



TOWARD ZERO DEATHS

Because your life counts

Northeastern Minnesota Toward Zero Deaths Workshop 4 “E” panel



Engineering

Vic Lund,
St. Louis County Traffic Engineer

St. Louis County's Edgeline Striping Study



Striping Study

§ Background

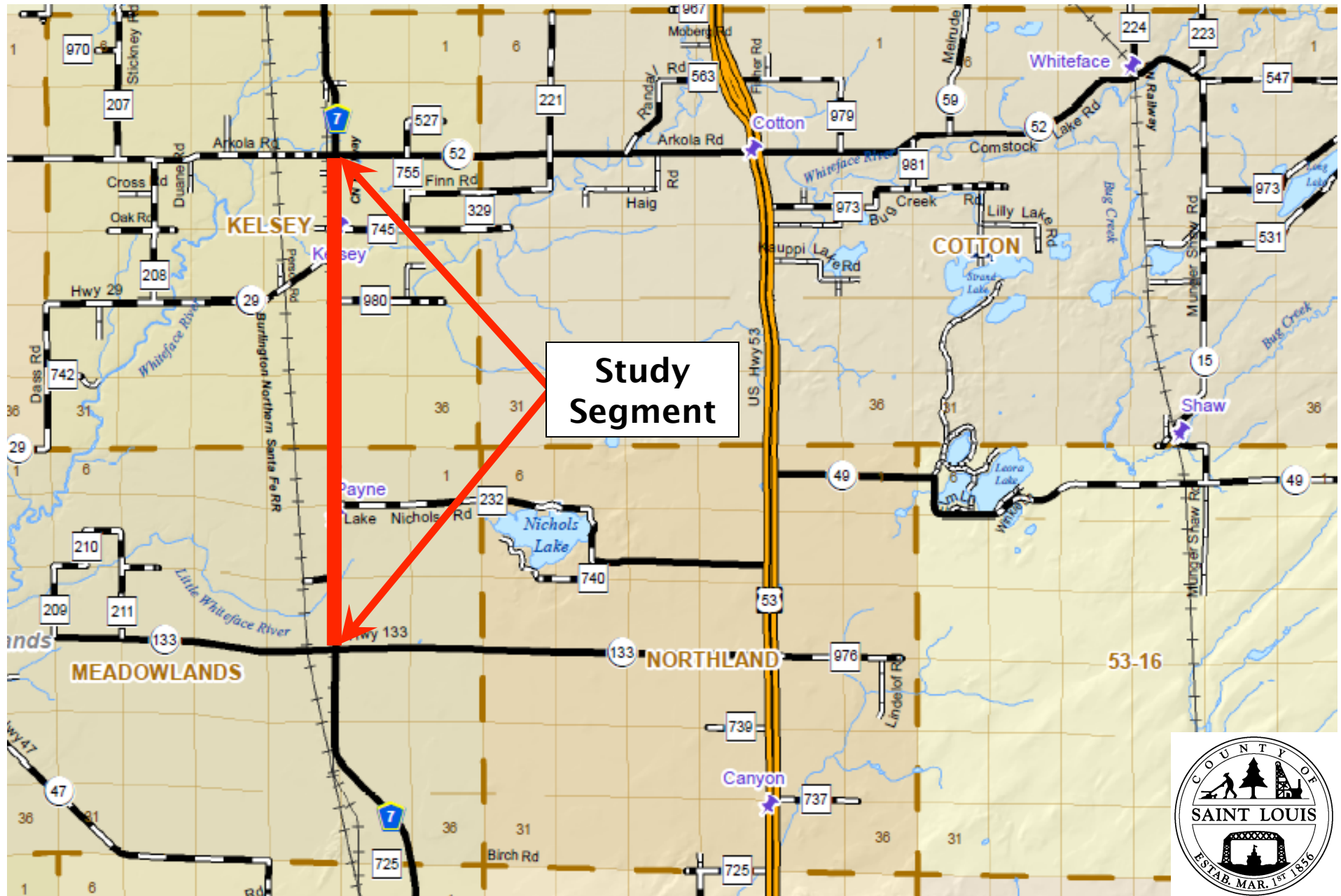
- § CSAH 7 (Hwy. 7) Reclaim and Overlay Project
- § Partnership with 3M Company
- § Major Dates
 - § Reclaim and Overlay – Fall 2009
 - § Rumble Strip Milling – Summer 2010
 - § Edgeline Striping Application – Summer 2010

