



Younger Drivers Toolkit for Local Agencies

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August 2015

Research Project
Report Number 2015RIC04



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Technical Report Documentation Page

1. Report No. MN/RC - 2015RIC04	2.	3. Recipients Accession No.	
4. Title and Subtitle Younger Drivers Toolkit for Local Agencies		5. Report Date August 2015	
		6.	
7. Author(s) Rena Kuehl, Cheri Marti, Michael Marti		8. Performing Organization Report No.	
9. Performing Organization Name and Address SRF Consulting Group, Inc. One Carlson Parkway North, Suite 150 Minneapolis, MN 55477-4443		10. Project/Task/Work Unit No.	
		11. Contract (C) or Grant (G) No.	
12. Sponsoring Organization Name and Address Minnesota Department of Transportation Research Services Section 395 John Ireland Boulevard Mail Stop 330 St. Paul, Minnesota 55155		13. Type of Report and Period Covered Final Report	
		14. Sponsoring Agency Code	
15. Supplementary Notes Report: http://www.dot.state.mn.us/research/TS/2015/2015RIC04.pdf PowerPoint file: http://www.dot.state.mn.us/research/documents/YoungerDrivers.pptx			
16. Abstract (Limit: 200 words) <p>This <i>Younger Driver Toolkit for Local Agencies</i> is intended to provide Minnesota local city and county transportation and traffic safety engineering staff with the information needed to conduct focused presentations to engage local communities to improve safety for Minnesota's highest risk driving population—younger drivers ages 15-29. The Toolkit is structured to first provide a foundation to understand the "why" behind younger driver severe crashes. Second, the toolkit features ideas and resources to help educate and promote community engagement to reduce younger driver-related traffic deaths and injuries. Toolkit outline:</p> <p>Understanding Younger Driver Safety Challenges</p> <ol style="list-style-type: none"> 1. The Importance of Driver Behavior to Improve Road Safety 2. Understanding Younger Drivers' Attitudes and Motivations for High-Risk Driving 3. Minnesota Younger Driver Crash Fact Sheets <p>Resources to Promote Younger Driver Behavior Change</p> <ol style="list-style-type: none"> 1. Example Community-Based Safety Strategies to Strengthen Younger Driver Safety 2. Public Service Announcement (PSA) Videos 3. Toward Zero Deaths (TZD) Partnerships 4. Younger Driver PowerPoint Presentation Template 			
17. Document Analysis/Descriptors		18. Availability Statement	
Toward Zero Deaths TZD Speed Impaired Alcohol Distracted Unbelted	PSA Younger driver Safety Crash Crash facts Toolkit	No restrictions. Document available from: National Technical Information Services, Springfield, Virginia 22161	
19. Security Class (this report) Unclassified	20. Security Class (this page) Unclassified	21. No. of Pages 57	22. Price

Younger Drivers Toolkit for Local Agencies

FINAL Report

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August 2015

Published by:

Minnesota Department of Transportation
Minnesota Local Road Research Board
Research Services Section
395 John Ireland Boulevard, MS 330
St. Paul, Minnesota 55155-1899

This report represents the results of research conducted by the authors and does not necessarily represent the views or policies of the Minnesota Department of Transportation and/or the Center for Transportation Studies. This report does not contain a standard or specified technique.

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Acknowledgements

We wish to thank the Minnesota Local Road Research Board (LRRB) and its Research Implementation Committee (RIC) for the financial support to make this important toolkit a reality. The Technical Advisory Panel that steered this project was extremely helpful in identifying key issues and concerns related to young driver traffic safety issues and the resources needed at the local level. They also were very generous with their time in attending meetings, reviewing and providing oversight for this final document.

The authors would like to thank the following individuals and organizations for their contributions to this document:

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In addition, we would like to thank the Office of Traffic Safety for behavioral facts and resources extensively referenced in this Toolkit as well as the MnDOT Library for their assistance in securing numerous references included in the appendix of this report.

We would also like to acknowledge the Minnesota Toward Zero Deaths program and the outstanding work they do to reduce traffic crashes, injuries and deaths on Minnesota roads. Specifically, the program co-leadership from the Office of Traffic Safety, Minnesota Department of Public Safety (DPS – OTS), and the Office of Traffic, Safety, and Technology, Minnesota Department of Transportation (MnDOT OTST).

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The Problem: Minnesota’s High-Risk Younger Drivers

Traffic crashes are the leading cause of death for young people. Across the state in 2013, 124 motorists age 29 and younger died in traffic crashes representing 32 percent of all traffic deaths; 12,262 were injured representing 40 percent of the all traffic injuries.²

Minnesota drivers age 15-29 are over-represented in traffic crashes; these drivers represent 23 percent of the licensed drivers, yet account for 35 percent of the crash-involved drivers. It is because of this over-representation and the tragic community impact of traffic crashes on young lives, that the Minnesota Local Road Research Board (LRRB) directed the development of the *Younger Driver Toolkit for Local Agencies*.

Toolkit Purpose and Content

This *Younger Driver Toolkit for Local Agencies* is intended to provide Minnesota local city and county transportation and traffic safety engineering staff with the information needed to conduct focused presentations to engage local communities to improve safety for Minnesota’s highest risk driving population—younger drivers ages 15-29. The Toolkit is structured to first provide a foundation to understand the “why” behind younger driver severe crashes. Second, the toolkit features ideas and resources to help educate and promote community engagement to reduce younger driver-related traffic deaths and injuries.

Understanding Younger Driver Safety Challenges

1. The Importance of Driver Behavior to Improve Road Safety
2. Understanding Younger Drivers’ Attitudes and Motivations for High-Risk Driving
3. Minnesota Younger Driver Crash Fact Sheets

Resources to Promote Younger Driver Behavior Change

1. Example Community-Based Safety Strategies to Strengthen Younger Driver Safety
2. Public Service Announcement (PSA) Videos
3. Toward Zero Deaths (TZD) Partnerships
4. Younger Driver PowerPoint Presentation Template

How to Use this Toolkit

The primary intent of this toolkit is to provide information on younger drivers for local agencies to use when giving presentations to the community. When preparing materials for a presentation, consider the following:

- Identify primary audience, presentation purpose and time available.
- Contact your Regional TZD Coordinator for local/regional younger driver initiatives or resources to incorporate into presentation. *(See section TZD Partnerships.)*
- Review “Understanding Younger Driver Safety Challenges” section of the Toolkit and note research and facts most relevant to audience and purpose.
- Select appropriate “Younger Driver Fact Sheets” for distribution.
- Remove/modify “Younger Driver PowerPoint Presentation Template” slides as needed.
 - Incorporate PSA’s of interest.
 - Select preferred community-based safety strategies. (Consider local/regional TZD initiatives to leverage and build upon.)
- Incorporate local peer-to-peer testimony of a younger driver severe crash and lessons learned when possible.
- Consider local TZD partner participation to provide important multi-disciplinary perspectives in addition to traffic safety engineering such as local law enforcement, emergency medical and trauma care providers, teen driver educators and traffic safety advocates.

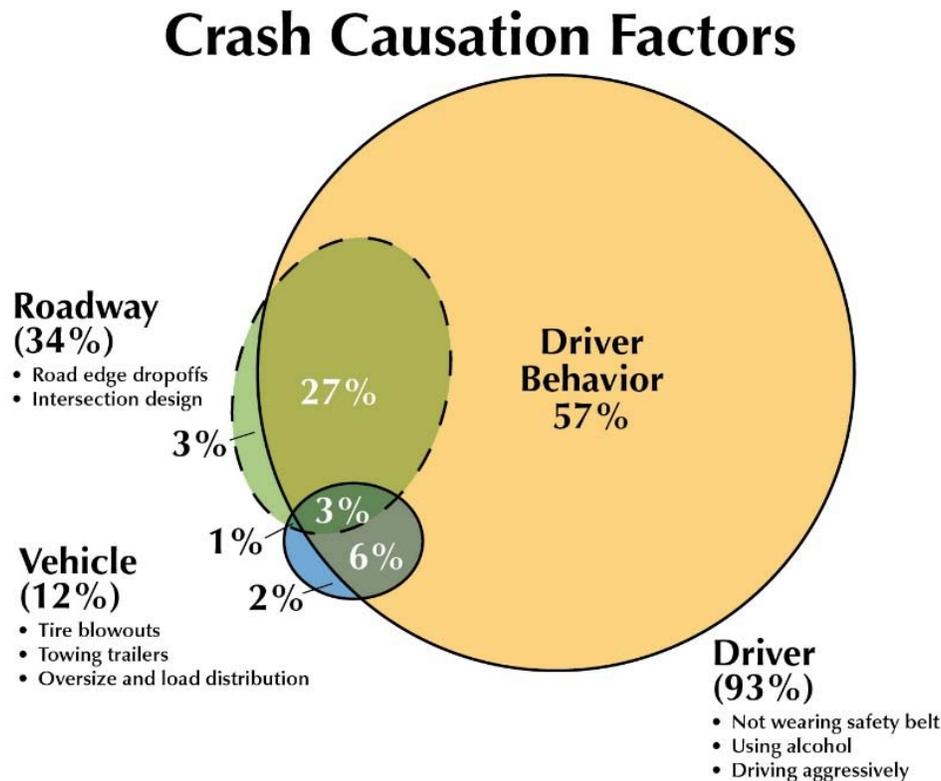
Understanding Younger Driver Safety Challenges

To improve younger driver safe driving practices, it is important to first provide a foundation for the basis of community involvement and traffic safety strategies. This foundation involves understanding: 1) the role of driver behavior in traffic crashes, 2) younger driver attitudes and motivations for high-risk driving, and 3) Minnesota younger driver crash facts to best focus resources and strategies to strengthen younger driver behavioral change.

1. The Importance of Driver Behavior to Improve Road Safety

The Minnesota LRRB recognizes that driver behavior is the most significant factor contributing to serious crashes on Minnesota’s local roads. Traffic crashes may result from any combination of overlapping crash factors including the roadway, the vehicle, and driver behavior. The following diagram from the Federal Highway Administration’s Office of Safety Programs illustrates the interrelationship of these crash factors:

Figure 1: Traffic Crash Causation Factors



Source: Human Factors & Highway Safety, Elizabeth Alicandri, FHWA Office of Safety Programs

The above figure reflects that in 93 percent of vehicle crashes the crash was a result, in part, of driver behavior. Research supports and experts agree that in most cases driver behavior—risky decisions, driver error, lapses of attention, and driver limitations—is the chief factor contributing to traffic crashes.¹ Serious traffic crashes on Minnesota’s local road system can be largely prevented and reduced if motorists, especially younger drivers, were persuaded to engage in key safe driving practices such as:

- Wear a seat belt
- Drive at safe speeds
- Pay attention
- Plan ahead to avoid impaired driving

For maximum safety benefit and to support a comprehensive safety approach, local road safety analyses and strategies to address younger driver safety should address driver behavior elements in addition to infrastructure safety elements to help ensure the safest and most forgiving roadway possible. This is an important concept for local elected officials and the community to understand as they seek to improve road safety—you can have the best-engineered and maintained road for safety, but the problem isn’t solved. Risky driver behavior is the greatest contributor to severe crashes and, even more so, for high-risk younger drivers.

2. Understanding Younger Drivers' Attitudes and Motivations for High-Risk Driving

Although all younger drivers ages 15-29 are at higher-risk for a crash, teen drivers ages 15-19 are three times more likely than drivers over the age of 20 to be in a fatal crash and have the highest crash risk per mile driven of all age groups apart from the most elderly drivers.³ The elevated risk for teen drivers, highest in the first six months of licensure, is attributed to several adolescent-specific risk factors, including:

- Immaturity and developmental characteristics such as heightened impulsivity and sensation-seeking behavior⁴
- A lack of driving skills and experience
- Exposure to higher risk driving environments (e.g., driving at night or with adolescent passengers)
- Greater willingness to engage in risk-taking behavior (e.g., distracted driving, speed and seatbelt non-use)^{5,6}
- Overestimation of their ability to multitask while driving⁷

The Minnesota DPS Office of Traffic Safety reveals that teen crashes have predictable and preventable patterns, such as, teens:

- Are prone to making simple driving errors, often while speeding.
- Are twice as likely to crash at night.
- Commonly crash while driving to and from school, especially after school, and with other teens in the car.
- Crash risk greatly increases with the presence of teen passengers; teen passengers promote risk-taking behaviors.

To help protect teen drivers, [Minnesota's enhanced Graduated Drivers Licensing laws](#) help reduce teen drivers' exposure to driving risks while allowing novice drivers to gain a strong foundation of driving experience. What younger drivers age 20-29 share with teen drivers is the propensity to carelessly take risks while driving without thinking through the potential consequences of their life-threatening decisions. Such high-risk behaviors typically include lack of seat belt use, speeding and distractions; unlike teen drivers, drivers age 20-29 are at higher risk for impaired driving. Teen and young adult drivers know what they are supposed to do to arrive at their destination safely; the problem is not a lack of knowledge, but rather one of perceptions of risk, beliefs, attitudes and motivations to engage in risky driving behaviors.

The following are research highlights providing insight into younger driver attitudes, perceptions and motivations to drive unbelted, impaired, speed, and distracted.

Unbelted Occupants

Minnesota seat belt use in 2013 was at a record high of 94 percent—yet young motorists ages 15–29 account for nearly 43 percent of all unbelted deaths and nearly 50 percent of all unbelted serious injuries—yet this group represents only 23 percent of all licensed drivers.³³ On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Not wearing a seatbelt was a contributing factor in 740 (24%) of

these crashes, averaging 148 severe crashes per year. In Minnesota, teens also have the lowest seat belt use rate of all age groups.

- Teen passengers are at highest risk for unbelted severe crash. According to national crash records, teen passengers killed in crashes use seat belts 25 percent less often than passengers aged 20 and older and 20 percent less often than fatally injured teen drivers.³⁴
- Seat belts are proven to save lives. When used, seat belts reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and light-truck occupants by 60 percent.³⁵
- Social pressure to not buckle up and poor comprehension of the risks of injury contribute to lower seat belt usage among teen drivers and passengers.³⁶
- An earlier study indicates drivers are *less likely* to wear safety belts when traveling a short distance, under time pressure, and running errands/making a lot of stops. In addition, survey respondents indicated they were less likely to buckle on two-lane, rural roads.³⁷
- Factors influencing drivers to *more likely* wear safety belts include: ³⁸
 - Poor weather conditions
 - Driving with a child
 - Driving at night
 - Strong belt enforcement
 - Reminder from someone to buckle-up
 - Higher fines
 - Increase in insurance
 - Work/school-related trips
 - Driving on interstate roads
- Research supports that resistant, seat belt non-users:³⁹
 - Harbor mistrust about the injury prevention benefits of belt use
 - Maintain an illusion of control to avoid a crash or injury in the event of a crash
 - Believe belt use is a personal choice, regardless of existing laws
 - Are resistant to social pressure to use safety belts claiming they will wear belts in the future, but don't
 - Are more inclined to wear a seat belt in the presence of law enforcement and stronger penalties
- Considerations to increase belt use among resistant, young adult non-users:
 - Strengthen perception of being stopped and ticketed through high-visibility enforcement, including communication about the enforcement
 - Advocate for stronger non-belt use penalties
 - Adopt employer policies and incentives/consequences for on-the-job non-belt use

- Develop peer messaging to address belt non-use where temptation is more likely (e.g., time pressure, quiet rural road, short distance, etc.)⁴⁰
- Encourage non-users in planning for future belt use. Research shows that people consciously planning when, how and where they will implement newly formed intentions, are far more likely to actually do it.⁴¹
- Considerations to increase belt use among teen motorists: ⁴²
 - Strengthen perception of being stopped and ticketed through publicized belt-use enforcement
 - Implement friendly, peer competitions with incentives to increase observed belt use.
 - Incorporate peer-to-peer outreach and persuasion to help change norms or expectations and attitudes around seat belt use.
 - Effectively frame belt-use messaging to compel teen behavior change; shift educational efforts to the latest social media outlets to reach younger audiences.
 - Engage parents to monitor teen belt use and impose consequences for unbelted motoring.
 - Create culturally and ethnically sensitive messaging to appeal to increasingly diverse younger driver population.

Impaired Driving and Alcohol-Related

On Minnesota’s roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five-year period from 2009-2013, averaging 618 severe crashes per year. Alcohol-related driving was a contributing factor in 731 (24%) of these crashes, averaging 146 severe crashes per year.

