



SAN JOSÉ

BETTER BIKE PLAN



2025

Draft September 2020

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

CITY STAFF

John Brazil, *Project Manager*
Ryan Smith, *Deputy Project Manager*
Andrea Arjona Amador
Peter Bennett
Jim Bittner
Nick Danty
Colin Heyne
Agustin Cuello Leon
Ramses Madou
Janneke Strause
Sherie Tan

COMMUNITY PARTNERS

Latinos United for a New America (LUNA)
Veggielution
Vietnamese Voluntary Foundation (VIVO)
Natural Resources Defense Council

BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

Brandon Alvarado, *Chair*
Daniel Filip, *Vice Chair*
Timm Borden
Scott Broberg
Richard Coolman
Michael Norris
Emily Schwing
Gail Seeds
Diane Solomon
Geroge Voon

CONSULTANT TEAM

Toole Design
Winter Consulting
Crossroad Lab
EMC Research

TECHNICAL ADVISORY COMMITTEE

Devin Gianchandani, *Department of Transportation*
Rick Scott, *Department of Transportation*
Jessica Zenk, *Department of Transportation*
Robert Herrera, *Fire Department*
Scott Green, *Mayor's Office*
Blage Zelalich, *Office of Economic Development*
Beth Tidwell, *Parks, Recreation and Neighborhood Services*
Yves Zsutty, *Parks, Recreation and Neighborhood Services*
Michael Brilliot, *Planning Division*
Robert Rivera, *Planning Division*
Sal Kumar, *Public Works Department*
Lauren Ledbetter, *Santa Clara Valley Transportation Authority*
Ellen Talbo, *Santa Clara County*
Matt Nichols, *Metropolitan Transportation Commission*
Kara Oberg, *Metropolitan Transportation Commission*
Ben Botkin, *Association of Bay Area Governments*
Sergio Ruiz, *Caltrans District 4*





CONTENTS

Chapter 1: Introduction	2
Chapter 2: Community Voices	14
Chapter 3: Existing Conditions	28
Chapter 4: A Next Generation Bike Network	50
Chapter 5: Implementation Strategy	68

MAPS

Map 1: Bicycle High Injury Network	35
Map 2: Existing Bike Network	39
Map 3: Level of Traffic Stress Analysis	41
Map 4: Network Connectivity Analysis	45
Map 5: Potential Bicycle Demand	47
Map 6: Proposed Bike Network	60
Map 7: Focus Areas	73
Map 8: Prioritized Bike Network	74
Map 9: Five-year Investment Strategy	80





CHAPTER 1

INTRODUCTION

BETTER BICYCLING IN SAN JOSÉ

CHAPTER 1: INTRODUCTION

Better Bicycling in San José

The Department of Transportation has a long-standing commitment to the mobility, health, and safety for the people of San José. Through the construction of an extensive on-street bike network and supportive programs and policies, the city is transforming into one of the most bike-friendly communities in North America. In this chapter, learn more about the rich history of bicycle riding in San José, the current urban context, and related planning efforts that support the development of this bike plan. Also learn about the ambitious goals set by the City's leadership in collaboration with your community. This is your San José Better Bike Plan 2025.

San José is a place where biking is a daily activity for a growing number of people. Situated between the mountains of California's coast ranges on the southern shore of San Francisco Bay, San José is Northern California's largest city and the capital of Silicon Valley. With over 300 days of sunshine per year and relatively flat topography, San José is an ideal place to bike. Over the past sixty years, San José has witnessed a dramatic transformation from an agricultural-based economy into the world's largest concentration of technology-based companies that we all know today. This combination of an industrial history, the presence of natural resources, and a mild climate has resulted in a growing city of over one million people. Due to this rich history, San José has also become one of the most diverse cities in the United States with large Latinx and Vietnamese populations.



A buffered bike lane and on-street bike parking corral

During the last sixty years of growth, San José spread rapidly to places where land was cheap and plentiful which resulted in relatively affordable housing for a time. During much of this period, San José built significant new housing and served largely as a bedroom community for the greater south bay. In recent years, however,

continued population growth has resulted in dramatic housing shortages and decreased affordability. The Bay Area welcomed new employers while simultaneously limiting denser, multi-family development through political action and community sentiment. Resulting development patterns have made San José’s daily commute the fifth-longest in the nation, with residents spending an average of eighty-one extra hours a year commuting in private vehicles.¹

In addition, the same development patterns have perpetuated historic racial segregation and income inequities as San José’s low-income communities, which are disproportionately Latinx and Vietnamese, have a harder time keeping up with rising housing prices. Displacement, the movement that happens when a household must relocate out of their home for reasons outside of their control, is extreme in the Bay Area. For every single high-income resident that moves in, six low-income residents move out. These shifts in housing patterns result in longer commutes and access to fewer opportunities.² Low-density development patterns and transportation needs result in San Joséans allocating an average of 44 percent of their income on the combined cost of housing and transportation.³

The resulting city is not as bike friendly as it could be. Lack of density and single-use zoning result in an urban area where housing, jobs, and shopping are spread out. Transportation infrastructure has followed suit with auto-oriented streets catering to long car trips. In recent years, the City of San José has sponsored numerous initiatives to create safer streets and more bikeable neighborhoods. The City’s Vision Zero Initiative sets out a strategy to eliminate traffic-related deaths and serious injuries. To encourage more compact development, San José measures a development’s multimodal efficiency using Vehicle Miles Traveled (VMT), a standard that creates a more balanced transportation system and does not favor travel by driving a car. The City has also created Urban Village Growth Areas that specify walkable, bicycle-friendly, and transit-oriented development. In addition, the City has increased its investment in transit and transit access. The City’s Bicycle Team has completed more than thirty projects reallocating roadway space for bikes, such as lane reductions and parking reallocation.

1 Texas A&M. Urban Mobility Report 2019, 2019.

2 San José Anti-Displacement Network Team. Community Strategy to End Displacement in San José, 2020.

3 Housing and Transportation Affordability Index, Center for Neighborhood Technology, accessed March 2020, <https://htaindex.cnt.org/map/>.

Better Bike Plan 2025 Development Priorities



A COMMUNITY-FOCUSED PLAN

The Plan reflects feedback and specific recommendations from community members.



BETTER BIKEWAYS ALL AROUND TOWN

This Plan will bring high quality biking citywide!



INVESTING IN SAFER STREETS

San José is investing in safety improvements where they are needed most.



OVERCOMING BARRIERS TO BICYCLING

This Plan identifies significant barriers, such as trail flooding, and addresses them in the Plan recommendations.

San José has the potential to be a great biking city. Because biking is an affordable, zero-emission mode of transportation that requires very little space per user, it has the potential to address many of the City’s most pressing issues which include traffic safety, congestion, climate change, and socioeconomic inequity. The San José Better Bike Plan 2025 sets the vision for a safe, direct, and connected citywide bike network that supports people’s daily needs.

HISTORY OF BIKING IN SAN JOSÉ

GOLDEN AGE OF BIKE RACING

1842

San José resident Alexandre Lefebvre builds a velocipede (predecessor to the modern bicycle)

1890s

Bike racing is the top sport in San José and around the world

1934

Release of "The 6 Day Bike Rider," a film about San José two-time cycling Olympian Henry "Cocky" O'Brien



1884

First bicycle clubs in San José

1895

Idelia Allen of the African American San José Cyclers breaks the world record for the women's mile coast

1936

Garden City Velodrome is built with WPA funds and patterned after Madison Square Garden; becomes the only Velodrome west of Chicago

ROAD RACING & THE BEGINNINGS OF BIKE ADVOCACY

1956

Pedali Alpini bike club members go to Italy, came back pioneering multi-speed bikes and long-distance road racing

1971

San José's Phil Wood & Co.'s innovations in hubs and bottom brackets revolutionizes both bicycles and wheelchairs, increasing mobility for wheelchair users



1970

Silicon Valley Bicycle Coalition founded

First bike lane built in San José

2009

197 miles of on-street bikeways have been constructed. City adopts goal to complete 500 miles of bikeways by 2020

2012

First protected bike lanes and buffered bike lanes

2015

2015 Lincoln Avenue road diet leads to 83% increase in bike traffic

City adopts Vision Zero

2017

First pop-up protected bikeway



2007

World's first Bike Party founded in San José

2011

City adopts goal of at least 15% of trips made by bike by 2040

2013

First green lanes

2016

City publishes the Trail Program Strategic Plan

2018

Completed 379 miles of 500 mile goal



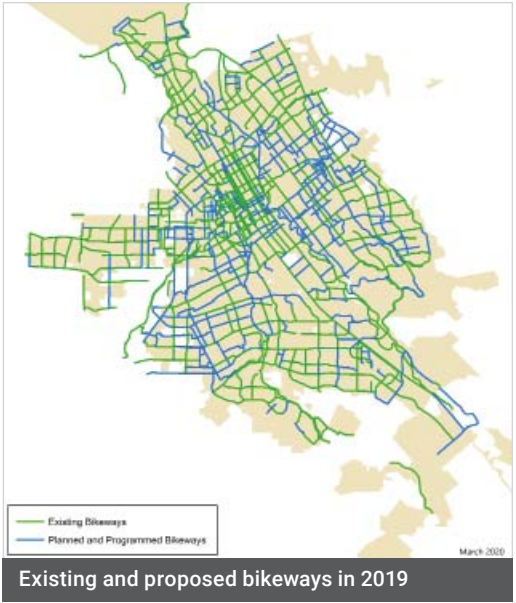
SAN JOSÉ BECOMES A BIKE FRIENDLY CITY

Background

Past planning efforts, such as the previous San José Bike Plan, adopted in 2009, and *Envision San José 2040 General Plan* (the City’s long-term comprehensive plan) set an ambitious stage for the Better Bike Plan. In addition, the City installed a network of separated bike lanes and protected intersections throughout Downtown through the Better Bikeways Project in the summer of 2018 and 2019.

Early adoption of preservation policies, including a growth boundary for new development, have provided opportunities for the City to develop its world-class network that connects neighborhoods to each other and to the natural environment. To make biking more accessible via city streets, the City adopted the 2009 Bike Plan. That plan established on-street bikeway projects, policies, and programs to make bicycling an integral part of daily life. While the first on-street bike lanes were installed in the 1970s, the 2009 plan resulted in an unprecedented amount of bikeway construction, bringing the City’s total

bikeway system to 392 miles of on-street bikeways and sixty-two miles of multi-use paths (also known as trails) by 2020. While this plan focuses on the part of the bikeway network that is on-street, trails are an important part of San José’s bike network. In 2016, Department of Parks Recreation and Neighborhood Services published the Trail Program Strategic Plan, outlining a strategy to complete San José’s 100-mile trail network. Learn more about the trail network on page 38.



Progress since the 2009 Bike Plan

	2009 Bike Plan Goals	2020 Status	Better Bike Plan 2025
Miles of Bikeways	Build 400 miles on-street bikeways and 100 miles of multi-use paths (aka trails)	<ul style="list-style-type: none"> • 392 miles of on-street bikeways (including 6 miles of protected bike lanes) • 62 miles of trails 	Build a 100-mile low-stress, connected network
Bicycle Mode Split	5%	<ul style="list-style-type: none"> • 1% Citywide • 4% Commute to Downtown 	<ul style="list-style-type: none"> • 15% citywide by 2040 • 20% citywide by 2050
Bike Crashes	Reduce crashes by 50%	<ul style="list-style-type: none"> • Vision Zero Policy adopted. • Consistent reduction in the number of crashes involving bicycles every year. 	Eliminate all roadway fatalities and major injuries, in line with Vision Zero San José
Bike Parking	Add 5,000 bike parking spaces	<ul style="list-style-type: none"> • 3,450 bike parking spaces and 20 lockers installed. 	Expand the availability of sidewalk bike parking, secure bike parking, and end-of-trip facilities at transit stops
Bike Friendly Status	Achieve Gold	Currently Bronze	Achieve Gold
Shared Micromobility	Implement a public bike share system	<ul style="list-style-type: none"> • 82 Bikeshare station • 1,000 Bikeshare bikes • 750 Dockless e-bikes • 5 Scooter companies with 5,600 total vehicles 	Expand shared micromobility (bike and scooter share)

A Plan for Everyone

The vast majority of the City’s on-street bikeways built over the last decade are traditional bike lanes and shared bike routes that use pavement markings and signs for bicyclists. While this is an incredible accomplishment, many people aren’t comfortable riding bikes so close to a vehicle without something physically separating them from cars and trucks, particularly on streets with higher vehicle volumes and speeds. For that reason, the City initiated the Better Bikeways project in 2018. Better Bikeways reflects a new philosophy in street design, focusing on rapidly building low-cost, low-stress bikeways that appeal to a wider audience and include more separation from vehicles. These new bikeways have resulted in an enormous improvement in the quality of biking throughout downtown San José. The City’s next step is to replicate and expand the Better Bikeways strategy into surrounding neighborhoods and other key areas of the city.

In addition to better on-street bikeways, the City is embracing new transportation technologies that have the potential to make non-car trips possible for a broader set of the population. The term “micromobility” applies to a growing class of very light personal vehicles such as electric scooters, electric skateboards, shared bicycles and electric bicycles. These devices have rapidly increased in popularity and are often available on-demand through rental or subscription services.

The City is also leveraging changes in transportation and land use to create a more sustainable and multimodal city. *Envision San José 2040 General Plan* (the City’s long-term general plan) includes strategies for infill and transit-oriented development, creating accessible public spaces, and weaving new development into the fabric of the larger city. That plan sets an ambitious goal that 15 percent of all trips will be made by bike by 2040. Climate Smart San José includes a goal of 20 percent of trips by bike by 2050. The City has also adopted focused development plans, such as those in its Urban Villages Major Strategy of the General Plan that create neighborhoods better suited to travel by biking, walking, and public transit.

Another significant effort is the City’s Vision Zero initiative, which set an ambitious goal to eliminate all traffic-related fatalities and serious injuries. The City adopted a Vision Zero Policy in 2015 and the Vision Zero Action Plan, adopted in 2020, outlines a commitment to build robust data tools, form a Vision Zero task force, increase targeted enforcement efforts, and build physical street safety improvements. Given that bicyclists and pedestrians are the most vulnerable transportation users and are vastly overrepresented in collisions, investments in bicycling safety measures are a central element of this initiative.

These progressive initiatives seek to move the needle on many of today’s great social issues: housing and transportation affordability, quality of life, public health, mobility, and climate change.



Bike lane on Willow Street



Protected bike lane on 3rd Street

WHO IS THIS PLAN FOR?

San José residents generally fall into four types of bicyclists:

STRONG & FEARLESS

Very comfortable on streets without bike lanes



ENTHUSED & CONFIDENT

Very comfortable on streets with striped bike lanes

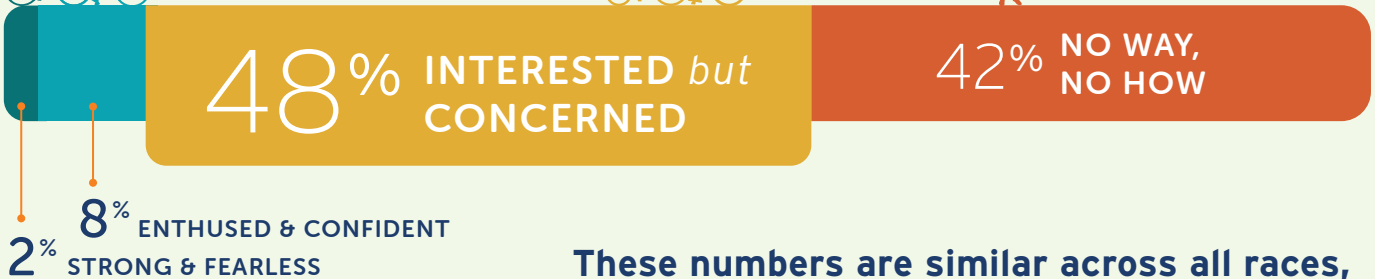
INTERESTED BUT CONCERNED

Only comfortable on streets with buffered or separated bike lanes. Interested in biking more.



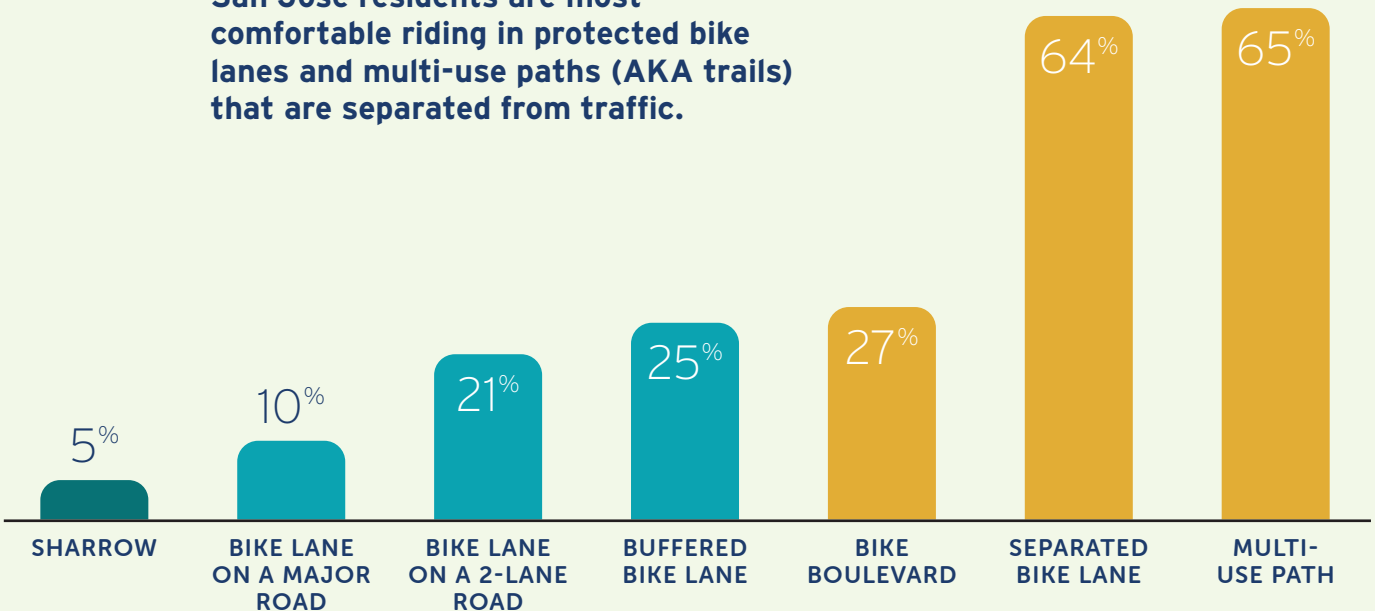
NO WAY, NO HOW

Unable, uninterested, or uncomfortable riding bikes.



These numbers are similar across all races, ethnicities, sexes, and ages in San José.

San José residents are most comfortable riding in protected bike lanes and multi-use paths (AKA trails) that are separated from traffic.



What will this Plan achieve?

The Better Bike Plan is designed to achieve three ambitious goals:

PLAN GOALS



Improve Safety

No one should die or suffer from a serious injury as a result of biking in San José. The Vision Zero San José initiative sets the goal of eliminating roadway fatalities and major injuries for all people, whether walking, bicycling, or driving, as soon as possible. This Plan prioritizes projects on roadways that are on the [Vision Zero High Injury Network](#) as well as projects on streets where the majority of the bicycle crashes occur. The Better Bike Plan recommendations are centered around current best practices in bikeway design, which are proven to reduce bicycle crashes.



Increase Mode Share

Complementary planning efforts have already set ambitious goals for bicycling in San José. This Plan outlines how the city is going to reach or exceed them by increasing the bicycle mode share - the percentage of trips that people make by bike.

15% by 2040

(Envision San José 2040 General Plan)

20% by 2050

(Climate Smart San José)



Lead with Equity

Past transportation decisions have prioritized more exclusive, expensive forms of transportation, built highways through low income neighborhoods, and disproportionately paved, rebuilt, and upgraded streets in more affluent neighborhoods. Access and availability of transportation options are not experienced equitably. Recognizing this, the Better Bike Plan incorporates inclusive planning practices and provides a project list aimed at prioritizing investments in communities that have historically experienced a lack of investment.

To achieve these goals, the Better Bike Plan 2025 sets this vision San José is a city where people of all ages, abilities and backgrounds can comfortably and conveniently bike for daily trips.

PLANNING PROCESS TIMELINE

COMMUNITY CONVERSATIONS

Read More in Chapter 2: Community Engagement

2018

GATHERING INFORMATION

Read more in Chapter 3: Existing Conditions

- » Plan & policy review
- » Field review
- » Demographic trends
- » Citywide spatial analyses
 - + Demand
 - + Safety
 - + Connectivity
 - + Comfort

- Workshop 1
- Community partnerships established
- Neighborhood Meetings
- Viva Calle pop-up
- Community survey

2019

DEVELOPING RECOMMENDATIONS

Read more in Chapter 4: Recommendations

- » Research on
 - + International best practices
 - + Bike facility design
 - + Micromobility
 - + Bike parking
- » Policy and program recommendations
- » Bike network recommendations

- Workshop 2
- Vietnamese mobile workshop & focus group
- Spanish bike party & workshop
- Village Fest pop-up
- Viva Calle pop-up

2020

CREATING THE PLAN

Read more in Chapter 5: Implementation

- » Implementation Strategy
 - + Prioritized projects, policies, and programs
 - + Cost estimates
 - + Investment Scenarios
 - + Five-year project list
- » Draft and Final Plan Document
- » City Council Adoption

- Virtual Workshop 3 (English, Spanish, Vietnamese)
- Neighborhood meetings
- Interactive webmap

What is in the Better Bike Plan?

The Better Bike Plan lays out a vision for a safe and connected network of on-street bikeways that will empower people of all ages and abilities to travel by bicycle. This includes an assessment of the current biking environment and the network connections, projects, bikeway designs, and policies needed to improve biking in San José.

The following chapters present key information related to the plan-making process, the recommended projects and programs, and the methods for prioritizing and implementing these recommendations to achieve the Plan's goals.

Chapter 2: Community Engagement

In this chapter, learn about all the ways that the City of San José involved community members in the development of the Better Bike Plan. Hear what people had to say and how the City will continue to involve the community in bikeway development.

Chapter 3: Existing Conditions

Read about what it is like to ride a bike in San José today, what people say about biking in San José, and how that will inform future investments.

Chapter 4: Recommendations

This is where it all comes together: based on the City's existing conditions and community input, this chapter lays out a plan for completing the Better Bike Plan vision. This includes programs, policies, and physical bikeways.

Chapter 5: Implementation

A connected, city-wide bike network with supportive programs and policies cannot be built overnight. This chapter sets out a plan for prioritizing and implementing this work.

Key Definitions

Below are some key terms that will be used throughout this plan document. Many jurisdictions and government agencies define these terms locally; these definitions apply to the San José Better Bike Plan 2025.

Bikeway

Any street or path that is designed to accommodate people on bikes. This includes a bike boulevard, a street with a bike lane, a protected bike lane, or a multi-use path (also known as a trail).

Communities of Concern

Communities of Concern include a diverse cross-section of populations and communities that could be considered disadvantaged or vulnerable now and in the future. Communities of Concern can have high levels of households with minority or low-income status, seniors, people who have limited English proficiency, people who have disabilities, and more.

Disadvantaged Groups

Women, people of color, people with disabilities, non-English speakers, low-income populations, people 65 and over, and youth.

Low-Stress Bike Network

A bike network that is comfortable to a broad range of users, including those that are not comfortable sharing the roadway with automobiles. Read more about this in Chapter 3: Existing Conditions.

Micromobility

A mode of transportation that consists of very light personal vehicles such as electric scooters, electric skateboards, shared bicycles and electric bicycles.

Mode share

The percentage of trips made by a certain method of travel.

Tôi sẽ đạp xe nhiều hơn nếu...

I would bike more if...

Me gustaría andar en bicicleta más si...

Road diet @ Foxworthy + Rubino Dr

- BIKE Lanes were separate, physically, from the roads. +1
- Safer to ride on streets, i.e. bumpers, bike lanes
- my bike didn't get stolen
- The streets were cleaned more often so that there is no debris in the bike lanes.

- Inside Emma Prusch Park





CHAPTER 2

COMMUNITY VOICES

CHAPTER 2: COMMUNITY VOICES

The Better Bike Plan 2025 is for everyone who lives, works, or plays in San José. To build a bike network that will work for a group this large and diverse, the City of San José sought to engage as many people as possible during the outreach process. The amount of transportation data, mapping information, location images, and condition information available to the creators of this Plan is unprecedented. However, this information won't tell us why someone chooses not to ride a bike, where people would like to go on a bike, or the specific transportation barriers that people in San José face.

The goal of engagement is to gather meaningful information and insights to inform decision-making so that outcomes address peoples' needs. To that end, a wide range of stakeholders were asked for their input to better understand bicycling issues and opportunities in San José.

