



# INTERSECTION WARNING SYSTEMS IN MINNESOTA

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**Jon Jackels**  
**Mn/DOT ITS Program Engineer**

*Your Destination...Our Priority*





# Minnesota ITS Safety Plan

## ITS Critical Strategy 5:

## Use Intersection Collision Warning Systems

[http://www.dot.state.mn.us/guidestar/2006\\_2010/its\\_safety\\_plan.html](http://www.dot.state.mn.us/guidestar/2006_2010/its_safety_plan.html)



## Minnesota ITS Safety Plan

Prepared for:



Prepared by:

**URS**  
SEH Inc.  
International Idea Institute, Inc.

October 31, 2006





# Deployment Strategies for Minnesota

- Dynamic Intersection Warning is included in Minnesota's ITS Safety Plan and SHSP.
- Eligible for federal HSIP funding.
- It is anticipated Minnesota Safety plans will identify 160 to 180 intersections where dynamic intersection warning systems may be installed.





# Intersection Warning Systems

## Major Roadway Warning Systems

Vehicle Crossing / Entering Mainline  
Speed Warning (none in Minnesota)

## Minor Roadway Warning Systems

Mainline Vehicle Approaching Cross Street  
Cross-street Stop Sign Warning Systems  
Cross-street Gap Assistance Systems



# Intersection Warning Systems in Minnesota





# Major Roadway Warning Vehicle Entering or Crossing



TH 169 @  
Mille Lacs CSAH 11

(This system has been removed  
and a CICAS system installed)





# Minor Roadway Warning Vehicle Approaching Intersection

Hennepin County Road 47  
@ Lawndale Lane

[http://www.dot.state.mn.us/guidestar/2006\\_2010/intersection\\_warning\\_system/Final%20Documentation.pdf](http://www.dot.state.mn.us/guidestar/2006_2010/intersection_warning_system/Final%20Documentation.pdf)



# Minor Roadway Warning

## Cross Street STOP Sign Warning



Washington County  
CSAH 15 (Manning Ave) @  
CR 47 (McKusick Road)









# Minor Roadway Warning Gap Assistance System

US 52 @ CSAH 9 – Goodhue County – January 2010

US 169 @ CSAH 11 – Milaca, MN - Spring 2011

MN 23 @ CSAH 7 – Lyon County – Spring 2011

[http://www.dot.state.mn.us/guidestar/2006\\_2010/cicas.html](http://www.dot.state.mn.us/guidestar/2006_2010/cicas.html)







# Major Roadway and Minor Roadway Warning

## St. Louis County

- Co Rd 2 (West Tischer Road) @ Co Rd 246 (West Eagle Lake Road) [De-energized]

## Wright County

- CSAH 5 @ CSAH 35
- CSAH 6 @ CSAH 35
- CSAH 9 @ CR 107

## Scott County

- CSAH 42 @ CSAH 17





# Safe Intersection Project - COTS

## District 4

- TH 200 @ Mahnomen CSAH 4
- TH 113 @ TH 59
- TH 29 @ Douglas CSAH 5
- TH 75 @ Clay CSAH 2
- TH 210 @ Ottertail CSAH 35

## District 2

- TH 75 @ Polk CSAH 21





# Challenges

- Establish the safety impact
- Continue development of intersection warning systems
- Establish warrants for proper applications
- Implement MUTCD standards and guidelines
- Educate and inform drivers
- Focus enforcement efforts





# Contact Information

Jon Jackels, P.E. PTOE  
ITS Program Engineer  
Mn/DOT

Office of Traffic, Safety, and Technology

[jon.jackels@state.mn.us](mailto:jon.jackels@state.mn.us)

651-234-7377

