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## Memorandum

**Date:** March 5, 2018  
**To:** Nancy Adams, City of Santa Rosa  
**From:** Jeff Knowles, Alta Planning + Design  
**Re:** **Santa Rosa Bicycle Friendly Community Audit**

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## Introduction

The City of Santa Rosa is currently a Bronze-level Bicycle Friendly Community (BFC), as designated by the League of American Bicyclists (LAB). The City last applied in fall 2015 and will need to reapply by fall 2019 to maintain a BFC designation. Since 2015, the City has done considerable work to improve the bicycle network and culture in Santa Rosa. Ridership has increased from 1% to 1.2% and fatalities per 10,000 bicycle commuters has fallen from 10.2 to 8. Despite these gains, non-lethal crashes are on the rise. Since the last application, crashes have increased from 774 per 10,000 bicycle commuters to 2,527 (more than triple). While behind average Silver level cities, Santa Rosa is ahead of many of its peer cities of similar size and population density. A comparison to peer cities is included in **Appendix A**. Based on an initial assessment of Santa Rosa's bicycle infrastructure and supporting programs, this memo provides targeted strategies Santa Rosa can implement to become a more bicycle-friendly community and to be recognized as such by its citizens and the LAB. The memo provides an overview and then outlines improvement strategies in three key focus areas:

1. Institutionalizing bicycling
2. Bicycling and businesses
3. Infrastructure investments

## Current Status

The graphic below outlines where Santa Rosa stands compared to cities with higher rankings.

SANTA ROSA					
BICYCLE-FRIENDLY COMMUNITY STATUS					
Bronze		Silver	Gold	Platinum	Diamond
KEY OUTCOMES					
	10.2 Fatalities per 10k daily commuters	1.4	0.6	0.5	0.2
	774 Crashes per 10k daily commuters	180	100	90	50
	1.0% Ridership percent of commuters who bicycle	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	current and being implemented			YES
ENGINEERING					
	Arterial Streets with bike lanes				90%
	33% of Road Miles have Bikeways				70%
	Bike Access to Public Transportation			VERY GOOD	EXCELLENT
EDUCATION					
	26-50% of Schools Offer Bike Education				80%
	Adult Bike Education	annual offerings			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

Santa Rosa excels in several areas including having a Bicycle Plan, liaison with the Santa Rosa Police Department, offering monthly adult bicycle education through the Sonoma County Bicycle Coalition, and celebrating May is Bike Month. However, these efforts are not reflected in what the LAB refers to as “Key Outcomes” or areas that quickly quantify how friendly a community is toward bicycling. These Key Outcomes are listed below, with more details in the following sections.

## Fatalities

At the time of the last application, Santa Rosa experienced 10.2 fatalities for every 10,000 bicycle commuters. Since the application was submitted, fatalities for every 10,000 bicycle commuter has dropped to 8. On average, a Silver BFC has 1.4 fatalities with Diamond-level communities falling to 0.2 fatalities per 10,000 bicycle commuters. In comparison to peer cities of similar population and density, Santa Rosa is doing much better in terms of fatalities, however, in order to be considered for Silver-level designation, Santa Rosa will need to significantly reduce this rate. This can be done by:

- Upgrading bicycle facilities
- Adopting a Vision Zero plan or policy
- Installing protected intersections

## Crashes

At the time of the last application, Santa Rosa recorded 774 crashes per 10,000 bicycle commuters. Since the application was submitted, crashes per 10,000 bicycle commuters has more than tripled to 2,527. Santa Rosa is significantly behind Silver-level communities, but doing better than peer cities of similar size and population density. Silver-level communities typically experience about 180 crashes per 10,000 bike commuters whereas Diamond communities see about 50. Santa Rosa can reduce this rate by:

- Upgrading bicycle facilities
- Adopting a Vision Zero plan or policy
- Installing protected intersections
- Upgrading trail crossings
- Expanding the Safe Routes to School Program

## Ridership

At the time of the last application, about one percent of commuters traveled by bicycle. This is fairly consistent with other Bronze-level communities, but below the 3.5 percent for Silver-level and 5.5 percent for Gold. Diamond communities see a 20 percent bicycle mode share. Since the application was submitted, ridership has increased to 1.2%. Santa Rosa can continue to increase its mode share by:

- Hiring a Bicycle and Pedestrian Coordinator
- Developing a bike rack program
- Expanding and upgrading bicycle facility network
- Expanding the Safe Routes to School Program
- Upgrading trail crossings
- Installing protected intersections

All of these recommendations to improve the Key Outcomes are further explained in the following action item focus areas. For a comparison with peer cities, see **Appendix A**.