- Drivers under age 19 are less likely than adults to drive after drinking alcohol; however, when they do drink and drive, their risk of crash involvement is greater compared with adults who drink and drive, due to: ⁴³
 - The greater likelihood to consume alcohol in larger quantities over shorter periods, resulting in a higher blood alcohol concentration when they do drive.
 - Their drinking results in greater impairment at the same blood alcohol concentration compared with adults even though adolescents drink less often.
 - The effects of alcohol exacerbate adolescents' inexperience and lack of driving-critical skills.
- Drivers 19 and younger who engage in risky driving behaviors (e.g., driving after midnight, non-belt use, distracted driving, showing off while driving, tailgating and speeding) are more likely to drink and drive and ride with an intoxicated driver. ⁴⁴
- Perceptions or beliefs about what is acceptable drinking and driving behavior of one’s peers—how many drinks it is believed “most friends” have before getting behind the wheel—heavily influences drinking and driving decisions. ⁴⁵
- Studies have shown that younger drivers often hold misconceptions and exaggerated views of the risk-taking behavior of their peers. The minority of younger drivers who recklessly drive under the influence of alcohol often wrongly believed they are no

different from most young people their age. Overestimating the approval of peers influences motivation and the greater likelihood to engage in drinking and driving.⁴⁶

- Frequent heavier drinkers, more common in young adults, feel less intoxicated than blood alcohol concentrations (BACs) may indicate due to developed tolerance leading to an increased likelihood for driving under the influence.⁴⁷
- Considerations to reduce impaired and alcohol-related severe crashes:
 - Safety interventions aimed at reducing students alcohol-related expectancies and correcting perceptions of peers' attitudes toward drinking and driving reduce students' motivations to engage in this dangerous behavior.⁴⁸
 - Risky driving decisions (e.g., lack of belt use, speeding) should be incorporated into substance use and DWI prevention programs as potential risk factors.
 - Interventions familiarizing students and young adults with standard BAC thresholds may be helpful in raising awareness of actual as opposed to perceived intoxication during drinking occasions.⁴⁹

Speeding

Between 2011-2013, illegal or unsafe speed accounts for nearly 25 percent of the factors cited in fatal crashes in Minnesota for drivers under age 30, the highest-risk group for speed-related crashes, compared to only 5 percent of the factors cited for drivers age 65 and older.⁸ On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Speeding was a contributing factor in 648 (21%) of these crashes, averaging 130 severe crashes per year.

- Far too many drivers speed and speeding drivers generally fall into four speeding patterns, including: 1) Infrequent incidental speeding (may be unintentional), 2) Infrequent situational speeding (e.g., being late), 3) Casual speeding (frequent for small portion of the trip), and 4) Habitual speeding (frequent for large portion of the trip).⁹
- Drivers who speed (*defined as 10 mph or more above the posted speed*) perceived posted speed limits as more of a minimum speed.¹⁰
- Drivers have different beliefs about how fast they can drive before receiving a ticket, and how fast they can safely travel, which may vary by road-type.¹¹
- Drivers who speed believe its safe for the roadway conditions (e.g., visibility, wide roads) and crashes or near misses experienced changed driving behaviors in related or similar environments only.¹²
- Factors influencing drivers to *increase* speed include situational factors (e.g., being late), others in the car/social pressure, inattention, and positive feelings about driving fast.¹³
- Factors influencing drivers to *decrease* speed include speed ticket or crash risks, others in the car/social pressure, and critical driving events experienced in the past (e.g., traumatic driving event).¹⁴

- Demographic variables (e.g., age, gender, income level, [education](#) level, etc.) are poor predictors of the frequency and duration of speeding; habitual speeders are often comprised of drivers from all demographic groups.¹⁵
- Considerations to reduce speed-related severe crashes:
 - Strengthen perception of being stopped and ticketed through high-visibility enforcement, including communication about the enforcement
 - Enforce posted speed limits and provide consistent and sustained enforcement
 - Advocate for stronger speed penalties; consider stronger city ordinances for speeding on local roads
 - Educate younger drivers (and parents of teen drivers) about the physics of speed and the impact of collision speed on crash severity and injury outcomes.
 - Adopt employer policies and incentives/consequences for speeding while on-the-job

Distracted Driving

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Distracted driving was a contributing factor in 530 (17%) of these crashes, averaging 106 severe crashes per year.

- Although there are many driver distractions, cell phone use is particularly risky because of the frequency of drivers engaging in the behavior and for greater lengths of time.¹⁶
- Estimates indicate that drivers using cell phones, when looking ahead, fail to see up to 50 percent of the information in their driving environment.¹⁷
- Inattention blindness prevents drivers from processing everything in the roadway environment in order to quickly identify potential hazards and respond to unexpected situations.¹⁸
- Multi-tasking is a myth. Instead, brains "task-switch" making fast-processing, linear choices on what to attend to- everything else not in the first line of attention gets fuzzy. When on the phone or doing other tasks while driving, looking ahead isn't enough to effectively anticipate and respond to prevent a crash.¹⁹
- Engaging in visual-manual tasks (e.g., reaching for phone, dialing, texting) associated with the use of hand-held phones and other portable devices increased the risk of getting into a crash by three times.²⁰
- Younger drivers are increasingly reliant on their phones to stay connected. Nationally, 78 percent of teens and young adults say they have read a text message while driving; 71 percent say they have composed/sent text messages while driving.²¹
- Teen drivers, as compared with adults, divert their attention to secondary tasks for longer periods at a time, which is associated with a sizeable increase in crash risk.²²

- Staying socially connected and appearance to peers in the vehicle are of greater importance to teens and young adults. The presence of one peer passenger increases teen crash risk by 50 percent; add 2 or more passengers and the risk is four times greater. These factors, combined with heightened sensation seeking and risk taking, can lead teen drivers to take much greater risks due to distractions than adults.²³
- Distracted driving is highly under-reported, due to:
 - Driver reluctance to admit behavior – there is no “blood alcohol test” for distracted driving.²⁴
 - Lack of witnesses and death of distracted drivers leaves little evidence of the distraction.²⁵
 - Time and resource limitations of law enforcement; difficulty obtaining cell phone records and/or knowing the precise time of the crash.²⁶
- Driver attitudes revealed in a NHTSA-sponsored 2010 national telephone survey of over 6,000 drivers 18 and older include:²⁷
 - Drivers underestimate the negative effects that cell phone use has on driving; more than half believe that using a cell phone and or sending a text message/e-mail makes no difference on their driving performance.
 - As passengers, 90 percent said they would feel very unsafe if their driver was talking on a handheld cell phone or texting/e-mailing while traveling with them.
 - Drivers younger than 25 are up to 3X more likely than older drivers to read or send text messages or emails; about half (49%) of those 21 to 24-years old report doing so.
 - About one third of drivers 18 to 24-years old said they can take their eyes off the road for 3 to 10 seconds or more before driving becomes significantly more dangerous.
- The “addictive” nature of cell phone use. Research demonstrates that human’s dopamine “seeking system” propels one into action and is stronger than the separate “liking system” which makes one feel satisfied and pauses one’s seeking. Dopamine launches our seeking behavior—Facebook, Twitter, Internet searching, and texting—resulting in nearly instant gratification of our strong desire to seek, which may, in turn, fuel a dopamine-induced addictive loop. One seeks and gets rewarded for seeking, which makes one seek more. Consequently, It becomes harder and harder to stop looking at email, stop texting, or stop checking your cell phone to see if you have a message or a new text.²⁸

The dopamine effect is further stimulated by: ²⁹

- Small amounts of information coming in so that it doesn't full satisfy (e.g., text message)
- Anticipation of a reward
- Unpredictability (e.g., unopened email).
- Specific "cues" that signifies something is going to happen (e.g., text notification)

- Considerations to reduce distracted driving behaviors among teen and young adult drivers:
 - Promote turning off cell phones, the use of call and text-blocking technology while driving, or placing phones out of reach to avoid the urge to dial, answer, read, or send electronic communication. Encourage passengers to handle calls/texts.³⁰
 - Parents and peers are critical influencers for teen drivers. The observed behavior (safe or unsafe) establishes norms or expectations regarding acceptable driving behavior and perceived distracted driving risk.³¹
 - Safety interventions that target parental modeling, increase parental monitoring. Correcting youth misperceptions about both parent and peer actual distracted driving behaviors may aid in decreasing teen distracted driving crash risk.³²

3. Minnesota Younger Driver Crash Fact Sheets

A series of five facts sheets based on severe crashes (fatal and life-changing injury crashes only) were developed to highlight younger driver involvement in crashes. The first fact sheet is a summary of crashes for all younger drivers, followed by four fact sheets that highlight younger driver involvement in specific driver behaviors:

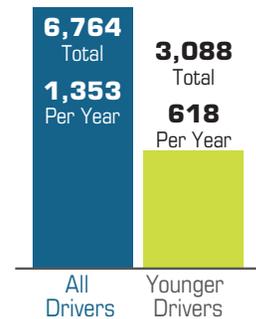
- All Younger Drivers
- Unbelted
- Impaired Driving
- Speeding
- Distracted Driving

The data for these fact sheets includes data for younger drivers ages 15-29 for the years 2009-2013 and was provided by the Minnesota Department of Public Safety, Office of Traffic Safety. A summary of how to use the Minnesota Crash Mapping Analysis Toll (MnCMAT) to access similar younger driver crash data at a local level is provided in this toolkit after the fact sheets.

Overview Younger Drivers: Fatal and Severe Injury Crashes

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. The crash data provided in this fact sheet is for younger drivers ages 15-29, unless otherwise noted. If there was a significant difference in data for the two age groups of 15-20 and 21-29, the data is shown separately. **46% of crashes each year involve younger drivers.**

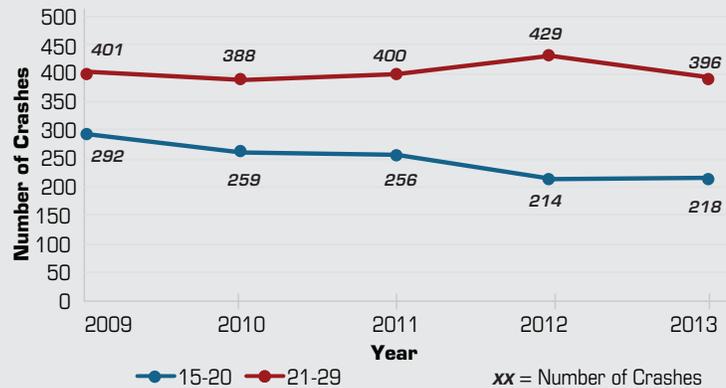
Severe Crashes Summary (2009-2013)



Source: Minnesota severe crash (K+A) data from 2009-2013, MN DPS

Crashes by Year

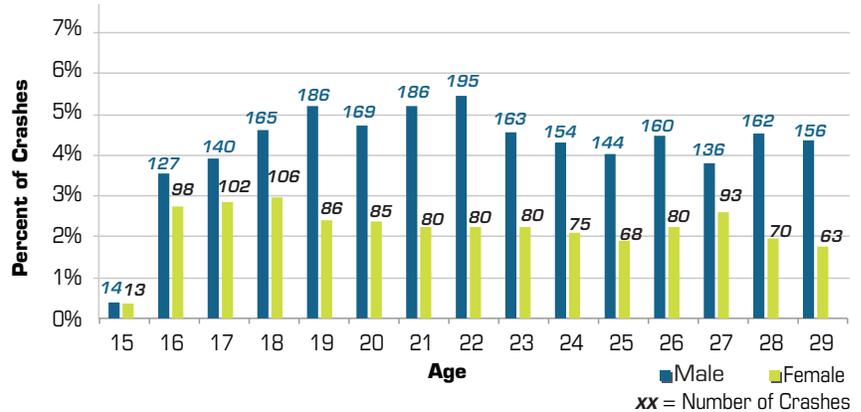
Younger driver severe crashes for ages **21-29 have remained consistent** over the past five years, while crashes for ages **15-20 have decreased**.



Crashes by Age and Gender



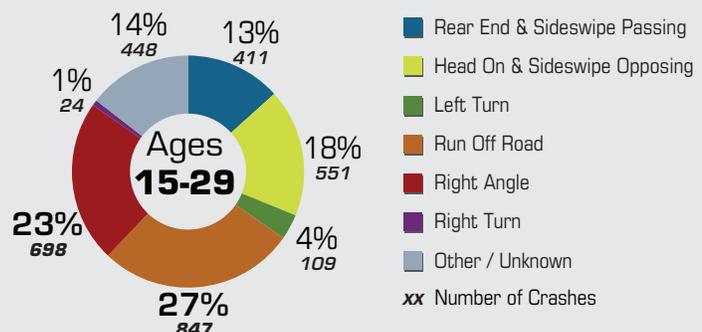
66% of younger drivers in severe crashes are **male**.



Crash Type



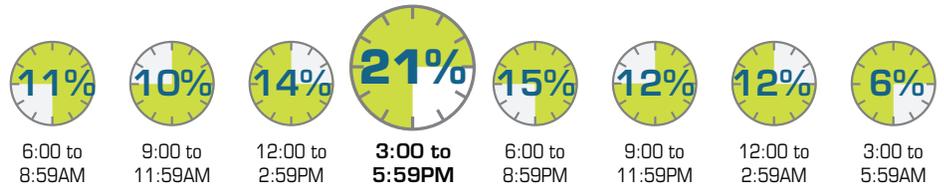
Run off road and right angle crashes are the most prevalent severe crash types for younger drivers, 27% and 23% respectively.



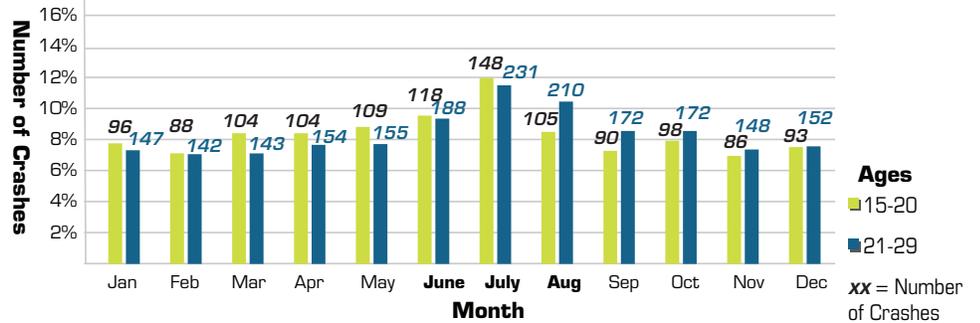
Time of Day and Month

21%

21% of severe crashes involving younger drivers occurred between the hours of **3:00 - 5:59PM**.



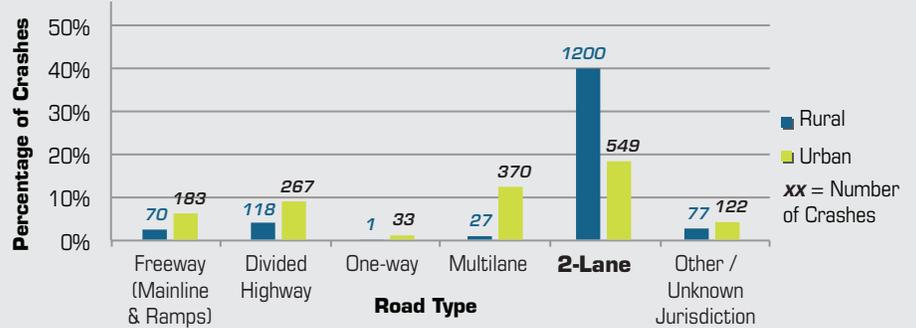
There was a slight increase in severe crashes involving younger drivers in the **summer months**, but overall, the crashes occur relatively evenly throughout the year.



Road Type

40%

40% of severe crashes involving younger drivers occur on **rural 2-lane** roadways.



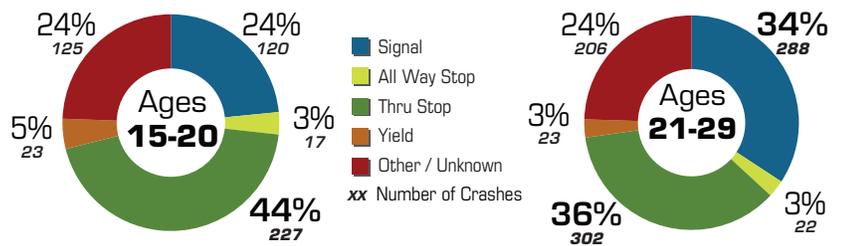
Traffic Control at Intersections

44%

44% of younger driver severe crashes at intersections for ages 15-20 occurred at **side-street stop-controlled intersections**.

