

Your best long-term solution to a bicycle detection problem is to contact the Bicycle/Pedestrian Coordinator and report it so that it can be tested. Often times a minor adjustment at the traffic signal controller can correct the problem.

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May The (Inductive) Force Be With You!



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Santa Cruz, CA 95060



BICYCLE DETECTION AT TRAFFIC SIGNALS





Bicyclists often wonder if a traffic signal will turn green for them. This brochure will show you how traffic signals work and the best ways to be detected at signalized intersections.

Types of Detection

There are two types of traffic signal detection in Santa Cruz: **video detection** and **inductive loop detection**. Currently we have 30 intersections using inductive loop detection and 10 intersections using video detection. Inductive loop detection has been in use for over 15 years and video for approximately two years.



Video detection is proving to be very accurate for detecting bicycles. The intersection is separated into zones of detection that include each lane

of traffic, including the bike lanes. When a bicycle is detected by the camera, the signal will turn green on the next signal cycle.

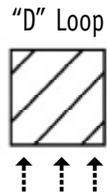


Loop detectors work basically like metal detectors. They consist of several “wraps” of

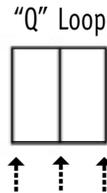
wire set in sawcut grooves that connect to the traffic signal controller cabinet on the sidewalk. Loop detectors will detect any type of metal—steel, aluminum, or alloy. Since they do not work by pressure, the weight of the vehicle does not matter. However, the closer to the ground the metal of the vehicle is, the more likely it will be detected.

If you are at a signalized intersection where you can see the sawcut lines in the pavement, you may wonder where you should position your bike to be detected. There are basically three types of loop detectors.

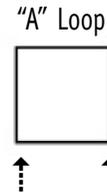
These are the best places to position your bike to be detected:



Anywhere in the loop



On the center or sides



On the sides

Markings

If an intersection has been paved over after the loops were installed, you won’t be able to see the sawcut lines of where the loops are. We have placed bike markings in these intersections to show you where to position yourself to be detected. The bike markings look like this.



If you find that you are not being detected after waiting for a very long time, you have three short-term options:

- position yourself on a different loop,
- wait for a motor vehicle to drive up and change the signal,
- or use the pedestrian push button.

Some people report that tilting their bike nearly flat on the loop also works. Others have experimented with attaching a large magnet to the bottom bracket of their bicycle frame to increase detection. These options may be inconvenient, but it’s safer than running a red light.