Engagement does not stop with the publication of this Plan. Using feedback collected during the process, the City has identified methods to continue meaningful conversations as bikeways are installed, programs implemented, and policies adopted. Including San José's diverse array of communities in every step of this process is critical to the goals of the Better Bike Plan 2025.

A Community-Focused Plan

Over the course of eighteen months, the community's feedback directly informed the development of the recommendations in this Plan. Creative outreach strategies enabled us to hear from a diverse range of viewpoints, including from people not typically engaged in planning processes. Outreach was conducted in neighborhoods across the city and focused on demographically diverse groups.



A San José community member strikes a “track stand” pose for the camera.

Engagement Process

Given the Plan’s mode share and equity goals, this community engagement process focused on reaching people who may be interested in biking but are hesitant for some reason or may not have yet considered biking. In the past, the City’s outreach efforts on bike related projects and plans focused on reaching people who already rode a bike in order to improve their experience. This Plan’s engagement process used a range of strategies to understand the barriers to bicycling people face, as well as the barriers faced by those who already enjoy bicycling.

The Better Bike Plan’s vision is ambitious. Creating a plan to advance that vision required building deep and genuine human connection across the entire city. Plan engagement was organized around four phases:



Phase I: Listen



Phase II: Partner



Phase III: Gather Feedback



Phase IV: Follow Through

Guiding Engagement Principles

Build on prior and ongoing planning efforts:

People in San José have already participated in numerous studies, plans, and publications that include recommendations for the bikeway network. This Plan considers all of that feedback and builds on and strengthens those efforts.

Build on existing stakeholder relationships:

This plan builds community engagement on existing relationships, drawing on local agency knowledge to understand the local context and identify appropriate stakeholders to engage.

Engage stakeholders effectively and equitably:

Work with existing Community-Based Organizations (CBOs) to identify effective stakeholder engagement activities, encourage direct participation from a variety of communities, and incorporate feedback into ongoing deliberations. Translation for written materials and interpretation at events were provided in Spanish and Vietnamese.

- ✓ **Over 600** PEOPLE ENGAGED IN PERSON
- ✓ **4** BIKE PLAN WORKSHOPS
- ✓ **22** NEIGHBORHOOD, COMMUNITY, AND BUSINESS ASSOCIATION MEETINGS
- ✓ **19** COMMUNITY EVENTS
- ✓ **270** COMMENTS ON THE ONLINE MAP
- ✓ **3720** PEOPLE REACHED ONLINE VIA DIGITAL MEETING ENGAGEMENT (YOUTUBE, FACEBOOK)



Phase I: Listen

In this initial phase, the City listened and learned about the many different perspectives and experiences of biking in San José. Feedback gathered at neighborhood events, community group meetings, business group meetings and pop-up events during this phase informed plan development.

Viva CalleSJ

One example of a Listening outreach activity involved tabling at Viva CalleSJ, San José’s open streets event. Viva CalleSJ is a free event that opens miles of San José streets to walkers, bikers, skaters, and people who just want to play in the street. Events like these help people engage with their streets and explore their city in a brand-new way. They are also great places to talk about the future of streets in a relaxed and unscripted setting. Throughout the development of the Better Bike Plan, the project team attended three Viva Calle events. Over 300 people stopped by the San José Better Bike Plan 2025 tent.

We Asked, You Said...

Which streets should we improve first?

- » Monterey Road
- » Senter Road
- » Almaden Expressway
- » Crossings of major streets and freeways
- » Camden Ave / Hillsdale Ave / Capitol Ave
- » Coleman Ave
- » Willow St / Keyes St / Story Rd

Where do you like to bike?

- » Branham Lane
- » Chynoweth Avenue
- » Along San José’s Trail Network

What else can be improved?

- » Street sweeping
- » Rough pavement
- » Enforcement of blocked bike lanes

I would bike more if....

- » There were more people biking
- » Biking was more convenient – more signage, complete network, access to destinations
- » People biking were more separated from cars!



A child writes on a whiteboard at the Viva Calle event in September 2018, to answer the question, “I would bike more if...”



A group of wet but intrepid bicyclists stand in front of a tent at the rainy Viva Calle event in May 2019

What do neighborhoods need?

To achieve the Better Bike Plan's goals, the City recognizes the importance of involving people who don't already identify as bicyclists. Connecting with neighborhood groups and business associations is an effective way to do this. These groups often have deep relationships with community members and a thorough understanding of the local culture. Building a foundation of trust with local neighborhood-based groups is also essential to generate support for projects.

During the first phase of the project, City staff talked to over 600 people at twenty-two meetings with neighborhood associations, local business groups, community meetings, and neighborhood-based celebrations.

Meetings and events

- » Cory Neighborhood Association
- » SUN Neighborhood Association
- » District 1 Leadership Group
- » District 3 Community Leadership Council
- » District 6 Leadership Council
- » District 8 Community Round Table
- » River Oaks Neighborhood Association
- » Hensley Historic District Neighborhood Association
- » Plata Arroyo Neighborhood Association
- » Winchester Neighborhood Advisory Committee
- » McLaughlin Tenant Association
- » Shasta Hanchett Park Neighborhood Association
- » Willow Glen Business Association
- » Alameda Business Association
- » Silicon Valley Leadership Group Transportation Committee
- » Silicon Valley Bicycle Coalition – San José Team
- » Alameda Cycle Touring Club (ACTC)
- » VTA Bicycle & Pedestrian Advisory Committee
- » Ride of Silence
- » Tet Lunar New Year Festival
- » San José Bike Party
- » San José Bicycle Pedestrian Advisory Committee
- » San José Better Bike Plan Technical Advisory Committee (TAC)

What we heard

- » All bikeways should be safe for children.
- » Bikeways to schools is a priority
- » Improve biking in retail areas
- » Connect to trails
- » Buses need to be able to accommodate more bicycles
- » More bikeway signage is a priority
- » Increase traffic enforcement for drivers and people on bikes
- » Understand gang boundaries when designing bikeways; some people don't feel comfortable crossing them
- » Provide high quality bikeway maintenance and cleaning
- » Connect East San José to Diridon Station
- » People would bike more if they had access to a bike



A bike signal



Phase II: Partner

Given the diversity and different cultures of the San José community, and a strong desire to ensure participation from historically underrepresented communities, engagement included partnerships with three local community-based organizations (CBOs).

Nearly twenty CBOs were identified and evaluated as potential partners based on their mission, programs, capacity, and how well they aligned with the priorities identified for this planning effort. The priorities focused on identifying communities that exist at the intersection of limited mobility and barriers to public participation, including:

- » Lower-income residents and workers
- » Communities of color
- » People with limited English proficiency (LEP)
- » Youth
- » Seniors
- » People with physical disabilities

In addition to these considerations, the project team evaluated potential partners based on the following criteria:

- » Can these CBOs act as ambassadors between their specific community and the Bike Plan update? How large is their constituency? How effective are they at turning people out?
- » Can the CBO provide a mechanism for the Project Team to understand local issues of importance to various communities? Are they engaged with and understand local transportation issues and planning processes? Do they have staff or volunteer capacity to participate in a meaningful way?
- » Can the CBO serve as a conduit of information to diverse stakeholders who may be too busy themselves to attend a meeting? What are their communication channels including, but not limited to, having established email listservs or an active social media following? How big is their mailing list? How many social media followers do they have?

Based on their deep understanding of local, underserved communities, three San José based CBOs were invited to partner throughout this project: Vegglielution, LUNA, and ViVo.

The CBO partners were engaged at the beginning of the project and convened for an initial luncheon to meet one another and the plan team members. They provided input and guidance throughout the plan on the City's outreach strategy and determined what types of events would be best for getting input from their constituencies. They then co-led workshops, focus groups, and pop-up events aimed to seek this feedback and to better understand what people want out of their biking community in San José.



The San José Better Bike Plan team engaging with community members at Viva Calle in 2018



Veggielution

connects people from diverse backgrounds through food and farming to build

community in East San José in the Mayfair neighborhood where one in three households qualify for public assistance. They utilize a unique community farm model that mobilizes volunteers to cultivate and grow healthy crops, which are then made available to the program participants and other local San Joséans.

"We were excited to partner with the Better Bike Plan team to get our community more civically involved in the planning process with the City that will have a direct impact on the health and wellness of our families."

- Emily Schwing, Veggielution Marketing & Impact Manager

Veggielution hosted the first workshop to gather input for the Better Bike Plan. Veggielution also took this opportunity to permanently integrate the importance of transportation choices into their environmental education curriculum for school children.



A woman holding a drawing of a woman riding a bike. Veggielution hosted a workshop to gather input for the Better Bike Plan



A group of people looking at a map on a table. As part of the workshop at Veggielution, participants provided input on bicycling in San José

Learn more at veggielution.org





Latinos United for a New America (LUNA) has the mission to help Latino immigrants take positive action to address the poverty-related challenges that have hit the Latino immigrant community so hard since the great recession.

LUNA hosted a bike party and workshop in Spanish. Over 70 people joined the event, where LUNA staff led a conversation about the Better Bike Plan. The event took place in an open lot on Havana Street and Midfield Avenue. Community Cycles repaired bicycles for attendees and the City of San José distributed helmets and lights. LUNA led a police cruiser-escorted ride around the neighborhood and returned to a catered lunch with tacos and popsicles.

"I am happy with the event we organized, and my neighbors are asking me when we are going to do it again!"

– Omar Vasquez, LUNA Board of Directors
Community Representative



A group photo with many people and bikes at the Luna Latinos bike party and workshop

Learn more at lunalatinosunidos.org





Vietnamese Voluntary Foundation (VIVO) has the

mission to empower refugees and

immigrants, low income ethnic families to become productive participating citizens, to benefit themselves, their families and their communities.

For Better Bike Plan 2025, VIVO provided a critical link to the Vietnamese community of San José, a group that has been historically less engaged in local planning efforts. San José has the largest Vietnamese community of any American city and is the largest Vietnamese population outside of Vietnam.

“VIVO was grateful for the opportunity to partner with the Better Bike Plan team. We were excited to see the Vietnamese community participate and contribute to the development of new transportation options within their community.”

- Ellena Tran, VIVO Project Coordinator

VIVO hosted a Better Bike Plan focus group conducted entirely in Vietnamese as well as two mobile workshops in San José’s Little Saigon neighborhood to gather input from the Vietnamese community.



A group of local residents posing for a photo at the VIVO focus group meeting

Learn more at vivousa.org



While San José is very diverse, feedback from the CBO-led events was consistent across demographics. Overall, community members voiced a preference for safe, protected, and low-stress bikeways. Connections to schools and transit were also heavily emphasized.

What did we hear?

Safer Connections

Close gaps between existing facilities, improve connections between streets and trails, and build safer connections across major streets.

Improve Image

Promote messaging that focuses on the positive, community aspects of bicycling. Don't lead with the restrictive language pointed at cars and driving.

Connect to Schools

Improve physical bicycle connections to schools. Also increase bike programming in schools that includes Safe Routes to Schools activities and fun events like bike rodeos.

Embrace Micromobility

Encourage new technologies that will decrease car use (such as e-bikes and e-scooters) while ensuring that they are well regulated.

Make Biking Convenient

Improve access to secure bike parking and install more wayfinding signage.

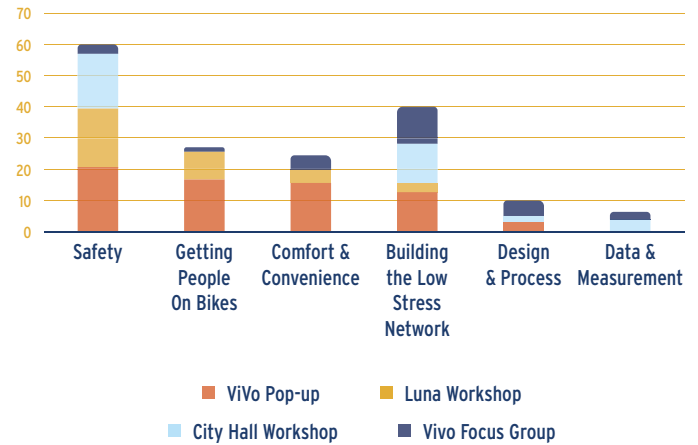
Keep Bike Lanes Unobstructed

Sweep and maintain existing facilities and prioritize enforcement to address illegal parking in bike lanes.

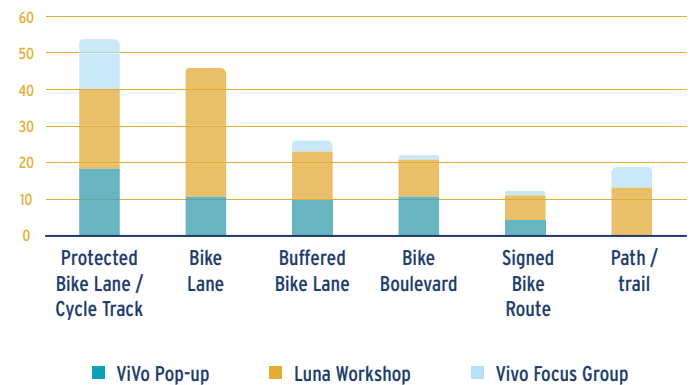
All Ages & Abilities Bikeways

Build protected bikeways on busy streets and traffic-calmed bike boulevards on neighborhood streets.

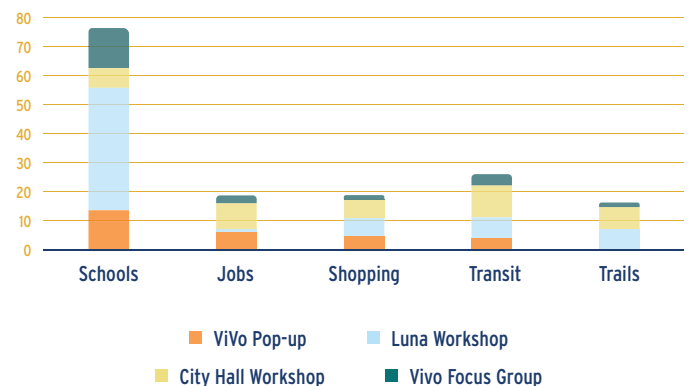
Which policies are most important to you?



Which Type of Bicycle Facility Do you prefer?



Access to _____ is most important to me.



Images and definitions of bikeway types can be found in Chapter 3



Phase III: Feedback

Did we get it right? The final phase of community outreach focused on gathering feedback - does the Plan correctly capture the needs of San José? This phase also celebrated the tremendous amount of work that went into developing the Plan and built support for project implementation.

Events

The City led Phase III of community outreach over the spring and summer of 2020. This coincided with the worldwide COVID-19 pandemic. To share the draft plan with the public, celebrate bicycling in San José, and gather feedback on the plan, the project team pivoted to virtual outreach methods. During the Shelter-in-Place public health order issued by Santa Clara County, a final community workshop was held over live stream rather than in person. City staff and consultants were joined by 456 participants in three languages on Facebook and YouTube.

Moving to a completely digital format, the team looked for creative ways to ensure that people had the opportunity to give feedback. CBOs crafted personal video invitations, hosted public meetings in multiple languages, and published meeting recordings publicly for community members who could not attend live.

The Draft Plan and an interactive web map of the draft bikeway network were made available at the Better Bike Plan website (bikesanjose.com). Hundreds of visitors added their thoughts and ideas directly to the Draft Plan and bikeway network. Many of these comments were incorporated into the plan you are currently reading.

Findings

Live meetings were hosted on two platforms:

- » YouTube: 192 participants
- » Facebook: 264 participants

Live meetings were also hosted in multiple languages:

- » English: 349
- » Spanish: 40
- » Vietnamese: 67

Online Feedback

- » Workshop Questions answered Live by City Staff: 12
- » Bikeway network comments: 270
- » Draft Plan comments: 150





Phase IV: Follow Through

The level of committed engagement included in this Plan's development doesn't end with its publication. Going forward, the City will continue these community conversations as Plan recommendations are implemented to ensure they reflect community needs and priorities.

Continue working closely with neighborhoods

To implement the design and construction of specific bikeways, the City of San José will continue to collaborate closely with neighborhoods and neighborhood groups. This means that City staff will continue to be present at neighborhood meetings and events to broaden trust and continually gather feedback.

Holistic approach

Achieving the goals set out in this Plan requires a holistic approach to community involvement. To advance the three plan goals (Mode Shift, Safety, Equity), the City of San José is committed to growing the diversity of people that bike. In addition, the City will continue developing a culture of trust and understanding with people living in San José. Specific ongoing efforts to be taken on by the City will include:

- » Develop a multi-faceted public relations campaign that expounds on the health, social, and economic benefits of bicycling.
- » Consider providing micro-grants to neighborhood groups and nonprofits to start or expand programs designed to encourage women, people of color, people with disabilities, non-English speakers, low-income populations, seniors and youth to encourage them to bike.
- » Organize additional open streets events, social rides, and other types of inclusive events that encourage people to try biking. Hold similar events multiple times per year to build momentum and support.
- » Continue working with schools and allied organizations to increase biking to school.
- » Seek and amplify the voices of historically underrepresented groups by engaging and supporting individuals or organizations in building a bike culture for women, people of color, immigrants, people with disabilities, LGBTQ communities, low-income people, and seniors and children.

Influence on future community engagement

The Better Bike Plan 2025 experienced overwhelming success with its novel approach of partnering closely with CBOs. This unprecedented process allowed the City to integrate substantial feedback and insights from a diverse group of San Joséans. It also allowed the City to deepen its relationship with the three community partners and consider how it might continue to deepen and expand the relationship between the City and neighborhoods that have long felt overlooked by local government. The Department of Transportation is already looking to incorporate a similar approach in several upcoming plans to prioritize hearing from residents who have not been historically involved in planning the future of the City of San José.



A young San José resident enjoys a bike ride across town. Photo by Sally Schroeder.

THIS PAGE INTENTIONALLY LEFT BLANK





CHAPTER 3

EXISTING CONDITIONS BIKING IN SAN JOSÉ TODAY

CHAPTER 3: EXISTING CONDITIONS

Biking in San José Today

San José is a place where biking is a regular and common activity for many people. To support this, the City has substantially expanded its impressive multi-use path system and on-street bike network. The City is also beginning to install on-street bikeways that appeal to more riders, such as separated bikeways and bike boulevards on low-traffic streets. This chapter summarizes the current biking environment, culture, connectivity, and desire in San José with an eye on the future. The following questions are answered through personal surveys, crash data, network analysis and policy research.

- Who bikes in San José today?
- What prevents people from biking?
- Where can a bike take you in San José?
- Where would people bike more?

The City has advanced many bicycle supportive policies and programs over the last few decades. Since the adoption of the Bike Plan 2020 in 2009, the City has:

- » Installed 195 miles of bikeways for a total network of 392 miles
- » Installed thousands of bike parking spaces, totaling 3,450
- » Implemented a public bikeshare system with eighty-three stations, 1,000 classic bikes, and 250 dockless bikeshare e-bikes



A bike lane and a Bay Wheels bikeshare station

- » Established an e-scooter permit program and permitted 5,600 e-scooters
- » Implemented a range of supportive programs

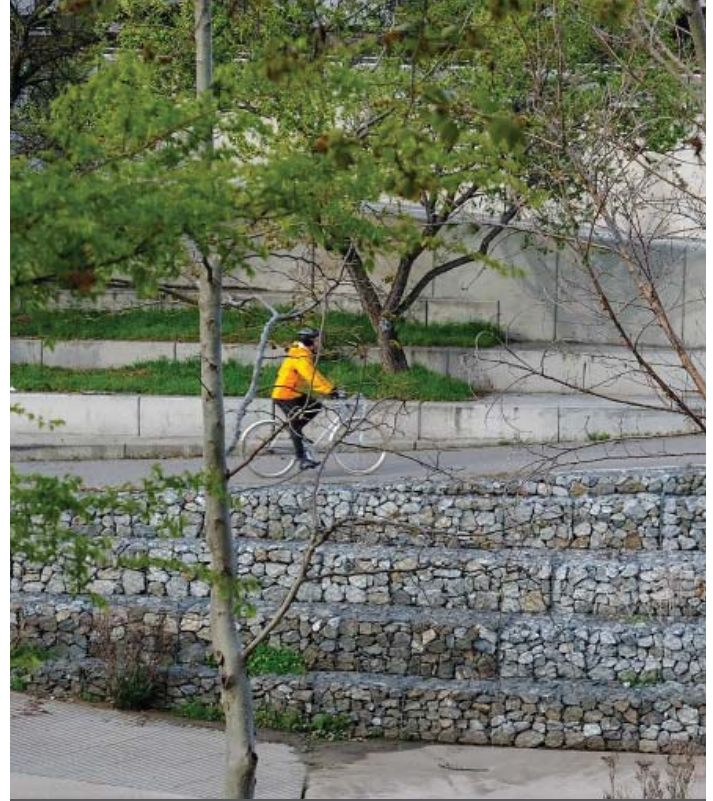
However, there is still a lot of ground to cover. While some neighborhoods have well connected bikeways, many bikeways require too much interaction with motor vehicles to feel comfortable to most people.

While only 3 percent of trips in San José are currently made by bike, this Plan advances the ambitious *Envision San José 2040 General Plan* goal of reaching 15 percent of trips by bike by 2040.

Who Bikes in San José Today?

Standard data sources for travel behavior typically rely on work trips and a person’s primary mode of transportation. Since work trips account for less than 20 percent of a person’s travel⁴ and many people bike or walk to transit, these sources paint an incomplete picture of how people rely on bicycling or walking.

To get a better idea of biking activity, the City surveyed a random selection of people living in San José about their perception of biking, comfort with biking, biking habits, and transportation decision making. In total, 1,238 people statistically representative of the city’s demographics answered the 89-question survey, which was administered in English, Spanish, and Vietnamese. Based on this survey, upwards of 3 percent of people bike to work as their primary means of traveling throughout the city. In addition, 9 percent of people reported using a bike as their secondary mode which means they use other means, like driving, taking transit, or walking, most of the time but still use a bike often.



Bicycling along the City’s expansive multi-use path network.



Bicycling in Downtown San José. Credit: Sally Schroeder

4 California Household Travel Survey, 2016

SAN JOSÉ BY THE NUMBERS



While women make up 44% of commuters, they only account for 24% of people who bike to work.⁶



60% of trips in San José are shorter than 3 miles.⁷



5% of households in San José do not have access to a personal automobile.⁸



From 1990 to 2017, San José has experienced a 28% increase in bicycle commuting.



The total cost of owning a car in the US is \$9,282. It's often higher in San José.⁹



3% of San Joséans bike to work as their primary mode and 9% as an additional mode.