34%
36%

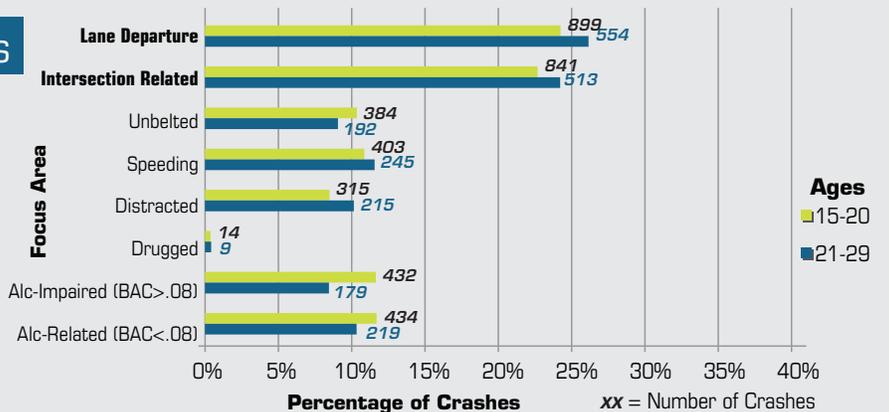
Younger driver severe crashes at intersections for ages 21-29 occurred at **signalized and stop-controlled intersections**, 34% and 36% respectively.



Additional Contributing Factors

+

The majority of severe crashes involving younger drivers were **intersection related** or **lane departure** crashes.

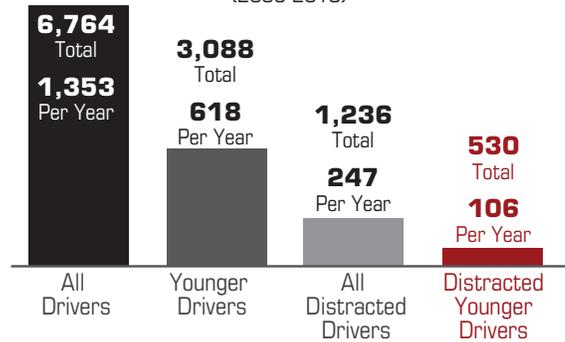


Distracted Younger Drivers: Fatal and Severe Injury Crashes

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Distracted driving was a contributing factor in 530 (17%) of these crashes, averaging 106 severe crashes per year.

The crash data provided in this fact sheet is for younger drivers ages 15-29, unless otherwise noted. If there was a significant difference in data for the two age groups of 15-20 and 21-29, the data is shown separately.

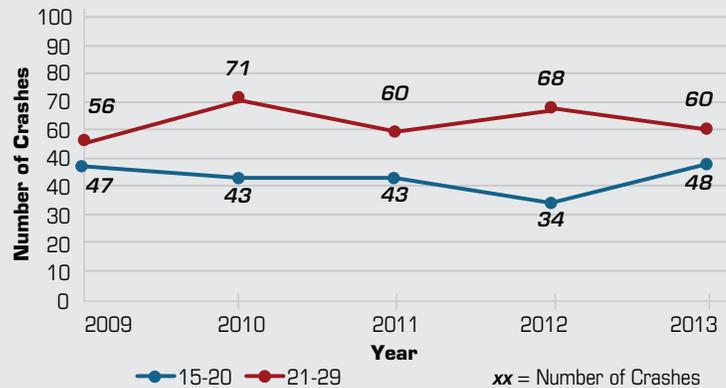
Severe Crashes Summary
(2009-2013)



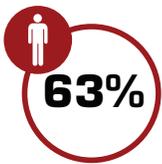
Source: Minnesota severe crash (K+A) data from 2009-2013, MN DPS

Crashes by Year

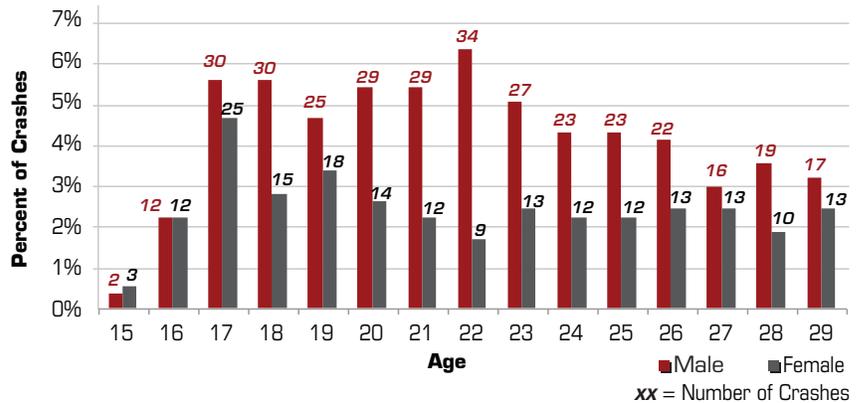
Distracted severe crashes involving younger drivers have **remained stable** from 2009 to 2013.



Crashes by Age and Gender



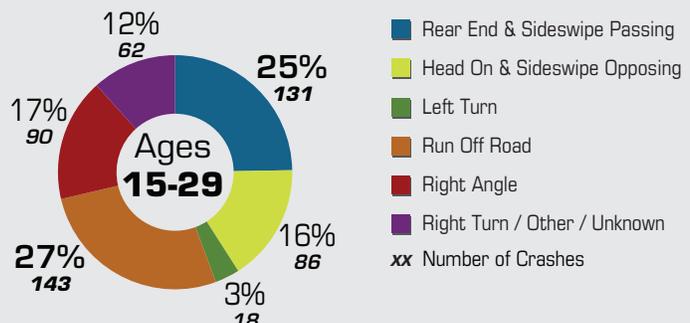
63% of distracted younger drivers involved in severe crashes are **male**.



Crash Type



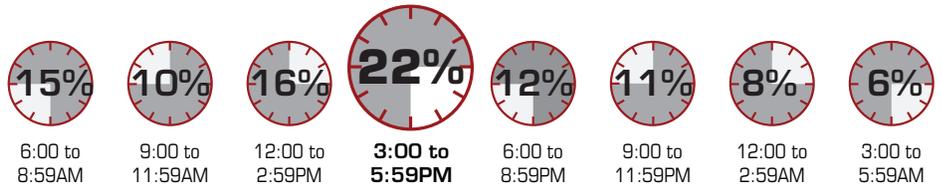
52% of severe crashes involving distracted younger drivers were **run off road** crashes and **rear end/sideswipe passing** crashes.



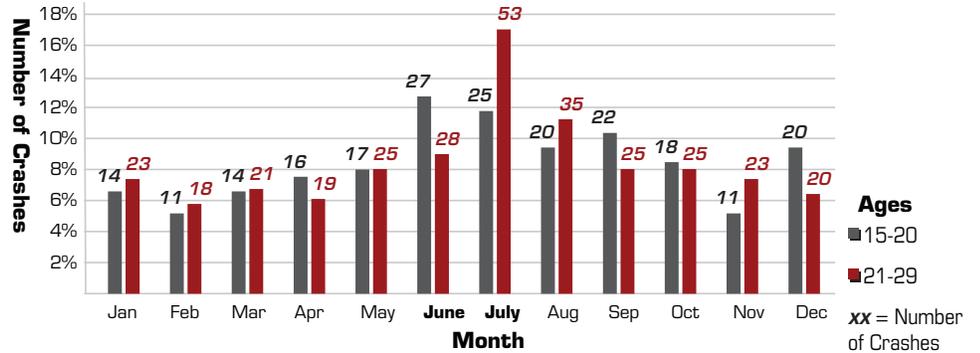
Time of Day and Month

22%

21% of severe crashes involving distracted younger drivers occurred between the hours of **3:00 - 5:59PM**.



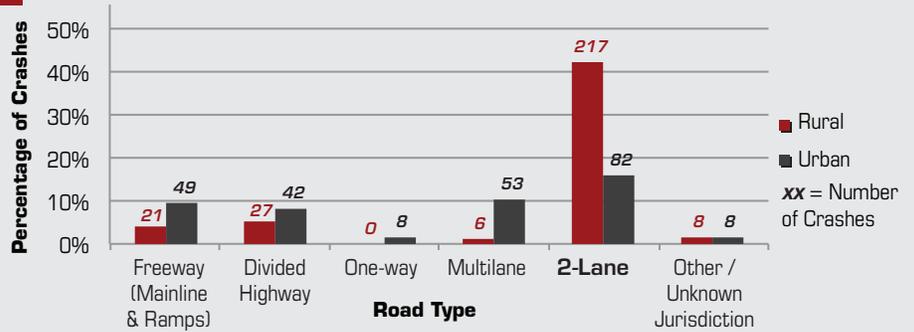
Distracted severe crashes involving younger drivers are more predominant in the summer months of **June and July**.



Road Type

41%

41% of severe crashes involving distracted younger drivers occurred on rural, **2-lane roads**.



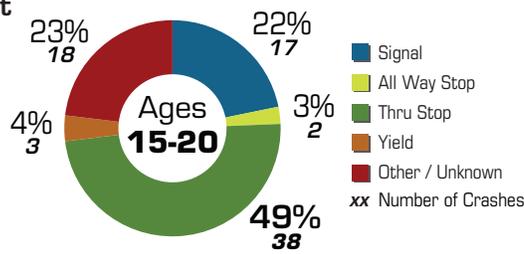
Traffic Control at Intersections

49%

49% of distracted younger driver severe crashes at intersections for ages 15-20 occurred at **side-street stop-controlled** intersections.

34%
34%

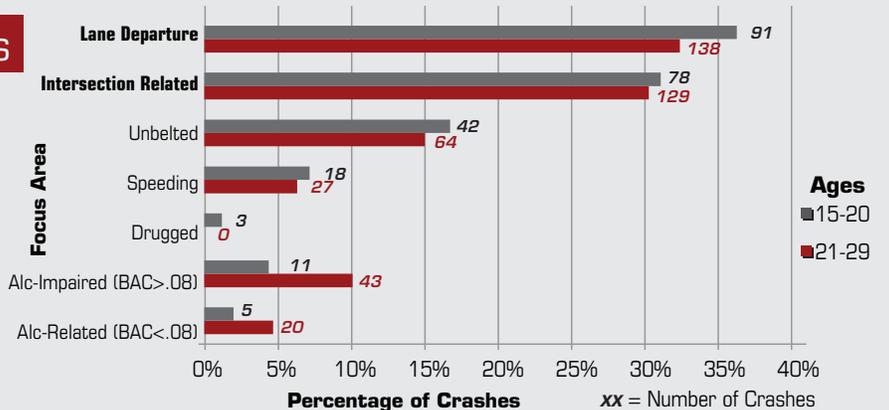
Distracted younger driver severe crashes at intersections for ages 21-29 occurred at **signalized and stop-controlled intersections**, 34% and 34% respectively.



Additional Contributing Factors



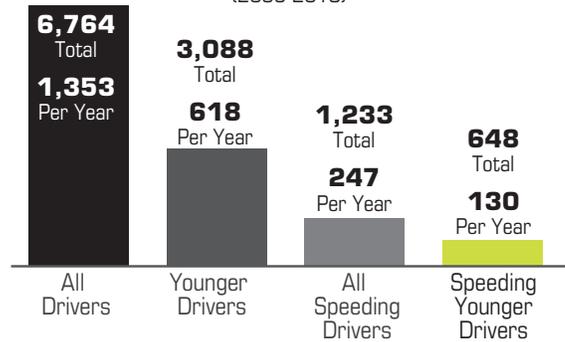
Lane departure and intersection related were the leading contributing factors of severe crashes involving distracted younger drivers.



Speeding Younger Drivers: Fatal and Severe Injury Crashes

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Speeding was a contributing factor in 648 (21%) of these crashes, averaging 130 severe crashes per year. The crash data provided in this fact sheet is for younger drivers ages 15-29, unless otherwise noted. If there was a significant difference in data for the two age groups of 15-20 and 21-29, the data is shown separately.

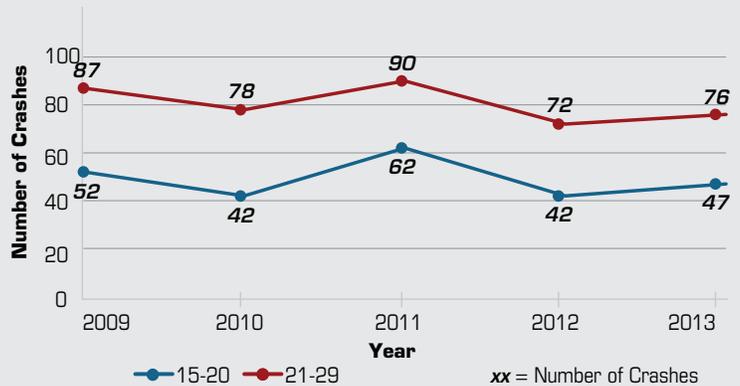
Severe Crashes Summary
(2009-2013)



Source: Minnesota severe crash (K+A) data from 2009-2013, MN DPS

Crashes by Year

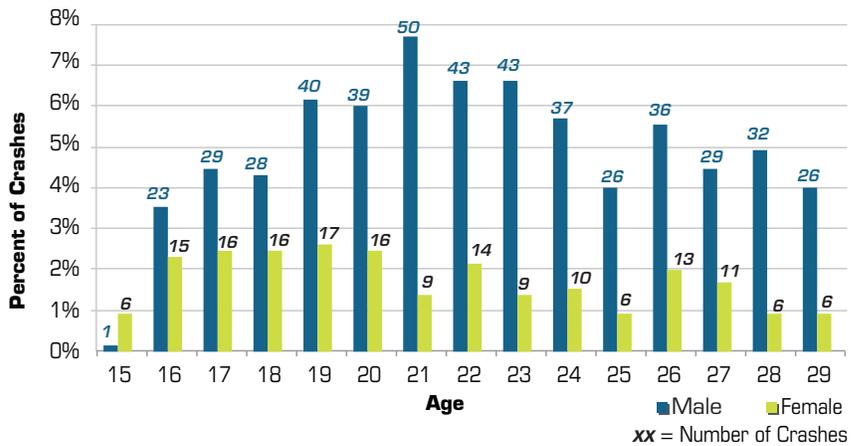
Speeding severe crashes involving younger drivers have **remained stable** from 2009 to 2013.



Crashes by Age and Gender



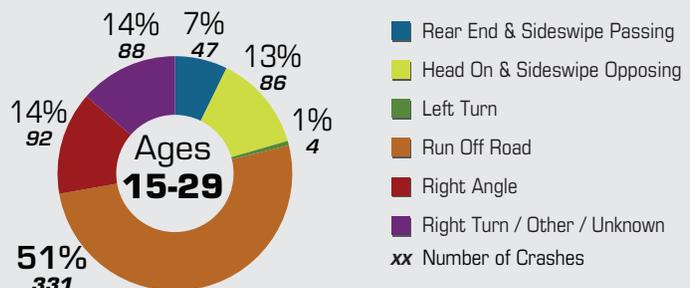
74% of speeding younger drivers involved in a severe crash are **male**.



Crash Type



51% of severe crashes involving speeding younger drivers were **run off road** crashes.



Time of Day and Month

21%

21% of speeding related severe crashes involving younger drivers occurred between the hours of **12:00 - 2:59AM**.



6:00 to 8:59AM



9:00 to 11:59AM



12:00 to 2:59PM



3:00 to 5:59PM



6:00 to 8:59PM



9:00 to 11:59PM

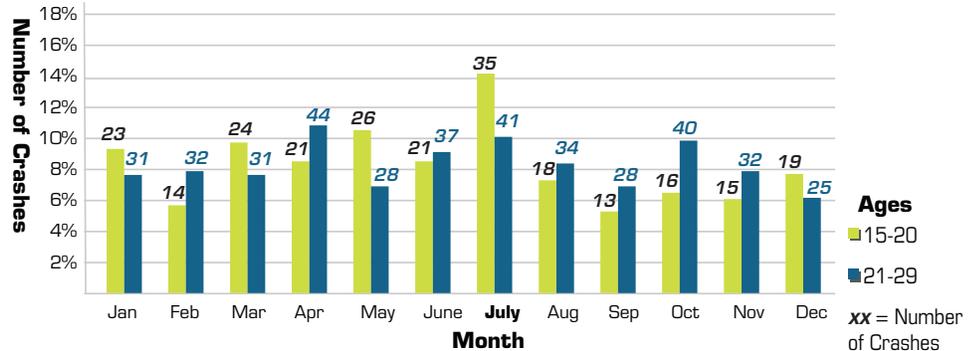


12:00 to 2:59AM



3:00 to 5:59AM

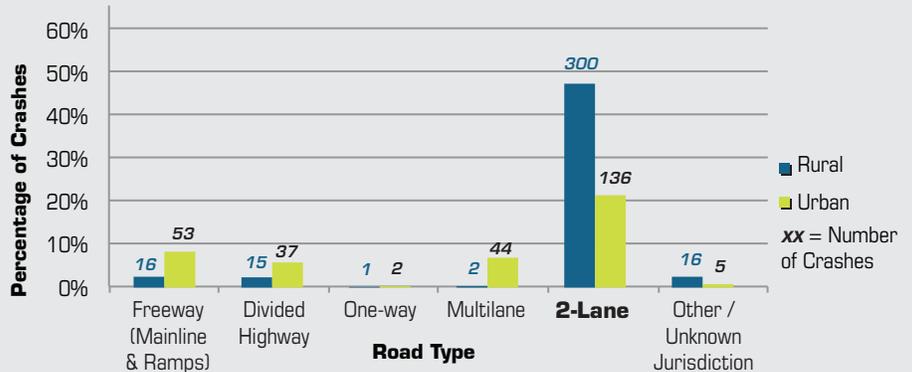
There was a slight increase in severe crashes involving speeding younger driver in **July**, but overall, the crashes do not seem to have a significant pattern throughout the year.



