

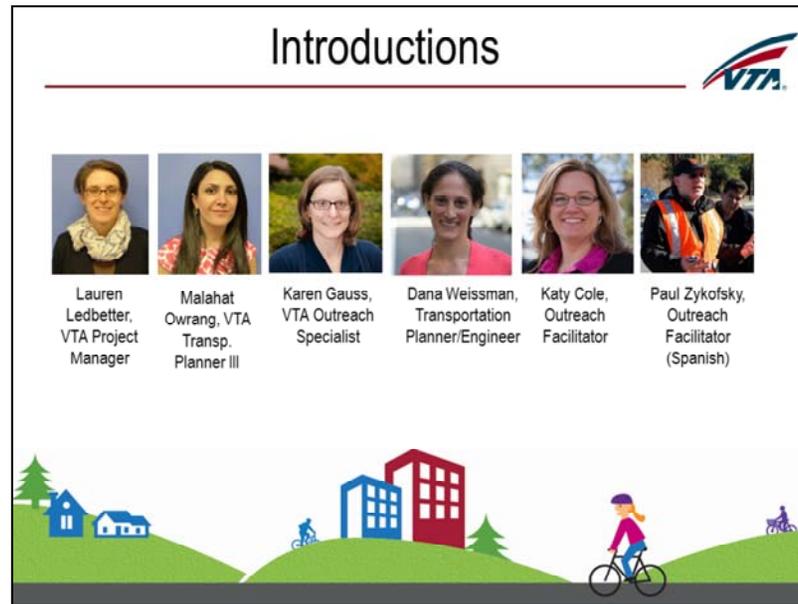
Santa Clara Countywide Bicycle Plan Update



Public Workshop
March 29, 30 and 31, 2016

5:30 – 6:00: Welcome/Refreshments
6:00 – 6:30: Presentation and Q&A
6:30 – 7:15: Visit stations
7:15 – 7:45: Recap conversations from stations and Q&A
7:45 – 8:00: Informal one-on-one discussions with staff





The public outreach team included:

Lauren Ledbetter (Lead VTA Project Manager), Malahat Owrang (VTA Transportation Planner), Karen Gauss (VTA Outreach Specialist)

Dana Weissman (Project Manager), Katy Cole (Outreach Facilitator), Paul Zykofsky (Outreach Facilitator)

Why are we here tonight?



To Learn From You!

Where do you want bikeways?

What kinds of bikeways?

What would encourage you to bicycle more?



We are kicking off the public outreach for the Santa Clara Countywide Bicycle Plan Update and want input on where we should build/improve bikeways that connect cities/towns.

VTA's Most Well Known Role



Most people know VTA as Santa Clara County's Transit agency. And it is true, 70 percent of VTA employees do work in transit. However, VTA also serves as the County's Congestion Management Agency, and in that role, VTA plans for and funds all modes of transportation, from freeway projects, to local road improvements, to bicycle and pedestrian improvements. One of our major roles involves distributing transportation funding from the region, state, and federal governments to the local jurisdictions within Santa Clara County.



VTA also oversees the design and construction of a select set of projects. These typically are either transit projects, or freeway or bike projects of countywide significance. Examples of recent VTA projects include, clockwise from the top left:

- Construction and operation of express lanes on Highway 237.
- Interchange redesign at 280/880/Steven's Creek Interchange, which included bicycle improvements on Steven's Creek.
- The Don Burnett Bicycle Pedestrian Bridge over 280 in Cupertino.
- BART extension to Silicon Valley, which will open Milpitas and Berryessa stations in late 2017.

With the update of the Countywide Bicycle Plan, VTA would like to take a larger role inclosing gaps in the bike network and building bridges and overcrossings that cross major barriers like freeways, creeks, and rail lines.

VTA's Role in Bicycling

- Link bicycling to transit
- Provide bike access on bus, light rail and BART
- Plan for bikeways at a county level and coordinate with local agencies
- Fund bikeways
- Construct (some) bikeways
 - Multi-jurisdictional
 - Transit connections



VTA takes an active role in bicycling in the county.