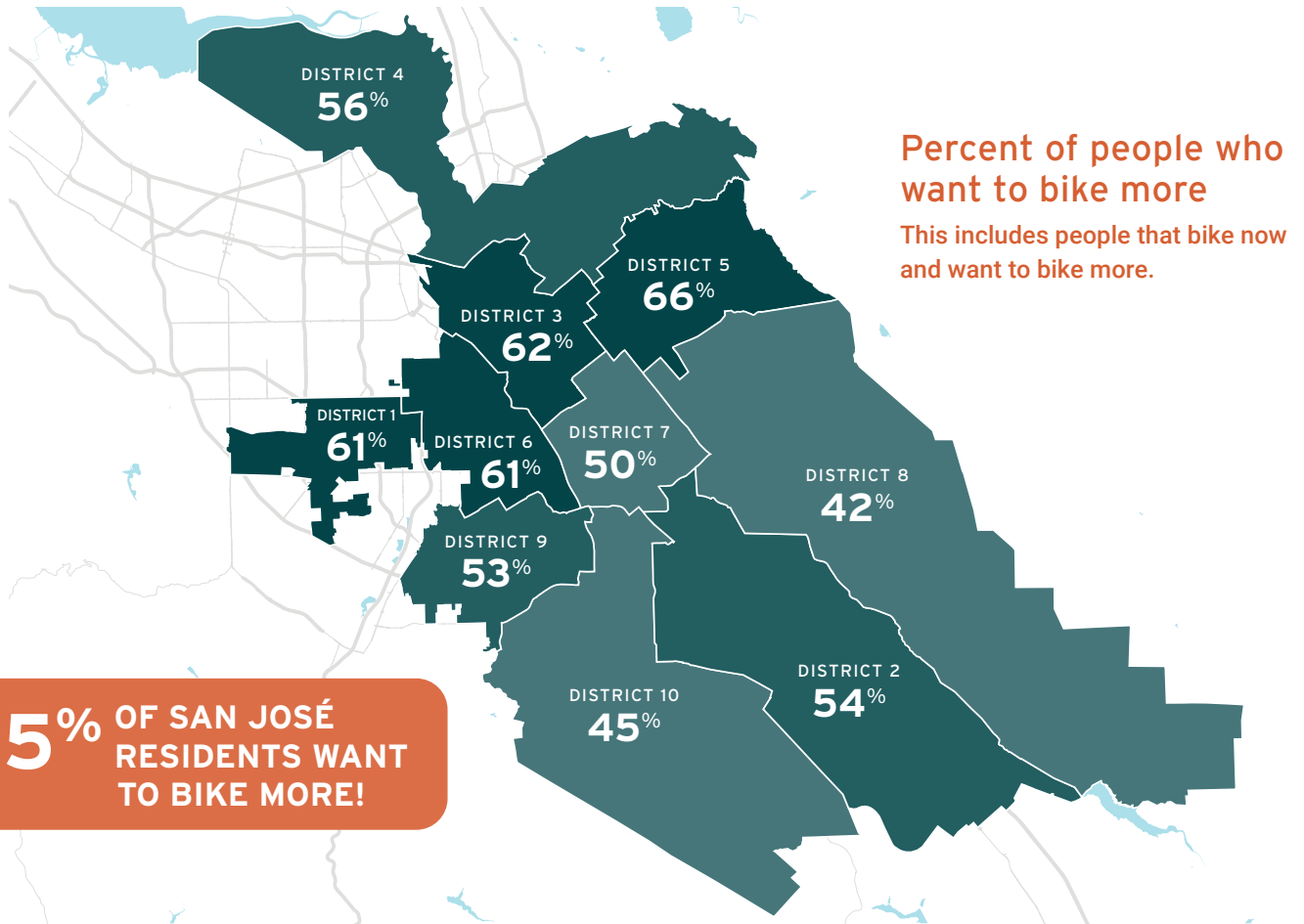
5 "Commuting Characteristics by Sex." 2013-2017 American Community Survey 5-year Estimates, United States Census Bureau, Table S0801, <https://factfinder.census.gov/>

6 California Household Travel Survey, 2016

7 "Physical Housing Characteristics for Occupied Housing Units." 2013-2017 American Community Survey 5-year Estimates, United States Census Bureau, Table S2504, <https://factfinder.census.gov/>

8 AAA. Your Driving Costs, posted by Ellen Edmonds, 12 Sept. 2019, <https://newsroom.aaa.com/auto/your-driving-costs/>

WHAT PEOPLE ARE SAYING ABOUT BIKING ⁹



People vary in their confidence and ability in riding a bicycle. Some people are confident operating bicycles in mixed traffic without designated bikeways while others may hesitate to use any bikeways that are not completely separated from traffic.

To better understand people’s preferences, survey questions classified San Joséans into four general groups based on their current bicycling behavior and their comfort level biking in different roadway conditions. This classification helps the City to understand who it is building bikeways for.

The largest group, with 48 percent of respondents, is referred to as the “Interested but Concerned” cyclist. This term refers to the fact that people in this group only

80% of San Joséans enjoy biking!

60% of San Joséans say “My neighborhood could be a better place to live if more people rode bicycles.”



⁹ San José Better Bike Plan 2025 survey, discussed on page 29

feel comfortable bicycling in bikeways that are physically separated from automobile traffic or will consider biking when the City constructs more physically separated bikeways.

The second largest group, capturing 42 percent of respondents, are in the “No Way, No How” category. This group reports being unable, uninterested or uncomfortable riding bikes. Considering how large this group is, the City will work to understand this attitude more through future surveys and outreach efforts.

The group with the smallest respondents, 2 percent identifying as “Strong and Fearless” and 8 percent identifying as “Enthusiased and Confident,” do feel comfortable biking on most of the existing street network. However, the goals of this plan cannot be achieved by accommodating these groups alone.

To achieve the City’s goal to increase bicycling trips, the City must build bikeways that are more separated from vehicle traffic and will appeal to most people. This includes separated bike lanes, multi-use paths/trails and bicycle boulevards on calm streets.

Common barriers to bicycling



CARRYING THINGS I NEED
54%



BIKE THEFT
66%



LACK OF SECURE BIKE PARKING
62%



TRANSPORTING OTHER PEOPLE
45%



LONG DISTANCES
61%



KNOWING THE ROUTE
60%

Safety concerns



4 in 5
San Joséans say

DEALING WITH
AGGRESSIVE DRIVERS



3 in 4
San Joséans say

GETTING IN
A CRASH



3 in 5
San Joséans say

SAFE BIKE
ROUTES
for their journey



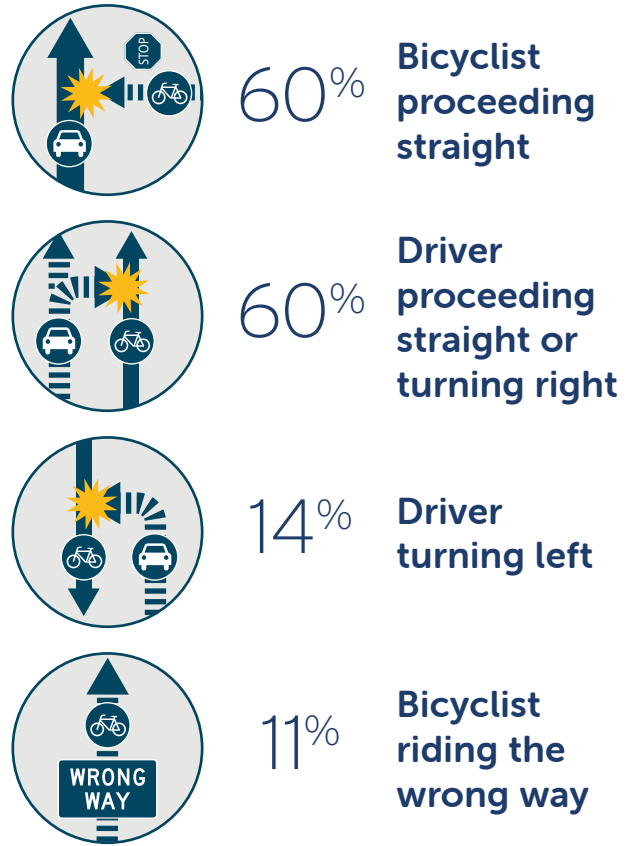
What Prevents People from Biking?

Transportation decisions are personal and the reasons for choosing not to bike are varied. However, there are common themes. Feeling unsafe biking on streets, fear of crashing, fear of bike theft, and not knowing the route are all top concerns for people thinking about biking in San José. Fear of crashing while riding a bike is a realistic concern. While overall crashes are reducing, they are still too frequent. An analysis of past crash data informed the location of recommended physical improvements as well as programmatic and policy recommendations included in Chapter 4.

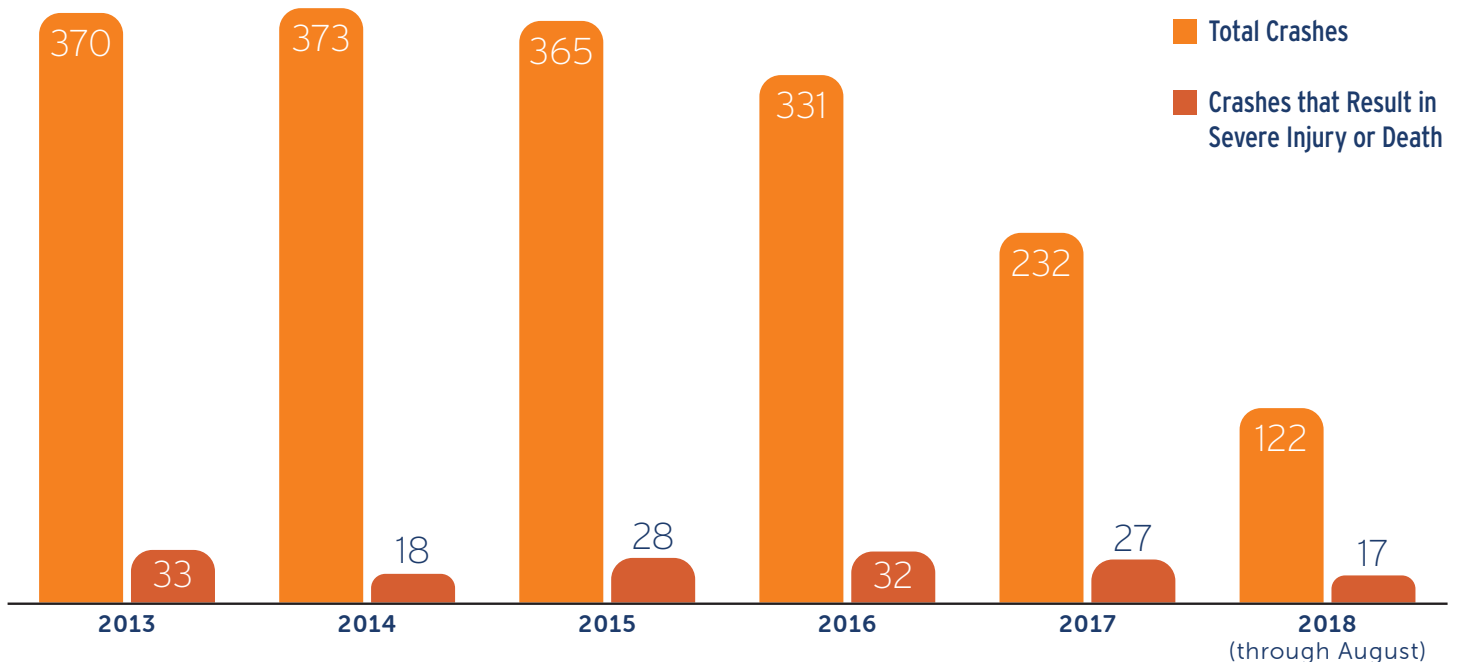
Collisions

How safe is it to bike in San José? Bicycle-related collisions have declined each year between 2013 and 2017, and that trend appears to be continuing into 2018. However, the total number of people who have been killed or seriously injured in a crash has not changed significantly and accounts for 9 percent of bicycle-related collisions over this five-year period. The crash locations are in places and at times when more people are biking.

Most Common Actions Before a Bike Collision



Bicycle Crashes by Year



Just Before the Crash

Collision reports provide a record of what each person involved in a crash was doing immediately before the collision happened. They can be a helpful resource when trying to prevent actions that are more likely to cause crashes.

Crashes are Preventable

Progress towards Vision Zero is typically evaluated for all modes of surface transportation according to the number of crashes that resulted in a fatality or severe injury. Crashes are preventable through changes in design, education, enforcement, and policy measures which form a holistic systems approach. Specific design changes that have been shown to prevent some of the most common crash types involving bikes in San José include installing protected bikeways, extending lanes through intersections, simplifying complex intersections, and slowing vehicle speeds.

Seventeen corridors identified in the Vision Zero San José Two Year Action Plan account for a high proportion of fatalities and severe injuries on San José streets. Corridors on this “High Injury Network” are the focus of the City’s major safety projects and outreach campaigns. Over 60 percent of the length of the Vision Zero Priority Safety Corridors are within a Community of Concern.¹⁰ Additional corridors identified through a bicycle-specific collision analysis continue this pattern. Addressing collision patterns at these locations helps to advance safety and equity goals in San José.

What is Vision Zero?

Traffic deaths for all modes have grown 37 percent in the ten-year period from 2009 to 2018—a period when the city’s population grew less than 10 percent.

In response to this trend, the City’s Vision Zero initiative seeks to systematically eliminate all deaths and severe injuries on San José’s roadways through robust data analytics, increased enforcement, increased engagement, and the installation of safety projects.

In 2015, San José became the fourth city in the nation to adopt a Vision Zero transportation safety initiative. Vision Zero Cities strive to reduce, and ultimately eliminate, fatalities and serious injuries caused by traffic collisions. San José’s Vision Zero work is based on the following core principles.

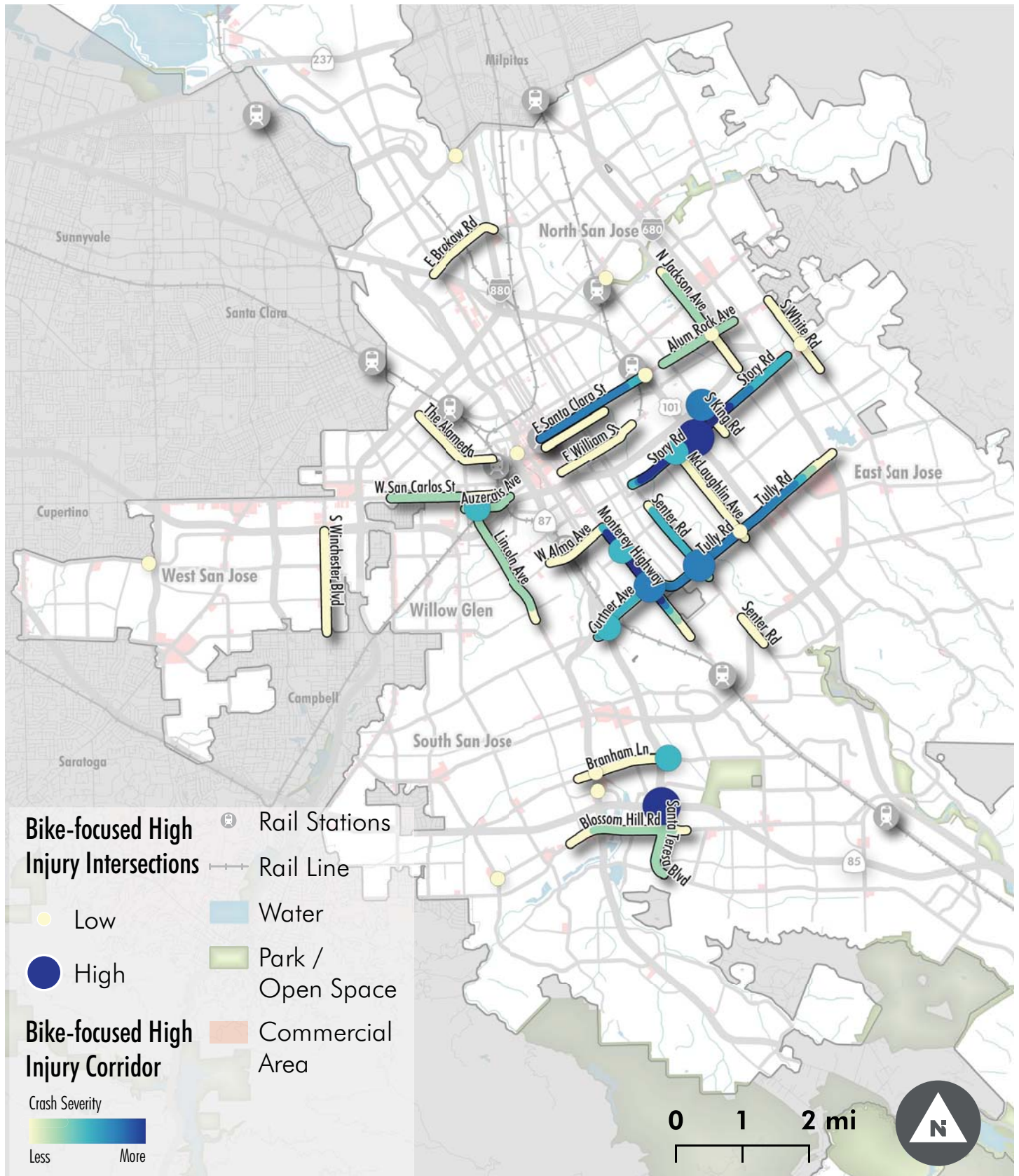
- » Traffic deaths are preventable and unacceptable.
- » Human life and safety take priority over speed.
- » Transportation systems must account for human error.
- » Speed is a fundamental predictor of crash survival.
- » Safe human behaviors, education, engineering, and enforcement are essential to a safe system.
- » Policy alignment at all levels of government.

San José has identified a high injury network consisting of 72 miles of roadways that make up only 3 percent of streets but account for one-third of all severe and fatal collisions. Streets with a concentration of injuries and fatalities for people biking differ somewhat from the 72-mile high injury network. These streets are shown on the map on the following page.

Follow the progress at visionzerosj.org

¹⁰ Communities of Concern include a diverse cross-section of populations and communities that could be considered disadvantaged or vulnerable now and in the future. Communities of Concern can have high levels of households with minority or low-income status, seniors, people who have limited English proficiency, people who have disabilities, and more.

Map 1: Bicycle High Injury Network



What is it Like to Bike in San José?

The City has significantly expanded the on-street network over the past decade to provide access directly to most destinations. It complements San José's extensive multi-use path network, many of which follow south-to-north oriented creeks. While these multi-use paths are treasured amenities, they do not always provide access directly to most destinations. To address this, in the past decade the City has significantly expanded its on-street bike network with a variety of facility types. In California, these bikeway types are also called Class I, II, III or IV, as defined below.

BIKEWAY TYPES

Multi-use Path (Class I)

Multi-use paths, also known as trails, are off-street two-way bikeways physically separated from motor vehicle traffic and used by people bicycling, people walking, and other non-motorized users. Popular examples in San José include the Guadalupe River Trail and the Coyote Creek Trail. They may cross roadways at grade or at under- or over-crossings. Multi-use paths are often located along creeks, utility corridors, and former rail corridors but may also be constructed along roadways with car traffic.

62 Miles in San José



Los Gatos Creek Trail at Del Monte Park

Separated Bike Lanes (Class IV)

Separated bike lanes, also known as cycle tracks or protected bike lanes, are a dedicated bikeway that combines the user experience of a multi-use path but are located on a street. They are physically distinct from the sidewalk and separated from motor vehicle traffic by a physical object such as parking, a curb, or posts.

6 Miles in San José



Separated bike lane on San Fernando at 1st Street

BIKEWAY TYPES

Bike Lane (Class II)

Bike lanes provide dedicated on-street space for bicyclists in the roadway, delineated with painted pavement stripes and symbols on the roadway surface. Bicycle lanes are usually provided in each direction on two-way streets and on one side of one-way streets. Bike lanes may also have a striped buffer area between bicycle and general-purpose travel lanes. In San José, bike lane approaches to and departures from signalized intersections are generally painted green to draw attention to these conflict zones.

291 Miles in San José



Bike lane next to bikeshare hub on 17th Street.
Credit: City of San José

Bike Route (Class III)

Bike routes are on-street bikeways where bicyclists must share the travel lane with motor vehicles because the lane is not wide enough to fit a bike lane. They may be marked with signs and/or a shared lane marking (“sharrow”) pavement markings, which is a bike symbol with two chevrons on top.

95 Miles in San José



Shared lane marking St John Street

Bike Boulevard (Class III)

Bike Boulevards are basic bike routes on calmer streets that are enhanced with additional elements to increase comfort for people bicycling. These elements include crossing enhancements and traffic calming features such as speed humps, bulbouts, or traffic diverters.

< 1 Mile in San José



Bike boulevard feature on San Fernando at 13th Street

Trail Development

More on Trails

Although the San José Better Bike Plan is focused on on-street bike infrastructure, trails are a huge component of the city’s bike network. Many bike riders in San José will use on-street bikeways combined with trails to complete their journey. The Better Bike Plan considered trail locations and the development of trail access points as part of the complete network proposal and prioritization. Improving trail access is part of the Plan’s recommendations.

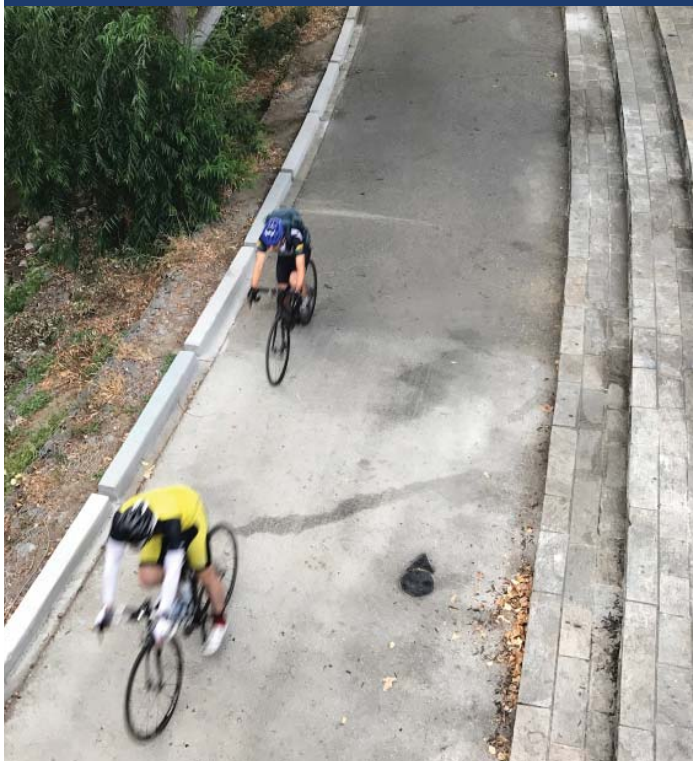
Who builds trails?

Development of trails in San José is guided and managed by the Department of Parks, Recreation, and Neighborhood Services. The department has a Trail Program led by a Trail Manager and Senior Analyst who collaborate with consultants and the Department of Public Works for implementation of studies, master plans, environmental documents, design/construction documents, and construction of projects.

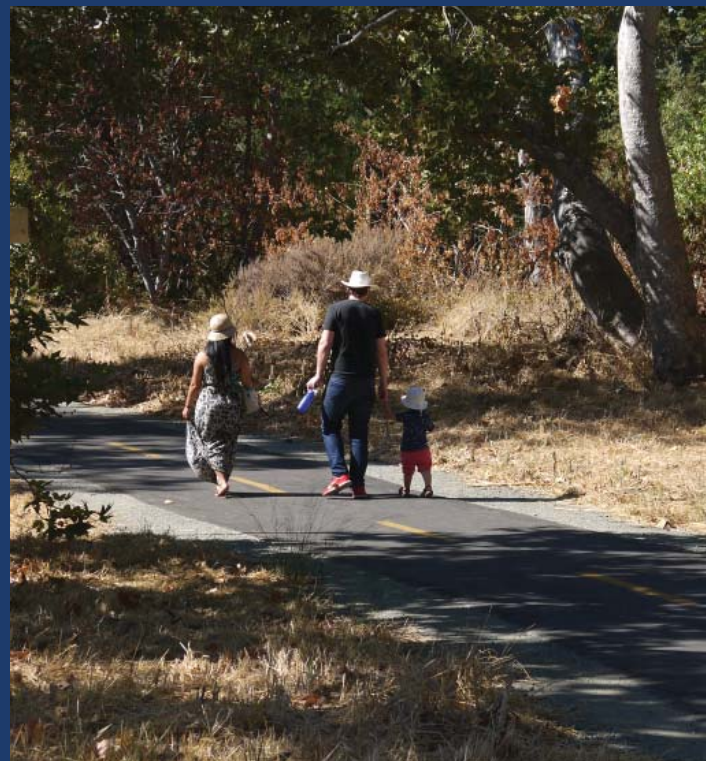
Guiding this work, the Trail Program Strategic Plan was published in 2016 and outlines a schedule to complete the 100-mile Trail Network in San José. The strategic plan engaged the City Council’s Transportation & Environment Committee to explore the challenges of project funding, complexity of design, and highly regulated riparian environment that is home for most trails. In 2018, the Trail Program published the San José Trail Network Planning and Design Toolkit. This establishes a set of design details and outlines a standard trail planning process. This document provides guidance on developing trail gateways that link on-street bikeways with off-street trails.