§ Purpose

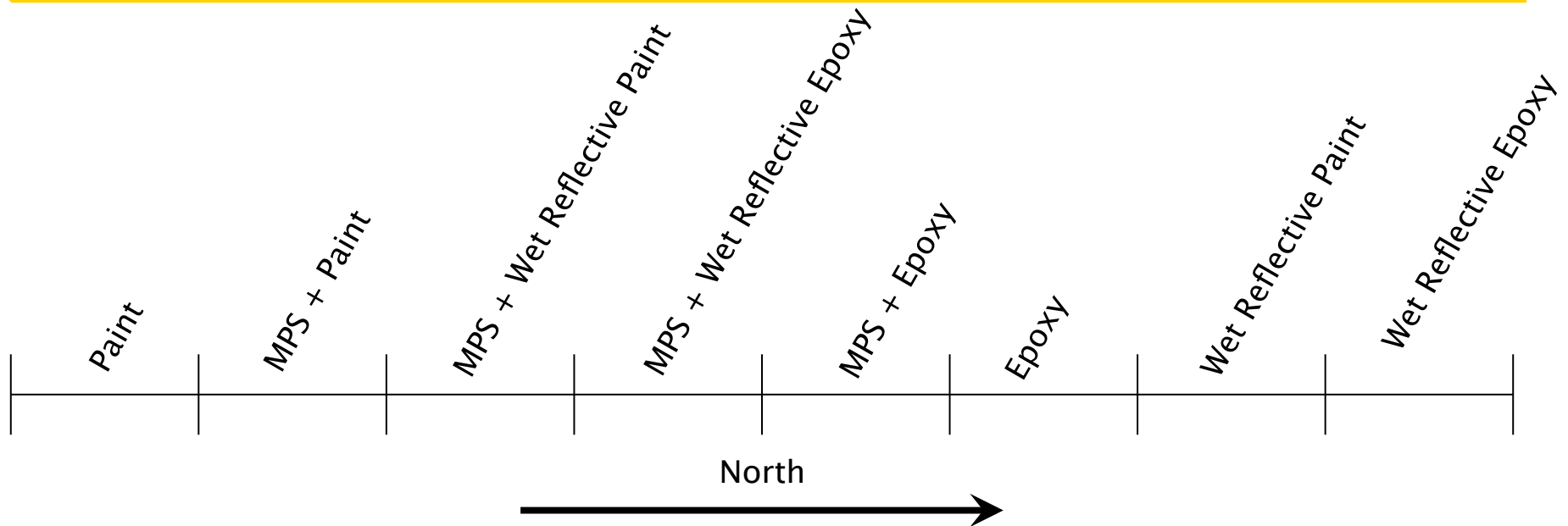
- § Provide opportunity to test multiple striping treatments
- § Help St. Louis County and other transportation agencies assess benefits of each treatment
- § Identify best practices for future
- § SAFETY, SAFETY, SAFETY...



