

ROADWAY SAFETY INSTITUTE

Advancing roadway safety with user-centered solutions

UTC Project Information	
Project Title	Development of Active Traffic Management Strategies for Minnesota Freeway Corridors with Enhanced Variable Speed Limit Control System
University	University of Minnesota Duluth
Principal Investigator	Eil Kwon
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Funding Source(s) and Amounts Provided (by each agency or organization)	Minnesota Department of Transportation: \$98,700
Total Project Cost	\$98,700
Agency ID or Contract Number	UTC Grant Number: DTRT13-G-UTC35 MnDOT contract 99008 work order 3 CTS# 2012007
Start and End Dates	09/23/2011 – 07/31/2015
Brief Description of Research Project	<i>Final report abstract:</i> In this study, the effectiveness of the I-35W variable advisory speed limit system on the improvement of the traffic flow was evaluated with the real traffic data. The analysis results indicate there was significant reduction in the average maximum deceleration and also the traffic time reliability was substantially improved during a peak hour period. Based on the assessment results, an enhanced version was developed to be able to reflect more effectively the time-variant road traffic conditions in determining the variable speed limits in real time. The coordinated adaptive metering strategy, developed in the previous phase of this research, is also enhanced and implemented in the field in this research. The field test results of the new metering system with the 100 NB corridor indicate substantial improvements in both the mainline and ramp traffic performance compared with those from the old stratified algorithm.
Describe Implementation of Research Outcomes (or why not implemented)	Nothing to report.
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	Nothing to report.

Last updated (9/30/2019)



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<p>Web Links</p> <ul style="list-style-type: none">• Reports• Project website	<p>http://www.cts.umn.edu/Research/ProjectDetail.html?id=2012007 http://www.cts.umn.edu/Publications/ResearchReports/reportdetail.html?id=2434</p>

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