



Santa Rosa Bicycle & Pedestrian Master Plan Update 2018

City Council Meeting
March 12, 2019

Nancy Adams, Transportation Planner
Transportation and Public Works

BACKGROUND

- Bicycle & Pedestrian Master Plan Update 2018
- Amendment to General Plan

BACKGROUND

- February 2011: City Council adopted the BPMP and the mitigated negative declaration
- November 2018: Bicycle and Pedestrian Advisory Board (BPAB) and the Waterways Advisory Committee (WAC) provided input on the Draft Plan Update 2018
- January 2019: BPAB by motion recommended City Council adopt the Plan Update and approve amending General Plan
- February 2019: Planning Commission unanimously recommended Plan Update adoption and approval of GPA

BACKGROUND

The Plan Update 2018 focuses on:

- reviewing and updating information for projects, programs, policies and bicycle and pedestrian design guidelines
- integrating emerging initiatives, such as SMART passenger rail service and bike share

The Plan Update 2018 is a critical tool for guiding City staff, the BPAB and the development community in building an active transportation system that is bicycle and pedestrian “friendly”

BACKGROUND

City has approximately -

- 31 miles of Class I paths
- 67 miles of Class II bicycle lanes
- 1.6 miles of Class II bicycle boulevards

Community Engagement

- Community Engagement was a major component
 - ✓ Community open houses (3)
 - ✓ Pop up events (6)
 - ✓ Stakeholder interviews (11)
 - ✓ Project flyers
 - ✓ Project website/Social media
 - ✓ Community survey (1,300 responses)
 - ✓ Interactive mapping tool (2,100 comments and votes)
 - ✓ E-mail distribution (11,000 newsletter subscribers)
 - ✓ Local newspaper/radio/media alerts