Road Type

48%

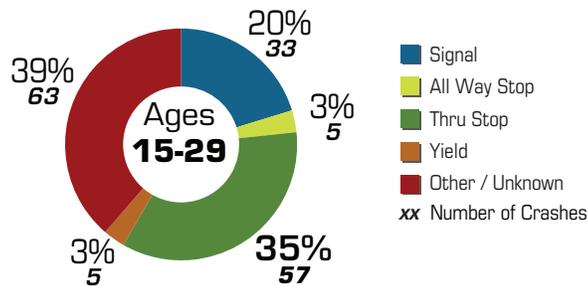
48% of severe crashes involving speeding younger drivers occurred on rural, **2-lane roads**.



Traffic Control at Intersections

35%

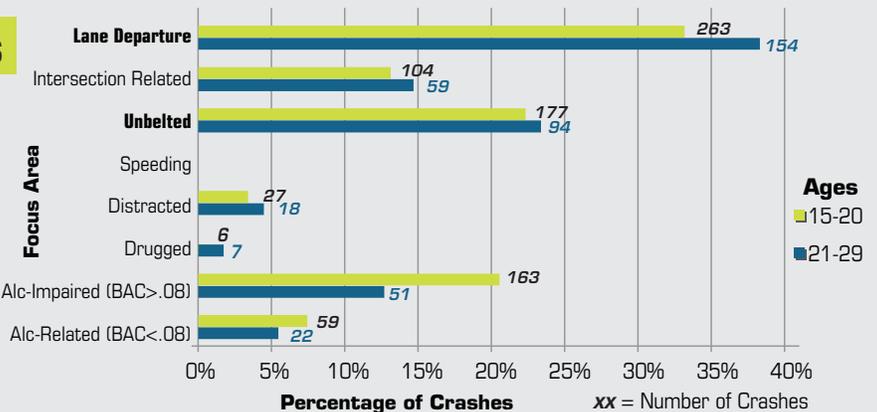
35% of speeding related severe crashes involving younger drivers at intersections for ages 15-29 occurred at **signalized intersections**. 39% of intersection related crashes had unknown signal control.



Additional Contributing Factors



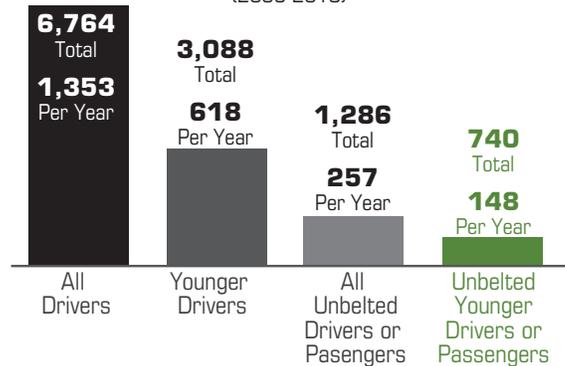
Lane departure and lack of seatbelt use were the leading contributing factors of severe crashes involving speeding younger drivers.



Unbelted Younger Occupants: Fatal and Severe Injury Crashes

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Not wearing a seatbelt was a contributing factor in 740 (24%) of these crashes, averaging 148 severe crashes per year. The crash data provided in this fact sheet is for younger drivers ages 15-29, unless otherwise noted. If there was a significant difference in data for the two age groups of 15-20 and 21-29, the data is shown separately. The crash data is broken down by unbelted drivers and passengers when appropriate.

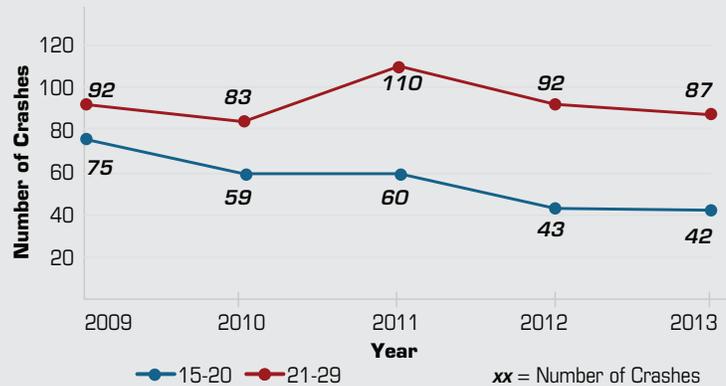
Severe Crashes Summary (2009-2013)



Source: Minnesota severe crash (K+A) data from 2009-2013, MN DPS

Crashes by Year

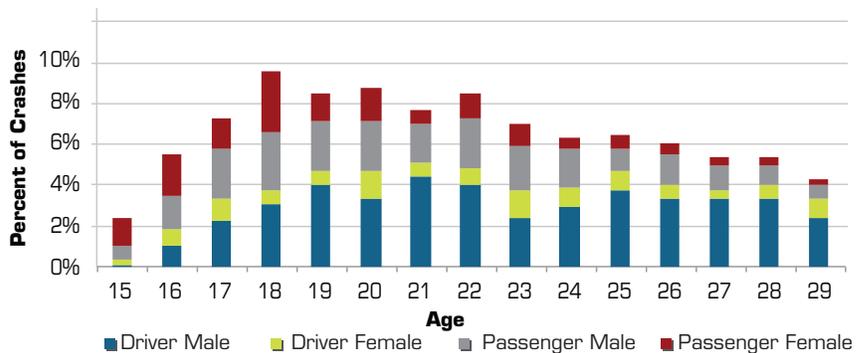
Unbelted younger driver or passenger severe crashes for ages **21-29 have remained consistent** over the past five years, while crashes for ages **15-20 have decreased**.



Crashes by Age and Gender



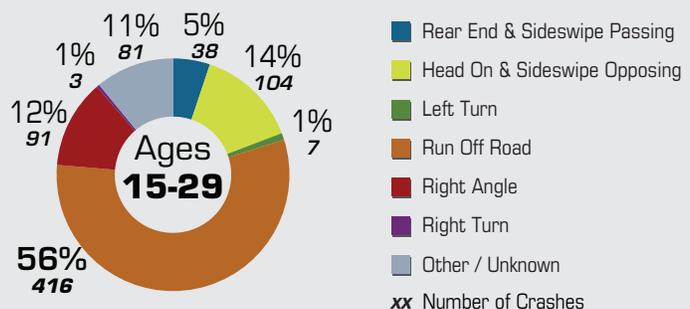
69% of unbelted younger drivers or passengers involved in a severe crash are **male**.



Crash Type



56% of severe crashes involving unbelted younger drivers or passengers were **run off road** crashes.



Time of Day and Month



21% of unbelted younger driver severe crashes occurred between the hours of **12:00 - 2:59AM**.



6:00 to 8:59AM



9:00 to 11:59AM



12:00 to 2:59PM



3:00 to 5:59PM



6:00 to 8:59PM



9:00 to 11:59PM

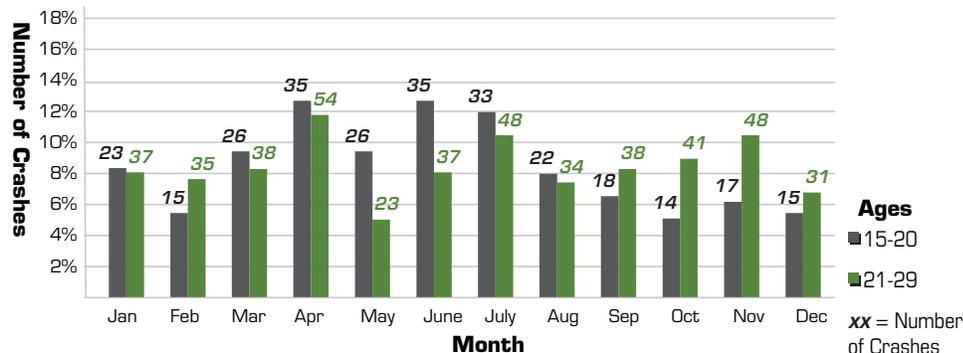


12:00 to 2:59AM



3:00 to 5:59AM

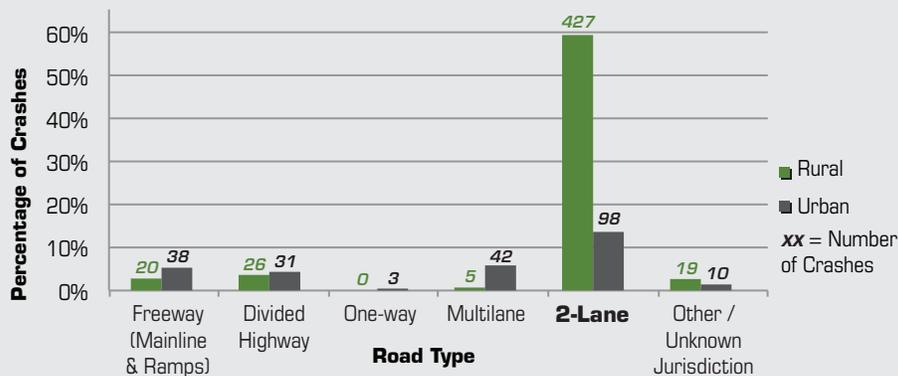
There was a slight increase in severe crashes involving unbelted younger drivers or passengers in the **spring/summer for driver ages 15-20**, but overall, the crashes do not seem to have a significant pattern throughout the year.



Road Type



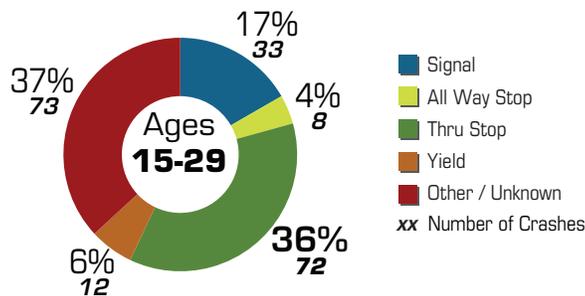
59% of severe crashes involving unbelted younger drivers or passengers occurred on rural, **2-lane roads**.



Traffic Control at Intersections



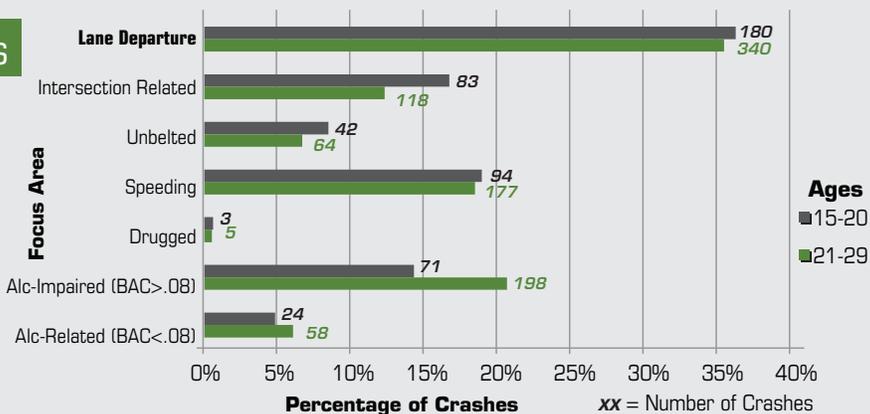
36% of unbelted related severe crashes involving younger drivers and passengers at intersections occurred at **side-street stop-controlled intersections**. 37% of intersection related crashes had unknown signal control.



Additional Contributing Factors



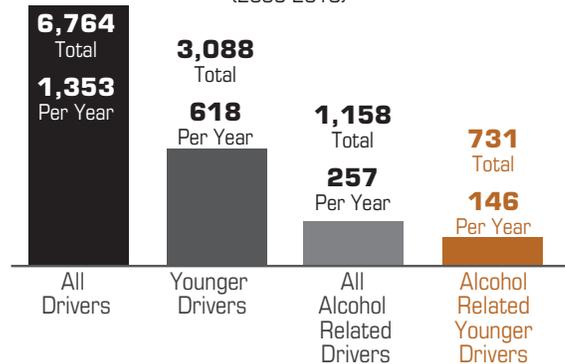
Lane departure was the leading contributing factor of severe crashes involving unbelted younger drivers and passengers.



Alcohol and Younger Drivers: Fatal and Severe Injury Crashes

On Minnesota's roadways, there were 3,088 severe crashes (fatal and serious injury) involving younger drivers ages 15-29 over a five year period from 2009-2013, averaging 618 severe crashes per year. Alcohol related driving was a contributing factor in 731 (24%) of these crashes, averaging 146 severe crashes per year. The crash data provided in this fact sheet is for younger drivers ages 15-29, unless otherwise noted. If there was a significant difference in data for the two age groups of 15-20 and 21-29, the data was shown separately. The crash data is broken down by impaired drivers (blood alcohol content \geq .08) and alcohol involved drivers (blood alcohol content $<$.08) when appropriate.

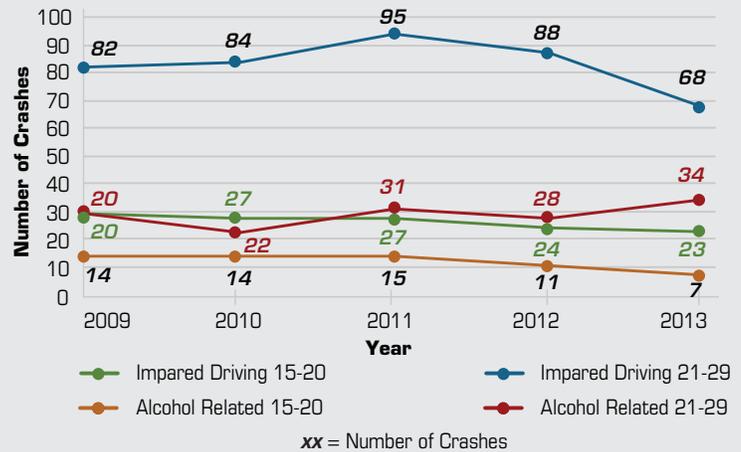
Severe Crashes Summary (2009-2013)



Source: Minnesota severe crash (K+A) data from 2009-2013, MN DPS

Crashes by Year

Impaired and alcohol related severe crashes for drivers age **15-20** have **decreased** in the past 5 years, while crashes for drivers age **21-29** have **remained relatively stable**.



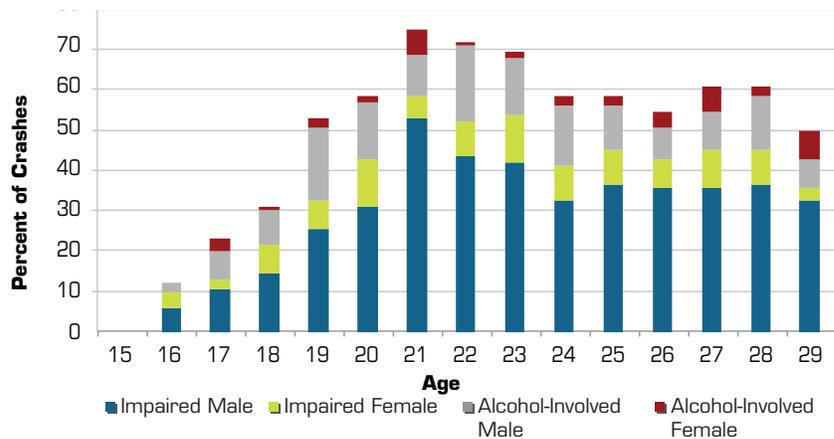
Crashes by Age and Gender

80%

80% of impaired and alcohol related severe crashes involved a **male** younger driver.

