

Welcome to Minnesota



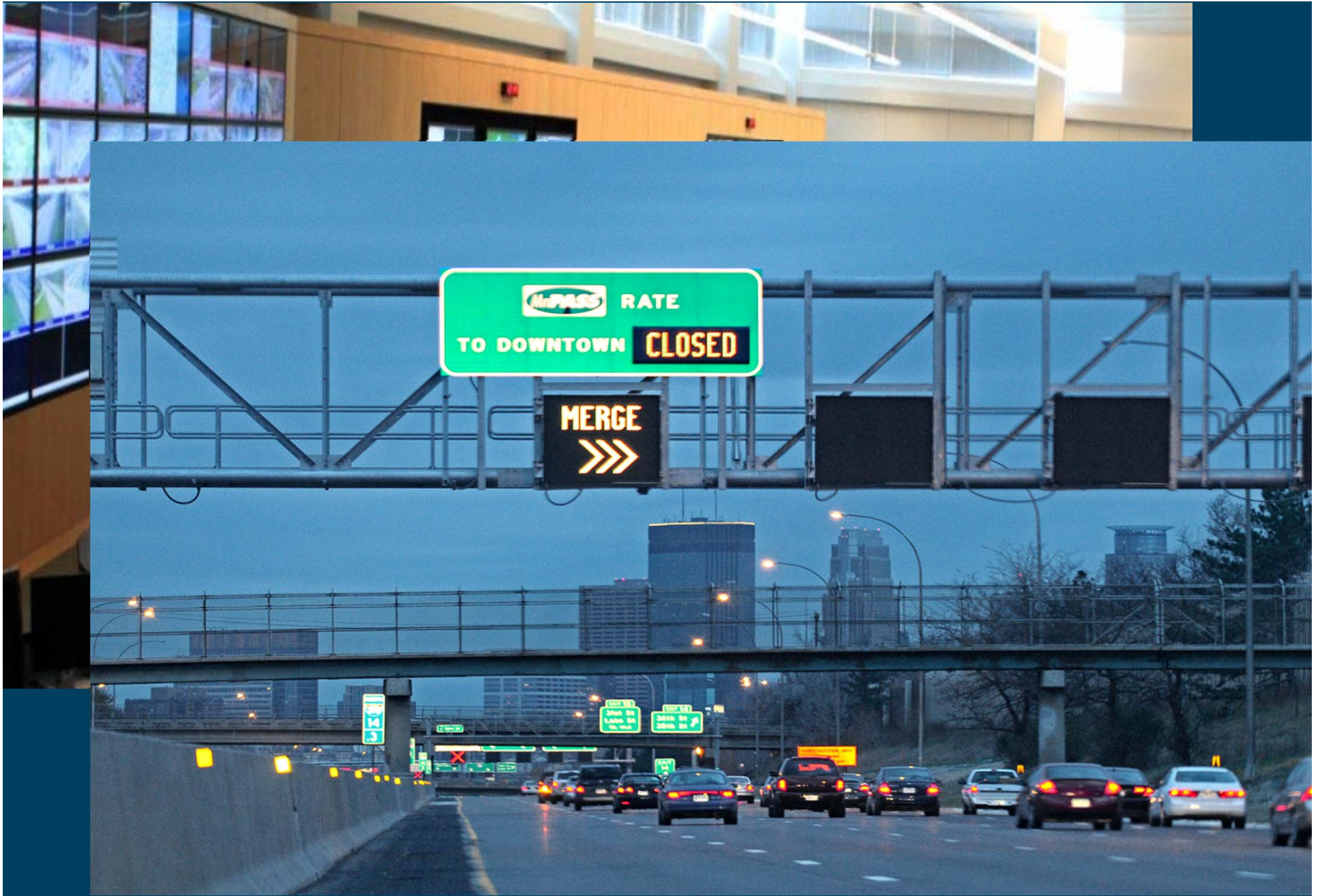


Minnesota Perspective ITS & Safety

“We’ve come a long way, Baby”

Your Destination...Our Priority





How we got here?

▶ Visionary Leadership

▶ Strong Partnerships

- U of M, DPS, MnDOT, industry associations, ITS America and it's Minnesota state chapter, local governments, MPO's, transit agencies, local emergency response, and the U.S. Dept. of Transportation

▶ Proven Benefit

- 15:1 Benefit/Cost Ratio Ramp Meters
- Public support, expectation and satisfaction
- Improved travel speeds and reliability