➤ **San José Trail Program Strategic Plan**

➤ **San José Trail Network Planning and Design Toolkit**

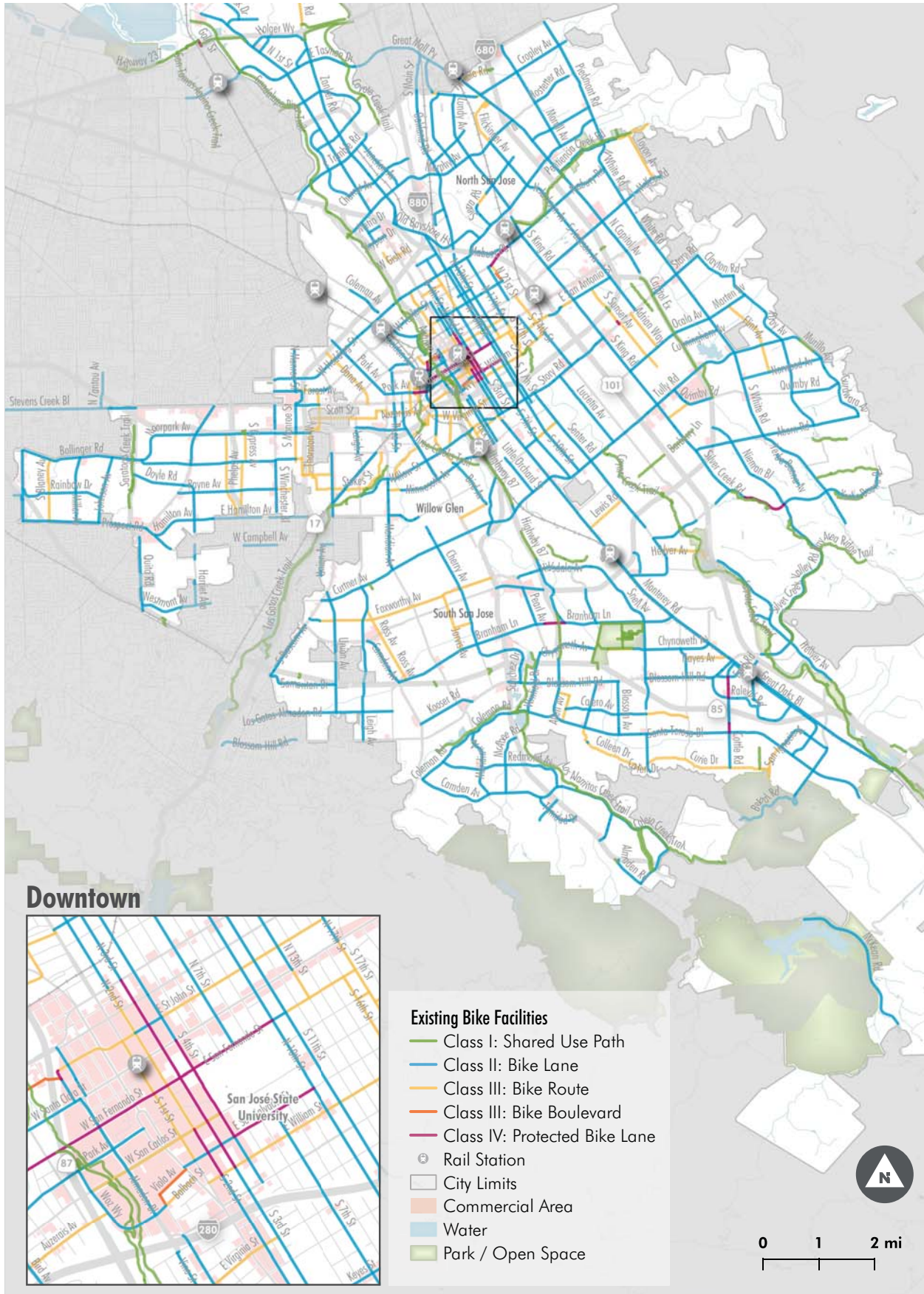


Bicyclists riding along a multi-use path



Pedestrians along the Penitencia Creek Trail

Map 2: Existing Bike Network



How comfortable is it to bike in San José?

The City of San José has installed a significant number of bikeways since the 2009 adoption of the San José Bike Plan 2020. However, this effort has not resulted in the desired increase in bike ridership citywide because most of the bikeways installed consist of painted bike lanes on busy streets that do not feel comfortable to most people, including the Interested but Concerned rider type discussed earlier in this chapter. Bikeways that are appealing to the Interested but Concerned rider type are called “low-stress”.

A “low-stress” bikeway or “low-stress” bike network refers to the use of bikeway designs that feel comfortable to a broad range of users, including those that are not comfortable sharing the roadway with automobiles. These low-stress bikeways are appropriate for all ages and abilities of riders and are also called 8-to-80 bikeways because they are appropriate for those who are eight years old to eighty years old.

Level of Traffic Stress

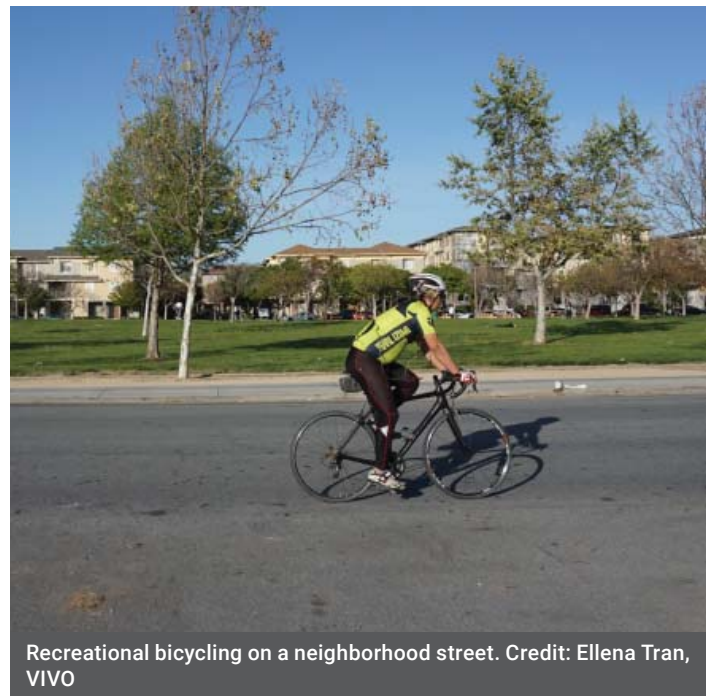
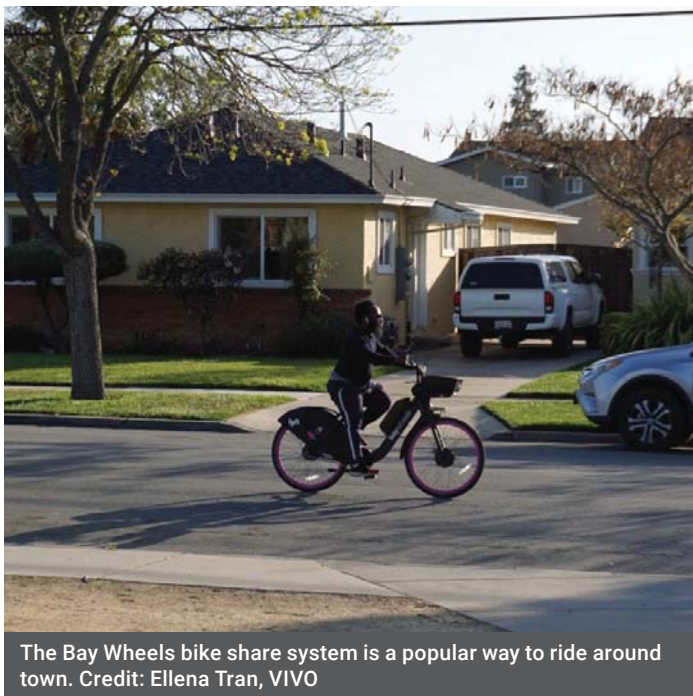
The map on the following page illustrates the degree to which a certain street feels comfortable to an “interested but concerned” rider type. The term Level of Traffic Stress (LTS) refers to a concept that evaluates road segments

according to the amount of stress experienced by people riding there, specifically people in the “interested but concerned” category.

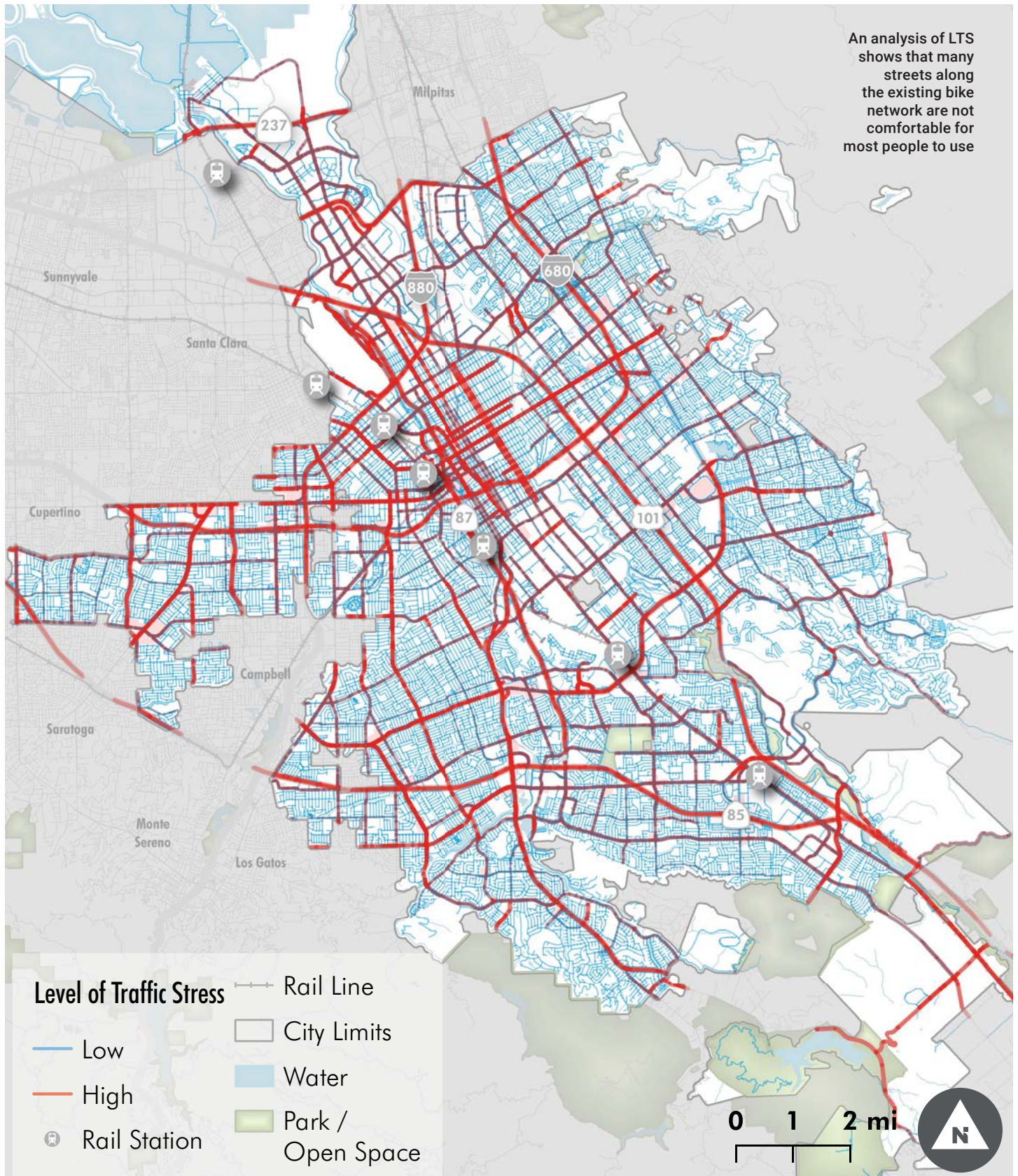
The LTS methodology was developed in 2012 and first published in a report by the Mineta Transportation Institute at San José State University. Characteristics such as traffic speeds, traffic volumes, bikeway presence and type, as well as number of travel lanes are used to estimate traffic stress.

LTS is calculated differently for streets with and without bike lanes. For streets with bike lanes, the calculation of traffic stress depends on the width of the lane, presence and width of a parking lane, and prevailing speed, without considering vehicle volumes. For example, major streets with a bike lane but no separation from vehicle traffic are usually considered high stress whereas lower-traffic, lower-speed streets can be low-stress with regular bike lanes.

In Map 3, ‘low-stress’ pockets are disconnected from the larger network by the requirement to either traverse or cross ‘high-stress’ streets. These streets often have bike lanes present, but painted bike lanes aren’t enough for most riders.



Map 3: Level of Traffic Stress Analysis



How easy is it to get around?

The street network varies considerably throughout San José. It includes a clearly defined street grid downtown, several limited-access highways and at-grade expressways that cut across the city, and miles of suburban streets with varying degrees of connectivity.

The majority of streets in San José are residential streets. A portion of these have low traffic volumes and travel speeds that would feel comfortable to the Interested but Concerned rider type. However, the differences in development patterns between neighborhoods result in a disconnected street network that make the creation of a complete bike network challenging. Low traffic, residential streets do not generally connect to destinations, and their contribution to neighborhood and citywide connectivity is hampered by the need to cross busy streets or intersections.

The city’s suburban growth is spread out over 180 square miles, which can result in long trip distances beyond the range of bicycling for many people. The City’s population density is approximately 5,763 residents per square mile, lower than that of other principal Bay Area cities, San Francisco and Oakland.



San José has 291 miles of bike lanes, however the number of people that enjoy riding on this type of bikeway are limited



Bike rider waiting to cross at an intersection in downtown San José

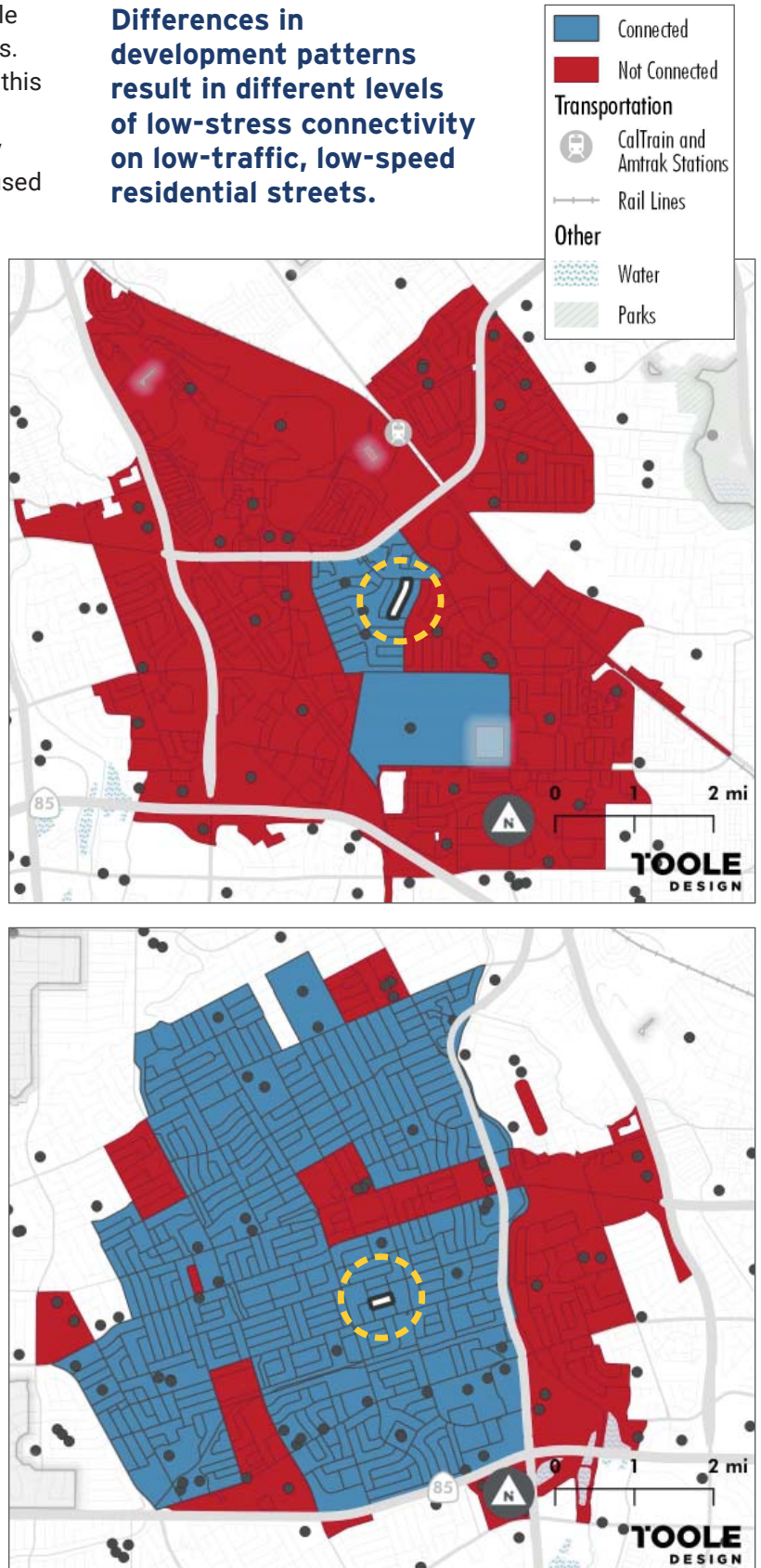
Connectivity and Access

A bike network is only accessible if it connects people to the places they need to go along low-stress streets. To understand the existing connectivity in San José, this Plan used a methodology called the Bicycle Network Analysis (BNA). This methodology was developed by PeopleforBikes, a nationwide bicycling coalition focused on making bike riding safer and easier. To assess a city’s connectivity, the BNA methodology scores the ability for a person to reach important destinations on a low-stress bikeway. Data points used in the analysis include population, employment opportunities, education opportunities, essential services, shopping, recreation and transit. Using this methodology, each census tract is assigned a score by comparing the number and type of reachable destinations on the low-stress bicycle network to the destinations reachable by car within the same distance. These scores range from 0 to 100. Areas where low-stress bicycle connectivity is closer to the street network’s overall level of connectivity receive higher scores.

According to the BNA analysis, neighborhoods with longer blocks and fewer intersections are less connected to the surrounding area. For example, from the street highlighted on the top map, a person can only access a few neighboring streets without experiencing stressful biking conditions. Additionally, while a high capacity transit station is within biking distance, it is not accessible for the ‘interested but concerned’ bike rider. In these neighborhoods, the importance of adding low-stress bikeways on major streets is elevated.

Neighborhoods with more intersections and low-traffic streets are more connected to destinations on low-stress bikeways. For example, on the lower map, a person living on the highlighted street can access many neighboring streets and key destinations without entering a high -stress biking environment. These low-traffic, neighborhood streets present an enormous opportunity if busy streets are enhanced with low-stress crossings.

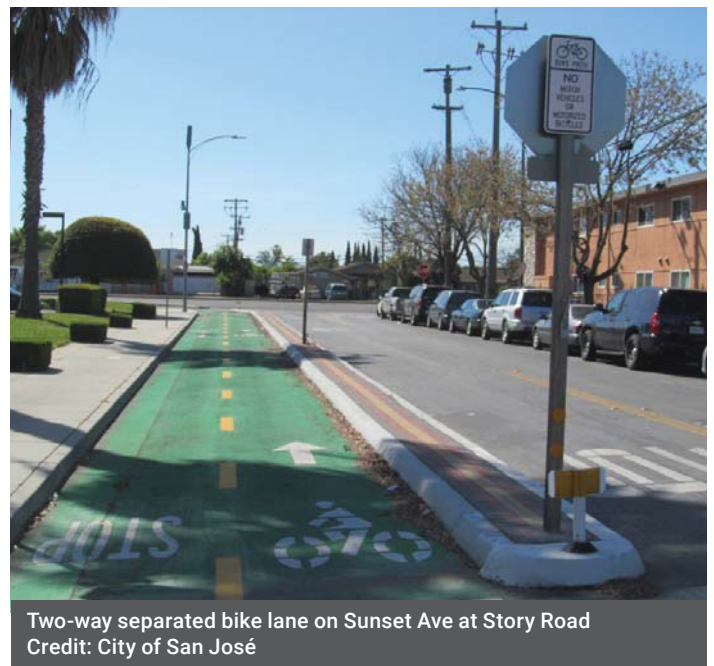
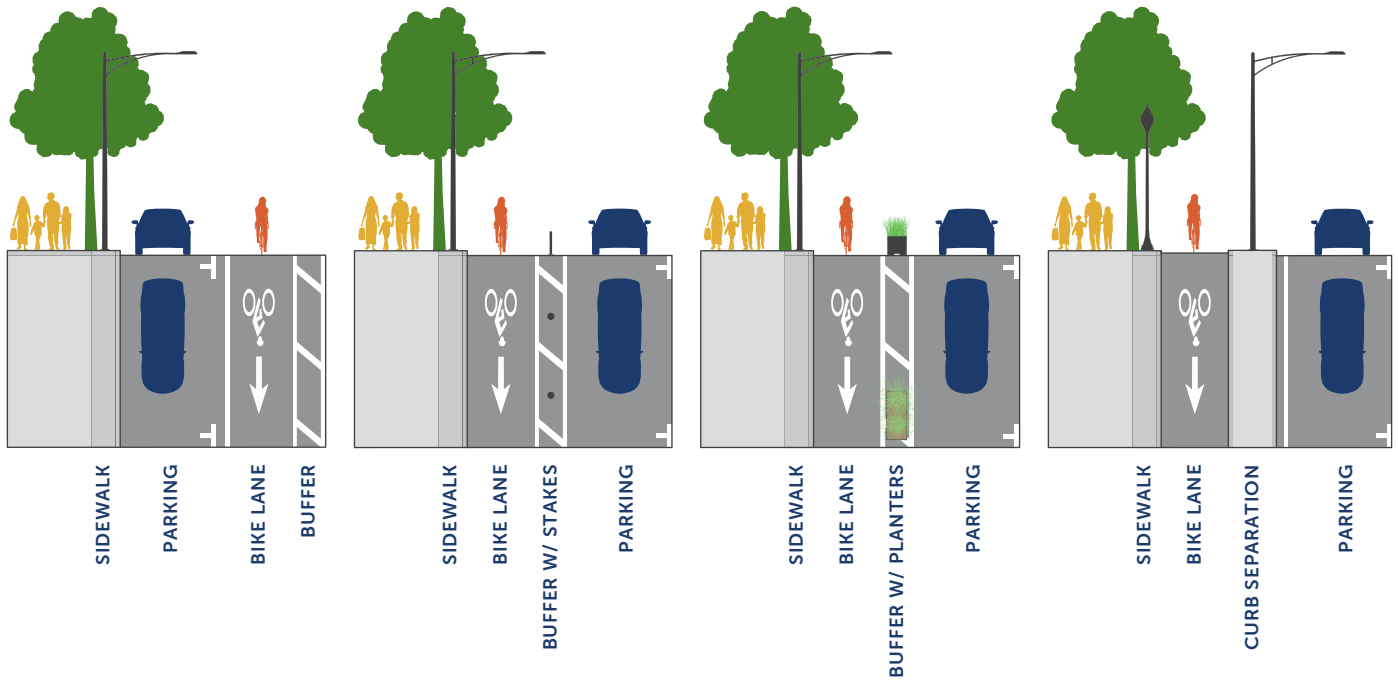
Differences in development patterns result in different levels of low-stress connectivity on low-traffic, low-speed residential streets.



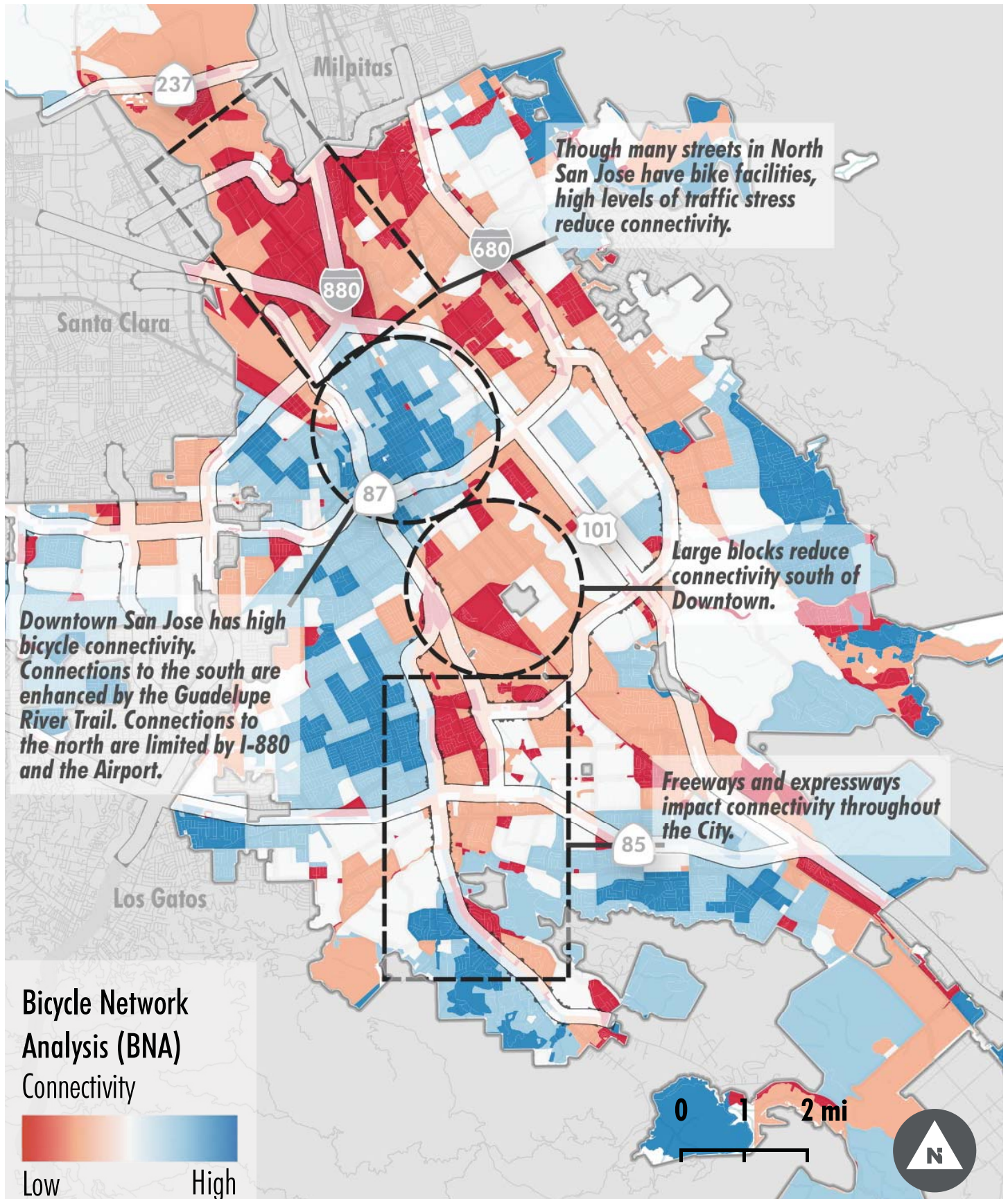
We are in luck!