21+
76%

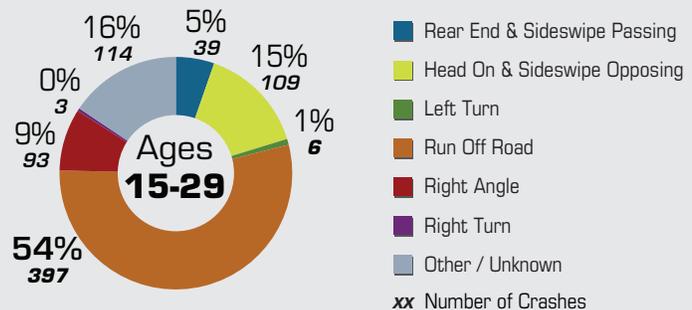
76% of impaired and alcohol related severe crashes involved younger drivers that were **21 years of age or older**.



Crash Type

54%

54% of impaired or alcohol related severe crashes involving younger drivers were **run off road** crashes.

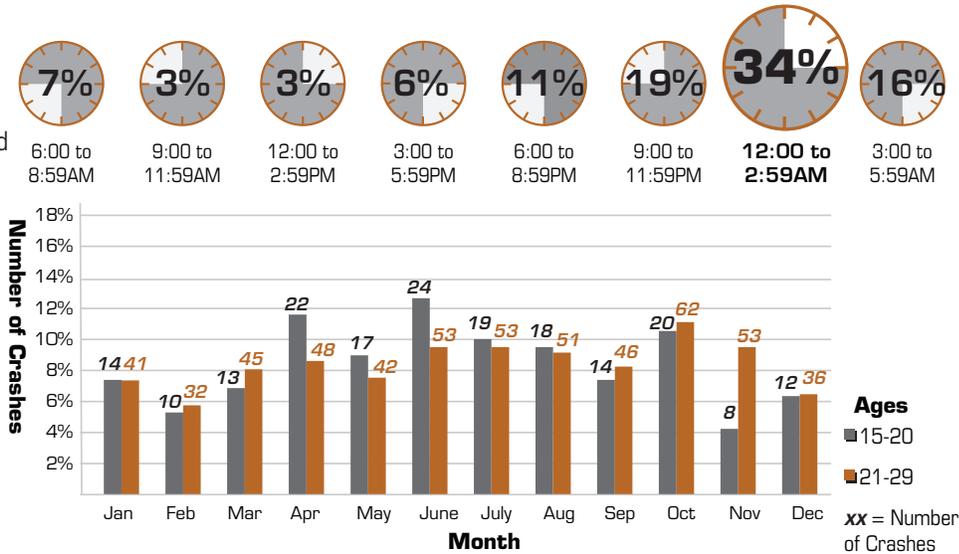


Time of Day and Month

34%

34% of impaired or alcohol related severe crashes involving younger drivers occurred between the hours of **12:00 - 2:59AM**.

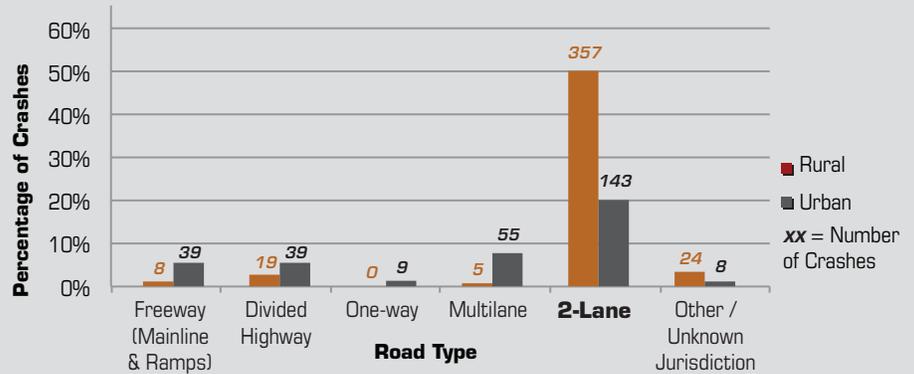
Impaired or alcohol related severe crashes for younger drivers do not seem to have a significant pattern throughout the year.



Road Type

51%

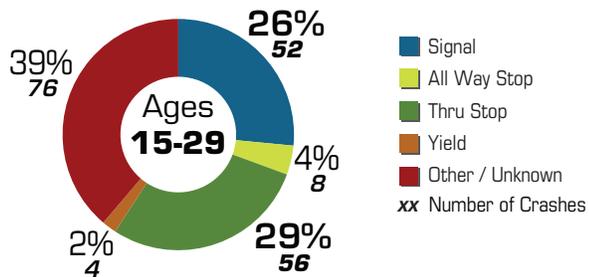
51% of impaired or alcohol related severe crashes involving younger drivers occurred on **2-lane rural roads**.



Traffic Control at Intersections

26%
29%

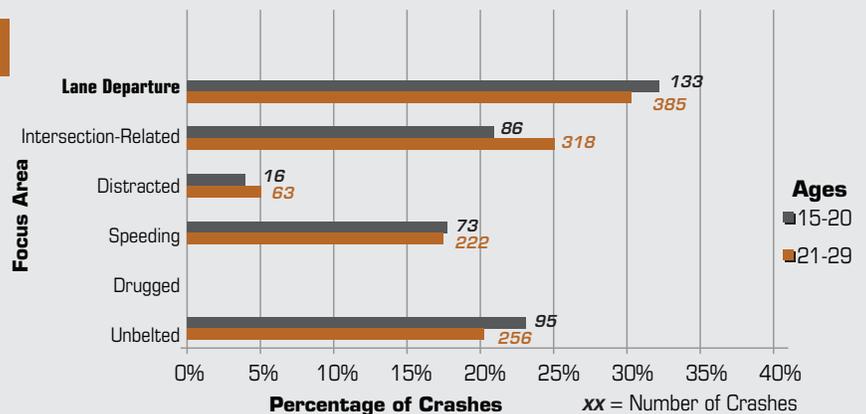
Impaired and alcohol related severe crashes at intersections occurred at **signalized and stop-controlled intersections**, 26% and 29% respectively. 39% of intersection related crashes had unknown signal control.



Additional Contributing Factors



Lane departure was the leading contributing factor of impaired and alcohol related severe crashes involving younger drivers.



Minnesota Crash Mapping Analysis Tool (MnCMAT) User Guide

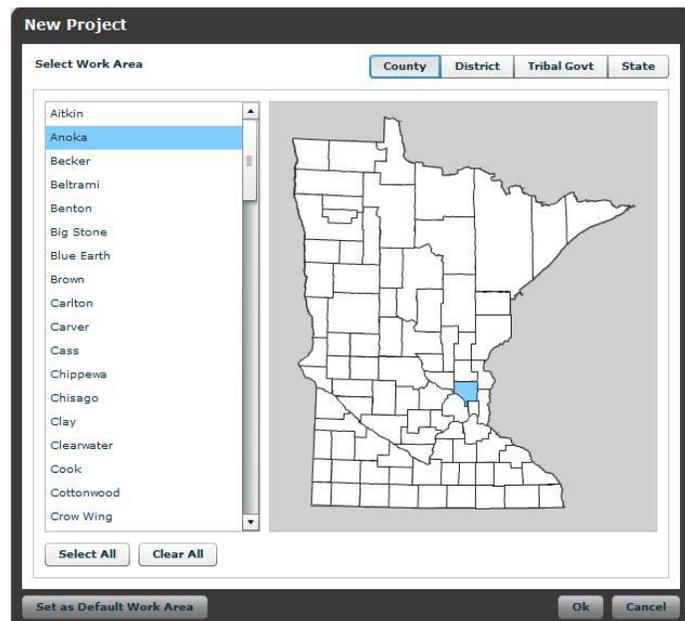
Local agencies have the ability to recreate the data presented in the fact sheets, at the local level, using the instruction below. Users should be aware that the data in MnCMAT is based on crashes, where as data provided by DPS is based on people. (e.g. if a crash occurs in which 4 people die, MnCMAT will report it as “1 fatal crash” and DPS will report it as “Four fatalities”)

Connecting to the MnCMAT Webpage

1. Click on the following link to access the homepage:
<http://www.dot.state.mn.us/stateaid/crashmapping.html>

Starting a MnCMAT Work Session

1. Once on the MnCMAT homepage (link provided above), under “Application and Instructions” click on the link titled “MnCMAT Program.”
2. You will then be directed to the MnCMAT interface with a login window. Enter your email and password associated with your MnCMAT account. If you do not have one, you will have to request access from MnDOT by clicking on the respective link provided towards the bottom of the login window.
3. Once logged in, you can begin a work session by clicking on either the “Create New Project” or “Open Existing Project” options. Assuming no projects have been created, start by following the “Create New Project” tab.
4. The final step necessary for starting a MnCMAT project is to specify the area of study. This can be narrowed down by county, district, tribal government, or you can just use the statewide data. The jurisdiction can be selected by using the list on left side of window or the interactive map adjacent to the right. Additionally, multiple jurisdictions can be selected using either the list or the map by simply clicking on another area. Once the work area has been selected, click the “Ok” box on the bottom-right corner of the window.

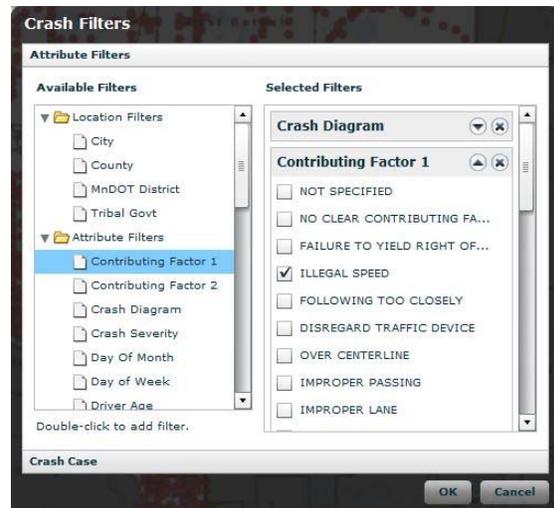
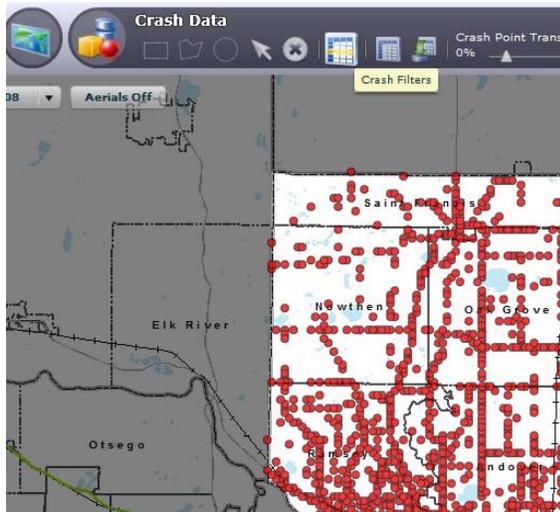


Basic Operating

1. The interface will zoom to the extents of the selected work area with all crashes on record within that area being represented by a red dot. Navigating around can be performed by clicking and dragging to the direction of interest, and zooming in or out can be achieved by using the bar on the top left side of the user interface or by using the mouse wheel.

Crash Filtering

1. Crashes can be filtered by various attributes. In order to do this, the window containing “Crash Data” must be selected. This circular icon is located at the top of the interface and encompasses a cube, a sphere, and a cylinder. Once the “Crash Data” option is selected, a window of options will slide out to the right.
2. The icon containing the crash filters is six spots from the left, and is denoted by a spreadsheet type symbol with two rows highlighted in yellow, as shown in the image below on the left side.



3. Crash information containing speeding, distracted driving, driving under the influence, road design, and many more features can all be filtered under the “Attribute Filters” folder. These filters can be used individually, or in unison with as many other filters as you would like.
4. To activate a filter, simply double click the category under the “Attribute Filters” folder. As shown in the right-side image above, the category with all of its criteria is moved over to the “Selected Filters” column. Once all of the desired filters have been selected, click on the “Ok” box in the bottom right corner of the crash filters window.
5. Crashes can also be filtered spatially along with or independently of location and attribute filters. Referring to the crash data image (above, left) the three tools to the right of the “Crash Data” icon allow you to filter crashes by creating a rectangle, polygon, or circle on the basemap.
6. Crash data for the filtered crashes can be viewed by clicking on the “Show Crash Data” icon, which is adjacent, and to the right of the “Crash Filters” symbol. Alternatively, crash data can be exported for use outside of MnCMAT.

Exporting Crash Data

1. Staying within the same “Crash Data” window the “Export Crash Data” icon can be found. It is located near the right side and is represented by a spreadsheet-like symbol with a green arrow attached. The crashes along with all of their associated data can be exported as a .csv file or a shapefile. Note that the exported data will contain numbered codes for each of the attributes. In order to decipher the codes the “Data Key Filters” spreadsheet can be downloaded from the MnCMAT homepage, which is provided in the link on the first page of this document.

Resources to Promote Younger Driver Behavior Change

Equipped with a foundational understanding of the younger driver traffic safety challenges and crash facts, local transportation traffic safety professionals need resources and guidance at their fingertips to help educate local government and community leaders as well as their citizenry. This section of the Toolkit contains: 1) suggested community-based safety strategies to strengthen younger driver safety, 2) popular traffic safety PSA's, 3) TZD partnership resources and links to leverage local safety initiatives, and, finally 4) a template Young Driver PowerPoint presentation for local agency representatives to use to prepare presentations on younger drivers for the community.

1. Example Community-Based Safety Strategies to Strengthen Younger Driver Safety

Traffic safety policies, enforcement and education play an important role for changing high-risk driver behaviors. Public information or education strategies are often popular among communities seeking to change risky driving behaviors. However, a key challenge is that most drivers—particularly higher risk younger drivers—know what they are to do to drive safely, yet due to repeated risky driving habits with no incidence of crash, drivers underestimate the risk of their choices. For this reason, community outreach and education alone won't change high-risk driving behaviors.

The most effective formula for changing driver behavior includes three chief components: 1) *policy* or laws and local ordinances with strong and swift penalties, 2) *enforcement* of the laws, and 3) *education* or public outreach about the enforcement and risks associated with lack of seat belt use, speed, driver distraction, and impaired driving. These three components work together to have the greatest impact on changing risky driver behavior. Consequently, when selecting and implementing a behavioral strategy, an agency must examine the supporting policy or laws, degree of enforcement, and educational or public outreach components of the strategy and explore ways to strengthen each, as appropriate, to gain the most from a selected strategy.

Finally, it is critically important that traffic safety enforcement is a priority within local law enforcement agencies and that local elected officials and local agency and community leaders advocate for strong local enforcement of traffic laws and address political and public resistance to strong enforcement.

The following safety strategies are suggested local community-based initiatives that help support strengthened traffic safety policy, enforcement, and education/public outreach to improve younger drivers' safe driving.

