Bicycle safety

draft

To build a device that easy attaches to bicycle that is able to collect data to be used to advocate for bicycle infrastructure here in my city. By capturing when motorists endanger cyclists.

Talk to anyone who has ridden a bike in most major American cities and you will hear, “I would ride my bike more, but it feels unsafe”. So how can we make bicycling more accessible? By strategically improving infrastructure.

Proximity detecting device: automatically turn it on when cars get to close

Camera: to capture license plates and images of cars (would be nice if multiple cameras could be attached)

GPS: to capture location

Clock: to time stamp the event

Enclosure: must be able to protect from the elements and from day to day use of the bike.

Program proximity sensor to turn on when anything is closer than 3 feet. This should turn on the camera and gps. The camera should remain on for as long as the pormixity sensor is activated, and then remain on for an additional 5 minutes (more or less idk). At the same time the gps and clock should activate creating a time and location stamp of the event.

Additional features:

air quality senors  
 MORE? What other useful data could be collected?