Town of Rutland

Dane County

Traffic Safety and Field Recommendations

May 29, 2024

Purpose: Work with the Town of Rutland on their concerns for speed limits and safety on their town roadways. Town officials have asked WisDOT to help them identify potential solutions. The roadways are an average of 22-24 feet wide with no shoulders. The roadways are generally flat but there are areas with horizontal and vertical curves that hide driveways that have been there for decades. There are two operating quarries within the town that have trucks driving from the quarries through the town every day, estimated at around 4-500/day.

WisDOT engineering and safety suggestions for the Town of Rutland:

Signing general comments

- Mounting heights of signs observed that several sign heights around the Town do not meet the WMUTCD.
 - The rural minimum mounting height shall be 5 feet from the edge of the pavement to the bottom of the sign.
- Minimum Reflectivity of Signs some signs were old and in poor condition.
 - Sheeting on the old signs has little reflectivity.
 - Modern sheeting will help the view of the signs especially at night.
- Several installations that had multiple signs on posts.
 - Causes mounting height variations and different sign commands being portrayed in the same location.
 - Each command should have its own sign post for maximum effect.
- Sign Conspicuity
 - Allows the usage of red or orange flags above signs to help draw attention, especially for new signs.
 - This will help enhance safety that can easily be done.
- Spacing of Speed Limit signs
 - Speed limit signs should be placed at the beginning of the roadway segment. Then they can be placed after every major intersecting roadway.
- Usage of Hill Blocks View sign
 - This sign alerts drivers to reduce speed as they approach crest vertical curves or the sight distance issues with an approaching driveway.
 - Should be accompanied with an advisory speed sign based on available stopping sight distance.

Foliage along roadways and driveways

Several driveways have tree branches that limit sight distance when exiting them. Concerns about reduced sight distance at driveways was mentioned. After reviewing these driveways, some are due to

the horizontal and vertical curves, but the foliage trimming would be very helpful as well. This is a yearly check by the town and residents.

Pedestrian/Bike concerns

Roadways are 22 feet in total width. Each person's comfort of walking or bike riding on what they feel is safe differs. There are no shoulders or paths on which to ride or walk so they are relegated to using the edge of the roadway. If two vehicles meet, the walkers and bikers must take to the ditch to make room. Signing is typically used at crossings of paths to the roadway. It would be numerous to place these signs on every roadway. Town of Rutland may want to pick an area where they feel these are most beneficial if they want to utilize these signs.

Speed feedback signs

BTO has contacted BOTS and supplied them the Town contacts. BOTS will contact them for Grant availability to help with purchasing the signs to be used by the Town.

Enforcement

Any BOTS grant would have an enforcement element associated with it. The need for speed enforcement was discussed at the field meeting. Dane County may provide some enforcement but it may be cost prohibitive for the Town, this is why a grant was suggested.

Education

Safety and noise related to truck traffic was a primary concern raised at the field meeting. A large portion of the trucks traveling in Rutland are going to/from two quarries. Creating educational materials to help build a culture of safe behavior for all users of Town roads would be a low-cost improvement. Materials could be included on the Town website, at their monthly meetings, and potentially shared with trucks when they leave the quarries. Reaching the target audience with messages that resonate with them is critical to an effective educational campaign. NHTSA has many resources available. One example is, "A Resident's Guide for Creating Safer Communities for Walking and Biking."

https://safety.fhwa.dot.gov/ped bike/ped cmnity/ped walkguide/residents guide2014 final.pdf

Geometrics

This is the very expensive option for a township. Rebuild the roadways in the horizontal and vertical concern areas. Widen the roadway to provide shoulders or paths for ped/bike accommodations. The issue is cost and if all the improvements were done, the speed would likely raise to 55 mph since the improvements would be designed to a certain speed limit.

Traffic Calming Devices

Another treatment option is speed humps, chicanes, and others. These are generally used in urban situations but the rural nature of the Town does not really work at the 45 mph. These devices may cause more incidents. Transverse rumble strips could be installed in advance of stop-controlled intersections, but the noise generated and proximity to residents needs to be considered for this option.

Incidents/crashes

The crash history from a 10-year period (5-year is standard) does not show a history of concern based on this factor. This is meant to be proactive approach but worth noting that the crashes show runoffs, driver impaired, or distracted driving with property damage. There were a low number of crashes that were located around the Town.