Safety Strategies

Strategy	Activities and Suggested Resources
<p>Publicize and support high-visibility law enforcement efforts</p> <p>Addresses: <i>Belt Use</i> <i>Distracted Driving</i> <i>Speed</i> <i>Impaired/Alcohol-Related</i></p>	<p>Support statewide dedicated high-visibility enforcement waves through media and social media messaging, letters to the editor, signs, and related community outreach events. Generally, enforcement waves include:</p> <p>October: Belt Use November – December: Impaired Driving April: Distracted Driving May: Belt Use July: Speed August – September: Impaired Driving</p> <p>See the Office of Traffic Safety (OTS) website for it’s annual calendar of enforcement mobilizations, talking points and outreach materials: https://dps.mn.gov/divisions/ots/law-enforcement/Pages/Enforcement-Mobilizations.aspx</p>
<p>Promote local employer traffic safety polices and training</p> <p>Addresses: <i>Belt Use</i> <i>Distracted Driving</i> <i>Speed</i> <i>Impaired/Alcohol-Related</i></p>	<p>Collaborate with local employers to develop/strengthen employee safe driving policies, including clear sanctions for failure to comply, and conduct supporting employee traffic safety training programs.</p> <p>See Minnesota Safety Council’s Network for Employers for Traffic Safety (NETS) employer sample policies and resources: http://www.minnesotasafetycouncil.org/nets/AboutNETS.cfm</p>
<p>Promote parental engagement with teen drivers</p> <p>Addresses: <i>Belt Use</i> <i>Distracted Driving</i> <i>Speed</i> <i>Impaired/Alcohol-Related</i></p>	<p>Work with local driver educators to incorporate “Point of Impact” Teen Driver Safety Parent Awareness Class materials into their curriculum to increase parent awareness of teen driving risks, Minnesota’s teen driver laws, and the important role parents play in developing a safer teen driver.</p> <p>See OTS website for “Point of Impact” program information and class guide: https://dps.mn.gov/DIVISIONS/OTS/TEEN-DRIVING/Pages/default.aspx https://dps.mn.gov/divisions/ots/teen-driving/Documents/poi-leaders-guide-oct-2014.pdf</p> <p>Partner with local traffic safety advocates (e.g., schools, insurance providers, law enforcement) to distribute information to parents regarding teen driver risks, laws, key parental roles, and parent resources available. For information on parent’s role in developing safe teen drivers, see: https://dps.mn.gov/divisions/ots/teen-driving/Pages/parents.aspx</p> <p>For a ready-to-use, comprehensive Parent-Teen Driving Agreement, see: http://www.allstatefoundation.org/teen_safe_driving_parent_resources.html</p>

Strategy	Activities and Suggested Resources
<p>Promote younger driver and occupants' "saved by the belt" testimonies during seat belt enforcement saturations</p> <p>Addresses: <i>Belt Use</i></p>	<p>Publicly recognize younger traffic crash survivors who buckled up, crashed, and were "saved by the belt." Community "saved by the belt" testimonies increase public awareness of the lifesaving value of safety belts of those who survived traffic crashes because they were properly restrained. This strategy is most effective as supporting media and public outreach during statewide seat belt enforcement waves and incorporated into seat belt enforcement messaging. Including local law enforcement officers in honoring traffic crash survivors who were buckled up promotes a positive relationship between local law enforcement and the younger driver community.</p> <p>When planning the ceremony, check with law enforcement who responded to the crash, to confirm that the person receiving the reward wasn't doing anything illegal (speeding, impaired, etc.)</p> <p>Consider partnering with local businesses to offer gift certificates in recognizing younger drivers and passengers who buckle up.</p> <p>To download a <i>Saved by the Belt</i> certificate, template news releases, and template letter to the editor, see: https://dps.mn.gov/divisions/ots/law-enforcement/Pages/Enforcement-Program.aspx</p>
<p>Strengthen local liquor establishments' serving/selling practices</p> <p>Addresses: <i>Impaired/Alcohol-Related</i></p>	<p>Promote local liquor establishments' support of and participation in server/seller training classes taught by accredited Minnesota DPS Alcohol & Gambling Enforcement Regional Alcohol Awareness Trainers to prevent over serving or selling to/serving intoxicated or underage customers.</p> <p>Collaborate with local law enforcement and on-sale liquor establishments identified as having higher levels of customer drinking and driving incidents to develop and implement preventative action plans.</p> <p>Explore community and local agency support for local alcohol ordinances and penalties that may be more restrictive than state law, such as higher fines, longer license suspension, and earlier license revocation for repeated violations.</p> <p>See Alcohol & Gambling Enforcement Regional Alcohol Awareness Training contacts and training materials including information on local alcohol ordinances, at: https://dps.mn.gov/divisions/age/alcohol/Pages/default.aspx</p>
<p>Strengthen safe ride services and public awareness/use</p> <p>Addresses: <i>Impaired/Alcohol-Related</i></p>	<p>Implement or strengthen community sober cab and safe ride services and/or conduct outreach to raise the community awareness and use of alternative transportation options to drinking and driving.</p> <p>For a step-by-step guide to explore potential partnerships and models to launch a safe ride service, see OTS Safe Ride Home Guide, at: https://dps.mn.gov/divisions/ots/tzd-safe-roads/Pages/default.aspx</p>

Strategy	Activities and Suggested Resources
<p>Promote outreach to reduce underage drinking</p> <p>Addresses: <i>Impaired/Alcohol-Related</i></p>	<p>Promote community-based education and outreach programs to reduce underage drinking including the choice to drink and drive. Mothers Against Drunk Driving (MADD) offers a variety of resources including community workshops, facilitator training resources, parent and youth resource handbooks, and community and media outreach materials:</p> <p>Power of You(th)—Power to Take a Stand: http://www.madd.org/underage-drinking/power-of-youth/</p> <p>PowerTalk 21 http://www.madd.org/underage-drinking/powertalk-21/</p> <p>Power of Parents: http://www.madd.org/underage-drinking/</p>
<p>Promote local community awareness of strengthened policy for distracted driving</p> <p>Addresses: <i>Distracted Driving</i></p>	<p>Promote local community awareness of the 2015 traffic law change of an additional fine of \$225.00 for a second or subsequent violation of Minnesota’s no texting/emailing/ban on wireless communication devices (except talking on cell phones) while driving law. Public outreach of this enhanced penalty is recommended during Minnesota’s annual Distracted Driving statewide enforcement mobilization in April as well as other local community events promoting younger driver traffic safety.</p> <p>For reference to enhanced penalty law effective August 1, 2015, see: https://www.revisor.mn.gov/laws/?id=75&year=2015&type=0#laws.2.22.0</p> <p>Promote community and local elected officials’ engagement in and support of strengthening cell phone use restriction of teen drivers holding a permit or provisional (restricted) driver’s license to all drivers under the age 18 even if using a full/unrestricted driver’s license.</p> <p>Strong traffic safety policy begins with developing grassroots, local level support. Local community and elected official support, when thoughtfully and strategically applied, catch the attention of state elected officials, and ultimately, may result in the passage of stronger statewide public safety laws.</p> <p>Related 2015-2016 Minnesota state legislature bill:</p> <ul style="list-style-type: none"> - Senate File 1555 extends cell phone use restriction of teen drivers holding a permit or provisional (restricted) driver’s license to all drivers under the age 18 even if using an full/unrestricted drivers license. <p>For current bill status and legislative action, see: http://www.leg.state.mn.us/leg/legis.aspx</p>

Strategy	Activities and Suggested Resources
<p>Strengthen younger driver belief in the dangers of distracted driving</p> <p>Addresses: <i>Distracted Driving</i></p>	<p>Improve younger drivers understanding of and experience with the risks associated with distracted driving in a safe environment to reinforce the importance of refraining from extraneous activities while driving. Outreach activities may occur at community and high-school events younger drivers attend.</p> <p>For several years now, Minnesota has partnered with AT&T to implement a high school/college level “It Can Wait” campaign. The campaign runs two times annually, usually in September and April. To learn more about the campaign, see: http://www.att.com/gen/press-room?pid=2964</p> <p>For an example interactive on-line driving simulator resources to help younger drivers identify various distractions and their relative impact on driving ability, see: The University of Minnesota’s Intelligent Transportation Institute’s Distraction Dodger simulator game http://www.its.umn.edu/DistractedDodger/</p> <p>Toyota USA and Discovery Education’s Head’s Up simulator game http://headsup.discoveryeducation.com/</p> <p>For driver distraction curriculum materials consisting of five classroom lessons, including a course presentation and handouts, that may be adapted by teachers for their own classroom use, see: University of Minnesota’s Intelligent Transportation Institute’s K–12 Driver Distraction Curriculum http://www.its.umn.edu/Education/k12outreach/curricula/driverdistraction/</p>

To explore the above safety strategies and to learn about specific safety initiatives in your area of the state, contact your TZD Regional Coordinator:

<http://www.minnesotatzd.org/initiatives/regions/>

If your community is considering forming a coalition, for suggestions of how to get started, see:

<http://www.minnesotatzd.org/initiatives/saferoads/coalition/>

Helpful On-Line Behavioral Younger Driver Traffic Safety Resources:

Minnesota TZD

<http://www.minnesotatzd.org/topics/>

Minnesota Office of Traffic Safety

<https://dps.mn.gov/divisions/ots/Pages/traffic-topics.aspx>

Minnesotan’s for Safe Driving

<http://mnsafedriving.com/teens-parents/teen-driving-laws.html>

Minnesota MADD

<http://www.madd.org/local-offices/mn/>

Minnesota Safety Council, traffic safety

<http://www.minnesotasafetycouncil.org/traffic/>

Students Against Destructive Decisions (SADD), Minnesota Chapter
<http://sadd.org/states/minnesota.htm>

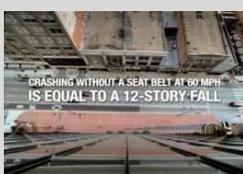
National Highway Traffic Safety Administration (NHTSA) Driving Safety Community Coalitions
<http://www.nhtsa.gov/Driving+Safety/Community+Traffic+Safety/Community+Traffic+Safety+Activities>

Governor's Highway Safety Association
<http://www.ghsa.org/html/issues/index.html>

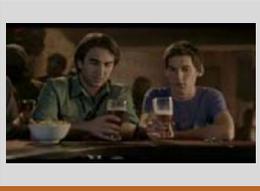
2. Public Service Announcements

Public Service Announcements (PSA's) are used to communicate important messages about traffic safety to the general public. Younger drivers are particularly vulnerable to risky behaviors which makes it even more important that they hear these messages to help promote their understanding of the dangers. The input of a panel of younger drivers which reviewed and ranked no more than 100 videos, based on how impactful and effective they felt they were, developed this PSA library. There are four tables contained in the following pages, each listing the top 10 PSA videos with a short description of the video for unbelted, impaired driving, speeding and distracted driving. You can access each video using the link below each PSA video title. There are many more videos similar to these available online.

Unbelted Occupants

1		<p>Zero Fatalities Twist Child in back seat dies because unbelted parent was thrown into him. https://www.youtube.com/watch?v=tXW57B_2sRQ&list=UUrR3CPsVkfXJ5QNbA14ZwAw</p>
2		<p>DOE: Rear Passenger Seatbelt (1:11) https://www.youtube.com/watch?v=e6Qhmdk4VNs Crash where unbelted rear passenger kills three people by colliding with them during the crash.</p>
3	 <p>CRASHING WITHOUT A SEAT BELT AT 60 MPH IS EQUAL TO A 12-STORY FALL</p>	<p>MnDPS: Heights (0:30) http://www.youtube.com/watch?v=HSZ-pQeRtK8&feature=youtu.be Informational: Collision at 25MPH without seatbelt is like falling from a 2-story building, shows all the way up to 60mph = 12-story building. Shows camera view from that height looking straight down to portray the potential damage a vehicular crash while being unbelted can cause.</p>
4		<p>NHTSA: Buckle Up America (0:32) http://www.trafficsafetymarketing.gov/BUA Random people on street slam their forehead into guy's windshield. "Since you'll never get to see your own face hit the windshield" then guy gets rear-ended and his head goes into the windshield.</p>
5		<p>Embrace Life (1:28) http://www.youtube.com/watch?v=h-8PBx7isoM Video conveying that life is too precious to risk not wearing seatbelt, especially to family. Gears more towards significance of personal choice to buckle up and its impact on family members.</p>
6		<p>Wear it for Them (1:00) https://www.youtube.com/watch?v=HPuID6mnOJU Unbelted male teen kills buckled little sister by flying into her during a crash.</p>
7		<p>NHTSA: 2014 Friendly Cop (0:30) http://www.trafficsafetymarketing.gov/C10T2014 (official website) http://www.youtube.com/watch?v=hzzQa9v79r8 (Youtube) Friendly Cop gives warning for forgetting turn signal, ticket for not wearing seatbelt.</p>
8		<p>Heaven Can Wait - Best Seatbelt Commercial Ever (0:44) https://www.youtube.com/watch?v=tywC-gRXbq0 Spirits leave body of those who have died in a car accident. The one person who was wearing a seatbelt has his spirit return; he wakes up.</p>
9		<p>THINK! Always Wear a Seatbelt (0:40) http://www.youtube.com/watch?v=Xx6v9CNcQ04 Three guys are terribly injured in a crash, not wearing seatbelts. Time rewinds, they put on their seatbelts when they get in the car and sustain only minor injuries (sore neck, etc.). "If you could have another chance, what would you do differently?"</p>
10		<p>THINK! Seatbelts - Three Strikes (0:40) http://www.youtube.com/watch?v=rq90ld-XtHE Voice over describes exactly how a man is injured and dies from not wearing a seatbelt during a crash. Uses visual aids of inside the man's body. From UK's THINK! Campaign.</p>

Impaired Driving and Alcohol-Related

1		<p>Friends are waiting (1:00) http://youtu.be/eubWYPhcEEo Budweiser dog commercial. Guy with his dog as he grows. Guy goes out for the night with the friends and doesn't return. Dog is distressed, only to find the guy return the next morning as he decided to stay at a friend's house rather than drink and drive.</p>
2		<p>TAC Victoria: Never (1:30) http://www.youtube.com/watch?v=otR8V7rlnjA&list=TLSSKQrXBnjIUzZtR_41i-FW3_bmzqwWyG Man crashes while driving drunk, which kills his girlfriend in passenger seat. Shows man and the passenger's father devastated.</p>
3		<p>TAC Victoria: Bush Telegraph (1:30) http://www.youtube.com/watch?v=FqyLcVBOhP4&list=TLSSKQrXBnjIUzZtR_41i-FW3_bmzqwWyG&index=8 Man leaves friend's house with kid after drinking. On his way out, his friend says "Oh have another, it won't kill you." Man runs stop sign, gets slammed by giant truck. Friend gets a call that he died.</p>
4		<p>NHTSA: Ignition Interlock (0:30) and (0:15) http://www.trafficsafetymarketing.gov/CAMPAIGNS/Drunk+Driving/Drive+Sober+or+Get+Pulled+Over/Saint+Patrick%27s+Day/Video++Ignition+Interlock A guy and girl are walking to their car after a date with their thoughts being audible for the viewer. The girl really likes him, but the guy is worried about something. When they get in the car the guy uses a Breathalyzer to start car. Girl is unimpressed and leaves.</p>
5		<p>TAC Victoria: Bloody Idiots (0:46) http://www.tac.vic.gov.au/road-safety/tac-campaigns/drink-driving Shows mom (crying), girlfriend (dead), friend (paralyzed), all resulting from a car crash involving a "bloody idiot."</p>
6		<p>NHTSA: Night Ends for These Buddies / Invisible Cop: Buddies (0:32) http://www.trafficsafetymarketing.gov/CAMPAIGNS/Drunk+Driving/Drive+Sober+or+Get+Pulled+Over/No+Refusal+Toolkit/Video+Invisible+Cop+Checkpoint Drinking friends give impaired driver keys. Driver gets arrested. "They'll see you before you see them." Strong enforcement message.</p>
7		<p>NHTSA: No Money (0:30) and (0:15) http://www.trafficsafetymarketing.gov/CAMPAIGNS/Drunk+Driving/Drive+Sober+or+Get+Pulled+Over/Saint+Patrick%27s+Day/Video++No+Money Guy sitting on bench, text overlay shows costs of DUI (bail, attorney, court costs, ticket, etc.). Strong message. "There are better ways to spend your money" Guy walks by in nice clothes, spinning car keys.</p>
8		<p>THINK! - #PubLooShocker (0:50) http://www.youtube.com/watch?v=YJDsH64sqNY&list=TLMHbqQ6B58WDZz8bLB0jzQ-Q-R5X_xcUJt Several people go to the bathroom and while washing their hands a face loudly crushes the mirror (seeming coming from the wall) startling them. From UK's THINK! Campaign.</p>
9		<p>TAC Victoria: Levels (0:35) http://www.tac.vic.gov.au/road-safety/tac-campaigns/drink-driving#education Two men at a bar order another drink. Voice over describes the many factors that contribute to their resulting BAC when they will be driving home. Bartender adjusts each person's drink along with voice over. Both end up with less than a full beer, but noticeable different amounts.</p>
10		<p>TAC Victoria: SWAP (1:30) http://www.youtube.com/watch?v=n4X2lbcx504&index=12&list=TLSSKQrXBnjIUzZtR_41i-FW3_bmzqwWyG Man and partner drive home from party after man has done drugs. He drives erratically, finally decides to switch so girlfriend can drive. Pulls over to the side of the road and gets out of the car right in front of a fast moving car. "If you drive on drugs, you're out of your mind."</p>

