Together

PAGE 62



Design Alternatives

PAGE 84



TABLE OF CONTENTS

TABLE OF CONTENTS

Figures

Figure 1.1. Design Alternatives to be Carried into the Project Initiation Document (PID)

Figure 1.2. Caltrans Project Development Process Timeline

Figure 2.1. Trip Origin and Destinations on El Camino Real by City

Figure 2.2. Trip Purposes on El Camino Real by City

Figure 2.3. Average Weekday Traffic Volumes and Automobile Speeds

Figure 2.4. Average Mid-Week Hourly Traffic Volumes by Time of Day by City

Figure 2.5. Average Daily Traffic Volumes by City (Midweek, Tuesday through Thursday)

Figure 2.6. Average Weekday AM Peak Traffic Volumes, Automobile Speeds, and Level of Service

Figure 2.7. Average Weekday PM Peak Traffic Volumes, Automobile Speeds, and Level of Service

Figure 2.8. Distribution of Injury Collisions on El Camino Real, All Modes

Figure 2.9. Distribution of Pedestrian Injury Collisions on El Camino Real

Figure 2.10. Distribution of Bicycle Injury Collisions on El Camino Real

Figure 2.11. Existing and Planned Bikeways on El Camino Real

Figure 2.12. Planned and Existing Bicycle Corridors and Gaps

Figure 2.13. Route ECR Average Weekday Boardings by Stop

Figure 2.14. Route ECR Passenger Loads by Direction

Figure 2.15. Route ECR Weekday Average Bus Speeds (6am–7pm)

Figure 2.16. Route ECR Average Speeds by City (6am–7pm)

Figure 2.17. Change in Route ECR Travel Times over Time

Figure 2.18. BART and Caltrain Stations near El Camino Real

Figure 2.19. Planned Housing and Job Growth within One Half-Mile of El Camino Real

Figure 2.20. Estimated Population and Employment Growth within One Half-Mile of El Camino Real

Figure 2.21. SamTrans Equity Priority Areas (EPAs) in San Mateo County

Figure 2.22. Route ECR Rider Median Household Income

Figure 2.23. Route ECR Riders Race and Ethnicity

Figure 2.24. Route ECR Rider Vehicle Ownership

Figure 3.1. DIB-94 Modal Priority by Roadway Context

Figure 3.2. Caltrans SHOPP Projects along El Camino Real in San Mateo County

Figure 3.3. Example City Recommendations from the El Camino Real Bus Speed and Reliability Study

Figure 3.4. Emphasis Areas from the C/CAG Countywide Local Roadway Safety Plan

Figure 3.5. Pedestrian Focus Areas and the Countywide Bicycle Backbone Network

Figure 3.6. Concept Design for El Camino Real from the C/CAG Sustainable Streets Master Plan

Figure 3.7. Local Corridor Plans for El Camino Real

Figure 4.1. SamTrans Rider Priority Improvements for Route ECR

Figure 5.1. Relationship of Vehicle Speed to Risk of Severe Injury and Death for Pedestrian Crashes

Figure 5.2. Recommended Segments for Curbside Bus Lanes

Figure 5.3. DIB-94 Recommendations for Bicycle Facilities by Posted Speed and Average Daily Traffic

Figure 5.4. DIB-94 Recommended Bicycle Facilities on El Camino Real

Figure 6.1. Number of Through Lanes by Direction

Figure 6.2. Sample Cross-Sections by City

Figure 6.3. Alternatives for Further Evaluation

Figure 6.4. Four-Lane Sections, Alternative 1

Figure 6.5. Six-Lane Sections, Alternative 2

Figure 6.6. Six-Lane Sections, Alternative 3

Figure 6.7. Six-Lane Sections, Alternative 4

Figure 7.1. Funding Strategy

Figure 7.2. Caltrans Project Development Process Timeline

Figure 7.3. Caltrans Process Approach

Tables

Table 2.1. Injury Collisions and KSIs by City, All Modes

Table 2.2. Injury Collisions and KSIs by City, Pedestrians

Table 2.3. Injury Collisions and KSIs by City, Bicyclists

Table 2.4. Summary of Existing Pedestrian and Bicycle Conditions

Table 3.1. Summary of Caltrans SHOPP Projects along El Camino Real

Table 3.2. Recent and Ongoing Local Corridor Plans for El Camino Real

Table 3.3: City Plans Addressing El Camino Real, 2010-Present

Table 5.1. Goals and Actions

Table 5.2. Target Outcomes and Key Performance Indicators

 Table 6.1. Alternatives Comparison

Acronyms

ADA	Americans with Disabilities Act
BART	Bay Area Rapid Transit
BRT	Bus Rapid Transit
C/CAG	City/County Association of Governments of San Mateo County
Caltrans	California Department of Transportation
СМСР	Comprehensive Multimodal Corridor Plan
CMP	Congestion Management Program
DP-36	Director's Policy (Caltrans)
EIR	Enviromental Impact Report
EIS	Enviromental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HIN	High Injury Network
ISOAP	Intersection Safety and Operations Process (Caltrans)
LOS	Level of Service
LRSP	Local Road Safety Plan
MTC	Metropolitan Transportation Commission
PDA	Priority Development Area
PID	Project Initiation Document
PA&ED	Project Approval & Environmental Document
ROW	Right of Way
SamTrans	San Mateo County Transit District
SMCTA	San Mateo County Transportation Authority
SHOPP	State Highway Operation and Protection Program
TDM	Transportation Demand Management
TSP	Transit Signal Priority
USDOT	US Department of Transportation

1920s **El Camino Real** paved as Peninsula's first highway

1940s-70s 101 and 280 freeways built, shifting regional travel away from El Camino Real

2006 The Grand Boulevard Initiative (GBI) launched to transform the built environment on El Camino Real

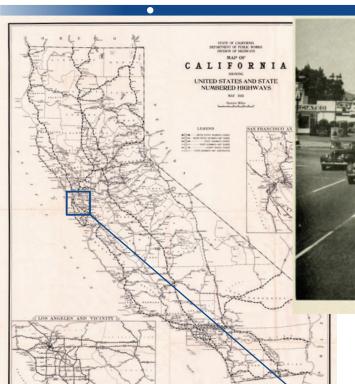
2024 SamTrans ressembles GBI focused on advancing transportation

improvements in San Mateo County



It's Time to Modernize El Camino Real.

El Camino Real was California's first highway, originally connecting Ramaytush Ohlone native communities, then Spanish missions, and ultimately a paved highway linking San Francisco and San José with Southern California.





Sources: Top from left to right: UC Berkeley Institute of Transportation Studies Library, San Mateo County Historical Association, SamTrans. Bottom from left to right: UC Berkeley Institute of Transportation Studies Library, SamTrans.

Since the 1950s, however, the role of El Camino Real has shifted to a more local focus: the construction of the Bayshore Freeway (current US 101) and I-280 diminished the

importance of El Camino Real for

regional and statewide travel.

Today, El Camino Real serves as San Mateo County's main street, connecting downtowns and key destinations while emerging as a hub for housing, offices, and small businesses, but its infrastructure still largely reflects its previous role as a highway catering to automobile travel passing through the Peninsula. This mismatch creates barriers and conflicts for other users of El Camino Real including people walking, biking, and riding transit—and results in

one of the highest rates of injury

collisions among streets in San Mateo County.

The Grand Boulevard

Initiative (GBI) seeks to

catalyze momentum around transforming El Camino Real. GBI began in 2006 as a partnership led by SamTrans involving cities, countywide agencies, Caltrans, advocates, business groups, and other stakeholders. Over the past two decades, GBI has supported cities with land use and transportation planning along El Camino Real, including supporting the adoption of over 50 local and countywide plans along the corridor. While cities have made substantial progress on El Camino Real over the past two decades, particularly with land use planning and development, GBI

stakeholders expressed a desire to refine a corridor-wide vision, process, and funding approach to implement transportation improvements. Following a break during the COVID-19 pandemic, SamTrans reconvened GBI in Fall 2024 to initiate the GBI Action Plan.

The GBI Action Plan represents the first step toward redesigning El Camino Real, building upon a year of interagency collaboration via a Task Force to advance a unified vision that improves mobility and safety. The Action Plan is a planning document that evaluates corridor-wide needs (Chapter 2), establishes a cohesive vision (Chapters 3-6), and builds momentum toward implementation (Chapters 5-7).

A BRIEF HISTORY OF EL CAMINO REAL, 1925-2025



El Camino Real was designed to move cars across the Peninsula/

Before freeways were built, El Camino was the first highway connecting San Francisco. San Jose. and central/southern California. It was originally designated as US-101 before the Bayshore Freeway was built.



El Camino's infrastructure has remained largely unchanged from decades ago.

Even though most regional trips have shifted to the 101 and 280 freeways, El Camino Real continues to prioritize high speed auto travel. Pedestrian, bicycle, and transit infrastructure remains limited.



The corridor is changing. **How should El Camino** Real change?

El Camino Real is San Mateo County's main street and serves as a focal point for new housing and job growth. Now is the time to redesign the corridor to meet these evolving needs.

Executive Summary

VISION STATEMENT

El Camino Real is a safe and vibrant street where people of all ages and abilities travel comfortably.



DEFINITIONS

A 'safe street'

eliminates fatalities and serious injuries and provides safer outcomes for all users.

A 'vibrant street' supports local businesses, accommodates new residents and jobs, strengthens a sense of community, and is a place where people want to spend time.

'All ages and abilities' means that everyone feels comfortable and safe while traveling, including youth, seniors, and people with disabilities.

Problem Statements

The GBI Task Force identified a set of priority problems at the beginning of the Action Plan process, summarized into three Problem Statements:

PROBLEM STATEMENTS





El Camino Real has an unusually high rate of fatal or serious injury crashes, particularly for people walking and biking.

· Rates of fatal or serious injury crashes are substantially higher on El Camino Real than other streets within San Mateo County. High vehicle speeds, highwaylike infrastructure, and densifying land use contribute to a high rate of conflicts between modes.

El Camino Real's highway-like design discourages walking, biking, and transit use.





- · People walking and biking encounter barriers and uncomfortable conditions, including missing or narrow sidewalks, unpainted crosswalks, long gaps between pedestrian crossings at traffic lights conflicts with cars making left turns, a lack of pedestrian-scaled lighting, and an absence of low-stress bicycle
- Buses travel much slower than automobiles. Route ECR, which serves as the backbone of SamTrans' bus network, experiences one-way travel times in excess of two hours between Daly City and Palo Alto. Few transit priority measures are present; buses encounter delays and on-time performance challenges due to near- side and pull-out stops, traffic signals, and exposure to traffic congestion.

It's too challenging for individual cities to develop, implement, and fund transportation projects on El Camino Real.



PROCESS

- · As a state highway, projects on El Camino Real require a complex project development and approvals process that is more costly and time-consuming compared to city-owned streets.
- It can be challenging for cities to piece together a full funding package for a large streetscape project.
- · Coordination is required to provide consistency across city boundaries, and less than one mile of redesigned streetscape has been implemented over the past two decades.

Goals

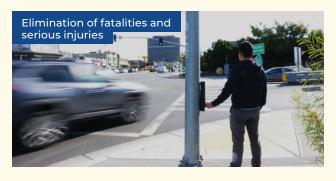
The GBI Task Force helped refine goals and actions to address the problem statements and achieve the corridorwide vision. **Key recommendations are** shown in bold under each Action.

TARGET OUTCOMES









Goal 1: Adopt an Injury-Prevention Mindset for El Camino Real

Adopting an injury prevention mindset means infusing every project on El Camino Real with measures to proactively reduce the likelihood and severity of injury collisions, especially for vulnerable roadway users.



ACTION 1A: PRIORITIZE CHANGES THAT IMPROVE SAFETY FOR VULNERABLE **ROADWAY USERS**

Eliminating fatal and serious injury crashes starts with prioritizing vulnerable roadway users, namely pedestrians, bicyclists, and transit riders. Vulnerable users lack the physical protection of a motor vehicle and are therefore more susceptible to injury or death in traffic crashes. **Prioritizing vulnerable users** means advancing pedestrian, bicycle, and transit improvements even when it presents tradeoffs for traffic operations or parking.



ACTION 1B: MANAGE CONFLICTS TO REDUCE THE POTENTIAL FOR CRASHES

El Camino Real experiences a high concentration of conflict points due to its density of uncontrolled driveways and intersections. Conflict points should be minimized to the extent possible on El Camino Real, especially driveways and uncontrolled left turns; where conflict points occur, users should **be separated in space and time** (e.g. separated bikeways, bus lanes, sidewalk gap closures, curb extensions, medians, traffic signals, pedestrian hybrid beacons, and turn restrictions).



ACTION 1C: MANAGE SPEEDS TO REDUCE THE SEVERITY OF CRASHES

Risk of severe injury or death rises exponentially with vehicle speed. Changes to street design on El Camino Real should target operating speeds of 25 to 30 miles per hour. Geometric design changes should be reinforced by retiming signal progression to maintain a steady 'green wave' at 25 to 30 miles per hour, and pursuing state legislation to implement speed enforcement cameras.

Goal 2: Transform El Camino Real into a Complete Street

El Camino Real's antiquated infrastructure no longer reflects the needs and objectives of the communities it serves. Actions 2A-2C articulate countywide priorities voiced by the Task Force and Working Group to achieve a complete street consistent with countywide, regional, and state plans.



ACTION 2A: ADVANCE CORRIDOR-WIDE BICYCLE AND TRANSIT IMPROVEMENTS TO EXPAND MOBILITY CHOICES

El Camino Real serves as a backbone for the countywide bicycle and transit networks. A consistent and cohesive approach to bicycle and transit facilities is necessary to provide a seamless, efficient, and comfortable experience. To accomplish this, El Camino Real (and/or parallel streets) should include a continuous all ages and abilities bikeway. An all ages and abilities bikeway would be accomplished either via advancing a Class IV separated bikeway or Class I bike path on El Camino Real or comparable facilities serving all ages and abilities on nearby parallel streets. Additionally, El Camino Real should feature transit improvements that reduce travel times, improve reliability, and enhance the user experience. Specific recommendations include bus bulbs or bus boarding islands, far-side stops, transit signal priority, and bus shelters. Bus lanes should be prioritized where there are slow to moderate bus speeds and excess travel lanes. Bus lanes are best suited to approximate one-third of the corridor along sections with three travel lanes per direction that exhibit potential for travel time improvement.



ACTION 2B: ENHANCE WALKABILITY AND AMENITIES TO SUPPORT VIBRANT COMMUNITIES AND A SENSE OF PLACE

Pedestrian improvements are necessary throughout El Camino Real to provide a seamless, connected, and inviting environment. El Camino Real should incorporate pedestrian improvements everywhere to provide a seamless, connected, and inviting environment for walking. Recommended improvements include addressing gaps in sidewalks and crosswalks, widening sidewalks, providing traffic controls at all marked crosswalks, providing curb extensions, incorporating pedestrian-scaled lighting, reducing conflicts at intersections and driveways, and enhancing amenities, landscaping, and stormwater management features to support a more comfortable experience on foot. New developments present the best opportunity to widen sidewalks and create a more vibrant pedestrian realm. Developments present opportunities to increase setbacks to provide additional space for pedestrians, while widening sidewalks within existing street rightof-way may be considered in areas where limited new development is expected to occur.



ACTION 2C: INCORPORATE A CONTEXT-SENSITIVE APPROACH THAT ADAPTS THE COUNTYWIDE VISION TO LOCAL CONDITIONS

The GBI Action Plan provides a countywide vision to advance transportation improvements. Within this framework, there is flexibility to tailor and customize local streetscape projects to address local transportation needs. A single one-size-fits-all cross-section is unlikely to emerge as a preferred alternative; nonetheless, a unified approach to safety improvements should be present throughout the corridor to ensure consistency and minimize confusion when transitioning across cities.

Goal 3: Create a Framework for Change that Aligns Vision, Process, and Funding

Advancing transportation projects on El Camino Real requires collaboration between cities, countywide and regional agencies, and Caltrans to identify the scope of improvements, navigate project approvals, and secure funding. Working together presents the opportunity to pool resources and technical expertise across agencies.



ACTION 3A: ADVANCE A COUNTYWIDE PROJECT DEVELOPMENT PROCESS WITH CALTRANS

Historically, cities were responsible for implementing projects individually on El Camino Real, which required significant time and resources from both cities and Caltrans and extended the timeline for project development. Feedback from cities and Caltrans suggests that a coordinated process will help alleviate local challenges and better address shared countywide needs. SamTrans and SMCTA will coordinate the Caltrans project development process at a countywide level, including a comprehensive strategy for implementation, phasing, and funding. Jointly, SamTrans and SMCTA will consider sponsoring the future phases of work following approval by cities to minimize costs needed from local jurisdictions to implement the large-scale project.



ACTION 3B: MAINTAIN INTERAGENCY COLLABORATION THROUGH CONSTRUCTION, OPERATIONS, AND MAINTENANCE ACTIVITIES

Transforming El Camino Real will be one of the largest transportation projects pursued in San Mateo County in recent memory. The scale and complexity of this challenge – roughly \$750 million to \$1 billion based on comparable projects – is greater than any individual agency, and will necessitate continued involvement and collaboration throughout the process. GBI will remain a forum to facilitate collaboration from planning and design through construction, operations, and maintenance activities on the corridor.



ACTION 3C: USE THE GBI ACTION PLAN TO GUIDE DECISION-MAKING

The GBI Action Plan should be used to evaluate tradeoffs and guide challenging decisions on El Camino Real to ensure a seamless and cohesive corridor. SamTrans, SMCTA, C/CAG, MTC, and Caltrans will use the GBI Action Plan to help plan. design, and fund improvements to El Camino Real.

Design Alternatives

The GBI Action Plan identifies conceptual crosssection alternatives that could fit on either the four- or six-lane sections on the corridor. El Camino Real has four- and six-lane sections as narrow as 60 feet (in Burlingame) and as wide as 140 feet (in Millbrae). For planning purposes, each alternative is defined by the layout of travel lanes, with options to pair those layouts alongside changes to curb space uses (i.e., maintaining on-street parking, adding separated bike lanes, or widening sidewalks) pending the outcomes of local corridor studies. These alternatives represent a generalization of the possibilities across the 25 mile El Camino

Real corridor; however, each city has unique characteristics that may result in some variation across these alternatives.

While all alternatives intend to incorporate unifying elements associated with safety, active transportation, and transit improvements, some alternatives are better suited to advance these goals than others. Consistent with other adopted plans and policies, the GBI Task Force identified alternatives with bus lanes, separated bike lanes, and wider sidewalks as most responsive to corridor wide goals.

Figure 1.1. Design Alternatives to be Carried into the Project Initiation Document (PID)

4 Lane Sections

MAINTAIN 4 LANES

4 Lanes

6 Lane Sections

MAINTAIN 6 LANES

6 Lanes





4 Lanes + Parking





4 Lanes + Separated Bike Lanes







4 Lanes + Wider Sidewalks



6 Lanes + Wider Sidewalks





The Grand Boulevard Initiative will track progress toward advancing project designs, facilitating public engagement, and advancing key performance indicators. For more information and updates on the Grand Boulevard Initiative, please visit: samtrans.com/gbi.

Figure 1.1. Design Alternatives to be carried into the PID (cont.)

6 Lane Sections

BUS LANE CONVERSION

6 Lanes



6 Lane Sections

ROAD DIET

Road Diet



6 Lanes + Parking



Road Diet + Wider Sidewalks + Parking



6 Lanes + Separated Bike Lanes



Road Diet + Wider Sidewalks + Separated Bike Lanes



6 Lanes + Wider Sidewalks



Road Diet + Parking + Separated Bike Lanes



Next Steps

Following the GBI Action Plan, SamTrans will begin the Caltrans project development process that will involve further analysis, design, engagement, and evaluation of potential changes, including the identification of a preferred design alternative estimated to occur in 2027 to 2028. Depending on funding, construction could begin on some segments in the early 2030s. In parallel, incremental improvements to El Camino Real will continue to be pursued by Caltrans, SamTrans, SMCTA, and cities.

Figure 1.2. Caltrans Project Development Process Timeline



Project Initiation Document (PID)

 Define scope, cost, schedule, and analysis approach

Project Approval & Environmental **Document (PA&ED)**

- · Preferred alternative, environmental analysis
- · Public engagement

Plans, Specifications, & **Estimates (PS&E)**

· Design project

Construction

Build project

*This needs assessment covers the full

jurisdictions with recently completed

corridor studies, such as Atherton and Colma, that already prepared similar plans.

length of El Camino Real across San Mateo County. Some parts of this analysis omit

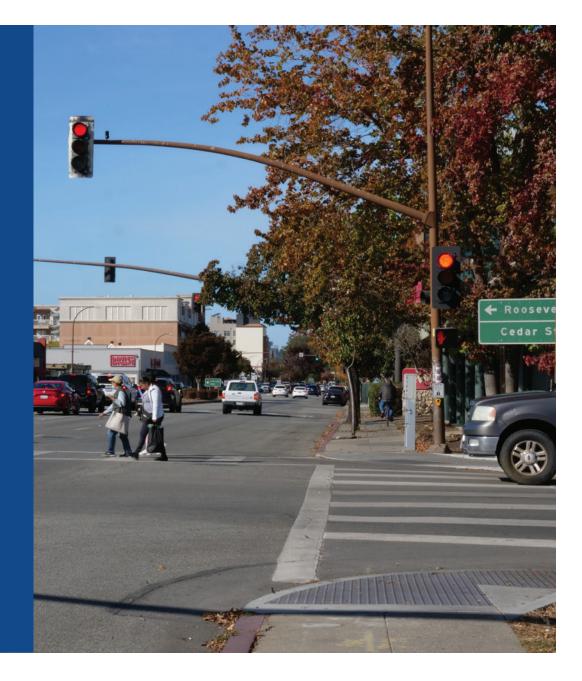


Needs Assessment

Identifying Needs

El Camino Real (State Route 82) has undergone few changes over the past decades, even as its surrounding built environment has evolved into a multimodal mixeduse corridor. While its street design continues to prioritize high speed regional auto mobility, its users primarily travel locally. This mismatch contributes to a high rate of injury collisions as well as barriers to transit and active transportation use.

This section explores current needs and deficiencies on El Camino **Real in San Mateo County** and how they shape the **GBI** safety and mobility problem statements summarized at the conclusion of the chapter.