While traditional bike lanes may not appeal to everyone, separated bike lanes do. On high-traffic, high-speed streets that already have dedicated bikeways, the City continues to work to upgrade them into separated bike lanes. This process will connect vast neighborhoods and important destinations with low-stress bikeways.

THE EVOLUTION OF A PROTECTED BIKE LANE



Map 4: Network Connectivity Analysis



WHERE ARE PEOPLE GOING?



WORK
18%



DINING
25%



ERRAND
16%



RECREATION
13%



OTHER
28%

Where can a bike take you?

Less than 20 percent of trips in San José are work-related. That means that most trips are made when people are not commuting to work but for other purposes like heading to restaurants (25 percent), running errands (16 percent), and or participating in recreation activities (13 percent).¹¹

The City has ambitious goals to increase the percentage of trips made by bicycle. To meet them, the City will need to make investments in neighborhoods where people are most likely to shift away from driving and towards bicycling.

Short Trip Opportunities

Trips less than five miles, and especially less than three, present good opportunities to convert driving trips to trips made by bike. As noted at the beginning of this chapter, 60 percent of trips in San José are shorter than three miles, which is a comfortable distance to bike.³ If comfortable bikeways are installed in places where people are making short trips, there is a high potential to shift many of those trips to bicycling.



60% of trips in San José are shorter than three miles, which is a comfortable distance to bike.

Overall Trip Potential

Land use patterns, resident and employment demographics, and transportation system characteristics help identify the likelihood that a person will choose to bike for daily needs and for recreation. The identification of future potential bike riders is called *trip potential analysis* and involves evaluating the following factors:

» **Intersection density** – The more frequent that a street intersects with other streets, the more choices someone

has when making a trip in the area. A higher intersection density increases the potential for short, bikeable trips. Additionally, intersections naturally slow traffic down and improve comfort for people biking and walking.

- » **Population density** is the number of people living in a unit of area, such as a square mile. If more people are living in an area, there is a higher likelihood that people will travel by bike because destinations are more likely to be nearby, and parking is less available. This increases the need for efficient transportation options, like walking, biking, and public transit.
- » **Employment density** is the number of jobs within a unit of area. A higher employment density means that more people are traveling to that location on a daily basis. This increases the need for space efficient transportation options, like walking, biking, and public transit.
- » **Transit access** refers to the location of transit stops and the number of people taking transit at those stops. The more people accessing transit at a location increases the likelihood that people will bike to that location.
- » **Households below the poverty line** – A high number of households below the poverty line increases the need for biking. Biking is more affordable than other transportation options, like car ownership. The poverty threshold varies based on household size and is determined by the Census Bureau.

Looking at these factors citywide, San José has the highest trip potential for bicycling downtown and along transit corridors that extend from downtown. Based on the factors described above, the greatest untapped short trip opportunities are not where people walk, bike, and take transit already, but are concentrated in nearby neighborhoods just west of downtown towards Campbell. In addition, the Monterey Road corridor has many short driving trips, suggesting that network improvements along and across this street may encourage bicycling.

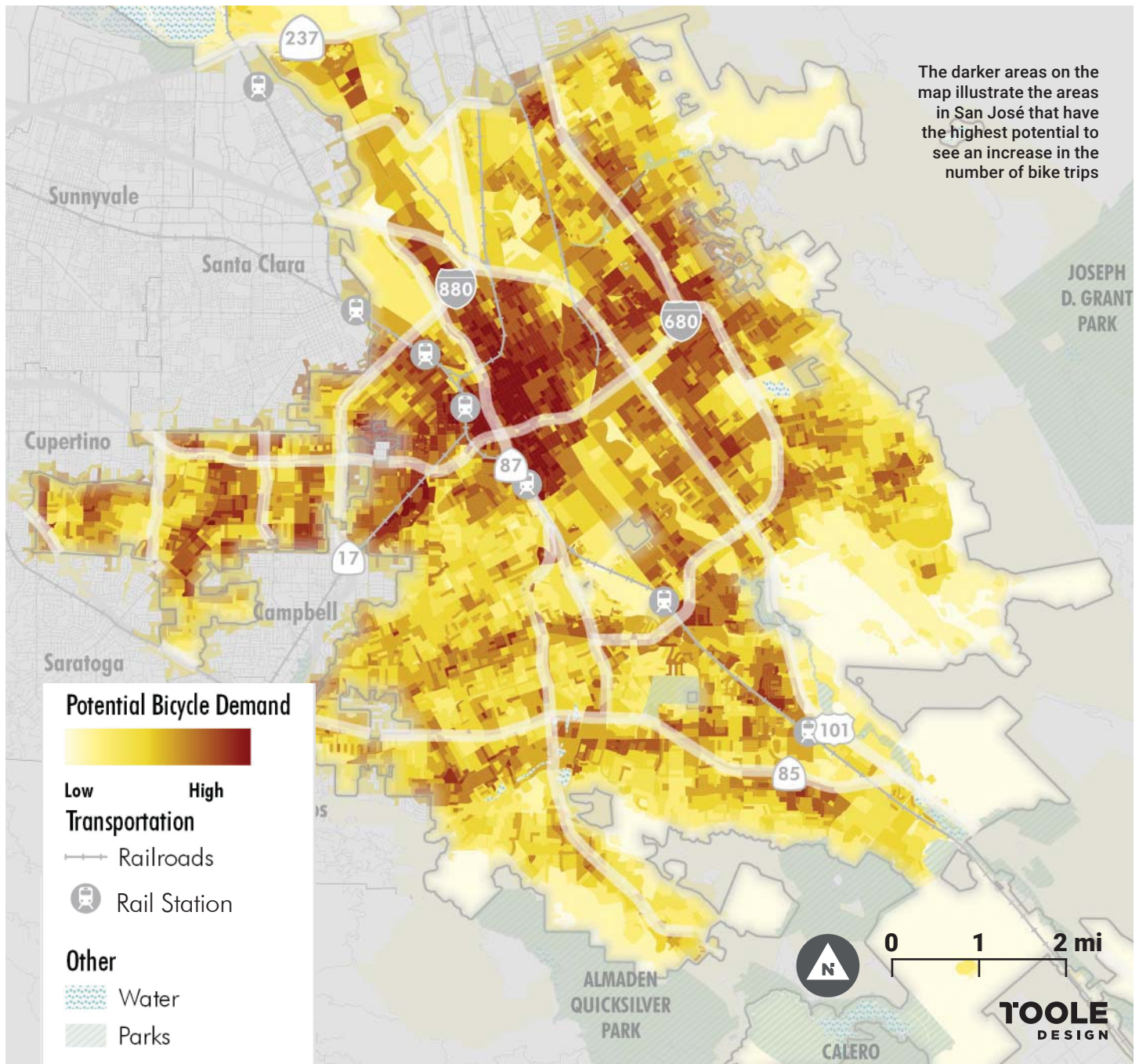
¹¹ California Household Travel Survey 2016

As shown in Map 5, many neighborhoods have large areas where the potential for more bicycling is high: they have low-volume, low-speed streets, the right factors are present, and many people are making short trips by car. However, many of these pockets are cut off from destinations by barriers like freeways and expressways, as shown in Map 4. This is especially prevalent in areas west of downtown San José, where Highway 17, Lawrence and San Tomas Expressways, and Saratoga Avenue interrupt otherwise connected neighborhoods.

What's next?

This chapter has answered critical questions about the physical, behavioral, and cultural conditions in San José that deter people from biking. The next chapter will outline policies, programs, and physical bikeway projects that will address these challenges to encourage more bike riding throughout San José.

Map 5: Potential Bicycle Demand







CHAPTER 4

A NEXT GENERATION BIKE NETWORK

CHAPTER 4: A NEXT GENERATION BIKE NETWORK

Much has changed since the adoption of the Better Bike Plan 2020 in 2009. San José's bike network has grown in mileage and has also grown up. Ten years ago, bikeways mostly consisted of bike lanes and routes shared with motor vehicles; now they include separated bike lanes and intersections, people-focused slow streets, and traffic signals that detect oncoming bicyclists. In addition, bike ridership has grown and bicyclists are going everywhere—to work, school, recreation, running errands, and just out having fun. They come in all shapes, sizes, ages, and abilities. To top all of that off, bikes themselves are evolving. The definition has expanded to child-carrying cargo bikes, skateboards, recumbent bikes, scooters, and electric bikes. San Joséans biking in 2025 will represent the most diverse ridership in one of the most diverse cities in North America. This chapter lays out the physical projects, policies, and programs to help San José build this vision.



A Silicon Valley Bike Coalition Group Ride in downtown San José.

Why a five year plan?

To achieve this plan’s vision, San José is laser-focused on implementation. The pressing issues that face residents such as affordability, opportunity access and climate change can be addressed, and the City of San José is ready to take action.

The five year horizon time responds to the immediacy of these issues and aligns with other planning documents, such as the *San José Access and Mobility Plan*. In addition, because the transportation field is dynamic and constantly changing, a plan with a horizon longer than five years would not adequately address these advancements.

This Plan will result in a Capital Improvement Program that will be implemented over the next five years.

This chapter outlines recommendations based on the extensive public outreach, outlined in Chapter 2, and the existing conditions, outlined in Chapter 3.

To address these conditions, the City must focus on:

- » **What will work for San José?** – To achieve a big jump in bike ridership, San José will listen to and learn from communities that have achieved over 15 percent bike ridership and apply it to local efforts.
- » **Beyond basic bike lanes** – The City will need to implement supportive programs and policies that address existing barriers to biking.
- » **Establish a low-stress bike network** – The City will build a connected network of bikeways that feel comfortable and accommodating to most people.
- » **Bikeway selection and design** – Bikeway design must respond to the context of the street and appeal to the “Interested but Concerned” rider. This section outlines design options for different conditions.

To create a great citywide bike network where all ages, abilities, and backgrounds truly feel safe and comfortable biking anywhere in San José will require addressing many difficult issues - some of which are beyond the scope of this plan. For example, the housing crisis has resulted in many unhoused people living along some city streets and multi-use paths. The success of housing programs outside the scope of this plan will contribute to a healthier community and public realm where everyone feels safe and welcome.

To ensure consistency and coordination with other initiatives, and to foster support from various public agencies, a Technical Advisory Committee (TAC) was convened to help guide and inform the planning process. The TAC was comprised of representatives from various City departments, transit agencies, adjacent jurisdictions, and regional transportation agencies.

Development of this plan was coordinated with the City’s Trail Program in the Parks, Recreation, Neighborhood Services Department (PRNS). In addition, during the year following approval of this plan, DOT will work with PRNS to document and map walking paths, such as those developed by Community Facilities Districts, that are used by bicyclists but not included in the Trail Program Network.

Plan implementation will be coordinated with the Trail Program to ensure a cohesive, connected network and to maximize connections between on-street bikeways and off-street trails. To coordinate with development activity, this plan incorporates City planning efforts such as Specific Plans, Priority Development Areas, Urban Village Plans, the Diridon Station Area Plan and the Diridon Integrated Station Concept Plan.

In addition, some recommendations of this Plan are on streets that extend into adjacent cities. The TAC included representatives from these neighboring cities as well as Santa Clara County and Caltrans, who own and maintain several roadways within the city’s limits. Final design, funding, and construction for projects along their right of way will require further coordination.



Participants provide ideas on San José’s future bike network at a workshop hosted by CBO partner Veggelution

What Will Work for San José?

San José has set one of the highest bike mode share goals of any city in North America. However, the City is still far from its 2040 target. Looking to learn from cities around the world that have achieved 15 to 20 percent mode shares, here is what San José needs to do:

The Right Ingredients

Build a low-stress, connected network. The network must be composed of low-stress connected bikeways, and must be comprehensive, legible, gap-free, and be successfully integrated with transit. The network must reach all parts of the city, especially areas with a large potential for bicycling, such as low-income neighborhoods with limited access to vehicles, downtown, and other key locations.

Build a bike culture. A bike culture can be built, but it takes challenging action and promotion, from rides and education/support programs, to making a statement with policies and the infrastructure on the ground. Support, outreach, and encouragement should especially be focused towards historically underrepresented groups.

Make alternatives to driving more convenient. People will bike more when the City's transportation system supports getting around without a car. Methods include variable parking pricing based on demand, supporting fast, frequent, reliable transit, and rebalancing streets to provide more space for pedestrians, buses, and bikes.

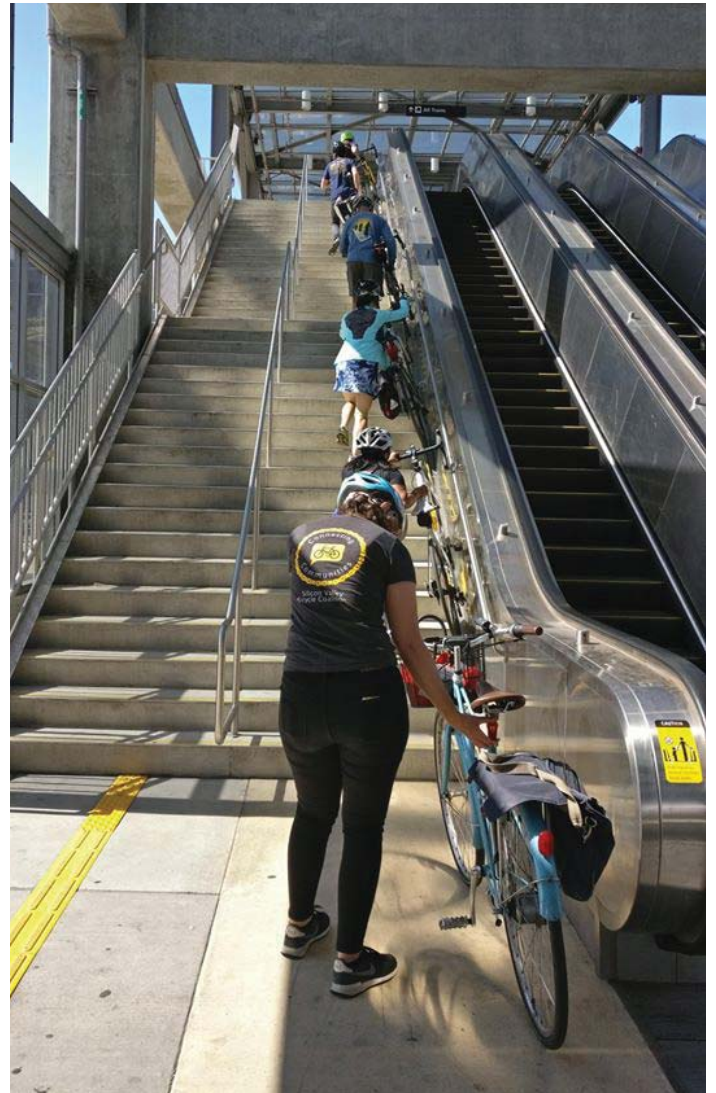
Quick Success

Have a bold vision and strong political will. San José's spending on bikeways in recent years has approached that of some of the world's best bicycling cities. This is a great start, but City leadership needs to continue to set policy strategically directing investments where it will make the most difference.

Implement rapidly. Also known as quick build, rapid implementation refers to the use of simple, affordable construction materials that can be installed quickly, such as plastic bollards or painted lines, to reallocate space for bicyclists. These bikeways can quickly be upgraded with more permanent materials when funding opportunities arise.

Reinvent continuously. Many biking cities have made remarkable progress, then plateaued. In order to achieve its mode share, safety and equity goals, San José will have to maintain political will for biking over the long haul, continually reinventing itself as a bike city and stay ahead of the curve.

Design for the context. Creating a low-stress, connected bike network requires a significant investment in well-designed and appropriately-placed facilities. It is not useful to install a bikeway design that only a few people are comfortable using, such as a painted bike lane on a busy street. To ensure the highest return on investment, San José will need to install bike lanes that the "Interested but Concerned" rider would use.



People with bikes pushing their bicycles up stairs at a transit station. Making bicycling and transit easier to use will help achieve the San José Better Bike Plan 2040 target for bicycling.

Radical Inclusion

Prioritize communities that have experienced historic underinvestment. Equitable investments in biking and other mobility options are an important element to start to address issues in low-income neighborhoods and communities of color. These groups are disproportionately impacted by a lack of affordable housing, high transportation costs, and public health issues, such as obesity, air pollution, and traffic violence.¹² Because they have historically been underserved and disproportionately impacted, prioritizing investments in these communities is critical to success.

Advocate and uplift. San José should seek and amplify the voices of the historically underrepresented and help to develop leadership for organizations led by and geared toward these groups. It’s important to establish a bike culture for women, people of color, people with disabilities, and older and younger people to encourage them to bike.

U.S. Cities Over 500,000 People with the Highest Rates of Bike Commuting in 2017

	Population	Bike Mode Share (%)	Mode Shift 1990 to 2017
San José 2050 Target	1,400,000+	20	--
San José 2040 Target	1,334,000	15	--
Portland, OR	648,121	6.3	447%
Washington, DC	693,972	5.0	554%
San Francisco, CA	884,363	3.1	224%
Seattle, WA	724,764	2.8	85%
Philadelphia, PA	1,580,863	2.6	359%
Tucson, AZ	535,676	2.5	-10%
Denver, CO	704,761	2.2	153%
Boston, MA	683,015	2.2	145%
Sacramento, CA	501,890	1.9	-5%
Chicago, IL	2,716,462	1.7	504%
San José	1,035,353	0.9	28%



Families visit the Better Bike Plan booth during Viva Calle, 2018

12 Daniel, H., S.S. Bornstein, and G.C. Kane. (2018). "Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper." *Annals of Internal Medicine*, 168(8).

Communities Moving the Needle

Cities around the world have achieved the kind of bike-friendly environment that San José seeks. Here is how they got there:

North American Success Stories

Portland, OR

Low-stress Networks: Portland’s neighborhood greenways and bike-friendly downtowns spurred a 400 percent mode share increase in the 1990s.

Bike Culture: Portland had a bike culture blitz in the early 2000s, investing heavily in encouragement programs, and making biking part of its identity.

Washington DC

Low-stress Networks: Washington, DC was an early adopter of the protected bike lane and has nearly as many miles of off-street bikeway as on-street.

Reinvention: Capital Bikeshare in the DC metro area has been wildly successful, growing to 4,300 bikes at 500 stations since 2006, not including dockless micromobility from other providers.

San José , CA

Rapid Implementation: Rapid Implementation works. San José’s Better Bikeways project coordinated bikeway upgrades with the existing pavement maintenance program, adding and improving ten miles of bikeways in 2018 and 2019 quickly and at low cost.

International Success Stories

Seville, Spain

Starting in 2006, the Spanish city of Seville built 50 miles of protected bike lanes in 16 months. In that time, bicycling rates increased by 200 percent and the crash risk decreased by 60 percent.

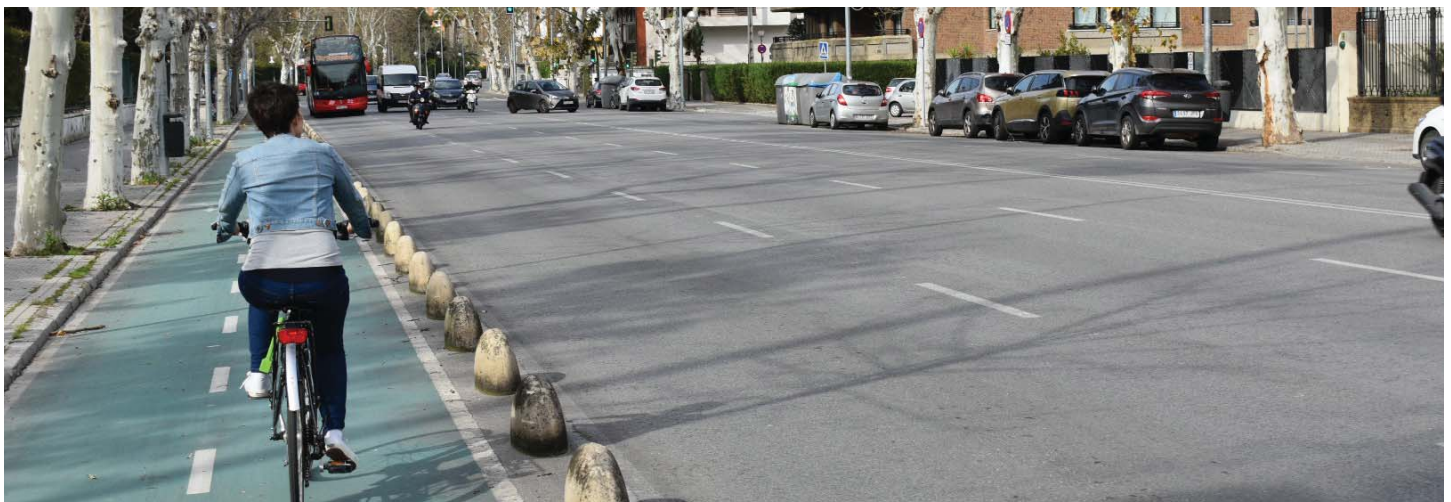
Equity: Seville’s partnership with its disability advocacy community was essential to the Plan’s success.

Germany

Many German cities have tripled bicycle mode share from 5 to 15 percent between 1980s and today. In Germany, only 27 percent of trips less than a mile are made by car, compared to 67 percent of trips in the U.S., as a result of mixed-use land patterns which encourage short trips.¹³

- » **Bold Vision:** Local jurisdictions led Germany’s bike renaissance starting in the 1970s.
- » **Safety:** Essential traffic safety strategies are featured at local and federal levels, including 19-mph zones, no right turn on red, and traffic calming on nearly all streets (93 percent in Leipzig).

Bike Culture: Biking is part of the cultural fabric, thanks to bicycling education for grade-school children, abundant bike parking, and annual bicycle infrastructure spending of up to \$21 per person.



A two-way protected bikeway in Seville, Spain

13 Cycling Expertise. “The Cycling Mode Share in Cities.” German Institute of Urban Affairs https://nationaler-radverkehrsplan.de/sites/default/files/forschung_radverkehr/cye-a-09.pdf.

Beyond basic bike lanes

Achieving the Plan’s goals hinge on much more than just constructing more and safer bike lanes. For San José to have 15 percent of the population biking by 2040, the culture must change. Communities and individual people must begin to see biking differently. The City must both address barriers that are holding potential bicyclists back and fully address the needs of those who choose to bike and those who bike out of necessity. Following in the footsteps of cities with bicycle mode shares over 15 percent, the following proposed programs and policies will get more people using new bikeways.



GET MORE PEOPLE ON BIKES

- » Change street design and parking pricing practices to actively disincentivize driving
- » Develop PR/messaging campaigns on benefits of bicycling
- » Award micro-grants for bicycling programs targeting disadvantaged groups¹⁴
- » Organize public-facing events and bike rides
- » Prioritize the existing Safe Routes to School program to schools in areas more conducive to biking and walking
- » Increase parking restrictions and other travel demand management programs in higher intensity, mixed-use areas
- » Expand shared micromobility (bike and scooter share)
- » Implement a wayfinding system
- » Make trails accessible 24 hours a day through changes in legislation as well as the addition of lighting and other security measures
- » Encourage bicycles on transit and provide adequate space for bicycles on buses and trains
- » Expand the availability of secure bike parking and end-of-trip facilities at transit stops
- » Develop a bicycle theft prevention program
- » Establish a bikeway maintenance schedule with focused street sweeping and user reporting system
- » Publicize street and bikeway closures and establish safe detour routes
- » Seek and amplify the voices of, and build a bike culture with, disadvantaged groups
- » Emphasize first- and last-mile connections to transit



MAKE BIKING SAFE

- » Lower speed limits and design speeds (25 mph or lower on bikeways without separation)
- » Improve intersections along bikeways by installing bike signals, actuated crosswalks, and stop controls
- » Advocate for speed limiters, automatic braking, and other safety features in motor vehicles
- » Designate car-free streets
- » Provide clear, dedicated, and direct access to bike parking from the street and to building entrances
- » Improve visibility, lines of sight, and lighting, especially where crashes have occurred before
- » Work with Caltrans to streamline permitting and integrate connected bikeways into Caltrans projects. Improve bikeway design approaching and crossing Caltrans facilities.



