



# Stanford Bicycle Commuter Access Study

OCTOBER 2017









## ACKNOWLEDGEMENTS

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## TABLE OF CONTENTS

### Introduction

About the Stanford Bicycle Commuter Access Study..... 5

### Chapter 1

Designing Bikeways for All Types of Riders..... 7

### Chapter 2

Commuting to Stanford by Bicycle..... 11

### Chapter 3

Addressing Borders and Partnering With Neighbors..... 29

### Conclusion

Where Do We Go From Here? ..... 39



*Featured on the cover is Adrian Alabi, Stanford Graduate Student in Electrical Engineering. Adrian got his bike helmet when he was an Electrical Engineering student and undergraduate soccer player.*



I

CAMPUS DR  
ESCONDIDO DR



TO TRAFFIC  
IN CIRCLE





## INTRODUCTION

# About the Stanford Bicycle Commuter Access Study

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Over the past decade, inspired transportation planners, engineers, and public officials have worked together to rethink local streets and roads to serve a new generation of cyclists.

Stanford University has a long and storied history of supporting and encouraging transportation by bicycle. From the fast growing popularization of the bicycle in the 1890s, to the bike boom of the 1970s, to today. Stanford has cultivated a campus that is easily traversed by bicycle.

This study describes the current trend towards building bikeways for people of all ages and abilities, examines the

opportunities and challenges for current bicycle commuters, and presents projects in neighboring communities that will increase the number of people who commute by bike both at Stanford and within communities nearby.

This study focuses on university students, staff, and faculty who commute to the main Stanford campus. Every year, Parking & Transportation Services surveys Stanford affiliates to understand their commute behavior and assess trends. Known as the Stanford Commute Survey, the results of the survey are discussed throughout this study.









## CHAPTER 1

# Designing Bikeways for All Types of Riders

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The last decade has seen tremendous investment in bicycle infrastructure locally and across the United States. As public agencies and private organizations like Stanford University make investments in their bicycle networks, two key realizations are shaping how these investments are made:

- **Not all bicyclists are the same.** Different bicyclists are comfortable using different types of bikeways.
- **Not all routes are the same.** While trails, bike lanes, and shared streets can all feel comfortable to bicyclists. Perceptions of safety also depend on factors like vehicle volumes and speeds.

This chapter describes how investment in high-quality bikeways improves conditions for existing bicycle commuters while making bicycling an easier choice for even more commuters.



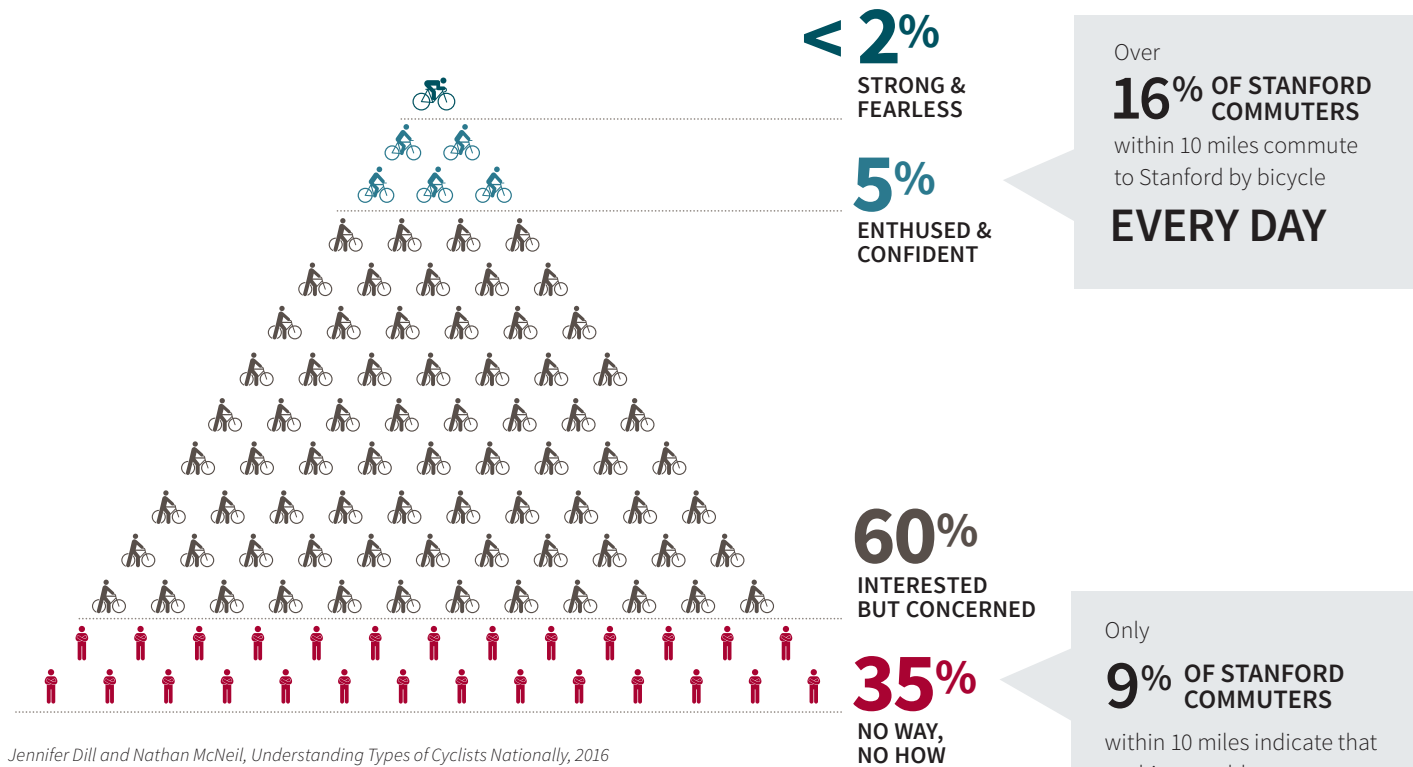


## Not All Bicyclists Are the Same

Although some bicyclists will ride on any road, regardless of available bikeway ('strong and fearless'), a much larger portion of the population would ride, but only where there is a high-quality bikeway ('interested but concerned'). And, about one-third of the total population would not ride a bicycle regardless of conditions.

The chart on this page shows a 'typical' distribution of bicyclists. The distribution at Stanford differs from this typical pattern. Stanford commuters are both much less likely to say they would never commute by bicycle and much more likely to say they always commute by bicycle than a typical commuter nationally.

### NATIONAL TRENDS



*Jennifer Dill and Nathan McNeil, Understanding Types of Cyclists Nationally, 2016*



# Bicycle Routes With Broad Appeal

Bike lanes, trails, and low speed neighborhood greenways all make biking more comfortable. Improvements to street, highway, and rail crossings can help drivers learn to expect bicyclists in these locations and create a safer, more comfortable routes for bicyclists.

The bikeways and road crossing treatments described on the right are designed to appeal to many types of riders, creating bikeways that ‘interested but concerned’ bicyclists are willing to use.



## TRAILS AND SEPARATED BIKEWAYS

Shared use paths (Class I) and separated bikeways (Class IV) separate bicyclists from automobiles and improve overall safety. Separated bikeways are especially useful on roads with higher speeds or traffic volumes. The Perimeter Trail is one example of a Class I facility on Stanford’s campus, and there many successful trails in the region.



## BICYCLE BOULEVARDS

In residential neighborhoods, bicycle boulevards—also known as neighborhood greenways—improve travel for bicyclists while calming traffic and greening neighborhoods. Bicycle boulevards are shared by automobiles and bicycles, but at speeds that make travel more comfortable for bicyclists. The Bryant Street Bicycle Boulevard in Palo Alto is well traversed by Stanford commuters.



## SEPARATED CROSSINGS

For major infrastructure—such as freeways, expressways, and train tracks—separated under- or overcrossings provide an opportunity for bicyclists to safely connect across barriers. Many Stanford commuters must cross US Hwy 101 and Caltrain Commuter Rail tracks each day, improved crossings are needed to build a high-quality network. The Homer Street tunnel in Palo Alto is one example of a game-changing crossing.



## AT-GRADE CROSSINGS

One persistent challenge to building high-quality routes is accommodating bicyclists at intersections. Providing protected intersections or, even just marked crossings, can help make motorists more aware of bicyclists. Oakland, California used this type of treatment as part of its Telegraph Avenue protected bike lanes to mark intersection crossings.





CHAPTER 2

# Commuting to Stanford by Bicycle

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As a major employer in Silicon Valley, Stanford has taken advantage of natural benefits (terrain and weather), and has also invested in numerous programs to encourage its commuters to bicycle or take transit to work.

Stanford's investment in its programs and bicycle-friendly infrastructure has

caused its share of commuters bicycling to work or school to nearly double over the last 15 years. The next several pages describe some of Stanford's efforts to increase commuting by bicycle and other sustainable travel modes and present opportunities to continue to grow the bicycle mode share into the future.



Over

**20%** OF STANFORD COMMUTERS  
BICYCLE TO CAMPUS

In Santa Clara County as a whole, only  
**2 percent** of residents bicycle to work



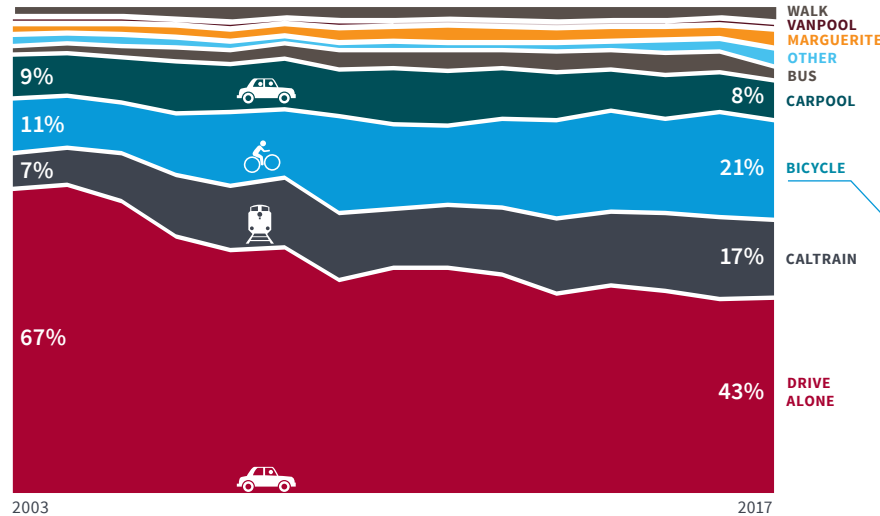


## Programs Lead to Platinum

In 2015, Stanford was the only university to receive a renewal of its Bicycle Friendly University Platinum designation from the League of American Bicyclists. Stanford was also the first university to be recognized at the highest level when the program launched in 2011. Achieving a Platinum designation required a comprehensive approach including developing on-campus

bikeways and implementing a diverse set of education, encouragement, engagement, and enforcement programs that make biking more accessible to all types of commuters. Stanford is also committed to monitoring and evaluating these programs to understand the benefits for the university, as well as its students and employees.

