

TOWNSHIP SPEED ZONE GUIDANCE

October 11, 2017

BACKGROUND

In 2015, the South Dakota legislature passed a law enabling Townships to set speed limits on their roadways. Whereas, prior to 2015, the township would have to seek approval from the County and the County would have to pass a resolution to make the new speed zone enforceable. Currently, all that is required by law is that the Township provide notification to the County for the new speed zone to be enforceable.

32-25-9.2. Township road speed limit--Violation as misdemeanor. No person may drive a vehicle on a township road in excess of fifty-five miles per hour. However, notwithstanding the provisions of § 32-25-9.1, any board of township supervisors may determine and establish speed zones upon all or any highways under its jurisdiction. The township board shall notify the county of any changes and the speed zones shall be conspicuously posted at the beginning and ending of the zones. Driving in excess of the speed limit established in this section or by the township board pursuant to this section is a Class 2 misdemeanor.*

*Note that Townships shall submit their notice to the Commission Office using the format provided on Minnehaha County's website. A copy is located at the end of this document.

The Manual on Uniform Traffic Control Devices (MUTCD) is a document issued by the Federal Highway Administration (FHWA) of the United States Department of Transportation (USDOT) to specify the standards by which traffic signs, road surface markings, and signals are designed, installed, and used. In the United States, **all traffic control devices must legally conform to these standards**. The manual is used by state and local agencies as well as private construction firms to ensure that the traffic control devices they use conform to the national standard.

Therefore, county highways as well as local roads (of which townships have jurisdictional authority) "must legally conform to these standards" as found in the *MUTCD*.

To that end, the purpose of this document is to provide guidance to townships that are contemplating making a speed zone change on one or more of their roadways.



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MUTCD GUIDANCE:

Section 2B.13.01 of the *MUTCD* speaks directly to the issue of properly signing for speed zones:

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

01 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.

Later in Section 2B.13, Item 6 of the *MUTCD* states:

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.**

Further, under the *Guidance* portion of Section 2B.13.10 of the *MUTCD*, the following appears:

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.

Note that “dust control” and “reducing potholes” or “minimizing maintenance” is not included as justification for re-evaluating statutory speeds limits.

Again, under the *Guidance* portion of Section 2B.13, Item 12 of the *MUTCD* states:

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.

Then, under Item 16 of Section 2B.13 of the *MUTCD*, additional guidance is offered which describes items that should be considered when re-evaluating speed limits:

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.

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Note that “dust control” and “reducing potholes” or “minimizing maintenance” are not included as factors that should be considered when re-evaluating statutory speeds limits.

To summarize the key points from above:

- All traffic control devices must legally conform to the *MUTCD*.
- An engineering speed study should be performed when contemplating a speed zone change.
- The speed zone change should be within 5 MPH of the 85th-percentile speed.
- Factors prompting a re-evaluation of a speed zone include:
 - 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
 - significant changes in traffic volumes
 - Road characteristics
 - Shoulder condition
 - Grade, alignment, and sight distance
 - The pace (ie., 85th-percentile speed)
 - Roadside development and environment
 - Parking practices and pedestrian activity, and
 - Reported crash experience for at least a 12-month period.
- Factors specifically NOT included as being factors for considering speed zone changes include:
 - Minimizing pot holes
 - Dust control
 - Minimizing routine maintenance
 - Noise abatement

These standards of practice as established through the *MUTCD* have been employed for many years and are widespread and widely accepted by traffic engineers and transportation planners. And yet, there are those unaware of the existence of these practices and those who conduct them.

USLIMITS2

To assist those who may be less familiar with engineering speed studies and to also help standardize such evaluations within the engineering community, the Federal Highway Administration (FHWA) has developed a free, on-line tool called USLIMITS2. Simply

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defined, USLIMITS2 is a tool that aids practitioners in determining appropriate speed limit recommendations. This on-line resource can be found at <https://safety.fhwa.dot.gov/uslimits/>.

In addition to the tool, this website provides access to a User Guide, Decision Rules, and other related information.

The Minnehaha County Highway Department strongly encourages that all townships use USLIMITS2 when contemplating speed zone changes.

The required inputs to use USLIMITS2 include the following:

- 85th Percentile Speed¹ = _____
- 50th Percentile Speed = _____
- AADT = _____
- Number of crashes in last 5 years = _____
- Number of Serious Injury/Fatalities in last 5 years = _____
- Number of accesses per miles = _____
- Parking practices and pedestrian activity
- Adverse Alignment (horizontal and/or vertical site distance issues)
- Site Distance issues
- Shoulder slopes are __:1

It is recognized that some of this information may not be immediately available and/or that the use of USLIMITS2 is outside the comfort level of some township officials. Therefore, townships are strongly encouraged to hire an engineering consultant to assist them in appropriately analyzing speed zone changes.

Costs for these services may range between \$800 and \$2000. While this cost may seem high, it should be considered as an investment in the safety and mobility of your road system which is benefit to all - a governing principal for all roadway authorities.

¹ Note that the majority of speed zone recommendations produced by USLIMITS2 will almost always be within 5 MPH of the 85th-percentile speed when adverse conditions are absent. Examples of adverse conditions include: high density of approaches, high pedestrian and/or bicycle movements, steep in-slopes, high crash rates, dangerous horizontal or vertical curves, etc. Therefore, identifying the 85th-percentile speed accurately becomes crucial as well as serving as a key indicator of what speed users are comfortable traveling.

{Example Notification Letter}

Minnehaha County Commission Office
415 N Dakota Avenue
Sioux Falls, SD 57104

_____ (Date)

SUBJECT: NEW SPEED LIMIT POSTING NOTIFICATION

In _____ (Township), on
_____ (name of street or avenue)

In compliance with SDCL 32-25-9.2, _____ Township hereby provides the required notice to the Minnehaha County Board of Commissioners that a new speed zone has been established in accordance with the *Manual of Uniform Traffic Control Devices* (MUTCD), Section 2B.13.

The details for this new speed zone are:

ON _____ (street name or avenue)
FROM _____ (beginning reference location)
TO _____ (ending reference location)
_____ MPH (New Speed Posting)

A copy of our township's board meeting minutes is attached which support this action along with a map showing the limits of the new speed zone. Also a copy of this resolution was published in the _____ (name of paper) for two weeks consecutively on _____ (date 1) and _____ (date 2).

Chairperson

Clerk

Attachments: _____ (date) Meeting Minutes (required)
Map showing accurate representation of speed zone extents (required)
Copy of Engineering Speed Study (optional)

(Fill in the red blanks and delete all items in parenthesis prior to signing and submitting.)