



## Highway 12 Safety Coalition

City of Wayzata, City of Long Lake, City of Orono, City of Medina, City of Maple Plain, City of Independence, City of Delano, City of Montrose, City of Waverly, City of Howard Lake, City of Cokato, and Franklin Township.

MnDOT, Minnesota State Patrol, West Hennepin Public Safety Department, Orono Police Department, Wayzata Police Department, Howard Lake Police Department, Wright County Sheriff's Office and Hennepin County Sheriff's Office.





Hwy 12 Safety Coalition





**Hwy 12 Safety Coalition**





## What fueled the Highway 12 Safety Coalition?

- Death
- Emotion
- Frustration
- Grief
- Anger
- Fear
- Disbelief

**Mayla Macon-January 14, 2016**





# Jamie Whipperman-December 2, 2014





# Kevin Orr - December 9, 2014

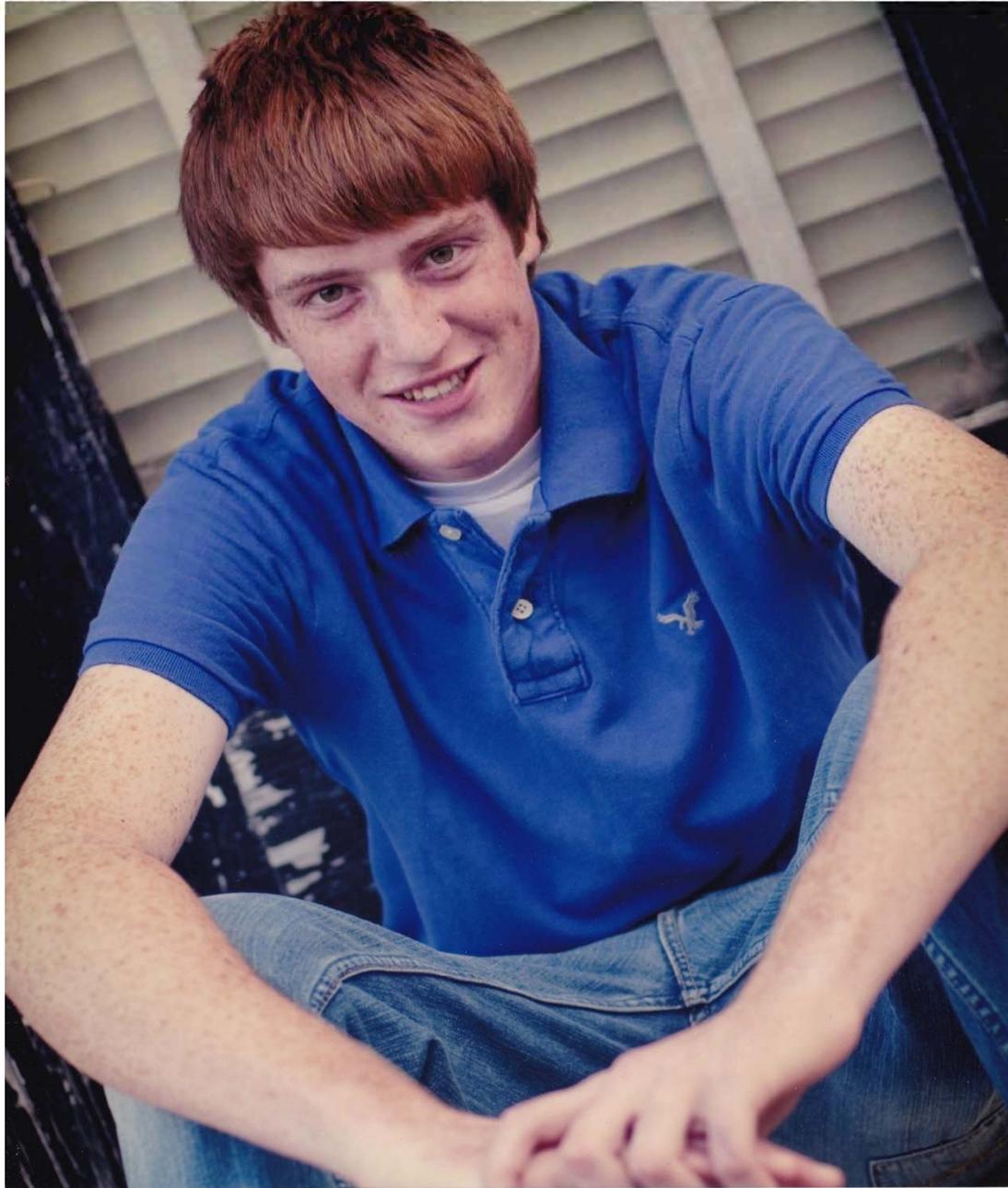