Outreach: Community Meetings

Open Houses



Stakeholder Interviews: Junior College Neighborhood Association

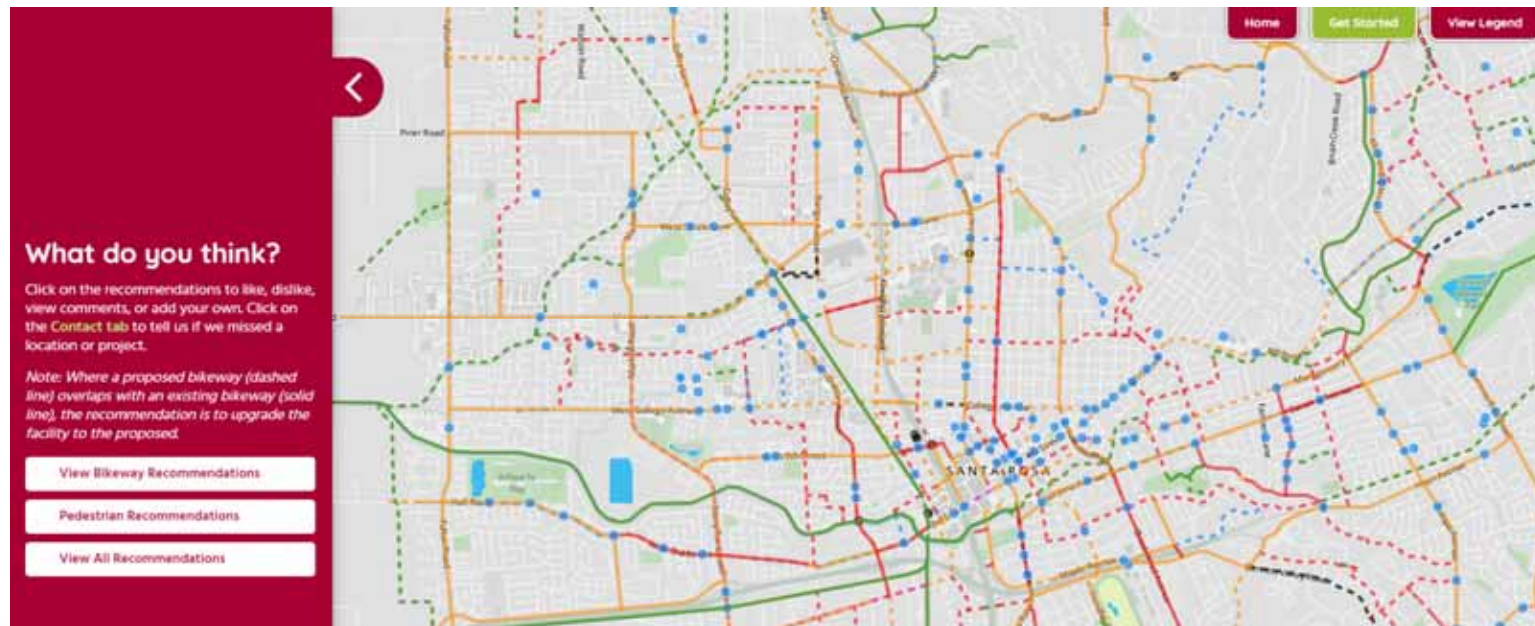


Pop Up Events: Hwy 101 Bike/Ped Overcrossing



Outreach: Online

- 1,300 Community Survey responses
- 2,100 Interactive Mapping Tool comments and votes
- 11,000 City Newsletter subscribers
- City Website and Social Media



Outreach: Board, Commission & Council Meetings

- 8 Bicycle and Pedestrian Advisory Board meetings
- 3 Waterways Advisory Committee meetings
- 1 Community Advisory Board meeting
- Planning Commission (February 14, 2019)
- City Council (March 12, 2019)



BPAB meeting

Components of the Plan Update

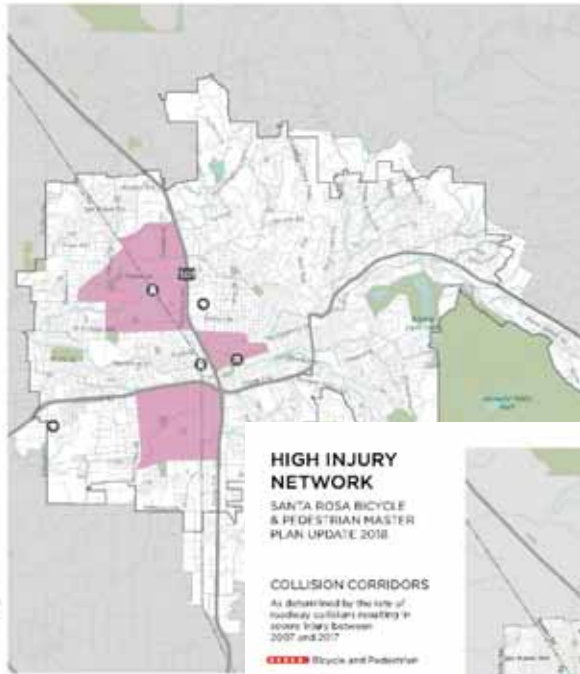
- Existing Conditions and Needs
- Vision and Goals
- Programs and Policies
- Recommendations Bikeways
- Recommendations Pedestrian
- Proposed Crossing Enhancement Locations and Trail Bridges
- Implementation – First Phase and Funding
- Bike & Pedestrian Facility Guidelines

Existing Conditions & Needs

COMMUNITIES OF CONCERN

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Community of Concern

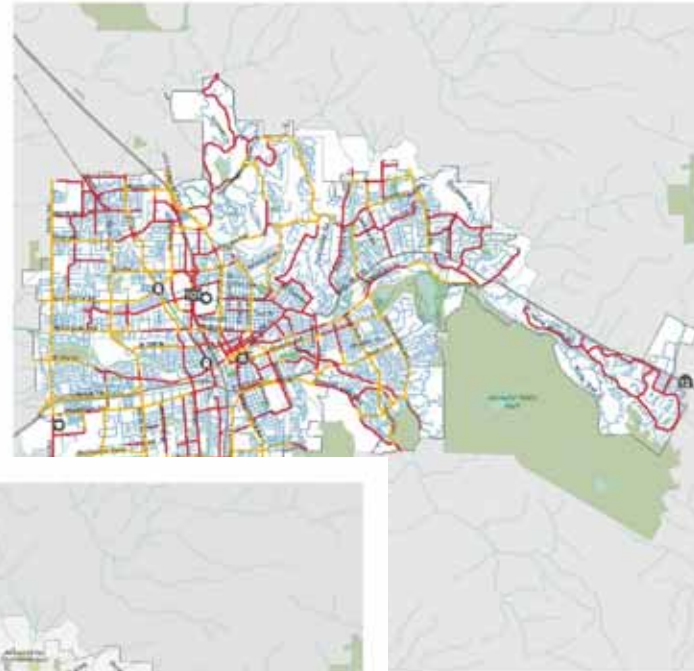


LEVEL OF TRAFFIC STRESS

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ROADWAYS AND PAVED TRAILS

- Level 1AT Ages and Abilities
- Level 2 Average Adult
- Level 3 Confident Adult
- Level 4 Fearless Adult