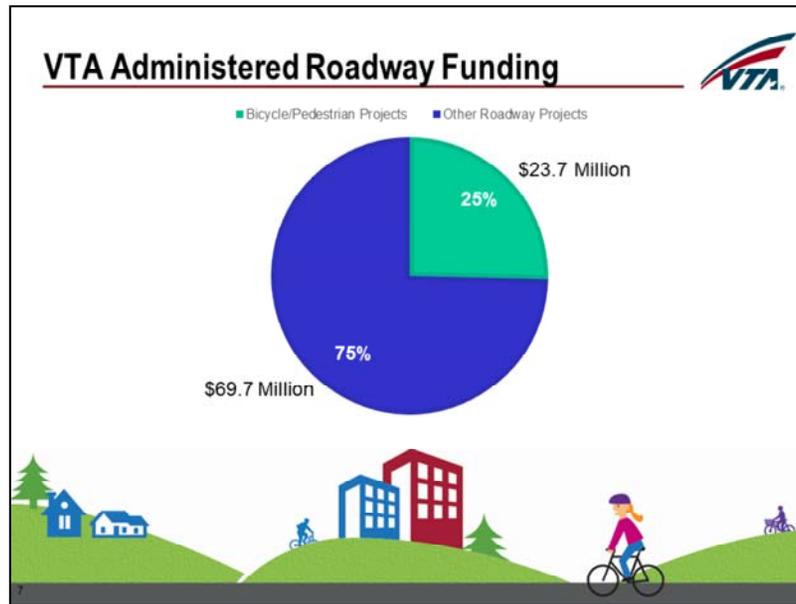
We look at ways to support the bike-transit connection.

Bikes are allowed on all our light rail vehicles, all buses have bike racks on the front, and the new blue Rapid Buses on route 522 have space for two bicycles inside as well as two bikes on the front rack. We are exploring options for adding three-position bike racks to our bus fleet.

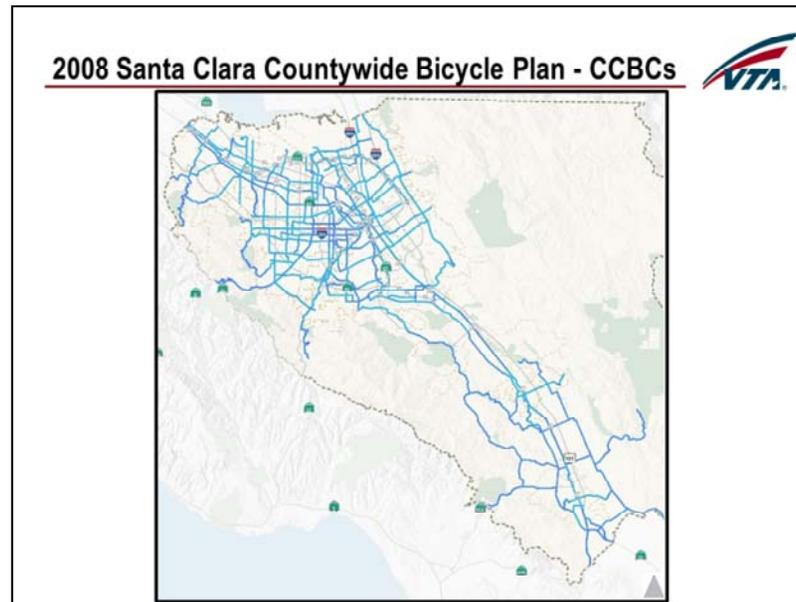
We work with local agencies to plan for bikeways across jurisdictions.

We provide funding to local agencies to construct bike lanes and bike paths.

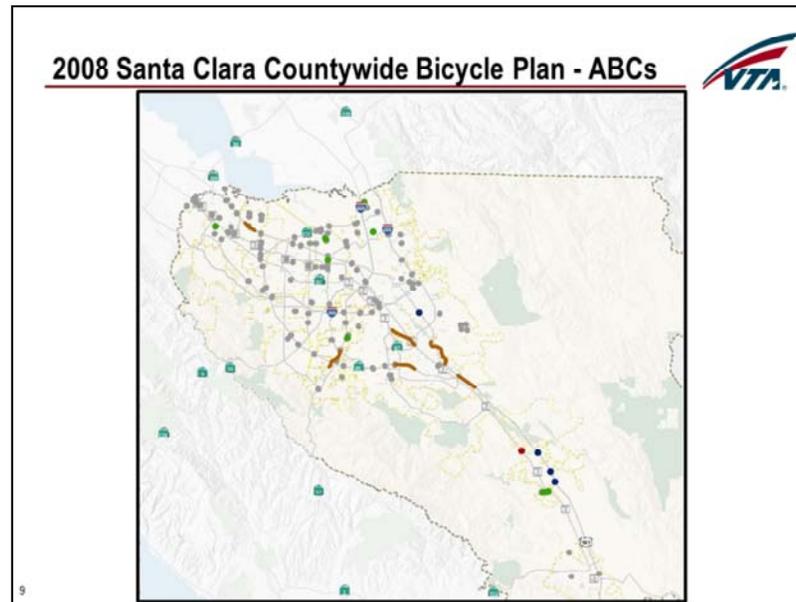
We construct some bike projects, typically those that are multi-jurisdictional or transit-serving.