# **Kevin Crowley-April 1, 2014**





# **Aaron Jaunich-October 30, 2012**





# **Bruce and Arlana Harris-August 1, 2011**





# **Chris Olson Family**

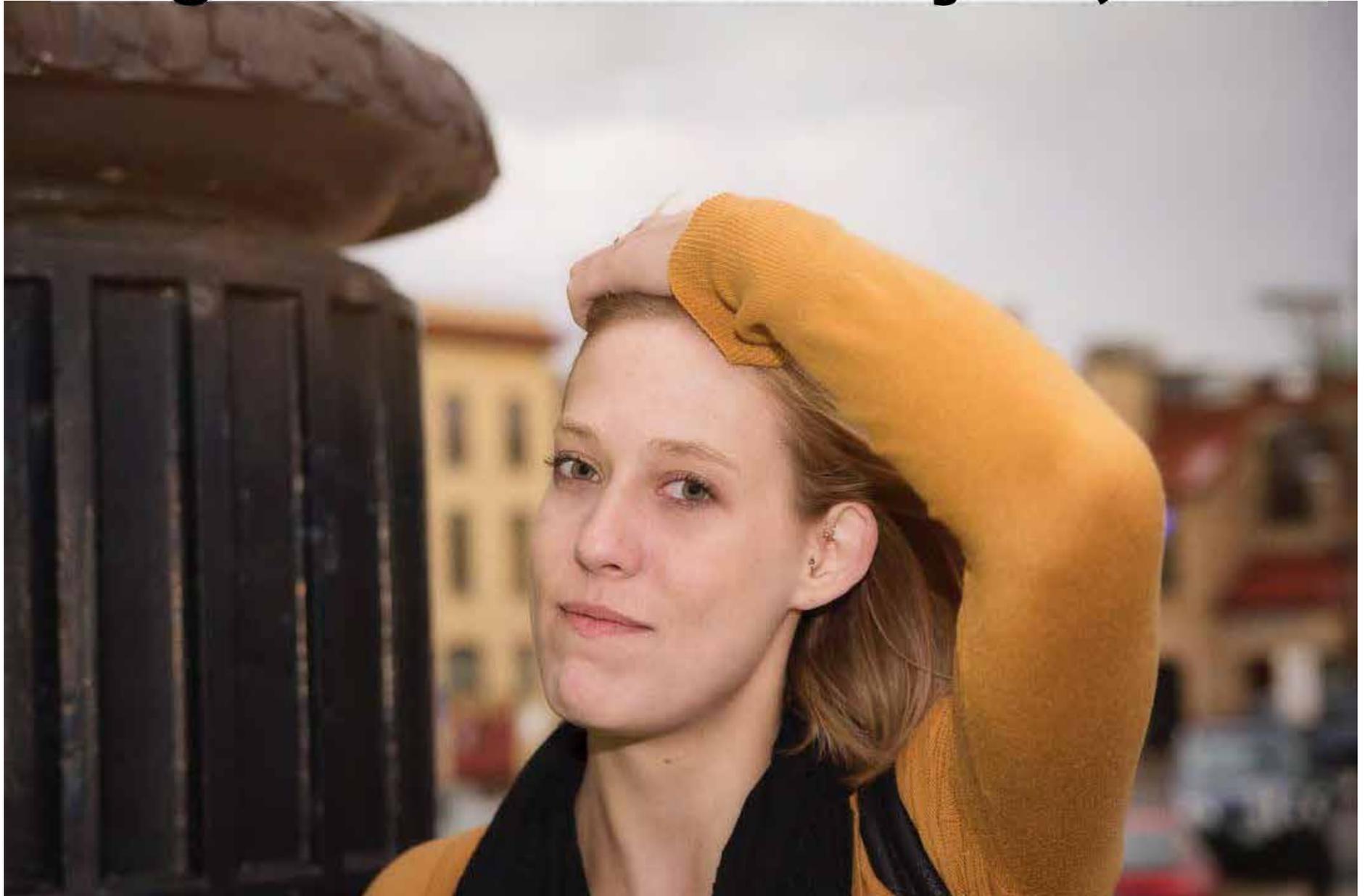
## **January 3, 2014**







# Paige Duncan- February 15, 2016



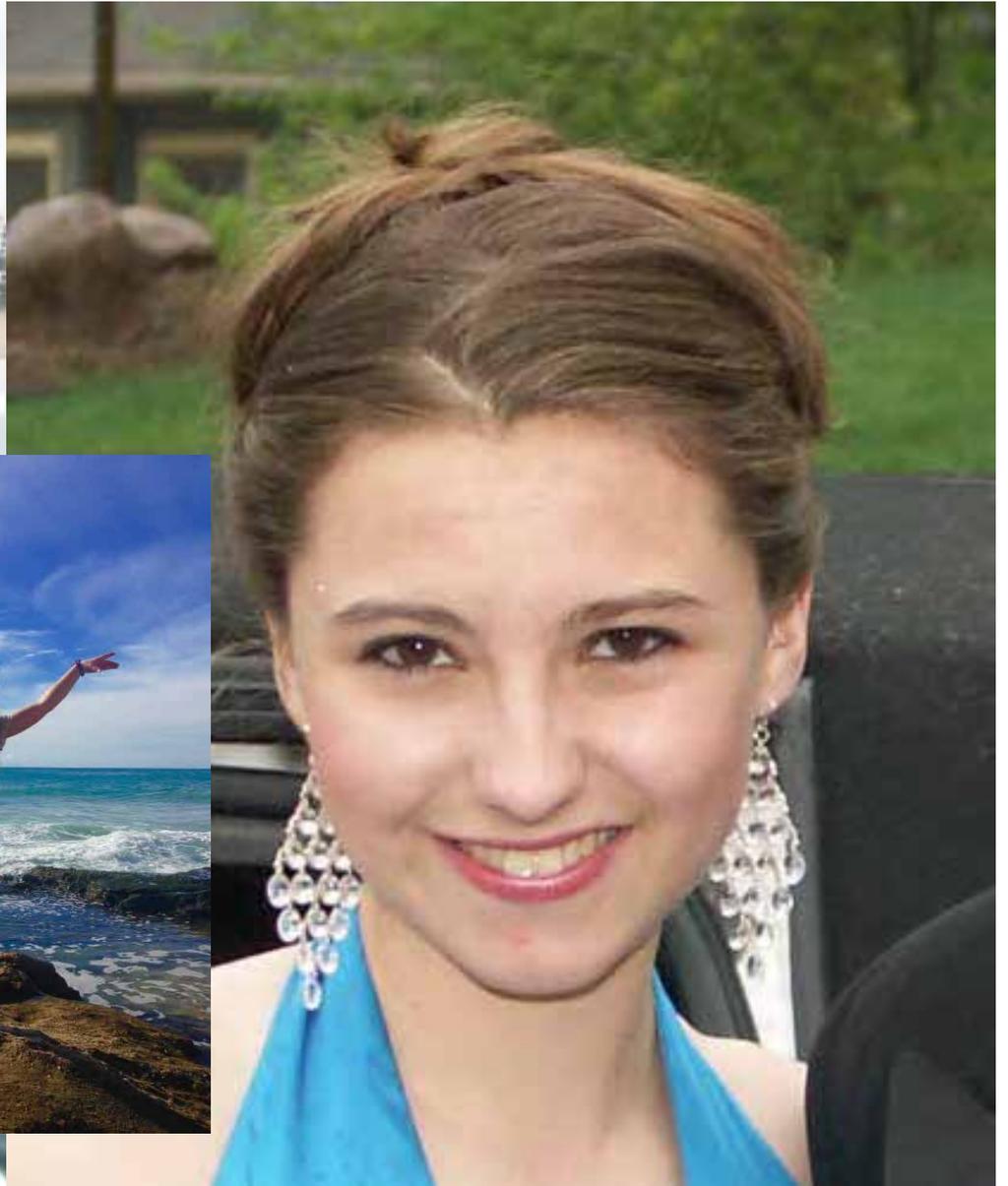
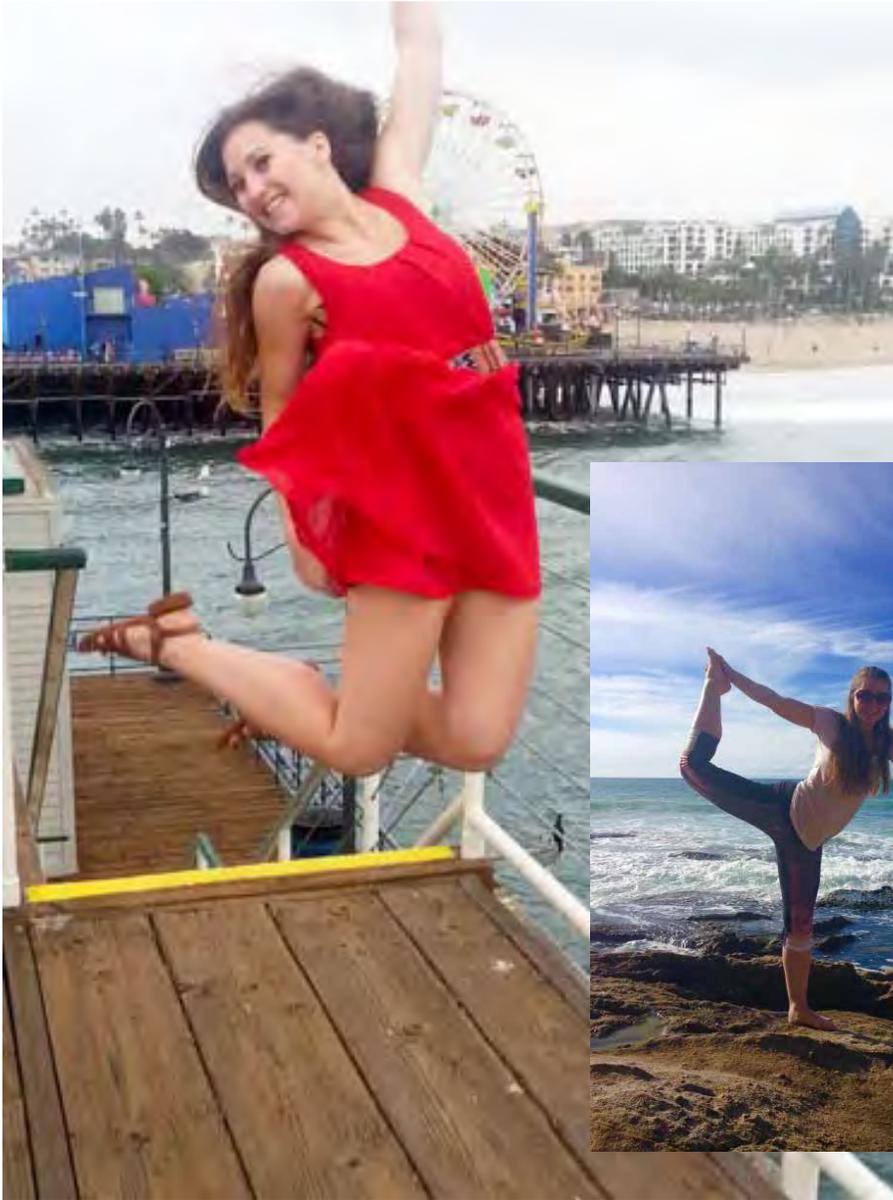


# Paul Dahlstrom – August 20, 2015





# Chelsea Langhans – August 22, 2015











# US 12 Road Safety Audit

Toward Zero Deaths  
November 17, 2016



# Goals of a Road Safety Audit

## #1: Eliminate Fatal and Serious Injuries (Ks+As)

- State Performance Measures
- Toward Zero Deaths (TZD)

## #2: Reduce Total Crashes

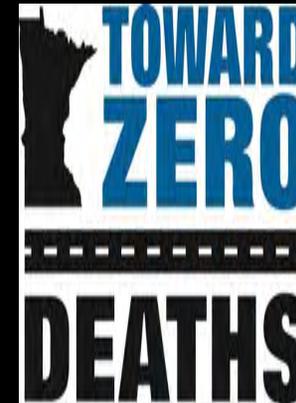
- Number
- Severity

## Multi-dimensional Approach to Safety

- Part of TZD
- 4 E's: Engineering, Enforcement, Education, Emergency Medical and Trauma Services