DESTINATIONS + BOUNDARIES

HIGH INJURY NETWORK

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COLLISION CORRIDORS

As determined by the rate of roadway collisions resulting in serious injury between 2007 and 2017

- Bicycle and Pedestrian
- Bicycle
- Pedestrian

DESTINATIONS + BOUNDARIES

- City Hall
- SMART Station
- SR Jankov College
- City Limits
- Shopping
- School
- Hospital
- Park
- Urban Growth Boundary



Vision & Goals

Santa Rosa is a community where walking and bicycling are comfortable, convenient, and common for people of all ages and abilities.

Goal 1: Increase Comfort

Design bicycle and pedestrian facilities that are accessible and comfortable for people of all ages and abilities to use

Goal 2: Maintain and Expand the Network

Identify, develop, and maintain a complete and convenient bicycle and pedestrian network

Goal 3: Support a Culture of Walking and Biking

Increase awareness and support of bicycling and walking through programs and citywide initiatives

Programs & Policies

Bicycle Friendly Community advancement

SANTA ROSA BICYCLE-FRIENDLY COMMUNITY STATUS

	Bronze	Silver	Gold	Platinum	Diamond
KEY OUTCOMES					
❌ 10.2 Fatalities <i>per 10k daily commuters</i>		1.4	0.6	0.5	0.2
❌ 774 Crashes <i>per 10k daily commuters</i>		180	100	90	50
❌ 1.0% Ridership <i>percent of commuters who bicycle</i>		3.5%	5.5%	12%	20%
ENFORCEMENT					
✅ Bicycle-Friendly Laws				VERY GOOD	EXCELLENT
✅ Law Enforcement Liaison					YES
EVALUATION					
❌ Bicycle Program Staff	Position Vacant				1 PER 10K CITIZENS
✅ Bicycle Plan	<i>current and being implemented</i>				YES
ENGINEERING					
✅ Arterial Streets	<i>with bike lanes</i>				90%
❌ 33% of Road Miles have Bikeways					70%
✅ Bike Access	<i>to Public Transportation</i>			VERY GOOD	EXCELLENT
EDUCATION					
❌ 26-50% of Schools Offer Bike Education					80%
✅ Adult Bike Education	<i>annual offerings</i>				MONTHLY
✅ Bike Education Outreach				VERY GOOD	EXCELLENT
ENCOURAGEMENT					
✅ Active Bike Clubs and Events					YES
✅ Bike Month and Bike to Work Events					EXCELLENT
✅ Active Bicycle Advisory Committee				YES	YES
✅ Active Advocacy Group				YES	YES
✅ Recreational Facilities				YES	YES

Programs & Policies

Vision Zero (VZ) Policy

TRADITIONAL APPROACH

Traffic deaths are *inevitable*

Perfect human behavior

Prevent *collisions*

Individual responsibility

Saving lives is *expensive*

vs

VISION ZERO

Traffic deaths are *preventable*

Integrate *human failing* in approach

Prevent *fatal and severe crashes*

Systems approach

Saving lives is *not expensive*

Vehicle Miles Traveled (VMT)

SB 743 changes CEQA guidelines on measuring transportation impacts from Level of Service (LOS) to Vehicle Miles Traveled (VMT)

Programs & Policies: Emerging Projects

SMART Corridor

Aug 2017-Aug 2018:

