

## TECHNICAL SUMMARY

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### LRRB PROJECT COST:

\$75,373



**Understanding Younger Drivers** 





This project developed a model presentation on safety and younger drivers that local agencies can customize to their needs.



# Putting Research into Practice: A Toolkit for Improving Safety Among Younger Drivers

#### What Was the Need?

Road safety is a consistent and growing concern, and communities throughout the state are focusing on making their roads safer, particularly for young drivers. Traffic crashes are the leading cause of death for young people, and drivers between the ages of 15 and 29 are overrepresented in traffic crashes. In Minnesota in 2013, 124 motorists under 29 were killed in traffic crashes and 12,262 were injured.

Local transportation engineers are often asked to speak at events about the factors involved in traffic safety: engineering, enforcement, emergency medical services and education. A toolkit of resources was needed to help them effectively educate and engage communities to reduce crashes involving younger drivers.

#### What Was Our Goal?

This project sought to synthesize existing information about road safety and younger drivers into a toolkit that would provide a valuable resource for use in outreach efforts. Investigators synthesized existing information about road safety and younger drivers, and used it to develop a toolkit of resources that local agencies, driving educators and others can use in outreach efforts to promote safer driving behaviors among drivers under the age of 29.

### What Did We Implement?

This project implements a host of federal and Minnesota traffic safety research and data, primarily from the past 10 years. It also incorporates research on teen attitudes and behavior from the fields of medicine, psychology and addiction treatment. The project develops that research into a practical toolkit accessible to local engineers, teachers, police officers and others working to improve safety among young drivers.

#### How Did We Do It?

Investigators collected information related to safety among younger drivers from a variety of sources. As a foundation for improving safe driving practices among younger drivers, this information focuses on the role of driver behavior in traffic crashes, younger driver attitudes and motivations for high-risk driving, and facts about crashes involving younger drivers in Minnesota.

In addition to synthesizing safety data, the project team analyzed the data closely to extract information about specific driver behaviors, which had not previously been done.

Using this information, team members produced a resource toolkit that includes fact sheets, a library of public service announcements available online, and a model presentation that can be readily adapted to different audiences.

## **What Was the Impact?**

Driver behavior is a factor in 93 percent of vehicle crashes. Risky driver behavior, such as speeding or not wearing seat belts, is the greatest contributor to severe crashes, particularly for younger drivers. As a result, persuading motorists through education to avoid these risky behaviors can greatly reduce the number of severe crashes.

"We dug into the data to address specific driving behaviors that can increase the likelihood of traffic collisions, which no one has really done before. The information should be useful for anyone educating younger drivers."

—Renae Kuehl, Senior Associate, SRF Consulting Group, Inc.

"Local engineers are often asked to make presentations about traffic safety and what they're doing to make roads safer. This toolkit provides fact sheets and a model presentation that can be adapted to local needs."

—Mitch Rasmussen, MnDOT State Aid Division Director

#### **Produced by CTC & Associates for:**

Minnesota Department of Transportation Research Services & Library MS 330, First Floor 395 John Ireland Blvd. St. Paul, MN 55155-1899 651-366-3780 www.mndot.qov/research



A panel of drivers under age 29 ranked "Embrace Life," a PSA from the Sussex Safer Roads Partnership encouraging seat belt use, as one of the most impactful and effective driving safety PSAs. The toolkit includes a library of 40 highly impactful PSAs.

Teen drivers are three times more likely than drivers over 20 to be in a fatal crash. Several risk factors are specific or common to adolescents: heightened impulsivity and sensation-seeking behavior, lack of driving skills and experience, driving in high-risk environments such as at night or with adolescent passengers, willingness to engage in risk-taking behaviors and overestimation of multitasking ability while driving.

The toolkit includes a series of five fact sheets to highlight younger driver involvement in crashes. The first provides general information about fatal and severe injury crashes among younger drivers in Minnesota. The other four address the impact of specific behaviors, including driving without seat belts, driving while impaired, speeding and distracted driving.

In addition, the toolkit contains several resources designed to promote behavior change among younger drivers, including:

- Recommended community-based safety strategies. These include laws and local ordinances with strong and swift penalties, enforcement of the laws, and education about enforcement and the risks affiliated with the behaviors addressed by the laws.
- A library of PSAs about traffic safety. The project's original scope included developing a PSA, but the focus changed when investigators discovered the large number of driving safety videos currently available online. They assembled a collection of these videos and then showed them to a panel of drivers under 29, who reviewed and ranked the videos to identify the most impactful ones. Investigators created lists of the 10 most effective videos focused on unbelted driving, impaired driving, speeding and distracted driving.
- A listing of partnerships available through the Minnesota <u>Toward Zero Deaths</u> program.
- A model PowerPoint presentation that agencies, educators and others can use to engage local communities. The presentation is designed to be easy to modify so users can delete data that does not apply to their community or add new information that is relevant. The report also provides instructions on accessing the <a href="Minnesota Crash Mapping Analysis Tool">Minnesota Crash Mapping Analysis Tool</a> to collect local safety data to help customize the presentation.

#### What's Next?

The toolkit should be valuable for local engineers, teachers, law enforcement and others who are working to improve road safety by reducing unsafe driver behavior. The Local Road Research Board is actively promoting the toolkit at conferences and through its publications.

This Technical Summary pertains to the LRRB-produced Report 2015RIC04, "Younger Drivers Toolkit for Local Agencies," published August 2015. The full report can be accessed at mndot.gov/research/TS/2015/2015RIC04.pdf.