Speed limit changes

The Town of Rutland has two large quarries and the number of trucks driving through is very high. On the main truck route there are a few geometric features that are not ideal. It is suggested the Town work with the quarries to establish truck routes in and out of the township. The suggested routes are shown in red on the attached map, however, primarily occur on Old Stage Road. It appeared during the field visit that this was already the preferred route in use. It should also be noted that there is a potentially safer intersection for the trucks to enter or exit US 14 at the roundabout at Biglow Road and Wis 92. The intersection of Old Stage Road and US 14 is a stopped controlled intersection. US 14 also does not have a passing lane for turning trucks. The optional route has fewer houses on Oak Lane and Biglow roads, but they do have more turns on the Town roads. There is also an option for trucks only entering at one intersection and exiting at the other which would avoid two-way truck traffic on the worst segment of Old Stage Road.

Roadway segments that the Town requested speed reductions are listed below with department recommendations. A map is attached to help show the segments being described:

Old Stage Road (US 14 to N Union Rd)

This segment seems to be the most used route for trucks hauling from the quarries. There are some blind horizontal and vertical curves on this roadway along with multiple driveways.

Recommend that this segment be reduced to 35 mph. This speed zone could be stretched to the Yahara quarry entrance just east of N Union Rd if necessary.

Center Rd (Old Stage Rd to Old Stone Rd)

The driveway entrance to the K&D stone quarry has sight distance less than 45 mph for parts of this segment. Signage could be installed for blind curves or hidden driveways.

Recommended to lower the speed limit on this segment of Center Rd to 35 mph, because of the quarry entrance with numerous trucks entering and leaving the site

Old Stone Rd (Center Rd to Old Stage Rd)

This segment has an existing density of homes and driveways just east of Center Road with a posted 35 MPH based on 346.57 (4) (j) It appears that this zone could be extend west to Old Ridge Road. The rest of Old Stage Road does not meet 346.57 (4) (j) and does not have any additional features to justify a lower of the zone to 35. Truck routes should follow other roadway segments.

Center Rd (Old Stone Rd to CTH A)

This segment of road does not meet 346.57 (4) (j) and does not have any additional features to justify a lower of the zone to 35. Truck routes should follow other roadway segments.

Lake Kegonsa Rd (CTH A to STH 138)

This segment of road does not meet 346.57 (4) (j) and does not have any additional features to justify a lower of the zone to 35. Truck routes should follow other roadway segments.

The team did however find a short segment of Lake Kegonsa Road north of WIS 138 that does meet 346.57 (4) (j). This is a short segment that would be logical to extend to bring the zone to logical termini which means this segment of Lake Kegonsa Road be lowered to 35 mph between WIS 138 and Rutland Town Line Road.

Conclusion

We appreciate working with the Township on this request. Please do not hesitate to contact us with any questions or comments. WisDOT Southwest Region will continue to work with the Township on next steps for guidance and implementation of the traffic recommendations.

STATE OF WISCONSIN 13-052 WISCONSIN DEPARTMENT OF TRANSPORTATION TOWN PLAT RECORD MILEAGE FOR LOCAL ROADS/STREETS TOWN OF LOCAL ROADS/STREETS DATE ce with sec. 86.30 Wis. stat. **RUTLAND** (1) 4-1-23 (2) 1-1-24 COUNTY: DANE Title: (3) 4-1-24 (1) THIS DATA REPRESENTS THE LAST CERTIFIED MILEAGE AS CORRECTED BY WISDOT WHICH MAY HAVE BEEN USED FOR PAST TRANSPORTATION AIDS. COUNTY TRUNKS (2) THE TOWN CHAIRMAN OR CITY/VILLAGE CLERK IS TO FILL IN THE MILEAGE TO BE CERTIFIED AS OPEN TO THE PUBLIC AS OF THE FOLLOWING JANUARY, INCLUDING THE NEW CHANGES THAT ARE MADE ON THE PLAT. (3) THIS DATA REPRESENTS MILEAGE ADJUSTMENTS MADE BY WISDOT DUE TO FIELD VERIFICATION, INVENTORY, ANNEXATION, ETC. TRANSPORTATION AID PAYMENTS MAY BE MADE BASED ON THIS FIGURE. RHE TOWN OF DUNN N90. VILLAGE OF OREGON Rosenbaun TOWN OF OREGON TOWN OF DUNKIRK T04N 346.57 (4) (j) - 35 MPH TOWN OF UNION 349.11 (3) (c) - requested 35 MPH based on truck route RIIE LEGEND: Optional Truck route () Route Identifier 349.11 (3) (c) - request 35 MPH based on logical termini or connecting zones PLSS Border State Connector US Connecting Highway T-RUTLAND