A bicyclist rides through Downtown San José.

14 The term ‘disadvantaged groups’ is defined in San José as women, people of color, people with disabilities, non-English speakers, low-income populations, people 65 and over, and youth. http://2040.planbayarea.org/sites/default/files/2017-07/Equity_Report_PBA%202040%20_7-2017.pdf



IMPROVE PROCESS AND DESIGN

- » Restrict right turns on red where appropriate
- » Establish a mode hierarchy for decision making that prioritizes pedestrians, bicyclists, and transit above personal vehicles.
- » Define the decision-making process in the City’s complete streets policy
- » Update City policies, plans, design standards, and other documents to include separated bike lanes as the preferred treatment on major streets
- » Adopt separated bike lanes, shared-use paths, and bicycle boulevards as preferred bikeway types
- » Develop design guidelines and a decision-making process for bike boulevard design
- » Partner with VTA and adjacent jurisdictions to develop a regional bicycle superhighway system
- » Collaborate with VTA to maximize co-benefits and minimize conflicts between transit and bicycling
- » Coordinate with others for bikeways not on city rights-of-way
- » Collaborate with public health partners to amplify the benefits of bicycling as active transportation.
- » Develop an annual maintenance plan and pursue dedicated funding for maintenance



MEASURE THROUGH DATA

- » Target bike safety factors and outcomes on Vision Zero Priority Safety Corridors
- » Install permanent bike counters, bike count displays, multimodal signal detection systems
- » Collect and analyze data before and after bikeways are installed
- » Use big data to better understand biking in San José

Where do you store your bike when you get to your destination?

Cities that rely on biking as a form of transportation install high quality, abundant, ubiquitous bike parking. The type of bike parking installed depends on the type of trip likely to occur at that location.

Short term bike parking refers to bike parking that is expected to be used for only a few hours. This type of parking is appropriate in a business district where people are likely to park for shopping or visiting a restaurant. Publicly accessible bike racks that are attached to the sidewalk are the typical way to provide short term bike parking. Another example is a bike corral, where several bike racks are grouped together in one parking space.

Long term bike parking should be installed in locations where a bike is likely to be stored for eight hours or more. These locations include residences, transit stations, and a person’s place of work. Due to the longer duration, long term bike parking must be secure, covered from the elements, and illuminated at night. It can consist of a locked outdoor shelter like a garage, a bike room within an office or apartment building, or a locked bike locker that sits in a public space.



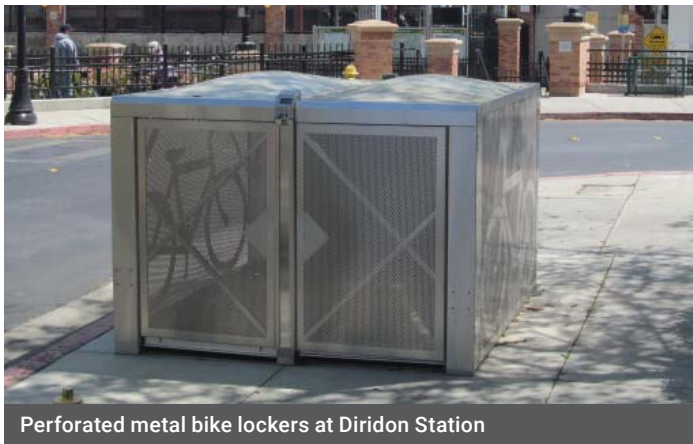
A bike corral on 1st Street in downtown San José

Currently, San José has 3,450 public parking spaces for bikes, compared to over one million total parking spaces for cars.¹⁵ Here’s how the City can grow this number:

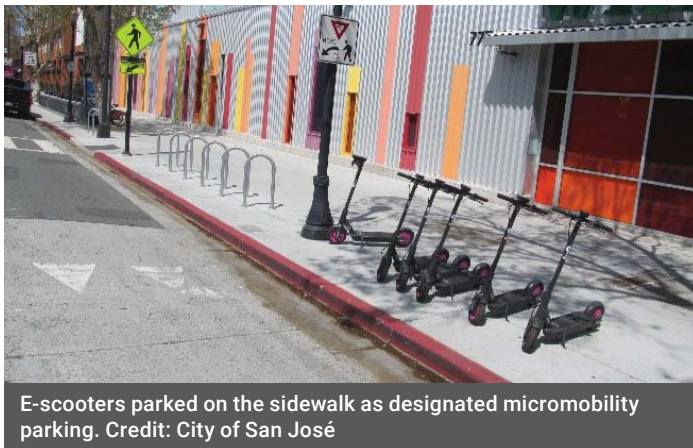
Public Bike Parking

Public bike parking—such as sidewalk bike racks—is the foundation of end-of-trip facilities for bicycling.

- » Bike Rack Request Program – Proactively improve visibility and efficiency of the City’s bike rack request program.
- » Install High-Density Parking in Commercial Areas – Expand the City’s bike corral program.
- » Micromobility Parking – Expand the City’s e-scooter corral pilot program.



Perforated metal bike lockers at Diridon Station



E-scooters parked on the sidewalk as designated micromobility parking. Credit: City of San José

Private Bike Parking

- » Work with Employers – Expand the City’s private property bike parking program.
- » Start with Public Buildings – Establish the City of San José as a model for providing bike parking at employment sites and other public buildings.

Bike Parking at Transit

- » Expand both short- and long-term bike parking at Diridon Station, BART Stations, Amtrak, ACE, and Caltrain Stations.

Long-term Change

- » Increase long- and short-term bike parking required through development, provide updated design standards, and strengthen the development review process to ensure required bike parking is installed.



A man hoists a bike to a top-rack bike parking spot. Increasing secure bike parking is important, like this bike parking room at the 19th Street BART Station in downtown Oakland

15 Smith, Ryan. “Parking for San José’s Future” (Master’s Thesis, University of San José, 2013), 45.

ESTABLISHING A BIKEWAY NETWORK

The development of the proposed bike network followed two guiding principles:

- » Rapidly implement a dense, interconnected bikeway network in key focus areas that are most likely to address safety, demand, and equity.
- » In low-density areas where trip distances are generally too far to bike, emphasize last-mile connections to transit.



Pedestrians and a bicyclist along the Guadalupe River Trail

The proposed bikeway network was informed by multiple sources of information to identify the appropriate streets and bikeway facility types

RELATED PLANS



- San José Bike Plan 2020 (2009)
- Vision Zero Action Plan
- Urban Village Plans
- San José Trails Strategic Plan
- Santa Clara Countywide Bike Plan
- VTA Across Barriers Connections Study
- ...and others...



NETWORK ANALYSIS



- Field review
- Citywide spatial analyses:
 - Demand
 - Safety
 - Connectivity
 - Comfort



COMMUNITY INPUT



- Technical Advisory Committee
- Bike & Pedestrian Advisory Committee
- CBO partners
- General public



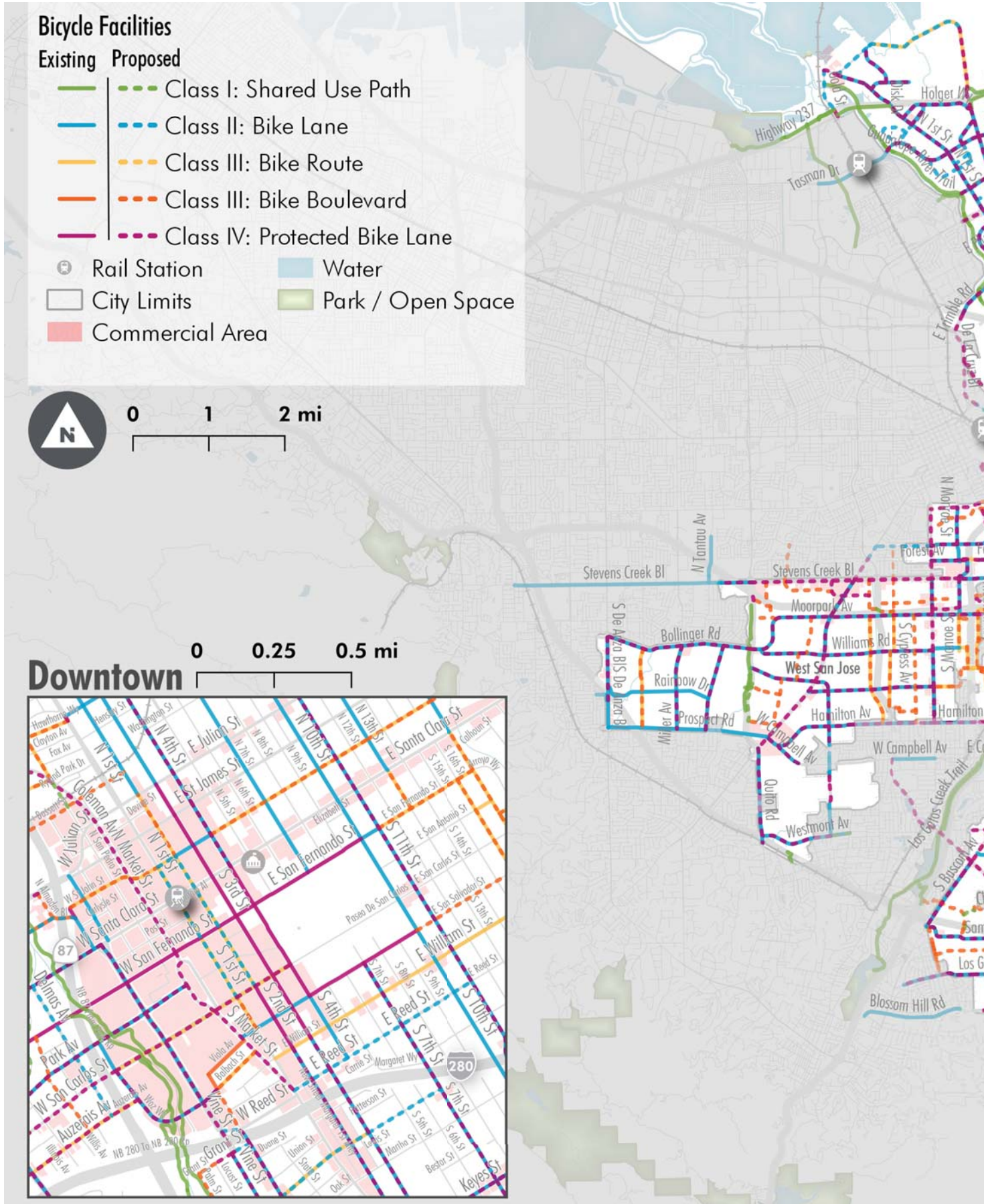


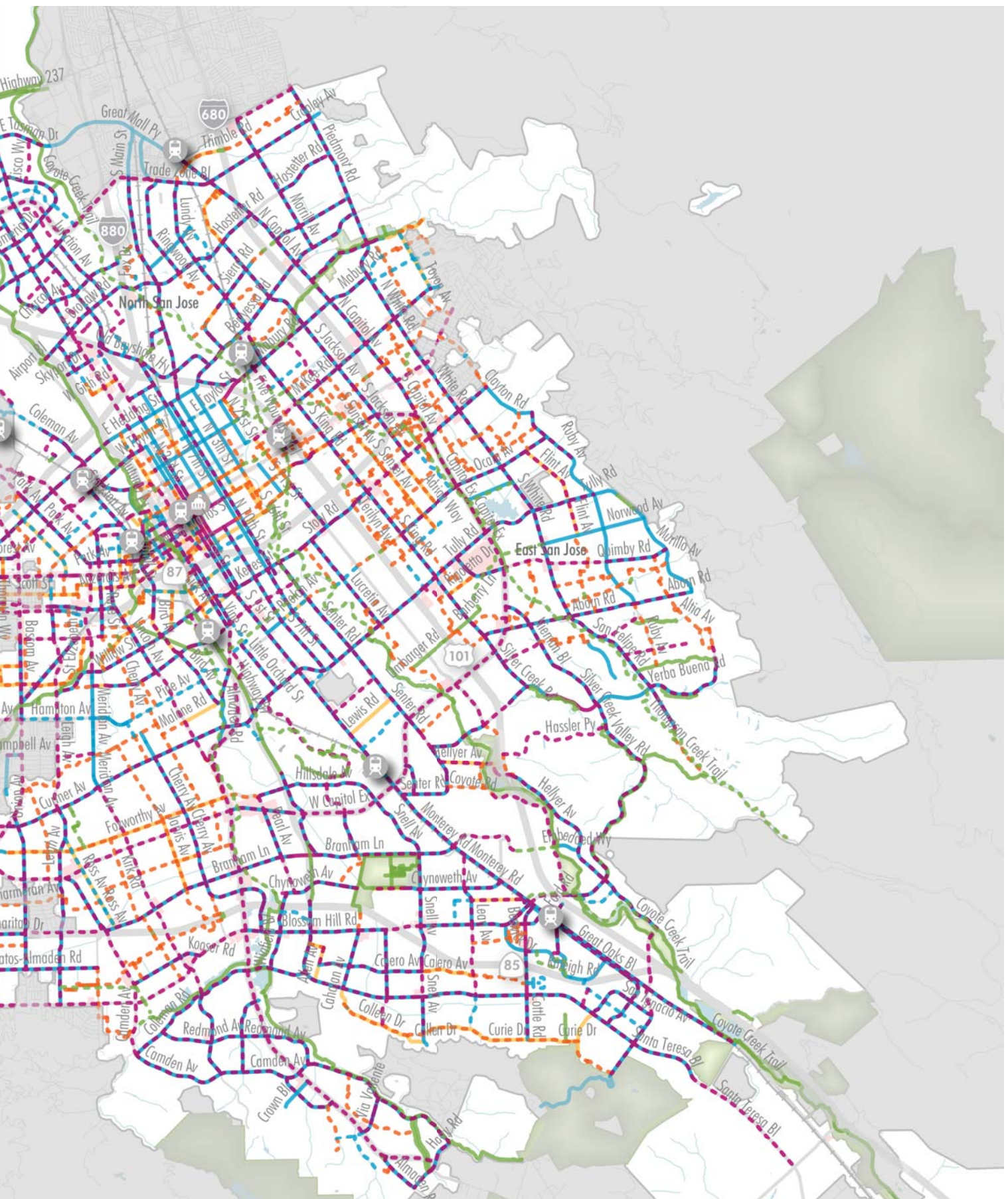
A family enjoys a bike ride on a multi-use path.



Two bicyclists ride along one of San José's many multi-use paths.

Map 6: Proposed Bike Network





Bikeway Selection and Design

The Better Bike Plan relies on current guidance in the San José *Complete Streets Design Standards and Guidelines* (2018), and targets “interested but concerned” bicyclists and micromobility users. These users would be most comfortable on low-stress bikeways, which are most likely to shift trips from driving to bicycling.

Chapter 6 in the San José *Complete Street Design Standards and Guidelines* outlines detailed design guidance for bikeways. This guidance includes design details for separated bike lanes, buffered bike lanes, standard bike lanes, shared lanes, bike boulevards, multi-use paths, and intersection treatments.

To provide a low-stress bike network for users of all ages and abilities, the Better Bike Plan recommends separated bike lanes on busier streets and bike boulevards on calmer neighborhood streets. In some instances where physical conditions are constrained, guidance is provided on the appropriate bikeway type.

While traditional bike lanes have a place, the majority of future on-street bikeways should consist of separated bike lanes, bike boulevards, and well designed intersections.

Protected Bike Lanes

When designing protected bike lanes, the following design factors must also be considered:

- » Frequent driveways may require the removal of vertical separators so that vehicles may cross the bikeway, resulting in little protection and many conflicts.
- » Protected bike lanes along bus transit routes may require design accommodations, such as bus boarding islands, and coordination with VTA to minimize conflicts between bikes, buses, and transit riders.
- » Intersections must carry the same feeling of protection through the intersection.
- » Curb access and management must be considered early in the design process to minimize conflicts.
- » Motor vehicle queuing space for turns may be impacted.

Bike Facility Selection

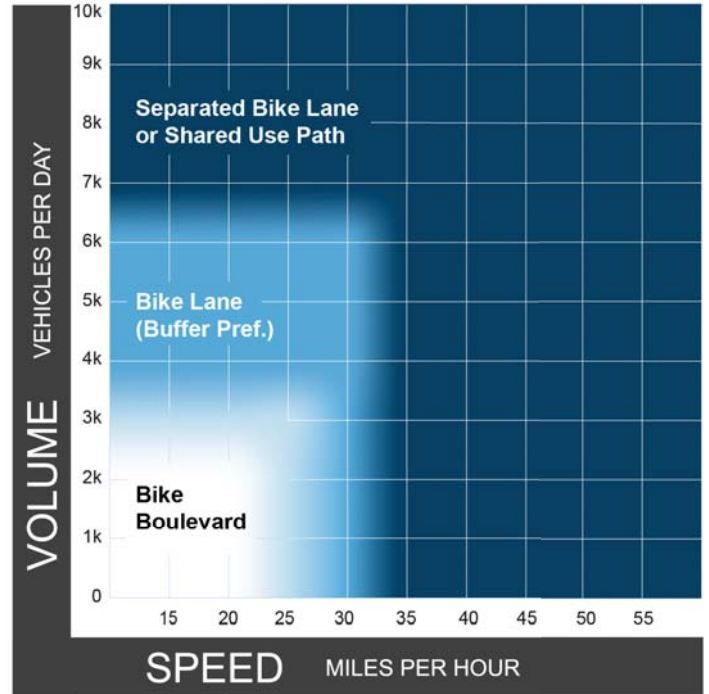


Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.



To minimize conflicts between transit riders, bike riders, and bus operators, VTA and the City of San José collaborate to build bus boarding islands, as shown in this photo.

Bike Boulevard Guidelines

Bike boulevards are most appropriate for low-volume (under 2,000 daily vehicles) and low-speed streets. Most bike boulevards not only require signage and pavement markings, but also the establishment of low-stress crossings of arterial streets, and traffic calming features based on the City of San José’s Traffic Calming Toolkit.

Well designed Intersections

Most vehicle-bicycle collisions occur at intersections, so in addition to choosing the right bicycle facility type for the context, engineers must consider intersection design and operations.

New design guidance and continued signal technology advancements give design engineers new options for improved intersection interactions between people biking and driving. Intersections where bicycle boulevards, protected bike lanes, and multi-use paths cross major streets, highway on-ramps, and other locations where there is a high potential for conflicts with vehicles must be designed thoughtfully. Through these intersections, designers must look for ways to continue the same level of comfort provided by the bicycle facility.

Advancements in intersection design include:

Operations	Lane Marking and Geometry
Leading bike intervals	Reduced turning speed
Crossing beacon at multi-use path crossings	Two-stage turn boxes
Dedicated bicycle signals	Protected intersections
Bicycle detection	Crossing and conflict markings



Green painted bike lane markings through an intersection, like the one at 3rd and E Santa Clara Street, are part of bikeway designs at intersections. Credit: City of San José



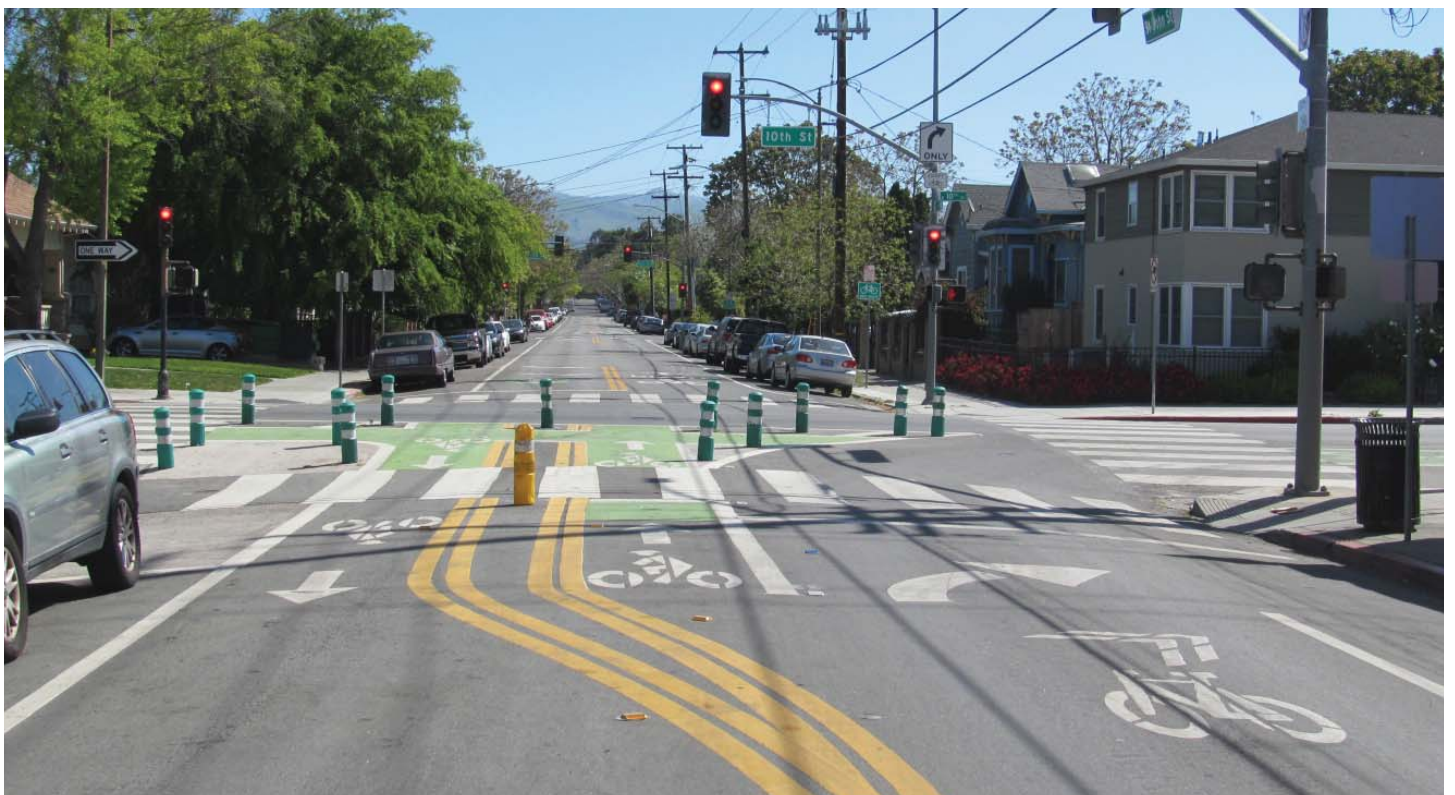
A painted bike lane with green bollards. Great intersections, such as this one at 10th and St John Street, make up the future of bikeways. Credit: City of San José



A traffic signal specific to bicycling. Dedicated bike signals, like this one at Story Road and Hopkins Drive, are a useful tool for biking through protected intersections. Credit: City of San José



A green-painted box protected by bollards. Two-stage left-turn bike boxes, such as this one on San Fernando at 4th Street, is helpful for navigating through intersections. Credit: City of San José



An intersection with green paint and bollards that diverts cars one way and allows bicyclists to ride through. Bike boulevard diverters, like at 10th and St John Street, maintain low volumes of cars on low-stress bike boulevards. Credit: City of San José

A Better Bike Network for San José

The proposed bike network includes hundreds of miles of new, better bikeways, an amount that will forever change the experience of riding a bike throughout the city.

This Plan includes recommendations to build

- » **104 miles** of new protected bike lanes (Class IV)
- » **253 miles** of existing bike lanes upgraded to become protected (Class IV)
- » **102 miles** of bike boulevards (Class III)

Feeling safe, comfortable, and cared for while riding a bike around San José will be normal.

Design

San José will continue to build and maintain high quality bikeways that appeal to riders of all ages and abilities.

To achieve the ambitious goals set out in this Plan, the City must be bold in building better bicycle facilities. This requires building at least the recommended widths and staying up to date on the latest research. Detailed design guidance can be found in *San José Complete Streets Design Standards and Guidelines* (2018), Chapter VI. Bike Facility Design.

What happens next?

In Chapter 5, learn about how the City of San José and key partners will take this vision to the streets!