Striping Study Map



Striping Study Design



- **Materials**

- Paint
- Wet Reflective Paint
- Epoxy
- Wet Reflective Epoxy

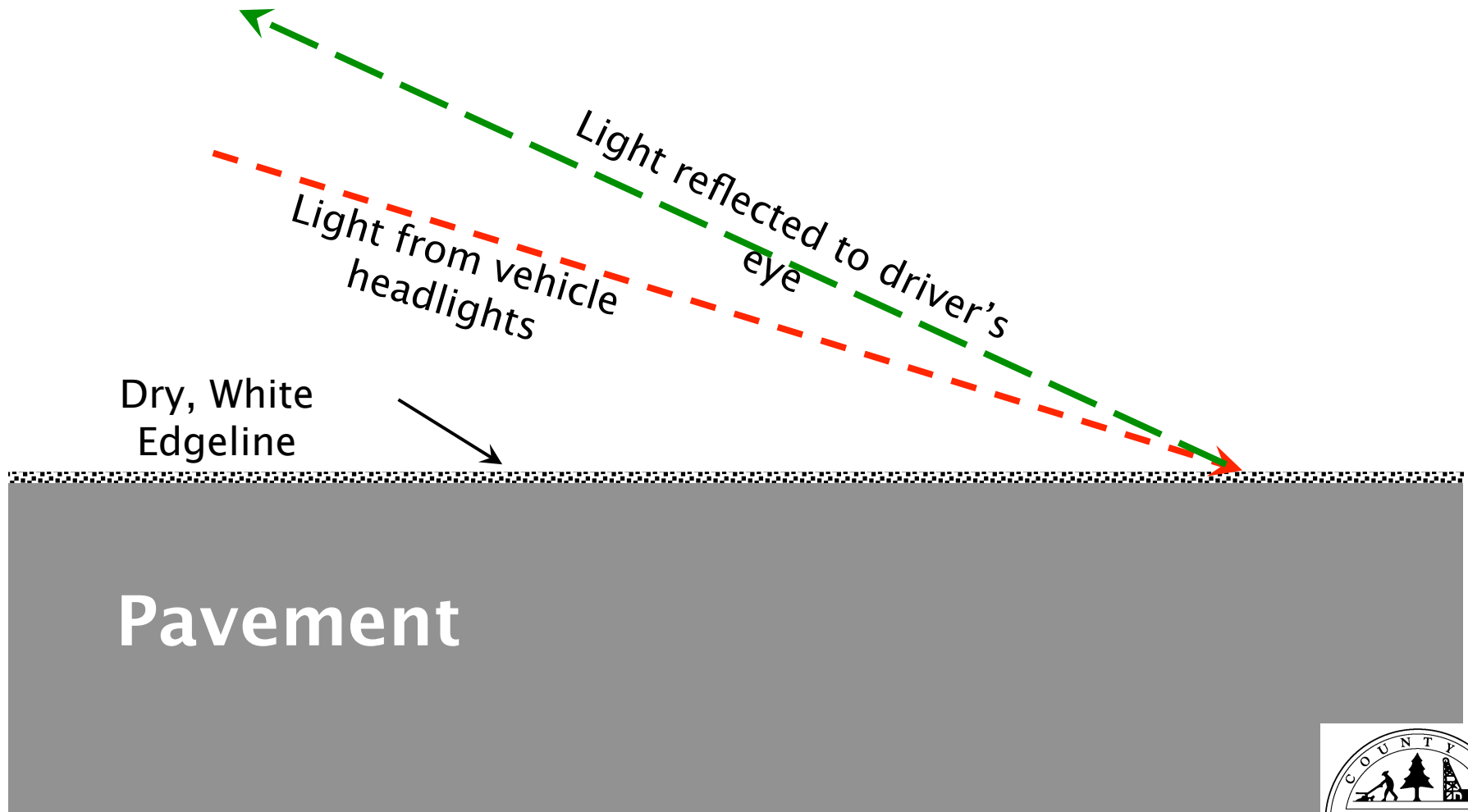
- **Surface Treatments**

- Smooth Surface
- Milled Profile Strip (MPS)