VTA has a sizable role in helping to fund bicycle related projects. This pie chart shows VTA administered roadway funding for 2014. During this timeframe, VTA awarded \$23.7 Million in funding to Member Agencies for bicycle projects. This is 25% of the \$93.4 Million in competitive roadway funds that VTA administers.



This map shows the 43 Cross County Bikeway Corridors (CCBCs) as presented in the 2008 Bicycle Plan. Think of these CCBCs as a layer on top of the local cities and town's bikeway network with the goal of providing bikeways that can connect you from city to city. Also, these CCBCs were the desired corridors in 2008. Not all of them are currently constructed. One of the questions that we would like you to answer is if these CCBCs are along the right streets/trails or if they need to be modified.



Another component of the 2008 plan was identifying Across Barrier Connections (ABCs). ABCs are places where bicycle connections are needed because there is a physical barrier or lack of space for the bicycle. For example, freeway interchanges, creeks, railroad crossings, freeways, or roadways that don't have shoulders/bikeways are all barriers to providing a connected bicycle network. The 2008 Bicycle Plan identified 300+ places where an Across Barrier Connections was needed.

2008 Santa Clara Countywide Bicycle Plan



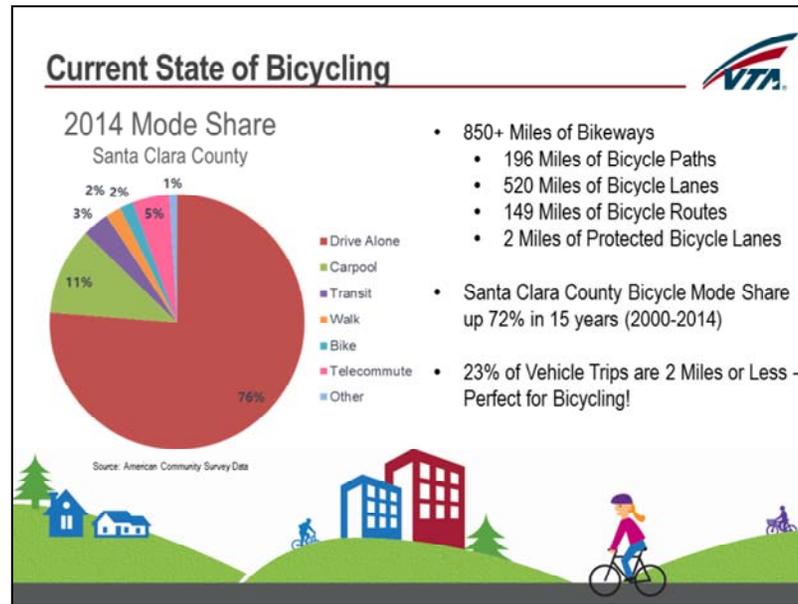
The photos are examples of how barriers are crossed. Both examples are bicycle/pedestrian bridges that cross major barriers.

Why It Is Time to Update the Bicycle Plan



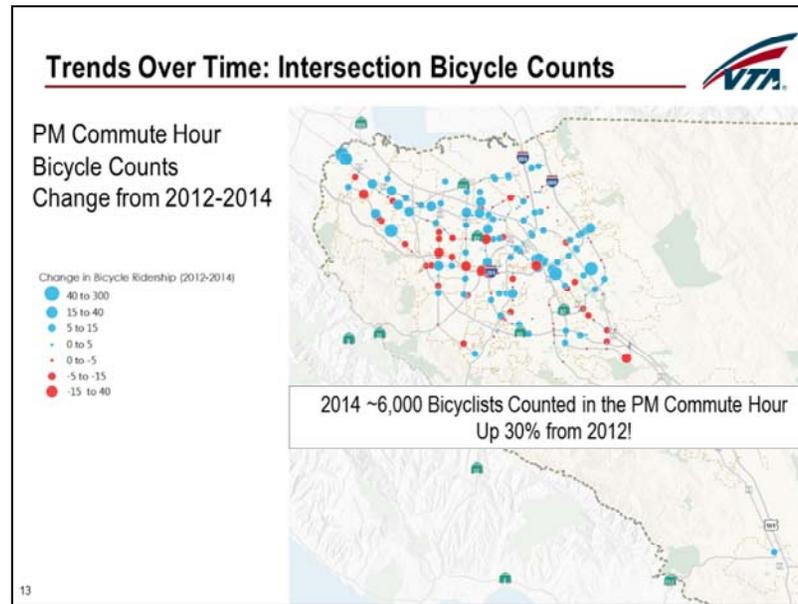
- Last plan was adopted eight years ago
- Cities have constructed many new bikeways
- New design standards, policies, flexibility in design
- Demand for higher quality, safer bikeways
- Need to improve implementation strategies