Low-stress bikeways in San José will invite people of all ages to bike. Credit: Richard Masoner





CHAPTER 5

IMPLEMENTATION STRATEGY

CHAPTER 5: IMPLEMENTATION STRATEGY

The vision for the Better Bike Plan is to make bicycling more accessible so that people of all ages, abilities, and backgrounds can comfortably and conveniently bike to any neighborhood. Doing so will significantly increase bicycle mode share, safety, and equity.

To achieve this, the City must be strategic and purposeful. Central to the City's strategy is investment in new high comfort bikeway infrastructure in areas that have supportive land uses, are proximate to community destinations and transit, and are where people have the greatest need for more affordable transportation options. Equally important and complementary to the bikeway network implementation strategy are key elements of the policy and program recommendations described in Chapter 4. Priority policy and program recommendations are focused on establishing a broader bicycling culture that not only supports those people who bicycle out of necessity, but rewards all who choose to travel by bicycle and other micromobility devices. This chapter outlines three key elements to implementation.

- » **Priority Programs and Policies** – The programs and policy recommendations from Chapter 4 are essential to the success of this plan. Programs and policies outlined in this section are high-priority and achievable in the next five years.
- » **Investing in the Better Bike Plan** – A thoughtful financial plan is critical to delivering any of the elements described in this Plan.
- » **Building the Network** – The vision for the bikeway network in this Plan is seamless city-wide. However, the City cannot build this out overnight. In this section, learn about the projects that will be installed first.



A local resident takes note of the San José bicycle network at a workshop.

Priority Policies and Programs

Achieving the Better Bike Plan's goals requires policies and programs that not only influence the design and provision of bikeway infrastructure, but also influence people's transportation choices and create a supportive environment for people of all ages, abilities, and backgrounds to choose biking. Based on a thorough review of international best practices from cities that have successfully moved the needle towards these goals, a series of top-priority policies and programs have been identified for San José. These initiatives will be implemented over the next five years and are organized around the key ingredients needed for San José to become a world-class bicycling city.

Support the Low-Stress Network

While building the low-stress bikeway network, it is important to adopt policies that make operations safer, leverage existing assets, and enhance use of the bikeway network. These actions include changing ordinances, expanding end-of-trip facilities, and modifying our approach to street design.

- » **Lower speed limits and design speeds.** Speed limits on streets within the bike network and without protected bikeways should be 25 mph or lower. Higher motor vehicle speeds increase crash severity and reduce bicyclist comfort.
- » Implement a policy addressing vehicle turning conflicts at intersections on separated bike lanes. The policy should identify turning thresholds where right-turn on red restrictions or other exclusive turning phases are recommended. Implement changes along the citywide bike network, within downtown, urban villages, and within proximity of major transit stations.
- » Allow **24-hour access to multi-use paths** and develop a plan to provide adequate lighting for safety and visibility (with the possibility of low-impact lighting in environmentally sensitive areas). Lighting and 24-hour access can increase the feeling of security.
- » Design and begin implementing a **wayfinding system** of signs that guides people on bikes to key destinations such as schools, shopping areas, and transit stations. Wayfinding is an essential encouragement tool that helps people confidently navigate the city. Evaluate cut-throughs, short connections, ramp access, and ADA compliance where necessary.
- » Develop **bike boulevard guidelines** and associated standards for the planning, design, and implementation of these Class III Bikeways to ensure they are designed for all ages and abilities and to create a shared understanding with the public.
- » Develop and implement strategies to provide **better bike crossings** of major streets, including where California state rules do not require signals and where bikeways cross highway facilities. Examples include daylighting (which can provide space for bike parking), dedicated signals and phasing, pavement markings, and protected intersections.



A low-stress protected bike lane. Credit: City of San José.

Foster a Radically Inclusive Bike Culture

A key ingredient in increasing mode share for bicycling and moving toward equity in biking is the fostering of a robust bike culture. Conventionally, bike culture in the U.S. has skewed toward people that are more affluent, white and male. However, San José's bike culture should represent the entire population, something that can only be achieved by seeking and amplifying the voices of historically underrepresented groups by engaging and supporting women, people of color, immigrants, people with disabilities, low-income people, and older and younger people. The following programs and policies will advance this objective.

- » Establish an **equity advisory committee** that consists of members of historically underrepresented groups with a focus on discussing bicycling and other transportation topics. Alternatively, consider reformulating the Bicycle Pedestrian Advisory Committee to ensure equitable representation. In addition to regular (at least quarterly) meetings of this commission, hold regular (once or twice per year) bike-focused listening sessions for each of the member groups individually. Develop and track metrics that evaluate the scope and efficacy of these initiatives.
- » Partner with local organizations representing the diversity of San José's population to develop a multi-faceted (online, outdoor, bus, etc.) **public education campaign** that expounds on the health, social, and economic benefits of bicycling. Conduct on-going polling research to identify effective messaging.
- » Partner with organizations including VTA to **provide micro-grants** to organizations to start/expand programs designed to encourage bicycling by women, people of color, people with disabilities, non-English speakers, low-income populations, seniors, and youth.
- » Maintain and expand successful **Safe Routes to School** initiatives that 1) build a love of bicycling for children, 2) encourage parents to support bicycling, 3) educate parents and administrators about the health and academic benefits of biking, and 4) provide resources to empower school communities. Initiatives should collaborate with ongoing programs, such as the Walk n Roll Program.
- » **Expand shared micromobility** (defined in Chapter 1) options in San José and increase its role as a first/last-mile transit access solution to attract a larger cross section of the population. Ensure existing and future micromobility services emphasize serving low-income areas, neighborhoods with higher percentages of non-white populations, and areas near public transit. In addition, work with micromobility companies to include more adaptive bikes, trikes, and cargo bikes.

Encourage Alternatives to Driving

Cities around the world have demonstrated that bicycling rates and safety both increase when driving is not seen or treated as the obvious or only choice for how to move about. The City should reinforce and champion the *Envision San José 2040 General Plan* to make San José a "walking and bicycling first city" by developing incentives to bicycling and deterrents to driving that will substantially increase mode share amongst biking, walking, and transit. Emphasize carrying out the City of San José's Vehicle Miles Traveled (VMT) reduction policy (Council Policy 5-1) and similar statewide legislation (S.B. 743). Supporting programs include:

- » **Collaborate across agencies and modal planning** to advance mutually beneficial VMT reduction initiatives and advocate for complete and multimodal street allocation.
- » Adopt a policy to provide **no new single occupancy vehicle capacity**, such as additional travel lanes, when streets are redesigned (either citywide or in key areas such as urban villages). This will provide more space for biking, walking, transit, and urban life.
- » **Increase or introduce parking fee rates and time restrictions** to encourage people to take transit, bike and walk to downtown, urban villages, Priority Development Areas (PDAs), as designated in the Valley Transportation Plan 2040, and other higher intensity, mixed-use areas. In the longer term, consider reducing the parking supply in these areas.
- » **Modify development requirements** to reduce or eliminate off-street parking minimums. Consider establishing parking maximums in downtown, urban villages, and other transit-rich areas. Besides discouraging driving, this will preserve land and increase the development potential of parcels.

Streamline Design and Implementation Processes

Implementing a low-stress bike network consistently and smoothly will require alignment within the City’s various funding, planning, design, implementation, and operation activities. San José can move more quickly toward achieving its goals if certain adjustments are made to policies and programs that significantly influence the design and operation of the transportation system.

- » **Adjust mode priority** in design and network planning. *Envision San José 2040 General Plan* called for promoting a walking- and bicycling-first city.¹⁶ Ensure these policies are reflected in design decision making and network planning. In urban villages, Downtown, and similar contexts, single occupancy vehicles should be the lowest priority.
- » Add detail to the City’s Complete Streets policy to clearly **define the process for decision-making**, steps for documentation, priorities or criteria for various decisions, and a process for exceptions to the policy.
- » Bring the Functional Classification Diagram of Street Typologies in the *General Plan and Complete Streets Design Standards*, into alignment to more clearly articulate that **separated bike lanes are the preferred bikeway treatment** on everything other than low-volume neighborhood streets. On streets with transit service, ensure that all cross sections include space/ROW for the appropriate bikeway type.
- » Make sure that bike safety factors, issues, and outcomes are clearly **identified in the City’s Vision Zero initiatives** and included for projects surrounding Priority Safety Corridors.
- » Enhance bicycle count efforts and collect more data to guide decisions by **installing permanent automatic bike counters** along key bikeways in 10 representative locations (e.g., different bikeway types, land use, and sociodemographic contexts). Work to increase the number of sites and counter installation as the bikeway network is expanded. Using bike counters with displays along popular bike routes can also encourage people to bike more often.
- » **Increase coordination between agencies** involved in the planning, design, operation, and maintenance of streets and multi-use paths to advocate for San José’s priorities and values for the transportation system. Agencies include VTA, Caltrans, and departments within the City of San José, such as DOT and PRNS, among others.



A group ride on a two-way protected bike lane.

16 *Envision San José*, City of San José, Chapter 6, p35.

Priority Projects

Even with a commitment to rapidly improving bicycling, the entire network cannot be built out overnight and the City must decide where to focus near-term efforts. The proposed network in Chapter 4 includes a complete collection of bikeways that seamlessly connect across the entire city. This section outlines the City’s process to prioritize projects for implementation. It focuses on:

- » Projects that deliver this Plan’s goals
- » Projects within the Plan’s Focus Areas
- » Projects that are “shovel ready”
- » Projects that can be installed with concurrent capital programs

Projects that deliver the Plan’s goals

Certain projects in the Better Bike Plan network will help advance this Plan’s goals more than others. The City will focus on these priority projects first to ensure that finite financial resources pay the highest dividends. At the same time, the City will continue to be proactive in

identifying opportunities that would facilitate bikeway implementation, which may include pursuing a lower priority project such as a repaving project that would allow for striping a new bike lane with marginal additional costs.

The proposed network has been prioritized using criteria that fall under three categories reflecting the Plan’s goals: **mode share, safety, and equity**. Criteria for bicycle mode share, which are focused on increasing connectivity and access to destinations via the bikeway network, were weighted most heavily because a bikeway network that increases overall access will also advance equity and safety goals. When looked at in isolation, priority projects that would advance each of the goals separately show some overlap, but there are some notable differences. For example, if considering only equity, higher priority projects cluster in neighborhoods just to the south, east and north of Downtown San José. Priority safety projects are located to the south and east of Downtown and tend to be on larger arterial streets such as Story Road and South King Road. When all the criteria are combined, the majority of high priority projects are within the Focus Areas, but there is a significant number of high priority projects in central San José neighborhoods.

Criteria used to prioritize projects across the citywide bike network



Mode Shift

Projects on the streets highlighted provide access to areas where many people live and work as well as areas where riding a bike is convenient.

Improvements on these streets are most likely to encourage people to drive less and ride bicycles.



Increase Safety

Projects in this category will improve safety for people riding bikes. They include projects on Vision Zero Priority Safety Corridors, streets that have experience many fatal or serious crashes, and high-stress streets that are perceived to be unsafe.



Increase Equity

Highlighted projects in this category are within a Community of Concern or provide access between a Community of Concern and an employment area, college, or transit.

Focus Areas

For people to choose riding a bike over driving, the City must build a connected low-stress network. If even a small portion of a person’s trip feels unsafe, they are much less likely to choose a bike for their trip. To achieve this shift, the City will focus on building out a dense network of bicycle facilities in select neighborhoods before expanding the network citywide. Because most trips are shorter than three miles, focusing on local trips will be more effective than prioritizing longer cross-town trips.

These “Focus Areas” are defined based on several factors:

- » Where bikeway infrastructure investments are likely to advance the Plan goals most effectively over the next five years. Bicycle trip potential—determined by factors

including population, employment, connections to transit, connectivity to Downtown, and ability to build on the existing protected bike lane network—is highest in the Focus Areas.

- » Serving low-income and historically underserved populations
- » Supporting the City’s Urban Villages and Planned Growth Areas¹⁷
- » Bike safety issues identified in the City’s Vision Zero Program

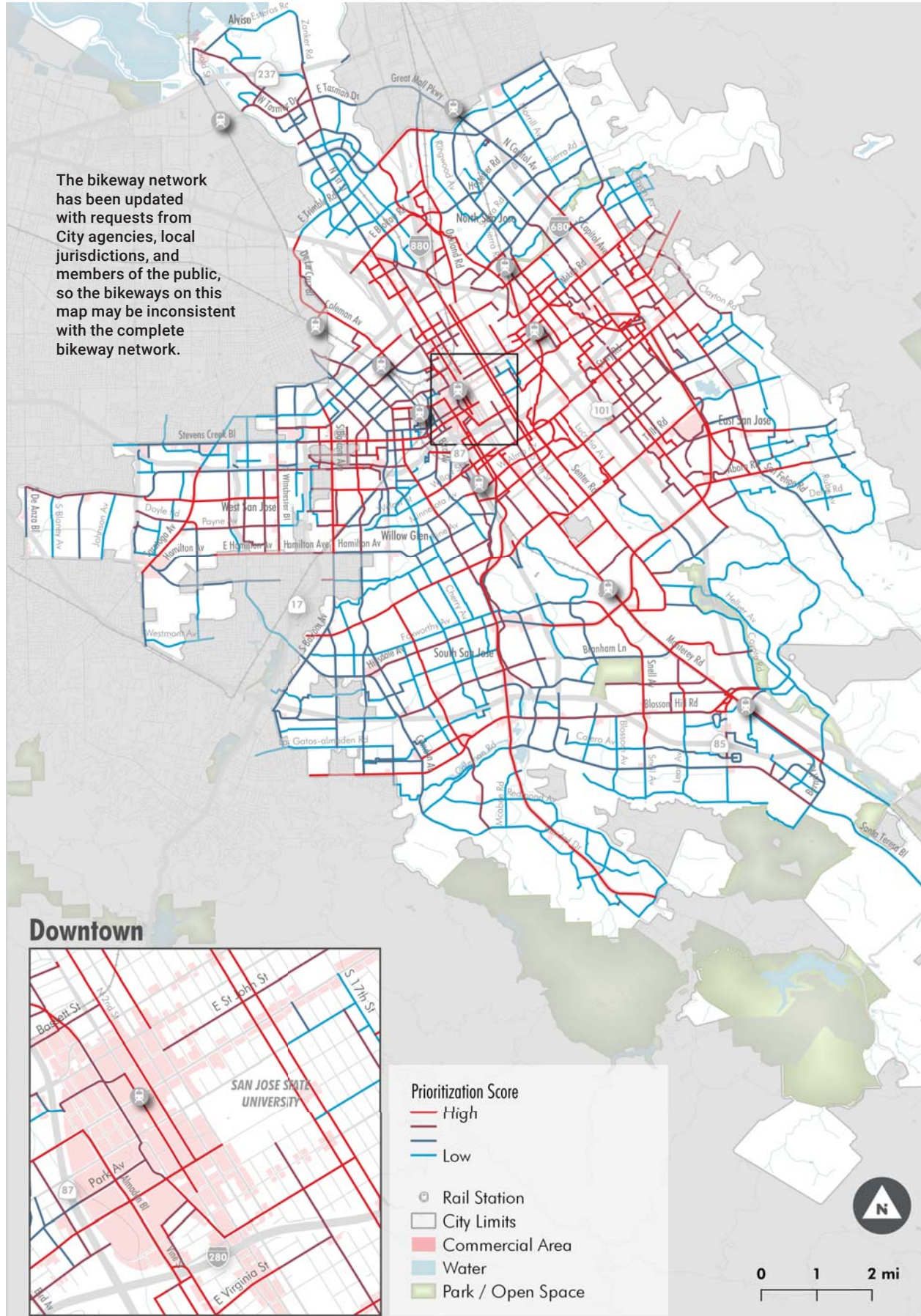
The City will look to first build out the recommended bikeway network in Focus Areas. However, high priority projects outside of these areas will be pursued as opportunities arise, such as those outlined on page 76.

Map 7: Focus Areas



¹⁷ Planned Growth Areas (PGAs) are defined in the City of San José’s General Plan as a key strategy for achieving City goals for economic growth, fiscal sustainability, and environmental stewardship. PGAs such as Downtown, transit employment areas, and Urban Villages, together total roughly 17 percent of the City’s area, and are expected to accommodate 30 percent of the City’s population growth.

Map 8: Prioritized Bike Network



Projects that are “Shovel Ready”

The relative ease of implementing projects reflects a combination of factors including cost, available right-of-way for accommodating new or upgraded bikeways, and operational challenges that may impact transit service or vehicle traffic. Projects that will be easier to implement are generally on streets with excess vehicle capacity or underutilized on-street parking (e.g., removal of parking or travel lanes would have little measurable adverse impacts) and tend to have low to moderate costs. Projects that will be more difficult to implement may have higher than average costs or one or two major cost items (e.g., a new bridge or right-of-way acquisition), or require reallocation of right-of-way where it is challenging to do so (e.g., a corridor with high traffic volumes or high parking utilization).

The proposed network has been assessed for these considerations, including what roadway modifications would be needed to implement the bikeway project and the estimated cost. This assessment has identified approximately 60 miles of bikeway projects within the Focus Areas and over 220 miles outside of the Focus Areas that should be relatively easy to implement. Many of these projects are on roadways that do not require any modifications to travel lanes or parking, or where there is sufficient space to accommodate all modes of travel. There are also a significant number of projects that will require further evaluation due to operational considerations. These include roadways with highly utilized on-street parking or vehicle volumes that complicate the removal of travel lanes. Bike projects proposed along streets that have transit service require further evaluation of design options that would minimize impacts to transit operations.

It is important to balance project priorities with feasibility considerations so that the City can distribute its investments more broadly, given finite funding, while also ensuring that projects advance its goals. The City will first focus on high priority/high feasibility projects—these are the projects that can be built in the near-term and will make a big impact. High priority projects that are difficult to implement or are less feasible may still connect important destinations and further the Plan’s goals.

Criteria used to determine ease of implementation

Traffic Volumes

Based on City traffic counts, streets with more capacity than needed were identified as possible road diet candidates.

Minimize Parking Loss

Projects where existing parking needs based on current parking counts can be accommodated within the proposed bikeway project are easier to implement. Parking is only removed where absolutely necessary.

Minimal Conflict with Transit

Bikeways that don’t overlap with transit service are easier to implement and treatments like bus boarding islands are included where bikeways and bus routes are on the same street.

Coordination with Other City Programs

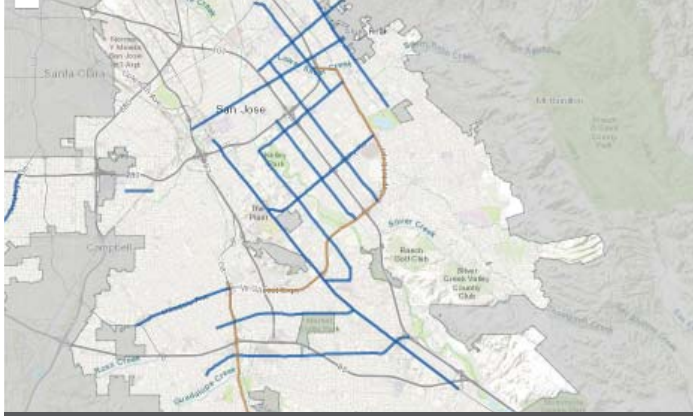
Other capital projects that overlap with bikeway projects can reduce the need for additional funding, especially where multiple city priorities can be addressed at the same time. Bikeways overlapping with Vision Zero, Pavement, and Green Streets projects are prioritized.



A bus boarding island next to a separated bike lane.

Projects that can be installed with concurrent capital programs

One of the best opportunities to implement projects is by taking advantage of initiatives that overlap with priority bikeways. These projects represent an opportunity to deliver multiple improvements through a single process and construction project. This can save staff time during the project development process and save the City money by addressing multiple issues with one construction process. Concurrent programs that have significant overlap with the proposed network include the following:



The Vision Zero High Injury Network

Vision Zero High Injury Network

The 17 corridors on the Vision Zero High Injury Network account for a high proportion of fatalities and severe injuries on San José streets. These streets are the focus of major safety projects and outreach campaigns. Bike projects that overlap with the High Injury Network will be prioritized to accommodate the timeline of the Vision Zero work.



Paving and restriping projects are great opportunities to install bike lane markings.

City of San José Paving Program

Streets expected to be paved in 2021 and 2022 are part of a nine-year program to repave every mile of local and neighborhood streets in San José while continuing to care for major streets. Street repaving presents an opportunity to install certain bikeways without adding much cost to a project. Starting in 2021, the City of San José will accelerate implementation of projects in this Plan by coordinating the striping of bike lanes with street paving operations. Projects such as the installation of a painted bikeway traffic calming, and improving intersection geometry can add little or no extra cost to a paving project.



Graphic of a stormwater project integrated into a bikeway design.

Green Stormwater Infrastructure

This plan will be coordinated and aligned with the City's Green Stormwater Infrastructure program. As part of a 30-year Green Stormwater Infrastructure plan, identified green streets will be designed to allow rainwater to soak into the ground and be filtered by soil. This reduces the quantity of water and pollutants flowing into storm drains and local creeks. The reconstruction of green streets presents an opportunity to integrate high quality bikeways into a street reconstruction project.

Investing in the Better Bike Plan

This Plan has outlined the many benefits of biking, the history of bikeway construction in San José, and the methods for building the Better Bikeway Network. This final section focuses on the financial costs of implementing this ambitious vision. The implementation of this Plan will include the construction of new bike lanes, protected bike lanes, bike boulevards and new multi-use path connections on streets throughout the city. The cost for these projects varies based on the type of bikeway and whether it is installed independently or coordinated with other initiatives such as Vision Zero, larger complete street reconstructions, stormwater projects, or routine re-paving. Bikeway projects will be funded through a variety of sources including the San José capital improvement program, grant applications, private development, and existing maintenance programs. The goals outlined throughout this Plan can only be met if the resources needed to implement them are identified.

The cost of implementing the bikeway network varies based on the type of bikeway that is planned on each street. Standard, painted bike lanes can be implemented at a substantially lower cost than projects that require curb or traffic signal work.

Protected bike lanes represent the largest portion of new bike lane miles, as well as capital costs. To provide more flexibility, this plan identifies a range of low and high total implementation costs. The high cost incorporates a more permanent and expensive treatment shown in the picture on the right. The low cost uses a less permanent and less expensive treatment shown on the left.

The cost estimates on the next page assume that most of the network will be constructed out of rapid implementation materials, and are based on a planning-level cost-per-mile estimate for each bikeway type. Rapid implementation materials are those that can be installed quickly and are lower cost. Planning-level estimates for certain treatments are also included, such as paint and striping, quick-build medians, and some signals. However, some projects will require more expensive changes such as traffic signal modifications or transit stop islands that help maintain transit reliability and reduce conflicts between bicyclists, buses, and motorists. The estimated build-out cost of the on-street bikeway facilities ranges from roughly \$263 million to \$370 million, depending on the type of physical separation used in each protected bikeway. This includes a range of roughly \$120 million to \$162 million in Focus Areas in Downtown and East, North, West, and South San José.



Flexible plastic posts provide physical separation between the bikeway and vehicle traffic at a relatively low cost.



Pre-cast concrete curbs provide a higher quality buffer between the bikeway and vehicle traffic at a slightly higher cost.