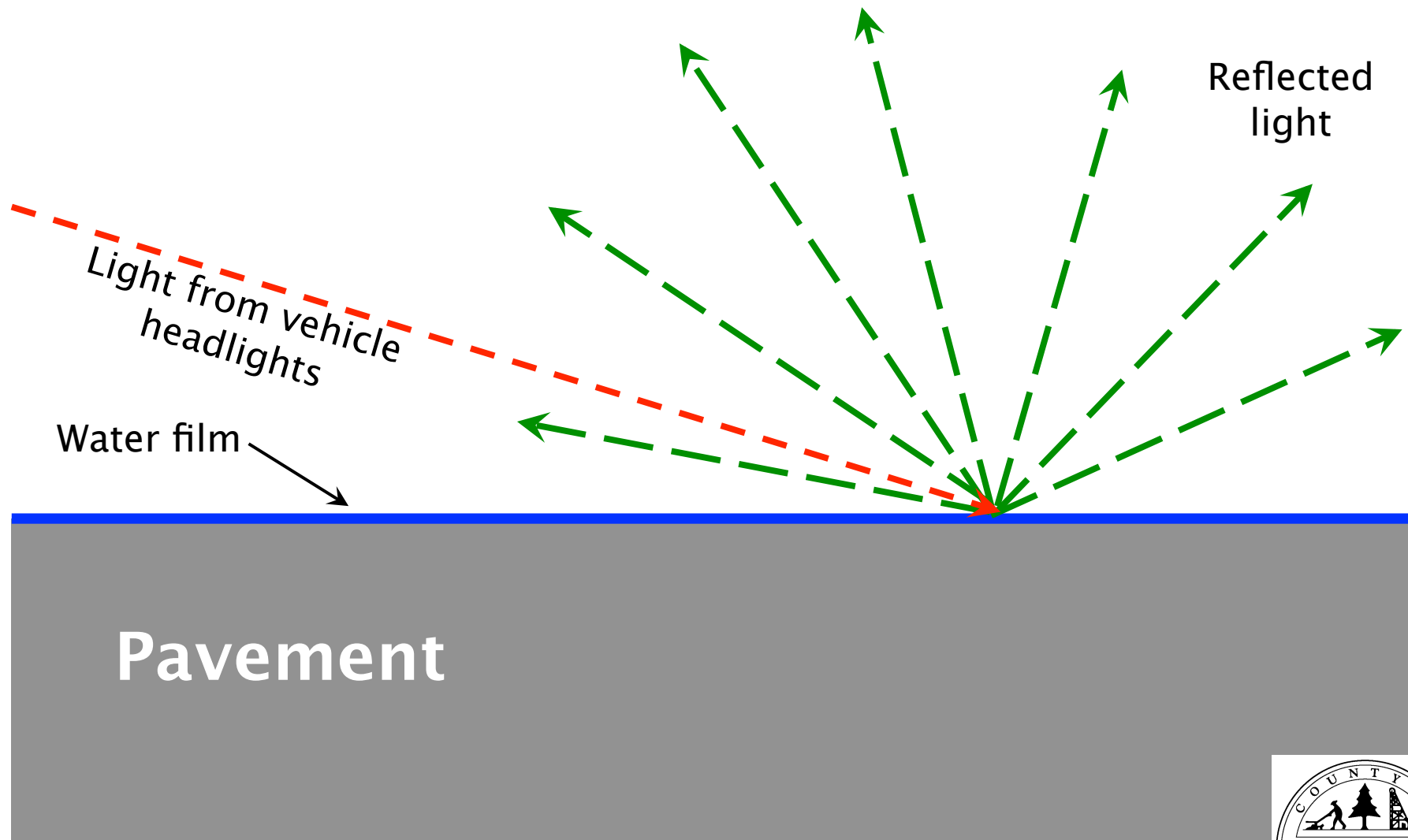
Anatomy and Mechanics of Rumble StripEs

4



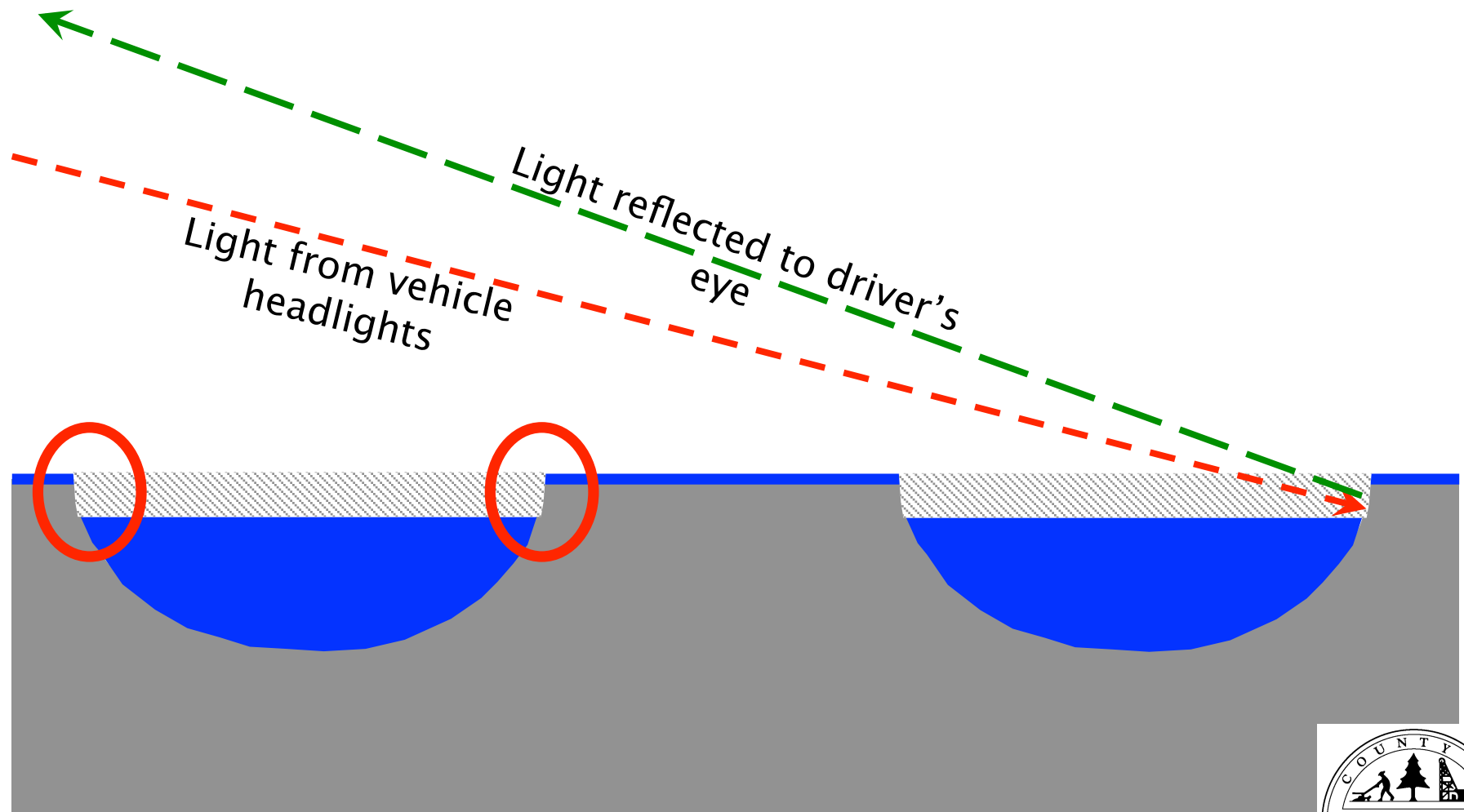
Anatomy and Mechanics of Rumble StripEs

5



Anatomy and Mechanics of Rumble StripEs

6



Edgeline Rumble StripEs – Why?

- § Provide audible and vibratory warning for errant drivers
- § Maintain nighttime, wet-condition retroreflectivity
- § Increase service life of the edgeline by reducing exposure to plow trucks
- § Reduction in ROTR Crashes (www.cmfclearinghouse.org)
 - § 18% for rural, two-lane highways in MN (Patel et al., 2007)
 - § Other studies range from 13% to 38%



CSAH 7 Pavement Marking Video



Education

Peg Johnson and Jenn Hoff,
Driving 4 Safe Communities Co-
Chairs



***Driving 4 Safe Communities** is a Lake Superior Region Coalition of Education, Emergency Medicine, Engineering and Enforcement professionals dedicated to increasing safety on our roadways and working toward zero deaths.*

Background of Driving 4 Safe Communities

- Established in December, 2008 as the “Lake Superior Region Safe Communities Coalition. “
- Mission Statement developed and adopted
- First 1 ½ years of meetings = lots of talk, little action
- In Spring, 2010 applied for and received Safe Communities grant from MN Department of Public Safety - Office of Traffic Safety
- ISD 709 (Proctor) serves as fiscal agent for the Coalition’s grant
- Adopted new name and logo “Driving 4 Safe Communities”

