Setting Speed Limits on Michigan Roads in 2024

An overview of the process set forth in MCL 257.628, as modified by PA 33, signed and effective April 2, 2024 Prepared by Matt Penniman, League of Michigan Bicyclists – matt@LMB.org

1. Determine who owns the road.

Local: Local road authority (governing body of city, village, airport, college, or university) determines speed limit

County: County road commission or board of commissioners / executive / department of roads (if no road commission), township board, and Michigan State Police jointly determine speed limit

State: MDOT and Michigan State Police jointly determine speed limit

2. Conduct a speed study.

Must measure "free-flowing traffic under ideal conditions on the fastest portion of the highway segment for which the speed limit is being posted." Must be "in accordance with traffic engineering practices that provide an objective analysis of the characteristics of the highway."

Calculate the **85th percentile** and **50th percentile speed** (i.e. the speed at which 85% or 50% of drivers are traveling slower; an 85th percentile speed of 33 mph means 85% of drivers are slower than 33 mph and 15% are faster.)

3. Determine desired speed limit.

There are **two options:** "The speed limit must be in multiples of 5 miles per hour and rounded to a multiple that is within 5 miles per hour of the eighty-fifth percentile speed." If the 85th percentile speed is 33 mph, the speed limit could be set at 30 mph or 35 mph.

Is the lower option still too fast for public safety? If the 50th percentile speed is at least 5 mph below the lower option, consider an **engineering and safety study.** The limit "may be set below the 85th percentile speed if an engineering and safety study demonstrates a situation with hazards to public safety that are not reflected by the 85th percentile speed, but must not be set below the 50th percentile speed."

4. File public record of traffic control order, communicate change in speed limit, and post signs.

Section 2B.13 Speed Limit Sign (R2-1)

Standard:

- Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles.
- The Speed Limit (R2-1) sign (see Figure 2B-3) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph.
- Speed Limit (R2-1) signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another.
- At the downstream end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be installed. Additional Speed Limit signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.
- Speed Limit signs indicating the statutory speed limits shall be installed at entrances to the State and, where appropriate, at jurisdictional boundaries in urban areas.

 Support:
- In general, the maximum speed limits applicable to rural and urban roads are established:
 - A. Statutorily a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or
 - B. As altered speed zones based on engineering studies.
- State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

 Option:
- If a jurisdiction has a policy of installing Speed Limit signs in accordance with statutory requirements only on the streets that enter a city, neighborhood, or residential area to indicate the speed limit that is applicable to the entire city, neighborhood, or residential area unless otherwise posted, a CITYWIDE (R2-5aP), NEIGHBORHOOD (R2-5bP), or RESIDENTIAL (R2-5cP) plaque may be mounted above the Speed Limit sign and an UNLESS OTHERWISE POSTED (R2-5P) plaque may be mounted below the Speed Limit sign (see Figure 2B-3). *Guidance:*
- A Reduced Speed Limit Ahead (W3-5 or W3-5a) sign (see Section 2C.38) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.
- States and local agencies should conduct engineering studies to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.
- No more than three speed limits should be displayed on any one Speed Limit sign or assembly.
- When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th-percentile speed of free-flowing traffic.
- Speed studies for signalized intersection approaches should be taken outside the influence area of the traffic control signal, which is generally considered to be approximately 1/2 mile, to avoid obtaining skewed results for the 85th-percentile speed. Support:
- Advance warning signs and other traffic control devices to attract the motorist's attention to a signalized intersection are usually more effective than a reduced speed limit zone.

 Guidance:
- An advisory speed plaque (see Section 2C.08) mounted below a warning sign should be used to warn road users of an advisory speed for a roadway condition. A Speed Limit sign should not be used for this situation.

 Option:
- Other factors that may be considered when establishing or reevaluating speed limits are the following:
 - A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
 - B. The pace;
 - C. Roadside development and environment;
 - D. Parking practices and pedestrian activity; and
 - E. Reported crash experience for at least a 12-month period.
- Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles.
- A changeable message sign that changes the speed limit for traffic and ambient conditions may be installed provided that the appropriate speed limit is displayed at the proper times.
- A changeable message sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit sign. [...]