Detailed Costs by Area (2020)

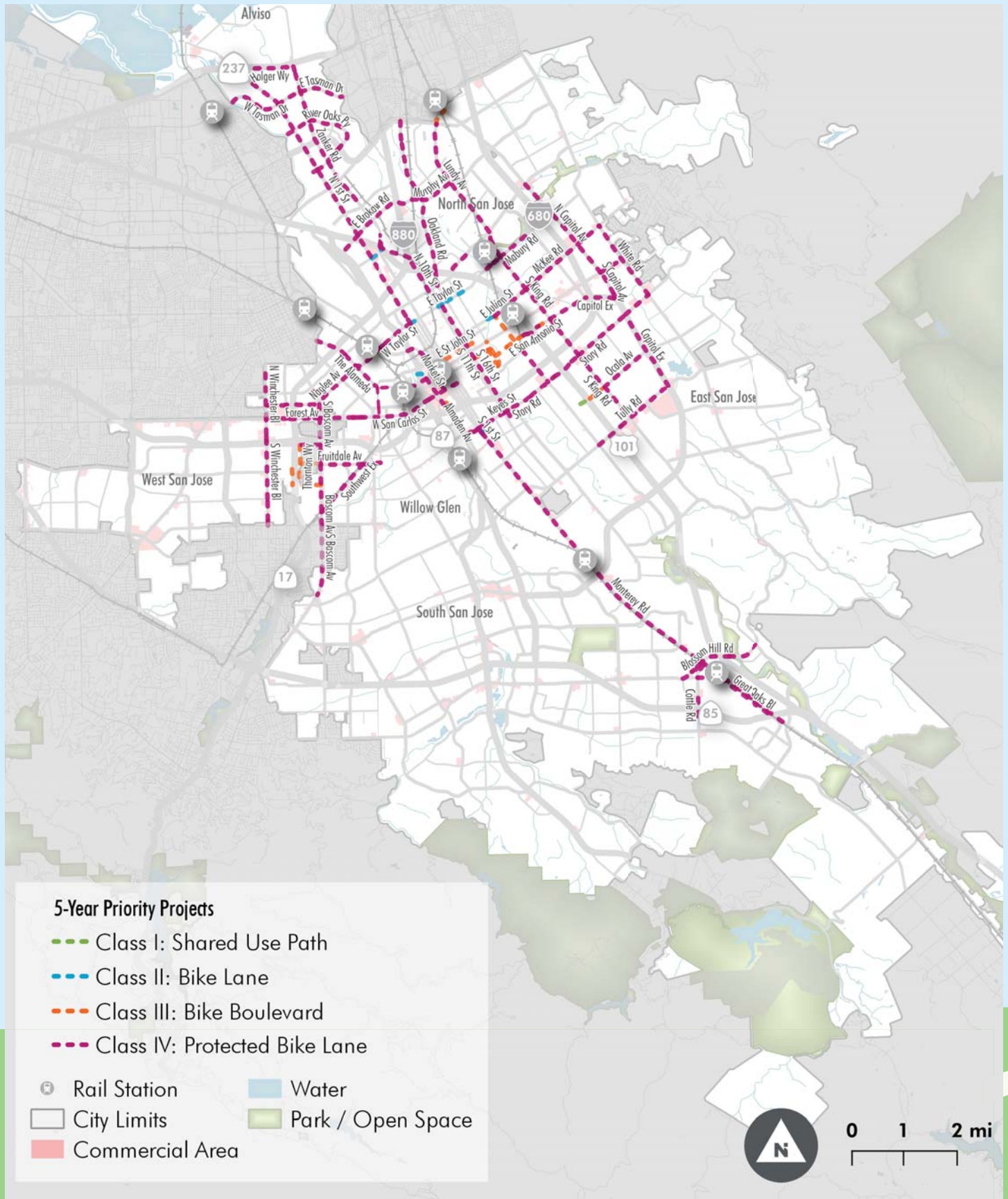
Area	Cost Range (low-high)
East San José	\$36–47 million
North San José	\$21–33 million
West San José	\$29–38 million
I-STAR	\$21–26 million
Downtown	\$13–16 million
Network outside of focus areas	\$142–208 million
Total Cost	\$263–370 million

Five-year Project List

The City is focused on making smart, strategic investments in its bikeway network over the next five years. Several investment scenarios were analyzed and the resulting implementation strategy represents a combination of high priority projects that can leverage other City projects and opportunities, projects that are considered to be relatively easy to implement, and projects that may be more challenging (i.e., lower feasibility), but critical in terms of connecting the network and providing access to key destinations. This implementation strategy is a living document and will be updated every year to reflect the state of funding and private development opportunities. Both of these factors are constantly changing and need to be re-evaluated regularly.

THIS PAGE INTENTIONALLY LEFT BLANK

Map 9: Five-year Investment Strategy



SAN JOSÉ'S 2025 BIKE NETWORK!



MODE SHIFT

PROPOSED BIKEWAY MILES

88 miles of **Protected Bike Lanes**

6 miles of **Bike Boulevards**

1 new **Highway Overpass**

95 Total Network Miles

190,000
residents

120,000
more jobs

62
more schools

will have new or upgraded access to the Low-Stress Bike Network



EQUITY

CONNECTING ALL SAN JOSÉANS

A goal of this plan is to Lead with Equity to ensure that biking is made more accessible and equitable for all people in San José. This plan prioritized investment in locations serving communities that have historically experienced a lack of investment:

87% of Communities of Concern and 100% of disadvantaged communities are served by the priority network



SAFETY

1/4 of the priority network is on Vision Zero corridors

1/3 of the VZ corridors are included in the priority network



Five-Year Project List

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
(not in focus area)	S 1st St	Keyes	Alma	Protected Bike Lane	68	VZ	0.32
ESJ	S King Rd	McKee Rd	Story Rd	Protected Bike Lane	66	Green, VZ	1.59
ESJ	Story Rd	King Rd	S Jackson Ave	Protected Bike Lane	62	Green, VZ	0.76
ESJ	Monterey Rd	Alma	Blossom Hill	Protected Bike Lane	61	Green, VZ	5.71
ESJ	McKee Rd	US-101	King Rd	Protected Bike Lane	61	VZ, Pave	0.36
(not in focus area)	Story Rd	Roberts Ave	S King Rd	Protected Bike Lane	61	VZ	1.18
ESJ	Monterey Rd	Alma	Blossom Hill	Protected Bike Lane	61	Green, VZ	5.71
ESJ	E Julian St	N 21st St	N 24th St	Bike Lane	61		0.15
ESJ	Story Rd	Roberts Ave	S King Rd	Protected Bike Lane	61	VZ	1.18
ESJ	Story Rd	Jackson Ave	White Rd	Protected Bike Lane	60	VZ	0.98
ESJ	McKee Rd	King Rd	Capitol Ave	Protected Bike Lane	60	VZ	0.51
ESJ	McKee Rd	King Rd	Jackson Ave	Protected Bike Lane	60	VZ	0.77
Downtown	Story Rd	Jackson Ave	White Rd	Protected Bike Lane	60	VZ	0.98
Downtown	McLaughlin Av	E William St	Story Rd	Protected Bike Lane	57	VZ, Green, Pave	0.76
WSJ	S King Rd	Story Rd	Tully Rd	Protected Bike Lane	57	VZ, Green	1.54
ESJ	Graham Av	Almaden	Keyes	Protected Bike Lane	55		0.20
WSJ	Mabury Rd	Lenfest Rd	King Rd	Protected Bike Lane	55		0.17
I-STAR	Story Rd	Senter Rd	Roberts	Protected Bike Lane	54	Green, VZ	0.40
ESJ	Tully Rd	McLaughlin	Brahms Ave	Protected Bike Lane	54	Pave, Green, VZ	0.55
Downtown	Tully Rd	McLaughlin	Brahms Ave	Protected Bike Lane	54	Pave, Green, VZ	0.48
(not in focus area)	N 1st St	W Mission St	W. Taylor St	Protected Bike Lane	54		0.17
WSJ	W San Carlos St	Bascom Av	Woz Wy	Protected Bike Lane	53	Green, Pave	2.16
ESJ	Blossom Hill Rd	Beswick Dr	Monterey Interchange	Protected Bike Lane	53	VZ	0.38
ESJ	W San Carlos St	2nd St	4th Street	Protected Bike Lane	52		0.13

KEY:

VZ = Vision Zero Priority Corridor
Green = Green Stormwater Infrastructure

Pave = Pavement Project
ESJ = East San José / Berryessa
NSJ = North San José

WSJ = West San José
I-STAR = I-STAR/Blossom Hill

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
WSJ	E Taylor St	N 13th St	N 21st St	Bike Lane	52		0.48
ESJ	Alum Rock Av	Capitol Ave	White Rd	Protected Bike Lane	51	VZ, Pave	0.47
NSJ	E Humboldt St	S 3rd St	S 1st St	Bike Lane	51		0.10
ESJ	Stevens Creek Bl	Macarthur Ave	Beacom Ave	Protected Bike Lane	51	Pave	0.21
ESJ	E Julian St	N 24th St	US-101	Protected Bike Lane	51		0.42
Downtown	Oakland Rd	Club Dr	E Gish Rd	Protected Bike Lane	50	Green	1.81
Downtown	S Winchester Bl	Rosemary Ln	Hamilton	Protected Bike Lane	50		0.07
Downtown	McKee Rd	N Capitol Ave	N White Rd	Protected Bike Lane	50	VZ	0.54
ESJ	Tully Rd	Brahms Ave	Capitol Expy	Protected Bike Lane	49	Pave, Green, VZ	0.69
Downtown	Capitol Ex	S Jackson Av	S Capitol Av	Protected Bike Lane	49	VZ	0.54
WSJ	Almaden Av	W. Reed Street	Grant St	Protected Bike Lane	49		0.05
ESJ	E Taylor St	N 8th St	13th Street	Bike Lane	48		0.33
I-STAR	Almaden Av	Grant St	Goodyear	Protected Bike Lane	48		0.56
ESJ	S King Rd	Commodore Dr	McKee Rd	Protected Bike Lane	48		1.13
Downtown	White Rd	McKee Rd	Story Rd	Protected Bike Lane	47	Pave, VZ	1.59
Downtown	E Taylor St	N 13th St	Monferino Dr	Spot Improvement	47		0.06
Downtown	S 24th St	E Julian St	E William St	Bike Boulevard	47	Green	0.83
Downtown	Cottle Rd	Endicott	Poughkeepsie	Protected Bike Lane	47		0.27
ESJ	Fruitdale Av	Bascom Ave	Southwest Expy	Protected Bike Lane	47	Pave, VZ	0.79
Downtown	Oakland Rd	E Gish Rd	E Hedding St	Protected Bike Lane	45	Green	0.89
NSJ	Keyes St	Sherman St	Senter Rd	Protected Bike Lane	45		0.85
Downtown	E San Antonio St	S. 33rd Street	King	Bike Boulevard	45	Pave, Green	0.25
ESJ	Keyes St	Sherman St	Senter Rd	Protected Bike Lane	45		0.85
WSJ	S 11th St	Hedding	Humboldt	Protected Bike Lane	45	Pave, Green	2.83
ESJ	Keyes St	Sherman St	Senter Rd	Protected Bike Lane	45		0.85
I-STAR	Oakland Rd	E Gish Rd	E Hedding St	Protected Bike Lane	45	Green	0.89
NSJ	Monterey Rd	Blossom Hill R	Bernal Rd	Protected Bike Lane	44	Green, VZ	0.06
ESJ	N 1st St	E Brokaw Rd	Mission St	Protected Bike Lane	44	Pave, Green	1.77
WSJ	Mabury Rd	DOT Wy	Berryessa Station Wy	Protected Bike Lane	44		0.17

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
Downtown	Monterey Rd	Blossom Hill R	Bernal Rd	Protected Bike Lane	44	Green, VZ	2.05
Downtown	W San Carlos St	Woz Way	2nd Street	Protected Bike Lane	44		0.53
WSJ	S Capitol Av	Berryessa Rd	Capitol Expy	Protected Bike Lane	42	Green, Pave	0.11
ESJ	S Bascom Av	W Hedding St	Fruitdale Ave	Protected Bike Lane	42	Green, Pave	1.50
Downtown	Blossom Hill Rd	Blossom Hill Rd @ Monterey Interchange	Coyote Rd	Protected Bike Lane	42	VZ	0.81
NSJ	S Capitol Av	Alum Rock Av	Capitol Expy	Protected Bike Lane	42	Green, Pave	0.45
WSJ	N Capitol Av	Berryessa Rd	Alum Rock Av	Protected Bike Lane	42	Green, Pave	2.17
Downtown	E Brokaw Rd	N 1st St	Oakland Ave	Protected Bike Lane	42	Pave, Green	1.49
Downtown	Blossom Hill Rd	Blossom Hill Rd @ Monterey Interchange	Coyote Rd	Protected Bike Lane	42	VZ	0.81
WSJ	E San Antonio St	S. 28th Street	S. 33rd Street	Protected Bike Lane	41	Pave	0.28
ESJ	Hwy 101 Overcrossing	Bacchus Dr / Fair Swm Center	Midfield Ave / Havana Dr	Path or Trail	41		0.20
Downtown	Almaden Bl	Woz Way	E Santa Clara St	Protected Bike Lane	41		0.61
ESJ	E San Antonio St	S. 28th Street	S. 33rd Street	Protected Bike Lane	41	Pave	0.28
ESJ	Forest Av	Ciro Ave	Naglee Ave	Protected Bike Lane	41		0.25
WSJ	E San Antonio St	S. 28th Street	King	Protected Bike Lane	41	Pave	0.07
NSJ	Coleman Av	E Julian St	Santa Teresa St	Protected Bike Lane	41	Green	0.39
Downtown	W Santa Clara St	Stockton	N. Almaden Blvd	Protected Bike Lane	39		0.52
Downtown	Airport Pkwy	Hwy 87	N 1st St	Protected Bike Lane	39	Pave	0.46
NSJ	N 10th St	Old Bayshore	Hedding	Protected Bike Lane	39	Green	0.72
WSJ	The Alameda	Race St	Stockton Ave	Protected Bike Lane	39		0.45
WSJ	Bascom Av	Fruitdale Av	E Hamilton Av	Protected Bike Lane	38	Green, Pave	1.13
ESJ	E San Antonio St	S. 17th St	S. 21st St	Bike Boulevard	38	Pave	0.28

KEY:

VZ = Vision Zero Priority Corridor
Green = Green Stormwater Infrastructure

Pave = Pavement Project
ESJ = East San José / Berryessa
NSJ = North San José

WSJ = West San José
I-STAR = I-STAR/Blossom Hill

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
ESJ	Mabury Rd	King Rd	N. Jackson Ave	Protected Bike Lane	38	Green	0.77
Downtown	Ocala Av	King Rd	Capitol Expy	Protected Bike Lane	37	Green	1.04
Downtown	Berryessa Rd	US-101	Mercado Way	Protected Bike Lane	37	Green	0.43
Downtown	W Taylor St	Coleman Ave	N 1st Street	Protected Bike Lane	37		0.75
WSJ	E Taylor St	N. 1st Street	N 8th St	Bike Boulevard	37		0.47
WSJ	W Taylor St	Coleman Ave	N 1st Street	Protected Bike Lane	37		0.75
NSJ	New Street (Skyport extension)	N 1st St	Zanker Rd	Bike Lane	36		0.31
WSJ	E San Antonio St	S. 21st St	S. 28th St	Bike Boulevard	36	Pave	0.38
NSJ	Oakland Rd	Montague Ex	Atteberry Ln	Protected Bike Lane	35		0.35
NSJ	S 16th St	E. San Fernando	E. William	Bike Boulevard	35		0.46
WSJ	Stevens Creek Bl	N Monroe St	Macarthur Ave	Protected Bike Lane	35	Pave, Green	0.42
WSJ	E San Antonio St	S King Rd	S Jackson Ave	Protected Bike Lane	35	Pave	0.77
NSJ	Forest Av	N Monroe St	Ciro Ave	Protected Bike Lane	35		0.28
I-STAR	Havana Dr	Hwy 101 Overcrossing	King Rd	Bike Boulevard	34	Pave	0.35
WSJ	S Market St	San Salvador St	Park Ave	Protected Bike Lane	34		0.13
(not in focus area)	The Alameda	W Hedding St	Race St	Protected Bike Lane	33		0.89
WSJ	Moorpark Av	Winchester Bl	Bascom Ave	Protected Bike Lane	33		0.38
NSJ	E St John St	N. 4th Street	N. 17th Street	Bike Boulevard	33	Pave	0.59
NSJ	Almaden Av	Balbach St	W. Reed Street	Bike Boulevard	33		0.15
Downtown	Old Bayshore Hy	Zanker Rd	N 10th St	Protected Bike Lane	33		0.62
WSJ	Fruitdale Av	Southwest Expressway	Race St	Protected Bike Lane	33	VZ, Pave	0.36
WSJ	N 1st St	Tony P Santos St	Tasman Dr	Protected Bike Lane	32		0.94
WSJ	Oakland Rd	Atteberry Ln	Club Dr	Protected Bike Lane	32		0.17
NSJ	Race St	The Alameda	W San Carlos St	Protected Bike Lane	30		0.55
ESJ	Enborg Ln	Thornton Wy	Bascom Ave	Bike Boulevard	30		0.38
NSJ	Race St	The Alameda	W San Carlos St	Protected Bike Lane	30		0.55
WSJ	Zanker Rd	Highway 237	River Oaks Parkway	Protected Bike Lane	29		1.23

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
WSJ	Cottle Rd	Raleigh Rd	Palmia Drive	Protected Bike Lane	29		0.45
(not in focus area)	The Alameda	Chapman Ct	Hedding St	Protected Bike Lane	28		0.60
WSJ	Downing Av	Longshore Dr	Bascom Ave	Bike Boulevard	28		0.45
NSJ	S Winchester Bl	Olsen Dr	Impala Dr	Protected Bike Lane	27	Pave	0.40
WSJ	S Winchester Bl	Olsen Dr	Hamilton Ave	Protected Bike Lane	27	Pave	1.22
NSJ	W Tasman Dr	Guadalupe River Trail	Zanker Rd	Protected Bike Lane	27		1.46
ESJ	S Winchester Bl	Olsen Dr	Hamilton Ave	Protected Bike Lane	27	Pave	1.22
NSJ	River Oaks Py	Guadalupe River Trail	Zanker Rd	Protected Bike Lane	26		0.47
WSJ	W Taylor St	The Alameda	Coleman Ave	Protected Bike Lane	25		0.58
Downtown	Market St	Julian St	Park Av	Protected Bike Lane	25		0.62
(not in focus area)	Forest Av	N Monroe St	N Winchester Blvd	Protected Bike Lane	25		0.38
NSJ	Southwest Ex	Stokes St	Bascom Ave	Protected Bike Lane	25		0.33
NSJ	Murphy Av	Oakland Rd	Lundy Ave	Protected Bike Lane	23	Pave	0.64
I-STAR	Lundy Av	Berryessa Rd	Commodore Rd	Protected Bike Lane	22		0.20
Downtown	N Winchester Bl	Stevens Creek Blvd	Newhall St	Protected Bike Lane	22	Pave	0.97
I-STAR	E Tasman Dr	Zanker Road	Milpitas City Limits	Protected Bike Lane	22		0.82
Downtown	S Bascom Av	Hamilton Ave	Elden Dr	Protected Bike Lane	21	Pave, Green	1.33
NSJ	Southwest Ex	Fruitdale Ave	Stokes St	Protected Bike Lane	21		0.86
WSJ	Naglee Av	Forest Ave	The Alameda	Protected Bike Lane	21	Pave	0.97
WSJ	Lundy Av	Trade Zone Bl	Sierra Rd	Protected Bike Lane	20	Green	1.84
	N 1st St	Tasman Dr	E Brokaw Rd	Protected Bike Lane	20	Green	2.88
WSJ	S Winchester Bl	Stevens Creek Bl	Olsen Dr	Protected Bike Lane	20		0.28
ESJ	Lundy Av	Sierra Rd	Berryessa Rd	Protected Bike Lane	19	Green	0.52
ESJ	Berryessa Rd	Mercado Way	Lundy Ave	Protected Bike Lane	17	Green	0.55

KEY:

VZ = Vision Zero Priority Corridor
Green = Green Stormwater Infrastructure

Pave = Pavement Project
ESJ = East San José / Berryessa
NSJ = North San José

WSJ = West San José
I-STAR = I-STAR/Blossom Hill

Focus Area	Street	From	To	Proposed Bikeway	Prioritization Score	Project Coordination	Miles
NSJ	River Oaks Py	Zanker Rd	Montague Expy	Protected Bike Lane	16	Green	1.10
WSJ	Stevens Creek Bl	Winchester Bl	Monroe Ave	Protected Bike Lane	15	Pave	0.37
(not in focus area)	Lundy Pl	Trade Zone	Capitol	Bike Boulevard	13		0.26
NSJ	Zanker Rd	River Oaks Parkway	Old Bayshore Road	Protected Bike Lane	13	Pave, Green	0.44
NSJ	Zanker Rd	River Oaks Parkway	Bering Dr	Protected Bike Lane	13	Pave, Green	1.75
Downtown	W St John St	N. Almaden Blvd	N. Autumn St	Bike Lane	13		0.24
NSJ	Zanker Rd	River Oaks Parkway	Old Bayshore Road	Protected Bike Lane	13	Pave, Green	0.44
NSJ	Holger Wy	N 1st St	Zanker Rd	Protected Bike Lane	12		1.03
I-STAR	Great Oaks Bl	Cottle Rd	Highway 85	Protected Bike Lane	11		1.68
Downtown	E San Fernando St	11th Street	17th Street	Bike Boulevard	9		0.36
I-STAR	Silver Creek Valley Rd	Coyote Rd	Hellyer Ave	Protected Bike Lane	9		0.60
NSJ	E Plumeria Dr	Orchard Pkwy	Montague Expy	Protected Bike Lane	8		0.82
Downtown	S 17th St	E Santa Clara St	San Salvador St	Bike Boulevard	8		0.53
WSJ	Thornton Wy	Moorpark Ave	Downing Ave	Bike Boulevard	7		0.76
WSJ	S Daniel Wy	Williams Rd	Westfield Ave	Bike Boulevard	2		0.30
Total Miles							95

Completing the network

The City of San José is committed to completing the entire vision and bikeway network outlined in this Plan. Following the installation of the priority projects outlined in this chapter, the City will continue to evaluate and apply national and international best practices as well as consider neighborhood and stakeholder feedback.

San José is constantly evolving, and the City will continue to reflect community priorities throughout the course of building out the bikeway network. To that end, this Plan will be updated every five years in collaboration with the community.

Monitoring and Evaluation

The San José Better Bike Plan 2025 lays out an ambitious program, and the City is committed to dedicating staff time, financial resources, and political leadership to achieve the Plan's goals. To make this commitment with confidence, the City must use many of the techniques deployed during plan development to evaluate the ongoing build-out and ensure the work continues to meet the goals of this Plan. The following metrics will be tracked and published:

Input measure

These metrics are objective and measure progress on the implementation of the better Bike Plan:

- » Miles of new protected bike lanes
- » Miles of bike lanes upgraded with separation
- » Number of protected intersections
- » Number of new connections to the multi-use path network
- » New miles of multi-use paths
- » Miles of bike boulevards
- » Rate of bicycle crashes
- » Number of new bike racks and corrals
- » Percent of destinations accessible by bike

Outcome measures

These measure the result of San José's efforts to improve biking throughout the city.

- » Average monthly bikeshare or micromobility users
- » Results of user surveys
- » Demographic (race, gender, age, etc.) composition of users
- » Bike counts from manual and automatic bike counts, plus other sources, including anonymized location-based data

In addition, the Better Bike Plan will be regularly revisited to keep current with the changing nature of transportation in cities, the demands of our public, and the evolutions in mobility.



Bicyclists along the Guadalupe River Trail.

As the projects in this plan move into design and installation, project process will be consistent so that community members will know what to expect when a bikeway is proposed in their neighborhood. Once a bikeway project is funded, the City follows the steps below to design and construct it.

	What the City is doing:	What you can expect to see:
Project Initiation	During this phase, the City is evaluating the feasibility of the project. This involves conceptual design review, data collection, and initial discussions with City Council members and community leaders.	Data collection activities during this phase give the City a better understanding of activities on the street. This may include traffic counts, which can be performed with tubes stretched across the roadway, cameras, or City staff manually counting activities on the street. In addition, field visits or geographical surveys during this phase are used to confirm existing conditions of the site.
Project Development (Often the longest phase)	The project development phase involves extensive outreach and design work. This process includes reaching out to the community then revising plans based on detailed site conditions and community input. Revisions can often take several rounds and this phase is often the longest and most publicly visible phase of the project.	This is the time to get detailed feedback from the community and address it in the proposed design. During this phase, community members will be invited to specific meetings about the project, and City staff members may attend regular community meetings and events to hear from the public.
Installation	City staff and construction contractors are busy during this phase coordinating the installation of the bikeway.	This is a very exciting phase of the project where you will be able to watch changes to the street happen before your eyes! Updated project information and possible construction street closures will be updated frequently on the City of San José’s website.
Maintenance	Develop a schedule for maintaining bikeways, as well as funding ongoing costs. Maintenance includes street sweeping, refreshing striping and markings, and replacing damaged infrastructure. At this stage, the City will also take care to address community concerns on bikeway maintenance, so be sure to chime in using the City’s 311 service.	The city will sweep bikeways, refresh striping and markings that have worn out, and replace infrastructure that has been damaged. The City leverages its bikeways program with its pavement maintenance program, so you may also see the City upgrading its existing bikeways or maintaining new ones during street paving.
Evaluation	Following the installation of a bikeway project, City staff will continue to monitor the success of the project. This can include surveying and additional data collection. The City may make small adjustments to the design during this phase based on site observations, community feedback, and collected data.	You can expect to see surveys of street users and counting equipment in the new bikeway, as well as the street and the sidewalk. Although engineers make most of the adjustments to the design during the Project Development phase, you might see small adjustments to signal timing, striping, or other project geometries during this phase.

This concludes the San José Better Bike Plan 2025. The City is enthusiastic about the ability for this Plan to positively contribute to the health and mobility options for our community and is committed to seeing it through. This Plan has documented an enormous amount of work by City staff, members of the public, and our community partners that gave feedback in many formats. This is your bike plan and there is a lot to do, so let's get pedaling!



Credit: Ellena Tran



Credit: Natalia Mercedal



Credit: Rose Province

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

SAN JOSÉ
BETTER BIKE PLAN 2025



September 2020