



MINNESOTA TOWARD **ZERO** DEATHS

15 Years of Minnesota TZD: Major Accomplishments and What the Future Holds?

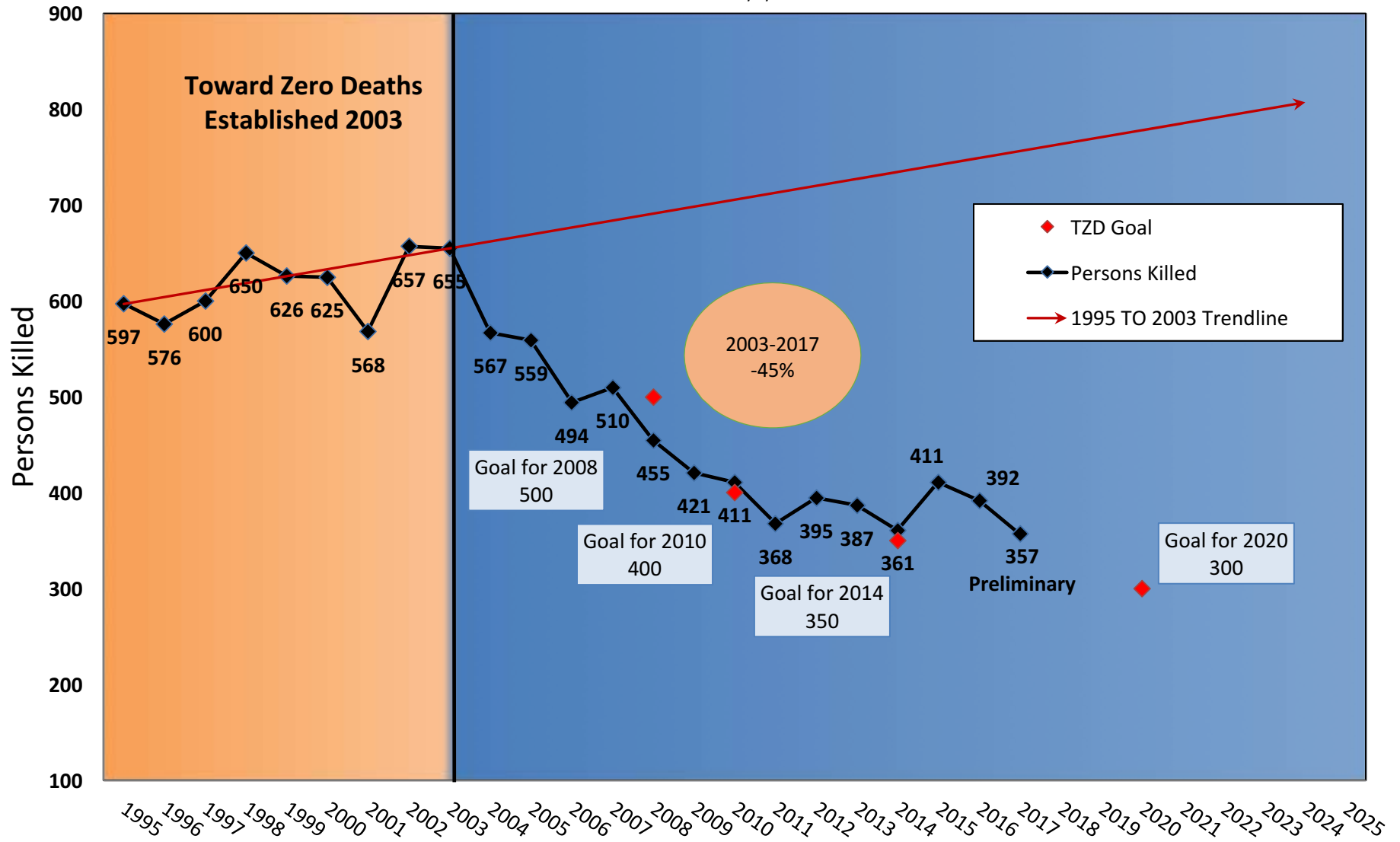
*Kristine Hernandez, Statewide Toward Zero Deaths Program Coordinator,
Office of Traffic Safety & Technology, MnDOT*



