Welcome to Minnesota
Minnesota Perspective
ITS & Safety

“We’ve come a long way, Baby”
How we got here?

- **Visionary Leadership**
- **Strong Partnerships**
  - U of M, DPS, MnDOT, industry associations, ITS America and its 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
TOWARD ZERO DEATHS
10 YEARS
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

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbelted</td>
<td>1,003</td>
<td>(42%)</td>
<td>1</td>
</tr>
<tr>
<td>Alcohol-Related</td>
<td>893</td>
<td>(35%)</td>
<td>2</td>
</tr>
<tr>
<td>Speeding-Related</td>
<td>704</td>
<td>(27%)</td>
<td>5</td>
</tr>
<tr>
<td>Involved Drivers Under 21</td>
<td>506</td>
<td>(20%)</td>
<td>7</td>
</tr>
<tr>
<td>Single Vehicle ROR</td>
<td>813</td>
<td>(32%)</td>
<td>4</td>
</tr>
<tr>
<td>Intersection</td>
<td>856</td>
<td>(33%)</td>
<td>3</td>
</tr>
<tr>
<td>Head-On and Sideswipe</td>
<td>543</td>
<td>(21%)</td>
<td>6</td>
</tr>
</tbody>
</table>
Teen 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
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“We’ve come a long way, Baby”
“But we have a long way to go!”

Your Destination...Our Priority