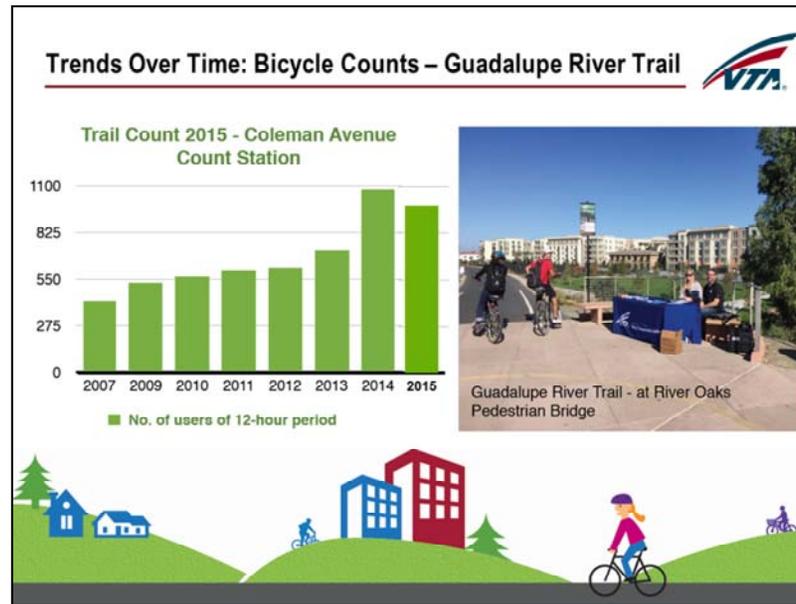
Let's look at some bicycling related metrics for Santa Clara County. In 2014 the percentage of people who commuted by bicycle was 2% according to the American Community Survey (www.census.gov). According to statistics from the League of American Bicyclists, the bicycle commute mode share increased by 72% from 2000-2014! We also do have an extensive network of bike lanes, paths, and routes that serve as the foundation for bicycling from city to city, with over 850 miles of bikeways.

According to the Santa Clara County Travel Demand Model (a tool that forecasts how people travel), 23% of trips that people take in their cars are 23% or less. A two mile trip is the perfect length for people to travel by bike, so our goal through this plan is to encourage people that are currently making these short trips by car to make some of them by bike!

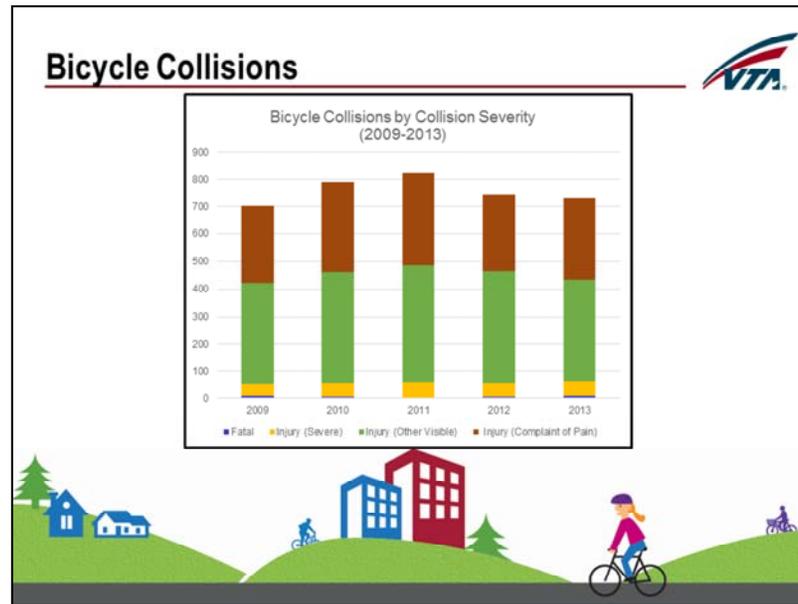


Overall, we have been seeing an increase in bicycling in Santa Clara County.