Travel Behavior & Traffic Conditions*

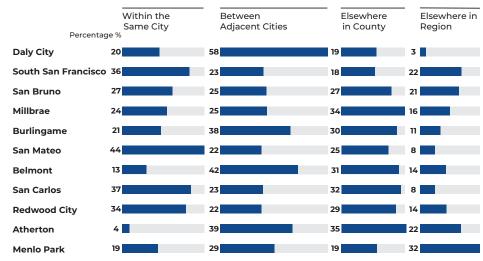
Origin-Destination Patterns

Despite its designation as a state highway, El Camino Real mostly serves local travel. About 50 percent of trips on the roadway start and end within the same city or an adjacent city, and about 80 percent of trips occur within San Mateo County. Very few trips span more than a few miles, since it is usually faster to take US-101 or I-280 for longer distance travel. This locally-oriented travel behavior is consistent across most cities, as illustrated in Figure 2.1.

Trip Purposes

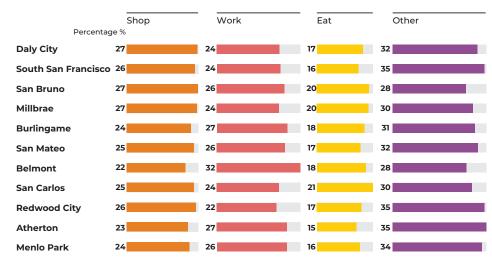
El Camino Real serves a wide range of trip purposes, none of which account for a majority of travel. On a typical weekday, only about one quarter of trips on El Camino Real are from people commuting to or from work. The rest of trips are relatively evenly split between retail, restaurants, and other trips (medical, educational, or recreational). This reflects El Camino Real's variety of land uses and destinations such as shops, restaurants, hospitals, schools, parks, and offices. Figure 2.2. illustrates typical trip purposes by city.

Figure 2.1. Trip Origin & Destinations on El Camino Real by City



Source: Replica, Spring 2024.

Figure 2.2. Trip Purpose on El Camino Real by City

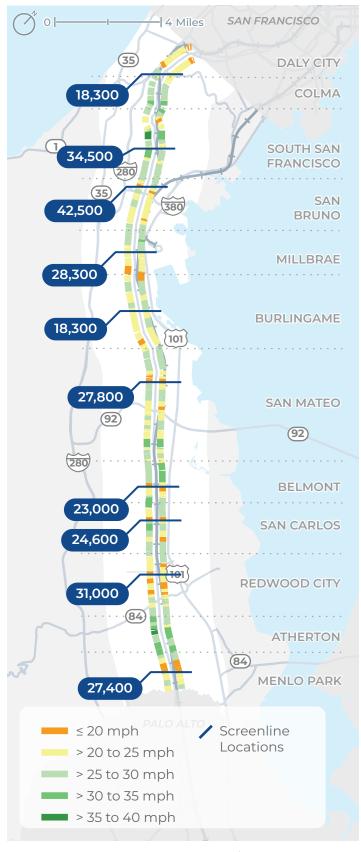


Source: Replica, Spring 2024.

Travel Demand and Traffic Volumes

Consistent with its range of trip purposes, El Camino Real serves all-day travel demand across both weekdays and weekends. As shown in **Figure 2.3.**, El Camino Real serves 25,000 to 30,000 vehicles per day in most cities. Traffic volumes tend to be higher near freeway interchanges and exceed 30,000 vehicles per day in cities such as South San Francisco, San Bruno, and Redwood City. Traffic volumes are lowest around Daly City, Colma, and Burlingame, where volumes are less than 20,000 vehicles per day. Higher traffic volumes usually coincide with six lane segments, but exceptions occur in cities like Colma (which has six lanes and lower volumes) and Redwood City (which has higher volumes and four lanes).





Source: SamTrans Traffic Counts (IDAX, February/April 2025), INRIX Data (December 2024).

Traffic volumes are relatively consistent across weekdays and weekends, with volumes peaking during midweek late afternoon to early evening periods as illustrated in **Figure 2.4.** and **Figure 2.5.**



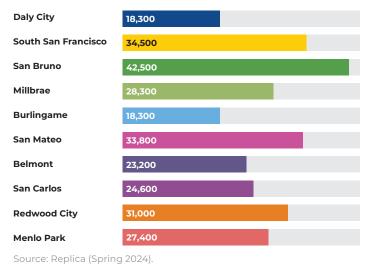
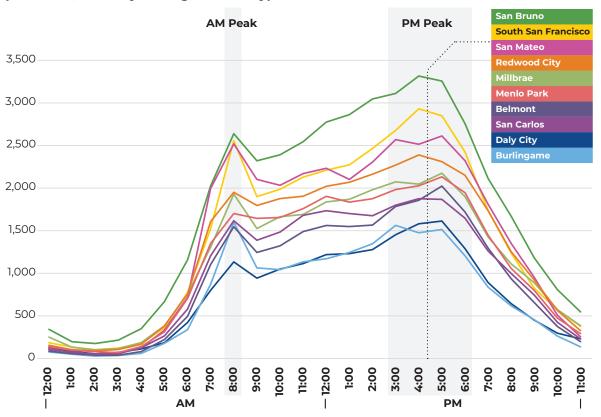


Figure 2.5. Average Mid-Week Hourly Traffic Volumes by Time of Day by City (Midweek, Tuesday through Thursday)



Source: SamTrans Traffic Counts (IDAX, February/April 2025).

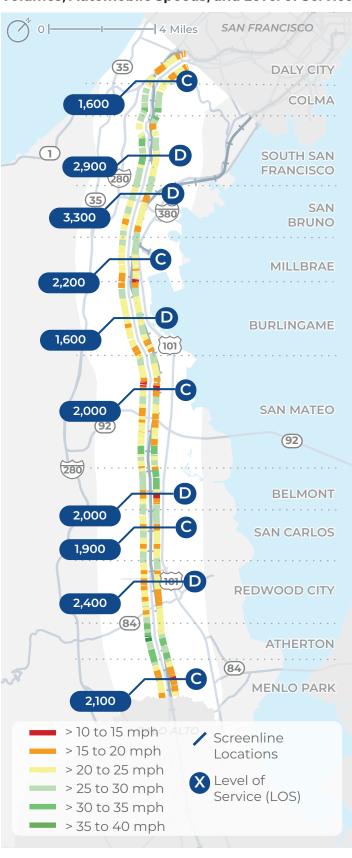
Traffic moves reasonably well throughout the day, including during the morning (7-9 AM) and evening (4-6 PM) peak commute hours, except for a few localized pinch points in cities like Millbrae, San Mateo, Belmont, Redwood City, and Menlo Park. **Figure 2.6** and **Figure 2.7** show AM and PM peak hour traffic volumes, speeds, and segment level of service (LOS) along the corridor. All segments evaluated operate within a Level of Service (LOS) C or D range, which is consistent with performance targets identified in the City/County Association of Governments of San Mateo County's (C/CAG) Congestion Management Program.

Figure 2.6 Average Weekday AM Peak Traffic Volumes, Automobile Speeds, and Level of Service

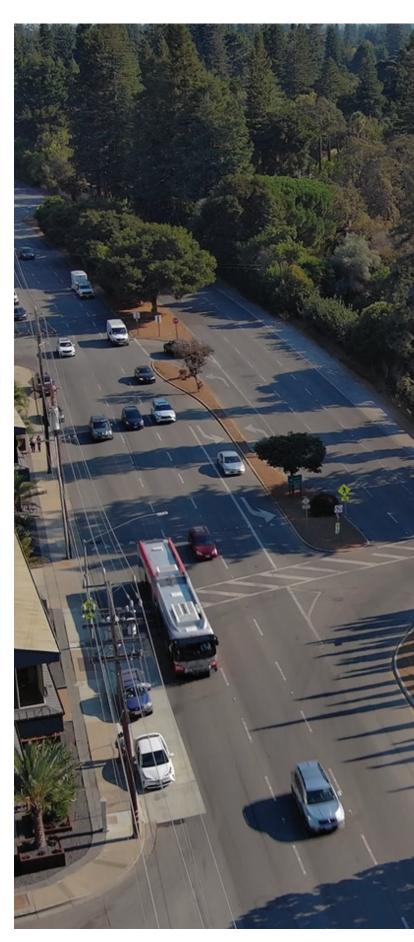


Source: SamTrans Traffic Counts (IDAX, February/ April 2025), INRIX Data (December 2024).

Figure 2.7. Average Weekday PM Peak Traffic Volumes, Automobile Speeds, and Level of Service



Source: SamTrans Traffic Counts (IDAX, February/ April 2025), INRIX Data (December 2024).



Safety

El Camino Real has a disproportionately high rate of fatal or serious injury crashes, particularly for vulnerable roadway users such as pedestrians and bicyclists. In most cities, El Camino Real accounts for only one to three percent of total street mileage; however, the corridor makes up about 10 to 20 percent of injury collisions and killed and seriously injured (KSI) collisions.

The Statewide Integrated Traffic Records System (SWITRS), California's collision database, places injury collisions into four severity levels. Fatal collisions, where at least one person is killed in the crash; severe injury collisions, where at least one person has a severe injury, which includes major injuries like broken bones and severe bleeding; other visible injury collisions, which includes evident but non-lifethreatening injuries like bruising and cuts; and complaint of pain collisions, where an involved party reports an internal injury that is not visible to others at the scene. Killed or seriously injured (KSI) collisions combine the two most severe collision types. fatal and severe injuries, into a single category.

Overall, rates of KSI collisions are about six times higher than other local streets in San Mateo County; rates are seven times higher for bicyclists and 10 times higher for pedestrians than other roadways in San Mateo County. These high collision rates are reflected in C/CAG's Local Road Safety Plan, which identifies El Camino Real as a part of the county's High Injury Network.

KEY CONTRIBUTING FACTORS FOR INJURY COLLISIONS ON EL CAMINO REAL



Speed

El Camino Real's 35 MPH speed limit elevates the risk of death or serious injury, and speeding in excess of 35 MPH is common across the corridor. A pedestrian hit at 35 MPH is more than twice as likely to experience a severe injury or death compared to 25 MPH.



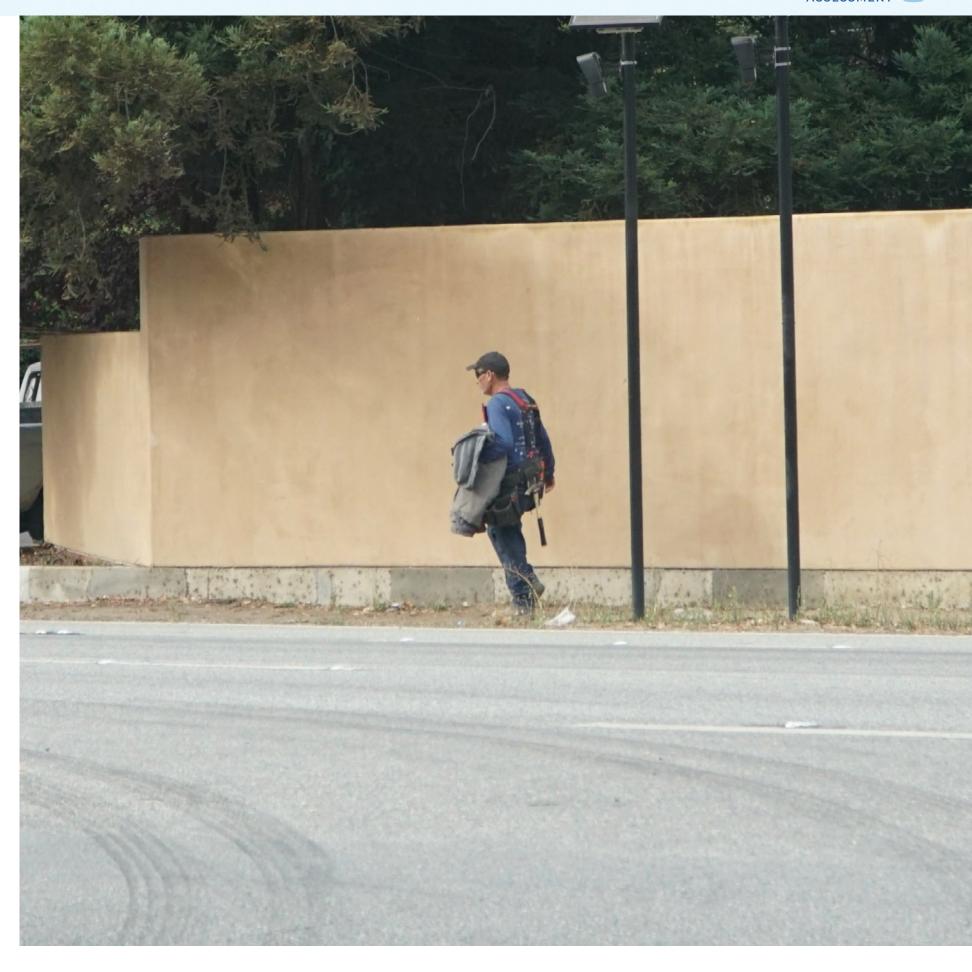
Infrastructure

El Camino Real's outdated highwaylike infrastructure exacerbates conflicts, including its uncontrolled or permissive left turns, gaps in sidewalks, unmarked or unsignalized crosswalks, driveway and parking conflicts, lack of pedestrian-scale lighting, and lack of separated bicycle facilities.



Built Environment

El Camino Real's densifying land uses are often mismatched with autooriented infrastructure and fast vehicle speeds. Increasing residential and employment density along the corridor will further exacerbate conflicts.



Injury Collisions, All Modes

El Camino Real experienced 886 injury collisions between 2019 and 2023, including 81 KSI collisions. Though injury collisions occurred along the entire corridor, the highest concentrations occurred within San Bruno, Millbrae, San Mateo, and Redwood City - 61 percent of El Camino Real's KSI collisions are concentrated in those four cities. Figure 2.8 and Table 2.1 illustrate the distribution of injury collisions and KSIs across the corridor.

HIGHEST KSI COLLISION
INTERSECTIONS ON
EL CAMINO REAL
2019-2023

1 Selby Lane

Atherton/North Fair Oaks **5 COLLISIONS**

2 Hillcrest Boulevard Millbrae

4 COLLISIONS **3 Center Street** Millbrae

3 COLLISIONS

3 COLLISIONS

3 James Avenue Redwood City

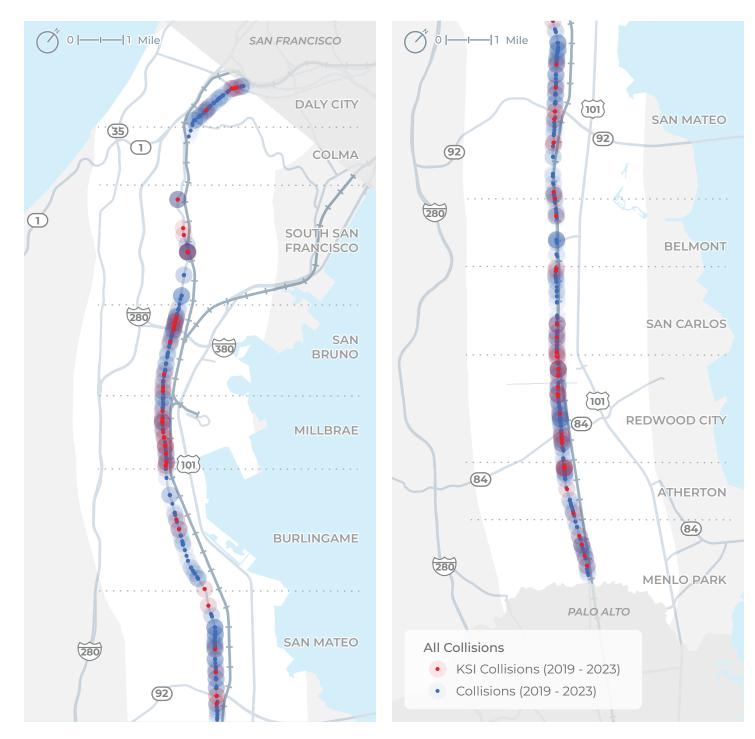
3 SR-92 Interchange San Mateo **3 COLLISIONS**

Table 2.1. Injury Collisions and KSIs by City, All Modes

	MILE	AGE	COLLISIONS		K: COLLI	SI SIONS
СІТҮ	MILES	% OF TOTAL	#	% OF TOTAL	#	% OF TOTAL
Daly City	1.6	6%	86	10%	4	5%
Colma	1.4	5%	1	<1%	0	0%
South San Francisco	2.6	11%	62	7%	6	7%
San Bruno	2.0	8%	1111	13%	9	11%
Millbrae	1.7	7%	74	8%	14	17%
Burlingame	2.8	11%	63	7%	2	2%
San Mateo	4.4	17%	144	16%	11	14%
Belmont	1.5	6%	36	4%	2	2%
San Carlos	1.9	8%	61	7%	7	9%
Redwood City	2.0	8%	141	16%	15	19%
North Fair Oaks	0.9	4%	26	3%	4	5%
Atherton	0.7	3%	28	3%	3	4%
Menlo Park	1.6	6%	53	6%	4	5%

Source: Transportation Injury Mapping System (2019-2023).

Figure 2.8. Distribution of Injury Collisions on El Camino Real, All Modes



Source: Transportation Injury Mapping System (TIMS), 2025.

Source: TIMS, 2025.

Pedestrian Collisions

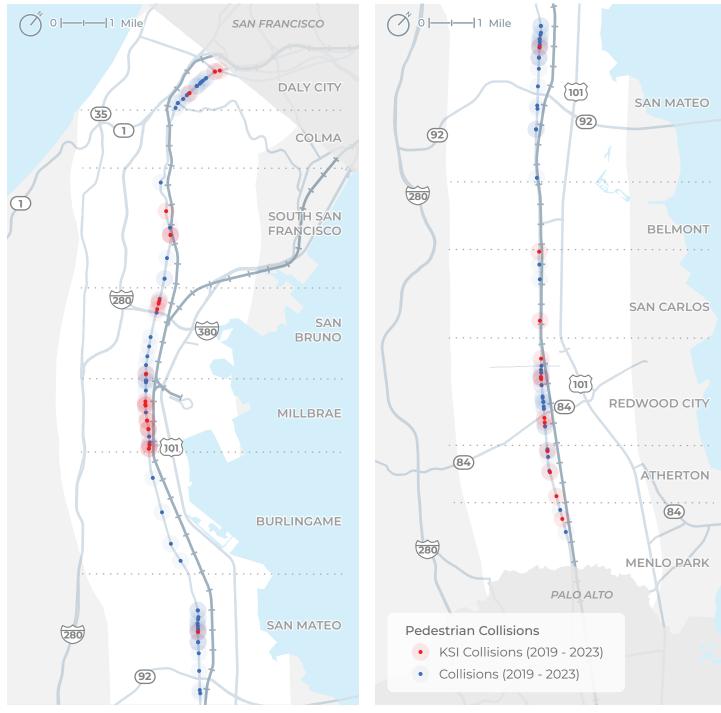
Collisions between vehicles and pedestrians make up a disproportionate share of KSIs on El Camino Real. Between 2019 and 2023, El Camino Real had 126 pedestrian injury collisions, which include 32 KSIs. KSI collisions are highly concentrated: 78 percent occurred in five cities: Daly City, South San Francisco, San Bruno, Millbrae, and Redwood City. Figure 2.9 and Table 2.2 illustrate the distribution of pedestrian injury collisions and KSIs across the corridor.

Table 2.2. Injury Collisions and KSIs by City, Pedestrians

	MILE	AGE	COLLISIONS			SI SIONS
СІТҮ	MILES	% OF TOTAL	#	% OF TOTAL	#	% OF TOTAL
Daly City	1.6	6%	19	15%	3	9%
Colma	1.4	5%	0	0%	0	0%
South San Francisco	2.6	11%	9	7%	3	9%
San Bruno	2.0	8%	15	12%	4	13%
Millbrae	1.7	7%	19	15%	10	31%
Burlingame	2.8	11%	4	3%	0	0%
San Mateo	4.4	17%	24	19%	1	3%
Belmont	1.5	6%	1	1%	1	3%
San Carlos	1.9	8%	3	2%	1	3%
Redwood City	2.0	8%	22	17%	5	16%
North Fair Oaks	0.9	4%	4	3%	1	3%
Atherton	0.7	3%	3	2%	2	6%
Menlo Park	1.6	6%	3	2%	1	3%

Source: Transportation Injury Mapping System (2019-2023).

Figure 2.9. Distribution of Pedestrian Injury Collisions on El Camino Real



Source: TIMS, 2025. Source: TIMS, 2025.

Bicycle Collisions

El Camino Real had 85 bicycle injury collisions between 2019 and 2023, including 11 KSI collisions. These collisions were mostly concentrated in three communities: Redwood City, San Carlos, and North Fair Oaks. **Figure 2.10** and **Table 2.3** illustrate the distribution of bicyclists injury collisions and KSIs across the corridor.

Table 2.3. Injury Collisions and KSIs by City, Bicyclists

	MILE	AGE	COLLISIONS		K COLLI	SI SIONS
СІТҮ	MILES	% OF TOTAL	#	% OF TOTAL	#	% OF TOTAL
Daly City	1.6	6%	6	7%	0	0%
Colma	1.4	5%	0	0%	0	0%
South San Francisco	2.6	11%	5	6%	1	9%
San Bruno	2.0	8%	7	8%	0	0%
Millbrae	1.7	7%	9	11%	1	9%
Burlingame	2.8	11%	2	2%	0	0%
San Mateo	4.4	17%	3	4%	0	0%
Belmont	1.5	6%	3	4%	0	0%
San Carlos	1.9	8%	9	11%	2	18%
Redwood City	2.0	8%	22	26%	4	36%
North Fair Oaks	0.9	4%	3	4%	2	18%
Atherton	0.7	3%	4	5%	0	0%
Menlo Park	1.6	6%	12	14%	1	9%

Source: Transportation Injury Mapping System (2019-2023).

Figure 2.10. Distribution of Bicycle Injury Collisions on El Camino Real SAN FRANCISCO **DALY CITY** [101] SAN MATEO 35 92 COLMA 280 SOUTH SAN FRANCISCO BELMONT 280 SAN CARLOS SAN BRUNO (101) **REDWOOD CITY** MILLBRAE (84) ATHERTON 84 BURLINGAME 280 MENLO PARK PALO ALTO SAN MATEO **Bike Collisions** 280 • KSI Collisions (2019 - 2023)

Source: TIMS, 2025. Source: TIMS, 2025.