- 723,000 passengers
- 65,500 bicycles

Bike Share

- Startup 2019



Recommendations: Bikeways

RECOMMENDED BIKeways

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PROPOSED

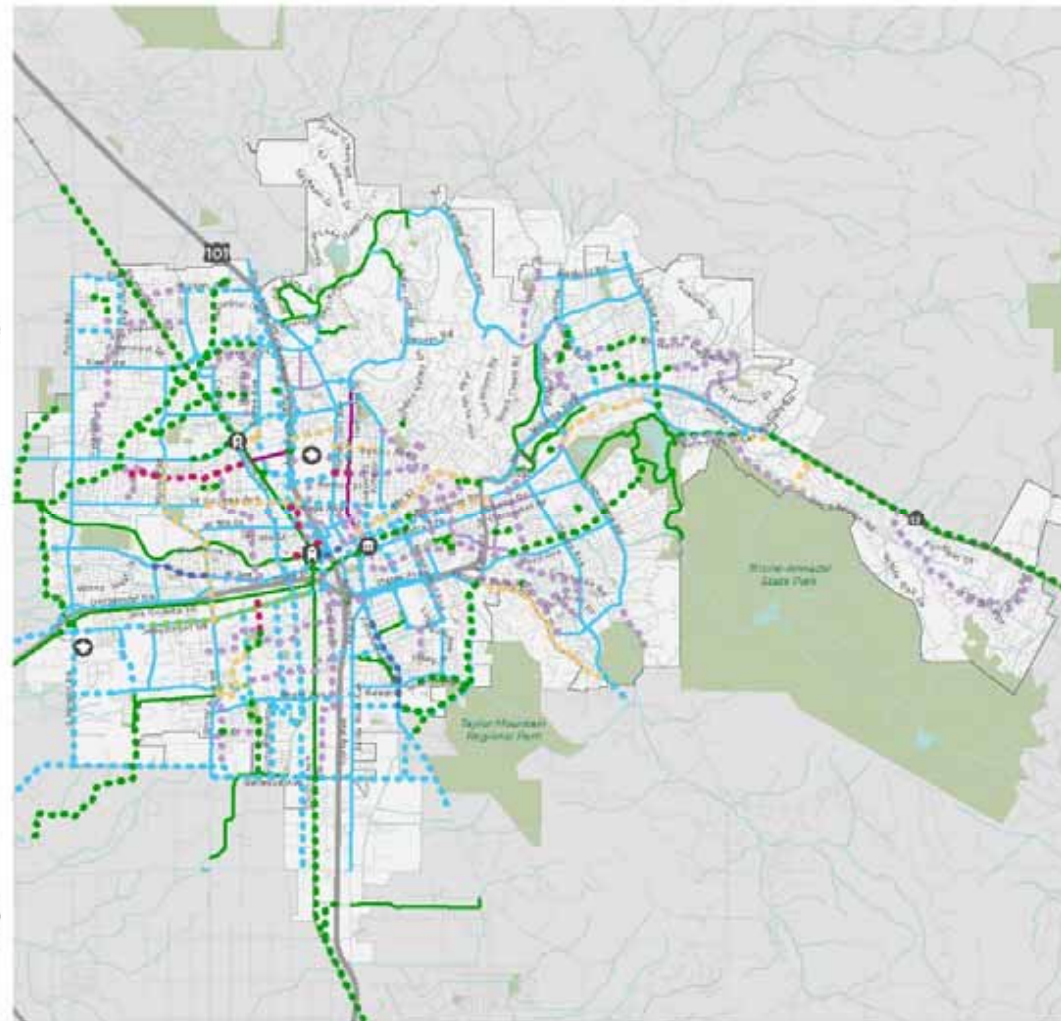
- Class I Shared-Use Path
- Class II Bicycle Lane
- Class II/B Buffered Bicycle Lane
- Class III Bicycle Route
- Class III/B Bicycle Boulevard
- Class IV Separated Bikeway
- Study

EXISTING

- Class I Shared-Use Path
- Class II Bike Lane
- Class III Bike Route
- Class III/B Bicycle Boulevard

DESTINATIONS + BOUNDARIES

- City Hall
- SMART Station
- Santa Rosa Junior College
- City Limits
- Park
- Urban Growth Boundary



Recommendations: Bikeways

Bikeway Type	Existing	Recommended
Class I Shared Use Paths	30.9 mi	38.9 mi
Class II Bicycle Lanes	67.1 mi	48.5 mi
Class II Buffered Bicycle Lanes	0.2 mi	1.9 mi
Class III Bicycle Routes	12.8 mi	35.3 mi
Class III Bicycle Boulevard	1.6 mi	2.5 mi
Class IV Separated Bikeways	-	2.2 mi

