

Behavioral Safety Strategies for Drivers on Rural Roads

Introduction

Consider the following 2012 statistics from the National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS):

- The fatality rate per 100 million vehicle miles traveled was 2.4 times higher in rural areas than urban areas (1.86 and 0.77 respectively).
- While 19 percent of the population lived in rural areas in 2012, rural fatalities accounted for 54 percent of fatalities.

A number of risky driving behaviors contribute to rural road fatalities, including low use of safety belts, alcohol-impaired driving, speeding, and being distracted or drowsy when driving. For example, in 2012, rural areas accounted for 54 percent of fatal alcohol-related crashes compared to 45 percent in urban areas. Furthermore, in 2012 a total of 54 percent of rural passenger vehicle occupants killed were unrestrained compared with 49 percent of urban passengers.

Local and rural road owners have a number of policies and programs available to address those driver behaviors that increase crash risk. This document describes the types of risky driving behaviors evident in rural areas and presents a summary of strategies that can be used to address these behaviors.

Behavior-based Safety Countermeasures

*Countermeasures that Work*¹ includes a variety of data-driven strategies that address risky driving behaviors common to rural areas. The list below provides example strategies from this resource to address each of these behaviors.²

Increase Seatbelt Usage

- Develop a recognition program that publically acknowledges or rewards law enforcement officers for fostering increased seat-belt use. Letters of commendation, uniform pins or ribbons, plaques, etc. are examples of recognition.
- If low seatbelt use among pickup truck drivers and passengers is an issue, conduct an enforcement program that targets these individuals.
- Conduct sustained, high-visibility enforcement initiatives.
- Continue current best practice enforcement and educational programs (e.g., “Click It or Ticket”).
- Provide more paid media campaigns in local publications such as newspapers, radio, and television as well as social media platforms.
- Conduct outreach to teens by sponsoring activities such as poster sessions, lectures, and educational events to reduce unsafe driving.



Reduce Speeding and Aggressive Driving

- Conduct public information campaigns and outreach activities that elevate the awareness of the dangers of aggressive driving.
- Educate the judiciary and elected officials on the risks associated with aggressive driving by sponsoring information exchange events and distributing fact sheets and brochures.
- Participate in events sponsored by transportation engineering and planning communities to highlight the impact of aggressive driving on road safety.
- Increase enforcement targeting aggressive driving.

Reduce Impaired Driving

- Implement or increase the number and effectiveness of sobriety checkpoints and targeted enforcement.
- Work with State/local government to discuss the need for stronger and more effective legislation, such as license suspension or mandatory ignition interlocks for first time offenders.
- Develop educational programs targeting specific audiences, such as elementary and middle school students, or the 18-to-34 year-old age group.
- Create effective media campaigns in both visual and print media.

Reduce Distracted Driving

- Develop a public outreach campaign that coincides with other jurisdictions' efforts to raise awareness about distracted driving.
- Reduce roadside distractions.
- Pass and enforce legislation that specifically penalizes distracted driving, including categorizing distracted driving as a type of negligent driving.

Addressing risky driving behaviors requires the joint efforts of a number of stakeholders including law enforcement, engineering and public works, school officials, and health professionals. The strategies presented above include a range of education and enforcement actions designed to affect driving behavior. Some of these strategies may require passage of appropriate local laws (e.g., install speed advisory trailers, increased speed enforcement on locally owned roads) while others (e.g., mandatory ignition interlocks) might require State or Federal action. Each of these strategies is designed to bring about a change in traffic safety culture among the driver population.

Influencing Safety Culture

Traffic safety culture relates behaviors considered to be socially acceptable within a peer group, to group reactions to violations of these behaviors.³ Evidence suggests that differences in safety culture may explain variations with respect to driving behaviors among population groups.⁴ For example, because rural drivers tend to use seatbelts at a lower rate than urban drivers, it has been speculated that this is a reflection of a different standard of acceptable behavior. Safety professionals believe that strategies that shift cultural norms (i.e., majority perceptions of acceptable behavior) will have lasting impact, reducing risky driving behaviors such as speeding, impaired driving, distracted driving, and low seatbelt use.