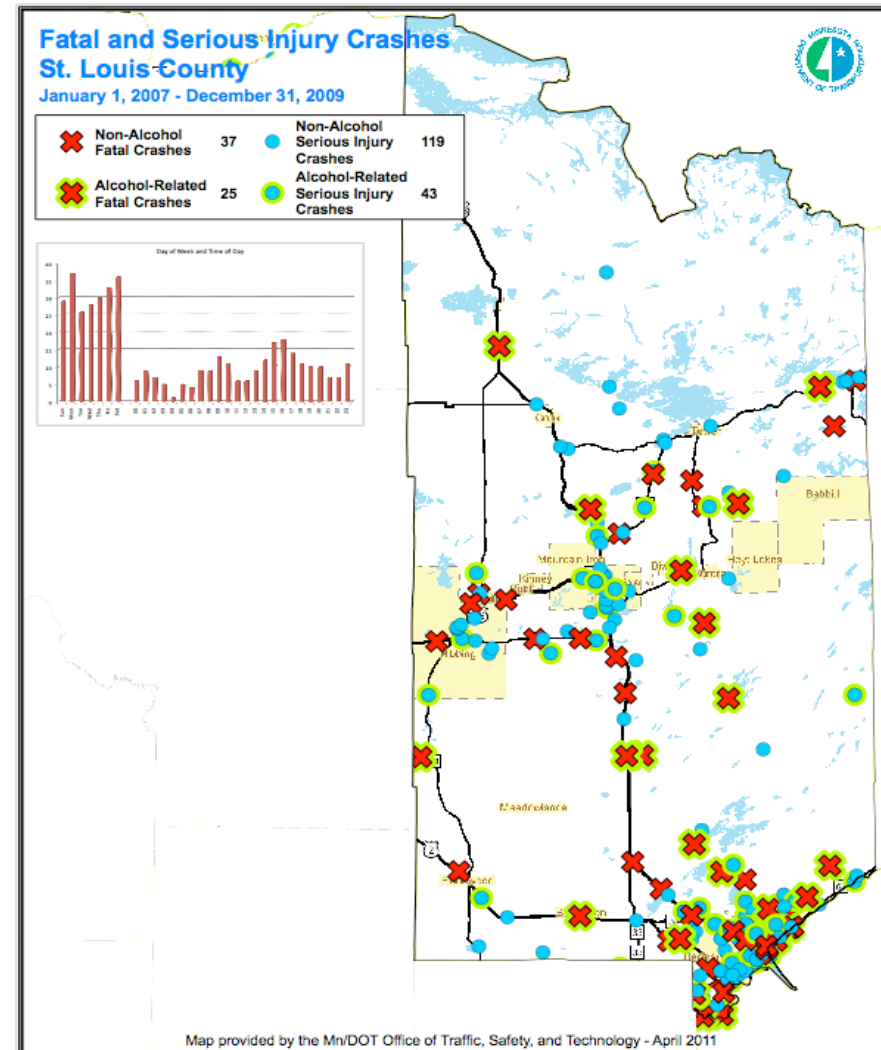
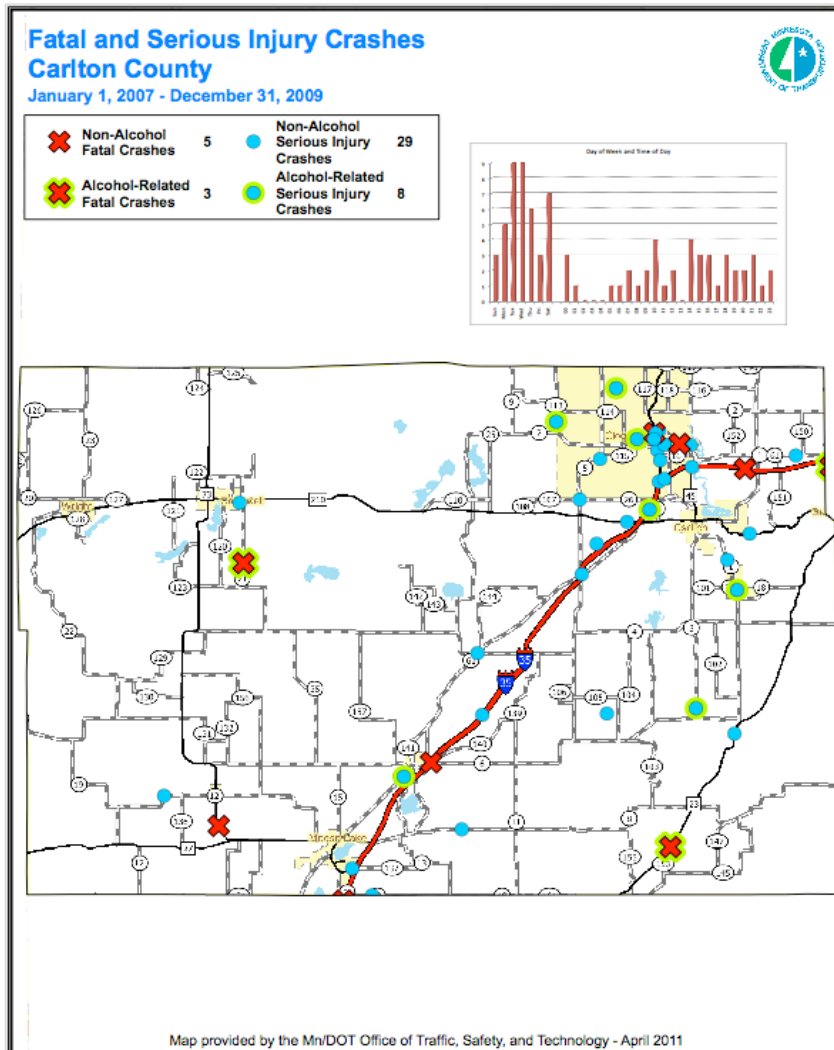


Press Conference-Dec 4, 2009

DWI Enforcement



Coalition focuses on northeastern Carlton and southern St Louis Counties



Driving 4 Safe Communities Membership

Core Members:

- ISD 704
- MN State Patrol
- Essentia Health-SMMC
- St. Luke's Hospital
- Carlton County Sheriff's Office
- MN DOT
- MN DOT – Region 1 TZD Coordinator
- ARDC – MIC
- MN Air National Guard
- Gold Cross Ambulance
- St. Louis County Public Works
- UMD Police Department

Support Members:

- St. Louis County Sheriff's Office
- Proctor Police Department
- Hermantown Police Department
- AAA of Minnesota / Iowa
- City of Duluth, Engineering
- MN Dept of Public Safety, OTS
- Sixth District DWI Court
- Arrowhead EMS
- Emergency Nurses Association



Goals for 2010-2011 Grant Year

To reduce alcohol related crashes in Southern St Louis County and speed related crashes in Carlton County through education, support of enforcement activities, cooperation with emergency medicine and collaboration with engineering.