MODE SHARE: STANFORD COMMUTERS (EMPLOYEES AND STUDENTS)



### EDUCATION



Safety classes available to all university affiliates  
**6,000** participants

### ENCOURAGEMENT



Provide up to **\$300** per year in 'Clean Air Cash' to commuters who join the Commute Club, including those who bike

### ENGINEERING



**40** bike-specific stop signs installed

### ENFORCEMENT



**3,500** bike lights distributed annually

Over **20%** of commuters arrive at Stanford by bike



On Bike to Work day alone, Stanford commuters eliminated over **8,700** pounds of CO<sub>2</sub>



Over **2,000** bicyclists are part of the Commute Club

# How Bicyclists Get to Stanford

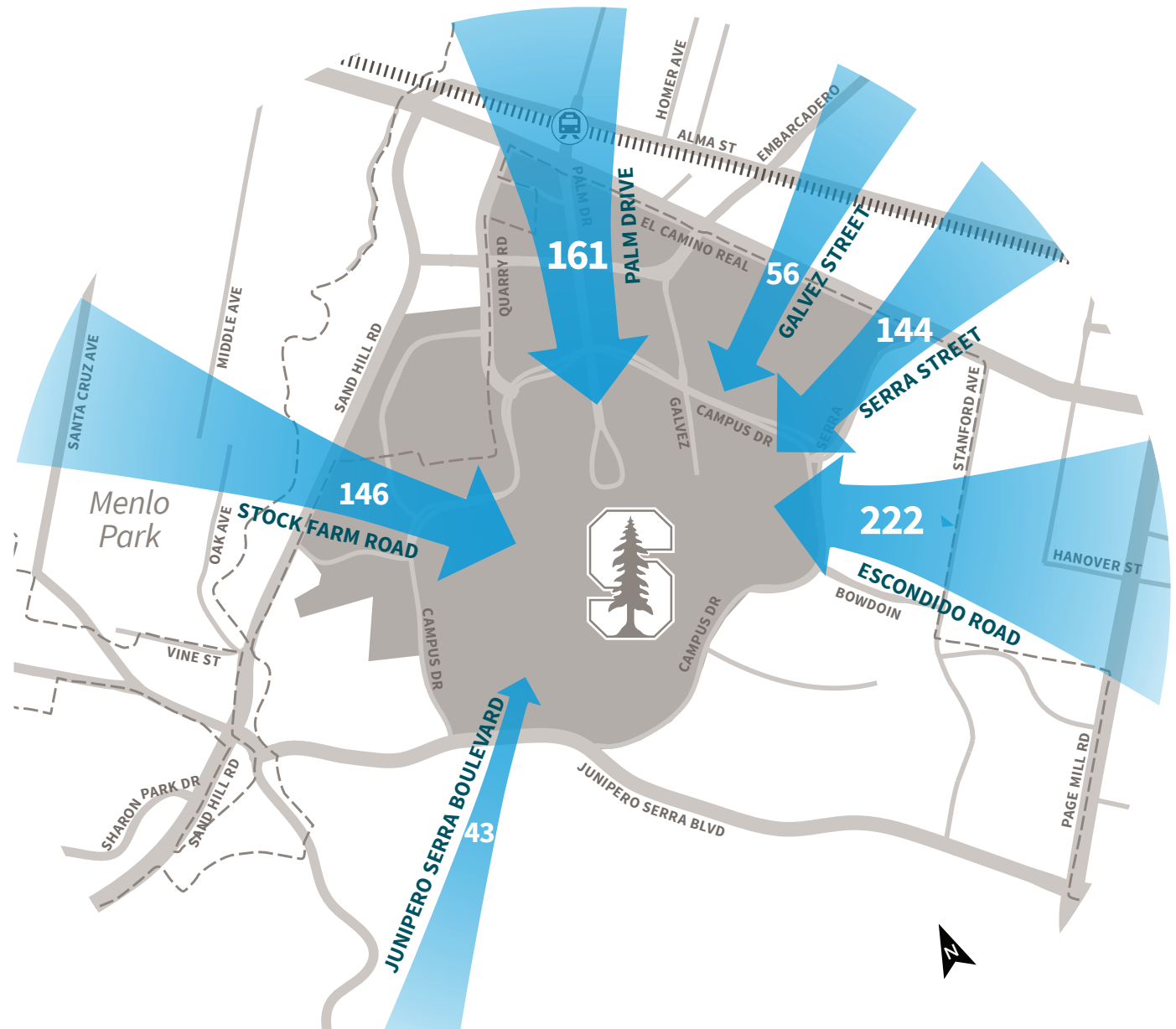
There are a number of entrances to the Stanford Campus (see map at right), but the most popular for bicyclists are Palm Drive, Serra Street, and Escondido Road. Serra Street is one of the most comfortable areas of campus to bike, and Palm Drive provides the most direct connection to Caltrain. The Escondido Road corridor is a collection of six locations for bicyclists from the southwest of campus, with Escondido Road the largest of these.

## STANFORD UNIVERSITY AREA Bicycle Counts, AM Average Peak Hour



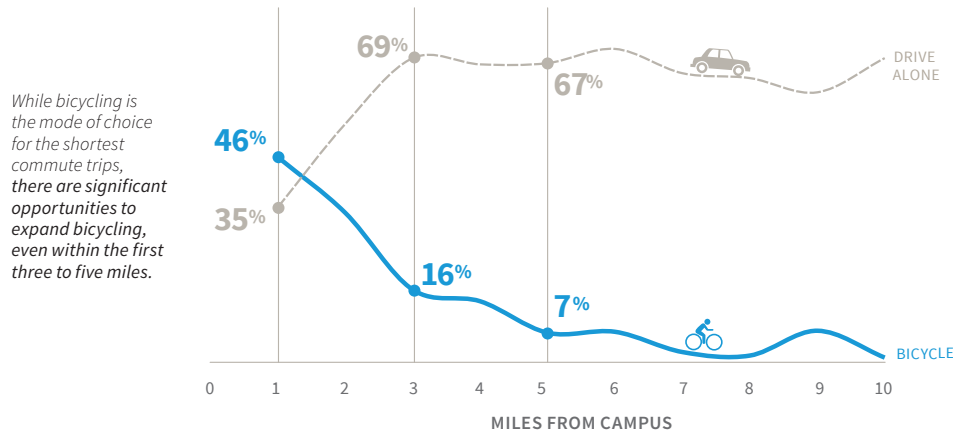
Actual bicycle counts have been consolidated to capture multiple counts in the same corridor.

PM peak hour volumes are similar to AM peak hour volumes.





MODE SHARE: PERCENT OF COMMUTERS BIKING AND DRIVING ALONE



While bicycling is the mode of choice for the shortest commute trips, there are significant opportunities to expand bicycling, even within the first three to five miles.

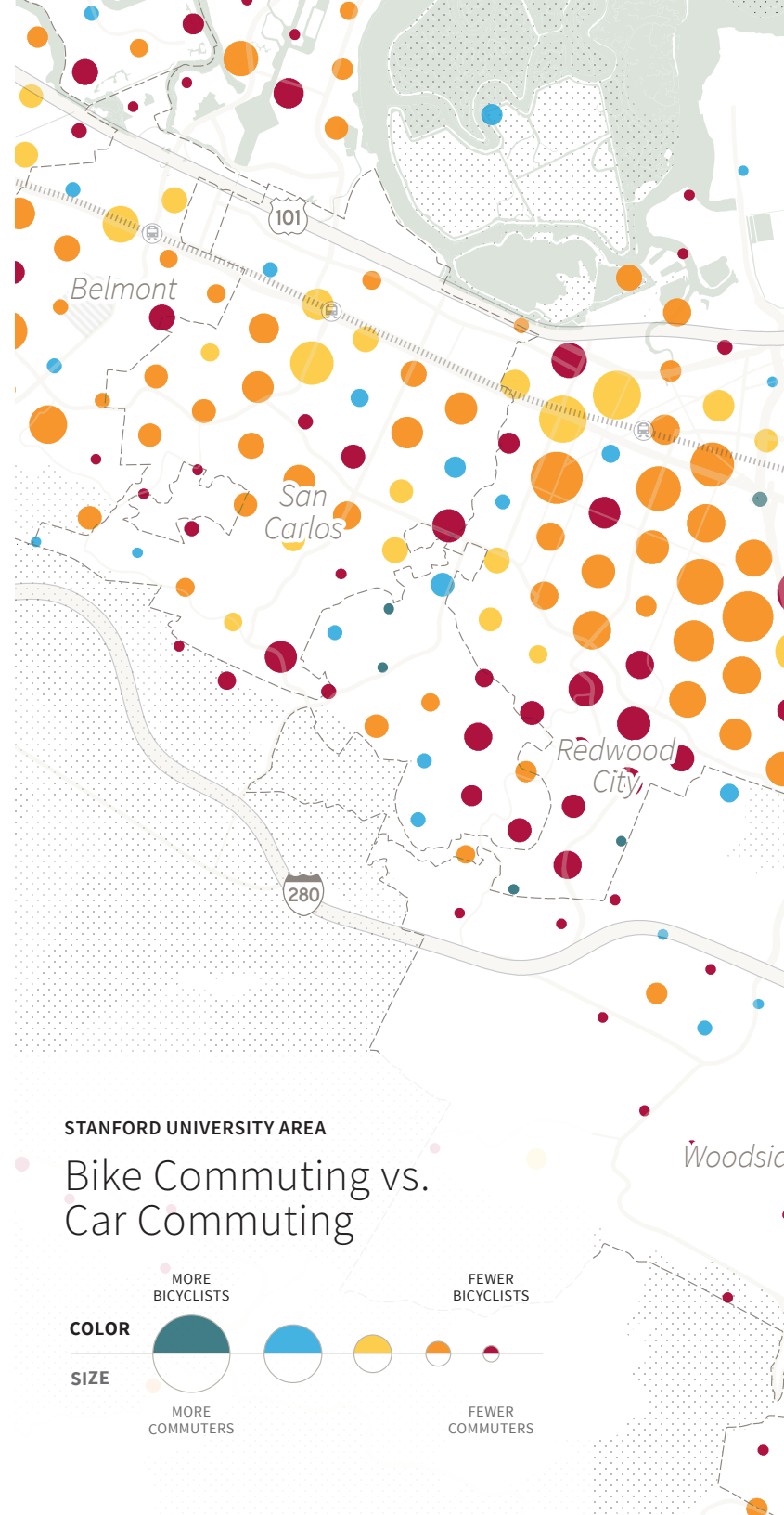
## Who Rides Today? What Are the Opportunities?

It comes as no surprise that commuters within the first few miles of campus are more likely to bicycle. The map at the right shows the location of Stanford commuters within seven miles of campus. The size of the dot indicates the number of commuters; the color shows the percent traveling by bicycle.

Currently, 46 percent of Stanford commuters who live within one mile of the campus commute by bicycle. This drops to 16

percent within three miles and to seven percent within five miles of campus.

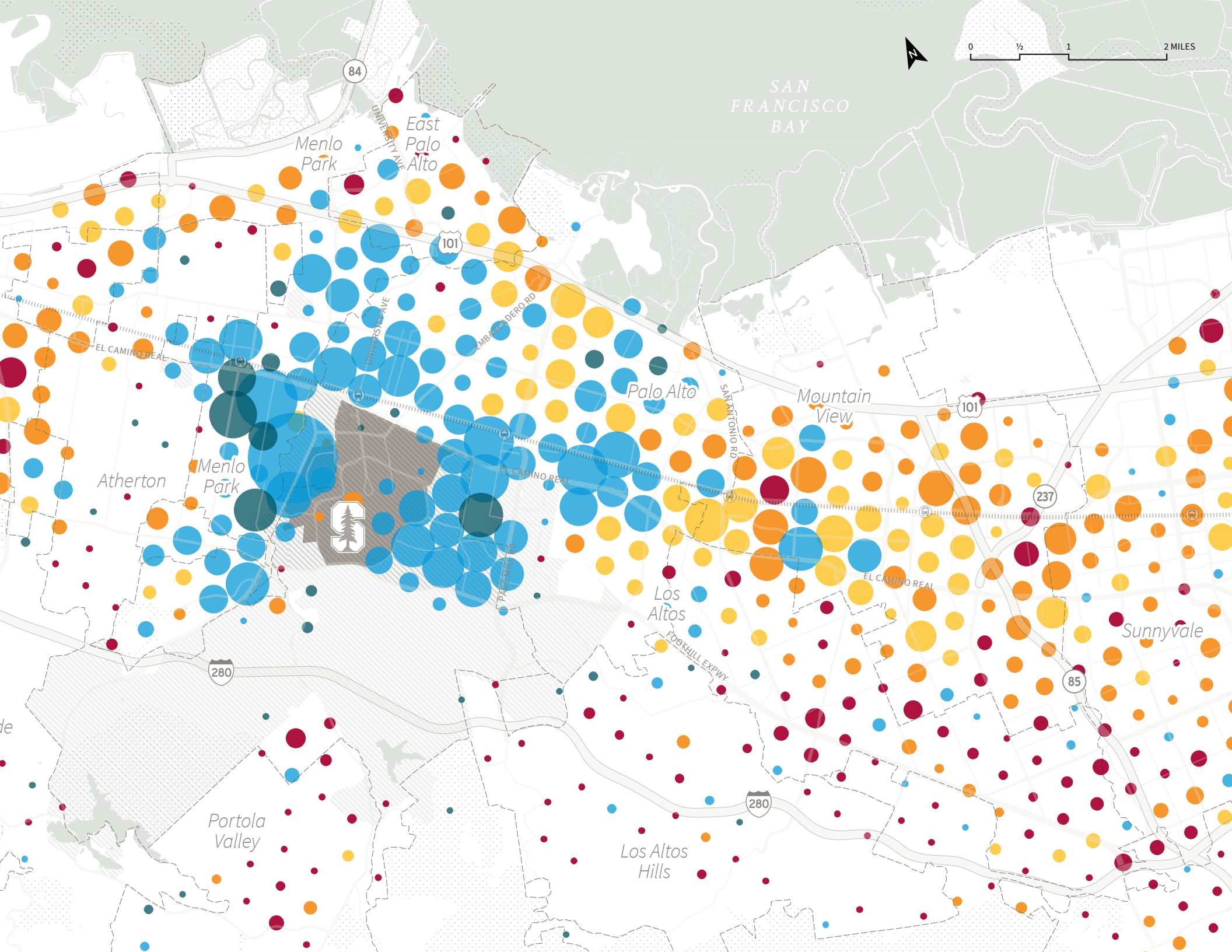
The opportunities to attract more riders are clear. Even within two to three miles—a common distance for a bicycle trip—many commuters choose other travel modes. This study examines how the quality of the network encourages Stanford’s commuters to bicycle today and how to make bicycling more comfortable and attractive for all types of users.