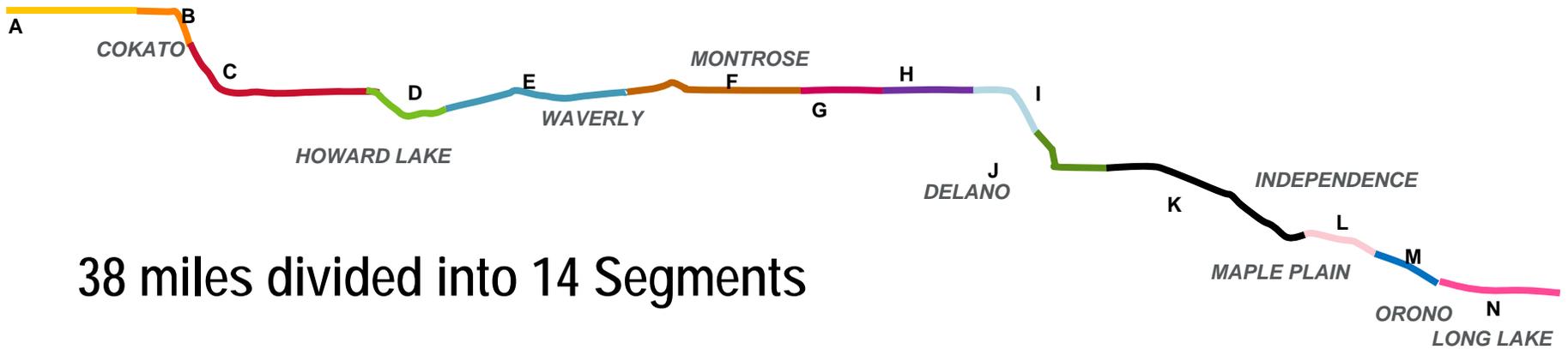
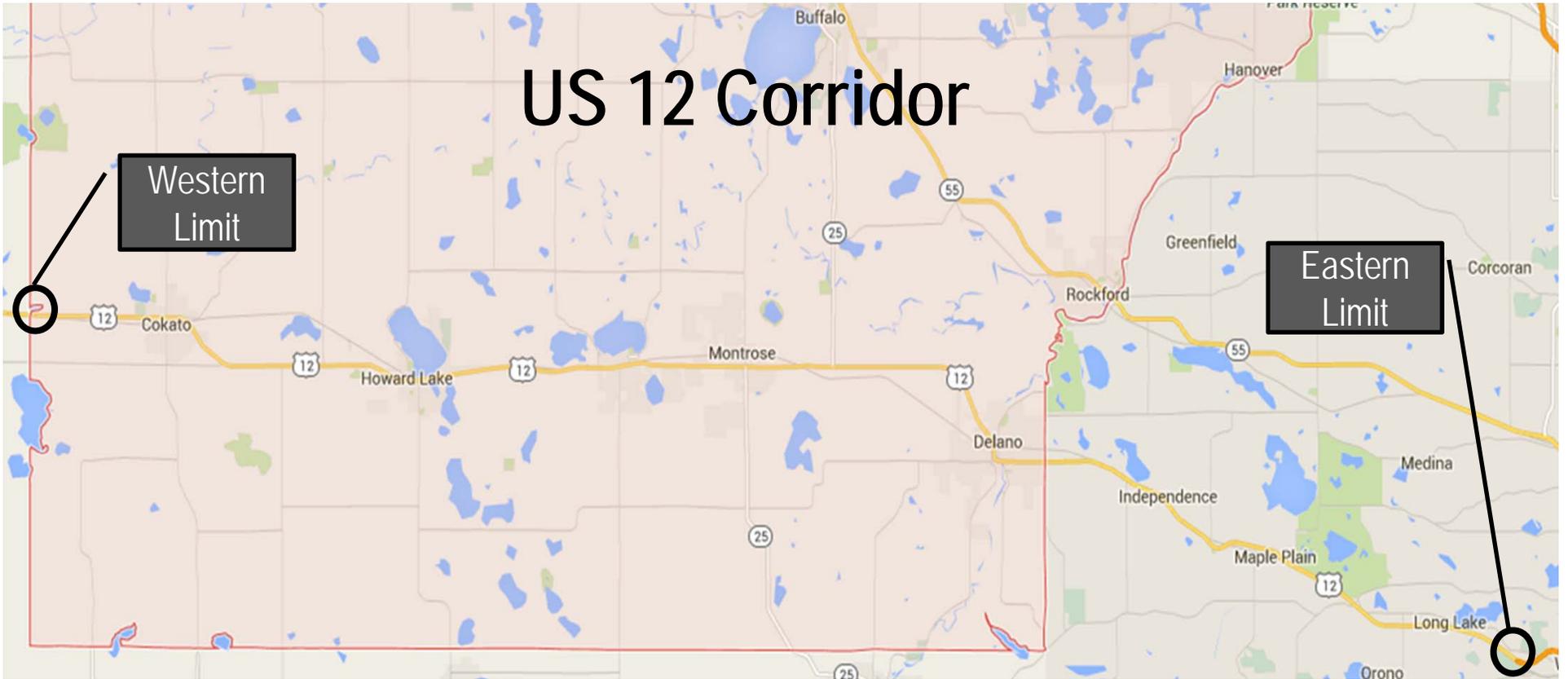
## Provide Recommendations

- Short, Medium, and Long-Term Solutions



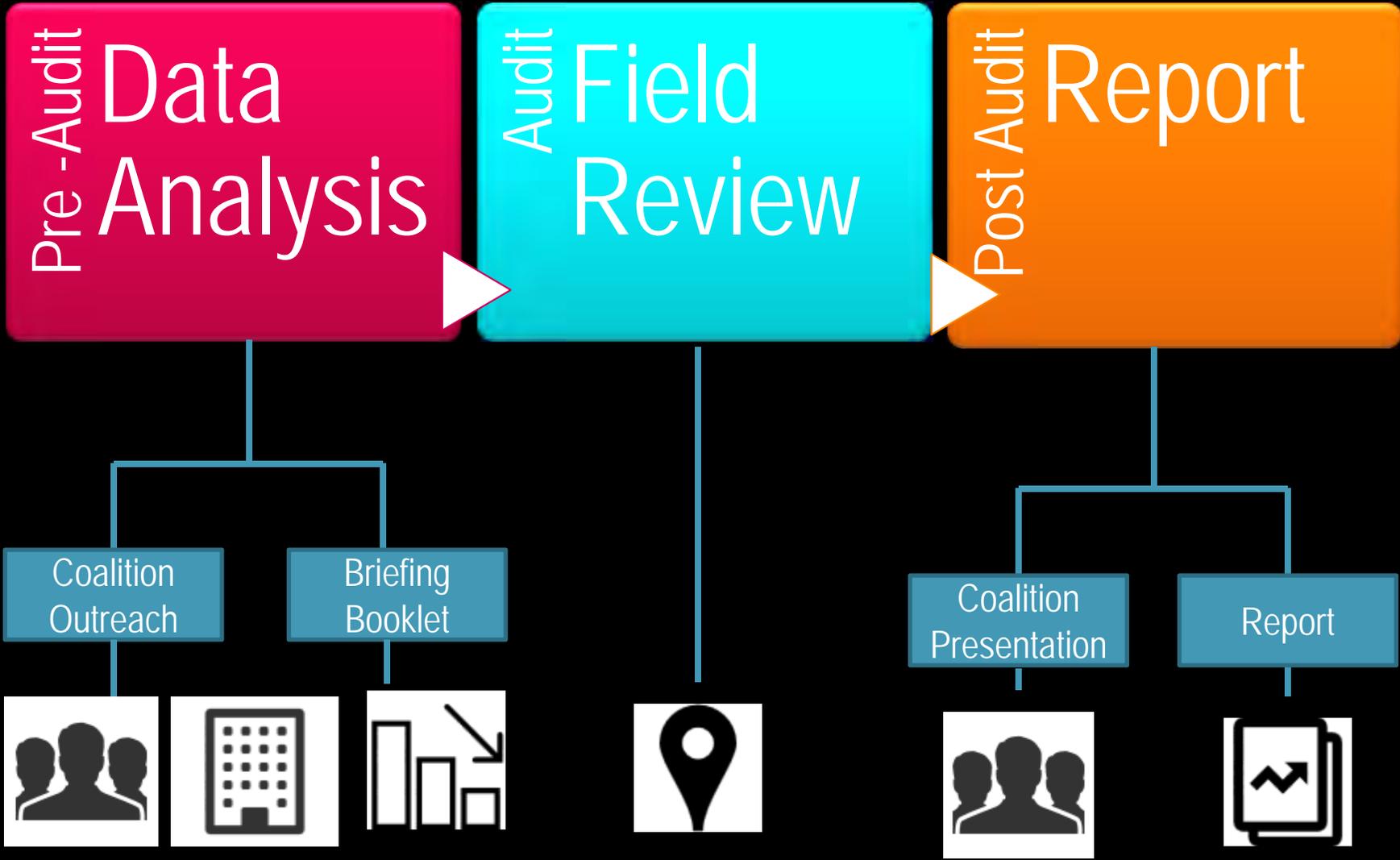
Meeting (May 16, 2011)