## Action Item Focus Areas

### Institutionalize Bicycling

Incorporating bicycling initiatives into City processes will improve bicycling in the community by facilitating implementation and coordination of projects, and will show a commitment to bicycling as an important mode of transportation in the community. Three key action items will support this focus:

#### Hire a Bicycle and Pedestrian Coordinator

The LAB recognizes the value in having one or more staff members who work on bicycle and pedestrian projects and program coordination full time. This person ensures that all planning, public works, and transportation

projects account for bicyclists and incorporate bicycle facilities in the designs. They can also write grant applications to fund projects and programs and serve as the city liaison for all bicycle and pedestrian coordination with the public and neighboring jurisdictions.

If funding is not available to create a new position, an existing staff member can be shifted into the Coordinator position. Additionally, the City can hire interns to work on bicycle and pedestrian projects until a suitable full-time staff member can be found, and bicycling considerations should be incorporated into the duties of transportation- and traffic-related positions at the City.

Some organizations and foundations will fund staff member salaries, fellowships, or contractor salaries for a set period of time. The City should apply for grants from one or more of these foundations.

## **Vision Zero**

The City is currently developing a Bicycle and Pedestrian Master Plan. A Vision Zero component should be included in this Plan. Vision Zero is the idea that no loss of life on a roadway is acceptable and all serious injuries and fatalities are preventable through roadway design and education. The Plan should include a Vision Zero policy or goal and can include an entire chapter devoted to the topic.

## **Complete Streets Policy**

The City has adopted a Complete Streets policy, which represents a significant commitment to consider bicycling accommodation on every roadway project in the City. Continuing to implement the Complete Streets policy in coordination with a Vision Zero policy and increased staff time spent on bicycling issues will help elevate the City's bicycling environment, and elevate its reputation as a bicycle friendly community.

## **Bicycling & Businesses**

Partnering with the business community can help Santa Rosa encourage both customers and employees to bicycle instead of driving.

## **Develop a Bike Rack Program**

Bike Rack programs coordinate and streamline bike rack installations. The program could be managed by an intern who could work with staff and business owners to install bike racks and bike corrals citywide. This also ensures bike racks are properly installed as to not block sidewalks while still being usable for bicyclists.

Currently, there are no bike corrals installed in Santa Rosa. The City should install bike corrals in high-traffic locations such as in vehicle parking spots on the corners of 4<sup>th</sup> and 5<sup>th</sup> Streets in downtown. This not only sends a statement that secure bike parking is important to the city and community members, but bike corrals increase visibility at intersections for all roadway users. An increase in visibility should reduce the risk of a collision in these locations.

The city could also develop customized bike racks. These racks can serve as a "brand," highlighting the Santa Rosa identity as a bicycle-friendly community and can double as art features.

## **Promote a Bicycle Friendly Business Program**

Bicycle Friendly Business programs recognize businesses who make it easy and convenient for both employees and customers to arrive by bicycle. This requires different strategies to accommodate the different needs of

customers and employees. For customers, providing bicycle parking and supporting City bicycling projects can make it safer and easier to travel by bicycle. Some businesses also choose to offer discounts or incentives to people who bicycle. For employees, offering secure long-term parking for bicycles is key. This could include a secure gated bicycle parking area, or access to bicycle lockers. Providing changing areas, showers, or lockers to store belongings can also make it easier for employees to bicycle to work.

By recognizing businesses who support bicycling, Santa Rosa can support their local economy while fostering partnerships with the Chamber of Commerce and business owners to build community support for bicycling projects and programs. The League of American Bicyclists has a Bicycle Friendly Business program similar to the BFC program, and some communities have chosen to develop their own programs.

## **Infrastructure Investment**

### **Expand the Bicycle Network**

Santa Rosa has put in considerable effort to expand bicycle network, both on- and off-street. However, the miles of bike facilities compared to the overall road network is low. Many streets are still without bike facilities and many roadways and trails citywide have gaps. For example, Dutton Avenue has bike lanes installed on some segments, but not others and the SMART Trail does not connect to the Downtown Santa Rosa SMART Station. Closing these gaps creates a complete network, incentivizing more bicycle riders. Using a bicycle facility selection tool, such as those provided by The National Association of City Transportation Officials (NACTO), will help determine which facility is most appropriate depending on vehicle speeds and volumes.