April 18, 2018

Minnesota Roadway Fatalities

Source: MnDOT 3/5/2018



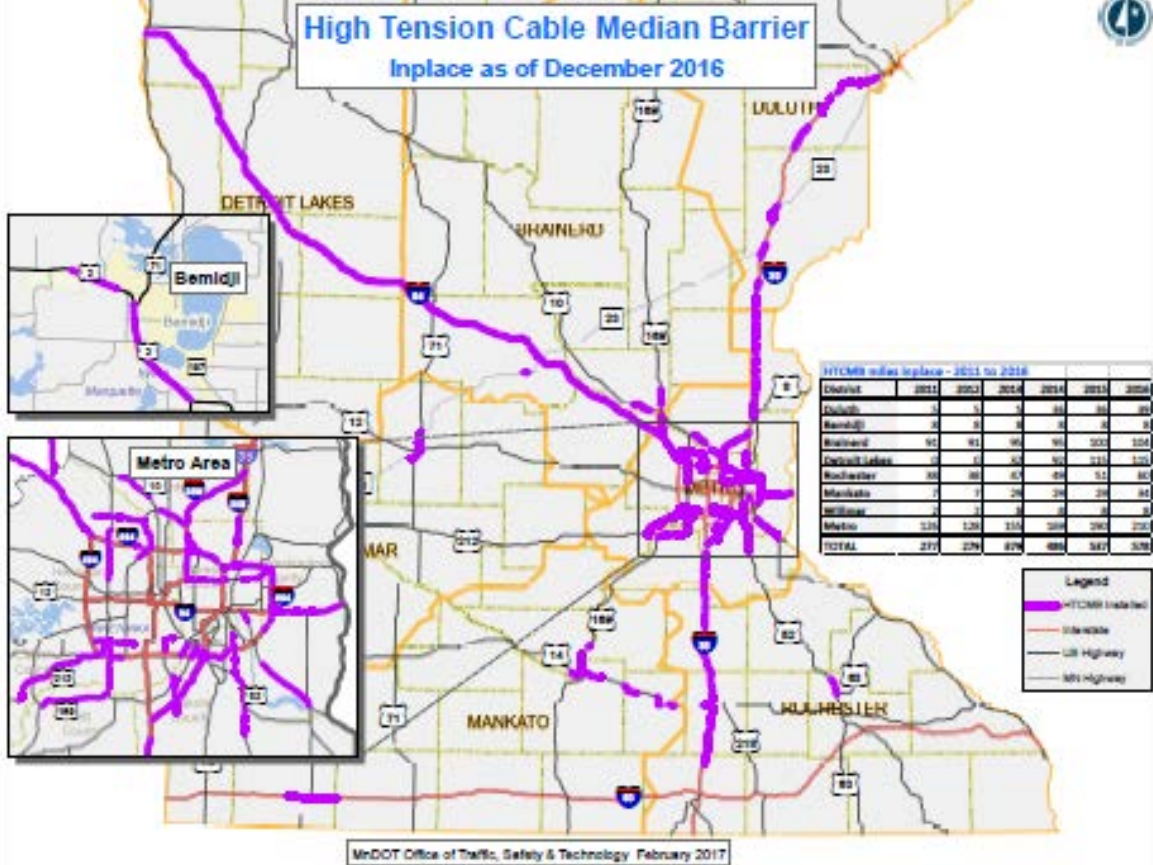
How are other states doing?

Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin



NHTSA Region 5

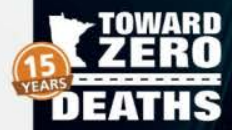
High Tension Cable Median Barrier
Inplace as of December 2016



Minnesota High Tension Cable Median Barrier

95% Reduction in Fatal Head-on Crashes

2003: None
2014: More than 450 miles
2016: 578 miles



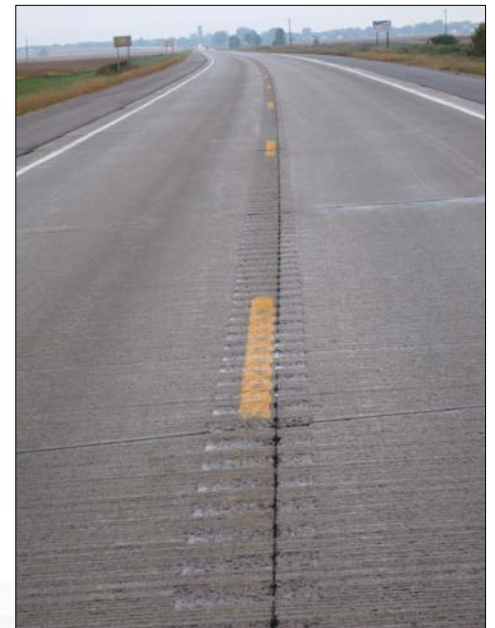
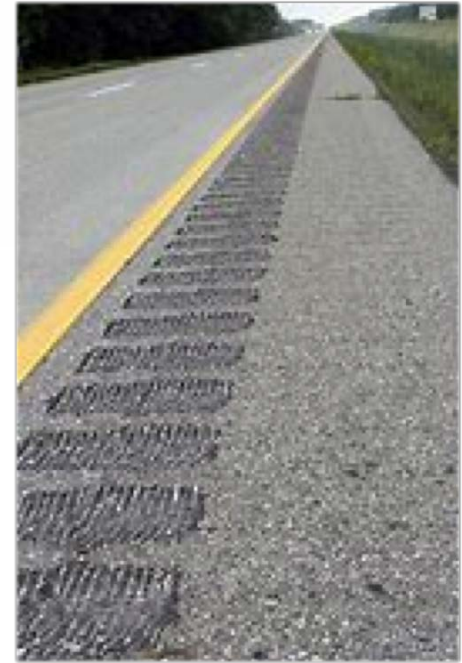
Roundabouts



- Removes Right Angle Crash potential (T-bone crashes)
- Reduces severe crashes by 80-90%
- Delay Reduction versus a 4-way Stop or Signalization

Description	Total Crashes	K	A	B	C	PDO
Before Crash Rate	0.442	0.0062	0.015	0.054	0.124	0.243
After Crash Rate	0.323	0.001	0.0025	0.022	0.054	0.244
Percent Increase/Decrease (By Rate)	-27.0%	-89.9%	-83.4%	-60.9%	-56.3%	+0.4%