92)

• Collisions (2019 - 2023)

Active Transportation

Walking on El Camino Real is often a stressful experience. Sidewalks are narrow (usually 10 feet or less) and mostly lack street trees or buffers to separate pedestrians from high-speed auto traffic. Various segments of El Camino Real lack sidewalks on one or both sides of the street, and gaps in marked and signalized crosswalks can make crossing the street a challenge. Many land uses are oriented toward auto access, with frequent driveways and large parking lots in between sidewalks and building entrances. **Table 2.4.** summarizes existing pedestrian and bicycle conditions.



Table 2.4. Summary of Existing Pedestrian and Bicycle Conditions

TYPE OF PEDESTRIAN BARRIER	QUANTITY	RELEVANCE
Sidewalks <15 Feet Wide	>95% of corridor	Most sidewalks on El Camino Real are 10 feet wide or less. Sidewalks narrower than 15 feet typically provide constrained space for pedestrians, landscaping, and bus stops.
Missing Sidewalks	14% of corridor is missing a sidewalk on one side of the street (3.5 miles)5% of corridor is missing a sidewalk on both sides of the street (1.2 miles)	Missing sidewalks pose barriers to pedestrian travel.
Uncontrolled and unmarked crosswalks	15 marked crosswalks lack traffic control 3 pairs of bus stops lack marked crosswalks	Marked crosswalks with traffic signals or pedestrian hybrid beacons are necessary to comfortably cross El Camino Real.
Missing marked crosswalks at part of a signalized intersections	63 intersections	Various signalized intersections are missing a marked crosswalk on part of the roadway crossing El Camino Real, requiring more circuitous pedestrian travel.
Infrequent spacing of marked, controlled crosswalks	Median spacing is 800 feet ; however, gaps can be up to 2,300 feet	Gaps between marked, controlled crosswalks in excess of 1,000 feet make it difficult to cross El Camino Real.
Lack of separated bikeways	>99% of corridor lacks Class IV separated bikeways	Class IV separated bikeways are most suitable for El Camino Real's high-speed, high-volume conditions.
Disconnected parallel bike routes	14% of corridor has a designated low stress parallel bicycle route suitable for all ages and abilities	Class IV separated bikeways, Class II bike lanes, and Class III bicycle boulevards may provide low stress parallel routes to El Camino Real.

Bicycling on El Camino Real is extremely challenging given the lack of bicycle facilities on the corridor. El Camino Real has less than one mile Class II bike lanes (in South San Francisco) and only one block of Class IV separated bikeway (in Belmont); the remainder of the 25mile corridor requires bicyclists to ride in mixed traffic flow with vehicles traveling at roughly three times their speed. Crossing El Camino Real can be similarly difficult given the long crossing distances, high volume of conflicting turns, and lack of protected intersections or dedicated bicycle signals.

El Camino Real is designated as a countywide backbone bicycle corridor in C/CAG's Countywide Bicycle and Pedestrian Plan. Class IV separated bikeways are presently in design in Colma and Redwood City, while Caltrans' Burlingame Roadway Renewal project will not include bicycle facilities due to limited rightof-way. Bikeways remain under consideration throughout the rest of the corridor.

Figure 2.11. Existing and Planned **Bikeways on El Camino Real**



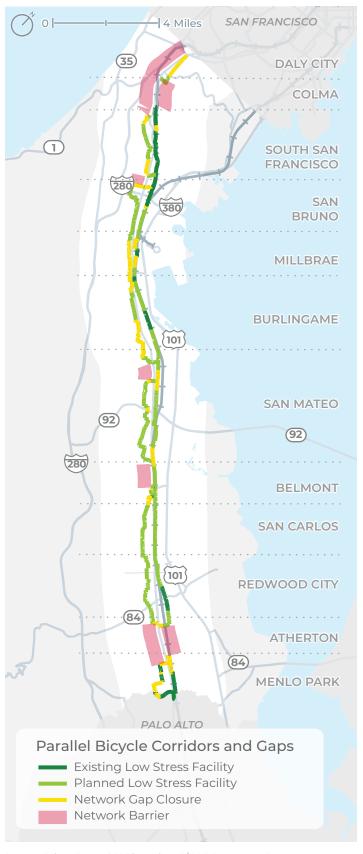
Source: Fehr & Peers, 2025.

Source: Fehr & Peers. 2025.

Parallel streets present an alternative to biking on El Camino Real in some (but not all) cities. Most bicyclists use parallel routes today; however, less than one-sixth of the corridor has a designated low stress parallel route suitable for riders of all ages and abilities within roughly one half-mile of El Camino Real. About three-fourths of the corridor has an existing or planned low stress route identified in local bicycle plans. These planned bicycle facilities will help close gaps in the bicycle network where streets intersect with each other but the bike lanes on those streets are disconnected. Adding bicycle infrastructure to close these gaps on El Camino Real's parallel roadways would improve comfort, access, and safety. Enhanced connections to and across El Camino Real from these parallel streets would also be necessary.

In some areas, the local street network has limited connectivity due to gaps in the street grid. In these places, roads are not connected with each other, placing a physical obstacle to bicycle and vehicle travel on those roadways. These gaps, denoted as bicycle network barriers, limit the viability of parallel routes in these areas. Network barriers include both sides of El Camino Real in Colma and Atherton, and the west side of El Camino Real in Daly City, South San Francisco, San Mateo, and Belmont. In these locations, bicycle facilities will need to be added to El Camino Real due to the limited potential for parallel bicycle routes in these areas. **Figure 2.12.** presents a network gap analysis of existing and planned parallel routes, as well as potential gap closure opportunities and network barriers. These parallel route opportunities will be further evaluated as the GBI implementation advances into PID and PA&ED.

Figure 2.12. Planned and Existing Bicycle Corridors and Gaps



Source: Fehr & Peers, 2025 based on C/CAG San Mateo County Comprehensive Bicycle and Pedestrian Plan, 2021.

Transit

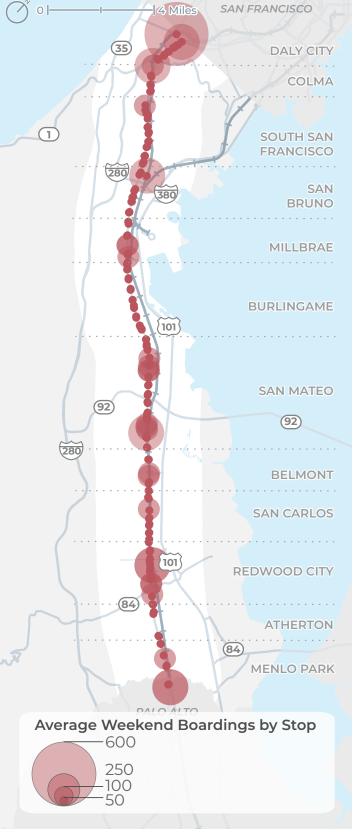
El Camino Real is San Mateo County's main transit corridor. El Camino Real is primarily served by Route ECR, while various other bus and shuttle routes also serve the corridor. Route ECR is SamTrans's highest ridership route that serves approximately 9,100 riders per day (roughly 30 percent of SamTrans' ridership). Route ECR provides connections with the entire SamTrans network as well as 11 BART and Caltrain stations that are located adjacent to El Camino Real. Route ECR provides service every 15 minutes throughout the day.

Ridership

Route ECR's ridership is distributed throughout the corridor. Ridership tends to be highest at stops in Daly City, South San Francisco, San Bruno, Millbrae, San Mateo, and Redwood City (**Figure 2.13.**). The busiest stops tend to be near BART and Caltrain stations, which offer transfer points to regional rail and other SamTrans routes.

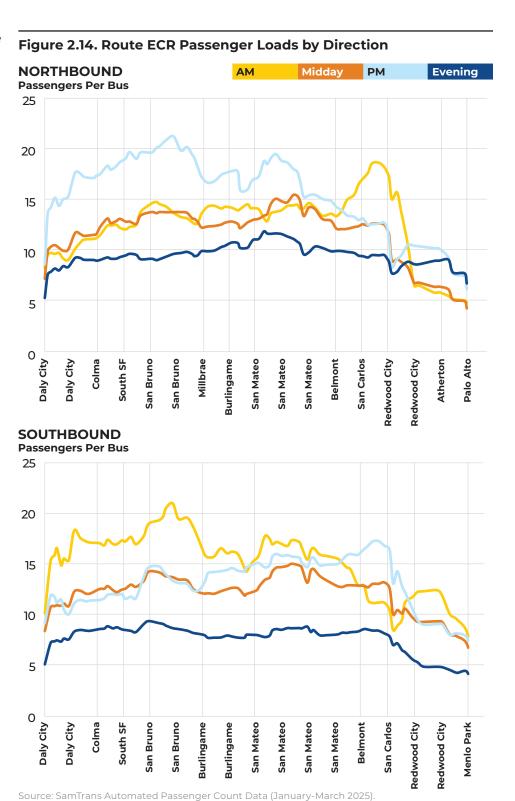


Figure 2.13. Route ECR Average Weekday Boardings by Stop



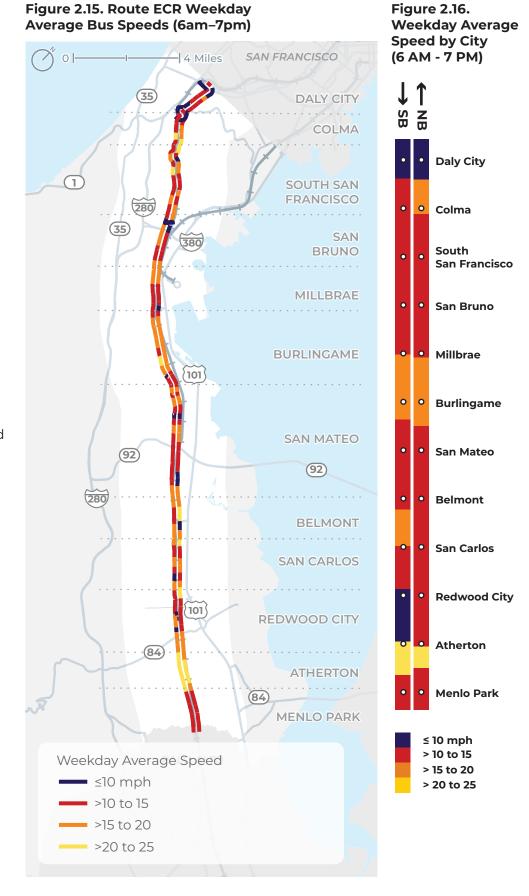
Source: SamTrans, Fehr & Peers, 2025.

Route ECR carries about the same number of passengers in each direction throughout the day, as shown in **Figure 2.14.** Passenger loads, the average number of passengers per bus, are generally consistent throughout the corridor, with higher activity in San Bruno, Redwood City, San Mateo, and South San Francisco. Passenger loads are highest in the southbound direction during the AM commute and in the northbound direction in the PM commute.



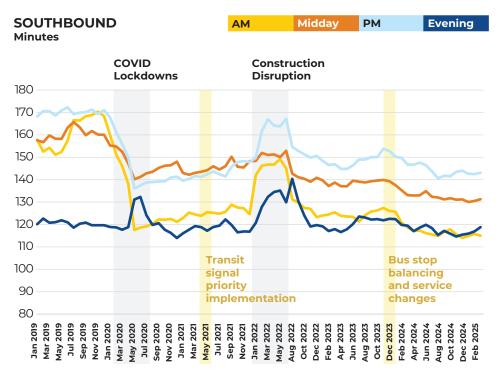
Bus Travel Time and Delay

Route ECR is one of the region's longest bus routes, with an end-to-end travel time of over 127 minutes (**Figure 2.15.**), an average speed of 13 miles per hour. Travel times are fastest in the mornings (114 minutes) and slowest during the evening peak (141 minutes). Buses are slowest in Daly City, San Bruno, San Mateo, and Redwood City. Average speeds on Route ECR are under 15 miles per hour in every city along the corridor, except Colma, Burlingame, and Atherton (Figure 2.16.).



Sources: SamTrans, Fehr & Peers, 2025.

Figure 2.17. Change in Route ECR Travel Times over Time



Source: SamTrans, 2019-2025.

The length of Route ECR exacerbates its exposure to delays and results in inconsistent on-time performance: about 85 percent of buses are on-time near the start of the route, but this decreases to 60 percent as buses travel along the 25-mile corridor. Passenger wait times vary at stops, and regularly exceed 30 minutes when buses get delayed—over twice as long as the route's scheduled 15 minute headway during peak periods (Figure 2.17.). Adding transit priority infrastructure that supports more reliable and consistent travel times would reduce these delays and lower SamTrans' operating costs.

SamTrans has decreased travel times by 21 percent (23 minutes) since 2019 through a combination of service changes, bus stop balancing, and implementation of transit signal priority throughout the corridor (which extends green lights by a few seconds for buses). Travel times are shorter today than during the COVID-19 pandemic despite the return of ridership and traffic congestion. However, the wide range between morning and evening peak period travel times suggests there are still opportunities to address various sources of bus delay.

SOURCES OF BUS DELAY ON EL CAMINO REAL



Bus Stop Delay

Bus stop design accounts for about 15 to 20 minutes of delay. About 80 percent of Route ECR's bus stops are pull out stops, (requiring buses to pull in and out of traffic to reach the curb), which delays buses as they need to wait for cars to pass by before they can pull into traffic. About 26 percent are located on the near-side of intersections, which causes delays from traffic signals and from vehicles making right turns.



Signal Delay

El Camino Real's traffic signals add about 5 to 15 minutes of delay. The corridor has an existing transit signal priority system, though there are opportunities to further enhance its effectiveness.



Traffic Delay

Traffic congestion adds about 20 to 30 minutes of delay to buses, which occurs at intersections and on roadway segments of El Camino Real. Traffic delay can be addressed through dedicated bus lanes.

Bus Stop Amenities And Access

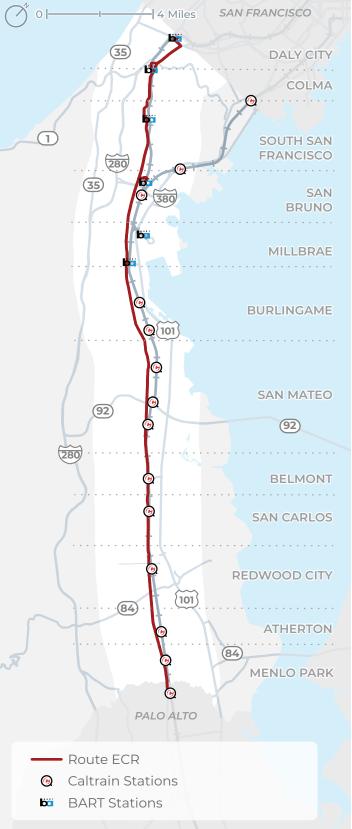
Route ECR has 163 bus stops, most of which have limited amenities and challenging access conditions. A majority of stops (61 percent) do not have bus shelters, which can make waiting for buses uncomfortable in wet, windy, or hot weather. Since all bus riders are also pedestrians, riders are exposed to many of the pedestrian infrastructure limitations identified in the previous section, including narrow sidewalks, gaps in sidewalks and crosswalks, and poor lighting.

Caltrain And BART Access

El Camino Real facilitates access to 12 Caltrain stations and five BART Stations located within a half mile of the corridor (Figure 2.18.). Ten of these 17 stations have frontage on El Camino Real. Combined, these stations serve approximately 28,000 daily boardings, a majority of which access these stations via walking, biking, or transit. Consequently, El Camino Real plays a key role in facilitating first/last mile access to connect Caltrain and BART stations to surrounding communities.



Figure 2.18. Caltrain and BART **Stations near El Camino Real**



Source: SamTrans. Fehr & Peers. 2025.

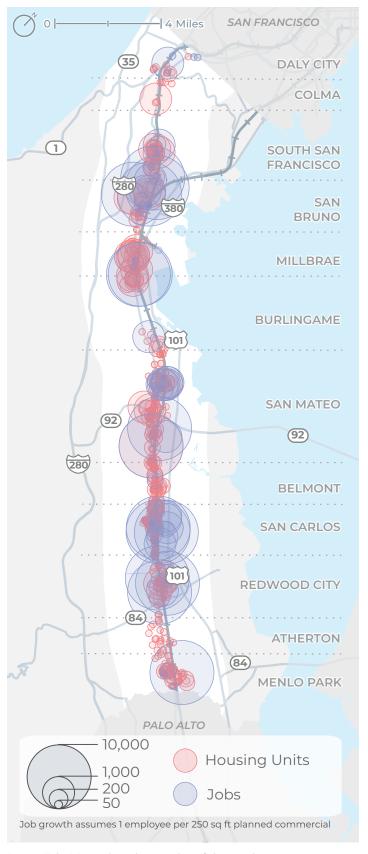
Source: Fehr & Peers. 2025.

Land Use

El Camino Real serves as San Mateo County's main street, serving a mix of retail, office, civic, and residential land uses. About 215,000 residents and 130,000 employees live and work within one half mile of El Camino Real.

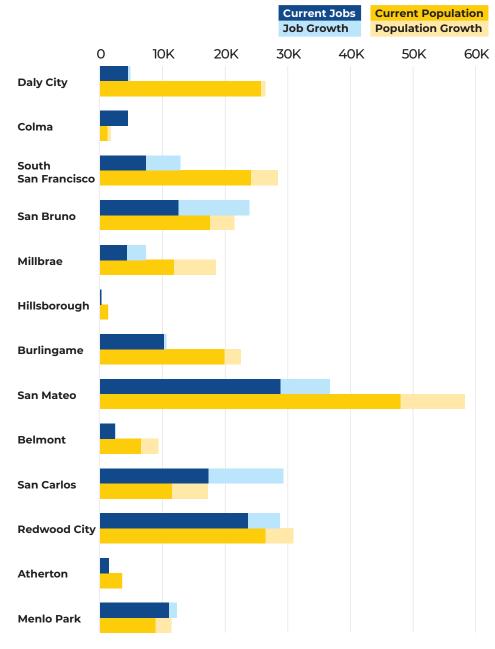
Most cities are focusing their housing and job growth along El Camino Real given its proximity to downtowns and regional transit. Based on a Fall 2024 review of recently adopted Housing Elements and development pipelines, there are approximately 45,000 new residents and 47,000 new jobs expected within one half-mile of El Camino Real in the next 10 to 15 years (Figure 2.19. and Figure 2.20.). Development is expected to occur throughout the corridor, especially around South San Francisco, San Bruno, Millbrae, San Mateo, San Carlos, and Redwood City. The continued densification of the El Camino Real corridor intensifies the mismatch between the corridor's automobile-oriented infrastructure and new mixeduse and transit-oriented development. Moreover, El Camino Real cannot be widened further to serve additional vehicle traffic, so additional travel demand will need to be accommodated with a greater share of trips via walking, biking, and transit. Improvements to transit and active transportation are necessary to respond to this planned growth.





Source: Fehr & Peers, based on a review of city Housing Elements and development pipelines in Fall 2024.

Figure 2.20. Estimated Population and Employment **Growth within One Half-Mile of El Camino Real**



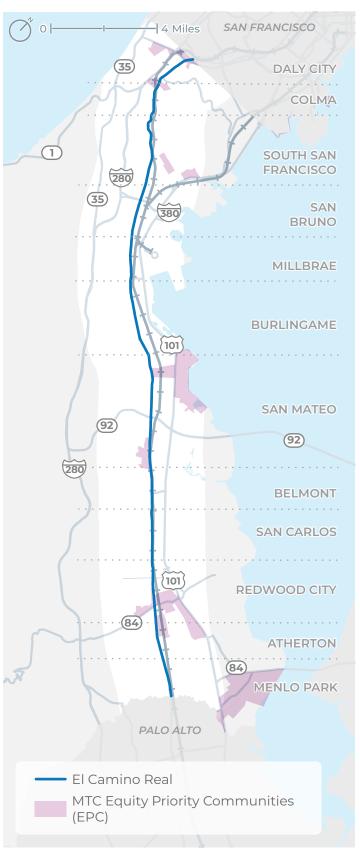
Source: Fehr & Peers, based on a review of city Housing Elements and development pipelines in Fall 2024.

Equity

El Camino Real serves a number of equity priority communities (EPCs), concentrations of low-income households, zero-car households, and racial and ethnic minorities identified by SamTrans (**Figure 2.21.**). Equity priority areas are clustered around Daly City, South San Francisco, San Bruno, Millbrae, San Mateo, and Redwood City, and tend to coincide with clusters of high transit ridership and higher rates of walking and bicycling.

Route ECR riders are disproportionately lower income compared to San Mateo County residents and SamTrans riders overall. As illustrated in **Figure 2.22**, the average household income of ECR riders is about 80 percent lower than the county average. Approximately 85 percent of ECR riders are people of color, which is greater than the countywide population share of 65 percent (**Figure 2.23**). Only 25 percent of Route ECR riders have access to a car at home, compared to 94 percent of San Mateo County households (**Figure 2.24**).

Figure 2.21. Equity Priority Communities (EPCs) in San Mateo County

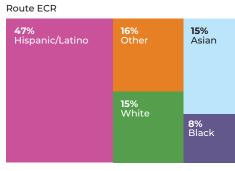


Source: MTC.

Figure 2.22. Route ECR Rider Median Household Income



Figure 2.23. Route ECR Riders Race and Ethnicity



San Mateo County Residents

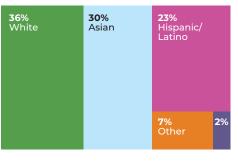
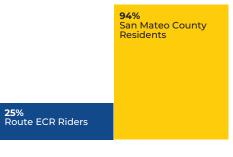


Figure 2.24. Route ECR Rider Vehicle Ownership



Conclusion

The following safety and mobility problem statements synthesize current challenges on El Camino Real. This list includes key challenges identified in this Needs Assessment and from stakeholder input from the GBI Task Force, and it is not an exhaustive list of areas of improvement for El Camino Real.

PROBLEM STATEMENTS



SAFETY

El Camino Real has an unusually high rate of fatal or serious injury crashes, particularly for people walking and biking.