STANFORD UNIVERSITY AREA

### Bike Commuting vs. Car Commuting





SAN FRANCISCO BAY

0 1/2 1 2 MILES

84

101

101

237

280

280

85

Menlo Park East Palo Alto

Palo Alto

Mountain View

Atherton

Menlo Park

Los Altos

Sunnyvale

Portola Valley

Los Altos Hills





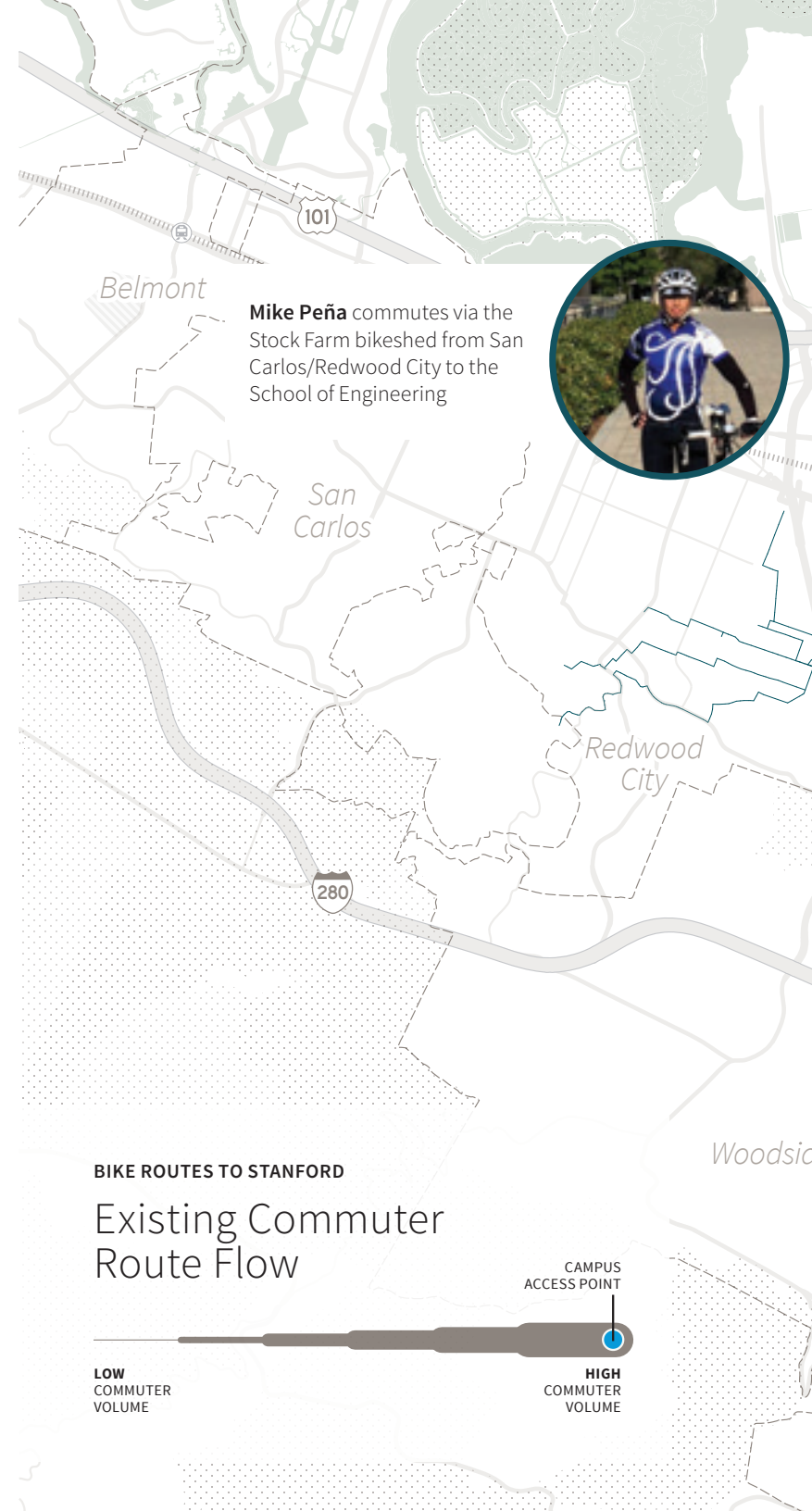
*“I look forward to my ride every day. On the way in, it gives me a great chance to prepare for the day ahead and think about the things I want to accomplish. On the way home, I get a chance to relax.”*

- JEFF WACHTEL

## How Do Commuters Bike Today?

There are many routes to bicycle to Stanford. This study considered several primary entrances that bicyclists use to access campus (Stock Farm Road, Palm Drive, Galvez Street, Serra Street, Escondido Road, and Junipero Serra Boulevard) and used an analysis of route distance and the quality of available bicycle lanes, trails and routes to identify how bicyclists are likely to ride to campus. Like a traditional watershed map, the bikeshed map shows how current bicyclists flow from the far reaches of our seven-mile commute shed toward a campus entry.

For each of these bikesheds, we tell the story of bicycling to Stanford through a current bicycle commuter, in addition to the data and analysis conducted for this study. These six individuals help illustrate the opportunities and challenges that commuters face when choosing to bicycle to campus.



SAN FRANCISCO BAY



**Jeff Wachtel** commutes via the Palm Drive bikeshed from Marsh Road and Middlefield Road to the Main Quad



**Jose Nuñez** commutes via the Galvez bikeshed from East Palo Alto to Bonair Siding



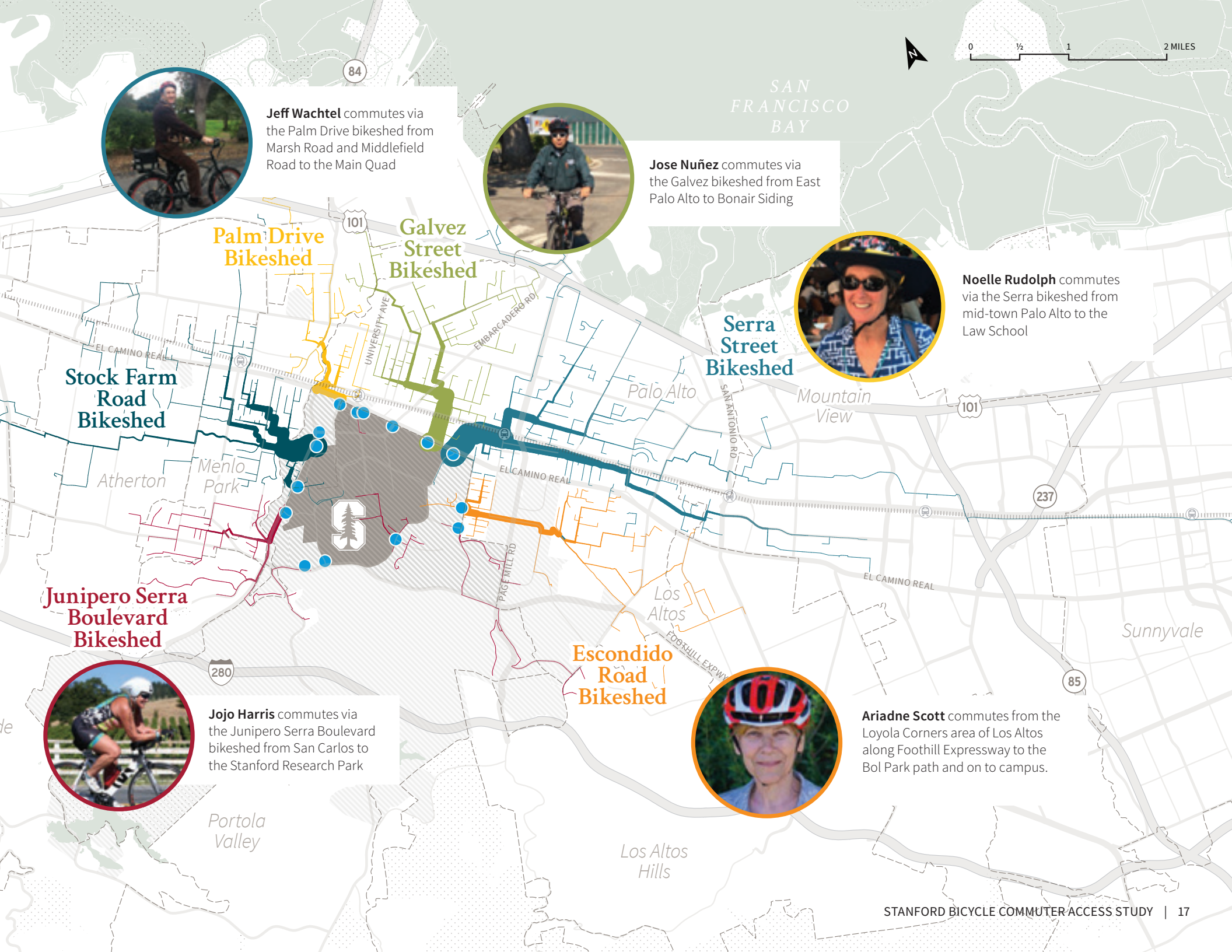
**Noelle Rudolph** commutes via the Serra bikeshed from mid-town Palo Alto to the Law School



**Jojo Harris** commutes via the Junipero Serra Boulevard bikeshed from San Carlos to the Stanford Research Park



**Ariadne Scott** commutes from the Loyola Corners area of Los Altos along Foothill Expressway to the Bol Park path and on to campus.

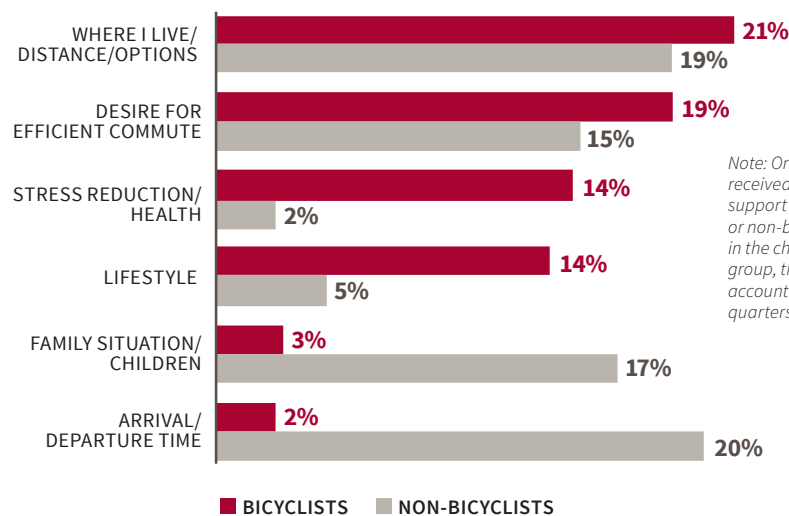




*“In the past five years, I have observed more traffic—more bikes (yeah!) and cars but even more distracted drivers so I have reduced my speed and carefully watch for the unexpected. I wave a lot to motorists to generate goodwill.”*

- ARIADNE SCOTT

FACTORS THAT INFLUENCE MODE CHOICE FOR COMMUTERS WHO BICYCLE AND DRIVE ALONE



Note: Only factors that received at least 10 percent support from either bicyclists or non-bicyclists are shown in the chart. For each group, the responses shown account for nearly three-quarters of all responses.

## What Are the Challenges?

Despite the many advantages, Stanford commuters who wish to bike to work face various obstacles. Some obstacles are physical barriers. US Hwy 101 and the Caltrain tracks can only be crossed at select locations. Some crossings that are most frequently used, like North California Drive, require bicyclists to dismount or are narrow, reducing comfort and presenting conflicts between bicyclists and pedestrians.

Stanford is surrounded by major arterials. El Camino Real, Sand Hill Road, Page Mill Road, and Junipero Serra Boulevard have significant numbers of turning vehicles and many automobile lanes to cross. These challenges limit the comfort for those choosing to bicycle.

With many commuters living five or more miles away from campus, Stanford is exploring how new infrastructure and technology (like electronic bikes) can help make bicycle commutes feel shorter and safer.

The chart above—drawn from the Stanford Commute Survey—illustrates some of the factors that influence mode choice.

All users cite distance and efficiency as important considerations when choosing how they get to work. More than other commuters, bicyclists note stress reduction, health, and lifestyle reasons for bicycling. Non-bicyclists are much more likely to reference family considerations and the need for a precise arrival or departure time as a reason to take another mode.



