

# Understanding Traffic & Safety Controls

## for Ottawa County

Road Commission and Township Collaboration

2012

### County Road Traffic Controls

#### *Authority and Obligation*

Under **Public Act 300 of 1949**, the Road Commission is charged to oversee the installation and maintenance of traffic control devices on all county roads.

Devices that fall into this category include traffic control signs, pavement markings, and traffic signals.

The Road Commission adheres to the regulations and guidelines provided by the **Michigan Manual of Uniform Traffic Control Devices (MMUTCD)**.

The goal is to provide safe and efficient movement of vehicle and pedestrian traffic on all county roads.

#### **County Road Traffic Control Device Breakdown**

*Guide Signs* ≈ 4,000

*Regulatory Signs* ≈ 5,700

*Warning Signs* ≈ 5,400

*Traffic Signals* = 58

*Pavement Markings* ≈ 6,000,000 feet

### Traffic Control Placement

#### *Responsibility*

The Road Commission has the sole responsibility to place or approve traffic control devices on county roads.

The MMUTCD specifies the size, shape, and color of all traffic signs and signals.

Traffic controls should meet these five basic requirements:

1. Fulfill a need,
2. Command attention,
3. Convey a clear, simple meaning,
4. Command the respect of road users, and
5. Give adequate time for proper response.

### *Establishing Speed Limits*

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Speed limits are established in accordance with the Michigan Vehicle Code.

Currently, regulatory speed limits are set by State Statute at a maximum 55 mph on county roads or 25 mph for business and residential districts known as “prima facie” speed limits. These speed limits are generally not posted on county roads.

Regulatory speed limits can be modified based on a unanimous recommendation from a traffic survey team consisting of representatives from the Michigan State Police, Road Commission, and Local Township. The recommendation is based primarily on results of a traffic engineering study that includes the collection of speed data, review of the crash history, and roadway characteristics.

The Lansing office of the State Police has to accept the recommendation of the survey team in order to establish a modified speed limit. Once approved, signs for the new speed limit can be posted.

## Pedestrian Safety

### Township Collaboration

Pedestrian signals, crosswalks, and street lighting are safety devices for both pedestrians and motorists.

At the Townships' request and expense, pedestrian signals can be installed at crosswalk locations on traffic signalized intersections. Once installed, the Road Commission will maintain the signals.

Painted cross walks (non school related) are maintained at controlled intersections at the Townships' expense.

Street lighting is lights used to illuminate roads, not traffic signals. The Township oversees the installation and maintenance of this utility.

## School Speed Zones

### Establishment Overview

School speed limits are intended for the protection of students walking to and from school.

At the request of the school superintendent, a need for such zone is determined by a study involving the Road Commission, appropriate school district, Sheriff Department, State Police, and sometimes the Township.

If established, school zone speed limits are only in effect for 30-minute periods when children are walking to and from school. The limit that may be posted varies depending on roadway factors, but is never less than 25 mph.

## Stop Signs



Stop signs are installed at an intersection only after a traffic engineering study of the existing conditions indicates that their installation is appropriate. The Road Commission follows the guidelines and warrants for installing signs set forth in the MMUTCD. These warrants examine the traffic volumes, crash history, traffic flow, and sight distance at the location to determine if a stop sign should be used.

MMUTC further states that stop or yield signs shall not be used for speed control.

## Traffic Signals

The decision to install or modify a traffic signal is based upon an engineering study and the following factors from the MMUTCD: **Vehicular and pedestrian volumes, Crash history, Vehicle delay, and Vehicle progression**

Traffic signals operate on one of three principles: pre-timed, semi-actuated and fully-actuated.

*A **Pre-Timed Signal** runs a set timing plan independent of the existing traffic. It also has the capability of running different cycle lengths depending on the time of day.*

*A **Semi-Actuated Signal** includes a mechanism installed on the minor road that detects when traffic is present. This detection switches the green phase to the minor road to allow traffic to clear.*

*A **Fully-Actuated Signal** includes mechanisms installed on both the major and minor roads that detect the volume of traffic present. Based on the amount of traffic, the signal provides enough time to accommodate all of the vehicles.*