

Your Destination... Our Priority

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2010 National Summit for Rural Traffic Safety Culture - July 12, 2010

The Overlooked Crisis



What is Culture?

- The values people perceive for the benefits and costs when taking a certain action.
- Planned behavior where we have beliefs of what is right and wrong.

Nic Ward – June 2009



In Minnesota

- From 1995-2003 Fatalities were trending upward
- Recognized that we needed to redefine safety
- Department of Public Safety and the Department of Transportation led an effort to create a new vision
- The Toward Zero Deaths (TZD) initiative was developed



Safety Planning Coordination



TZD:

Established to coordinate safety efforts





Toward Zero Deaths



- Vision To reduce fatalities and serious injuries on Minnesota's roads to zero
- Mission To create a culture for which fatalities and serious injuries are no longer acceptable through the integrated application of education, engineering, enforcement, and emergency medical and trauma services. These efforts will be driven by data, best practices, and research.



TZD - The New Approach

- Consider All Roads
- Partner with all Four E's

Education, Enforcement, Engineering and Emergency Medical Services

• Proactive and Systematic





Where are Minnesota Fatalities happening?

- About 67% on Rural roads
- Nearly 50% on Local Roads



Critical Emphasis Areas 2005-2009

Driver Behavior Based Emphasis Areas				
Unbelted (Based on Veh. Occ. Fatalities)	896	(49%)	1	
Alcohol-Related	857	(35%)	2	
Speeding-Related	632	(26%)	5	Emphasis
Involved Drivers Under 21	439	(18%)	7	Area Fatality
Infrastructure Based Emphasis Areas	Rank			
Single Vehicle ROR	762	(31%)	4	Vermed
Intersection	808	(33%)	3	
Head-On and Sideswipe	521	(21%)	6	



Background



4/30/2010



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Highway Safety Improvement Program (HSIP)

- Decentralized funding for safety projects based on where fatalities occur
- Shift to require all Districts to target a proportion of safety funds for local jurisdictions
- Beginning in 2007, all projects are solicited, prioritized and approved centrally
- Projects are based on the Strategic Highway Safety Plan and supporting data.
- Priority is given to proactive or low-cost systematic projects.



Overall Successes to Date

- Record low number of fatalities in 2009 421
 - 2010 fatalities trending slight lower than 2009
- Strong TZD Partnership with DPS and other Safety Stakeholders Over 600 attending annual conference
- Active County Engineers Safety Committee and State-Aid Support
- Effective New Legislation
 - DWI Improvements Ignition Interlock (2010)
 - Primary Seat Belt legislation (June, 2009)
 - Booster Seat required for under age 8 and up to 4' 9" (July, 2009)
 - Graduated drivers license w/ nighttime, passenger & cell restrictions (Aug, 2008)
 - Ban Text Messaging while driving (Aug 2008)
- Trauma System Implemented Statewide by 2010 (all MN hospitals)
- Targeted High Visibility DWI Enforcement lots of local participation
- Regional TZD programs are developing throughout the state



Engineering Initiatives

- Governor's Low Cost/High Benefit Safety for Greater Minnesota (\$3.8M for 2010)
- "Gap" Projects (\$1.5M completed, 2.9M for 2010)
- Cable Median Barrier
 - 230 miles currently installed
 - Initial findings more than 13 lives have been saved



Speed Management High Enforcement of Aggressive Traffic (HEAT)

- Partnership with enforcement agencies to develop and aggressive driving education and heightened enforcement campaign
- Using data to select corridors and days and times for increased speed enforcement
- A clear evaluation plan was developed prior to implementation
- Goals are to effect the 85th percentile speed, heighten driver awareness of risky behavior and improve enforcement to positively impact speeds and crashes.

Summary of Activity - October 1, 2009 – March 31, 2010 HEAT enforcement

- Stopped 17,704 Vehicles (11,235 Male Drivers, 6,438 female drivers)
- Issued 6,699 citations (3,684 speed, 960 seat belts, 68 Move Over Law)
- Issued 16,216 warnings (9,076 speed, 486 seat belts, 185 Move Over Law)
- Arrested 24 people for DWI
- Arrested 114 people for other offenses (outstanding warrants, etc.)







Purpose of SHSP

To achieve a significant reduction in traffic fatalities and serious injuries on public roads









Sustainablilty/Liveability

Quality of Life!



Road Safety Plans

- Recognized a need to assist all jurisdictions in developing effective safety projects
- Safety plans will be developed for all Mn/DOT Districts and all 87 Counties by 2012
- A systematic assessment of roadway risks associated with fatal and serious injury crashes
- A prioritized list of infrastructure projects is the major product



Edge Risk Assessment



30/2010

 1 – Good Edge, Good Clear Zone

 2 – No Edge, Good Clear Zone

3 – No Edge, No Clear Zone



Curve-Related Roadway Departure

- Approximately 50% to 60% of roadway departure crashes are curve related
- Are all curves equally at-risk?
 - No

- Ranked based on Checkmark system 5 * System:
 - ADT Range
 - Radius Range
 - Severe Crash on curve
 - Intersection on curve
 - Visual Trap on curve



4/30/2010



7 ★ Rating System



County Highway Intersections	Geometry		Volume	Proximity		Commercial	
	Skew	On/Near Curve	ADT Ratio	previous STOP sign	RR Xing	Crashes	Development
Intersection 1	1	×	1	×			*
 Intersection 2 	×		✓	V		V	
Intersection 3						1	
 Intersection 4 			1	1	1		
Intersection 5		- X		1	1		
Intersection 6		×	1				×
Intersection 7	1	×	1	×		1	
Intersection 8	1		1				
4/30/2010							41



Schedule of Delivery

- Phase I October 15, 2009 to mid July 2010
- Phase II July 2010 to April 2011
- Phase III April 2011 to January 2012
- Phase IV January 2012 to September 2012





Challenges/Opportunities

- Complacency (safety advocates and the general public)
- Meeting our g
- Our Goal: Fewer than 400 fatalities by 2010
- Changing the engineering culture proactive/reactive, new policies
- Difficult to use HSIP funding for low cost local projects
- Lack of data and ease of accessibility for analysis
- Negative feedback to some low cost countermeasures
- Building and maintaining partnerships
- Evaluation of low cost countermeasures
- Behavioral Challenges
 - Distracted driving, Alcohol related crashes, Older drivers, Motorcycle fatalities
- Sharing Best Practices in Highway Safety





Goal: Zero Deaths