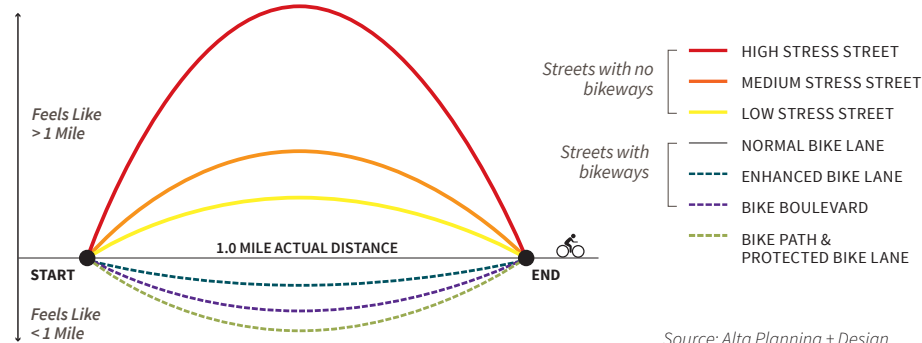
**STANFORD UNIVERSITY AREA**

# Physical Barriers Impacting Bicycling to Stanford

- Major highway
- Major road
- Railroad
- Existing Hwy 101 and Caltrain separated crossings



PERCEPTION OF BICYCLING DISTANCE BY FACILITY TYPE



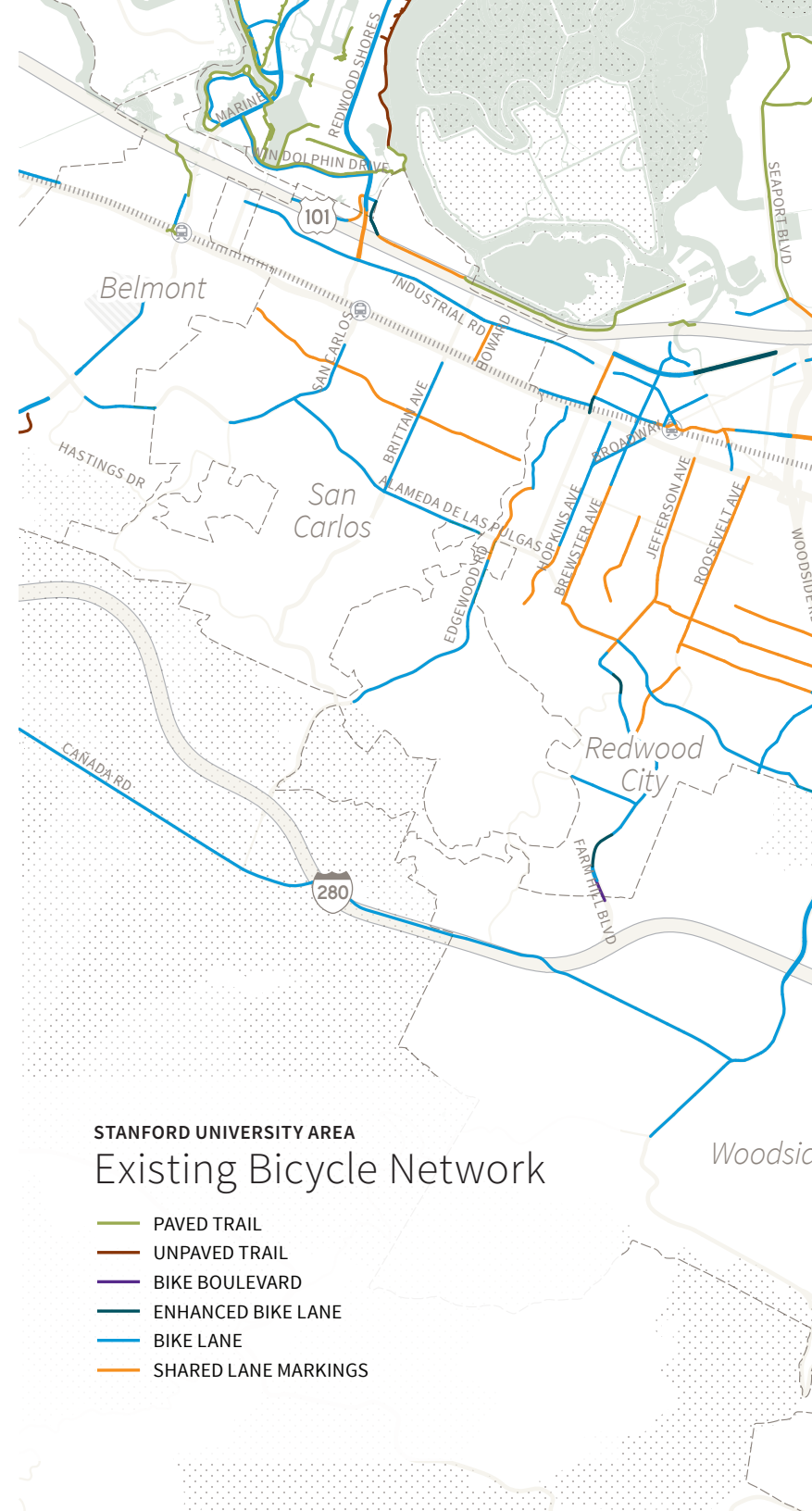
Source: Alta Planning + Design, 2016 based on research by Joseph Broach, Jennifer Dill, and John Gliebe. "Where do cyclists ride? A route choice model developed with revealed preference GPS data." *Transportation Research Part A*, 46 (2012) 1730–1740

## What Routes Are Available Today?

As part of this study, Stanford looked at the current bicycle network to better understand how well current routes connect to Stanford. The map to the right identifies existing bikeways within seven miles of the Stanford campus. This map shows the types of bikeways—trails, bicycle lanes and bicycle boulevards—that make bicycling most comfortable.

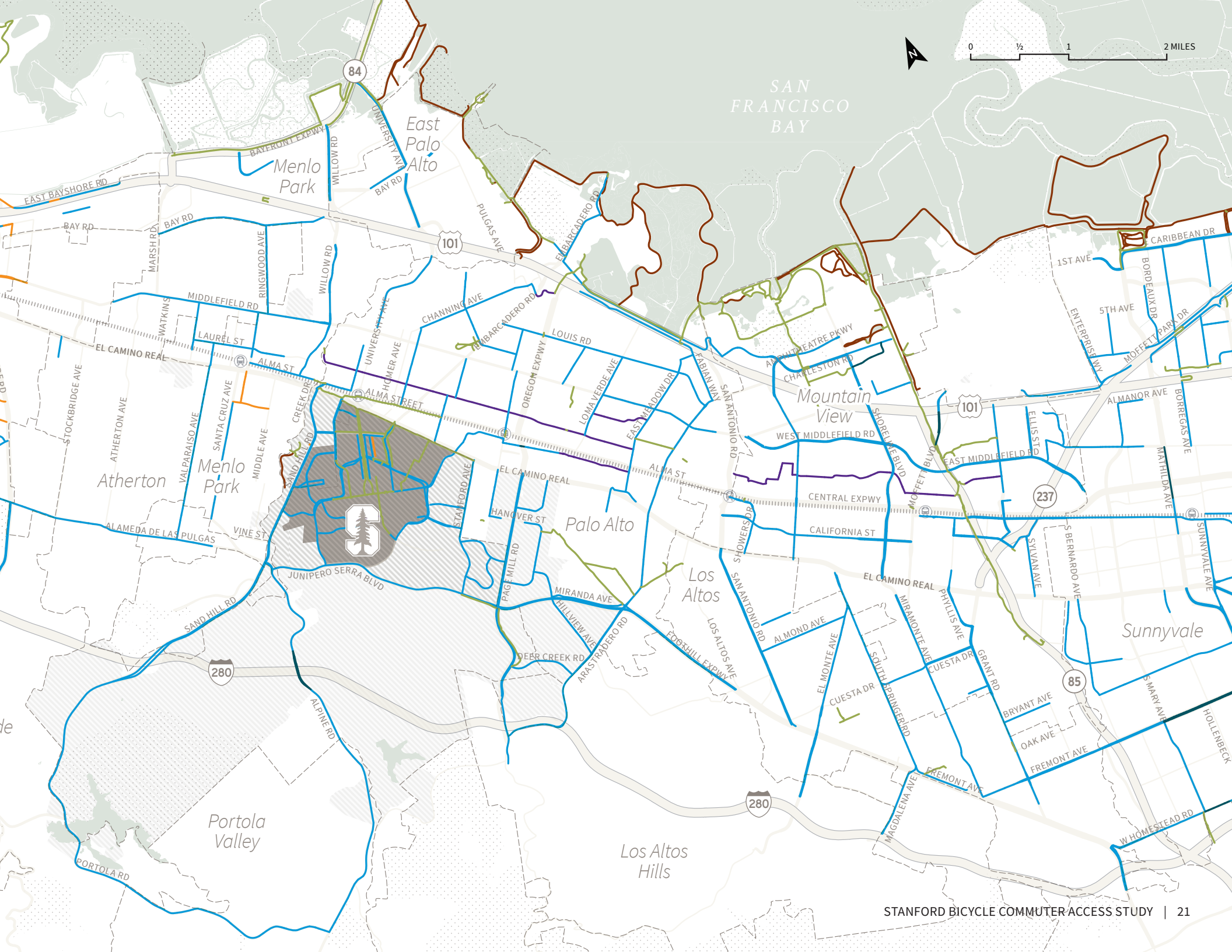
One way to measure the impact of different bikeways is to consider how a bicyclist perceives the distance they travel by type of route. Research has shown that bicyclists

perceive routes with less separation from vehicles, higher vehicle speeds, and more conflicts as longer than higher quality routes—those with more separation, lower speeds and fewer conflicts (see chart above). By quantifying the difference between these bikeways, we can better understand how infrastructure can influence individual commute choices.



STANFORD UNIVERSITY AREA  
Existing Bicycle Network

- PAVED TRAIL
- UNPAVED TRAIL
- BIKE BOULEVARD
- ENHANCED BIKE LANE
- BIKE LANE
- SHARED LANE MARKINGS



SAN FRANCISCO BAY

0 1/2 1 2 MILES

84

101

101

237

280

280

85

East Palo Alto

Menlo Park

Mountain View

Menlo Park

Atherton

Palo Alto

Los Altos

Sunnyvale

Portola Valley

Los Altos Hills





*“As a bike boulevard, Bryant Street is a peaceful commute in comparison to other streets where cyclists compete for space and safety.”*

- NOELLE RUDOLPH

## How Do Existing Routes Connect Commuters to Stanford?

The map on this page recasts the prior map based on how the available network connects 'interested but concerned' bicyclists to Stanford. The highest quality bike routes are shown in blue. These bikeways—including off-street paths, bicycle boulevards, and similar—are generally designed to attract the 'interested but concerned' bicyclists who are uncomfortable mixing with automobile traffic unless speeds and automobile volumes are very low.

While there is a strong network of these routes from Stanford through Palo Alto, many of the connections are circuitous, requiring out-of-the-way travel (and therefore more stress). To the north and south, the routes accessing Stanford generally require travel on high-stress streets.

The routes are identified heading away from campus, with only higher quality routes shown. All other routes are shown in grey, even low-stress routes that do not connect.