Recommendations: Pedestrian

PEDESTRIAN RECOMMENDATIONS

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PROPOSED

- Class I Shared-Use Path
- Sidewalk
- Study

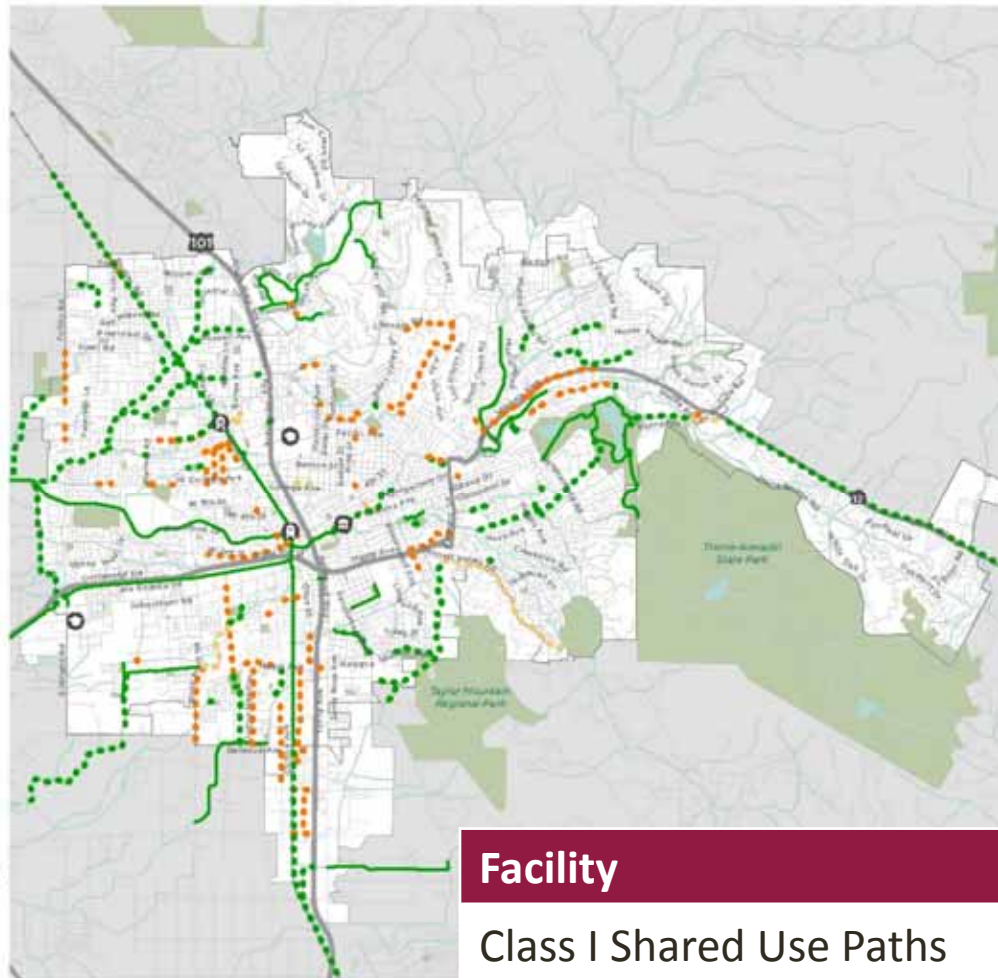
EXISTING

- Class I Shared-Use Path

DESTINATIONS + BOUNDARIES

- Santa Rosa Junior College
- City Hall
- SMART Station
- City Limits
- Park
- Urban Growth Boundary

