CRSP History

- 2009-2013 – Developed CRSP’s for all 87 counties in MN
- 2011-2015 – Funded construction of safety strategies
- 2016 – Starting 5 year project to update all 87 plans
The entire county system was evaluated (almost 30,000 miles, 19,000 horizontal curves, and 16,000 intersections)

Prioritized lists of county facilities were identified

Over 17,000 safety projects (valued at almost $250 million with an average cost less than $15,000) were developed for the high-priority candidate locations

County participation in HSIP significantly increased
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<th>Year</th>
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*Projection via linear interpolation

Minnesota Fatality Rates By System

- Begin Preparation of
- Begin Widespread Deployment of Safety Strategies Along County System
CRSP Update Goals

- Produce Updated County Road Safety Plans:
  - Customized approach
  - Updated crash data
  - Individual outreach and engagement plans
  - Additional safety practices
- Provide technical support for county implementation of HSIP-funded safety projects
- Focus on reducing Fatal and Incapacitating Injury crashes – build on prior results and continue to bend the trendline
Counties included in Phase 1

Beltrami – Bruce Hasbargen
Carlton – Mike Tardy
Chisago – Joe Triplett
Crow Wing – Tim Bray and Rob Hall
Freeborn – Sue Miller
Goodhue – Greg Isakson
Hennepin – Carla Stueve and Jason Pieper
McLeod – John Brunkhorst
Meeker – Ron Mortensen
Morrison – Steve Backowski
Olmsted – Kaye Bieniek
Otter Tail – Rick West
St. Louis – Vic Lund
Stearns – Jodi Teich
Wright – Chad Hausmann and Jeremy Carlson
New This Time

- Customized plans based on County’s needs
- Individual outreach/engagement plans: individual meetings, group meetings, county specific workshop
- Expanded list of safety strategies: additional strategies, medium and higher cost countermeasures, maintain focus on effectiveness (crash reduction)
- Added emphasis on electronic deliverables: map showing all K + A crashes in each county (all systems), maps documenting location/type of prior implementation, .kmz maps of all suggested safety projects
- Long timeframe for each Phase (18 months versus 9 months in original effort)
- Comprehensive analytical approach: High Crash + High Risk (Systemic)
- Preparation of a comprehensive database
- Research One-Pagers
Google Earth Maps

KMZ Maps of Roadway Facilities and Crashes with Popup Information
Research One-Pagers

**Topic: Road Diet**

**What is a Road Diet?**

A road diet is an infrastructure strategy which converts a traditional 4-lane undivided configuration to a 3-lane undivided comprised of one through lane in each direction and a center two-way left-turn lane (TWLTL). The center TWLTL ultimately reduces the number of conflict points by removing left turning vehicles from the mainline. Road diets can also take the form of a converted 6-lane undivided cross section to a 5-lane cross section comprised of two through lanes in each direction and a center TWLTL. Conversion to a 5-lane configuration occurs less frequently and consequently the benefits of the conversion are not nearly as well documented as the 3-lane conversion. A 4- to 3-lane conversion also commonly provides the option to install bicycle facilities on one or both sides of the thru lanes. The bicycle enhancements coupled with a reduced number of conflict points along a corridor results in a safer and more complete environment for drivers as well as pedestrians.

**Key Points**

- In MN, 3-lane crash rate = 2.0 vs. 4-lane crash rate = 5.7 (per MEV)
- Fewer conflict points than 4-lane undivided roads
- Low cost solution to reduce rear-end crashes

**Before**

![Before](image1.png)

**After**

![After](image2.png)

*Source: FHWA, Road Diet Informational Guide. 2018 (FHWA-SA-14-028)*

**How effective is a Road Diet?**

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**Topic: Transverse Rumble Strips**

**What are Transverse Rumble Strips?**

Transverse rumble strips or in-lane rumble strips are raised or depressed panels or sections on the pavement that provide audible and tactile warnings to drivers when approaching a decision point. Typical designs of transverse rumble strips are either across the entire lane or exclusively in the main wheel path of the lane. The most common applications of this warning device include placement on an approach to stop-controlled intersections along high-speed rural corridors and temporary use in construction zones. The purpose of any rumble strip is to attract the attention of the driver; the noise and vibration produced by the in-lane rumble strips when vehicles travel over them alert drivers to be aware of potential changes in traffic conditions ahead. The goal of installing transverse rumble strips in advance of rural intersections is to reduce the frequency of the unintentional running of STOP signs. The purpose of installing transverse rumble strips in advance of work zones is to alert drivers of flaggers/workers and some type of lane adjustments, transitions, splits, drops, etc. The primary difference between these two applications is that construction zone rumble strips are generally temporary and are removed after the construction has been completed.

**Key Points**

- Intended to reduce the unintentional run-the-stop intersection crashes through audible and tactile warning
- Effectively reduces approach speeds to rural intersections
- Increases stopping compliance

*Source: Minnesota Department of Transportation (MDOT)*
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- **Individual Meetings w/ Each County**
- **Webinar**
- **Workshops**
Outreach and Engagement

Goal: To further reduce K+A’s by fostering stronger collaboration through a more individualized approach with each county.

Meetings:
- Kick off + four meetings with all counties (purple)
- Five individual meetings with each county (yellow)
- Two optional County Board Presentations per county (yellow)
- Customized safety workshop for each county (orange)
Questions?

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