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Programs to Educate All Cyclists & bikeprogram.org
Michigan Mountain Biking Association & mma.org
Michigan Trails & Greenways Alliance & michigantrails.org

Allow Road Users to Bypass Malfunctioning Signals

Action

Michigan bicyclists request that the Governor and Michigan Legislature:

- **Support legislation to allow bicyclists to safely and legally proceed through malfunctioning traffic signals**
- **Expand the proposed legislation to include a provision to allow automobiles to also be able to proceed through non-functioning or malfunctioning traffic signals**
- **Amend language referring to "automated stoplights" to read "actuated signals" to fully encompass the various styles of traffic signals in use across the state.**

Status

HB 4265 was introduced by Representative Shirkey on 2/14/13 and referred to the Committee on Transportation and Infrastructure. Co-sponsors include Representatives Dave Pagel, Frank Foster, Kurt Heise, Bill LaVoy, Douglas A. Geiss, and Ray Franz.

Issue

Many Michigan intersections use induction loop systems to actuate automated traffic signals. These systems typically rely on coils of wire placed under the roadway surface. Passing an electrical current through those coils creates a magnetic field. When a large metallic object comes to rest above the coils, the magnetic field is disturbed. Upon registering the disturbance, the system changes the traffic signal.

Many induction loop configurations are not properly calibrated for bicycle use. Such systems rely on metal from a vehicle being close enough to the coil to disturb the magnetic field. A bicycle in the middle of the loop may be too far from any of the wires to trip the sensor. Even if a cyclist is lucky enough to be positioned properly, modern carbon fiber and other high-tech polymer bicycles may not contain enough metal to disturb the magnetic field. And of course, even a perfectly configured loop system may malfunction. Other styles of automatically actuated signals, such as those that rely on cameras, can also malfunction and fail to detect bicyclists or other roadway users.

A malfunctioning signal leaves bicyclists in an uncomfortable position: he or she must (1) sit at the intersection indefinitely, or (2) proceed through the intersection and risk both a traffic citation and potential injury. Vehicles behind the bicyclist are also trapped at the intersection, frustrating motorists. Recognizing this, many law enforcement officers already forego ticketing bicyclists who proceed through a malfunctioning traffic signal, as long as it was otherwise safe for them to do so.

Possible solutions include retrofitting existing induction loops by changing coil configuration and/or sensor sensitivity, installing signs and road stencils indicating the optimal stopping position to actuate the sensor, and/or changing Michigan law, as this legislation proposes, to allow bicyclists to legally proceed through malfunctioning lights when it is safe to do so. Since an otherwise well-engineered system can still completely malfunction, we advocate a combination of all three approaches and urge local governments to take appropriate actions to adjust and modify signals to accommodate bicyclists.

HB 4265 solves this issue by allowing bicycles, motorcycles, or mopeds to proceed through a red traffic signal if "after 1 full cycle of the automated stoplight after making the stop, or after 60 seconds if the automated stoplight is not cycling or the driver is unable to determine whether the automated stoplight is cycling, the automated stoplight fails to detect the presence of the bicycle..." If a bicyclist is ticketed for proceeding through a red light, the amendment places the burden on the citing law enforcement officer to testify that the light was cycling properly, or that the cyclist failed to wait 60 seconds.

We recognize that non-functioning traffic signals also affect motorists and therefore advocate modifying HB 4265 to allow all road users, including automobiles, to proceed through non-functioning traffic signals.