 Rates of fatal or serious injury crashes are substantially higher on El Camino Real than other streets within San Mateo County. High vehicle speeds, highway-like infrastructure, and densifying land use contribute to a high rate of conflicts between modes.

El Camino Real's highway-like design discourages walking, biking, and transit use.



 People walking and biking encounter barriers and uncomfortable conditions, including missing or narrow sidewalks, unpainted crosswalks, long gaps between pedestrian crossings at traffic lights conflicts with cars making left turns, a lack of pedestrian-scaled lighting, and an absence of low-stress bicycle facilities.

Buses travel much slower than automobiles. Route ECR, which serves as the backbone of SamTrans' bus network, experiences one-way travel times in excess of two hours between Daly City and Palo Alto. Few transit priority measures are present; buses encounter delays and on-time performance challenges due to near- side and pull-out stops, traffic signals, and exposure to traffic congestion.

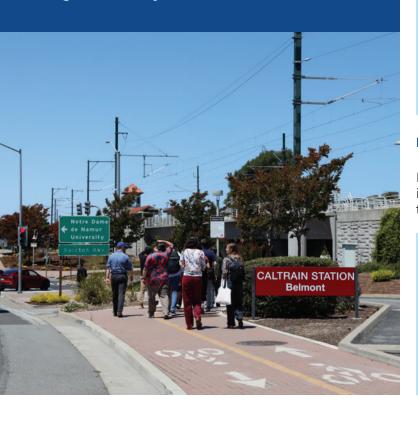
Source: Figures 2.22.-2.24., SamTrans 2024 Triennial Survey.

Source: Caltrans Design Information Bulletin-94 (2024)



Planning & Policy Framework

This chapter summarizes relevant plans and policies for El Camino Real, including recent and ongoing local corridor plans as well as foundational plans and policies at the state. regional, countywide, and local levels.



Caltrans Planning & Policy Framework

Caltrans has established several foundational plans and policies around safety, active transportation, and transit on state highways including El Camino Real.

Caltrans Planning and Policy Framework

Directors Policy 36 (2022)

DP-36 commits to a **safety-first** approach to street design that strives to proactively address risk factors that contribute to fatalities and serious injuries on the state highway system.

California Department of Transportation (Caltrans) has a vision to eliminate fatalities and serious injuries on California's roadways by 2050 and provide safer outcomes for all communities.

To realize this vision Caltrans commits to:

- A safety-first mindset prioritizing road safety.
- · Prioritize the elimination of fatal and serious injury crashes through our existing safety improvement programs along with development and implementation of new programs to enhance the safe use of our roadways.
- Eliminating race-, age-, ability- and mode-based disparities in road safety outcomes.

Directors Policy 37 (2021)

DP-37 requires that all Caltrans-led projects incorporate complete streets improvements for transit and active transportation users.

All transportation projects funded or overseen by Caltrans will provide comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail unless an exception is documented and approved. When decisions are made not to include complete streets elements in capital and maintenance projects, the justification will be documented with final approval by the responsible District Director.

Figure 3.1. DIB-94 Modal Priority by Roadway Context

Place Type		Modal Priority on Conventional Highways and Local Roads within State Right of Way					
	, ·	Pedestrian	Bicyclist	Transit	Freight	Personal Vehicle	
Urban	City Center	<u>ጵ</u> ጵጵ	૾ ૽૾૾૽૾૽૾૽	m , ∮ m			
Area	Urban Community	<u>ጵ</u> ጵጵ	૾ ૽૾૾૽૾૽૾૽	 🚊			
Suburban Area	Suburban Community	秀秀	्र			~ ~~~	
	Rural Main Street	<u>ጵ</u> ጵጵ	% %	000	~~~~~	←	
Rural Area	Transitional Area	秀	ోం				
	Undeveloped Area	秀	<i>\$</i> 0		~~~ ^	↔	

Priority Most

Lowest Priority

Fewest

Additionally, DP-37 seeks to help streamline the implementation of complete streets projects:

Colors in this table indicate relative priority

Number of icons indicate relative number

of anticipated users in the place type.

of modes in the given place type.

Caltrans commits to removing unnecessary policy and procedural barriers and partnering with communities and agencies to ensure projects on local and state transportation systems improve the connectivity to existing and planned pedestrian, bicycle, and transit facilities, and accessibility to existing and planned destinations, where possible.

Draft Transit Policy (2025)

Note:

In July 2025, Caltrans published a draft Transit Policy that lays out the agency's goal to improve **transit** reliability and speeds on the State Highway System. The draft policy commits Caltrans to "construct and improve transit-supportive infrastructure on the state highway system such as transit priority facilities, transit stops, and bicycle and pedestrian connections to transit." The policy also reinforces Caltrans' goal to deliver infrastructure projects that provide better first- and last mile connections to transit stops.

Caltrans Design Guidance

Following DP-37, Caltrans issued **Design** Information Bulleting 89 (DIB-89), which provides design guidance for separated bikeways, and Design Information Bulletin 94 (DIB-94), which clarifies context-sensitive design guidance to serve travelers of all ages and abilities, addressing topics such as modal priority, operating speeds, bicycle facilities, sidewalk width, lane width, crosswalk placement, and bus stops, as shown in Figure 3.1. Together, DIB-89 and DIB-94 equip Caltrans and its partners with a context-sensitive design toolkit to advance the goals of DP-36 and DP-37.

In parallel, Caltrans has updated its Intersection Control Evaluation process with Intersection Safety and Operational Assessment Process (ISOAP), which guides the evaluation of proposed traffic control and design geometrics for intersections and other access improvements proposed on the State Highway System. ISOAP places a greater emphasis on road safety performance consistent with DP-36, evaluating geometry and traffic control through a performance-based analysis that considers all users and supports the principles of the Safe System Approach.

Caltrans Plans

Caltrans District 4, which serves the nine-county San Francisco Bay Area, has published a series of plans to improve transit and active transportation on the state highway system, including El Camino Real.

Caltrans District 4 Bicycle Plan Update (2025)

The Caltrans District 4 Bike Plan identifies bicycle infrastructure improvements to improve safety and to remove barriers to bicycling. The plan identifies priority projects by county and includes multiple segments of El Camino Real in San Mateo County. Recommended improvements for El Camino Real include Class I Shared-Use Paths, Class IV Separated Bikeways, and various intersection crossing upgrades.

Caltrans District 4 Pedestrian Plan (2021)

The Caltrans District 4 Pedestrian Plan documents existing sidewalk and crosswalk conditions along the State Highway System, with El Camino Real mostly receiving "fair" and "poor" rankings for its pedestrian infrastructure. The plan also places the Bay Area's state highways into three tiers based on the density of pedestrian collisions on each roadway, with El Camino Real in the highest tier due to its large number of pedestrian-involved collisions. The plan prioritizes roadways for future improvements, and it places El Camino Real in the highest prioritization category.

Caltrans Bay Area Transit Plan (2025)

The Caltrans Bay Area Transit Plan aims to enhance transit speeds and reliability on state highways. The draft plan prioritizes transit improvements on corridors in the Bay Area, which includes El Camino Real throughout San Mateo County. The plan also presents a Complete Streets Transit Toolbox, which includes implementation guidance for transitpriority and transit-access infrastructure such as bus lanes, queue jump lanes, bus bulbs, and boarding islands.

State Route 82 Comprehensive Multimodal Corridor Plan (CMCP)

Caltrans is developing a Comprehensive Multimodal Corridor Plan (CMCP) for State Route 82 in San Francisco, San Mateo, and Santa Clara counties. The CMCP will identify existing and future needs and identify improvements. Projects included in the CMCP will be eligible for future funding under the Solutions for Congested Corridors Program, a state funding program discussed in Chapter 7. SamTrans and Caltrans are meeting monthly to coordinate the Grand Boulevard Initiative and CMCP planning processes and develop a shared understanding of corridor-wide needs and priority projects. The CMCP will be finalized in 2026 after the GBI Action Plan is completed.



Figure 3.2. Caltrans SHOPP Projects along El Camino **Real in San Mateo County**



Ongoing and Upcoming Construction Projects

Caltrans is moving forward with smaller scale State Highway Operation and Protection Program (SHOPP) projects across much of the corridor, shown in **Table 3.1.** and **Figure 3.2.** SHOPP projects primarily address roadway maintenance and incorporate small-scale pedestrian and bicycle safety improvements where possible. SHOPP Projects along El Camino Real are all currently in the design phase and construction is anticipated to begin in the next few years.

Table 3.1. Summary of Caltrans SHOPP Projects along El Camino Real

SHOPP ID	EXTENTS	EST. START OF CONSTRUCTION
0Q140	Daly City, Colma, and South San Francisco from I-280 to Arroyo Drive	2026
0AA32	South San Francisco, San Bruno, Millbrae, and Burlingame from Arroyo Drive to Murchison Drive	2028
OK810	Burlingame and San Mateo from Murchison Drive to East Santa Inez Avenue	2025
4W730	San Mateo from East Santa Inez Avenue to 43rd Avenue	2028
0X280	San Mateo to Palo Alto from 43rd Avenue to Sand Hill Road, excluding extents of 1W130	TBD
1W130	Redwood City and Atherton, from Brewster Avenue to Selby Lane	2028
4J89U	Palo Alto, Los Altos, Mountain View, and Sunnyvale between Sand Hill Road and Knickerbocker Drive	Completed in 2025

Countywide Planning & Policy Framework

San Mateo County has several countywide documents that help guide transportation planning along El Camino Real. These plans address safety, active transportation, traffic operations, transit, and stormwater management along El Camino Real.

SamTrans El Camino Real Bus Speed and **Reliability Study (2022)**

The El Camino Real Bus Speed and Reliability Study seeks to improve bus speeds and reliability on SamTrans' Route ECR to improve rider experience, attract new riders, improve operational efficiency, and provide a better experience for bus drivers. The plan analyzes contributing factors to speed and reliability challenges and identifies a set of corridorwide and city-by-city recommendations such as bus lanes, bus bulbs, transit signal priority, bus stop

balancing, and access improvements. Bus lanes are recommended along segments with three travel lanes per direction and potential for improved travel times, including in South San Francisco, San Bruno, Millbrae, northern Burlingame, San Mateo, San Carlos (southbound only), and northern Redwood City (southbound only). The plan's appendix provides stop-by-stop recommendations to identify improvements (Figure 3.3.).

San Mateo C/CAG Countywide Local Road Safety Plan (2024)

C/CAG's Countywide Local Road Safety Plan seeks to identify safety improvements, strategies, and programs using the Safe System Approach to eliminate facilities and severe injuries on streets within San Mateo County. The plan aims to promote a culture across agencies and communities that puts roadway safety first in all actions. The plan identifies a countywide High Injury Network that account for a disproportionate concentration of injury collisions, which includes the entirety of El Camino Real. It also notes emphasis areas (Figure 3.4.), including

Figure 3.3. Example City Recommendations from the El Camino Real Bus Speed and Reliability Study

Proposed Route ECR Improvements PROPOSED BUS STOP LOCATIONS & IMPROVEMENTS nnrovement(s) Existing Stop. No Changes Bus Stop Balancing & Placement Far-side, in-lane bus stops with balanced spacing helps buses travel faster and more reliably. ECR stops should be spaced every 1/4 to 1/3 mile, with shorter spacing occurring in areas with high idership and/or serving transit connecti public facilities, and equity priority areas. Stops should be located on the far side of intersections in the lane of travel to maximize the effectiveness. of the corridor's transit signal priority system and avoid delays and conflicts associated with near side and pullout stops. Rus Bulbs Bus bulbs are curb extensions that allow buses to stop in the lane of traffic. Bus bulbs improve speed and reliability by reducing the amount of time lost when merging in and out of traffic, while also reducing pedestrian crossing distances Where space permits, near-level boarding and eparated bikeway bypasses are suggested 3 Queue Jumps cases where near-side pullout stops are most suitable, queue jumps reduce delay for buses nerging back into traffic. Queue jumps allow uses to enter traffic flow from a dedicated bus ane or right-turn only lane via transit signal oriority (a leading bus interval or active signal priority). Alternatively, allowing buses to proceed straight in a right-turn only lane can function as nformal queue jump. 4 Pedestrian Improvements elps reduce overall passenger travel times and access barriers. Pedestrian access improv may include striping unmarked crosswalks, adding traffic signals or pedestrian hybrid beacons at unsignalized crossings, adding or widening sidewalks, and adding or modernizing curb

Source: El Camino Real Bus Speed and Reliability Study, 2022.

Figure 3.4. Emphasis Areas from the C/CAG **Countywide Local Roadway Safety Plan**



Pedestrian and bicyclist safety



Nighttime/low light safety



Unsignalized intersections on arterials/collectors



Vulnerable age groups (youth and aging)



Motor vehicle speed related roadway segment crashes



High-speed roadways



San Mateo Count

Countywide Bicycle and Pedestrian Plan, 2021

♣ SFO

Alcohol involvement

Source: CCAG Countywide Local Roadway Safety Plan, 2024

pedestrian and bicycle safety, nightlime/low-light safety, unsignalized intersections on arterials, vulnerable age groups, motor vehicle speed related roadway segment crashes, high-speed roadways, and alcohol involvement. The plan recommends implementing a toolkit of improvement measures targeting specific roadway to maximize their reduction of fatalities and severe injuries.

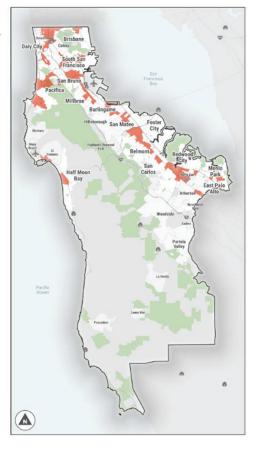
C/CAG San Mateo County Comprehensive Bicycle And Pedestrian Plan (2021)

C/CAG's Bicycle and Pedestrian Plan documents existing bicycle and pedestrian infrastructure conditions in San Mateo County and provides recommendations for future improvements. El Camino Real is part of the plan's countywide Bicycle Backbone Network, which are crosscounty bikeways that are prioritized for improvements. The plan also designates Pedestrian Focus Areas for priority improvements to sidewalks and crosswalks, which includes most of El Camino Real (Figure 3.5.).

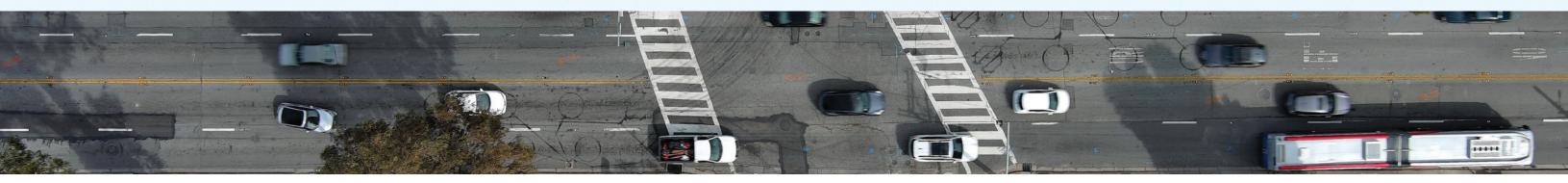








Source: C/CAG San Mateo County Comprehensive Bicycle and Pedestrian Plan, 2021.



SamTrans Bus Stop Improvement Plan (2024)

The Bus Stop Improvement Plan establishes standardized policy and an implementation approach for bus stop improvements. The plan includes an inventory of existing amenities at bus stops across the service area, engagement to understand preferences for amenities, design guidelines to establish minimum criteria for bus stop amenities, recommended improvements for different stop typologies, and an implementation plan. The plan recommends bus shelters at all Route ECR stops on El Camino Real.

C/CAG Sustainable Streets Master Plan (2021)

The C/CAG Sustainable Streets Master Plan provides a roadmap and set of tools to advance sustainable streets that integrate pedestrian, bicycle, and transit improvements with green infrastructure components like stormwater planters and pervious pavement. The plan documents strategies to provide transit and active transportation improvements, expand the treatment of roadway runoff using green infrastructure to achieve water quality

improvements, adapt the transportation network to better address rainfall and heat-related climate change impacts, sequester carbon and provide shade through street trees, and improve habitat for birds and other urban wildlife. The Plan includes concept designs for El Camino Real as a priority project and documents typical design details for sustainable streets (Figure 3.6.).

C/CAG Congestion Management Program (Biannual Updates)

C/CAG's Congestion Management Program identifies strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The Congestion Management Program establishes traffic operations performance standards on highways and arterials including El Camino Real, which many cities in San Mateo County reference in local standards. The program also incorporates transportation demand management planning and monitoring to improve efficiency of existing transportation system and infrastructure.

Figure 3.6. Concept Design for El Camino Real from the C/CAG Sustainable Streets Master Plan



Source: C/CAG Sustainable Streets Master Plan Priority Projects Concept Designs, Appendix E.

C/CAG Countywide Transportation Plan (2017)

C/CAG's Countywide Transportation Plan provides a long-range plan that sets forth a coordinated framework and a systematic planning process for identifying and resolving transportation issues. The plan establishes a vision for a transportation system that is safe and convenient for all people whether travelling on foot, by bicycle, via public transportation, or in an automobile, to reach places they wish to go. The Plan identifies projects for the Regional Transportation Plan including implementing complete streets improvements, bus rapid transit, and transit signal priority on El Camino Real consistent with the Grand Boulevard Initiative.

Caltrans and C/CAG Joint Principles For Improvement to El Camino Real (2006)

Caltrans and C/CAG established a memorandum of understanding in 2006 to guide key principles for future changes to El Camino Real. The joint principles include commitments to retain the roadways footprint for transportation purposes, maintain existing through lanes along the corridor, and consider adding bus rapid transit infrastructure. Key excerpts are provided below.

Mobility - Seek to optimize mobility on El Camino Real as a thoroughfare connecting communities from County line to County line. This includes mobility for multiple modes of transportation such as public transit, private and commercial vehicles, bicycles and pedestrians.

Through Capacity - Preserve the throughput capacity on El Camino Real to:

· Allow for future traffic increase due to population growth and increased housing densities.

- Allow for potential enhancements for Express Bus or Bus Rapid Transit including the capability of a possible dedicated bus lane. No land use or transportation project should reduce or eliminate a segment of El Camino Real from the potential for a dedicated bus lane.
- · Facilitate Incident Management.

This means as a minimum:

- No elimination of through lanes
- · Two through lanes in each direction of travel on El Camino Real must be preserved.
- Must retain the current through lane footprint for transportation purposes only.
- Other actions that reduce capacity on El Camino Real must be evaluated under the C/CAG adopted traffic impact policies for the Congestion Management network. Changes found to have significant unmitigated traffic impacts under that policy will not be permitted.

Fully consider development of Express Bus or Bus Rapid Transit including the possibility of a dedicated bus lane to increase the person throughput. Encourage transit ridership through easy and attractive pedestrian connection between the downtown centers and Caltrain/ BART stations through design, aesthetics, and special crosswalk treatments.

San Mateo County Trails Plan (2001)

San Mateo County's Trails Plan identifies a countywide trail network to support recreational and commuter travel. The plan identifies El Camino Real as a part of the Juan Bautista de Anza National Historic Trail, which represents the route taken on his 1775-76 expedition from present-day Mexico to found a colony for Spain at San Francisco. However, the plan notes that the volume of traffic on El Camino Real makes recreational use difficult.

Regional Planning & Policy Framework

Regional Plans & Policies

MTC, which is responsible for regional transportation planning in the Bay Area, has adopted several plans and policies that apply to El Camino Real. These regional plans seek to increase the use of sustainable transportation modes by prioritizing transit, active transportation, and transit-oriented development.

Plan Bay Area 2050+ (Underway)

Plan Bay Area 2050+ is MTC's 30-year plan for the Bay Area. The plan lays out a vision to improve transportation, housing, and the environment in the region. Plan Bay Area identifies bus rapid transit (BRT) improvements along El Camino Real from Daly City BART to the Palo Alto Caltrain Station, including dedicated bus lanes for approximately 45 percent of the route, transit priority infrastructure, and transit signal priority. Plan Bay Area also identifies Priority Development Areas (PDA), places near frequent transit corridors and job centers that have been identified by cities for housing and jobs growth. Twelve San Mateo County jurisdictions have identified parts of El Camino Real as a PDA.

MTC Regional Active Transportation Plan (2022)

The Regional Active Transportation Plan is MTC's implementation plan for Plan Bay Area 2050, the region's long-range transportation strategy. The plan designates El Camino Real as a part of the Bay Area's Regional Active Transportation Network. This network aims to connect MTC defined Equity Priority Communities, Priority Development Areas, and Transit-Rich Areas.

MTC Complete Streets Policy (2022)

MTC's Complete Streets Policy is the primary tool for implementing the Regional Active Transportation Network. The policy requires that projects funded with regional funds implement local Complete Streets plans and build bicycle infrastructure to "All Ages and Abilities" design guidelines.

MTC Transit-Oriented Communities Policy (2022)

MTC's Transit-Oriented Communities (TOC) Policy

aims to center housing, jobs, and community amenities near transit. The policy, which is part of Plan Bay Area 2050, seeks to increase density and housing within one half-mile of major transit stops and stations, which includes El Camino Real. MTC has minimum land use density, affordability, and transit access requirements for these areas. Cities that follow these TOC requirements will be prioritized for MTC funding, and 12 San Mateo County jurisdictions are within one of these TOC areas.

MTC Bay Area Transit Priority Policy For Roadways (Draft, 2025)

MTC's Bay Area Transit Priority Policy for Roadways seeks to strengthen coordination between transit agencies and jurisdictions that manage public streets to improve transit travel times and reliability to help transit better serve the needs of Bay Area residents. Through its Transit Priority Roadway Assessment, MTC is developing a regional Transit Priority Network that will inform prioritization of regional funding and define where projects should apply transit-supportive design principles.

Station Access Policies

Twelve Caltrain stations and five BART stations are located within one half-mile of El Camino Real. Each agency has adopted station access policies that guide and prioritize investments in access programs and infrastructure to promote safe, convenient, and sustainable multimodal transit connections.

BART Station Access Policy (2016)

BART's Station Access Policy defines a modal hierarchy to guide access investments by station type. Along El Camino Real, the Daly City, Colma, South San Francsico, San Bruno, and Millbrae BART stations are identified as "Balanced Intermodal" or "Intermodal/Auto Reliant," emphasizing primary investment in active transportation, secondary investment for transit and passenger loading, and maintenance of existing taxi, TNC, and parking facilities.