Edgeline & Centerline Rumble Strips



Reduced Conflict Intersections



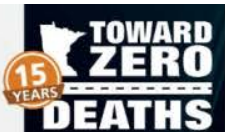
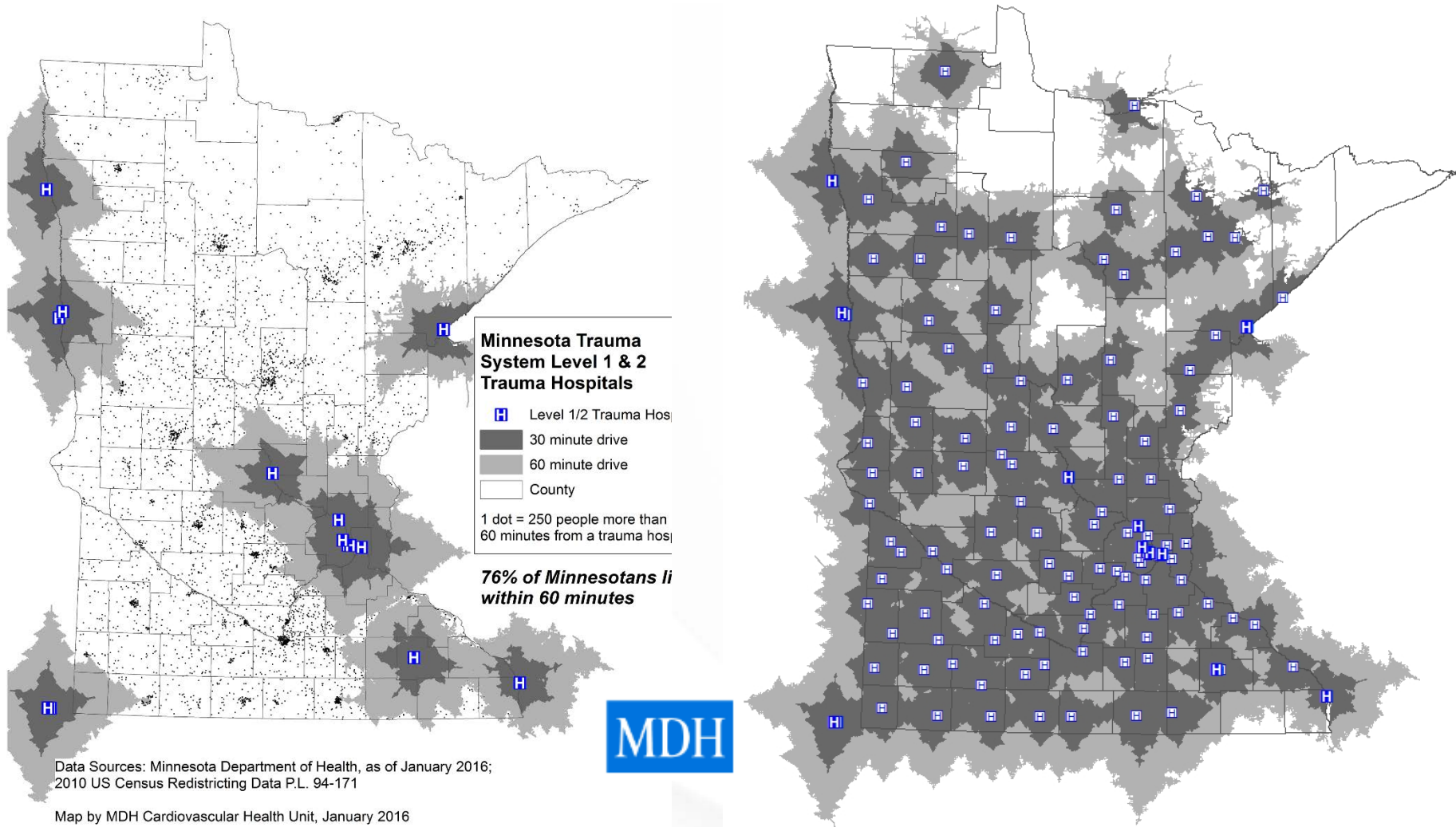
- **100%** Reduction in Fatal and Serious Injury Crashes
- 77% Reduction in Right Angle Crashes
- Many more sites planned, programmed, or in development

County Road Safety Plans



According to Rick West, Otter Tail County engineer:
“...provide practitioners with a detailed, prioritized county-wide, safety plan to guide and support future safety investments. The benefits far outweigh the challenges and have resulted in a safety culture change in Otter Tail County.”

Established Statewide Trauma System



Pre- and Post-TZD

Statewide Auto Launch Policy

- “Es” coming together for incident management
- Reduces response time
- Removes liability in decision-making



DWI Courts



Enforcement

- Highly Visible
- Targeted
- Coordinated state and local efforts
- Multi-state border to border efforts



Driver License Sanctions – Ignition Interlock



The number of impaired ($BAC \geq 0.08\%$) drivers in fatal crashes falls

- ↓ 3% when states require interlocks for repeat offenders only
- ↓ 8% when states require interlocks for repeat offenders and first offenders with high BACs
- ↓ 16% when states require interlocks for all DUI offenders, including first offenders

Motorcycle Safety Training



- **2011:** MN Advanced Rider Courses
- **2012:** MN Expert Rider Courses
- **Added Trainings:** 3-Wheel, Moped, Road Guard, Skills Re-test, etc.