# US 12 Corridor

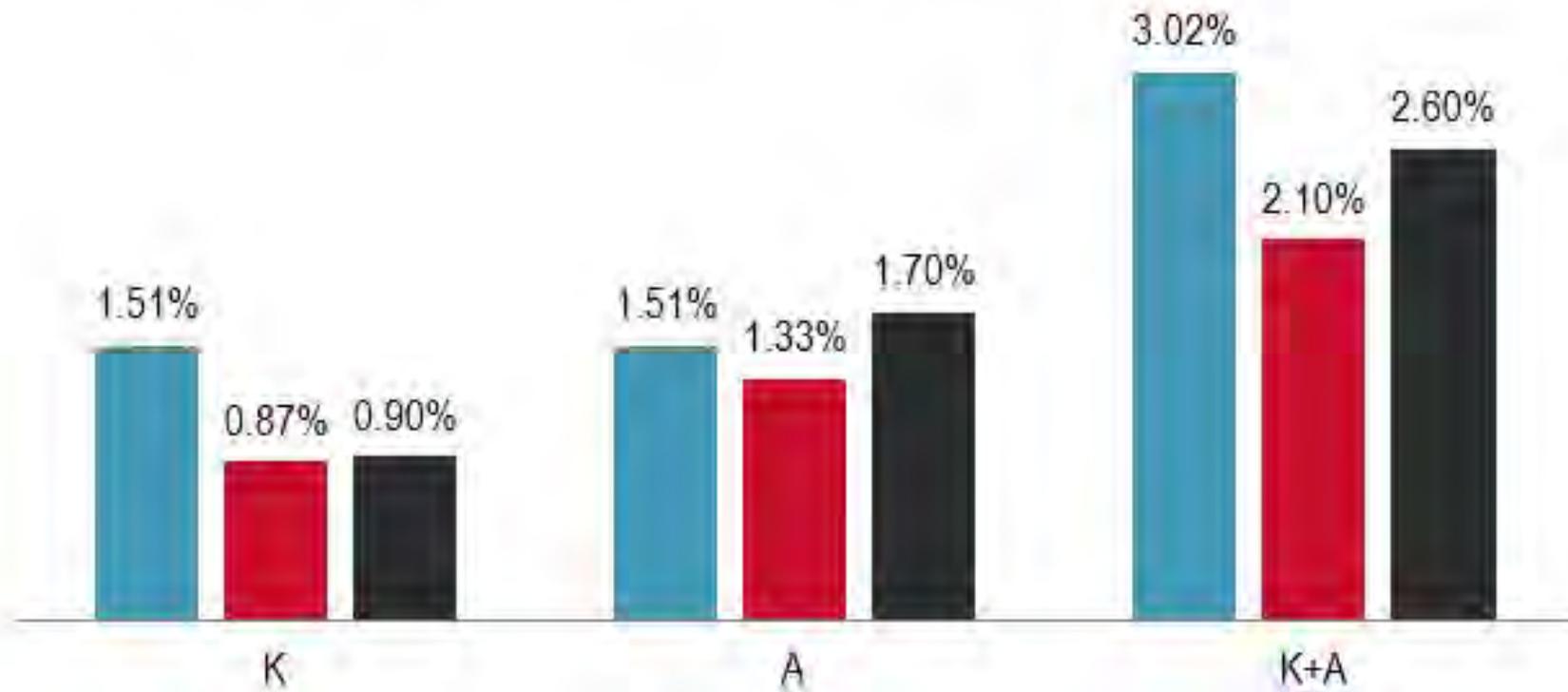


38 miles divided into 14 Segments

# RSA Process

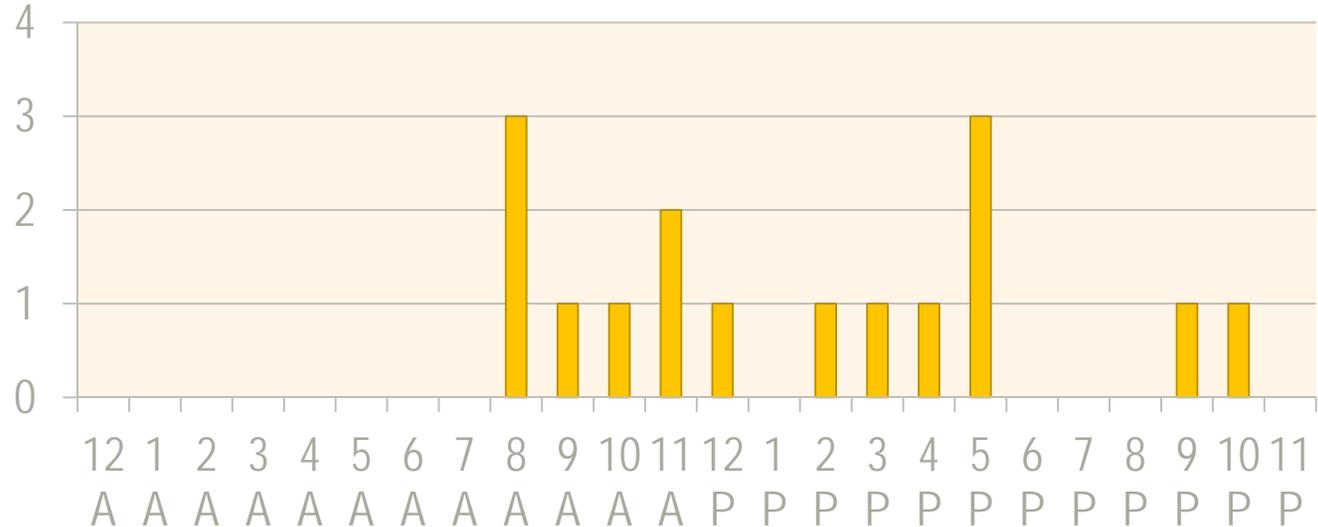


- US 12 (2014-2010)
- Rural, 2 Lane, ADT >8000, Minnesota T.H. With Intersection Crashes (2009-2013)
- Rural 4 Lane Expressways, With Intersection Crashes (2009-2013)



**Percentage of Fatal (K) and Severe (A) Crashes  
US 12 compared to Statewide Averages  
2010-2014**

## Fatal + Serious Injury (Time of Day)

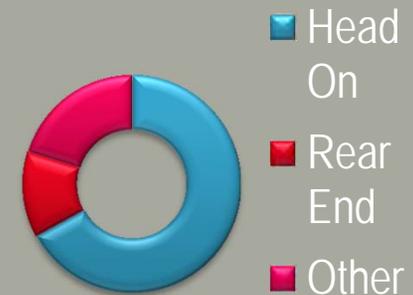


### US 12 characteristics:

- High volumes on two-lane sections
- Transitions from urbanized metro area to very rural area
- Several small cities exposed to high commuter volumes
- Two MnDOT districts involved - very different needs that shape priorities



### Fatal + Serious Injury



63% Head On



# Road Safety Audit Team

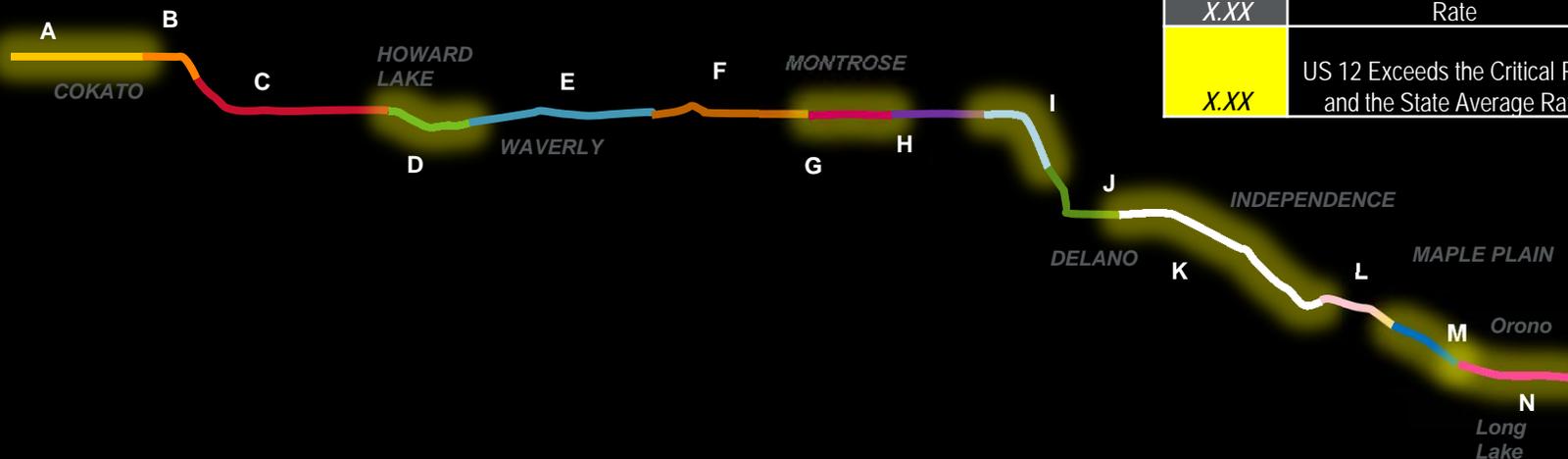
- MnDOT Office of Traffic , Safety & Technology
- FHWA
- MnDOT State Design Flexibility Engineer
- MnDOT Bike and Pedestrian Engineer
- Coalition Member
- Law Enforcement
- Consultant Team