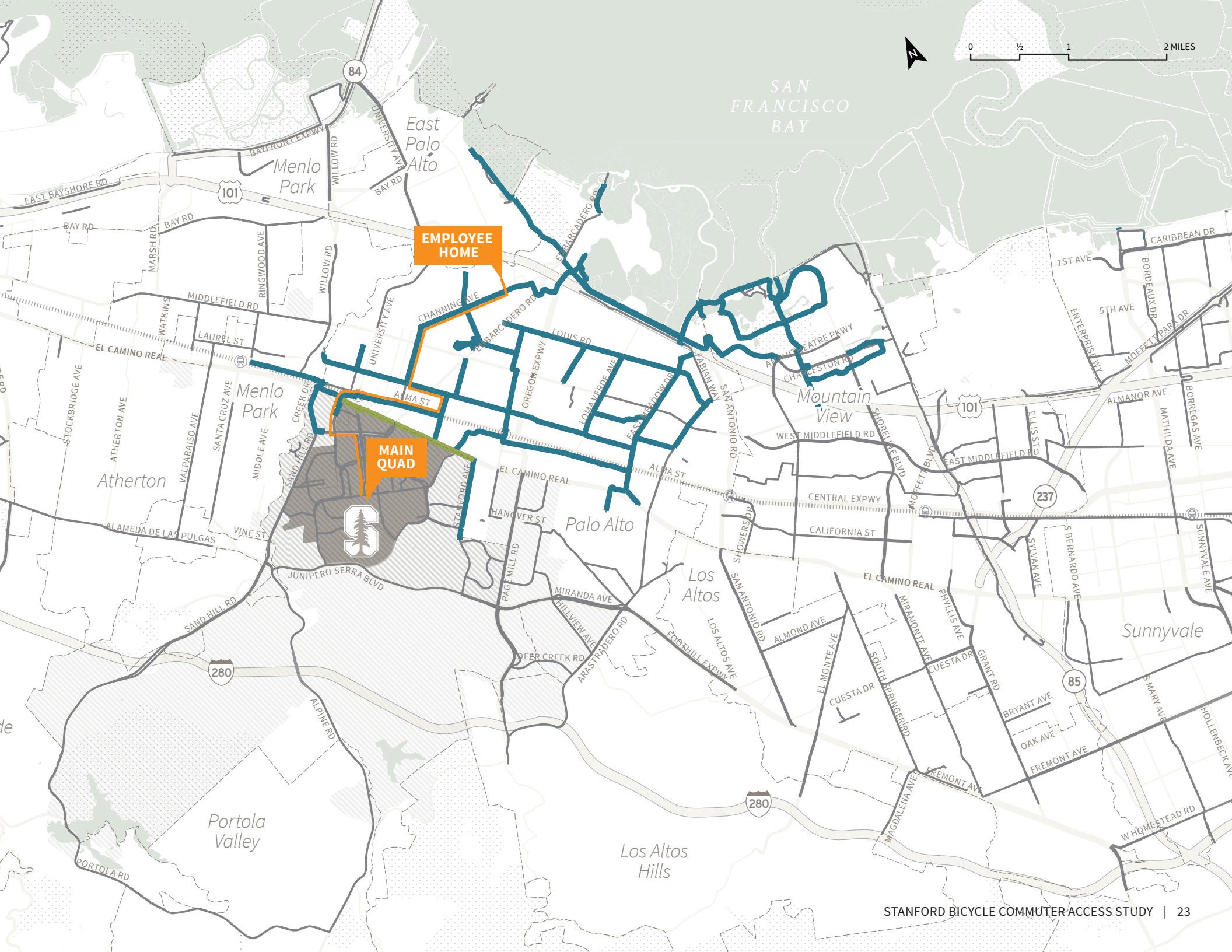
**TYPES OF CYCLISTS**

### Where Can They Go on the Bicycle Network?

- Low stress routes that connect to Stanford
- Example commute to show out-of-the-way travel



0 1/2 1 2 MILES



EMPLOYEE HOME

MAIN QUAD





*“When I ride from East Palo Alto, I am terrified when I have to cross the bridge. Once I get to the bike lanes in Palo Alto, I feel like I can breathe and just ride my bike.”*

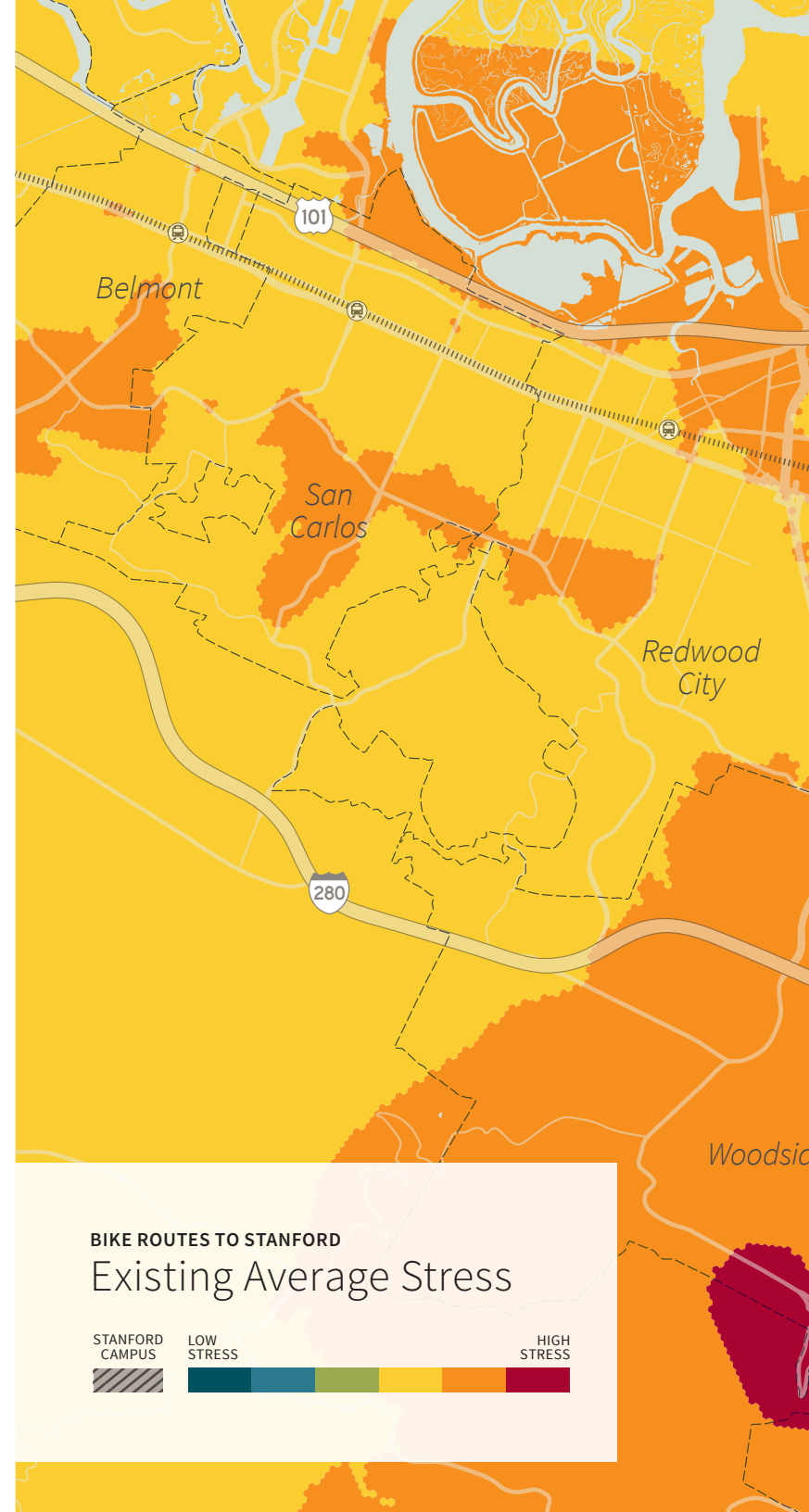
- JOSE NUÑEZ

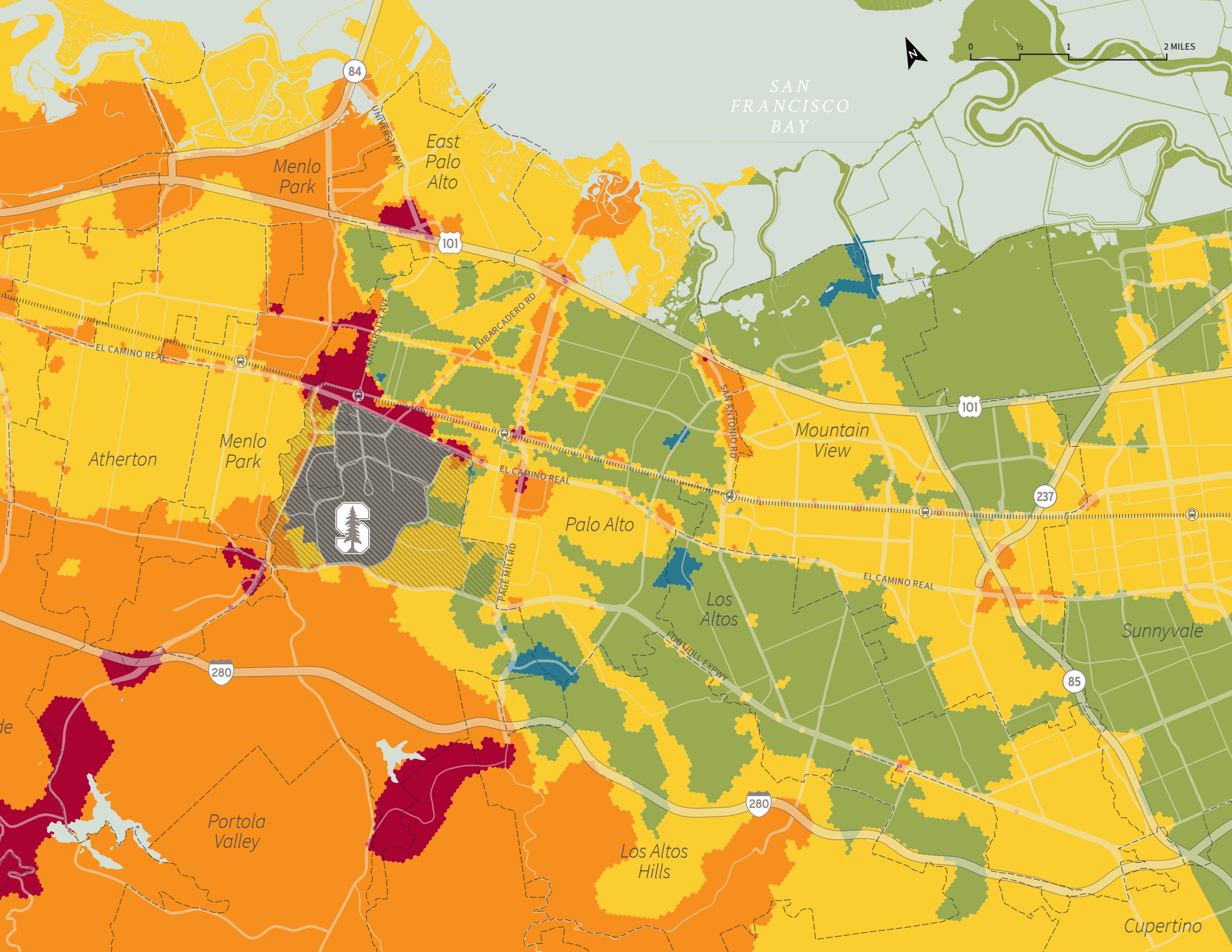
## Stress Pockets on the Ride to Campus

Considering available bikeways and how they connect to Stanford, the next series of maps describe how bicyclists experience travel from any origin to Stanford. The map on the right shows high-stress pockets that bicyclists endure from challenging routes and crossings, such as El Camino Real, US Hwy 101, and Caltrain. For example, the red

pocket directly adjacent to campus along El Camino Real results from the lack of high-quality crossings and impacts many bicyclists traveling to campus.

The pockets of green throughout much of Palo Alto show how the network of low speed streets and bike boulevards reduces stress for bicyclists from these neighborhoods.





SAN FRANCISCO BAY

0 1/2 1 2 MILES

84

101

101

237

280

280

85

Menlo Park

East Palo Alto

Atherton

Menlo Park

Mountain View

Palo Alto

Los Altos

Sunnyvale

Portola Valley

Los Altos Hills

Cupertino

UNIVERSITY AVE

UNIVERSITY AVE

EMBARCADERO RD

SANT ANTONIO RD

EL CAMINO REAL

EL CAMINO REAL

EL CAMINO REAL

PAGE MILL RD

FOOTBALL EXPWY



*“The extra bonus of my ride is getting to see a regular group of friendly faces, including a few dogs, that seem to recognize me.”*