Speeding

1		<p>NZ TA: Speed Ad – Mistakes (1:00) http://www.youtube.com/watch?v=bvLaTupw-hk New Zealand viral video. Car on side street pulls out in front of speeding car. Both drivers get out of car while their cars are going towards each other in slow motion. Guy from side street shows his kid in back seat, speeding car realizes he is going way too fast to stop. “Other people make mistakes. Slow Down”.</p>
2		<p>NZ TA: Flying Objects (1:00) http://www.youtube.com/watch?v=uV5o_-UADiY Informational video on the physics of sudden stops – your internal organs keep moving even when your seatbelt catches your chest. The faster you go, the bigger the mess.</p>
3		<p>Crash Reconstruction (1:00) http://www.youtube.com/watch?v=z44uZVn1r9A Fatal crash is played out while a collision investigator provides details of the events leading up to the crash. Also states that the outcome would have been drastically different had the driver of been going just 5 km/h slower.</p>
4		<p>Speed vs Impact (0:59) https://www.youtube.com/watch?v=bpjhf3qoOk4 Man discusses how a slower initial speed means a much slower impact speed, with visual.</p>
5		<p>Just Slow Down by Winnipeg Police Service (2:25) https://www.youtube.com/watch?v=H5Ey0nccJlg Teen speeding kills child.</p>
6		<p>DOE The Faster the Speed the Bigger the Mess Campaign - Speed Kills (1:01) https://www.youtube.com/watch?v=z8Mnf22D30 Man speeding rear ends car at stop sign pushing it forward, rear-ended car hits pedestrian mother.</p>
7		<p>NZ TA / LTSA – Spot the Difference (New Zealand) (0:30) https://www.youtube.com/watch?v=p7d4l6FuvGQ#t=14 Split screen with two joggers. On one half, one of the joggers gets hit by a speeder, on the other half, the car stops on time. Created by the Land Transport Safety Authority of New Zealand (LTSA).</p>
8		<p>DOE The Faster the Speed the Bigger the Mess Campaign – The Bigger the Mess (1:00) https://www.youtube.com/watch?v=v_AMEYsBxZA Slow motion crash with voice over describing consequences of speeding. Mother and kid in backseat die.</p>
9		<p>NYC Speed Limit PSA (0:29) https://www.youtube.com/watch?v=hTSioR_2nHc Discusses why 30mph is much safer than 40mph.</p>
10		<p>Speed Excuses (0:32) http://www.youtube.com/watch?v=Y15UvlGXp20&feature=youtube Shows various people making excuses about why they’re speeding (I didn’t see the sign, my wife’s in labor, etc.) and still getting a ticket. Enforcement has “heard it all.”</p>

Distracted Driving

1		<p>Volkswagen – Eyes on the Road (1:22) https://www.youtube.com/watch?v=R22WNkYKeo8 Moviegoers gather their attention to a preview showing a car driving down an open roadway. A mass text is then sent out to all of the attendees. At once, many patrons divert their attention to their phones. Seconds later they hear a loud bang –looking up to realize the car has crashed off of the road. A message is brought to the screen reminding viewers to keep their eyes on the road. Very engaging to viewers compared to other PSA videos.</p>
2		<p>TAC Victoria: Distractions TV Ad “Blind” (0:45) “Metro” Version: http://www.youtube.com/watch?v=ZHOHcLWQewA&index=2&list=PLI2p5jFnfRhG3eZ74U05L3Q6ifS9EYvRi “Regional” Version: http://www.youtube.com/watch?v=oal-vBFmnRk&list=PLI2p5jFnfRhG3eZ74U05L3Q6ifS9EYvRi Man driving looks away from the road to view GPS, phone, etc. The viewer is shown a black screen each time the driver looks away, demonstrating the act of taking your eyes off the road. When the driver returns his attention to the road there is a startling surprise awaiting him (bikers, etc.). Ends in a crash.</p>
3		<p>Zero Fatalities “Texting and Walking Theater PSA” (0:42) http://www.youtube.com/watch?v=zrb0rXVFOs0 (0:42) Less dramatic 42-second video of how texting can affect motor skills. References how it can result in poorer driving ability.</p>
4		<p>NHTSA: Manifesto – Texting while Driving Video (0:29) http://www.youtube.com/watch?v=S_-6EoNhitg Girl driving with her friends pulls out her phone to reply to a text. She drives into an intersection and is struck by a truck, resulting in the death of herself and her friends. Officer at the end says he pulled her over for texting she might still be alive, shows life-saving role of law enforcement.</p>
5		<p>Zero Fatalities: You Wouldn’t Text Here Movie Theatre Spot (0:40) http://www.youtube.com/watch?v=qIqSvaTA00&list=UUrR3CPsVkfXJ5QNbAI4ZwAw People texting in odd situations with bad results: a dentist doing a filling, a hair stylist with a buzzer, a football quarterback while playing. “You’d never consider texting here, don’t even think about texting here.” There are also 15 and 30 second versions.</p>
6		<p>The Impossible Texting & Driving Test http://www.youtube.com/watch?v=HbjSwdwJILs Various people attempt to avoid obstacles in a closed course while texting.</p>
7		<p>Zero Fatalities “Texting and Walking Part II” (0:30) http://www.youtube.com/watch?v=Se-PtyEoZtU&list=UUrR3CPsVkfXJ5QNbAI4ZwAw Shows people getting into minor incidents walking while texting. Expresses that it would be crazy to text while driving.</p>
8		<p>NHTSA: BAM (Distracted Driving) (0:31) http://www.trafficsafetymarketing.gov/CAMPAIGNS/Distracted+Driving/Phone+In+On+Hand++Ticket+In+The+Other/TV+BAM+Distracted+Driving+Enforcement+SDHD Various people (teens, mom, adult male, etc.) talk/text while driving, get in accident. Cops shown at very end “we’re stepping up enforcement to save lives.”</p>
9		<p>TAC Victoria: Pillow – You Can’t Fight Sleep (0:34) http://www.tac.vic.gov.au/road-safety/tac-campaigns/drowsy-driving Voice over describes the dangers of driving drowsy.</p>
10		<p>NHTSA: Glee Distracted Driving PSA: “On My Way” http://www.youtube.com/watch?v=mnw_7xI5kIM Shows a girl pick up her phone to send a quick text message to her friends. While being distracted, she drives through a stop sign and gets hit by a truck. Message indicating that it only takes a few seconds of taking your eyes off the road for something tragic to happen – texting can wait.</p>

3. TZD Partnerships

Minnesota TZD is the state's cornerstone traffic safety program, employing an integrated approach of engineering, enforcement, education and emergency medical and trauma services to reduce traffic-related serious injuries and deaths on Minnesota roads. While these individual disciplines have a long history of successful traffic safety programs, TZD aims to tie these together with a common vision and mission for even greater success. The TZD program uses data to target areas for improvement and employ proven countermeasures.

The TZD program team works in partnership with community and corridor groups to improve the traffic safety of a designated area. Toward Zero Deaths provides technical assistance, materials, and guidance to local groups that are committed to reducing crashes and the fatalities and severe injuries that result from them.

The TZD program is led by the directors from the Office of Traffic Safety (OTS), Minnesota Department of Public Safety (DPS) and the Office of Traffic, Safety, and Technology (OTST), Minnesota Department of Transportation (MnDOT). The state is broken up in to eight regions, each with their own TZD coordinator that focuses on local initiatives. For more information about each of these departments, visit their websites at the links below.

Minnesota Department of Public Safety – Office of Traffic Safety

The Office of Traffic Safety designs and implements public education and traffic-law enforcement programs with the goal of reducing crashes, deaths and injuries on Minnesota roads by improving driver behavior. The [DPS OTS website](#) includes detailed information with fact sheets, laws, PSA videos, educational materials and resources on a variety of traffic topics such as speeding, pedestrians, child passenger safety, deer-vehicle safety, distracted driving, impaired driving, motorcycles, move over law, older drivers, rural driving, school bus safety, seat belts, air bags, teen driving and winter driving.

OTS manages all of the crash records for the state and produces three major publications annually: [Highway Safety Plan](#), [Minnesota Motor Vehicle Crash Facts](#) and the [Minnesota Impaired Driving Facts](#). In addition, OTS annually develops [county-specific fact sheets](#) that document the number of crashes that occurred in each county for various traffic issues.

Minnesota Department of Transportation – Office of Traffic, Safety, and Technology

MnDOT's safety unit focuses on the engineering component of Toward Zero Deaths by developing safety plans, providing crash data projects and research reports. The [MnDOT OTST website](#) includes detailed information on engineering solutions and research findings for a variety of traffic safety topics such as cable median barriers, lighting, pavement markings, pedestrians, roundabouts, rumble strips, signals, signing, speed limits, work zones and more. The [Minnesota Strategic Highway Safety Plan](#) is located on the MnDOT OTST website and provides insight and direction on how to reduce traffic-related crashes that involve motor vehicles on all Minnesota roads.

Toward Zero Deaths Website Resources

The [TZD website](#) includes detailed information about the Minnesota TZD Program, its partners, regional TZD initiatives, events, news, resources, contacts and how to get involved. The resources page provides information and links to resources in the critical emphasis

areas identified in Minnesota's Strategic Highway Safety Plan and other topics that serve as focus areas for reducing fatalities and serious injuries on Minnesota's roads.

Below are web links to key information on the [Minnesota TZD website](#) about the Minnesota TZD Program and its partners, regional TZD initiatives, contacts and how to get involved. This is the most up to date information as of the publication date of this document.

Many of the documents in the links below are also included on the following pages.

- [TZD Program 1-pager](#)
- [TZD Strategic Direction](#)
- [TZD Roadmap of partners](#)
- [Local MN Traffic Safety Initiatives](#)
 - [East Central Initiatives](#)
 - [Metro Region Initiatives](#)
 - [Northeast Region Initiatives](#)
 - [Northwest Region Initiatives](#)
 - [South Central Initiatives](#)
 - [Southeast Initiatives](#)
 - [Southwest Initiatives](#)
 - [West Central Initiatives](#)
- [TZD contacts](#)
- [Get involved – TZD Events](#)

TZD'S STATEWIDE GOAL: Fewer than 300 fatalities and 850 serious injuries on Minnesota's roads by 2020.



WHAT IS THE MINNESOTA TOWARD ZERO DEATHS (TZD) PROGRAM?

The Minnesota TZD program is the state's cornerstone traffic safety program that employs an interdisciplinary approach to lowering the number of traffic crashes, injuries, and deaths occurring on Minnesota roads. The program's vision is to ultimately reduce those fatalities and serious injuries to zero.

The program is a partnership between the Minnesota Departments of Public Safety, Transportation, and Health; the University of Minnesota; and others.

What does the program do?

- Works to create a culture for which traffic fatalities and serious injuries are no longer acceptable through the integrated application of education, engineering, enforcement, and emergency medical and trauma services—known as the “4 Es.”
- Uses data to target areas for improvement and employ proven safety strategies.
- Implements best practices and advances innovations and new technologies.

What are the program's key accomplishments?

- A 41 percent reduction in the number of fatalities since 2003.
- An increase in statewide belt use to 95 percent.
- Stronger traffic safety policies, including passage of the lower blood alcohol content (0.08, from 0.10) for DWI in 2004; improved graduated driver's licensing and the ban on texting, e-mailing, or accessing the web while driving in 2008; primary seat belt and booster seat laws in 2009; and expanded use of ignition interlock for DWI in 2010.
- Creation and expanded implementation of the Point of Impact driver education program designed for parents and teens.
- Implementation of a statewide trauma system and regional trauma centers throughout Minnesota.
- Implementation of Safety Plans for each county and MnDOT district.
- Creation of a TZD regional structure throughout the state to lead TZD efforts in local geographic areas.
- Implementation of infrastructure improvements focused on fatal and serious injury crashes.
- Expanded implementation of systematic safety improvements such as rumble strips, cable median barriers, and rural intersection lighting.
- Creation of one TZD traffic enforcement grant that incorporates all overtime traffic safety enforcement projects and encourages development of a county-wide strategic enforcement plan.
- *How to Save a Life, Young Forever* and *Gone Too Soon* videos created by the Minnesota State Patrol and shown to more than 90,000 Minnesotans.



What will TZD do next?

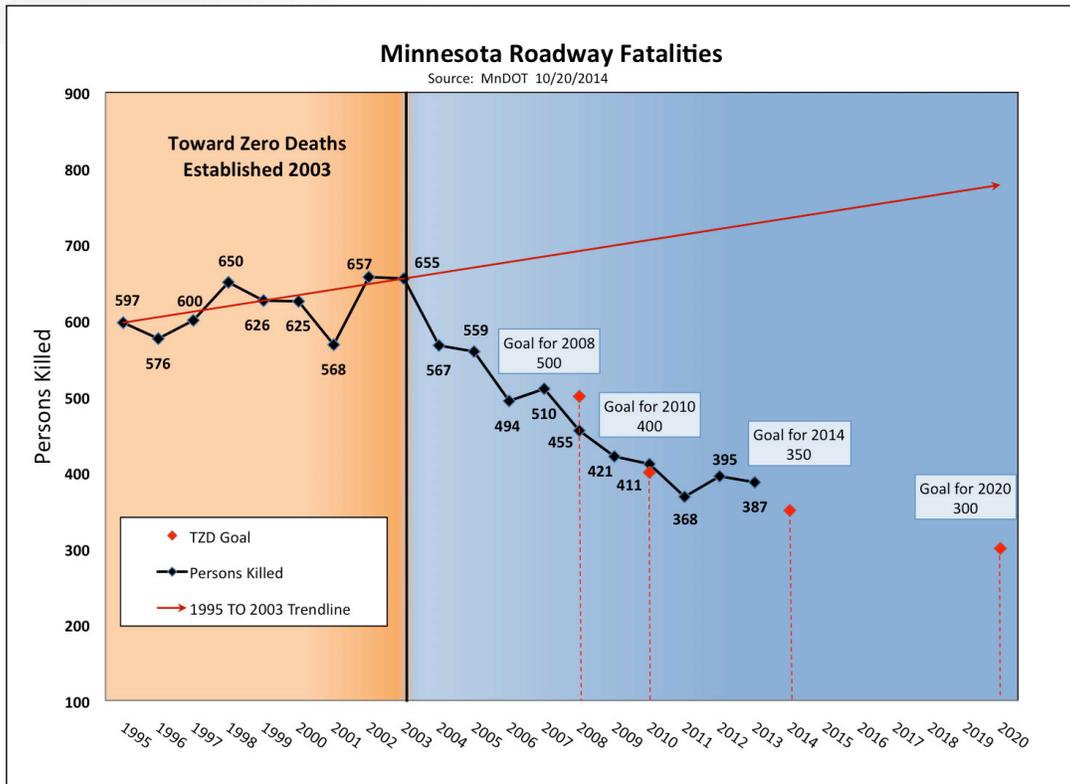
- Implement the 2014 Strategic Highway Safety Plan.
- Expand engagement with Minnesota traffic safety advocates.
- Improve the traffic safety records system across all disciplines.
- Engage the court system as a traffic safety partner.
- Continue to support regional partnerships throughout the state.
- Implement a comprehensive TZD communication plan.
- Evaluate key programs and initiatives.

How can I participate in TZD?

- Contact your regional TZD coordinator (www.minnesotatzd.org/initiatives/regions).
- Attend the annual statewide TZD conference and annual regional workshops (www.minnesotatzd.org/events).
- Attend the TZD Stakeholder Breakfasts in person or participate online (www.minnesotatzd.org/events/breakfasts).
- Request to be added to the TZD mailing list: kkirk@umn.edu.

How can I get more information?

- Contact Kaydee Kirk, Program Coordinator
Center for Transportation Studies
612-626-5854
kkirk@umn.edu
- Visit the TZD website
www.minnesotatzd.org



In 2003, 655 traffic fatalities occurred on Minnesota’s roads. That same year, the statewide TZD program was launched as a deliberate, interdisciplinary approach to traffic safety. Despite increases in the number of licensed drivers, registered motor vehicles, and vehicle miles traveled (VMT), there were 387 traffic fatalities in Minnesota in 2013—a 41 percent reduction from 2003.

STRATEGIC DIRECTION

→ **STATEWIDE GOAL:** Fewer than 300 traffic-related fatalities—and fewer than 850 serious injuries—by 2020

VISION

To reduce fatalities and serious injuries on Minnesota's roads to zero

MISSION

To create a culture for which traffic 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.