0 0.95 1.9 MILES



Facility

Recommended

Class I Shared Use Paths

38.9 mi

Sidewalks

21.2 mi

Proposed Crossing Enhancement Locations

PROPOSED CROSSING ENHANCEMENT LOCATIONS

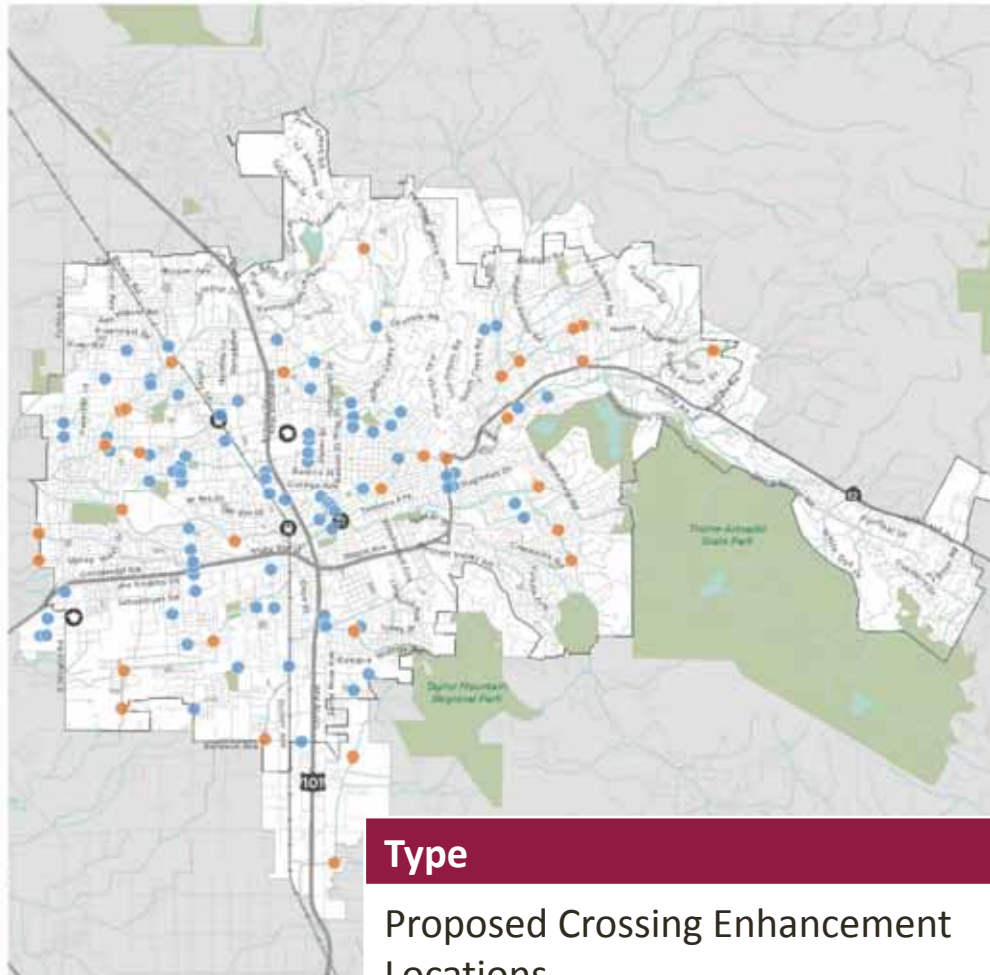
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- Proposed Crossing Enhancement Location
- Trail Bridge

DESTINATIONS + BOUNDARIES

-  City Hall
-  SMART Station
-  Santa Rosa Junior College
-  City Limits
-  Park
-  Urban Growth Boundary

0 0.65 1.3 MILES



Type	Proposed
Proposed Crossing Enhancement Locations	39
Trail Bridges	31

Implementation: First Phase



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FIRST PHASE PROJECTS

- Shared-Use Path (Class I)
- Bicycle Lane (Class II)
- Buffered Bicycle Lane (Class III)
- Bicycle Route (Class III)
- Sidewalk
- Study

DESTINATIONS + BOUNDARIES

- City Hall
- SMART Station
- Santa Rosa Junior College
- City Limits
- Park
- Urban Growth Boundary

SHARED-USE PATH

- **A** Highway 101 Overcrossing (WOODSTOWN RD TO SANTA ROSA JUNIOR COLLEGE)
- **B** Jennings Avenue (AT SMART TRACKS)
- **C** Roseland Creek Trail (BURBANK AVE TO MORRIS AVE)
- **D** SMART Trail
SEGMENT A (SERVICE MEMORIAL DR TO HWY 101)
SEGMENT B (HWY 101 TO 3RD ST)
SEGMENT C (GUERNEVILLE RD TO CITY LIMITS)
- **E** Southeast Greenway (DARTMOUTH LN TO CHINA LAKE PARK)
- **F** Taylor Mountain Regional Park Trail (3RD ST VALLEY PARKWAY LN TO PETERSON HILL RD/VOLCANO AVE)

BICYCLE ROUTE

- **B** Street (2ND ST TO 4TH ST)
- ### SIDEWALK
- **F** 3rd Street (700 Y EAST OF FOREST AVE TO 200 Y WEST OF WILSON ST)
 - **G** Chanate Road (BENDONG AVE TO LONITA AVE)
 - **H** Fulton Road (WHEELER DRIVE TO WHEELER ROAD)
 - **I** Guerneville Road (MARLOW ROAD TO REELEY AVENUE)
 - **J** Sonoma Avenue (WHEELER LN TO VOLCANO COURT NEAR 5TH AVE)