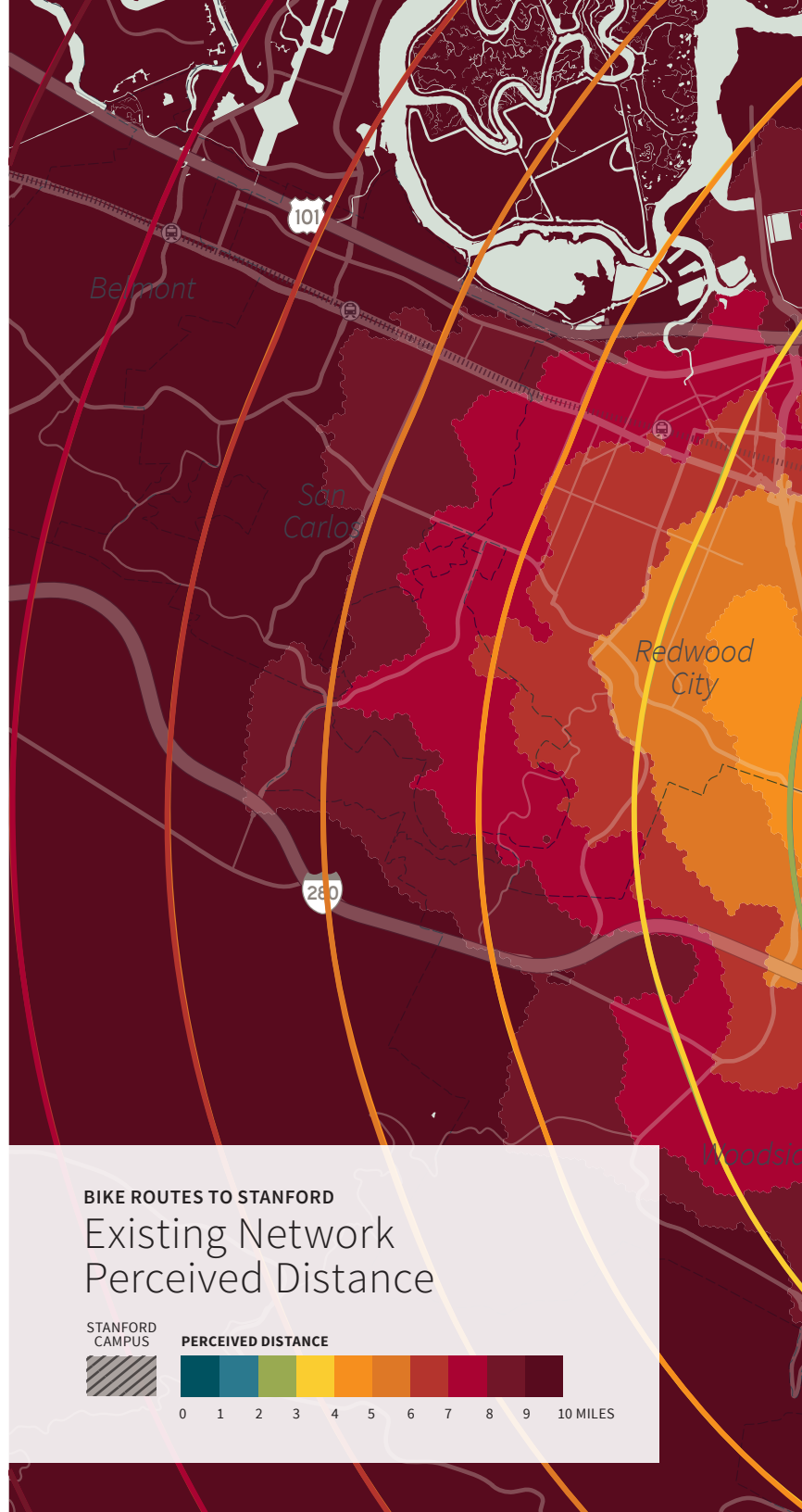
- JEFF WACHTEL

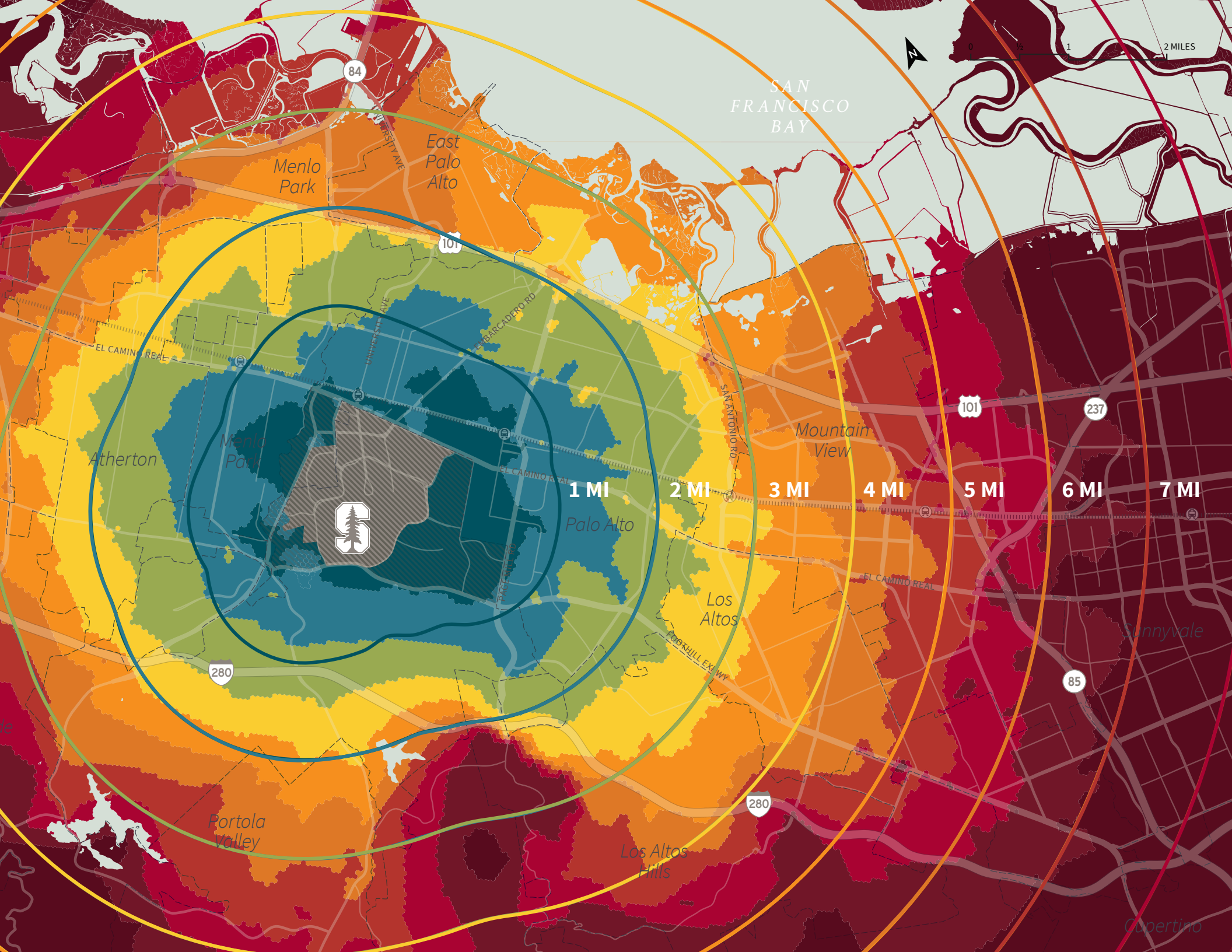
## Perceived Distance on the Route to Campus

Another way to present the quality of an individual commuter’s bicycle trip is to compare perceived travel distance to actual distance. In the map at right, the concentric rings around Stanford show the actual straight-line distance in miles from the edge of campus. The colored bands indicate a typical bicyclist’s perception of distance, with each color indicating an additional perceived mile.

One mile out from campus, many bicyclists perceive their routes to be two to three miles long. At three miles out from campus, the typical commuter will perceive five to six miles of distance, and at five miles out—an often used threshold for bicycle travel—many commuters may perceive seven to nine miles of travel.

The overall distribution is notably squashed by major barriers like US Hwy 101, I-280, El Camino Real, and Caltrain.





SAN FRANCISCO BAY

84

2 MILES

Menlo Park

East Palo Alto

101

EL CAMINO REAL

UNIVERSITY AVE

BARCADERO RD

SANT ANTONIO RD

Mountain View

101

237

1 MI

2 MI

3 MI

4 MI

5 MI

6 MI

7 MI



Palo Alto

Los Altos

EL CAMINO REAL

280

POORHILL EXHWY

Sunnyvale

85

Portola valley

280

Los Altos Hills

Cupertino







Almost  
**TWO-THIRDS**

of Palo Alto's Bike Plan  
will be completed by 2019  
when several new bike  
boulevard corridors are  
completed



### CHAPTER 3

## Addressing Borders and Partnering With Neighbors

Stanford has worked to address the challenges at the campus borders. El Camino Real, Sand Hill Road, Junipero Serra Boulevard, and Page Mill Road create a ring of high-stress streets immediately adjacent to campus. Some of these roads have bikeways, but high speeds, long crossing distances and limited numbers of crossings reduce the overall experience for bicyclists.

Stanford is working with local partners to improve access, including collaborating on design solutions. One example is the Stanford Perimeter Trail, which was constructed as part of a comprehensive proposal made by the university in partnership with Palo Alto to create a set of hiking and biking trails connecting recreational areas in the foothills to those in the Palo Alto Baylands. The map on the next page identifies improvements to the front (and side) entries to campus that will be critical for improving access to Stanford.





From within East Palo Alto, University Avenue is currently the only route for bicyclists to cross US 101.



This existing bicycle and pedestrian bridge from San Mateo Drive to Stanford West Apartments presents an opportunity to improve bicycle connections between Menlo Park and Stanford.



On Santa Cruz Avenue, bicyclists share travel lanes with cars and must cross multiple lanes to turn onto Sand Hill Road or Campus Drive.



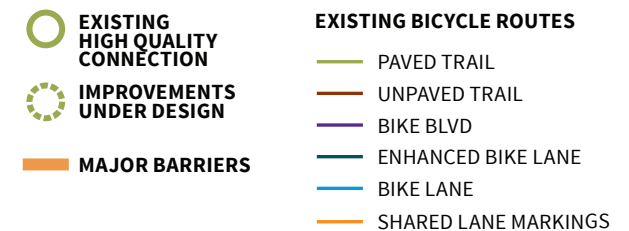
Hanover Street bike lanes drop between Page Mill Road and California Avenue, leaving a gap in the current network.

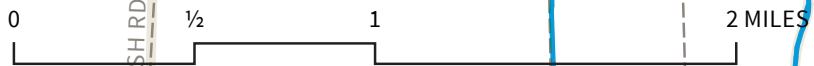
*“I look forward to improvements on Churchill Avenue. Better protection for cyclists crossing El Camino Real and an improved connection to the Perimeter Trail will address the most challenging part of my commute.”*

- NOELLE RUDOLPH

#### STANFORD UNIVERSITY AREA

### Perimeter Strategic Projects





Stanford is funding a trail connection from Quarry Road to the Palo Alto Transit Center (PATC). Palo Alto is studying potential upgrades to transit and bike access to the PATC. Combined with improvements on Palm Drive across El Camino Real, this could provide a low-stress bikeway at one of Stanford's primary entries.

Stanford has helped fund proposed bicycle and pedestrian improvements along Embarcadero Road, which also improve bicycling and walking access to Palo Alto High School.

Palo Alto is making improvements to Churchill Avenue that include a bike connection across El Camino Real and to the Stanford Perimeter Trail.

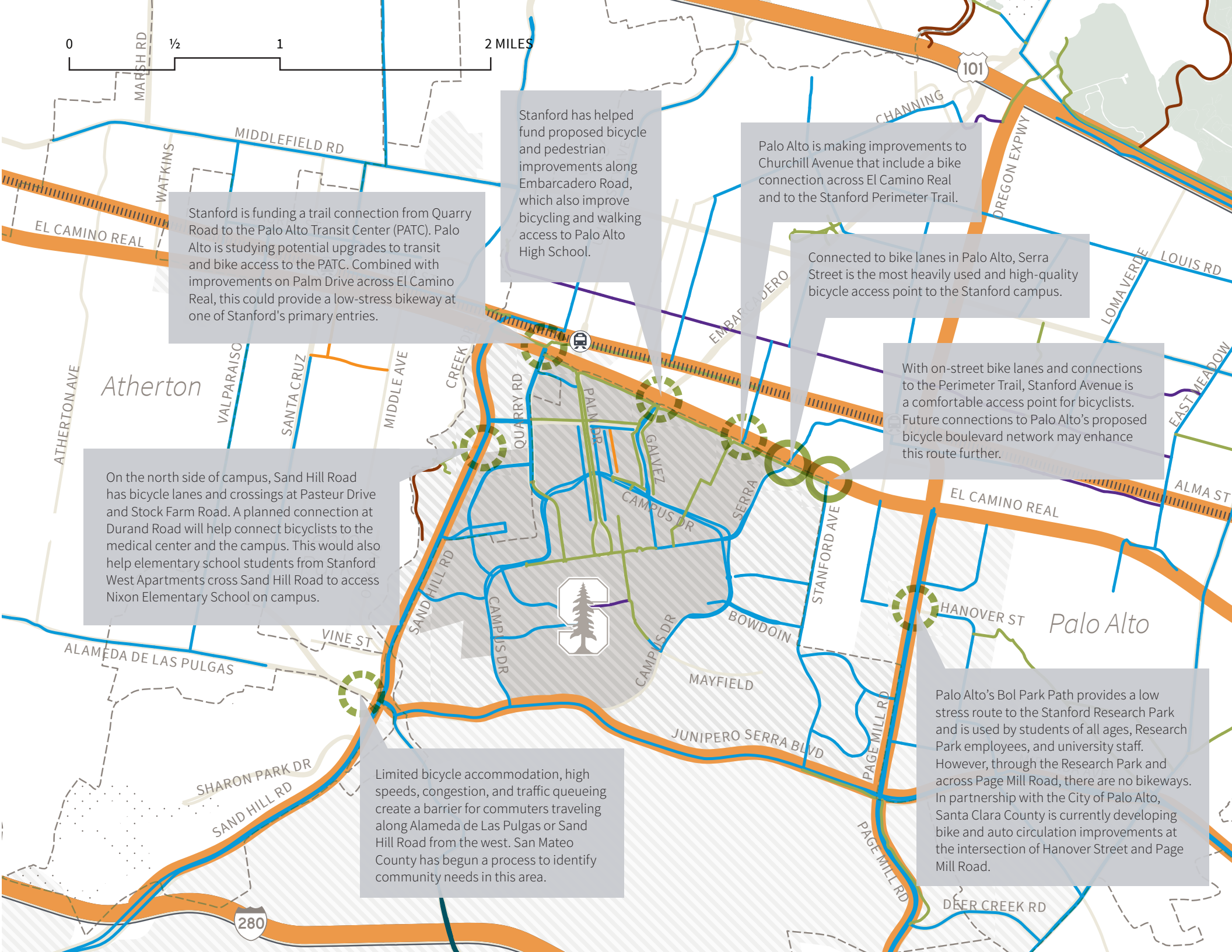
Connected to bike lanes in Palo Alto, Serra Street is the most heavily used and high-quality bicycle access point to the Stanford campus.

