



Traffic Signals Will Reduce Traffic Crashes, Right?

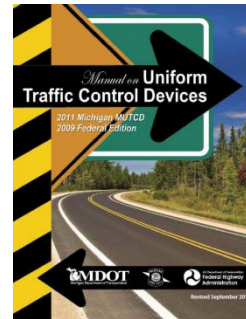
Traffic signals are an indispensable part of a modern road system. Used properly, they benefit safe, convenient, and efficient travel by reducing certain types of crashes and minimizing unnecessary delays to users. As Macomb County's population and traffic volumes continue to grow, more traffic signals will be needed. However, they are not needed everywhere.








When installed inappropriately, a signal will increase accidents and traffic delays and contribute to congestion. Often simpler measures will work better. Macomb County and responsible local traffic officials are dedicated to reviewing each situation, applying objective criteria and sound engineering and safety principles, and selecting the best measure to alleviate an intersection concerns. The goal is to keep our public roads safe, efficient and easy to use,

ensuring the quality of traffic service expected by Macomb County motorists.

The County follows established well developed, nationally recognized guidelines, the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) in conjunction with the AASHTO design guide: A Policy on Geometric Design of Highways and Streets to determine when traffic signals become necessary. These guidelines identify specific traffic and pedestrian volume thresholds, accident history, sight distance, and any unusual conditions at the intersection.



A traffic study is completed before a traffic signal is approved and designed. This study considers a number of important factors, including the following:

-  Intersection design, crash history and potential
-  Vehicle traffic volumes and gaps in traffic approaching the intersection
-  Approach speeds and sight distances and locations of nearby signals
-  Characteristics of the area and adjacent land use
-  Projected and planned growth



With the facts in hand, engineers look to determine what actions, if any, will yield the best results with the least adverse side-effects. When considering the possibility of a traffic signal, the engineers must, by State and federal law, consider the guidelines for signal installation set forth in the MMUTCD, which embodies time wise tested recommended practices developed to ensure that signals are used where, but only where, they are justified by comprehensive, objective criteria.

ADVANTAGES OF SIGNALS

Traffic signals are valuable devices for the control of vehicle and pedestrian traffic. Warranted traffic signals, properly located and operated, usually have one or more of the following advantages:



They can provide for the orderly movement of traffic.



Where proper physical layouts and control measures are used, they can increase the traffic-handling capacity of the intersection.



Under favorable conditions, they can be coordinated to provide for continuous or nearly continuous movement of traffic at a definite speed along a given route.



They can be used to interrupt heavy traffic to permit other traffic, vehicular or pedestrian, to cross.

DISADVANTAGES OF SIGNALS

While many people realize that traffic signals can reduce the number of angle collisions at an intersection, few realize that signals can also cause an increase in other types of crashes. For example, it has been well documented that other types of accidents, notably rear-end crashes, usually increase when a signal is installed. Traffic signals have become regarded as a panacea or "cure-all" for any and all traffic problems at intersections. The following factors can result from an improper or unwarranted (per MMUTCD) signal installation:



Excessive delay may be caused. Even the best designed and operated signals usually increase delay, when compared to unsignalized intersections, resulting in significant fuel waste and higher motorist costs.



Disobedience of the signal indications is encouraged. Delay at unwarranted traffic signals can breed gross disrespect toward signals as well as other traffic control devices.



The use of less adequate routes may be encouraged in an attempt to avoid such signals.



Accident frequency can be significantly increased at unwarranted signals or at locations where installation was not based on sound engineering analysis.

MAKING IT ALL HAPPEN

If a traffic study shows that a traffic signal is justified, engineers begin the numerous tasks in planning for, designing, and installing the signal equipment. Additionally, many new signals require other physical changes to be made to the intersection, along with new traffic signs and pavement markings necessary for the intersection to operate properly. All the processes that go into completing a warranted signal installation take time to complete from the initial date of request to the final date of activation.



Traffic Signals



The Macomb County Department of Roads takes its role in responding to traffic concerns very seriously, yet the ultimate burden of safety rests on you, the motorist in the County. We will respond to every traffic concern you have. Since we receive over 1000 citizen concerns per year, we may not be able to investigate your request as quickly as we would like to. We appreciate your patience and understanding in this matter.



MACOMB COUNTY DEPARTMENT OF ROADS

117 South Groesbeck Hwy.

Mount Clemens, MI 48043

Phone: (586) 463 8671

Email: geninfo@rcmcweb.org

<http://roads.macombgov.org>