



New Ulm to North Mankato, Minnesota

U.S. Highway 14 Road Safety Audit (DRAFT 4.16.12)

The U.S. Highway 14 corridor between New Ulm and North Mankato in Nicollet County recorded 250 crashes from 2006 to 2010. This overall crash rate is consistent with comparable rural state highways. However, 11 of those crashes had either a fatality or a serious injury, leaving this portion of Hwy 14 with a fatal and serious injury crash rate 50 percent greater than comparable rural state highways. Safety in the area from North Mankato to Nicollet and at the intersection of Hwy 14 and Hwy 15 north of New Ulm is of particular concern.

MnDOT's recent safety improvements along the corridor include centerline rumble strips, intersection lighting, signage with flashing lights, speed limit radar signs and more. In addition, MnDOT hired an independent consultant to conduct a Road Safety Audit to:

1. Determine if the number and severity of crashes is unusual
2. Identify the primary factors contributing to the crashes and
3. Develop and evaluate potential improvement strategies

With the Road Safety Audit complete, the next steps for MnDOT and its local transportation partners are to research, review and analyze alternatives in order to identify improvement areas for the corridor and explore possible funding sources.

Audit Findings

- Verified the statistically significant safety problem on the Hwy 14 corridor between North Mankato and New Ulm
- Confirmed the large number of head-on crashes caused by vehicles crossing the centerline
- Noted that in many head-on crashes drivers appeared to have been distracted as there was no clear explanation as to why the driver crossed the centerline
- Noted the many diagonal, or skewed, intersections that make it difficult for drivers to see approaching traffic at highway crossings
- Noted that seat belt use in the region is low compared with to the rest of Minnesota (73.2% vs. 92.7%)
- Confirmed that traffic volumes (ranging from 5,300 to 8,800 vehicles per day) have remained flat in recent years, but indicates over time the overall traffic volumes may increase

Report Recommendations

Recommendations for the corridor include considering techniques that involve narrowing the existing shoulder width to create buffers between opposing traffic to widening the roadway. These considerations are:

- Provide a 4-foot wide buffer area (provides errant driver recovery space)

April 2012

In 2011-2012, Highway 14 between New Ulm and North Mankato received a comprehensive Road Safety Audit by representatives of the Federal Highway Administration, the Minnesota State Patrol, MnDOT and private sector safety and engineering experts.

The team reviewed the crash history of the roadway, evaluated the corridor's design features and considered all factors that contribute to crashes.

The audit is posted on MnDOT's web site at: <http://www.dot.state.mn.us/d7/projects/14newulmtonmankato/>

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Your Destination...Our Priority



- Provide a 12-foot wide buffer area (provides recovery space and turn lanes)
- Build a 2+1 road with two lanes in one direction and one lane in the other, alternating every few miles, and separated with cable median barrier (virtually eliminates head-on crashes)
- Build a 4-lane divided highway (reduces head-on crashes; may increase other types of crashes like right-angle crashes at-grade intersections – assuming no access control or reduced conflict intersection treatments are incorporated into the expansion)

Recommendations for the Hwy 14/Hwy 15 intersection and the Hwy 14/Hwy 111 include:

- Install an all-way stop or a roundabout (short-term)
- Build an interchange (long-term)
- Provide channelization (turn lanes separated and raised with medians)
- Improve pavement markings

Addressing Driver Behavior on Hwy 14

When a traffic safety issue is identified, changing the roadway—including traffic signals, signage and the like—may appear to be the most direct solution. However, crash data and driver behavior often reveals that engineering is just one component. Therefore, recommendations also include taking full advantage of resources and strategies provided by the Toward Zero Deaths program.

The goal of TZD is to eliminate deaths and injuries on all roads, using a combination of proven safety strategies encompassing education, enforcement, engineering, and emergency medical and trauma services. These include:

- Addressing low seatbelt usage, excessive speed and other behavioral issues by implementing high-visibility enforcement and education
- Suggesting that the Nicollet County representative on the Blue Earth County TZD Enforcement Grant propose Hwy 14 study area to be included in Minnesota’s statewide distracted driving enforcement campaign on April 19, 2012; extend focused enforcement if possible
- Encouraging area employers to adopt distracted driving policies to encourage safe driving practices of employees while at work. The Minnesota Safety Council offers a sample distracted driving policy: <http://www.minnesotasafetycouncil.org/facts/factsheet.cfm?qs=6ACC71CFDE46D33BF908D7D68B570E85>

Additional findings and recommendations can be found in the Hwy 14 Road Safety Audit at:

<http://www.dot.state.mn.us/d7/projects/14newulmtonmankato/>

Next Steps – Corridor Investment Management Strategy

Corridor Investment Management Strategy (CIMS) is a corridor-based initiative that brings MnDOT together with its local, modal and state partners to identify opportunities for collaborative and innovative investment. CIMS also allows MnDOT and its partners to look at other transportation corridors throughout the state for a sustainable, progressive system that will provide the greatest benefits to Minnesotans. MnDOT will host a CIMS workshop with local partners in Mankato on May 14, 2012, to discuss the initiative and how it will apply to current and future highway planning and development on regional corridors U.S. Hwy 14 and U.S. Hwy 169.