Name	Agency and Position
Derek Leuer	MnDOT, Traffic Safety Engineer
Scott Thompson	MnDOT District 7 (Mankato), Traffic Engineer
Jim Rosenow	MnDOT, State Design Flexibility Engineer
Melissa Barnes	MnDOT, Bicycle and Pedestrian Engineer
Brad Estochen	MnDOT, State Traffic Safety Engineer
Will Stein	FHWA, Safety Engineer (Minnesota Division)
Gary Kroells	West Hennepin Public Safety Department, Director (Leader of the Highway 12 Coalition)
Rick Denneson	West Hennepin Public Safety Department, Sgt.
Brandi Popenhagen	HDR, Project Manager
Natalie Lindsoe	HDR, Project Engineer
Bernie Arseneau	HDR, National Director - Traffic Management Systems

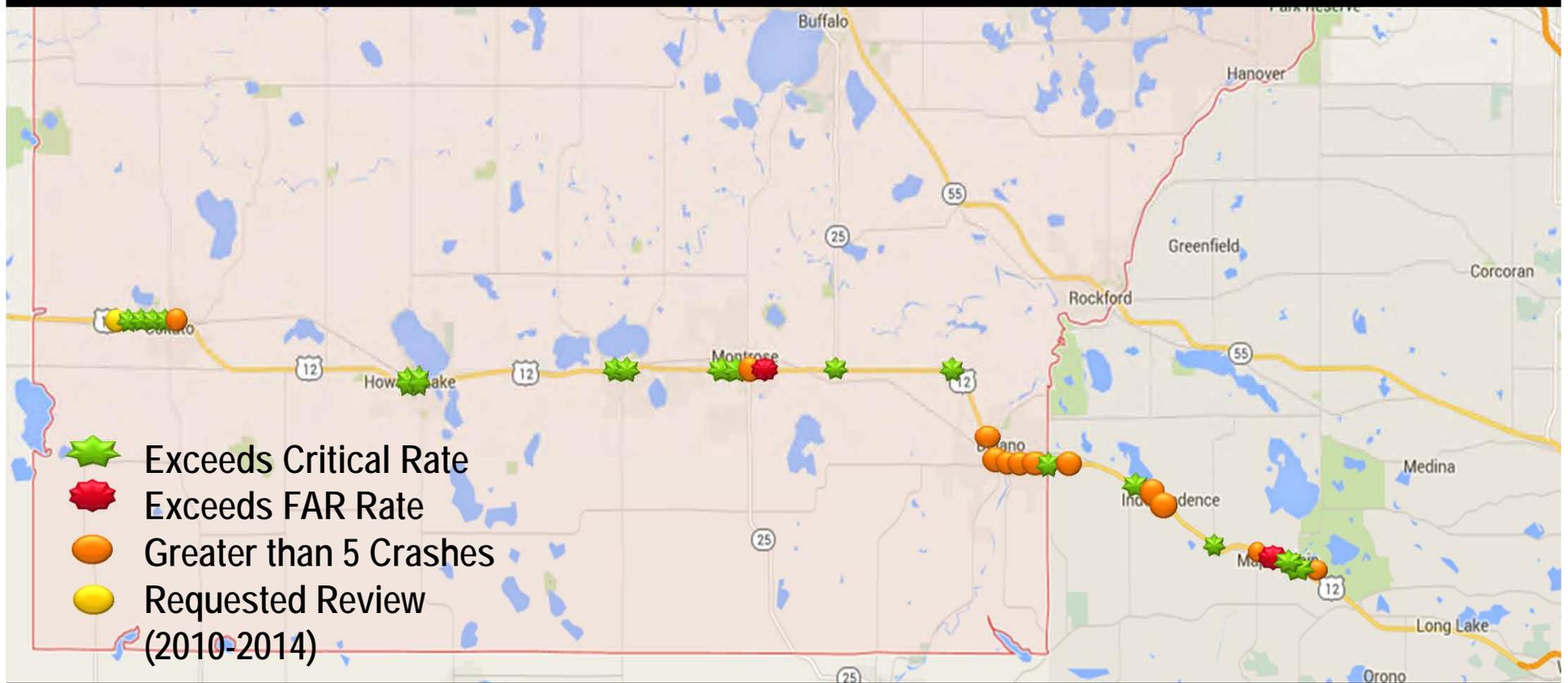
# Segments with High Fatal and Incapacitating Injury Rates (2010-2014)

Segment	Roadway Type	Crash Rate			K + A (FAR)		
		US 12	State Average	Critical	US 12	State Average	Critical
A	Rural 2-lane: ADT €[5000,8000)	0.61	0.61	0.95	5.12	2.41	6.86
B	3-lane Undivided	1.78	2.00	2.85	0.00	2.67	3.17
C	Rural 2-lane: ADT €[5000,8000)	0.31	0.61	0.88	1.70	2.41	2.67
D	3-lane Undivided	0.75	2.00	2.67	3.25	2.67	3.07
E	Rural 2-lane: ADT €[8000,∞)	0.15	0.73	1.02	0.00	1.57	1.79
F	3-lane Undivided	0.67	2.00	2.44	1.43	2.67	2.93
G	Rural 2-lane: ADT €[8000,∞)	0.61	0.73	1.10	5.07	1.57	1.84
H	3-lane Undivided	0.18	2.00	2.60	2.64	2.67	3.03
I	Rural 2-lane: ADT €[8000,∞)	0.32	0.73	1.06	2.13	1.57	1.81
J	3-lane Undivided	1.47	2.00	2.46	0.00	2.67	2.94
K	Rural 2-lane: ADT €[8000,∞)	0.83	0.73	0.93	3.00	1.57	1.71
L	3-lane Undivided	1.93	2.00	2.53	2.06	2.67	2.98
M	Rural 2-lane: ADT €[8000,∞)	0.51	0.73	1.04	3.66	1.57	1.80
N	Rural 2-lane: ADT €[8000,∞)				2.08		



X.XX	US 12 Exceeds the State Average Rate
X.XX	US 12 Exceeds the Critical Rate and the State Average Rate

