



## LOOP DETECTOR PAVEMENT MARKINGS FOR BICYCLES

The City of Cincinnati wants to make it easier for citizens to use bicycles for transportation in our community. A common problem for cyclists is the inability to trigger a green light at an intersection when motor vehicles are not around. For this reason, the city has begun installing bike-specific pavement markings at priority intersections, to show cyclists where to position themselves in order to trigger the green light.

In Cincinnati, there are two types of traffic signals:

**TRAFFIC-ACTUATED SIGNALS** are equipped with sensors called “loop detectors.” Loop detectors consist of wire that is embedded in the pavement just before the intersection (you can often see cuts in the pavement where the loop detectors are buried). When these loops are electromagnetically triggered by vehicles passing over them, they send a message to the control box to turn the light green. It is not the weight of the vehicle that triggers the loop detector, it is the metal in the vehicle interacting with the buried loop detector cable.

**FIXED-TIME SIGNALS** change from red to green at pre-set intervals according to the time of day. These signals do not have loop detectors. Approximately half of the traffic signals in Cincinnati are currently on fixed-time cycles.

### WHAT CYCLISTS SHOULD DO TO TRIGGER A GREEN LIGHT

1. As you approach a red light at an intersection, look on the pavement for a white painted marking of a cyclist passing through two narrow white vertical lines. This marking is positioned over a sensitive part of the loop detector.
2. Stop your bike so that your tires are on top of the vertical white lines of the marking.
3. Wait for the light to turn green. Be patient, as with vehicles, this may take up to 2 minutes depending on the time of day. It is important to stay put until the light facing you has turned completely green.
4. If you are riding with a group of cyclists, ride over the marking about a bicycle length apart to extend the green light. When metal is over the loop detector, the light will stay green up to the pre-set maximum length of time.

If you are at an intersection without a marking, look on the ground for a rectangular cut in the pavement. Try positioning your bike directly over one of the cuts that are parallel to the direction of traffic flow.

