





Protected Bike Lanes

By Milan, Caidyn, and Geo







Challenge

How do we decrease Santa Rosa's greenhouse gas emissions?

Solution: Encourage people to ride their bikes by building Class IV Protected Bike Lanes.



Key Findings

- ¹/₄ of trips in Santa Rosa are less than 2 miles, but 1.6% of all trips are made on bikes.
- 33% of people don't feel safe while riding their bikes and 44% sometimes feel safe. 87% of people would ride their bikes more often if they felt safer.
- 500 cyclists have been injured in Santa Rosa since 2012.
- Over 250,000 children are injured in bicycle accidents each year.





Existing Conditions

Why is it a challenge?

- We have 0 protected bike lanes in Santa Rosa.
- The condition of our bike lanes is making riders feel unsafe and therefore not wanting to ride their bikes.

Who is/isn't being benefited?:

- New and experienced cyclists will be safer
- Accessible bike transportation leads to a healthier lifestyle
- Less traffic congestion



Case Studies

What are solutions in other areas?

- New York City's protected bike lane on 9th Avenue led to a 56% reduction in injuries to all street users, including drivers, cyclists, and pedestrians.
- Cyclists increased by 200% when a protected bike lane was added on Pennsylvania Avenue in Washington, D.C.

Areas in Santa Rosa that need protected bike lanes:

- Mendocino Avenue between Steele Lane and Ridgeway Avenue
- Roads near parks, such as Summerfield Road
- Roads near schools



Lessons Learned

What did you learn?:

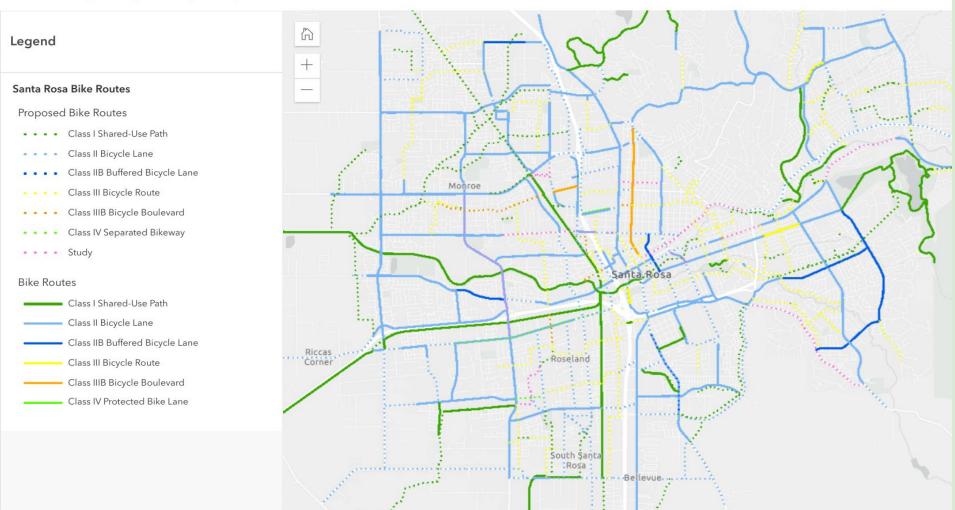
- Increases safety for cyclists
- Reduces greenhouse gas emissions
- No protected bike lanes in Santa Rosa



- Bicyclists account for over 2% of people who die in a crash involving a motor vehicle
- You are twice likely to be in a fatal accident than driving in cars
- Cost of bike injuries and incidents typically exceed \$23 million within the United States.
- Existing roads/bike lanes conditions



Santa Rosa Bicycle Map: Existing & Proposed Routes



Short-Term Recommendations

- Find bike paths that have space for protection.
- Analyze bike lanes in busy areas and its conditions.
- Plan for any potential renovation for bike lanes in need.

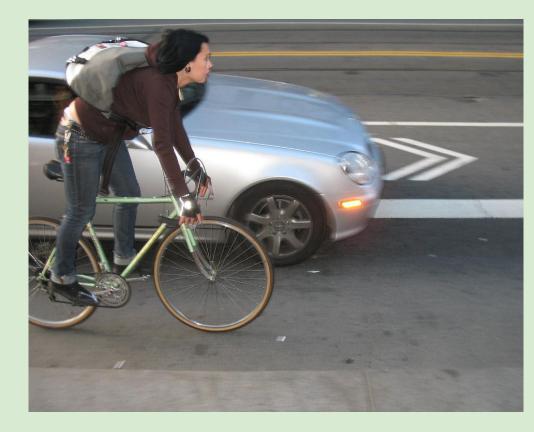
Sonoma County Bicycle Coalition

 Sonoma County Transportation Authority



Long-Term Recommendations

- Build protected bike lanes
 - Consult Fire department, Construction crews
- Renovate/ update sidewalks and streets
- More bike racks





https://www.cdc.gov/transportationsafety/bicycle/index.html

https://www.pressdemocrat.com/article/opinion/close-to-home-santa-rosa-needs-protected-bike-lanes/

https://scta.ca.gov/sonoma-marin-bikeshare/

https://www.pressdemocrat.com/article/news/santa-rosas-mendocino-avenue-to-see-revamp-with-addition-of-bike-la nes-dow/

https://westcoasttriallawyers.com/california-bicycle-accident-lawyer/bicycle-vs-car-safety/#:~:text=Even%20though% 20bicycle%20trips%20contribute,bike%20than%20driving%20a%20car

https://www.cdc.gov/transportationsafety/bicycle/index.html#:~:text=However%2C%20bicyclists%20account%20for %20over,vehicle%20on%20our%20nation's%20roads.&text=Note%20that%20bicycle%20refers%20to,unicycles%20po wered%20only%20by%20pedals.

https://dot.ca.gov/-/media/dot-media/programs/design/documents/dib-89-01_kf-a11y.pdf

https://www.injurytriallawyer.com/blog/bicycle-accidents-involving-children-kid-vs-car.cfm

https://www.peopleforbikes.org/statistics/economic-benefits