VTA counts cars and bicycles at major intersections during the afternoon commute in the County every two years. This map shows where the counts are done and how the number of bicycles counted at these intersections changed between the 2012 count and the 2014 count. During the busiest hour on the roads each day, approximately 6,000 bicycles were counted at these major intersections. In 2012 approximately 4,500 bicyclists were counted during the busiest hour at these same intersections. Therefore, bicyclists at the major intersections during the afternoon commute hour increased by 30% from 2012 to 2014.



VTA also counts trail users (includes bicyclists and pedestrians) on the Guadalupe River Trail. The graph shows how trail use as increased over time with a peak of approximately 1,100 trail users in a 12-hour period. Additionally, over 2,000 trail users were counted at the River Oaks Pedestrian Bridge during a 12-hour period in 2015.



We also reviewed collision statistics from the most recent period available (2009-2013). The data is from the Statewide Integrated Traffic Records System (SWITRS) database. The graph shows the number of bicyclist related collisions by injury type: Minor Injury (complaint of pain/not visible), Visible Injury (scraped up), Severe Injury (likely required medical treatment), and Fatality.

The number of collisions for each year and type are:

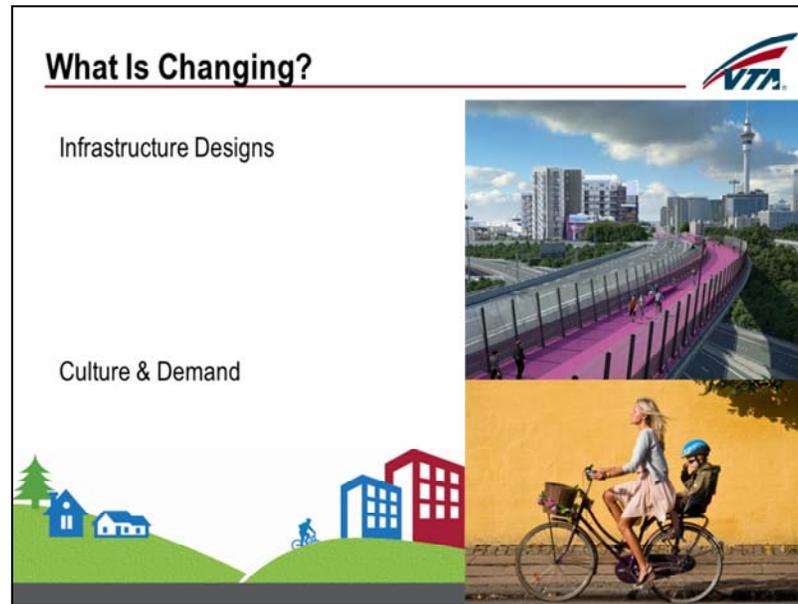
2009 – 7 Fatal, 47 Severe Injury, 368 Visible Injury, 281 Minor Injury, 703 Total

2010 – 6 Fatal, 52 Severe Injury, 404 Visible Injury, 328 Minor Injury, 790 Total

2011 – 3 Fatal, 58 Severe Injury, 425 Visible Injury, 337 Minor Injury, 823 Total

2012 – 4 Fatal, 52 Severe Injury, 407 Visible Injury, 281 Minor Injury, 744 Total

2013 – 8 Fatal, 56 Severe Injury, 369 Visible Injury, 296 Minor Injury, 729 Total



As we discussed, it seems that bicycling is increasing likely because there are new bikeway designs that are attracting more types of people and there are cultural shifts that are leading more people to bicycle.

There are several reasons why this is happening including:

- Several policies and federal and state regulation passed to support complete street designs and active transportation.
- Big transportation projects accommodate bicycle and pedestrian access, for example BART.
- More people are bicycling to run their daily errands.
- And more bicycle lanes/paths leads to more people bicycling.