Caltrain Station Access Policy (2024)

Caltrain's Station Access Policy defines a hierarchy to guide station area planning and investment, and ensure sustainable modes are the highest access priority. Walking is defined as the highest priority followed by biking and shared mobility, transit and shuttle, drop off and rideshare, and private automobile parking.

City Planning & Policy Framework

Local Corridor Studies

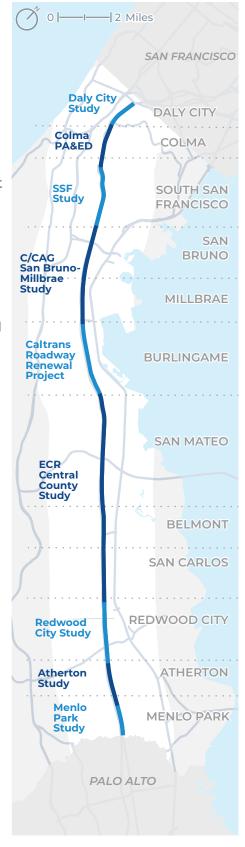
As of Fall 2025, every city along El Camino Real in San Mateo County is working on or recently completed a corridor plan identifying local needs and priorities. These corridor plans summarized in **Figure 3.7.** and in **Table 3.2.** include more focused analysis and community engagement to identify recommendations for complete streets improvements. SamTrans developed the GBI Action Plan in coordination with these local studies to advance their preferred alternative(s) through the Project Initiation Document (PID) and Project Approval and Environmental Document (PA&ED) phases of the Caltrans process.

While much progress has been made at the local level, most cities remain in the initial planning stages; only Burlingame has reached construction via a Caltrans-led SHOPP project (described in the following section), while Caltrans is pursuing a bicycle and pedestrian improvement project in Redwood City and Colma is advancing its own complete streets project through the Project Approvals & Environmental Document phase of the Caltrans project development process.

Table 3.2. Recent amd Ongoing Local Corridor Plans for El Camino Real

PLAN/PROJECT	CITIES	LEAD AGENCY	COMPLETION DATE
El Camino Real/Mission Street Technical Study	Daly City	SamTrans	2025
El Camino Real Bicycle and Pedestrian Project	Colma Colma		2020; Project Approval and Environmental Document underway
El Camino Real Mobility Plan	South San Francisco	South San Francisco	2026
C/CAG San Bruno- Millbrae Study	San Bruno, Millbrae	C/CAG	2026
El Camino Real Streetscape Plan	Millbrae	Millbrae	2022
El Camino Real Roadway Renewal Project	Burlingame	Caltrans	Under Construction
Central El Camino Real Multimodal Plan	San Mateo, Belmont, San Carlos, Redwood City	SamTrans	2026
Bike & Ped Safety Improvement Study	Redwood City, North Fair Oaks	Redwood City	2019
El Camino Real Complete Streets Corridor Study	Atherton, North Fair Oaks, and Menlo Park	Atherton	2025
El Camino Real Technical Study	Menlo Park	SamTrans	2025

Figure 3.7. Local Corridor Plans for El Camino Real



Source: Fehr & Peers, 2025

Other City Plans & Policies

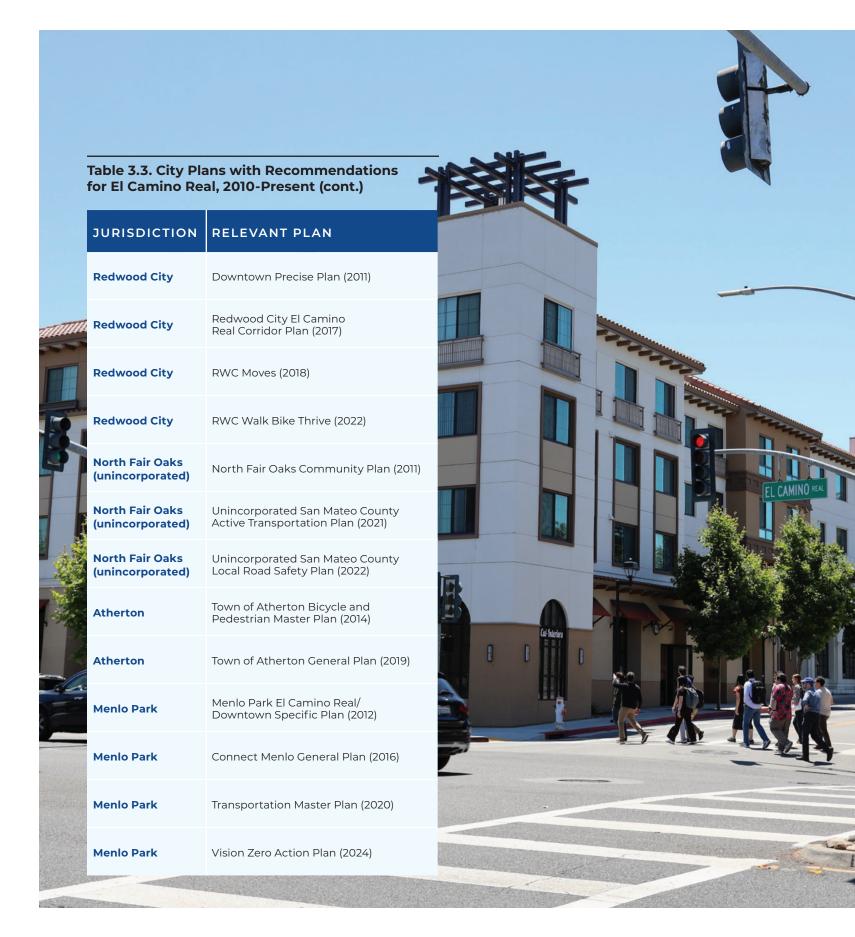
Various cities have addressed transportation visions for El Camino Real via citywide general plans, specific plans, active transportation plans, and safety plans. **Table 3.3.** summarizes recommendations for El Camino Real in these plans.

In addition to plans listed in Table 7, various citywide plans are underway, including the City of Burlingame's Vision Zero Action Plan, the City of San Mateo's Complete Streets Plan, and the City of San Carlos' Northwest Area Specific Plan.

Table 3.3. City Plans with Recommendations for El Camino Real, 2010-Present

JURISDICTION	RELEVANT PLAN	JURISDICTION	RELEVAN
Daly City	Walk Bike Daly City Pedestrian and Bicycle Master Plan (2020)	Millbrae	City of Millbr
Daly City	Vision Zero Action Plan (2020)	Burlingame	Envision Bu
Colma	Town of Colma Bicycle and Pedestrian Master Plan (2023)	Burlingame	City of Burlin Pedestrian N
Colma	2040 General Plan (2021)	San Mateo	City of San N Pedestrian N
South San Francisco	Shape SSF 2040 General Plan (2022)	San Mateo	City of San N Master Plan
South San Francisco	Active South City South San Francisco's Bicycle and Pedestrian Master Plan (2022)	San Mateo	San Mateo T Developmen Access Plan
South San Francisco	City of South San Francisco Local Road Safety Plan (2022)	San Mateo	Strive San M Plan 2040 (2
San Bruno	Transit Corridors Plan (2014)	San Mateo	City of San N Roadway Sa
San Bruno	City of San Bruno Walk 'n Bike Plan (2016)	Belmont	City of Belm Pedestrian a
San Bruno	Local Road Safety Plan (2023)	Belmont	City of Belm
Millbrae	City of Millbrae Active Transportation Plan (2021)	Belmont	Belmont Vill
Millbrae	Millbrae Downtown and El Camino Real Specific Plan (2022)	San Carlos	City of San C Pedestrian N
Millbrae	Millbrae Station Area Specific Plan (2022)	San Carlos	Downtown S Streetscape

JURISDICTION	RELEVANT PLAN
Millbrae	City of Millbrae 2040 General Plan (2022)
Burlingame	Envision Burlingame General Plan (2019)
Burlingame	City of Burlingame Bicycle and Pedestrian Master Plan (2020)
San Mateo	City of San Mateo Citywide Pedestrian Master Plan (2012)
San Mateo	City of San Mateo Bicycle Master Plan (2020)
San Mateo	San Mateo Transit-Oriented Development Pedestrian Access Plan (2022)
San Mateo	Strive San Mateo General Plan 2040 (2024)
San Mateo	City of San Mateo Local Roadway Safety Plan (2024)
Belmont	City of Belmont Comprehensive Pedestrian and Bicycle Plan (2016)
Belmont	City of Belmont 2035 General Plan (2017)
Belmont	Belmont Village Specific Plan (2017)
San Carlos	City of San Carlos Bicycle and Pedestrian Master Plan (2020)
San Carlos	Downtown Specific Plan and Streetscape Master Plan (2025)



Previous Efforts by the Grand Boulevard Initiative

Guiding Principles (2006)

In 2006, the Grand Boulevard Initiative established 10 Guiding Principles and potential implementation strategies to guide development along El Camino Real. These Guiding Principles were endorsed by every city along the corridor.

1. Target housing and job growth in strategic areas along the corridor

- · Amend General Plans and implement zoning and Specific Plans that facilitate increases in density, particularly around transit stations and key
- · In accordance with city goals, encourage more housing and business opportunities, with a greater range of affordability and choices, exemplifying high-quality architecture and urban
- · Preserve significant buildings.
- Provide a system of local and corridor-wide incentives to attract private development and economic investment along the corridor

2. Encourage compact mixed-use development and high-quality urban design and construction

- · Develop design guidelines to assist in the attainment of the Grand Boulevard vision and challenge statements.
- · Accommodate housing.
- · Implement zoning and precise plans with designspecific elements that address street orientation, facades, parking and setbacks
- · Provide planning aides and design guidelines, such as the Community Design and Transportation Manual, to developers

3. Create a pedestrian-oriented environment and improve streetscapes, ensuring full access to and between public areas and private developments

- Provide an integrated pedestrian environment with wide, continuous sidewalks, landscaping, lighting, and signage, all with human-scale details, with a commitment to maintain those amenities. Such amenities should conform to Caltrans standards.
- · Continuously clean and maintain the Grand Boulevard streetscape and public spaces.
- · Preserve sightlines between activity areas.
- · Create landmarks and signature buildings to shape the street environment to a pedestrian orientation.
- · Repair barriers between activity areas such as discontinuous sidewalks.

· Reduce street crossing distances where appropriate.

4. Develop a balanced multi-modal corridor to maintain and improve mobility of people and vehicles along the Corridor

- · Support transit-oriented development (TOD) and increased density around station areas.
- · Orient buildings toward transit stops.
- · Design transit stops for easy passenger loading, unloading and fare payment.
- · Improve signal timing.
- · Implement transit-preferential street treatments such as signal priority, bulb out stops, bus by-pass lanes and high occupancy vehicle (HOV)/Bus-only lanes where needed and feasible.
- · Implement programs designed to reduce auto trips during congestion periods.

5. Manage parking assets

- · Consider trip reduction due to transit when designing parking requirements.
- · Pursue the development of public/public and public/private partnerships to develop multiuse parking structures in strategic locations along the corridor.
- · Consider shared parking facilities (I.e. for business during the day, restaurants at night).
- · Consider the trade-offs between TOD and parking at rail stations.
- Preserve street frontage for active uses by placing parking behind buildings.
- · Develop and use a network of alleys to access parking and limit vehicular crossings of sidewalks.
- · Where appropriate, install parking meters or timelimited parking spaces to encourage turnover.
- · Review parking requirements when considering new developments, possibly substituting reliance on Transportation Demand Management (TDM) strategies and reducing required parking.

6. Provide vibrant public spaces and gathering places

· Create public spaces of all sizes that will stand the test of time and provide lasting value for future generations.

- · Design public areas to attract usage.
- · Orient new development around existing or new gathering places and transit stations.
- · Design public spaces to be functional as well as decorative through the careful use of space and amenities.
- Encourage the development of small public spaces and pocket parks

7. Preserve and accentuate unique and desirable community character and the existing quality of life in adjacent neighborhoods

- · Encourage design that is compatible with or shares design elements with adjacent development and neighborhoods.
- · Identify local themes and express them through landscape, architecture and urban design guidelines.
- Preserve diverse local small businesses and create economic opportunities for their continued presence in the revitalized corridor.

8. Improve safety and public health

- · Design intersections for a balance between the needs of autos and pedestrians. Design parallel access routes where needed to separate pedestrian and bike movements.
- · Provide high-quality pedestrian amenities such as distinct crosswalks, countdown signals and curb ramps.
- Ensure adequate public and private facilities for disabled individuals.

9. Strengthen pedestrian and bicycle connections with the corridor

- · Reduce the distance between corridor crossings to improve connectivity with adjacent neighborhoods where appropriate.
- For projects near the corridor, encourage design that provides easy access to the corridor or to cross streets.
- Provide pedestrian cut-through linkages to access parking lots, alleys and neighborhood routes between blocks, including additions to "Safe Route to Schools" paths.

10. Pursue environmentally sustainable and economically viable development patternsProvide incentives for LEED (leadership in energy and environmental design) certified projects.

- · Pursue design, engineering and construction techniques that assist with the management of storm water runoff, preserve (and possibly increase) soil permeability, and reduce heat island and other negative effects of urban development.
- · Pursue cross-jurisdictional shared revenue projects, such as parking structures, that provide mutual benefits to all partners.
- Provide a system of local and corridor-wide incentives to attract private development and economic investment along the corridor.

Corridor Studies

SamTrans led several corridor plans during the first phase of the Grand Boulevard Initiative that reviewed existing conditions and identified potential improvements. These studies included a corridorwide Existing Conditions Report in 2006 (updated in 2011); Transforming El Camino Real, a corridor study in partnership with the cities of Belmont, San Carlos, and Redwood City (2007); and the Grand Boulevard Multimodal Corridor Plan, a corridorwide complete streets study (2010). SamTrans also led a Bus Rapid Transit Phasing Study in 2014 that considered transit improvements for the corridor.

Implementation Challenges

Despite pockets of progress, El Camino Real has not yet seen a transformation consistent with the visionary plans developed over the past two decades. There are many contributing factors for this slow rate of progress:

- · Caltrans approvals process: As a state highway, projects on El Camino Real require a complex project development and approvals process that is more costly and time-consuming compared to city streets.
- · City staff resources: Most cities lack the staff resources and institutional knowledge to individually navigate the Caltrans approvals process, especially when similar projects on local streets can be done faster and more costeffectively.
- · Policy misalignment: While cities, countywide agencies, and Caltrans have largely converged around safety and mobility goals for El Camino Real, historically there has been conflicting policy goals that slowed compete streets improvements over traffic operations concerns.
- Funding: Large streetscape projects can be costly and challenging to fund, although the passage of Measure W in 2018 substantially expanded funding opportunities for multimodal projects on corridors like El Camino Real compared to years past.

The Process Problem Statement summarizes challenges implementing projects on El Camino Real. The GBI Action Plan aims to address these implementation challenges. Recommended actions are identified in **Chapter 5**.

PROBLEM STATEMENT



PROCESS

It's too challenging for individual cities to develop, implement, and fund transportation projects on El Camino Real.

As a state highway, projects on El Camino Real require a complex project development and approvals process that is more costly and time-consuming compared to city streets. Moreover, it can be challenging for cities to piece together a full funding package for a large streetscape project. Less than one mile of redesigned streetscape has been implemented over the past decade.

Recently Completed Improvements on El Camino Real

Despite the tremendous amount of planning completed across local, countywide, regional, and state agencies, El Camino Real has experienced limited streetscape changes over the past decade. Implementation of streetscape improvements have typically been focused on spot improvements associated with development projects or capital improvements led by cities or Caltrans addressing individual intersections or blocks. Some recent examples include:

South San Francisco

South San Francisco implemented threequarters of a mile of new sidewalk, Class II bike lanes, bus bulbs, and stormwater management facilities, representing the largest single streetscape project implemented over the past decade.



Development Projects

Several blocks of sidewalks have been widened associated with development projects in San Mateo (Hillsdale Mall), San Carlos (San Carlos Transit Village), Redwood City (various downtown developments), Menlo Park (Springline and Middle Plaza), and other cities.



Belmont

Belmont implemented a one block gap closure of a Class I trail between Emmett Avenue and Ralston Avenue accompanied by a pedestrian hybrid beacon at Emmett Avenue to facilitate bicycle and pedestrian travel and improve access to the Belmont Caltrain Station.



Crosswalk improvements

Caltrans and cities have implemented pedestrian hybrid beacons at several uncontrolled crosswalks throughout the corridor. Additional upgrades are planned via upcoming SHOPP projects.







Force consisting of Working Group participants as well as advocates, business groups, and other stakeholders. SamTrans organized half-day workshops in San Carlos, South San Francisco, Redwood City, San Mateo, and Belmont, where participants identified key challenges and solutions for the corridor. The interactive format encouraged participants to share their agency or organization's perspectives and ongoing work along El Camino Real. SamTrans also established a steering committee comprised of partner agencies including SMCTA, C/CAG, MTC, and Caltrans to provide strategic guidance on corridorwide planning and implementation to guide the development of the Action Plan. The key elements of the Action Plan – the problem statements, vision statement, goals, actions, and design alternatives reflect the input and collaboration of the GBI Working Group, Task Force, and Steering Committee.

Between Fall 2024 and Fall 2025,

city and agency staff, and a Task

GBI convened seven meetings involving a Working Group of

MAY 2025 GBI



TASK FORCE MEETING

This section summarizes the Stakeholder Engagement process undertaken by the **Grand Boulevard Initiative** to develop the Action Plan,

About the Grand Boulevard Initiative

GBI began in 2006 as a partnership focused on El Camino Real led by SamTrans involving cities, countywide agencies, Caltrans, advocates, business groups, and other stakeholders spanning both San Mateo and Santa Clara Counties. One of GBI's first accomplishments was developing Guiding Principles for land use and transportation changes that were endorsed by every city on the corridor, referenced in Chapter 3. Over the past two decades, GBI has supported cities with land use and transportation planning on the corridor.

Despite significant progress in land use planning and development over the past two decades, GBI stakeholders expressed a desire to refine a corridor-wide vision, process, and funding approach to implement transportation improvements. SamTrans reconvened GBI in Fall 2024 to address this need through the GBI Action Plan.

GBI TASK FORCE PARTICIPANTS

ORGANIZATIONS

Chamber San Mateo County

Housing Leadership Council

Paratransit **Advisory Council**

Peninsula Open Space Trust

Rails to Trails Conservancy

San Mateo County Economic Development Association

San Mateo Commission on Aging

Silicon Valley Bicycle Coalition

South San Francisco Chamber of Commerce

Stanford University Sustainable San



15 LOCAL

JURISDICTIONS

C/CAG Atherton

Belmont

Burlingame Colma

Daly City Hillsborough

Menlo Park

Millbrae Palo Alto

Redwood City San Bruno

San Carlos

San Mateo South San

Francisco San Mateo

County

10

AGENCIES

Caltrans

Caltrain

Commute.org

MTC

SamTrans

San Mateo County Office of Education

San Mateo County Parks Department

SMCTA VTA



coordinating planning across cities, countywide and regional

agencies, and Caltrans. It also

Task Force and Working Group

vision, and providing input into

highlights the role of the GBI

in shaping the Action Plan:

and solutions, developing a

design alternatives and the

public engagement efforts

evaluation framework. It also synthesizes recent and ongoing

and documents next steps for

gathering community input.

identifying priority problems

The following sections summarize findings from the Task Force and Working Group meetings.

Identifying & Prioritizing Problems

The first round of Task Force and Working Group meetings focused on identifying key challenges facing El Camino Real. While a range of topics were covered, three problems emerged as key priorities: mobility, safety, and process.

Mobility & Safety

Consistent with the findings of the Needs Assessment, participants discussed how El Camino Real's highway-like design limits mobility choices and contributes toward a high rate of injury collisions. Participants identified safety challenges on El Camino Real resulting from auto-oriented street design that facilitates high-speed vehicle traffic and includes narrow sidewalks, uncomfortable crosswalks, limited pedestrian-scaled lighting, and an absence of bicycle infrastructure. Mobility challenges were similarly linked to discontinuous bicycle and pedestrian facilities, slow and unreliable bus travel, and barriers to BART and Caltrain access, which reinforce auto-dependency and discourage transit and active transportation use. Participants helped develop the following problem statements summarizing mobility and safety challenges.

Process

Despite the tremendous amount of planning completed across local, countywide, regional, and state agencies, El Camino Real has yet to see transformative changes. Participants identified many contributing factors for this slow rate of progress, including the Caltrans approvals process, lack of city staff resources, policy misalignment, and funding (as discussed in **Chapter 3**). Participants helped develop the following problem statements summarizing challenges associated with the implementation process for improving the corridor.



PROBLEM STATEMENTS



SAFETY

El Camino Real has an unusually high rate of fatal or serious injury crashes, particularly for people walking and biking.



MOBILITY

El Camino Real's highway-like design discourages walking, biking, and transit use.



PROCESS

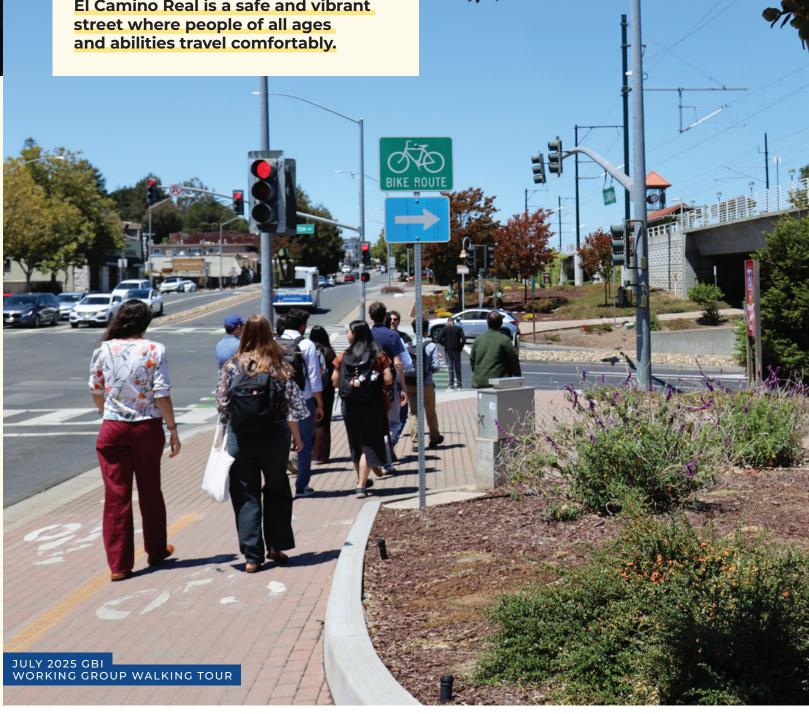
It's too challenging for individual cities to develop, implement, and fund transportation projects on El Camino Real.