1986: 375 Students

Through 2017: 169,740 students in all courses

Teen Hands-on Learning Activities



Wheel of Distraction



Pedal Kart Obstacle Course

TZD *Buckle Up Stencil*

Example: Bemidji State University
(Pennington & Red Lake Counties)



What is *Traffic Safety Culture*?

Shared:

- Values
- Beliefs
- Norms
- Attitudes



North Memorial Health Care



Safeway Driving School



**MnDOT
Fleet &
Watercraft!**

2017: 3-Year Traffic Safety Culture Community Pilot Program begins

3-Phase Work Plan

- Establish community partnerships
- Develop traffic safety culture strategies
- Implement traffic safety strategies



Message Monday!



November 2016

Partnering with MnDOT & DPS

Sharing with Iowa & Wisconsin DOTs

From a Facebook message:

Hi MnDOT! I am a Pennsylvania resident, but was out in Minnesota visiting friends



and saw your sign on 62 near Minnetonka.

I loved it so much, I stitched it on a T-shirt and I wanted to share. Have a great day!!

Traffic Safety Culture



What Makes TZD Successful?

- Addresses all roads
- Multi-disciplined, “4-E” approach
- Proactive/systematic
- Breakdown obstacles (time, attention, silos, resources, habits, turf, credit, attitude)



What lies ahead?



The Future: Automated Vehicles

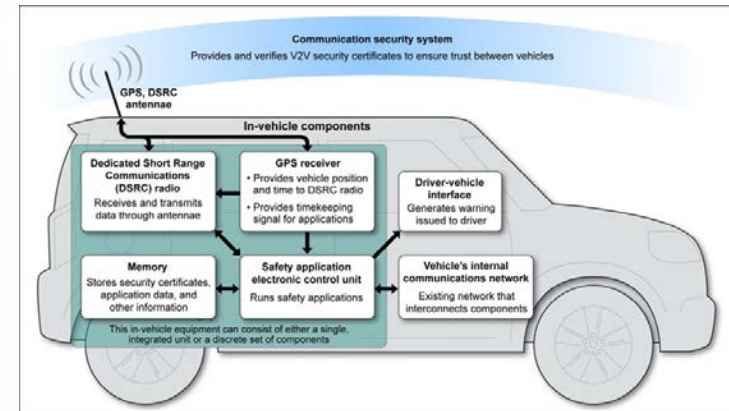


DAN BROWNING, STAR TRIBUNE



Vehicle-to-Vehicle Communication: 2020?

- Wi-Fi signal between vehicles
- GPS location & heading
- Relays information before driver is visually aware
 - sudden braking ahead
 - vehicle in blind spot
 - stop-crash alert (intersection)
 - do not pass warning



Sources: Crash Avoidance Metrics Partnership and GAO



Speed Study Pilot Project – Portable Speed Signs



"It is an education tool and an enforcement enhancer, it puts the driver on notice"

- Captain Joe Dwyer, MSP District 2800

Increase Active Statewide Coalitions *to all 87 Counties*

Counties without coalitions

Kittison

Roseau

Lake of the Woods

Clearwater

Norman

Red Lake

Pine

Koochiching

Cook

Mahnomen

Wilkin

Traverse

Stevens

Pope

Becker

Cass

Wadena

Todd

Pipestone

Lincoln

Brown

Rock

Sibley

Waseca

Steele

Mower

Carver

Hennepin

Anoka

NE, NW, WC, EC, SW, SC, SE, Metro

Future: Partnerships with neighboring states

- North Dakota
- South Dakota
- Iowa
- Wisconsin



Minnesota TZD State Conference or Midwest TZD Conference?

What's next?

Please share your ideas with us!



We are in this together for our communities, families and friends.

Questions & Answers

Contact Information

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