# 32 intersections evaluated during audit



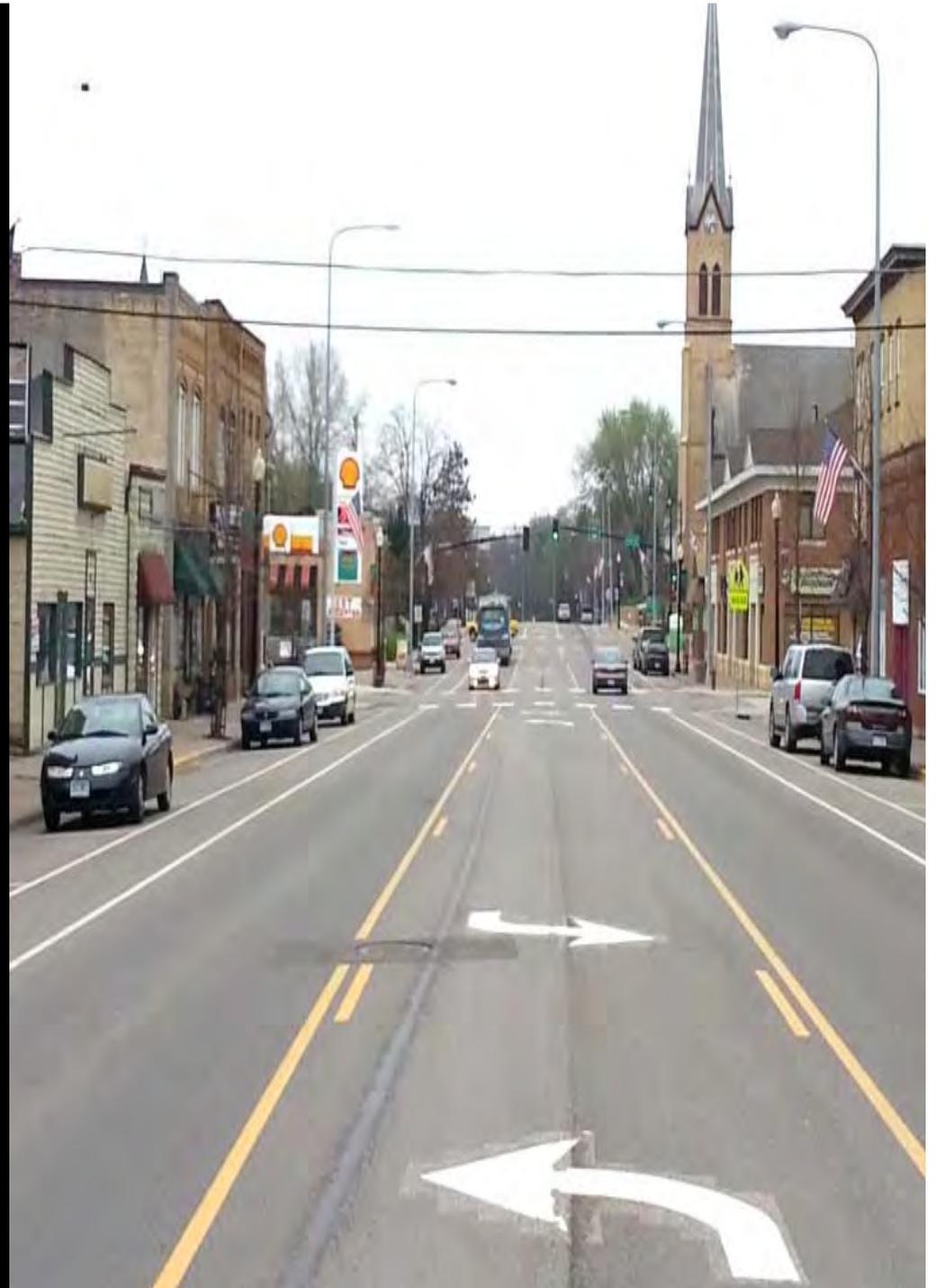
# Strategies Urban Sections

## Short Term

- Consistent Speed Transitions
- Sidewalk Network Plans
- Pedestrian Bump-outs
- Mumble Strips

## Medium Term

- Complete Street (Road Diet)



# Strategies Rural Sections

## Short Term

- Centerline rumble strips
- Edgeline rumble strips

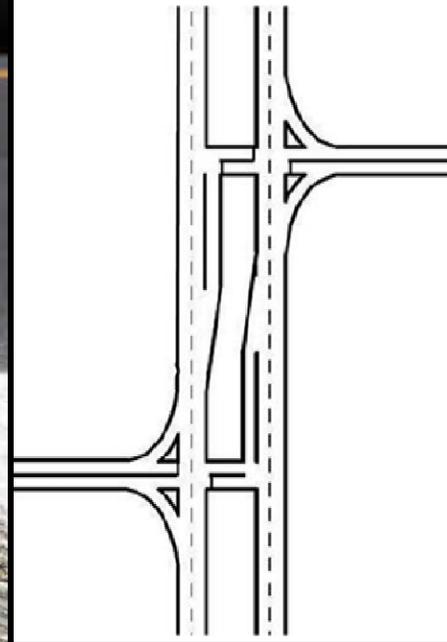
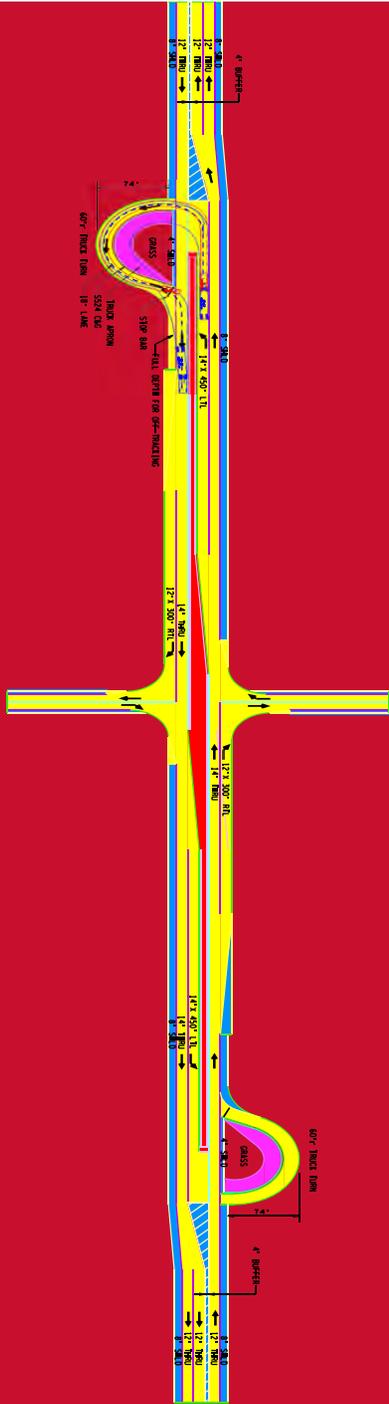
## Medium Term

- Centerline buffer-strip

## Long-Term

- 2+1 passing lane
- Access management





## Strategies

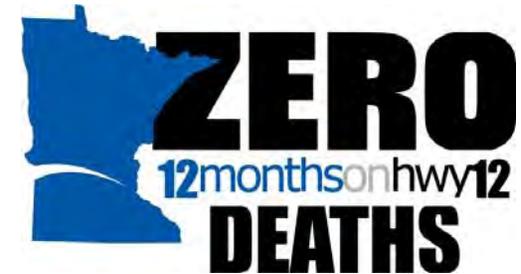
- Over 120 suggested strategies
- Spot and segment wide
- Behavioral
- Short-term/mid-term/long-term



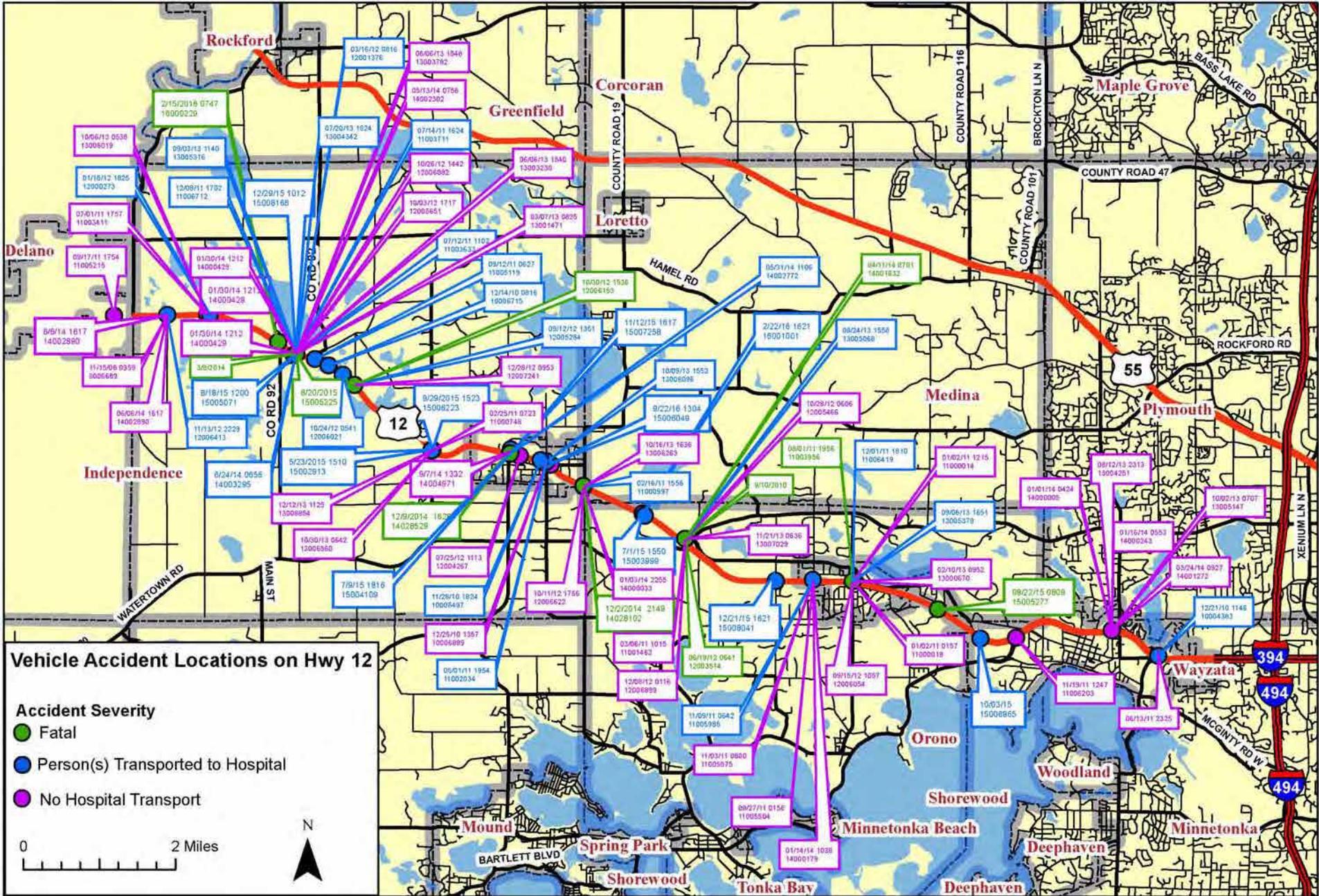


## Safety Audit

### Summer of 2015



- 24 people have been killed in the last 60 months on Highway 12.
- Highway 12 through Independence is at a critical rate and labeled high risk regarding fatal and serious injury crashes. Almost almost double the state average for a similar highways. (3.00 crashes per 100 MVM vs. state average of 1.57)
- 63% of fatal or incapacitating crashes identified in the safety audit were head collisions.
- 39% of all fatal and serious injury crashes occurred in the Independence, Maple Plain, Orono, and Long Lake area.
- The section of Highway 12 though Independence was built in the 1930's with one upgrade in the 1950's. This highway is at least 60 years old. Continues to see metro level volumes of traffic and provides no room for error while driving.