- **Goal 1:** Hold at least 6 traffic safety coalition meetings
- **Goal 2:** Hold quarterly fatal review meetings with 4E involvement
- **Goal 3:** Generate involvement in regional activities
- **Goal 4:** Conduct high visibility campaign in conjunction with law enforcement efforts
- **Goal 5:** Collaborate with local employers to develop workplace traffic safety related policies and programs
- **Goal 6:** Educate local government on traffic safety issues and opportunities
- **Goal 7:** Support DWI court



So what have we been up to??

Join naturally occurring events:

- Hermantown Public Safety Expo
- Arrowhead EMS Conference – booth
- UMD DC Underground Motorcycle event
- 148th Air National Guard Safety Day

Regular “Letter to the Editor”:

- Duluth News Tribune



EMS CONFERENCE

Jan 20-22, 2011

Driving 4 Safe Communities

Arrowhead EMS Conference – January 20-22, 2011



Jenn Hoff (Essentia Health), Teresa Delp (St. Luke's Hospital)



Jenn Hoff (Essentia Health), Teresa Delp (St. Luke's Hospital)



UMD-DC UNDERGROUND MOTORCYCLE EVENT

May 7, 2011



148th : “101 Critical Days of Summer”

May 24, 2011



Prepare now for winter driving in the Northland



Craig Honkola

Last weekend's winter blast and the fast-approaching season of snow and ice are reminders aplenty of the need to shift from leisurely, summer driving habits to more-cautious wintertime habits. Vehicles need to be prepared for our frigid, Northland winter weather, too.

Below are some great ideas. More can be found at minnesotasafetycouncil.org, the home page of the Minnesota Safety Council.

Vehicles ought to be serviced by qualified mechanics before winter takes hold to be sure brakes, batteries, exhaust and cooling systems, headlights, fluids, windshield wipers and washers all are in proper working order. Through the winter, gas tanks can be kept at least half full to prevent gas lines from freezing.

Keep close tabs on the weather, and avoid traveling, especially alone, if severe weather is threatening. Before taking a trip, inform someone at your destination of your expected arrival time and your route.

Stock your car with basic winter driving equipment: a scraper and brush, a small shovel, jumper cables, a tow chain and a bag of sand or cat litter for traction. Include also emergency items such as road flares, a blanket and a flashlight with batteries.

An emergency survival kit in every car should include a metal bucket or coffee can; a small candle

with matches or disposable lighter; a brightly colored square of cloth such as a bandanna; a basic first-aid kit; a large, plastic, garbage bag that can be used to insulate feet, legs and torso; and high-energy, nonperishable foods.

If your car has been outside during a snowfall, brush off all the snow before setting out. Snow left on the front hood can blow into the front vent and cause defrosting problems and also can melt and refreeze on the windshield. Snow on the roof can cover the rear window, and snow on the rear deck can blow over taillights. Pay particular attention to cleaning off headlights and taillights so other motorists

can see you.

Adjust your speed to the conditions and increase the distances between you and other vehicles.

Remember that bridges and overpasses can be more slippery than other parts of the road. If you begin to skid, remain calm, ease your foot off the gas and turn the wheel in the direction you want the car to go. If you have an anti-lock braking system, or ABS, apply steady, firm pressure to the brake pedal. Never pump ABS brakes.

Consider keeping a cellular phone for use during emergencies. Because driving requires full attention, it is recommended you find a safe place to pull over when you need to make a call.

CRAIG HONKOLA is a safety technician for the Duluth Air National Guard's 148th Fighter Wing and a member of Driving 4 Safe Communities, a group formed to address traffic safety issues in the Northland via education, enforcement, engineering and emergency medical services.



Patrick Corrigan / Cagle Cartoons

Judge's View: Casual attitudes toward drinking and driving must be challenged

Duluth News Tribune- December 12, 2010



Support Enforcement Waves: Distracted Driving

Apr 20, 2011



Seat Belt Challenge

Apr, 2010



Click It or Ticket

May 2011



ADDITIONAL ACTIVITIES

Quarterly Fatal Crash Reviews

- Engineering, Enforcement, Education, EMS

Support St Louis County Engineering project

- Rumble striping as a traffic safety feature

Traffic Safety Presentation

- MN Power by Duluth Police officer



What's coming up...