One way to create space on existing streets for bicycle facilities is to reduce the width for vehicle travel lanes. NACTO recommends a ten-foot travel lane for urban areas and 11-foot travel lanes for truck routes.<sup>1</sup> Many vehicle lanes in Santa Rosa are over 12 feet. Reducing this width provides opportunity to install bike facilities.

### **Upgrade Existing Bike Lanes**

About 90 percent of arterials in Santa Rosa have bike lanes installed. Many of these facilities are small, four-foot bike lanes on 35 to 40 mph roadways, which can be uncomfortable for the average rider. Existing bicycle lanes could be upgraded to buffered bike lanes or separated bikeways by removing on-street parking or narrowing vehicle lane widths. These lower stress facilities can increase comfort for more hesitant bicycle riders, such as women and children, because they are further or physically separated from vehicle traffic. This is especially impactful on streets with high vehicle speeds where only the most fearless riders may currently feel confident.

### **Enhanced Facilities**

Santa Rosa has several miles of trails that provide excellent connections to destinations citywide. Many of these trails cross the roadway network at-grade and can be challenging to navigate for bicyclists. For example, many of these crossings have bollards or fencing blocking direct access to the trail, causing the bicyclist to swerve or dismount. Removing these obstructions, adding ramps and high-visibility crosswalks, and installing more bike signals in appropriate locations provide riders with a more seamless and less stressful ride.

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<sup>1</sup> <https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/>.

As Santa Rosa continues to expand its bicycle network, many of these roadways with bike facilities will intersect. Intersections are often considered the most stressful component of riding a bicycle. Santa Rosa can redesign major bikeway intersections into “protected intersections” with corner safety islands that provide a protected waiting space for bicyclists. This treatment has been installed in several cities across the nation and can be installed at intersections with separated bikeways or bike lanes alike.

### **Expand Safe Routes to School Program**

Sonoma County and Santa Rosa have significantly expanded the Safe Routes to School (SRTS) program over time, with 26 Santa Rosa schools enrolled in the 2017-2018 school year. Santa Rosa should continue to work to expand bicycle-safety education and events to all schools. The City could partner with the school districts and encourage them to start small with events such as the annual International Walk and Roll to School Day or by developing Suggested Routes to School Maps.

Suggested Routes to School Maps, also called Walk and Roll Maps, provide guardians with walking and bicycling routes to school by pointing out locations of crossing guards, off-street paths, traffic signals, and other safety features that would make walking or riding a bike to school feel more comfortable. The maps typically contain safety tips such as using hand signals and how-to information such as how to properly fit a helmet. Lastly, the maps can help inform the City of problem locations or gaps in the bicycle and pedestrian networks.

## Appendix A: Peer City Comparison

Five California cities of similar population and population density to Santa Rosa were selected for a peer comparison of bicycle commute rates, crashes, and fatalities. Two of the cities were also selected for their designation as a bronze and silver Bicycle Friendly Community.

### Overview

City	Population	Population Density (per square mile)	Bicycle Commute Rate	Bicycle Friendly Community
Santa Rosa	169,005	4,093	1.2%	Bronze
Rancho Cucamonga	167,743	4,203	0.3%	Bronze
Oceanside	169,407	4,201	0.2%	Silver
Elk Grove	155,350	3,682	0.2%	
Modesto	202,629	4,567	0.6%	
Concord	123,658	4,567	0.8%	

### Bicycle Safety Information

Using the criteria from the League of American Bicyclists, the most recent five years of collision data (January 1, 2012 to December 31, 2016) was used to calculate the following crash and fatality data. This information was queried from the Statewide Integrated Traffic Records System (SWITRS). The crashes reported involve motor vehicles where the bicycle was the victim.

City	Bicycle Crashes	Crashes per 10,000 bicycle commuters	Bicycle Fatalities	Fatalities per 10,000 bicycle commuters
Santa Rosa	305	2,527	1	8
Rancho Cucamonga	107	4,632	2	87
Oceanside	204	16,190	3	238
Elk Grove	177	13,721	1	78
Modesto	456	8,803	8	154
Concord	212	4,463	3	63