With on-street bike lanes and connections to the Perimeter Trail, Stanford Avenue is a comfortable access point for bicyclists. Future connections to Palo Alto's proposed bicycle boulevard network may enhance this route further.

On the north side of campus, Sand Hill Road has bicycle lanes and crossings at Pasteur Drive and Stock Farm Road. A planned connection at Durand Road will help connect bicyclists to the medical center and the campus. This would also help elementary school students from Stanford West Apartments cross Sand Hill Road to access Nixon Elementary School on campus.

Limited bicycle accommodation, high speeds, congestion, and traffic queuing create a barrier for commuters traveling along Alameda de Las Pulgas or Sand Hill Road from the west. San Mateo County has begun a process to identify community needs in this area.

Palo Alto's Bol Park Path provides a low stress route to the Stanford Research Park and is used by students of all ages, Research Park employees, and university staff. However, through the Research Park and across Page Mill Road, there are no bikeways. In partnership with the City of Palo Alto, Santa Clara County is currently developing bike and auto circulation improvements at the intersection of Hanover Street and Page Mill Road.







East Palo Alto overcrossing design

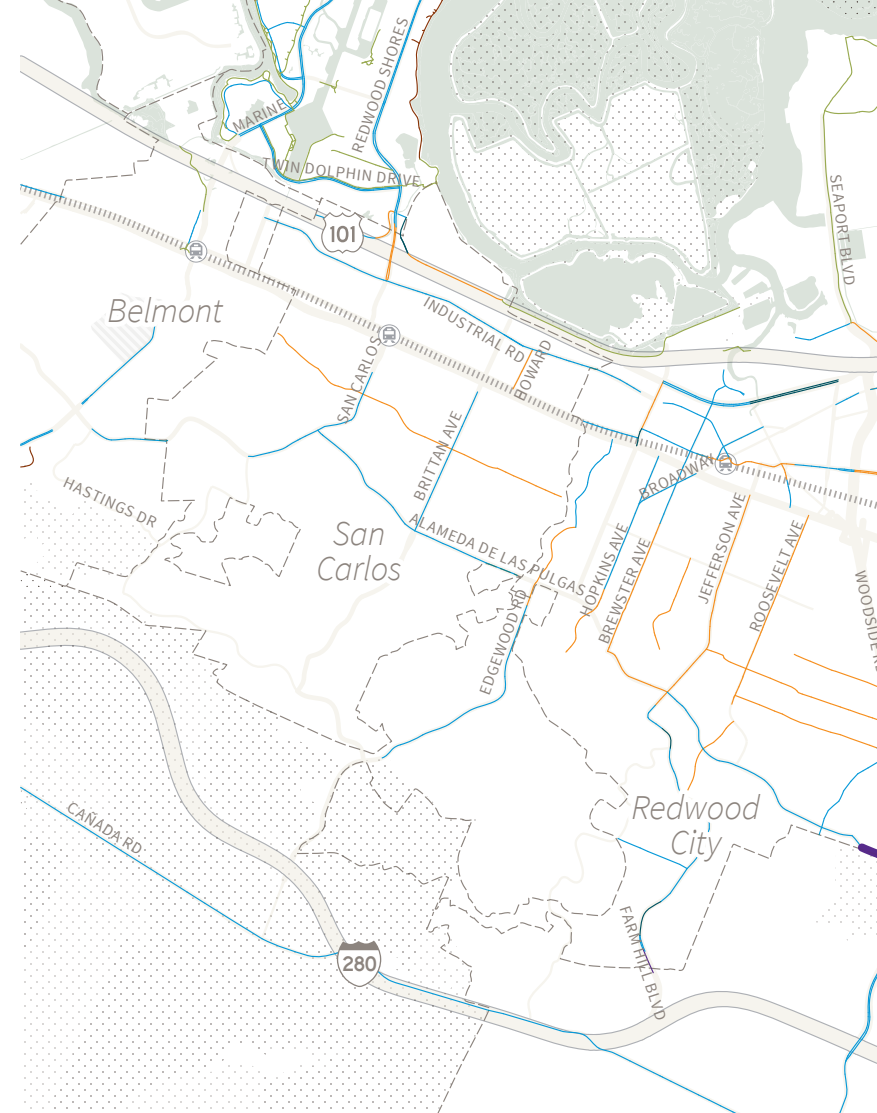


## Partner: Working With Neighboring Jurisdictions to Support Bicycling Investments

Many local jurisdictions have plans to improve bicycle connectivity in the region. The map on this page shows projects identified by these plans and by the type of bikeway recommended. Making investments will benefit residents of these communities, and local employees, including Stanford.

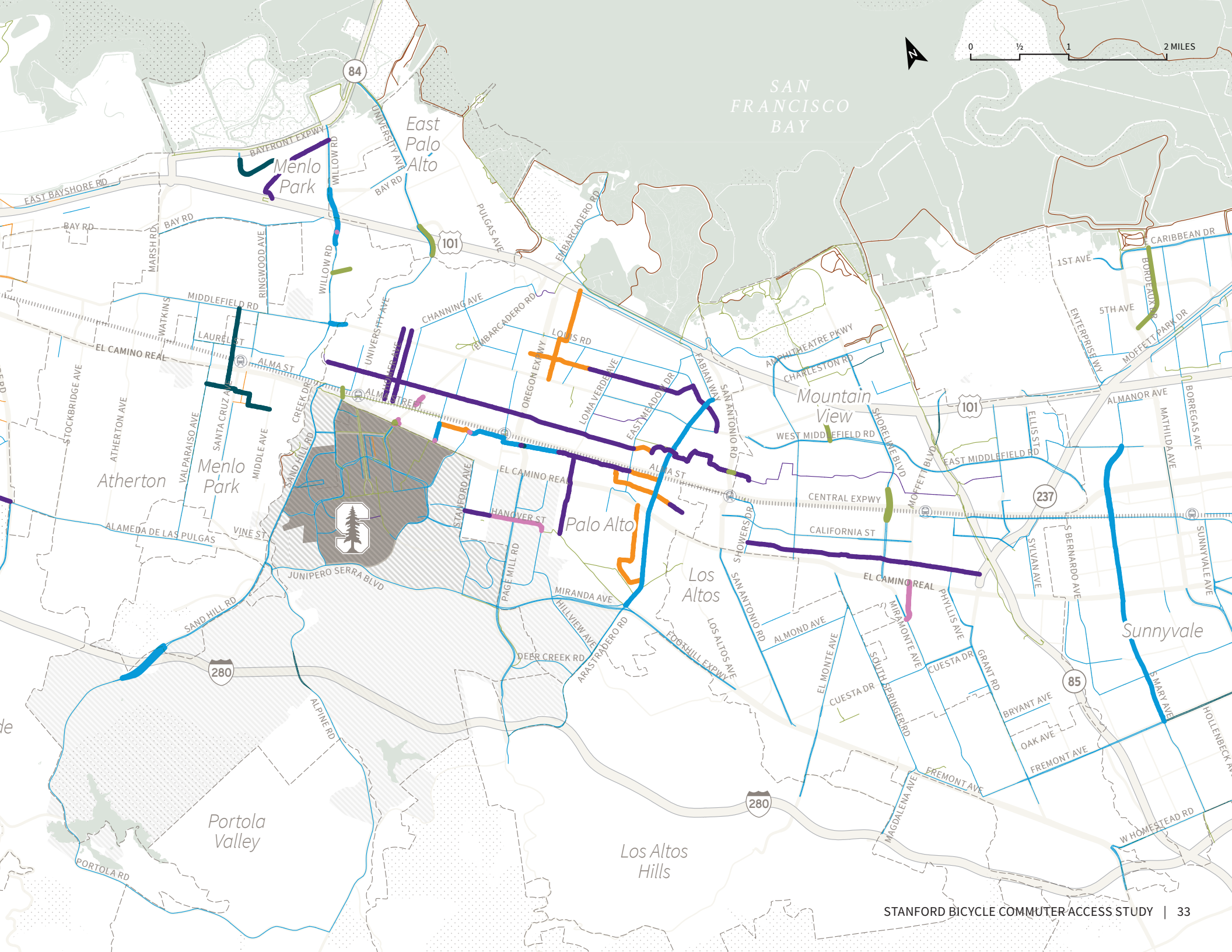
Several cities are also exploring bicycle- and pedestrian-specific crossings of US Hwy 101

and other significant regional barriers. Moreover, other large employers, such as Facebook and Google, have worked with local cities and invested in local bikeways. As these projects advance, they can provide significant benefits to residents, cities and employers throughout the region.



### STANFORD UNIVERSITY AREA Future Bicycle Network

- Existing
- Future
- PAVED TRAIL
- UNPAVED TRAIL
- BIKE BOULEVARD
- ENHANCED BIKE LANE
- BIKE LANE
- CYCLETRACK
- SHARED LANE MARKINGS





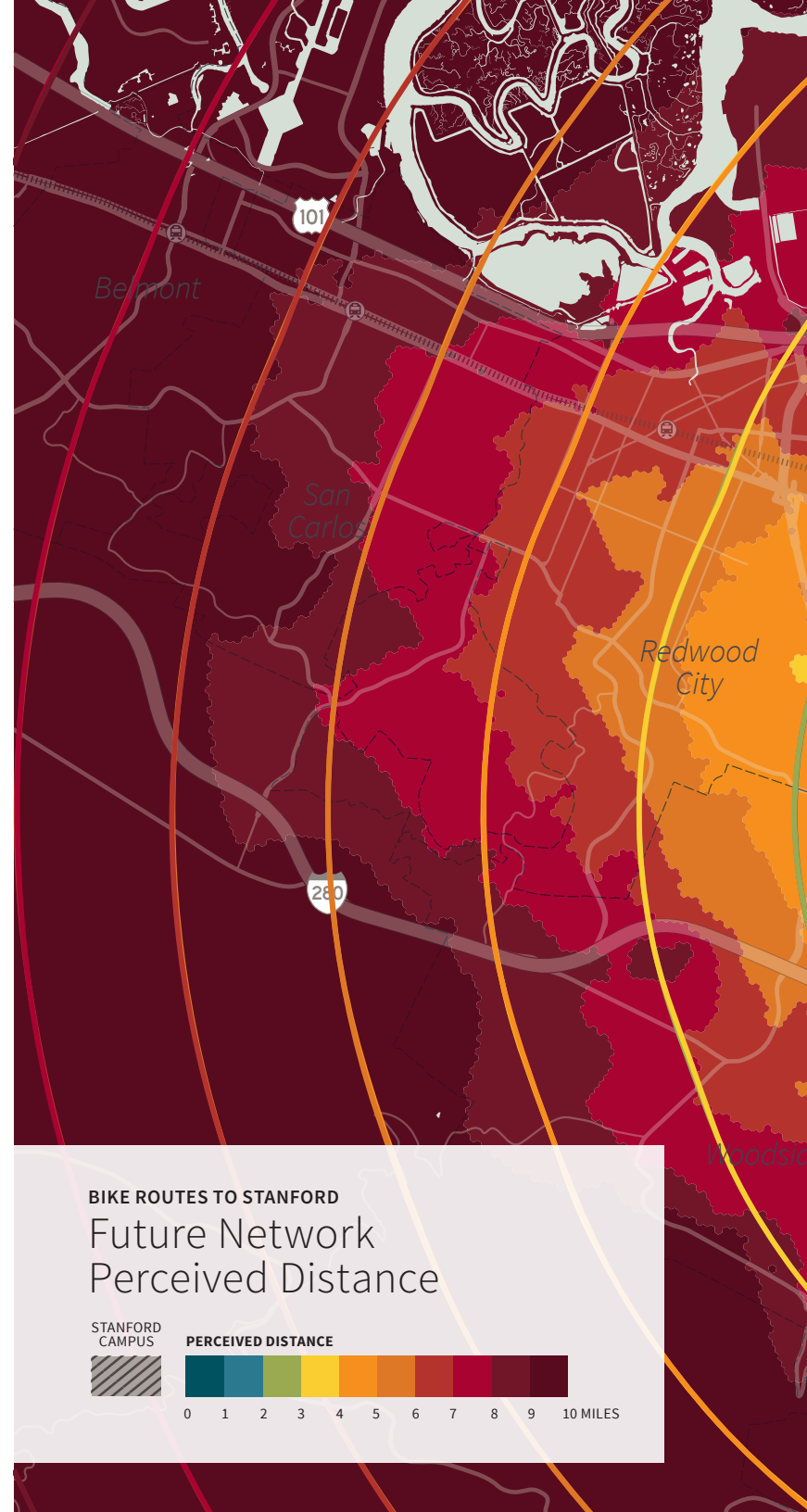
## Partner: How Will Future Off-Campus Investments Improve Bicycle Commuting to Stanford?