Developing a Vision

Participants developed vision statements to articulate the desired form and function of El Camino Real, resulting in consensus around the following:

VISION STATEMENT

El Camino Real is a safe and vibrant street where people of all ages



Brainstorming Solutions

Participants brainstormed potential solutions to improve safety and mobility on El Camino Real. Discussions focused on pedestrian, bicycle, and transit improvements as a means of reducing injury collisions and expanding mobility options on the corridor. Participants also discussed an implementation process for these improvement measures. Ideas generated during these meetings were incorporated into the Goals, Actions, Target Outcomes, and Key Performance Indicators in Chapter 5.

Throughout these discussions, participants noted that El Camino Real serves multiple functions as a state highway, countywide arterial, and local main street.

Consequently, a coordinated implementation process is necessary that balances local needs with countywide consistency and connectivity.



Here are the key items participants identified:



Pedestrian Improvements

There is a clear need for pedestrian improvements across the corridor, including widening sidewalks, enhancing crosswalks, incorporating pedestrianscaled lighting, and adding street trees and landscaping. Walkability serves as the foundation for vibrant neighborhoods, thriving businesses, and accessible transit facilities.



Bicycle Improvements

A desire for corridor-wide bicycle facilities, while acknowledging that right-of-way constraints at some pinch points may require use of parallel corridors. Building a connected bicycle network that facilitates both north-south travel on El Camino Real and east-west travel across El Camino Real was emphasized as an important priority. Consistent with DIB-94's guidance summarized in Chapter 3, bicycle improvements on El Camino Real should be physically separated from traffic to appeal to all ages and abilities.



Transit Improvements

Transit improvements should be incorporated alongside pedestrian and bicycle improvements, targeting improvements at bus stops (e.g. bus bulbs and bus boarding islands), enhancing pedestrian and bicycle access to bus stop and BART/Caltrain stations, and improving travel times and reliability for SamTrans service. Bus lanes were discussed as a potential solution on the wider six lane segments of El Camino Real, which could be accomplished via converting a general purpose lane.



On-Street Parking Tradeoffs

On-street parking presents tradeoffs given limited space for active transportation and transit improvements on the corridor. While on-street parking can play a key role for facilitating access to businesses on parts of the corridor, there was consensus that on-street parking has lower value than active transportation and transit improvements for addressing mobility and safety needs, and is not well utilized on much of the corridor given ample off-street parking.

Evaluating Tradeoffs

Following the brainstorming of potential solutions, participants reviewed a series of potential crosssections for El Camino Real that illustrated a universe of possibilities for the corridor. These crosssections became the design alternatives shown in **Chapter 6**. A consensus emerged for design alternatives that incorporated bus lanes, separated bike lanes, and wider sidewalks to address mobility and safety needs. In contrast, there was limited interest in preserving the status quo that tends to prioritize traffic operations and on-street parking.

Continuing Coordination Efforts

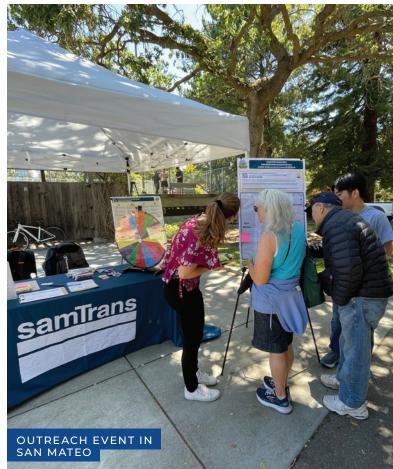
Concluding the Action Plan work program, the Task Force and Working Group reviewed the Action Plan document and weighed in on next steps in the Caltrans project development process and funding approach. The Task Force and Working Group will continue to serve as the forum for engaging across agencies, advocacy organizations, and business groups as work on the corridor continues.

Community Outreach

City-Led Outreach

Community outreach on El Camino Real is currently being led at the local level, with each city seeking input on their respective corridor studies (see Chapter 3 for a summary of these studies). As of Fall 2025, community outreach is ongoing in South San Francisco, San Bruno, Millbrae, San Mateo, Belmont, and San Carlos, while outreach has been completed in Colma, Burlingame, Redwood City, and Atherton as part of recent studies. The GBI Action Plan has exercised care to avoid duplicating these efforts; corridor-wide input has been received via a synthesis of recently completed countywide outreach efforts and presentations at city council meetings. Preliminary findings suggest a shared interest throughout the corridor in advancing active transportation, transit, and safety improvements, and agreement that maintaining status quo on El Camino Real is generally unacceptable.





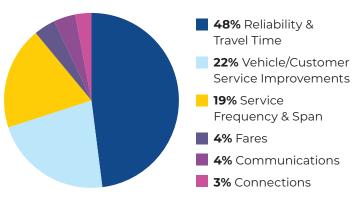
Countywide **Outreach Findings**

GBI builds on public outreach findings from prior countywide planning studies including the SamTrans El Camino Real Bus Speed and Reliability Study, the C/CAG Local Roadway Safety Plan (LRSP), and the C/CAG Countywide Active Transportation Plan. Collectively, public input across all three studies emphasizes the importance of transformative transportation investments on El Camino Real to improve safety, connectivity, and access for people walking, biking, and taking transit.

SamTrans Rider Outreach (2018-2024)

In 2018, SamTrans conducted an extensive on-board survey of Route ECR riders SamTrans to better understand travel behavior, rider demographics, and assess how the agency could improve Route ECR. Riders indicated that improving bus reliability and travel time should be the agency's top priority. These findings were echoed in public outreach for Reimagine SamTrans in 2020-2021 and SamTrans' 2024 Triennial Customer Survey.

Figure 4.1. SamTrans Rider Priority **Improvements for Route ECR**



Source: SamTrans Rider Outreach Survey, 2018.

In 2022, SamTrans conducted outreach to riders to hear their priorities for specific bus improvements along Route ECR. Outreach materials focused on a multilingual project website, interactive map, pop-up events, and a virtual public hearing. Riders shared concerns about reliability issues, including inconsistent service frequencies and buses showing up late or not at all. Riders expressed strong support for bus lanes, reducing the number of stops, and improving bus stops.

Recent outreach efforts have found a desire for multimodal transportation improvements to improve conditions for walking, biking, and using transit on El Camino Real.

44

Crossing El Camino Real to get to the bus stop is dangerous. Cars don't stop for pedestrians. C/CAG LRSP

Route ECR is never on time and causes me to be late to work.

REIMAGINE SAMTRANS PHASE 1

People drive too fast down El Camino Real. C/CAG LRSP

Route ECR needs to be faster. It's always late, then when it finally comes, two buses come back-to-back. **SAMTRANS 2024 TRIENNIAL SURVEY**

Biking on El Camino is too difficult. There are too many fast cars, parked cars, cars pulling out, poor bike visibility. C/CAG LRSP

C/CAG Local Roadway Safety Plan (2024)

The C/CAG Local Road Safety Plan engaged the public through a mix of in-person events and an online survey to understand key community safety concerns on both a local and countywide scale. Key themes emerging from public engagement include a need to improve safety, enhance connectivity, pair safety and transit improvements, and address roadway conditions through targeted infrastructure improvements. Specific feedback related to El Camino Real included a need for safety improvements for people walking and biking. and a desire for lane or roadway narrowing.

- · Safety: Respondents expressed a countywide need to improve conditions for people walking and biking, with concerns about high vehicle speeds, traffic volumes, and unsafe driver behavior. Priority improvements should include new and widened sidewalks, safer crosswalks, pedestrian-scale lighting, accessible curb ramps, separated bicycle facilities (especially at intersections), and traffic calming measures. Respondents noted that there was a particular need for safety improvements for people walking and biking on El Camino Real.
- · Connectivity: Respondents stated a desire for a continuous pedestrian and bicycle network that provides strong connections to transit stations, schools, parks, and job centers, as well as improved first- and last-mile access.
- · Transit: Respondents expressed a desire for more reliable and frequent transit service, paired with safer and more convenient walking and biking connections to transit stations.
- · Traffic Operations and Roadway Infrastructure: Respondents cited concerns with congestion, vehicle conflicts at intersections, and pavement conditions. Priority roadway improvements should include barriers to separate two-way traffic, extended passing lanes, and highoccupancy vehicle lanes. Respondents also noted a desire for lane or roadway narrowing along El Camino Real.

C/CAG Countywide Comprehensive Bicycle and Pedestrian Plan (2021)

The C/CAG Countywide Bicycle and Pedestrian Plan involved two advisory committees, virtual public events including two multilingual community workshops, and a project website and online interactive map. C/CAG received input on community members' top priorities and concerns, priority locations for improvements, as well as any key regional routes and destinations that should be included in the countywide bicycle and pedestrian networks. As part of the study, the public and stakeholders expressed interest in the following improvements:

- · Connectivity improvements including a more continuous countywide bikeway network, a comfortable north-south connection (including a backbone 'bicycle superhighway' on El Camino Real), continuous bicycle facilities across jurisdictional boundaries, and easy and safe access to key destinations.
- Safety improvements including more separated bicycle facilities, traffic calming programs to address high motor vehicle speeds, and crosswalk improvements.
- Equity focused improvements including implementing projects in lower income communities and developing projects that provide safe and comfortable travel conditions users of all ages and abilities.
- Process improvements including aligning countywide and local plans and providing funding. programs, and policies to support maintenance and project delivery.















GBI City Council Roadshow

SamTrans, with support from SMCTA and **Caltrans**, presented at city council and committee meetings in every city along El Camino Real in San Mateo County in the Fall of 2025. The purpose of the City Council roadshow was to share updates on the Grand Boulevard Initiative, present initial findings from the GBI Action Plan, and provide an opportunity for councilmembers to provide feedback. City Councils across the corridor expressed strong support for the Grand Boulevard Initiative and its vision to transform El Camino Real into a safer, more inviting street that serves people walking, biking, and taking transit. Councilmembers acknowledged that infrastructure improvements along El Camino Real have been challenging to implement at the city level, given the number of jurisdictions and agencies involved, and welcomed GBI's renewed regional framework and implementation focus. While supporting a shared regional framework, Councils noted that corridor alternatives should incorporate a context-sensitive approach that adapts the countywide vision to each community's conditions and priorities.

ROADSHOW LEAD AGENCIES







Next Steps for Community Engagement

Community engagement will continue through local corridor studies and via the Caltrans project development process described in Chapters 5 and 7.



Goals & Actions

This chapter summarizes the vision, goals, and actions for El Camino Real, accompanied by target outcomes, key performance indicators, recommended improvement measures, and implementation guidance. The content of this chapter seeks to address the corridor needs and problem statements identified in Chapter 2 and builds upon the previous plans and policies summarized in Chapter 3 along with input from the **Task Force and Working** Group summarized in **Chapter 4. This chapter** provides the GBI Action Plan's policy framework and key recommendations to advance improvements on El Camino Real.

VISION STATEMENT

El Camino Real is a safe and vibrant street where people of all ages and abilities travel comfortably.



The Grand Boulevard Initiative Working Group helped develop the Vision Statement to articulate the desired form and function of El Camino Real:

DEFINITIONS

A 'safe street'

eliminates fatalities and serious injuries and provides safer outcomes for all users.

A 'vibrant street' supports local businesses, accommodates new residents and jobs, strengthens a sense of community, and is a place where people want to spend time.

'All ages and abilities' means that everyone feels comfortable and safe while traveling, including youth, seniors, and people with disabilities.

Goals & Actions

To realize the corridor-wide vision and address the needs, opportunities, and challenges described in Chapters 2-4, the GBI Action Plan identifies a series of Goals and Actions targeting specific topics related to street design on El Camino Real. The Goals and Actions intend to support broader state, regional, and countywide goals related to the reduction of greenhouse gas emissions and vehicle miles traveled, improved climate resiliency, and a more equitable transportation system. Goals and Actions are summarized in Table 5.1. and described below.

Key recommendations are highlighted under each Action. Most of these measures can and should be pursued in tandem with any of the street design alternatives pursued on the corridor described in Chapter 6.

Table 5.1. Goals and Actions

	ТОРІС	PROBLEM STATEMENT	GOAL	ACTIONS		
	SAFETY	El Camino Real has an unusually high rate of fatal or serious injury crashes, particularly for people walking and biking.	Adopt an injury- prevention mindset for El Camino Real.	 1A: Prioritize changes that improve safety for vulnerable roadway users. 1B: Manage conflicts to reduce the potential for crashes. 1C: Manage speeds to reduce the severity of crashes. 		
	MOBILITY	El Camino Real's highway-like design discourages walking, biking, and transit use.	Transform El Camino Real into a complete street.	 2A: Advance corridor-wide bike and transit improvements to expand mobility choices 2B: Enhance walkability and amenities to suppor vibrant communities and a sense of place 2C: Incorporate a context-sensitive approach that adapts the countywide vision to local conditions 		
	PROCESS	It's too challenging for individual cities to develop, implement, and fund transportation projects on El Camino Real.	Create a framework for change aligning vision, process, and funding.	 3A: Pursue a countywide project development process in partnership with Caltrans 3B: Maintain interagency collaboration through construction, operations, and maintenance activities 3C: Use the GBI Action Plan to quide decision-making 		



Problem Statement

El Camino Real has a high concentration of fatal or serious injury crashes, particularly for people walking and biking.

Goal

Adopt an injury-prevention mindset to eliminate fatal and serious injury crashes on El Camino Real.

Context

Caltrans has committed to prioritizing safety on state highways, including the elimination of fatal and serious injury crashes as well as race-, age-, ability- and mode-based disparities in road safety outcomes. Cities and C/CAG have each identified El Camino Real as a part of local and countywide high injury networks, which represent a disproportionate concentration of fatal and serious injury crashes. Adopting an injury prevention mindset means infusing every project on El Camino Real with measures to proactively reduce the likelihood and severity of injury collisions, especially for vulnerable roadway users.

Supporting Documents

- · Caltrans Directors Policy 36 and 37 (DP-36 and DP-37)
- Caltrans Design Information Bulletin 89 and 94 (DIB-89 and DIB-94)
- Caltrans Intersection Safety and Operational Assessment Process (ISOAP)
- · C/CAG Countywide Local Road Safety Plan
- · C/CAG Sustainable Streets Master Plan
- · City Local Road Safety Plans and Vision Zero Plans

Actions

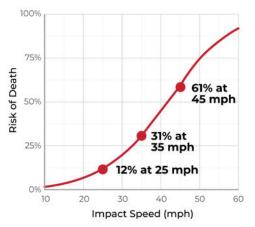
ACTION 1A: PRIORITIZE CHANGES THAT IMPROVE SAFETY FOR VULNERABLE ROADWAY USERS

Eliminating fatal and serious injury crashes starts with prioritizing vulnerable roadway users, namely pedestrians, bicyclists, and transit riders. Vulnerable users lack the physical protection of a motor vehicle and are therefore more susceptible to injury or death in traffic crashes. Pedestrians, including transit riders, are exposed to a range of stressful conditions when traveling on El Camino Real that contribute to a greater likelihood of fatal or serious injury collisions, including but not limited to unmarked or unsignalized crosswalks, poor lighting, long crosswalks, wide curb radii, sidewalk gaps, frequent driveways, constrained bus stops, and lack of separation from high-speed vehicle travel. Bicyclists encounter a similar set of issues, as El Camino Real has no separated bike lanes. Prioritizing vulnerable users means advancing pedestrian, bicycle, and transit improvements even when it presents tradeoffs for traffic operations or parking.

Specific recommendations for improvement measures are detailed further in Actions 2A-2B.

Figure 5.1. Relationship of Vehicle Speed to Risk of Severe Injury and Death for Pedestrian Crashes





Source: Limpert, R. (1994). Motor Vehicle Accident Reconstruction and Cause Analysis (4th ed.).

ACTION 1B: MANAGE CONFLICTS TO REDUCE POTENTIAL FOR CRASHES

El Camino Real experiences a high concentration of conflict points due to its density of uncontrolled driveways and intersections. Driveways are the most common source of uncontrolled conflicts between vehicles, pedestrians, and bicyclists, and can pose particular challenges when clustered together or near intersections, overlapping bus stops, and paired with uncontrolled left turns. Uncontrolled intersections often result in higher speed conflicts associated with left turning vehicles across oncoming vehicle traffic as well as people walking and biking. These conflict points are further exacerbated by the mixing of vehicles, buses, bicyclists, and pedestrians in limited street spaces, and lack of physical and temporal separation measures between these users.

Conflict points should be minimized to the extent possible on El Camino Real, especially driveways and uncontrolled left turns. Street improvements and development projects should aim to remove or consolidate driveways where feasible, and new driveways should be avoided. Uncontrolled left turns should be limited by closing gaps in medians, incorporating new traffic signals and protected left turn phases, or implementing turn restrictions.

Where conflict points occur, users should be separated in space and time. Physical separation measures should include separated bikeways, bus lanes, sidewalk gap closures, curb extensions, and medians. Temporal separation measures should include adding traffic signals, pedestrian hybrid beacons, and turn restrictions.

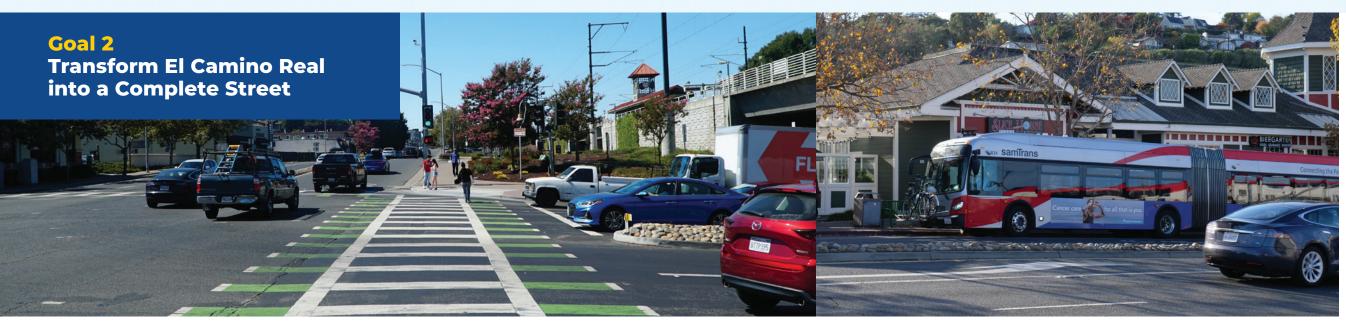
Specific recommendations for improvement measures are detailed further in Actions 2A-2B.

ACTION 1C: MANAGE SPEEDS TO REDUCE THE SEVERITY OF CRASHES

Risk of severe injury or death rises exponentially with vehicle speed: a pedestrian hit at 35 miles per hour is more than twice as likely to experience a severe injury or death compared to a pedestrian hit at 25 miles per hour as shown in **Figure 5.1.** El Camino Real generally has a posted speed limit of 35 miles per hour, and drivers often travel in excess of this speed limit.

Changes to street design on El Camino Real should target operating speeds of 25 to 30 miles per hour. Caltrans' DIB-94 suggests streets in urban communities (such as those served by El Camino Real) should target operating speeds of 25 to 30 miles per hour. Lowering speed limits and target operating speeds through roadway design and traffic calming reduces the severity of crashes to improve safety for all road users. Suggested design treatments are included in Caltrans' Traffic Calming Guide and the FHWA Safe System Speed Management Guide, and are further detailed under Actions 2A-2B.

Geometric design changes should be reinforced by retiming signal progression and pursuing state legislation to implement speed enforcement cameras. During late night hours when traffic volumes are low and visibility is poor, incorporating 'rest on red' signal timing should also be considered to help prevent speeding by setting traffic signals on red until vehicles approach. Combined, these measures would holistically reduce vehicle operating speeds on El Camino Real.



Problem Statement

El Camino Real's highway-like design discourages walking, biking, and transit use.

Goal

Transform El Camino Real into a complete street that works for all users.

Context

El Camino Real's antiquated infrastructure no longer reflects the needs and objectives of the communities it serves. In coordination with various local corridor studies (summarized in **Chapter 4**), the GBI Action Plan identifies a universe of design alternatives that are possible across the corridor's varying sections to carry into the Project Initiation Document for further study and evaluation (see **Chapter 6**). Actions 2A-2C articulate countywide priorities voiced by the Task Force and Working Group to achieve a complete street consistent with countywide, regional, and state plans. A preferred alternative is not identified at this stage; these decisions will occur during the Project Approval & Environmental Document (PA&ED) phase of the Caltrans project development process.

Supporting Documents

- · Caltrans DP-36, DP-37, and Draft Director's Transit Policy
- · Caltrans District 4 Transit, Bicycle, and Pedestrian Plans
- · C/CAG Countywide Bicycle and Pedestrian Master Plan
- · C/CAG Countywide Local Road Safety Plan
- · C/CAG Sustainable Streets Mater Plan
- · SamTrans El Camino Real Bus Speed & Reliability Study
- Local Active Transportation Plans, Safety Plans, and Corridor Plans

Actions

ACTION 2A: ADVANCE CORRIDOR-WIDE BICYCLE AND TRANSIT IMPROVEMENTS TO EXPAND MOBILITY CHOICES

El Camino Real serves as a backbone for the countywide bicycle and transit networks. Consequently, people bicycling and riding buses should have a seamless, efficient, and comfortable experience using the corridor. A consistent and cohesive approach to bicycle and transit facilities is necessary to achieve countywide, regional, and state policy goals for the corridor.