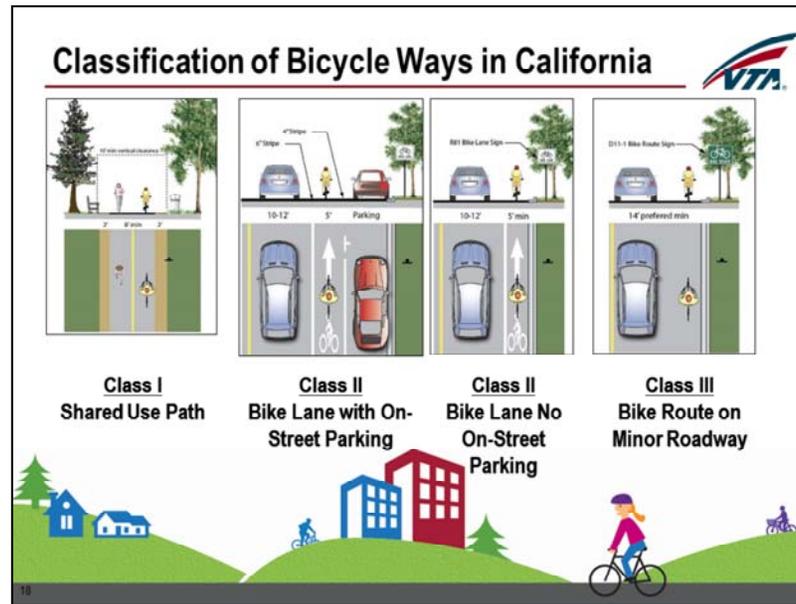
Over the last several years we have been incorporating new designs into bicycle lanes and making them more and more separated from vehicle travel lanes. This is because research has shown that traditional on-street bike lanes and bike routes are used primarily by confident cyclists and these treatments are not comfortable for most of the population.

The bike graph shows research that was conducted by Roger Gellar in Portland Oregon. The research suggests that cyclists can be categorized into four categories: 1.) Strong & Fearless, 2.) Enthused and Confident, 3.) Interested but Concerned, 4.) No Way, No How. Traditional bike lanes and routes are attractive to categories 1 and 2; however those groups only account for approximately 8% of the population. 60% of the population falls into category 3, Interested but Concerned. The people in this group probably bicycle for recreation and prefer to bicycle on off-street paths or very low volume neighborhood streets because they don't feel comfortable or safe riding on roadways with vehicle traffic, even if there is a bicycle lane.

One of the goals of the plan is to provide innovative bicycle facilities that connect across the County. For example providing buffers between the vehicles lanes and the bicycle lanes so

that more people feel comfortable bicycling.

We have a great start and it's time to start implementing innovative treatments to make our facilities more attractive and safe for everyone!



This image shows the Caltrans categories for Bikeways:

Class I – Shared Use Path or Trail

Class II – On Street Bicycle Lanes

Class III – Bike Routes, which usually are denoted by signs along the roadway.

Classification of Bicycle Ways in California



Class IV

- AB 1193 — Protected Bikeways or Cycletrack
- Caltrans recently developed standards



Long Beach

Temple City

Separated bikeways are becoming more common. Caltrans has even classified them as Class IV Bikeways. Separated bikeways are a bike lanes that is separated from vehicle travel lanes either by raised median, curb, or other physical barrier.

What Is Going On Around Us?



Bicycling is going mainstream...



The next several photos show how bicycle culture is showing up in Santa Clara County.

The first image is of an advertisement on Banana Republic's window in Valley Fair Mall. We aren't certain where their statistic comes from, but it is interesting that they are promoting bicycling.

What Is Going On Around Us?



Bicycling is going mainstream...



This is of the Farmers Market in Downtown Sunnyvale – some colorful bikes!

What Is Going On Around Us?



Bicycling is going mainstream...



Gunn High School students bicycling home from school. Gunn High School and Palo Alto High School have a large amount of students that bicycle to/from school.

3-Gunn High students biking on Maybell Avenue – Typical afternoon release

4- Gunn High bike mode

5- Palo Alto safe routes to school efforts

6- Google bikes

7-Eastridge or Milpitas? Transit Center-old lady with her bike

What Is Going On Around Us?



Bicycling is going mainstream...

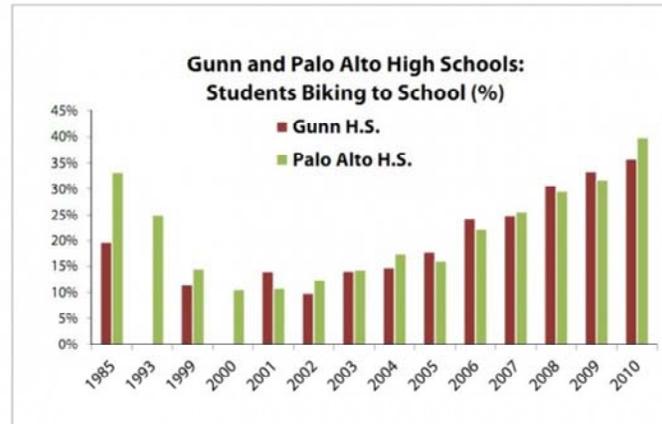


Figure 4-1: High School Bicycling Rates, 1985-2010

This chart shows how much bicycling has increased at Gunn High and Palo Alto High over the years. In 2010 almost 40% of students bicycled to school.