Application of a safety culture concept represents a new model to support strategies affecting high-risk driving behaviors. Shifting the safety culture requires influencing the level of social acceptance of high-risk behaviors. Changing these norms necessitates the long-term commitment of leadership and the delivery of clear messages. Changes can take several generations; therefore, influencing young people can be critical.

The “Most of Us Wear Seatbelts” Campaign conducted in Montana was the first statewide campaign using the social norms approach to increasing seatbelt use. The campaign was designed to increase the number of adults who wear their seatbelts and generated statistically significant results with regard to several measures of the target population’s behaviors and perceptions after only one year.

For example, before the program, 85 percent of the respondents reported that they wore safety belts the last time they drove a vehicle. However, they estimated that 54 percent (the mean estimate) of typical Montana adults wore safety belts the last time they drove. After just one year of an intensive TV and radio media campaign, Montanans’ perceptions of the frequency of safety belt use increased significantly. As these perceptions of safety belt use increased, so did reported safety belt use. Increases in safety belt use were seen across a variety of measures, including the frequency with which respondents reported: 1) wearing a safety belt at least 90 percent of the time, 2) always wearing a safety belt as a passenger, and 3) always making passengers wear safety belts when driving.⁵

Application of the safety culture concept offers the potential to address various driver behavioral challenges facing local and rural road owners. The Most of Us example demonstrates that policies and programs that target changes in underlying social norms may shift public perceptions regarding acceptable driving behaviors.

Resources

There are a number of resources available to support development of programs and policies to reduce high risk driving behaviors:

AAA Foundation for Traffic Safety, *2012 Traffic Safety Culture Index* (Washington, DC: 2012).

Federal Highway Administration, *Developing Safety Plans: A Manual for Local Rural Road Users*, FHWA-SA-12-017 (Washington, DC: March 2012)

NHTSA, *Evaluation of the Most of Us Arizona High School Seatbelt Campaign* (Washington, DC: 2008).

NHSTA, *Traffic Safety Fact Sheets 2010 Data* (Washington, DC: July 2012).

NHTSA, *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* (Washington, DC: 2011).

Transportation Research Board (TRB), *NCHRP Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan; Volume 11: A Guide for Increasing Seatbelt Use*, National Cooperative Highway Research Program (Washington, DC: TRB 2005).

Transportation Research Board (TRB), *NCHRP Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan, Vol. 16: A Guide for Reducing Alcohol-Related Collisions* (Washington, DC: Transportation Research Board, 2005).

Transportation Research Board (TRB), *NCHRP Report 500, Guidance for Implementation of the AASHTO Strategic Highway Safety Plan, Vol. 23: A Guide for Reducing Speeding-Related Crashes*, National Cooperative Highway Research Program (Washington, DC: TRB, 2005).

Transportation Research Board (TRB), *NCHRP Report 500: Guidance for Implementation of the AASHTO Strategic Highway Safety Plan, Volume 1: A Guide for Addressing Aggressive-Driving Collisions*, National Cooperative Highway Research Program (Washington, DC: TRB, 2005)

Transportation Research Board (TRB), *NCHRP Report 600 — Human Factors Guidelines for Road Systems, Second Edition*, National Cooperative Highway Research Program (Washington, DC: TRB, 2012).

Western Transportation Institute, *White Paper on Traffic Safety Culture*, July 2010.

¹ NHTSA, *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices* (Washington, DC: 2011).

² A. Ceifetz, et.al., *Developing Safety Plans: A Manual for Local Rural Road Users* (Washington, DC: March 2012).

³ Western Transportation Institute, "White Paper on Traffic Safety Culture," White Paper No 2, July 2010. p. 1.

⁴ Ibid.

⁵ Montana State University, "Most of Us Wear Seatbelts Campaign" website.

Available at: http://www.mostofus.org/mou_projects/most-of-us%2ae-wear-seatbelts-campaign-2002-2003/