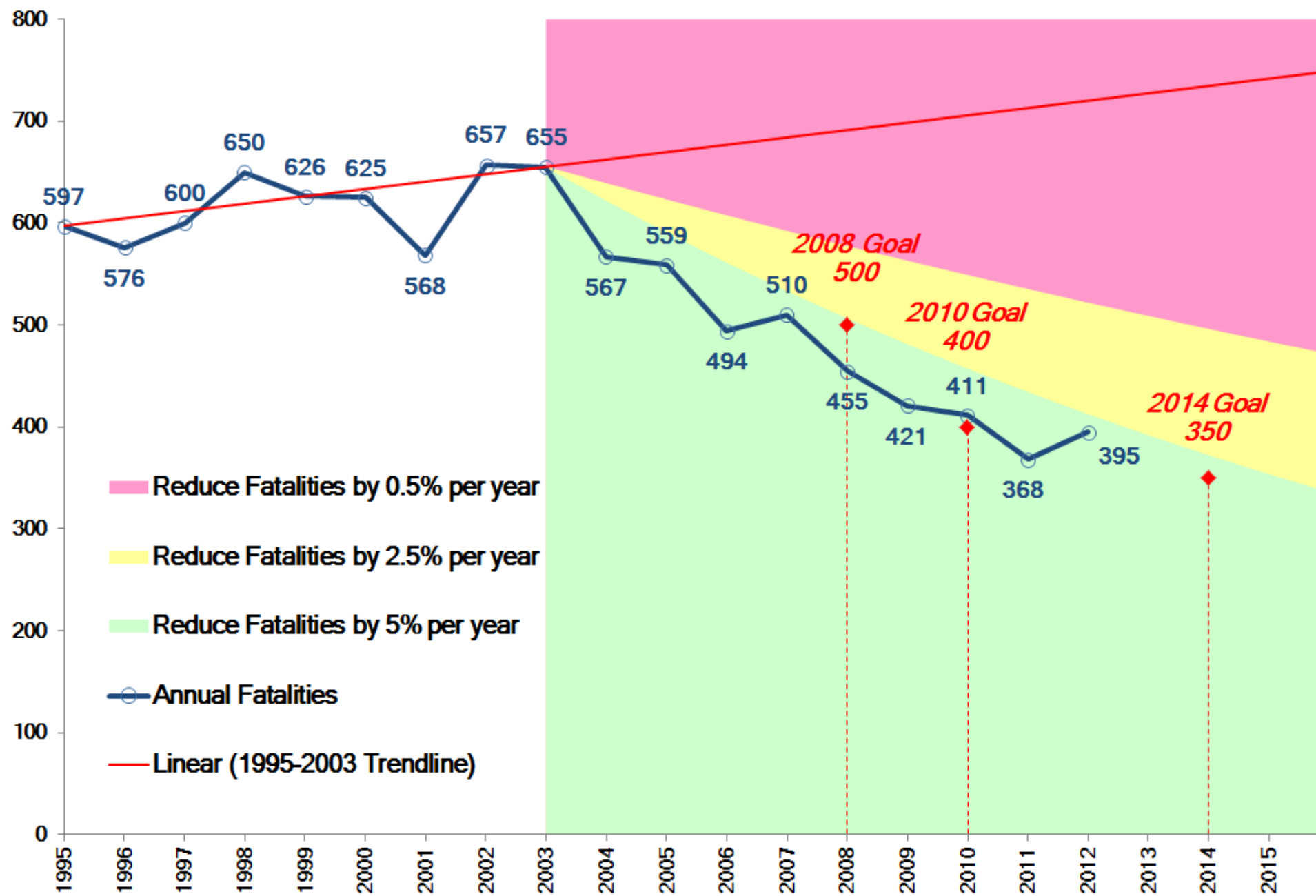
TOWARD ZERO DEATHS

Because your life counts



Roadway Fatalities, All State & Local Roads

Source: MnDOT 5/30/2013



MN Fatalities

- ▶ About 50% happen on local roads with the majority of these on the county system
- ▶ Over 70% happen on rural roads



Minnesota SHSP

Critical Emphasis Areas

Unbelted	1,003	(42%)	1	Emphasis Area Fatality Rank
Alcohol-Related	893	(35%)	2	
Speeding-Related	704	(27%)	5	
Involved Drivers Under 21	506	(20%)	7	
Single Vehicle ROR	813	(32%)	4	
Intersection	856	(33%)	3	
Head-On and Sideswipe	543	(21%)	6	



Teen Driver

Teenage Driver Support System Field Operational Test

- A smartphone-based software and hardware package.
- Provides in-vehicle feedback to teens about potentially unsafe driving behaviors while driving.
- Provides unsafe behavior feedback to parents.



Speed

“Your Speed” Signs

- Regulatory Sign
- Driver Speed Awareness Sign displays actual speed
- Flashes if Over Limit
- Permanently Mounted or mobile

Dynamic Advisory Speed Limits

- Intelligent Lane Control Signs (ILCS)
- Work Zones – Speed advisory



DWI

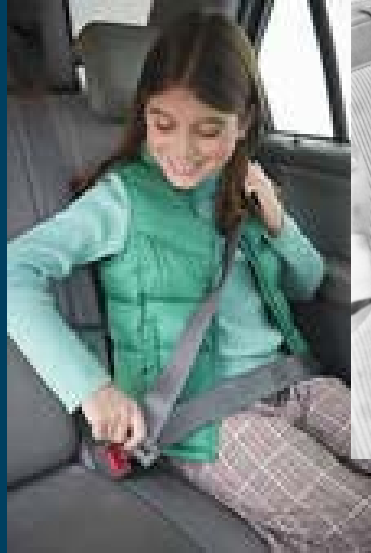
Ignition Interlock

- Device installed in vehicle and connected to the starter.
- Driver must blow into the device and measure an alcohol content under 0.02.
- If the alcohol content is at or above 0.02 vehicle will not start and information is transmitted to authorities.
- Less intrusive technology is being researched.



Seat Belts

- Minnesota's seat belt law is a primary offense.
- Drivers and passengers in all seating positions including the backseat must be buckled up.
- Currently technology to enforce is not required nor accepted by the market.



Run off the Road

Cable Median Barriers

- Cable median barriers can reduce fatal crashes by 90 percent.

Rumble Strips

- Grooves in the pavement designed to alert inattentive drivers through noise and vibration and reduce the number of accidents.

Vision Based Technology Available

Digital Roads



Intersections

Rural Intersection Conflict Warning System

- Reduce fatal and serious injury crashes at rural stop controlled intersection.
- Candidate intersections identified by Road Safety Plans
- Design Build IDIQ Contracting Method.

Connected Vehicles

- V to V





Minnesota Perspective ITS & Safety

“We’ve come a long way, Baby”
“But we have a long way to go!”

Your Destination...Our Priority