- ▣ Saving lives by using four E approach
  - Education
  - Enforcement
  - Emergency Medical Services
  - Engineering

Fifth is “Everyone” working together to save lives



# Hwy 12 Safety Coalition Going 12 for 12



**CRASH  
REDUCTION  
PROJECT  
AREA  
12 FOR 12**

**HWY 12  
SAFETY COALITION**



## Hwy 12 Safety Coalition Education



## TZD Buckle Up Logos!





## Hwy 12 Safety Coalition Education Calling 911



### Leading cause of crashes on Highway 12

#### 1 Distracted Driving

We have all witnessed this behavior and most likely have done it ourselves. Is that text worth a life?

What can you do to help? All you need to do is pay attention to your driving. Be aware of what you are doing and be prepared for what others are doing around you.

#### 2 Illegal or Unsafe Speed

We all know that driving above the speed limit or too fast for the existing conditions is dangerous.

Do the right thing. Watch your speed and slow down during bad weather.

### Be a part of the solution

#### How you can help:

If you see a concern – unsafe driving behavior, speeding, and/or driver distraction, **please call 911** and report the behavior, only if you can do so safely. Or better yet, if you are traveling with a passenger, let them make the call.

**Be prepared to give the following information** – your location, license plate number of unsafe driver, and a description of the driver if possible.

With everyone's help,  
we can make **Highway 12 safer!**

### What we are asking of our friends & neighbors is simple

We want your help in reducing crashes on Hwy 12 - a road that many of you drive on a daily basis. In recent years, the number of crashes on Hwy 12 has impacted us all in one way or another. With your help, we can change it.

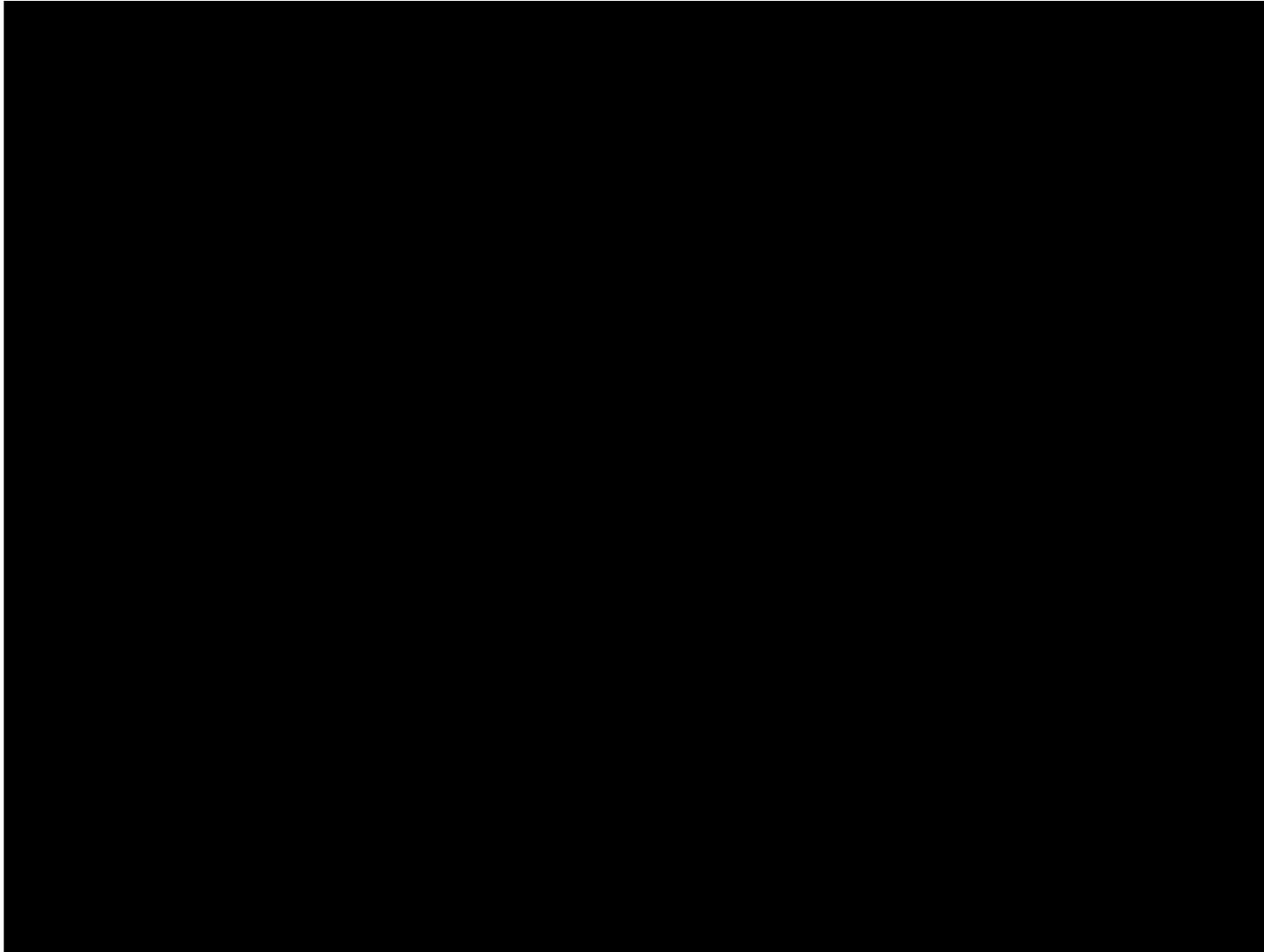
- 1 Do you speed-even a little?
- 2 Have you ever driven distracted? (cell phone, make-up, eating or reading)
- 3 Have you ever had to slam on the brakes to avoid the car in front of you?

If you answered **YES** to any of these questions, we are asking you to change your driving habits and be part of the solution to reduce crashes on Highway 12.





**Hwy 12 Safety Coalition  
TZD Enforcement**





Hwy 12 Safety Coalition  
EMS



- Incident Command on all PI Crashes
- Rapid Response for police/fire/EMS
- Auto Start North Memorial Air Care



# Strong Community Partnership

- ▣ Audit pulled stakeholders together in a unified front all working toward the common goal of improving the safety of the Hwy 12 corridor and the surrounding communities!