- Displaying a crashed motorcycle and story-board at the Carlton County Fair
 - Carlton County Sheriff's office
- Participating in the Hermantown Public Safety Expo
- Applying seatbelt stencils to area schools and other parking lots
- Distributing motorcycle safety materials to dealerships
- Looking for new opportunities to partner with local government and employers to further promote traffic safety
- Applying for Year-2 of grant funding from the Office of Traffic Safety



Education

Cheryl Bisping, Mesabi Safe
Communities



Driving Towards Zero Deaths

- § Partnership funded by the Department of Public Safety, Office of Traffic Safety.
- § Covers Northern St. Louis County & Eastern Itasca County.
- § Members include schools, youth groups, law enforcement, businesses, health care organizations, & others.
- § Based on need: high rate of alcohol-related injuries and fatalities; low rate of seat belt use.
- § Goal: to reduce the number of injuries and fatalities related to motor vehicle crashes.



Deadliest County List

- **St. Louis County** is listed as the **SECOND Deadliest** County in MN for traffic fatalities.
- **St. Louis County** is listed as the **SECOND Deadliest** County in MN for Impaired Driving fatalities and the **Second** for Serious Injuries alcohol-related crashes.



Coalition Activities:

In the Community, Schools & Youth Conferences



§ DUI Awareness

- § Controlled Drinking Experiment
- § Last Call/DUI Education at Detoxification Center
- § “Smashed” Curriculum at Probation classes
- § DUI forfeiture vehicles/Couch crashers in the Mines & Pines parade & at SLC Fair
- § Fatal Vision goggles

§ Teen Traffic Safety Education

- Parent component of teen driver’s education
- Teens Behind the Wheel Curriculum

§ Monthly Car Seat Clinics

§ Seat Belt Compliance Surveys/Education

§ Distracted Driving Education

§ Community Presentations: Backstrom Family, Minnesotans for Safe Driving, etc.

Controlled Drinking Experiment



Portable Breath Test

Walking the line



DUI Awareness Campaign



Talking Urinal Cakes

WHERE ARE YOU CRASHING TONIGHT...



...in traffic or on a buddy's couch?

Plan Your Night Before You Drink!



Save a Life, Don't Drink and Drive
Mesabi Safe Communities Coalition



Teens and Alcohol



Kiss your license Good-Bye!

Seat Belt Safety

Minnesota Seat Belt use rate is:

92%

On the Iron Range?

70%



BANG HEAD HERE
if you're not wearing your
SEAT BELT. BUCKLE UP!
MESABI SAFE COMMUNITIES COALITION

Seat Belt Safety

Why buckle up?



Because there is “Room to Live...”

Why doesn't anybody do something?



You are somebody!

For More Information
or to Join
**The Mesabi Safe Communities
Coalition**

Contact:

Cheryl Bisping, RN, CPP

Fairview Range

Community Health Outreach Coordinator

218-312-3012



Driving Towards Zero Deaths





Northeast Regional Trauma Advisory Committee

Pat Lee

Executive Director Arrowhead EMS



2011 Pilot Enforcement Project (PEP)

Lake Superior Traffic
Enforcement Team

Lt. Leigh Wright
Duluth Police Department

Partners

- State Patrol
- UMD Police
- St. Louis County Sheriff's
- Hermantown PD
- Proctor PD
- Floodwood PD
- Duluth PD
- 911

Enforcement Mission

- Working Cooperatively
- Increased Enforcement Visibility
- Community Awareness
- Expectations

Working Cooperatively

- Communication
- Partners on Boards (911, PIO) Etc.
- Shared Responsibility
- Briefings
- Team Meetings

Shift Schedule

Event Date	DPD	SLCSO	HPD	PPD	UMD PD	FPD	Enforcement
Passenger							Hours
Protection							
Year 2010							
Oct. 16 Sat.	1	1	1	1	1		1900 - 0300
Oct. 17 Sun.	1	1	1	1	1		0800 - 1400
Oct. 18 Mon.	1	1	1	1	1		0800 - 1400
Oct. 22 Fri.	1	1	1	1	1		1900 - 0300
Oct. 23 Sat.	1	1	1	1	1		1900 - 0300
	30	30	30	30	30	0	6 hour shift

Increased Visibility

- Enforcement Dates/Budget Allotment
- 50% Must Be High Visibility-Our Team Is 99%
- Review Crashes/Team Needs
- Working with PIO

Community Awareness

Media

- Programmable message signs
- Signs
- Press Release
- Press Conference

Admin Help



Expectations

- Fill Enforcement Hours
- Complete Paper Work
- Share Work Load
- HAVE FUN!

Questions for panel?