El Camino Real (and/or parallel streets) should incorporate a continuous all ages and abilities bikeway. An all ages and abilities bikeway would be accomplished either via advancing a Class IV separated bikeway or Class I bike path on El Camino Real or comparable facilities serving all ages and abilities on nearby parallel routes. A Class IV separated bikeway or Class I bike path on El Camino Real is preferred to provide direct connections between key destinations along the corridor. If such a facility is not provided on El Camino Real, improvements to parallel street(s) should be identified within roughly one half-mile of El Camino Real to achieve consistency with Caltrans, MTC, and C/CAG plans for a continuous backbone bikeway serving the corridor. Parallel street improvements should be fully funded prior to construction of corridor streetscape improvements on El Camino Real. In either case, El Camino Real should incorporate comfortable bicycle crossings for intersecting bike facilities to reduce barriers for biking.

El Camino Real should feature transit improvements that reduce travel times, improve reliability, and enhance the user experience. The El Camino Bus Speed & Reliability Study includes specific guidance on bus stop placement and suitable improvement measures, while SamTrans' Bus Stop Design Guidelines provide specifications for bus stop layout and bus shelters. Specific recommendations include the following:

- **Bus bulbs** (curb extensions at bus stops) help buses drop off and pick up passengers without weaving in and out of traffic.
- Bus boarding islands (bus bulbs with a separated bikeway bypass) provide the added benefit of separating bicyclists from buses.
- Far-side stops (located after an intersection) typically minimize conflicts with vehicles and pedestrians, whereas near-side stops (located before an intersection) can result in conflicts with right-turning vehicles and limit pedestrian visibility.
- Transit signal priority helps reduce delay for buses at traffic signals by extending green phases when buses are approaching.
- **Bus shelters** facilitate more comfortable waiting environments for riders, providing protection from sun, rain, wind, and noise.

Bus lanes should be prioritized where there are slow to moderate bus speeds and excess travel lanes. Consistent with the El Camino Real Bus Speed & Reliability Study, curbside bus lanes are best suited to sections with three travel lanes per direction and potential for improved travel times (Figure 5.2.). Such conditions occur along roughly one-third of the corridor, including in South San Francisco, San Bruno, Millbrae, and Burlingame (6.1 miles) and in San Mateo (2.6-3.1 miles), and San Carlos and northern Redwood City (1.5 miles). Bus lanes along these segments would help reduce bus travel times by 10 to 20 minutes while also serving emergency vehicles and right-turn movements.

Figure 5.2. Recommended Segments for Curbside Bus Lanes



Source: SamTrans.



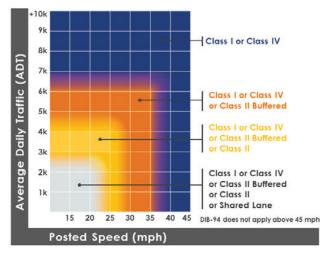


What Bicycle Facility Types are Suitable for El Camino Real and Parallel Corridors?

Caltrans' Design Information Bulletin 94 (DIB-94) recommends bicycle facilities for different street types depending on posted speed and average daily traffic. As shown in Figure 5.3., Class IV separated bikeways or Class I bike paths are recommended for streets like El Camino Real that serve 20.000 to 50.000 vehicle per day with posted speeds of 35 to 40 MPH. Class IV separated bikeways and Class I bike paths provide the most separation from motorized vehicles and can achieve a low stress, all ages and abilities facility especially when paired with other traffic calming measures to reduce vehicle operating speeds. Caltrans' DIB-89 provides additional guidance around designing separated bikeways.

On parallel streets, a wider range of potential bikeway facilities may be suitable for all ages and abilities depending on traffic volumes and vehicle speeds, including shared facilities like class IIIB bicycle boulevards for low volume, low speed streets, and class II bike lanes or class IIB buffered bike lanes for low- to moderate-volume streets. Caltrans' DIB-89 provides bikeway design guidance.

Figure 5.3. DIB-94 Recommendations for Bicycle Facilities by Posted Speed and Average Daily Traffic



ACTION 2B: ENHANCE WALKABILITY AND AMENITIES TO SUPPORT VIBRANT COMMUNITIES AND A SENSE OF PLACE

Walkability is a function of a pedestrian's interactions with infrastructure, density and mix of land use, and variety of landscaping and amenities. On El Camino Real, the building blocks to improve walkability within the public realm include widening sidewalks, separating and buffering pedestrians from vehicles, reducing conflicts at intersections and driveways, and enhancing amenities, landscaping, and stormwater management features to support a more comfortable experience on foot.

El Camino Real should incorporate pedestrian improvements everywhere to provide a seamless, connected, and inviting environment for walking.

- · Provide signals or pedestrian hybrid beacons at all marked crosswalks: Uncontrolled marked crosswalks experience a disproportionately high rate of pedestrian KSI collisions; traffic signals or PHBs more effectively separate pedestrian movements from oncoming vehicles.
- Close gaps in sidewalks and crosswalks: Continuous sidewalks along the entirety of El Camino Real and crosswalks at all legs of signalized intersections improves pedestrian safety accessibility while enhancing first/last mile connections to transit.
- · Address long gaps between traffic signals: New traffic signals and pedestrian hybrid beacons improve accessibility for pedestrians and bicyclists crossing El Camino Real and help manage traffic flows.
- Reduce wait times for pedestrians crossing El Camino Real: Shorter wait times at traffic signals and pedestrian hybrid beacons reduce barriers to crossing El Camino Real and likelihood of pedestrians crossing during a "Don't Walk" phase due to avoid long waits.
- Provide curb extensions at intersections (i.e. **bulbouts):** Curb extensions at intersections increase the visibility of pedestrians and reduce crosswalk distances, especially when accompanied with reductions in curb radii to reduce vehicle turning speeds. Curb extensions can be paired with landscaping and stormwater management features.

- Incorporate pedestrian-scaled lighting and high-visibility crosswalk striping: Lighting oriented toward pedestrians helps improve visibility at night when pedestrian KSI collisions are more likely to occur, while high-visibility crosswalks help improve visibility of pedestrians crossing the street.
- · Incorporate landscaping and stormwater management features with new sidewalks, **bulbouts. and medians:** Street trees and other landscaping provides shade and buffers pedestrians from vehicles, while stormwater management reduces flooding and creates more resilient infrastructure.
- Repurpose excess street space for pedestrian plazas, parklets, and other public uses: Seek placemaking opportunities to repurpose excess street space at oversized or skewed intersections. Wider sidewalks create the potential for wayfinding, public art, and other ways to highlight the history, cultural significance, and economic vitality of the corridor.

New developments present the best opportunity to widen sidewalks and create a more vibrant pedestrian realm. Developments present opportunities to incorporate easements and setbacks to provide additional space for wider sidewalks, street trees, stormwater management features, and amenities, as well as removing driveways and shifting vehicle access off of El Camino Real where possible. Ideally, sidewalks should be 15 feet wide (inclusive of a 5-foot planting strip buffer zone for landscaping and a 10-foot through zone), though 12 feet or less may be necessary in constrained areas. Local zoning codes, objective design standards, and transportation

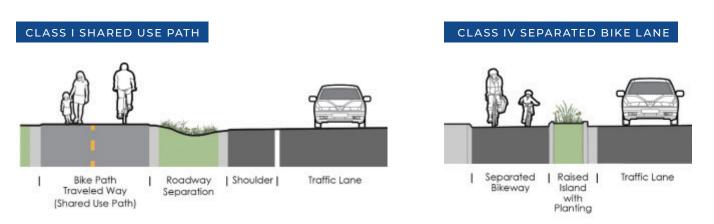
demand management ordinances should aim to advance walkable, transit-oriented development on El Camino Real, while development review processes should evaluate consistency of development projects with the GBI Action Plan's goals. It is generally preferable to preserve existing street right-of-way for bicycle and transit improvements in lieu of widening sidewalks. However, widening sidewalks within the existing street right-of-way may be suitable along segments where limited development is expected to occur, and it is infeasible to pursue sidewalk easements within existing sites.

ACTION 2C: INCORPORATE A CONTEXT-SENSITIVE APPROACH THAT ADAPTS THE COUNTYWIDE VISION TO LOCAL CONDITIONS

GBI provides a countywide framework to advance safety, transit, and active transportation improvements across the 25-mile El Camino Real corridor. Within this framework, there is flexibility to tailor and customize local streetscape projects to address local transportation needs and incorporate design features such as lighting, landscaping, stormwater management, wayfinding signage, and other elements. Continued collaboration between countywide and local planning efforts will help realize a Grand Boulevard that reflects the unique contexts of the communities it serves.

A single one-size-fits-all cross-section is unlikely to emerge as a preferred alternative. **However**, a unified approach to safety improvements should be present throughout the corridor to ensure consistency and minimize confusion when transitioning across cities.

Figure 5.4. DIB-94 Recommended Bicycle Facilities on El Camino Real



Source: Caltrans DIB-94, 2024. Source: Caltrans DIB-94, 2024.



Problem Statement

It's too challenging for individual cities to develop, implement, and fund transportation projects on El Camino Real.

Goal

Create a framework for change, aligning vision, process, and funding under the leadership of SamTrans, SMCTA, and C/CAG.

Context

Advancing transportation projects on El Camino Real requires collaboration between cities, countywide and regional agencies, and Caltrans to identify the scope of improvements, navigate project approvals, and secure funding. In the past, this process has been further complicated by a misalignment of processes, policy, design standards, and funding criteria across agencies. However, by working together, a countywide project development process led by SamTrans and SMCTA presents the opportunity to pool resources and technical expertise. Moreover, the recent adoption of Caltrans DP-36, DP-37, and DIB-94, along with the pending approval of Caltrans' Transit Policy and SB-960 streamlining, has equipped Caltrans and cities with the tools necessary to work together more efficiently.

Supporting Documents

- Caltrans DP-36, DP-37, and Draft Director's Transit Policy
- · Caltrans Design Information Bulletin 94 (DIB-94)
- Caltrans Intersection Safety and Operational Assessment Process (ISOAP)
- · Senate Bill 960

Actions

ACTION 3A: PURSUE A COUNTYWIDE PROJECT DEVELOPMENT PROCESS IN PARTNERSHIP WITH CALTRANS

Historically, cities were individually responsible for implementing projects on El Camino Real, including managing, planning, designing, funding, and Caltrans approvals. This required significant time and resources from both cities and Caltrans, and extended the timeline for project development. Consequently, very few projects have been constructed on El Camino Real over the past two decades. Feedback from cities and Caltrans suggests that a coordinated process will help alleviate local challenges and better address shared countywide needs across El Camino Real.

The Caltrans project development process consists of three main phases: the Project Initiation Document (PID), Project Approval and Environmental Document (PA&ED), and Plans, Specifications, and Estimates (PS&E). SamTrans and SMCTA will coordinate the Caltrans project development process at a countywide level, including a comprehensive strategy for implementation, phasing, and funding. Jointly, SamTrans and SMCTA will consider sponsoring the future phases of work following approval by cities to minimize costs needed from local jurisdictions to implement the large-scale project.

ACTION 3B: MAINTAIN INTERAGENCY COLLABORATION THROUGH CONSTRUCTION, OPERATIONS, AND MAINTENANCE ACTIVITIES

Transforming El Camino Real will be one of the largest transportation projects pursued in San Mateo County in recent memory. The scale and complexity of this challenge is greater than any individual agency and will necessitate continued involvement and collaboration throughout the process. GBI will remain a forum to facilitate collaboration from planning and design through construction, operations, and maintenance activities on the corridor. This ongoing collaboration will help resolve key questions such as roles and responsibilities during construction, approaches to optimizing traffic operations while enhancing transit and active transportation, and developing standard maintenance agreements that agencies can use to advance transportation projects more easily in partnership with Caltrans.

ACTION 3C: USE THE GBI ACTION PLAN TO GUIDE DECISION-MAKING

The GBI Action Plan should be used to evaluate tradeoffs and guide challenging decisions on El Camino Real to ensure a seamless and cohesive corridor. The Action Plan builds upon a wide range of adopted plans and policies at the city, county, regional, and state levels that aim to achieve a safer street that supports more walking, biking, and transit use (see Chapter 3). SamTrans, SMCTA, C/CAG, MTC, and Caltrans will use the GBI Action Plan to help plan, design, and fund improvements to El Camino Real.

Target Outcomes & Key Performance Indicators

The GBI Action Plan identifies four target outcomes associated with advancing the plans' goals and actions: a walkable pedestrian environment, a continuous all ages and abilities bikeway, an efficient and comfortable transit corridor, and the elimination of fatalities and serious injuries. Each target outcome has several key performance indicators to help evaluate progress toward implementation.

KEY

 KPI aims to increase KPI aims to decrease

Table 5.2. Target Outcomes and Key Performance Indicators

TARGET OUTCOME	KEY PERFORMANCE INDICATOR	EXISTING CONDITIONS (2025)	
	Mileage without sidewalks on both sides of the street	3.5 miles	
	Number of marked crosswalks without signals or pedestrian hybrid beacons	15 marked crosswalks	
Existing Condition (2025)	Number of intersections without marked crosswalks on all legs	63 intersections	
	• Mileage of sidewalks greater than 15 feet wide (inclusive of planting strips)	<1 mile	
	Mileage missing medians	6 miles	
	◆ Mileage of Class IV or Class I bikeway on El Camino Real	0 miles	
A continuous all ages and abilities bikeway	Mileage of designated bikeways on parallel streets within ½ mile of El Camino Real with a level of traffic stress 1 or 2 designation	9 miles	
	One-way bus travel times reliably under 100 minutes throughout the day	115 to 145 minutes	
	On-time performance >85% at all time points	63%	
An efficient and comfortable transit corridor	Percentage of stops located far-side and in-lane	27%	
	• Miles of bus lanes	0 miles	
	• Percentage of stops with bus shelters	34%	
Elimination of fatalities and	Number fatalities or serious injuries on El Camino Real	81 (2019-2023)	
serious injuries	• Mileage of 25 MPH posted speed limits ¹	0 miles (entire corridor is signed at 35 to 40 MPH)	

¹Changes to posted speed limits would be advanced through updated roadway design and signal timing consistent with DIB-94 recommendations for urban communities.



Design Alternatives

The GBI Action Plan represents the first step toward redesigning El Camino Real, a process that is advancing alongside local corridor studies and a coordinated Caltrans project development process. This chapter defines the universe of design alternatives that are possible across the corridor's varying sections, including concepts discussed in adopted plans and ongoing corridor studies. This chapter also compares these alternatives against countywide priorities voiced by the Task Force, and makes recommendations to ensure countywide consistency in accordance with Actions 2A-2C.

Existing Conditions

El Camino Real has four- and six-lane sections that are as narrow as 60 feet (in Burlingame) and as wide as 140 feet (in Millbrae). Most sections are somewhere in between, and have sidewalks up to 10 feet wide, on-street parking, left turn lanes, and medians, although the presence of these features vary from city to city.

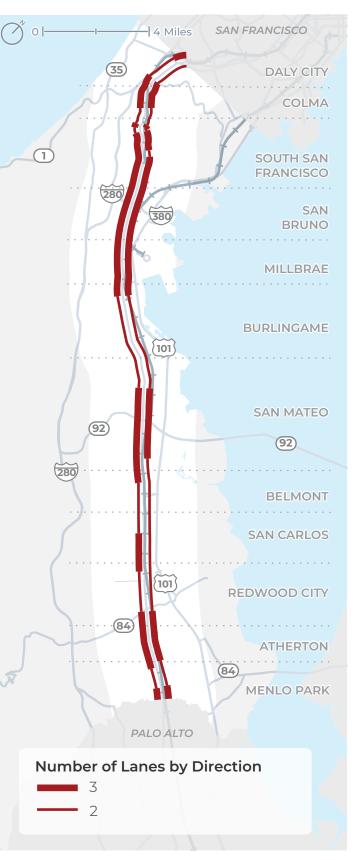
Existing Typical 4 Lane Section



Existing Typical 6 Lane Section

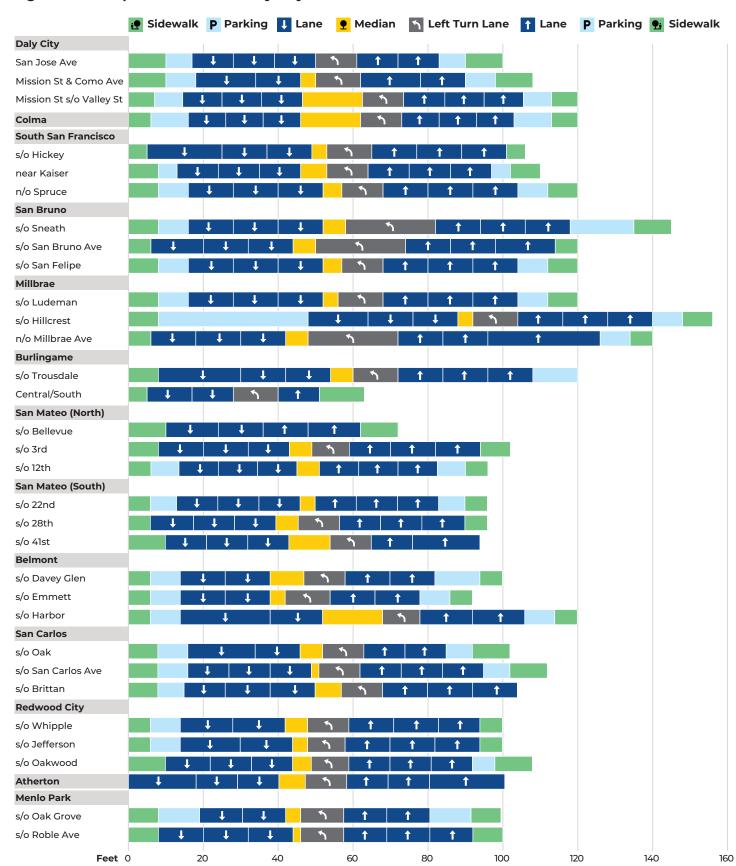


Figure 6.1. Number of Through Lanes by Direction



Source: Fehr & Peers.

Figure 6.2. Sample Cross-Sections by City



Note: Generalization based on sample section locations; some variation occures throughout the corridor. Details such as double left turn lanes, right turn lanes, shoulders, and local access parking lanes not depicted.

Definition of Alternatives

The GBI Action Plan identifies cross-section alternatives – generalized representations of how street space could be reallocated - that could fit on either the four- or six-lane sections on the corridor. The alternatives include the number of general purpose travel lanes (including lane reductions or conversions) and compatibility with different approaches to curb space presently under study in various local complete streets studies. Each alternative incorporates the following baseline design parameters:

· Maintains a minimum cross-section of four travel lanes (two lanes in each direction) to serve existing and future traffic volumes, which are expected to remain relatively high (20,000 to 40,000 across most of the corridor); where excess travel lanes are present, alternatives for a lane conversion (bus lanes) or lane reduction (road diet) are considered.

- · Provides sidewalks and a median with a left turn lane (where feasible within the right-of-way).
- Preserves flexibility to be paired with various curb space uses, including on-street parking or loading, wider sidewalks, or separated bike lanes where space permits; however, there is often not enough right-of-way on these sections to incorporate more than one curb space use.
- · Incorporates programmatic changes to intersections, curb space, parking, transit, and active transportation facilities consistent with Actions 1A-1C and 2A-2C.

Four alternatives are presented below (Figure 6.3.). For planning purposes, each alternative is defined

by the layout of travel lanes, with options to pair those layouts alongside changes to curb space uses (i.e., maintaining on-street parking, adding separated bike lanes, or widening sidewalks) pending the outcomes of local corridor studies. These alternatives represent a generalization of the possibilities across the 25-mile El Camino Real corridor; however, each city has unique characteristics that may result in some variation across these alternatives.1

¹ While the alternatives strive to capture the range of conditions on El Camino Real, there are some notable outliers. For example, Burlingame has a very constrained cross-section without left turn lanes or parking, while Daly City has extra space that provide more flexibility to accommodate widening sidewalks or adding separated bicycle lanes while maintaining on-street parking.



Figure 6.3. Alternatives for Further Evaluation

Four-Lane Sections

MAINTAIN 4 LANES

Alternative 1. Maintain 4 Lanes



1-A. 4 Lanes + Parking



1-B. 4 Lanes + Separated Bike Lanes



1-C. 4 Lanes + Wider Sidewalks



Six-Lane Sections

MAINTAIN 6 LANES

Alternative 2. Maintain 6 Lanes



2-A. 6 Lanes + Parking



2-B. 6 Lanes + Separated Bike Lanes



2-C. 6 Lanes + Wider Sidewalks



Figure 6.3. Alternatives for Further Evaluation (cont.)

BUS LANE CONVERSION

Alternative 3. Bus Lane Conversion



3-A. Bus Lanes + Parking



3-B. Bus Lanes + Separated Bike Lanes



3-C. Bus Lanes + Wider Sidewalks





Alternative 4. Road Diet



4-A. Road Diet + Wider Sidewalks + Parking



4-B. Road Diet + Wider Sidewalks

+ Separated Bike Lanes



4-C. Road Diet + Parking + Separated Bike Lanes



Four-Lane Sections

Four-lane cross-sections represent the most constrained segments of El Camino Real where limited changes are under consideration. One design alternative is under consideration for four-lane sections along with three curbspace options.

ALTERNATIVE 1: MAINTAIN 4 LANES

Options: Maintain parking, add separated bike lanes, or widen sidewalks

Alternative 1 maintains four travel lanes and a median/left turn lane on the narrowest sections of El Camino Real. Depending on available right-of-way and the outcome of local planning studies, Alternative 1 can be paired with maintaining parking, adding separated bicycle lanes, or widening sidewalks. This alternative would also incorporate programmatic changes to intersections, curb space, parking, transit, and active transportation facilities consistent with Actions 1A-1C and 2A-2C.

Figure 6.4. Four-Lane Sections, Alternative 1

Alternative 1. Maintain 4 Lanes



1-A. 4 Lanes + Parking



1-B. 4 Lanes + Separated Bike Lanes



1-C. 4 Lanes + Wider Sidewalks





On-Street Parking Tradeoffs

A key choice in redesigning El Camino Real is whether or not to maintain onstreet parking. On-street parking is present along roughly two-thirds of the corridor, but utilization varies widely. Utilization tends to be higher when on-street parking serves high-turnover businesses that lack their own parking lots, and lower when ample off-street parking is present to serve local businesses.