Looking back and re-mapping to the measures of route quality, the planned city and county bikeway improvements identified on the prior map will provide a significant improvement in the quality of bicycle commute routes.

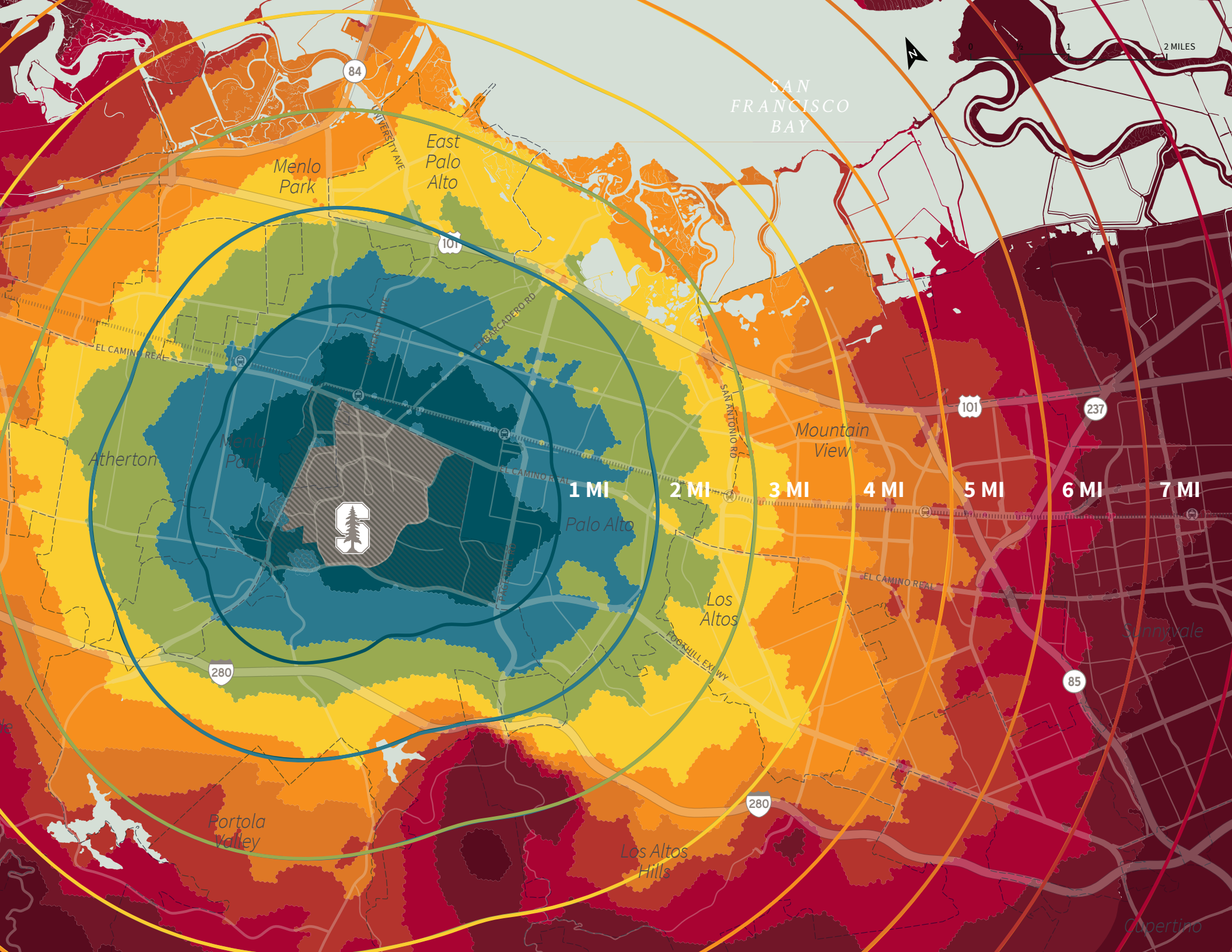
Implementing the proposed improvements within seven miles of campus is expected to improve bicyclist perceptions of their

routes by up to two miles, depending on the location.

In addition to improving commutes for over 2,600 current bicyclists, these investments are expected to make bicycling a likely mode for 800 or more new Stanford bicycle commuters.







SAN FRANCISCO BAY

84

2 MILES

Menlo Park

East Palo Alto

101

EL CAMINO REAL

Menlo Park

Atherton

1 MI

2 MI

3 MI

4 MI

5 MI

6 MI

7 MI

Palo Alto

Mountain View

101

237

Los Altos

Sunnyvale

280

Portola Valley

Los Altos Hills

280

85

Cupertino



## Looking to the Future: Stanford's On- and Off-Campus Investments

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As part of its 2018 General Use Permit, Stanford has proposed to fund four off-campus bikeway improvements (see facing page) that will benefit both Stanford commuters and the broader community. The identified improvements would address gaps in the bicycle network between existing or planned infrastructure improvements.

These bikeways, if approved and constructed, would remove vehicle trips to Stanford and reduce local congestion.

Improving the safety and comfort of bicyclists would help Stanford to continue to fulfill critical roles in the region as an educator, employer, and incubator of new talent and ideas.

These four bikeway improvements represent both a continuation of Stanford's commitment to the bicycle as a primary mode of transport, and a new beginning in prioritizing off-campus bikeway investments for the benefit of Stanford and the broader community.





### East Palo Alto - Clarke-Newell Connections

Stanford proposes to fund the design and implementation of improved connections to the soon-to-be constructed bicycle and pedestrian overcrossing of US Hwy 101 between Clarke Avenue and Newell Road. The combination of the bridge and the connections to it will remove a key barrier to bicycle travel from East Palo Alto to Stanford and communities west of US Hwy 101.

### Menlo Park - Oak Grove Avenue Connection to Stanford West Apartments

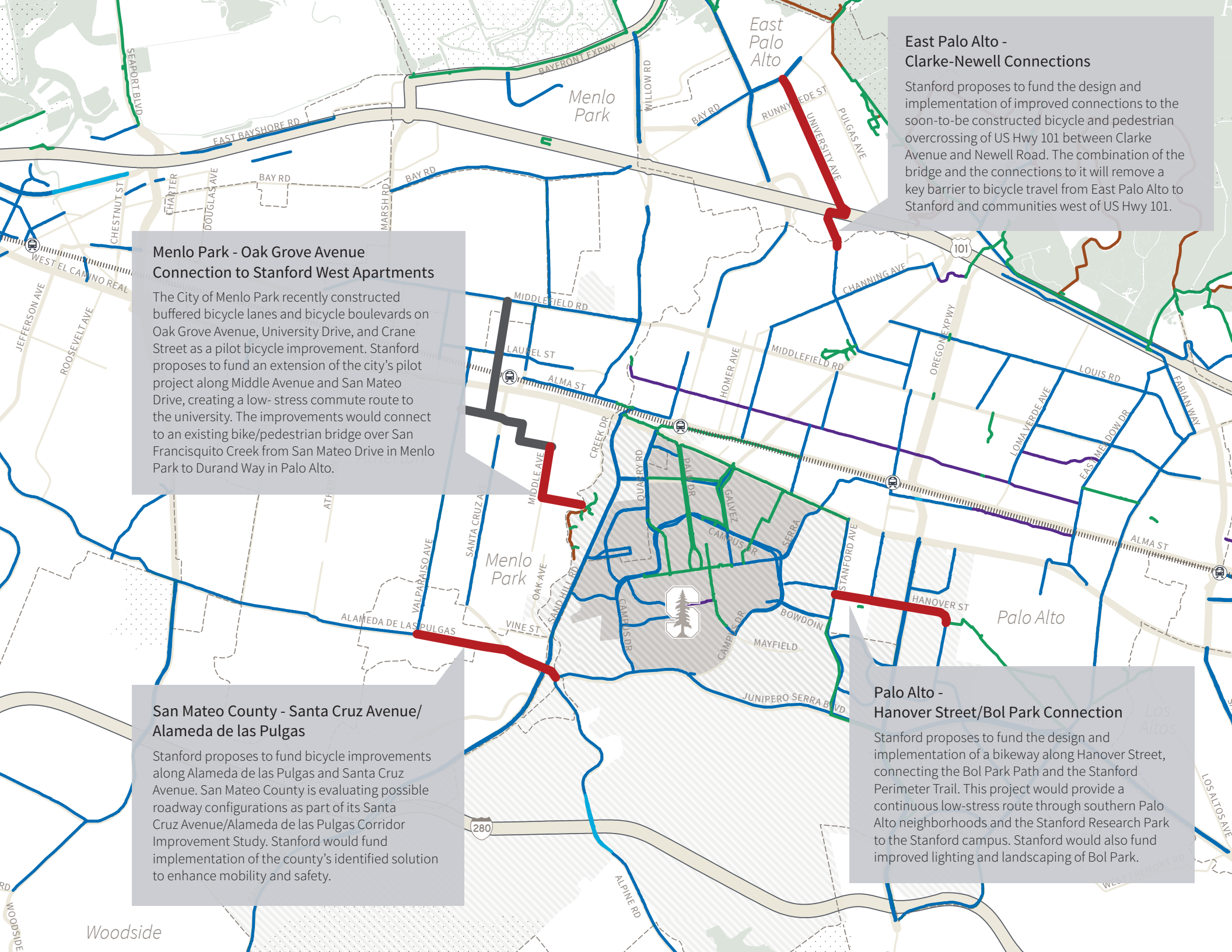
The City of Menlo Park recently constructed buffered bicycle lanes and bicycle boulevards on Oak Grove Avenue, University Drive, and Crane Street as a pilot bicycle improvement. Stanford proposes to fund an extension of the city's pilot project along Middle Avenue and San Mateo Drive, creating a low-stress commute route to the university. The improvements would connect to an existing bike/pedestrian bridge over San Francisco Creek from San Mateo Drive in Menlo Park to Durand Way in Palo Alto.

### San Mateo County - Santa Cruz Avenue/ Alameda de las Pulgas

Stanford proposes to fund bicycle improvements along Alameda de las Pulgas and Santa Cruz Avenue. San Mateo County is evaluating possible roadway configurations as part of its Santa Cruz Avenue/Alameda de las Pulgas Corridor Improvement Study. Stanford would fund implementation of the county's identified solution to enhance mobility and safety.

### Palo Alto - Hanover Street/Bol Park Connection

Stanford proposes to fund the design and implementation of a bikeway along Hanover Street, connecting the Bol Park Path and the Stanford Perimeter Trail. This project would provide a continuous low-stress route through southern Palo Alto neighborhoods and the Stanford Research Park to the Stanford campus. Stanford would also fund improved lighting and landscaping of Bol Park.









## Conclusion: Where Do We Go From Here?

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The 2017 Stanford Bicycle Commuter Access Study represents a step forward in the university's evolution as a leader in the area of bicycle commuting. The data collected will help inform future infrastructure improvements, campus programs, and outreach efforts.

**Stanford has renewed its commitment to a strong bicycle culture that is focused on improving the safety and comfort of bicyclists from all geographic areas and of all skill levels.**

Parking & Transportation Services, in conjunction with other Land, Buildings,

and Real Estate departments will continue to work to facilitate widespread bicycle commuting by providing resources to all members of the Stanford community. These efforts will benefit not only Stanford, but also the surrounding communities.

The 2017 Stanford Bicycle Commuter Access Study allows the university to reflect on the progress that has been made to this point and set benchmarks for the growth and innovation in this program in the future. Bicycling continues to be a central pillar of Stanford's steadfast commitment to promoting sustainable commuting.



For more information, visit  
[transportation.stanford.edu/bicycle](https://transportation.stanford.edu/bicycle)

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