What Is Going On Around Us?



Bicycling is going mainstream...



This image shows Palo Alto Safe Routes to School efforts, with a “bike scramble” where the cars are stopped at the intersection and the kids can bicycle any direction.

What Is Going On Around Us?



Bicycling is going mainstream...



Many employers encourage bicycling and even offer fleets of bicycles for use by employees. This is an example of Google's bicycle fleet.

What Is Going On Around Us?



Bicycling is going mainstream...



We also know that bicycling plays an important link with transit as evidenced by the full bike racks on buses and in light rail cars. This is an example of an everyday woman using her bicycle with transit.

What Is Going On Around Us?



Innovation is happening...



We are seeing a lot of new and innovative bikeways throughout the County. The following photos show some examples.

This photo is of a green bike lane to enhance the visibility of bicyclists through the Stevens Creek/SR 85 interchange.

What Is Going On Around Us?



Innovation is happening...



This is an experimental buffered bike lane on River Oaks Parkway in San Jose. The bumps are called "Armadillos" and are intended to provide some physical separation from the vehicle lane and bike lane.

What Is Going On Around Us?



Innovation is happening...



This is the new VTA Bus Rapid Transit bus called the Flyer. It has two bicycle racks on the front of the bus and up to three on the inside!

What Is Going On Around Us?



Innovation is happening...



This is a Bay Area Bike Share bike station. Bike Share allows a person to borrow a bike and return it to any bike station in the County. Bay Area Bike Share is planning on expanding the number of bike stations in San Jose.

What Is Going On Around Us?



Innovation is happening...



This is a green bike lane and bicycle parking in Downtown San Jose. The bicycle parking was created by removing a vehicle parking space and installing five bike U-racks.

What Is Going On Around Us?



Innovation is happening...



This is a path crossing in Mountain View that has a designated spot for bicyclists to cross separate from the pedestrian crosswalk.

What Is Going On In the World?



Bike London



There is also innovation and interesting bikeways being constructed or imagined throughout the world. Some of these ideas are pretty wild, but they are meant to inspire us!

This image is an example of a London cycle track that has the bikeway traveling behind the bus stop.

What Is Going On In the World?



Bike London



This is a rendering of a 12km floating cycle superhighway on the River Thames that was developed by a group of architects, artists and engineers.

What Is Going On In the World?



Bike London



This is an elevated bike superhighway projects proposed for London named SkyCycle. The city is currently poised to spend £900 million (\$1.4 billion) on one of Europe's most ambitious bicycle path infrastructure projects. Called the East-West Cycle Superhighway, the separated bicycle path would connect Acton in West London with Barking in the east -- a journey of more than 18 miles.

What Is Going On In the World?



Copenhagen Cycle Superhighway

Google Maps



The next images show some examples from Copenhagen. A total of 22 municipalities in the Greater Copenhagen area have all collaborated to build the new network of cycle routes. The planned network, when completed, will comprise 26 Cycle Super Highways, covering a total of 300 km (186 miles). The network will increase the number of cycle lanes in Greater Copenhagen by 15%.

What Is Going On In the World?



Copenhagen Cycle Superhighway



This is an example of an intersection in Copenhagen.

What Is Going On In the World?



Copenhagen Cycle Superhighway



This is an example of an intersection in Copenhagen.

What Is Going On In the World?



Copenhagen Cycle Superhighway



This is an example of an intersection in Copenhagen.

What Is Going On In the World?



Magenta Adventure, Auckland's new Cycleway



The next images show the Magenta adventure, which is a \$18 million project built on an existing off-ramp in Auckland. The off-ramp was closed in 2005 after an upgrade to the central motorway junction left it abandoned. It remained unused for a decade before a decision was made to include it in the planned Nelson Street Cycleway. The route is part of the government's urban cycleways project, involving \$200 million of planned cycling improvements over the next three years.

What Is Going On In the World?



Magenta Adventure, Auckland's new Cycleway



The Magenta Adventure.

What Is Going On In the World?