BICYCLE LANE

- **G** 7th Street (2ND ST TO HENDON DR)
- **H** Dutton Avenue (2ND ST TO SEBASTOPOL RD)
- **I** Guerneville Road (RANGE AVE TO LINDSE AVE)
- **J** Piner Road (MARLOW RD TO CLEVELAND AVE)
- **K** Range Avenue (RANGE AVE TO BULL AVE)
- **L** Santa Rosa Avenue (SONOMA AVE TO MARCE AVE)
- **N** Sebastopol Road (MARLOW AVE TO SEBASTOPOL AVE)

STUDY

- **U** 4th Street (2ND ST TO PARKERS LN)
- **V** Brookwood Avenue (2ND ST TO SONOMA AVE)
- **W** College Avenue (WHEELER LN TO HOGAN ST)
- **X** Elliott Avenue (LAWRENCE DR TO HENDON AVE)
- **Y** Montgomery Drive (SILVERBROOK DR TO HANFORD DR)
- **Z** Northwest Connections: SANTA ROSA CREEK TRAIL (HWY 101 TO 3RD ST)
CHANNEL TRAIL (2ND ST TO CHANNEL DR)
MELTA ROAD (2ND ST TO STATE BRIDGE RD)
CHANNEL TRAIL (2ND ST TO 3RD ST)
TO CHANNEL DR
- **AA** Roseland Creek Trail (2ND ST TO BURBANK AVE)
- **BB** Stony Point Road (GUERNEVILLE RD TO SEBASTOPOL RD)

BUFFERED BICYCLE LANE

- **N** 3rd Street (2ND ST TO HOGAN ST)

Implementation: Funding

FUNDING SOURCE	ON-STREET BIKEWAYS	TRAILS	SAFE ROUTES TO SCHOOL	SAFE ROUTES TO TRANSIT	CROSSING/ INTERSECTIONS	PROGRAMS	STUDIES
Local and Regional Programs							
Transportation Funds for Clean Air (SCTA)	•	•	•	•	•		
Bicycle Facilities Program (BAAGMD)	•	•	•	•			
One Bay Area (MTC)	•	•	•	•			
Transportation Development Act, Article 3 (SCTA)	•	•	•	•	•		
Measure M (SCTA)	•	•	•	•	•		
Regional Measure 3 (MTC)				•			

FUNDING SOURCE	ON-STREET BIKEWAYS	TRAILS	SAFE ROUTES TO SCHOOL	SAFE ROUTES TO TRANSIT	CROSSING/ INTERSECTIONS	PROGRAMS	STUDIES
Competitive Grant Programs							
Active Transportation Program (CTC)	•	•	•	•	•	•	
Sustainable Transportation Planning Grants (Caltrans)							•
Highway Safety Improvement Program (Caltrans)	•		•	•	•		
Solutions for Congested Corridors (CTC)	•	•			•		
Office of Traffic Safety (CA OTS)						•	
Recreational Trails Program (CA DPR)		•					
Affordable Housing & Sustainable Communities (CA HCD)	•			•		•	
Cultural, Community, and Natural Resources (CA NRA)		•					
Urban Greening Grants (CA NRA)	•	•	•	•			

Bicycle and Pedestrian Facility Guidelines

Content

Design Needs of Runners

Running is an important recreation and fitness activity commonly performed on hard-surfaced paths. Many runners prefer softer surfaces, such as rubberized bark mats or crushed rock, to reduce impact. Runners who design their workout will also vary significantly. If high volume is expected, thoughtful attention to separation of different types of users should be considered.



Design Needs of Strollers

Strollers are wheeled devices pushed to hold (usually) babies or small children. They vary greatly in their design and specific features are designed to accommodate a variety of use cases. Design needs depend on the volume, geometry and the adults who are pushing the stroller.

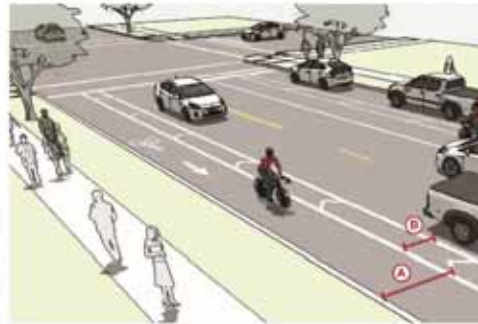
Strollers commonly have small guiding h for easy maneuverability, but those who travel on air-paved surfaces or rougher surfaces may be valuable to these users. Performing a user research study is recommended.