# Using the Road Audit



We all have a stake in **A**  **B**



# Rumbles to the Rescue



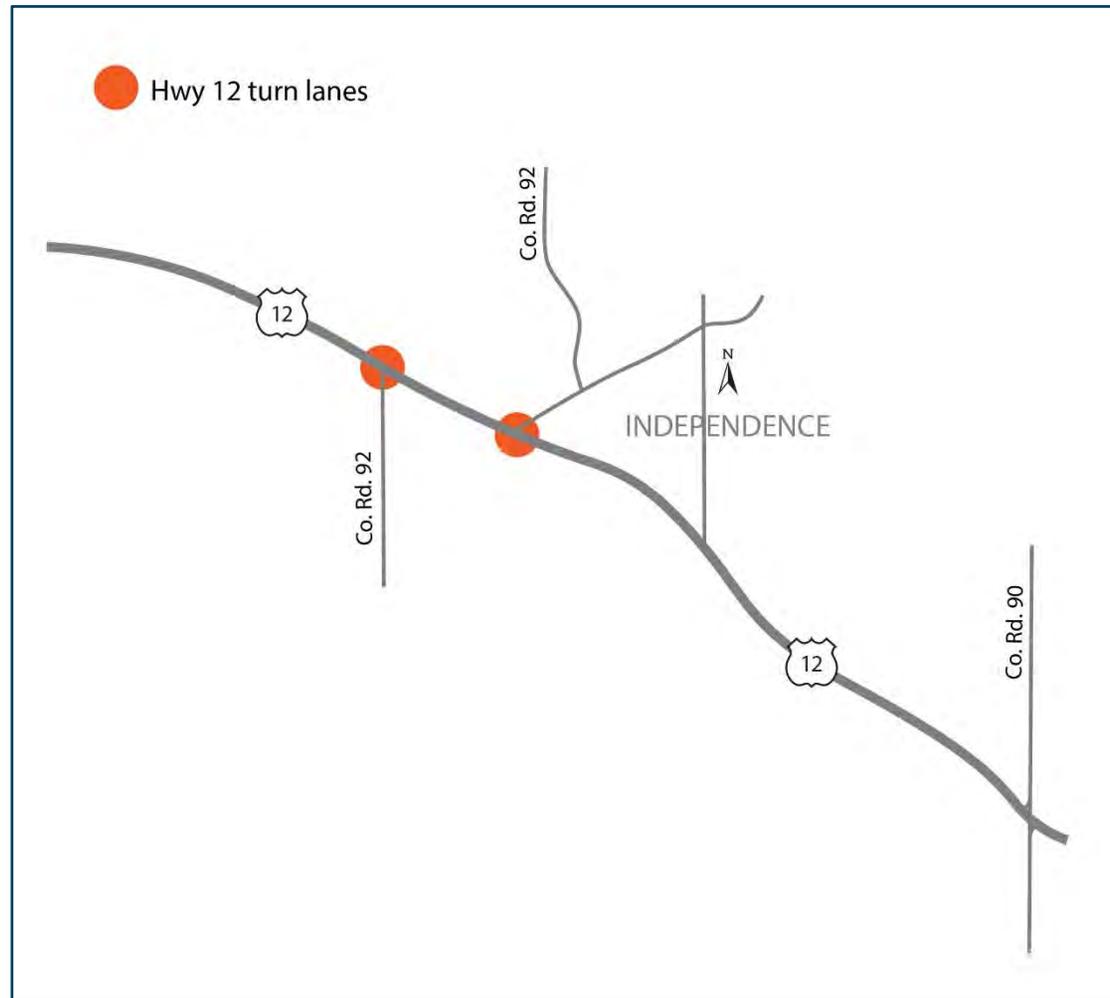
# Short-Term Improvements

Projects that were able to be implemented in a shortened timeframe, several of which were identified in the Road Safety Audit:

- ▶ TH 12 Intersection Lighting – 6 intersections
- ▶ Signal system enforcement (blue) lights
- ▶ TH 12@CSAH 92 – install left turn lanes at east and west junctions
- ▶ CSAH 6 to CSAH 112 – installed center median barrier



# Hwy 12 @ Co Rd 92 – Turn Lanes



# Hwy 12 – Co Rd 112 to Co Rd 6 Center Barrier



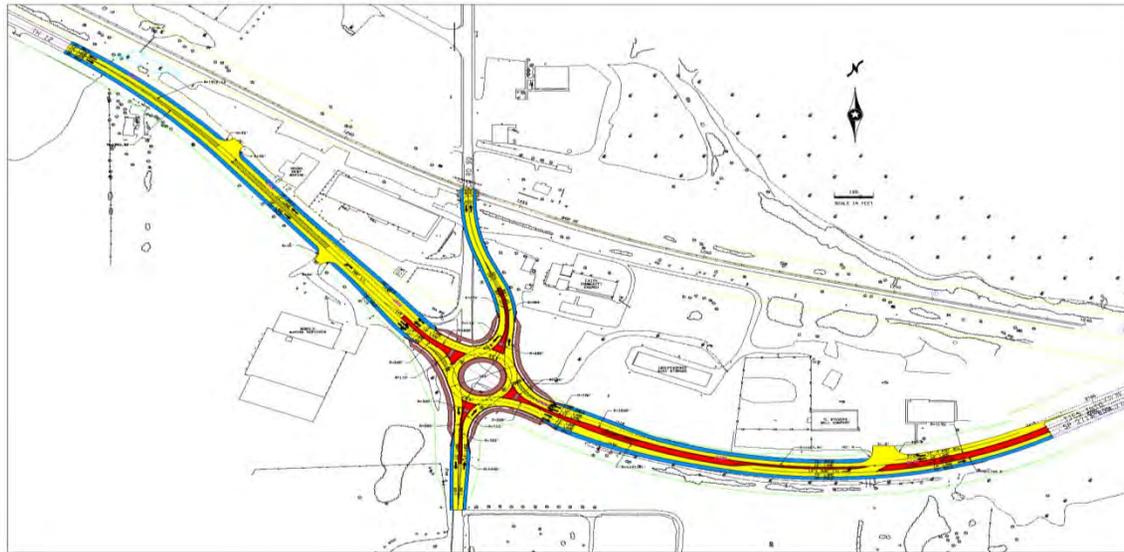
# Medium-Term Improvements

Projects identified as part of the Road Safety Audit that will take longer time to implement due to additional R/W, environmental impacts mitigation and municipal consent:

- ▶ Hwy 12 intersection at Co Rd 90 – Roundabout
- ▶ Hwy 12 between Co Rd 6 to Co Rd 29 – continuation west of center barrier
- ▶ Hwy 12 intersections at Co Rd 92 – Several alternatives being considered coupled with access management



# Hwy 12 @ Co Rd 90 – Roundabout



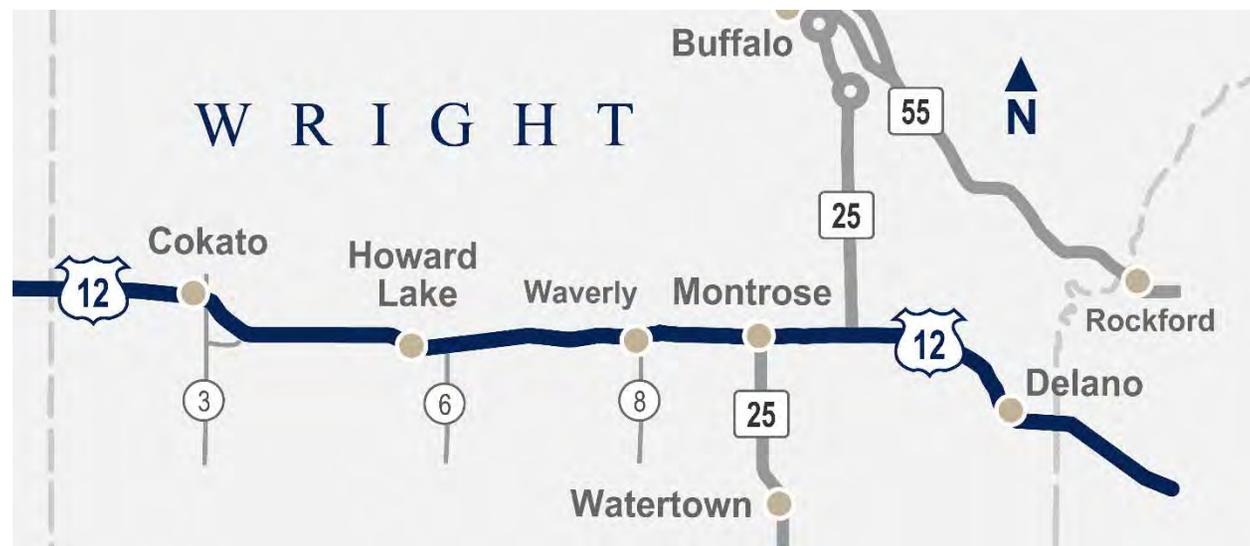
# Long-Term Improvements – Future Projects

- ▶ Hwy 12 improvement between intersections – potential widening of roadway to provide buffer between opposing directions



# MnDOT District 3

- ▶ Resurfacing projects on TH 12 across Wright County scheduled between 2018 & 2021
- ▶ District 3 will work with each community to implement recommendations from the safety audit as appropriate



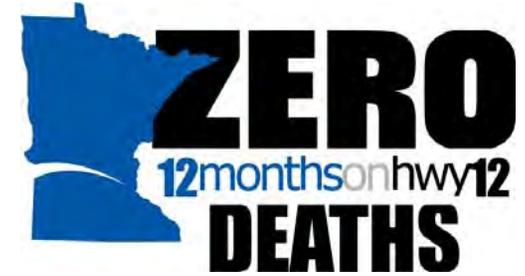


## Highway 12 Safety Coalition Future projects

- Design and scope of round-a-bout at Co Rd 90
- Design of single intersection at Co Rd 92 N
- Intersection management/closure
- Continued center concrete median County Road 6 to County Road 29



**Hwy 12 Safety Coalition**



- ▣ Saving lives by using four E approach
  - Education
  - Enforcement
  - Emergency Medical Services
  - Engineering

Fifth is “Everyone” working together to save lives