Magenta Adventure, Auckland's new Cycleway



The Magenta Adventure.

What Is Going On In the World?



Hovenring, Eindhoven, Netherlands



This is an example of a grade separated bicycle intersection. This example, the Hovenring in Netherlands goes over a freeway interchange and separates different modes. The project opened in June 2012. Suspended from a 70 meter tall pylon it seems to float and it has become a magnificent landmark for Eindhoven, Veldhoven and Meerhoven after which the ring got it's name. It allows bikes to travel through the major intersection without interacting with cars.

What Is Going On In the World?



Hovenring, Eindhoven, Netherlands



Another shot of the Hovenring.

A Vision for Bicycling in Santa Clara County



Bike to work, school, shopping, and errands



The Vision for the Bicycle Plan is:

*The Santa Clara Countywide Bicycle Plan is a comprehensive resource to advance the planning and construction of **safe, convenient, and connected cross-county bikeways**, which people use to travel to work, shopping, school, transit, and elsewhere.*

This image shows a family biking to shopping.

A Vision for Bicycling in Santa Clara County



Cross freeways and rail lines safely, on bike bridges



The image shows bicyclists crossing the freeway.

A Vision for Bicycling in Santa Clara County



Ride from one city to the next on safe, continuous bike lanes and trails



The image shows bicyclists riding to work on connected paths.

A Vision for Bicycling in Santa Clara County



Find your way easily with signs, maps, and apps



The image shows a pavement marking that clearly tells trail users that they are on the Bay Trail.

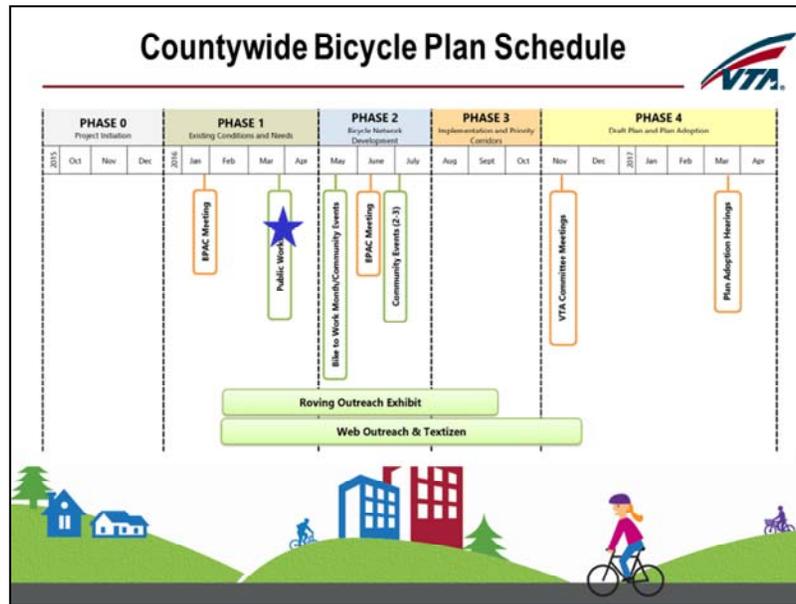
A Vision for Bicycling in Santa Clara County



Easily use your bike with the train or bus



The images show people bring their bicycles on light rail and on buses.



We are at the beginning of the project and are just kicking off the public outreach. We will continue to solicit outreach through the summer via our website, Textizen survey, and at local community events such as Farmers Markets and Bike to Work Day.

The Countywide Bicycle Plan is scheduled to be adopted in Spring of 2017.

Ways to Stay Involved



- VIP Bike Ride: Bike to Work Day – May 12th
- New Bike Maps in Bike to Work Day Bags – May 12th
- Silicon Valley Bikes! Festival & Bike Show – May 15th
- Look for the Roving Exhibit in your neighborhood
- Get updates and communicate with us online:

www.vta.org/bikeplan

 **Textizen** Text Yes: (408) 916.5799
Mande Si: (408) 831.6442

vtabikeplan @VTA



Here are the ways to stay involved!:

- Website: We will provide materials for review on the website. Additionally, the website includes an interactive map where you can draw suggestions on where bikeways should go or tell us about places that are good for bicycling or are barriers to bicycling. The interactive map will be available by the end of April.
- Textizen: Do you want better biking in Santa Clara County? Please text “Yes” to take a brief survey about how we can improve bicycling and to sign up to get updates on the Plan.



We had five workstations at the public outreach workshops. The materials for each workstation are provided on the website.