Destination Innovation Project
Safe Corridor Enhancements (SCorE)
Work Zone Accident Reduction Deployment (WZARD)

Location
Eastbound I-94 between T.H. 101 in Rogers to T.H. 15 in St. Cloud, MN.

Partners
- MnDOT – District 3 St. Cloud Maintenance
- MnDOT – District 3 St. Cloud Operations
- MnDOT - RTMC
- MN State Patrol

Project Completion
May 2012

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Description of Project

This project will provide innovative dynamic systems to improve traffic safety during snow and ice operations and other work zones caused by planned maintenance operations or in response to incidents or traffic enforcement activities.

During snow events visibility is reduced and road surfaces have reduced friction. Many motorists are unaware of the extent of these conditions resulting in them over-driving conditions, typically by driving too fast for the existing conditions or being unprepared for the existing conditions to change suddenly. This inappropriate driving can lead to run-off-the-road and multiple vehicle crashes. Also, snow and ice maintenance operations improve the safety on the highway by removing snow and ice from the driving surface. Unfortunately, these operations cannot improve visibility and are usually done at speeds less than the prevailing traffic speed. The presence and lower speed of the snow plows, especially in the left lane, often violates drivers’ expectations. This can lead to additional run-off-the-road crashes and often involves a crash with the snow plow.

The SCorE WZARD project will design and integrate innovative dynamic systems to improve traffic safety primarily during snow and ice operations and in other work zones. The primary focus of the project is to provide automated dynamic warning to motorists of a snow plow operating on the roadway encouraging the driver to approach with increased caution and awareness.

Benefits of the SCorE WZARD Project:

- Automated geofenced AVL will improve traffic safety during snow and ice operations and other work zone activities by informing vehicle operators of work vehicles ahead;

- Provide travelers along I-94 outside of the metro area with traveler information, including advance warning of work zone activities and traffic incidents;

- Integrate planned and currently-installed roadside technologies with automated systems to streamline traveler information and reduce MnDOT and Minnesota State Patrol vehicle crashes or conflicts on the corridor.

Next Steps

- Project completed.