Across all alternatives, maintaining on-street parking usually comes at the expense of providing separated bike lanes or widening sidewalks. In contrast to active transportation, transit. and safety policies identified in **Chapter 3**, there are no countywide, regional, or state policy commitments pertaining to on-street parking on El Camino Real. Consequently, the GBI Task Force concluded that onstreet parking provides lower value to achieve corridor-wide mobility and safety goals.

Nonetheless, a curbspace management strategy will be necessary along some segments to address parking and loading needs of local busnesses. Decisions to maintain parking should weigh these access tradeoffs against countywide goals and policies. Even where onstreet parking is maintained, spot improvement measures such as bulbouts and bus bulbs should be prioritized.



Sidewalk Widening Considerations

Many sidewalks on El Camino Real are too narrow to facilitate a walkable pedestrian environment. Most sidewalks are 10 feet wide or less, whereas 15 feet is a typical minimum for multimodal boulevards. Ideally, sidewalk widening would occur within easements and setbacks of new developments in order to preserve existing right-of-way for bicycle and transit improvements (see Action 2B). Widening sidewalks within existing right-of-way constraints can limit options for bicycle and transit improvements and is better suited in built-out areas unlikely to experience infill development.

Six-Lane Sections

Six lane cross-sections provide more flexibility to consider lane conversions (bus lanes) or lane reductions (road diets). Three design alternatives are under consideration for sixlane sections along with three curb space options.

ALTERNATIVE 2: MAINTAIN 6 TRAVEL LANES

Options: Maintain parking, add separated bike lanes, or widen sidewalks

Alternative 2 maintains six travel lanes and a median/left turn lane. Depending on available right-of-way and the outcome of local planning studies, Alternative 2 can be paired with maintaining parking, adding separated bicycle lanes, or widening sidewalks. This alternative would also incorporate programmatic changes to intersections, curb space, parking, transit, and active transportation facilities consistent with Actions 1A-1C and 2A-2C. Alternative 2 is best suited for segments of the corridor with exceptionally high traffic volumes where a lane conversion or reduction may be operationally challenging.

Figure 6.5. Six-Lane Sections, Alternative 2

Alternative 2. Maintain 6 Lanes



2-A. 6 Lanes + Parking



2-B. 6 Lanes + Separated Bike Lanes



2-C. 6 Lanes + Wider Sidewalks



ALTERNATIVE 3: BUS LANE CONVERSION

Options: Maintain parking, add separated bike lanes, or widen sidewalks

Alternative 3 converts the outside lanes to bus lanes while maintaining two travel lanes and a median/left turn lane. Depending on available right-of-way and the outcome of local planning studies, Alternative 3 can be paired with maintaining parking, adding separated bicycle lanes, or widening sidewalks. This would also incorporate programmatic changes to intersections, curb space, parking, transit, and active transportation facilities consistent with Actions 1A-1C and 2A-2C.

Figure 6.6. Six-Lane Sections, Alternative 3

Alternative 3. Bus Lane Conversion



3-A. Bus Lanes + Parking



3-B. Bus Lanes + Separated Bike Lanes



3-C. Bus Lanes + Wider Sidewalks





Recommended Bus Lane Segments

Bus lanes are among the most transformative and cost-effective transit prioritization strategies to benefit the nearly 10,000 existing daily bus riders on El Camino Real and make transit more appealing for new riders. Bus lane extents on El Camino Real would be consistent with recommendations identified in the El Camino Real Bus Speed and Reliability Study, which prioritized segments that would provide the greatest benefits to bus speeds, reliability, and overall ridership (see **Figure 5.2.**). These segments include:

South San Francisco (McLellan Drive) to northern Burlingame (Dufferin Avenue) via San Bruno and Millbrae, 6.1 miles **San Mateo** (northbound 36th Avenue to 2nd Avenue; southbound 2nd Avenue to 42nd Avenue), 2.6 miles northbound, 3.1 miles southbound

San Carlos/Redwood City (San Carlos Avenue to Claremont Avenue, southbound only), 1.5 miles

Curbside bus lanes are recommended for these segments, dedicating the rightmost lane to buses while accommodating local business access and right-turning vehicles. Bus lanes are compatible with on-street parking, separated bike lanes, or wider sidewalks.

Bus lanes present an opportunity to reduce bus travel times by 10 to 20 minutes and maintain more reliable operations, based on a review of Route ECR data and comparable corridors. Bus lanes also provide traffic calming, improve safety, and help reduce vehicle miles traveled, while maintaining a clear path of travel for emergency vehicles.



Road Diet Tradeoffs

A road diet presents an opportunity to provide traffic calming and repurpose additional roadway space for a combination of two of the following: widening sidewalks, preserving parking, or adding separated bike lanes. However, road diets that funnel buses into mixed traffic flow can risk increasing bus travel times and reducing reliability. In segments with higher traffic volumes that are more susceptible to increased congestion, 10 miles of road diets on El Camino Real could increase bus travel times by 20 to 40 minutes and worsen overall reliability, reducing mobility for bus passengers and increasing overall bus operating expenses. Consequently, road diets are usually best suited to segments with lower traffic volumes and limited traffic congestion, such as Colma or Atherton.

ALTERNATIVE 4: ROAD DIET/LANE REDUCTION

Options: Maintain parking + add separated bike lanes, maintain parking + widen sidewalks OR Add separated bike lanes + widen sidewalks

Alternative 4 reduces the number of travel lanes on El Camino Real from six to four lanes, commonly known as a road diet. A road diet provides additional space for a combination of curb space uses, such as maintaining parking and adding separated bike lanes, maintaining parking and widening sidewalks, or adding separated bike lanes and widening sidewalks. This alternative would also incorporate programmatic changes to intersections, curb space, parking, transit, and active transportation facilities consistent with Actions 1A-1C and 2A-2C. Alternative 4 is best suited to segments with low traffic volumes and limited traffic congestion, as lane reductions could result in a substantial increase in traffic congestion and bus travel times elsewhere.

Figure 6.7. Six-Lane Sections, Alternative 4

Alternative 4. Road Diet



4-A. Road Diet + Wider Sidewalks + Parking



4-B. Road Diet + Wider Sidewalks + Separated Bike Lanes



4-C. Road Diet + Parking + Separated Bike Lanes



Alternatives Comparison

While all alternatives intend to incorporate unifying elements associated with safety, active transportation, and transit improvements, some alternatives are better suited to advance these goals than others. The GBI Task Force contributed to a comparison of alternatives to assess how they address target outcomes for the corridor. The alternatives evaluation is presented in Table 6.1.

For six lane sections, **Alternatives 3B** (Bus Lanes + Separated Bike Lanes) and 3C (Bus Lanes + Wider Sidewalks) ranked highest among Task Force participants for responsiveness to corridor-wide goals, while **3A** (Bus Lanes + Parking) and 4B (Road Diet + Wider Sidewalks + Separated Bike Lanes) were raised as potentially suitable for some segments.

Among four-lane segments, **Alternative 1B** (4 Lanes + Separated Bike Lanes) and 1C (4 Lanes + Wider Sidewalks) were identified as most responsive to corridor-wide goals, recognizing that potential options on these segments are more limited.

ALTERNATIVES KEY

Excellent: Likely to achieve the target outcome.

Good: May help achieve the target outcome with some adjustments (e.g. widening sidewalks into development setbacks or incorporating bus bulbs and transit signal priority).

Fair: While improvements are possible, the alternative requires some compromises to achieve the target outcome (e.g. investing in parallel bike corridors, accepting some level of existing transit delay, or a lower likelihood of achieving an operating speed of 25 MPH).

Poor: A regression relative to existing conditions (e.g. transit travel times would increase relative to existing conditions).

Alternatives Selection & Recommendations

Over the next two years, SamTrans and SMCTA will work with Caltrans, C/CAG, MTC, and cities to develop and evaluate corridor designs consistent with these design alternatives. The GBI Action Plan does not identify a preferred alternative, and a single one-size-fits-all cross-section is unlikely to emerge as a preferred alternative. The selection of a preferred alternative for each segment will occur during the PA&ED phase of the Caltrans project development process, and local corridor studies are concurrently identifying and evaluating how these alternatives fit within different community contexts.

Consistent with Actions 2A-2C, the GBI Action Plan recommends that unifying elements associated with safety, active transportation, and transit improvements should be present throughout the corridor to ensure consistency and minimize confusion when transitioning across cities. Specifically, key recommendations include:

- El Camino Real (and/or parallel corridors) should incorporate a corridor-wide all ages and abilities bikeway.
- · El Camino Real should feature transit improvements that reduce travel times, improve reliability, and enhance the user experience.
- Bus lanes should be prioritized where there are slow to moderate bus speeds and excess travel lanes.
- · El Camino Real should incorporate pedestrian improvements everywhere to provide a seamless, connected, and inviting environment for walking.
- New developments present the best opportunity to widen sidewalks and create a more vibrant pedestrian realm.

The Caltrans project development process and its relationship to alternatives evaluation and selection of a preferred alternative is described in the following section.

Figure 6.1. Alternatives Comparison

	VARIANT		EXPECTED PERFORMANCE AGAINST TARGET OUTCOMES					r
ALTERNATIVE			WALKABLE PEDESTRIAN ENVIRONMENT	CONTINUOUS LOW- STRESS BIKEWAY	EFFICIENT TRANSIT CORRIDOR	CONTEXT-SENSITIVE OPERATING SPEEDS	GBI TASK FORCE - OVERALL ASSESSMENT	ii t
	1A: 4 Lanes + Parking	Mass-ssalt	Good	Fair	Fair	Excellent	Fair	9
1: Maintain 4 Lanes	1B: 4 Lanes + Separated Bike Lanes	W.aa-aaa. <mark>∤</mark> ®	Good	Excellent	Fair	Excellent	Good	
<u> </u>	1C: 4 Lanes + Wider Sidewalks	utilas-aas tii	Excellent	Fair	Fair	Excellent	Good	
	2A: 6 Lanes + Parking	<u> </u>	Good	Fair	Good	Fair	Fair	
2: Maintain 6 Lanes	2B: 6 Lanes + Separated Bike Lanes	## <mark>#######################</mark> ###########	Good	Excellent	Good	Fair	Fair	
888-8888	2C: 6 Lanes + Wider Sidewalks	AULARA-RRESLIM	Excellent	Fair	Good	Fair	Fair	
	3A: Bus Lanes + Parking	Ma∏aa-aaa∰alt	Good	Fair	Excellent	Excellent	Good	
3: Bus Lane Conversion	3B: Bus Lanes + Separated Bike Lanes	ATT BASSASS UNI	Good	Excellent	Excellent	Excellent	Excellent	٦ ء
B aa•aaa ≘	3C: Bus Lanes + Wider Sidewalks	ANNI <mark>∓</mark> aa-aaa ≡ l⊬t	Excellent	Fair	Excellent	Excellent	Excellent	d
	4A: Road Diet + Wider Sidewalks + Parking	Attisas-aaasi Mi	Excellent	Fair	Poor	Excellent	Fair	
4. Road Diet	4B: Road Diet + Wider Sidewalks + Separated Bike Lanes	ANTI SA SASTIM	Excellent	Excellent	Poor	Excellent	Good	
88 - 888	4C: Road Diet + Parking + Separated Bike Lanes	Alless-ssall#	Good	Excellent	Poor	Excellent	Fair	



Funding & Implementation

Funding Approach

Though the scope of changes to El Camino Real is yet to be determined, a corridor-wide redesign will be one of the largest transportation projects in San Mateo County. Based on costs of comparable projects, redesigning El Camino Real is expected to cost up to \$1 billion. Projects of this size involve a range of funding sources and usually are split into phases and segments; SamTrans and SMCTA will refine an implementation and phasing approach as the project development process moves forward. The following funding sources are expected to play a role in funding projects on El Camino Real.

Countywide & Regional Funding Sources

Funding from San Mateo County's Measure A and Measure W, which is distributed by SMCTA, is anticipated to be the main funding source for improvements to El Camino Real. As a project of countywide significance, SMCTA may fund up to 50 percent of total project costs. SMCTA's Highway Call for Projects is expected to be the primary funding source for major streetscape projects, while the agency's Pedestrian & Bicycle Program, Transportation Demand Management Program, and Regional Transit Connections Program are possible funding sources for smaller scale, more focused

Corridors. Active

Transportation

Programs (ATP)

Regional

Opportunities

Share, BusAID

Regional Measure
3. ATP Regional

Figure 7.1. Funding Strategy

up to \$1B **OVERALL GBI PROGRAM** Rough order of magnitude cost for up to 22 miles of streetscape redesign (\$2025) up to \$500M up to \$500M **FUNDING** Up to 50% of total project costs **Funding Gap BREAKDOWN** from SMCTA Measure A & W Program **NEXT STEPS SMCTA takes Federal State Opportunities** actions to become **Opportunities** Local Partnership, project co-sponsor 5307 Formula Solutions for Congested

funds. CIG/Small

Starts, earmarks

projects. SMCTA intends to update policies related to the Measure A and W to only fund projects consistent with the Action Plan on El Camino Real.

The Metropolitan Transportation Commission distributes capital improvement grants via various programs that distribute state and federal funding sources in addition to revenue from the Bay Area's bridge tolls. Many of these funding sources are administered by C/CAG in San Mateo County. These MTC programs include One Bay Area Grants (OBAG), the Lifeline Transportation Program, Bus Accelerated Infrastructure Delivery (BusAID), and the Transportation Development Act (TDA) Article 3 Bicycle and Pedestrian Program:

- OBAG is a program that directs federal transportation funding toward projects and programs in the Bay Area. The program consists of two components: a regional fund administered by MTC targeting projects that align with Plan Bay Area; and a county fund where C/CAG and other Bay Area county transportation agencies nominate local projects for selection by MTC.
- MTC's Lifeline Transportation Program
 uses federal and state funding to finance
 transportation projects in Equity Priority
 Communities across the Bay Area. The program,
 administered by C/CAG in San Mateo County,
 prioritizes projects identified in the communitybased transportation planning process.

- BusAID provides funding toward lower-cost capital improvements that improve transit reliability and travel times. The program funds a variety of infrastructure projects including transit lanes, signal priority, stop relocations, and bus stop speed improvements.
- TDA is a state program that uses revenue from fuel taxes to fund transportation improvements. Article 3 of the TDA allows up to two percent of these revenues to be distributed to cities and counties for local transportation projects. MTC reviews project applications for TDA 3 funding in the Bay Area and C/CAG solicits projects from San Mateo County's cities.

The Bay Area Air Quality Management District (BAAQMD) also distributes funding from car vehicle registration fees in the Bay Area toward sustainable transportation projects. Of this funding, which is collected from a \$4 surcharge on Bay Area vehicle registration fees, 40 percent of revenue is distributed to county transportation agencies for local transportation and clean air vehicle projects. C/CAG administers these funds in San Mateo County.

SMCTA and C/CAG are also exploring future funding mechanisms that can be used to mitigate environmental impacts associated with increasing vehicle miles traveled (VMT) from development projects and highway expansions. A possible VMT bank, exchange, or similar VMT mitigation program for transportation and land use projects may fund improvements to El Camino Real, for example, and would not be included in the 50 percent funding cap for SMCTA funds.

FUNDING 7

State Funding Sources

The State of California administers various funding programs for complete streets and transit improvements on El Camino Real. Caltrans funding sources include a portion of the State Transportation Improvement Program (STIP). STIP is a joint federal and state funding source that includes two sub programs: the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). Caltrans manages the ITIP program, which accounts for 25 percent of STIP funding. MTC, in cooperation with county congestion management agencies like C/CAG, manages the remaining 75 percent through the RTIP program.

Caltrans also administers the SHOPP program, which mostly focuses on repair and resurfacing projects on state highways. SHOPP projects must be initiated by Caltrans, meaning that locally prepared PIDs are not eligible for SHOPP funding, but SHOPP projects can incorporate pedestrian, bicycle, and transit improvements. The Proactive Safety and Reactive Safety programs are subprograms of SHOPP and fund safety improvements targeting specific intersections or segments with a high risk or recent history of collisions.

The California Transportation Commission (CTC) administers multiple programs applicable to El Camino Real, including the bicycle- and pedestrianfocused Active Transportation Program (ATP), the congestion reduction focused Solutions for Congested Corridors Program (SCCP), and the Local Partnership Program (LPP) which provides funding toward various transportation improvements.

The California State Transportation Agency (CalSTA) administers several grant programs, including the Transit and Intercity Rail Capital Program (TIRCP) which funds capital improvements that reduce greenhouse gas emissions and increase transit ridership and is best suited to transformative projects such as bus lanes and transit center access improvements.

Federal Funding Sources

In addition to the federal funding distributed by MTC, the U.S. Department of Transportation administers various grant programs funded by the Infrastructure Investment and Jobs Act, such as the Better Utilizing Investments to Leverage Development (BUILD) grants, which target regionally significant infrastructure projects, and the Safe Streets and Roads for All program, which provides grants focused on safety improvements. The Federal Transit Administration administers the Small Starts program and Core Capacity program, each of which can fund bus rapid transit projects. Federal funding programs are expected to evolve with the next transportation bill, as the Infrastructure Investment and Jobs Act will expire at the end of 2026.

Local Funding Sources

Cities may require development impact fees, environmental impact mitigations, or community benefit contributions associated with new development projects on or near El Camino Real. Cities may also designate community facilities districts (also known as Mello-Roos districts) to levy special property taxes within specific areas to fund streetscape projects. Public-private partnerships represent a potential ongoing funding source for streetscape maintenance, either conditioned on specific development projects or as a business improvement district where maintenance costs are shared across various entities.

Where We Go From Here

The GBI Action Plan represents the first step toward analyzing, evaluating, designing, and constructing streetscape projects on El Camino Real. The GBI Action Plan, alongside local corridor studies discussed in Chapter 4, provides a framework to assess corridor-wide needs and identify project alternatives.¹ Following the GBI Action Plan, SamTrans will begin a Project Initiation Document (PID) in 2026 that formally kicks off the Caltrans project development process, establishing the scope, analysis methodology, schedule, and rough order of magnitude costs

of a complete streets project on El Camino Real in San Mateo County. After the PID, the Project Approval and Environmental Document (PA&ED) phase will advance another round of public engagement and identify a preferred alternative (estimated to occur in 2027 to 2028). The Project Specifications and Estimates (PS&E) phase will carry forward the final design and engineering of the preferred alternative (around 2028 to 2029). Depending on funding, construction could begin in the early 2030s. Figure 7.1. and 7.2. summarize this process and the proposed GBI approach.

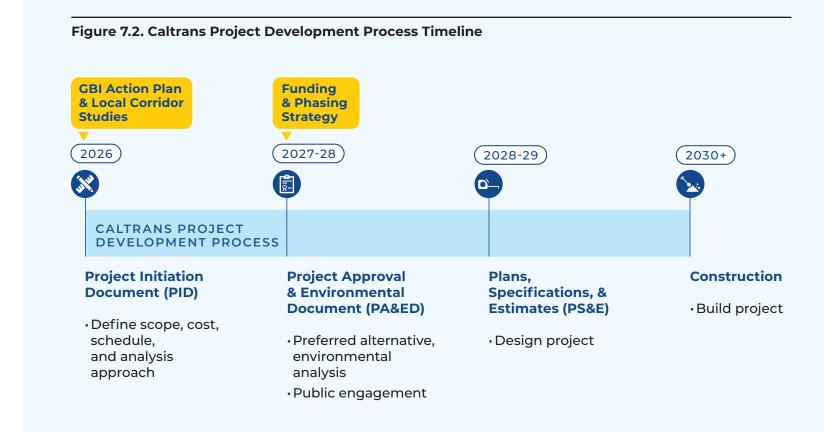


Figure 7.3. Caltrans Process Approach



Project Initiation Document (PID)

The PID is a planning level document that establishes the scale and purpose of planned improvements to Caltrans' right-of-way. The document includes the project's purpose and need statement, a preliminary scope of improvements, and the proposed analysis methodology. The PID usually includes multiple project alternatives to appropriately capture the potential range of changes under consideration.

Proposed GBI Approach by SamTrans and SMCTA

SamTrans will lead the development of a countywide PID building upon the GBI Action Plan along El Camino Real. A countywide PID presents an opportunity to streamline and accelerate scoping and analysis while maintaining flexibility to continue advancing local planning efforts. All cities along El Camino with recent or ongoing corridor planning studies would be included in the PID. By participating in the countywide PID process, cities will not need to pursue their own overlapping project development process within the study area.



Project Approval & Environmental Document

The PA&ED phase provides a more detailed analysis of project alternatives, such as traffic operations, safety, and environmental analysis. A preferred alternative is selected during the PA&ED phase.

Proposed GBI Approach by SamTrans and SMCTA

The level of effort necessary to complete the PA&ED and PS&E phases is uncertain. Depending on the phasing and funding strategy, the PA&ED and PS&E phases may be led by SamTrans/SMCTA or by individual cities.



Project Specifications & Engineering

The PS&E phase involves final design and engineering of the preferred alternative.



SB 960 and Potential Effects on Caltrans Approval Process

Senate Bill 960 (SB 960), approved in 2024, supports the implementation of transit priority and complete streets projects on state highways like El Camino Real. SB 960 requires Caltrans to adopt a new transit policy to guide the implementation of transit priority measures on the state highway system. The draft policy was released for review in July 2025. The bill also requires Caltrans to develop and adopt a project intake, evaluation, and encroachment permit review process for complete streets facilities sponsored by a local jurisdiction or a transit agency, with the intent of streamlining such projects. El Camino Real represents a strong candidate to demonstrate how Caltrans' transit policy and review process can expedite project approvals.

The Grand Boulevard Initiative Task Force and Working Group will continue to collaborate through this process, including during the selection of a preferred alternative for each segment of El Camino Real. Selection of a preferred alternative will involve public engagement as well as collaboration between SamTrans, SMCTA, C/CAG, cities, and Caltrans to advance the shared corridor-wide vision and goals identified in the GBI Action Plan while tailoring design approaches to local contexts. The Working Group will also provide input in project delivery approaches.

In parallel, Caltrans, SamTrans, and cities will continue to fund and implement spot improvements advancing the GBI Action Plan goals, such as changes to intersections, pedestrian facilities, bus stops, or traffic calming. These improvements are typically advanced through SHOPP projects. grants from SMCTA, C/CAG or MTC, or development projects; however, they are usually smaller-scale and lack resources to fully redesign multi-block segments of the corridor.