Bicycle Toolbox

Buffered Bicycle Lanes

Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space, separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.



Typical Use

- Anywhere a conventional bike lane is being considered.
- Wide conventional bike lanes or roadways adaptible on streets with lower to moderate speeds (15-25 mph). Buffers for these are encouraged on streets with higher speeds (30 mph and high volumes or high truck volumes) up to 4000 ADF.
- On streets with wide lanes or lane widths.
- Applicable for street-level uses on most streets.

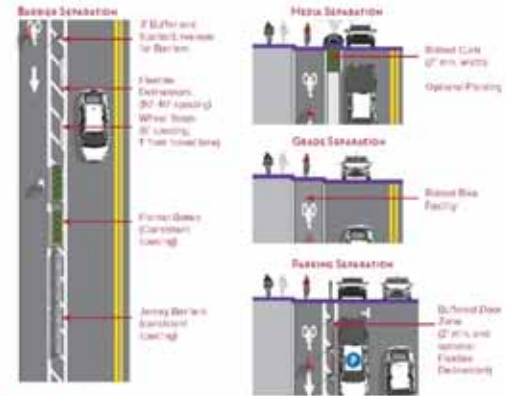
Design Features

- The minimum bicycle travel area and buffer width is 5 feet wide.
- Buffers should be at least 2 feet wide. If buffer area is 4 feet or wider, white chevrons or diagonal markings should be used. (CA MUTCD 9C-1)
- For clarity at all-way or minor street crossings, signage is recommended.
- There is no standard for whether the buffer is configured on the parking side, the travel side or a combination of both.

Bicycle Toolbox

Separated Bikeway Barriers

Separated bikeways may use a variety of vertical elements to physically separate the bikeway from adjacent travel lanes. Barriers may be robust constructed elements such as curbs, or may be more interim in nature, such as flexible delineator posts.



Typical Use

Appropriate barriers for retrofit projects:

- Parked Cars
- Flexible delineators
- Bollards
- Planters
- Parking stops

Appropriate barriers for reconstruction projects:

- Curb Invention
- Medians
- Landscaped Medians
- Raised protected bike lane with vertical or horizontal bollards
- In-ground AirFlare bollards

Amendment to General Plan

Replace figure 5-2 Bicycle Corridors with the
“Recommended Bikeways”

Amend the text -

Bicycle Facilities (5-6) - pages 5 – 10,
5 – 11, 5 - 12

Pedestrian Facilities (5-7) - page 5 – 14

Amendment to General Plan

Bicycle Facilities (5-6) - page 5 – 10

Increase miles of designated bikeways

- 180 to 242 miles

Add – 3 new Bikeway Categories

- Class IIB (Buffered bike lane)
- Class IIIB (Bicycle boulevard)
- Class IV Separated bikeway

Amendment to General Plan

Bicycle Facilities (5-6) – pages 5-11 and 5-12

Add text from Plan Update related to criteria used to determine bikeway categories

Amendment to General Plan

Bicycle Facilities (5-6) - page 5 – 12

Change miles of designated bikeways

- Class IV - 2 miles
- Class III – 48 miles
- Class IIIB – 4 miles
- Class II – 116 miles
- Class IIB – 2 miles
- Class I – 70 miles

Amendment to General Plan

Bicycle Facilities (5-6) - page 5 – 12

Change to 5 criteria used to prioritize bike and pedestrian projects

- Collision reduction
- Connectivity
- Comfort network
- Gap Closure
- Equity

Amendment to General Plan

Pedestrian Facilities (5-7) - page 5 – 14

Remove existing text and replace with text from Plan Update related to sidewalks, pathways, proposed crossings and trail crossings

Planning Commission Recommendations

- Hire a Bicycle and Pedestrian Coordinator
- Review the Plan Update
- Adopt Vision Zero
- Adopt the Vehicle Miles Travelled (VMT) Standard to Evaluate Traffic Impacts
- Add text from Plan Update related to criteria used to determine bikeway categories (Bicycle Facilities 5-6)

RECOMMENDATION

It is recommended by the Planning Commission and the Transportation and Public Works Department that Council, by resolution, adopt the Bicycle and Pedestrian Master Plan Update 2018 and approve a General Plan Amendment, consistent with the Bicycle and Pedestrian Master Plan.