→ **GOAL 1:** Establish the vision of TZD as a priority for all state and local agencies and units of government

Strategies

- *Implement a comprehensive TZD communications plan*
- *Urge state agencies and local jurisdictions to make TZD a part of their culture and responsibility*
- Convene an annual meeting of agency commissioners
- Promote agency-to-agency collaboration
- Implement effective traffic safety policies

→ **GOAL 2:** Create and strengthen traffic safety partnerships

Strategies

- *Engage Minnesota traffic safety advocates*
- *Engage the court system as a traffic safety partner*
- Recruit industry and nonprofit organizations to engage in traffic safety initiatives
- Increase and diversify participation in TZD programs and events

→ **GOAL 3:** Promote and implement effective traffic safety initiatives

Strategies

- *Improve the traffic safety records system across all disciplines*
- *Implement the 2014 Strategic Highway Safety Plan*
- *Evaluate key programs and initiatives*
- Use data to drive all traffic safety initiatives
- Strengthen Minnesota's trauma system to ensure timely triage, transfer, and treatment for all injured patients
- Update district safety plans and monitor county safety plan implementation efforts
- Increase collaboration among law enforcement agencies on all state and local roads
- Advance new technologies and innovations
- Adopt and implement best practices
- Prioritize, coordinate, and promote effective policy and legislation
- Conduct a consolidated public awareness assessment

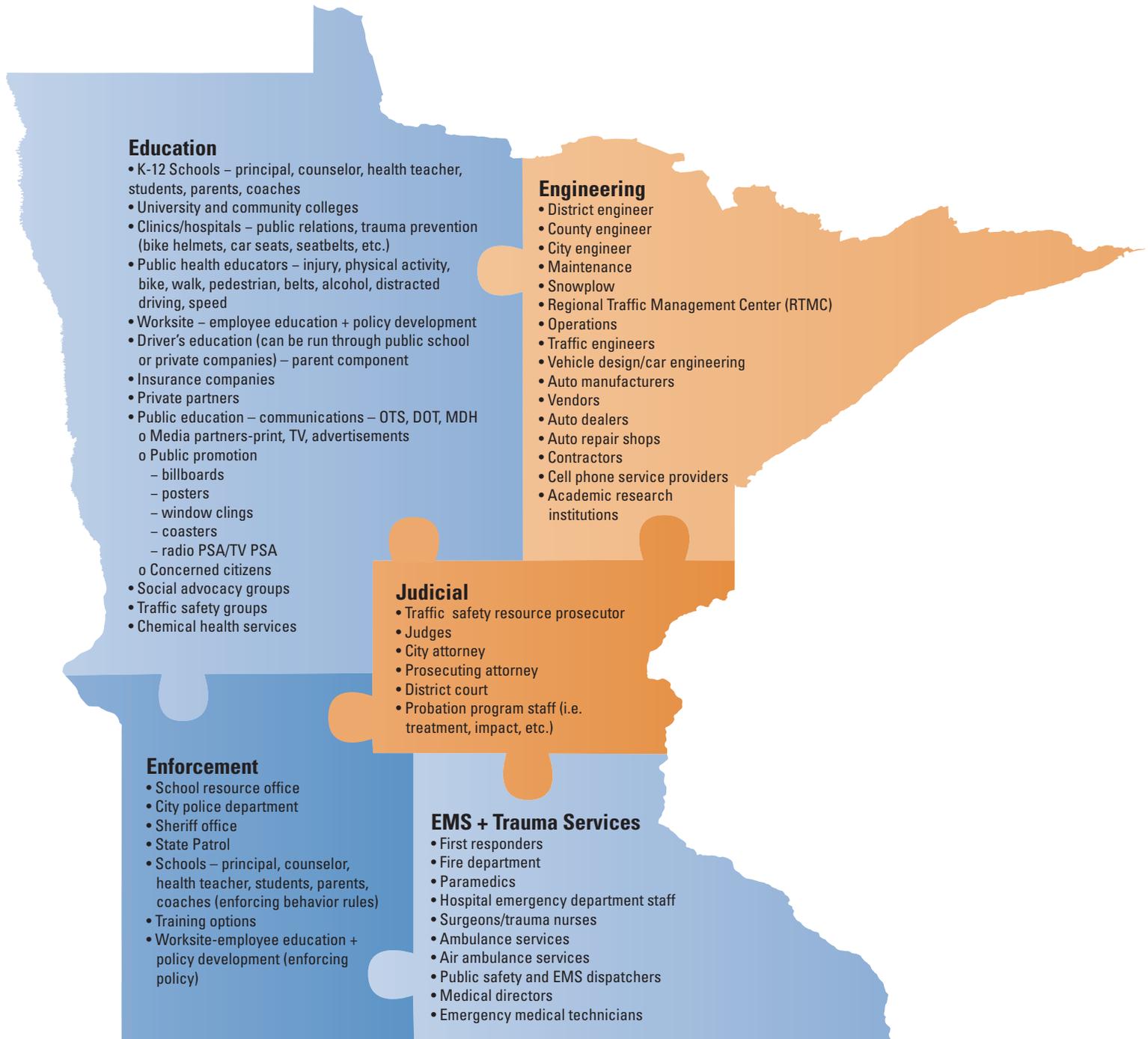
Italics signify priority strategies for 2015

VALUES

- Continuous improvement
- Engaged partners
- Evidence-based approaches

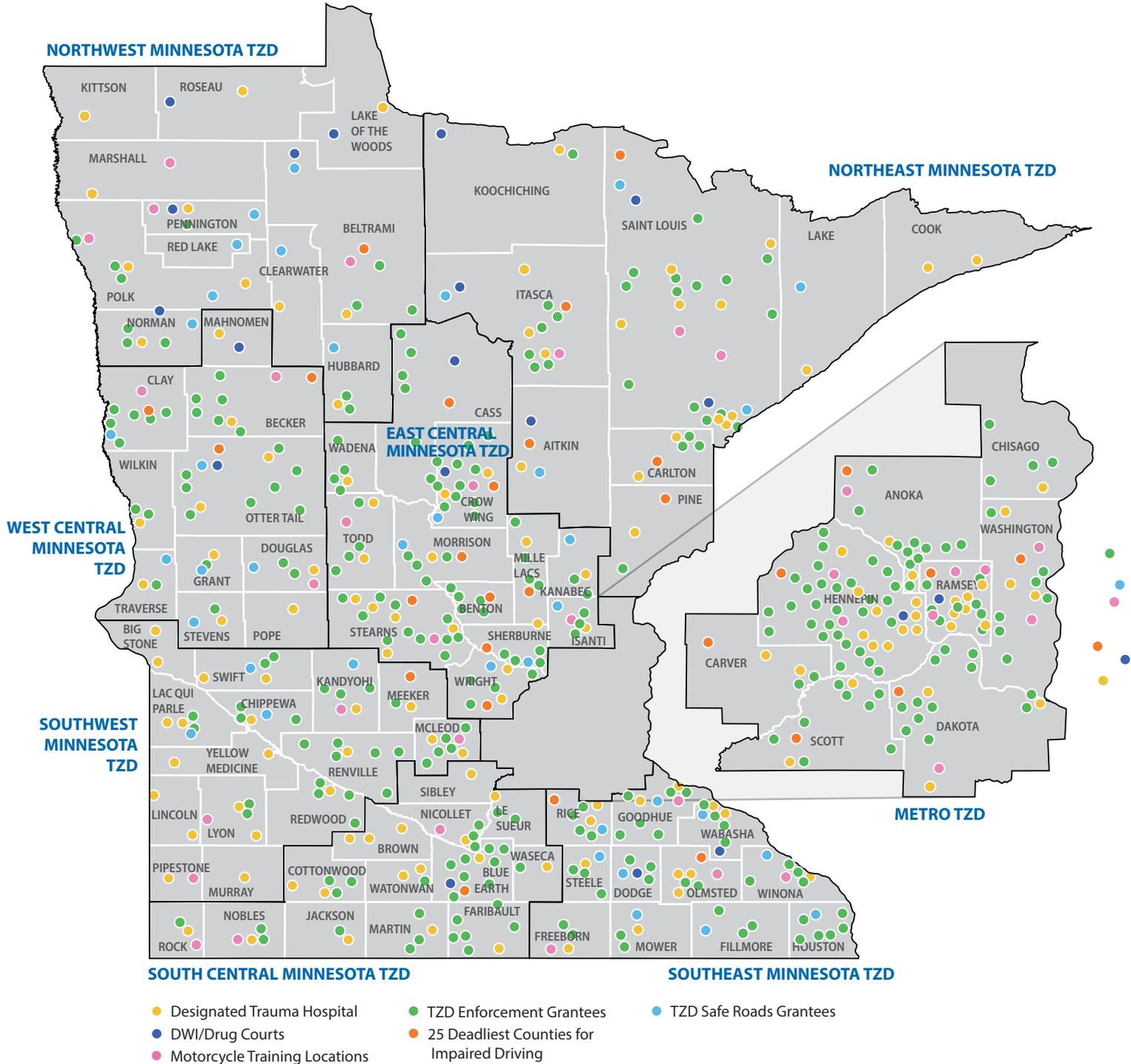
Roadmap of Partners

Potential TZD partners in your community



Driven by data, best practices, and research

Local Minnesota Traffic Safety Initiatives

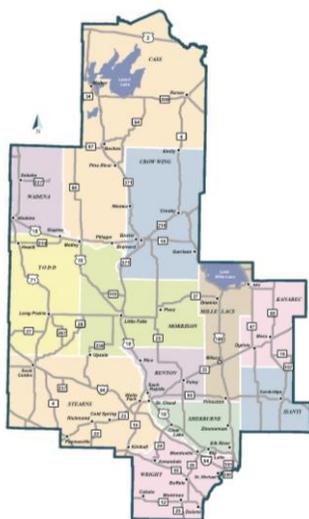


Mission:

To create a culture for which traffic 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.

Values:

- ❖ Continuous Improvements
- ❖ Engaged Partners
- ❖ Evidence-based Approaches

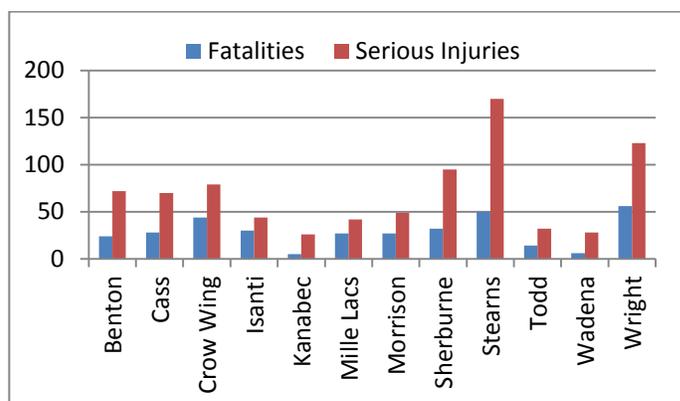


The East Central Minnesota Toward Zero Deaths (TZD) program is new this year. The counties involved include: Benton, Cass, Crow Wing, Isanti, Kanabec, Mille Lacs, Morrison, Sherburne, Stearns, Todd, Wadena, Wright

The leading cause of deaths and severe injuries in East Central Minnesota include:

- ❖ **Lack of Seatbelt Use**
- ❖ **Impaired Driving**
- ❖ **Speed and Aggressive Driving**
- ❖ **Inattentive Driving**

East Central Minnesota Fatal and Serious Injuries
by County (2010-2014)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run off the Road**
- ❖ **Impaired Driving**

The East Central Minnesota TZD program is led by a steering committee comprised of the "4 E's:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ EMS / Emergency and Trauma Services

East Central Minnesota TZD Leadership Contacts

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Mission

To create a culture for which traffic 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.



Values

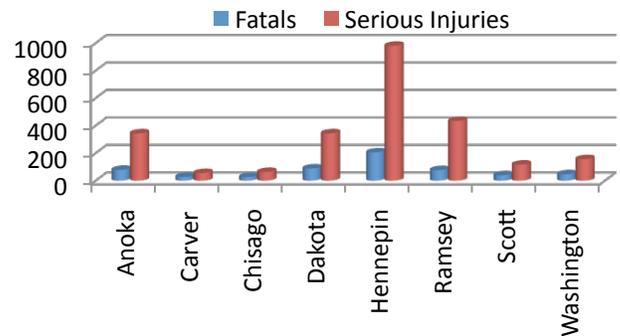
- ❖ Continuous improvements,
- ❖ Engage partners and
- ❖ Evidence-based approaches

The Metro Region Minnesota Toward Zero Deaths (TZD) program began in 2012. The counties involved include: Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott and Washington.

The leading cause of deaths and severe injuries in the metro region of Minnesota include:

- ❖ **Impaired Driving**
- ❖ **Speed and Aggressive Driving**
- ❖ **Inattentive Driving**
- ❖ **Lack of Seatbelt Use**

Metro Region Minnesota Fatal and Serious Injuries
by County (2009-2013)



The leading types of crash resulting in deaths and severe injuries include:

- ❖ **Intersection-Related**
- ❖ **Lane Departure**

The Metro Region Minnesota Toward Zero Deaths program is led by a Steering Committee comprised of the "4 Es:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ EMS / Emergency and Trauma Services

Metro Region Minnesota TZD Leadership Contacts

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Education / EMS

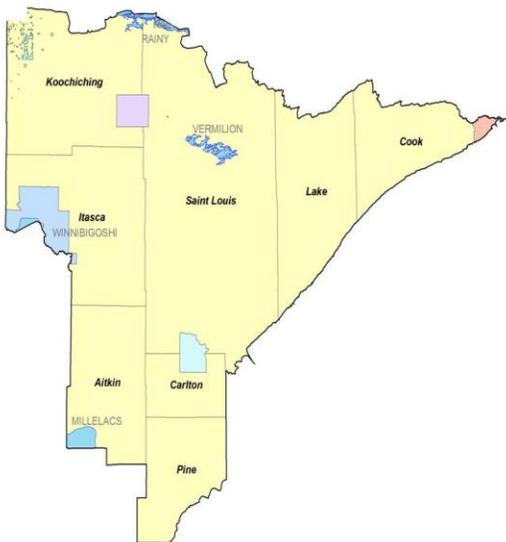
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Mission:

To create a culture for which traffic 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.

Values:

- ❖ Continuous improvements,
- ❖ Engage partners and
- ❖ Evidence-based approaches.

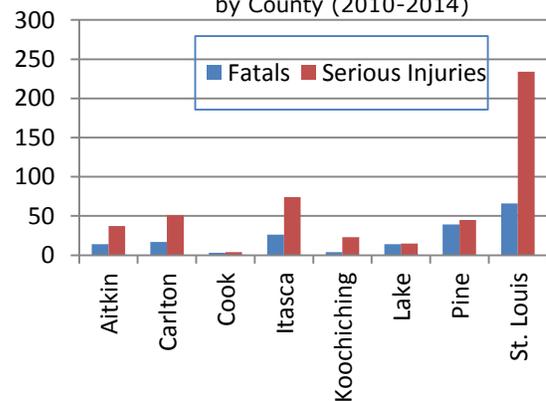


The Northeastern Minnesota Toward Zero Deaths (TZD) program began in 2010. The counties involved include: Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, Pine, St. Louis

The leading cause of deaths and severe injuries in Northeastern Minnesota include:

- ❖ **Alcohol**,
- ❖ **Distraction**,
- ❖ **Speed** and
- ❖ Lack of **Seatbelt** use.

Northeastern Minnesota Fatafs and Serious Injuries
by County (2010-2014)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run-off-Road**
- ❖ **Intersection-related**

The Northeastern Minnesota TZD program is led by a steering committee comprised of the "4 Es:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ Emergency Medical and Trauma Services

Northeast Minnesota TZD Leadership Contacts

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Mission:

To create a culture for which traffic 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.

Values:

- ❖ Continuous improvements,
- ❖ Engage partners and
- ❖ Evidence-based approaches.

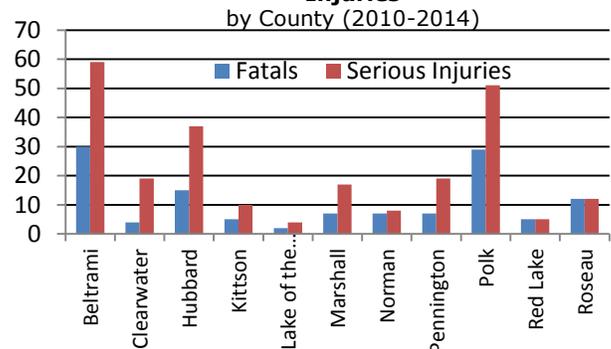


The Northwest Minnesota Toward Zero Deaths (TZD) program began in 2008. The counties involved include: Beltrami, Clearwater, Hubbard, Kittson, Lake of the Woods, Marshall, Norman, Pennington, Polk, Red Lake, and Roseau.

The leading cause of deaths and severe injuries in northwest Minnesota include:

- ❖ **Alcohol**,
- ❖ **Distraction**,
- ❖ **Speed** and
- ❖ Lack of **Seatbelt** use.

Northwestern Minnesota Fatal and Serious Injuries



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run-off-Road**
- ❖ **Intersection-related**

The Northwest Minnesota TZD program is led by a steering committee comprised of the "4 Es:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ Emergency Medical and Trauma Services.

Northwest Minnesota TZD Leadership Contacts

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Education / EMS

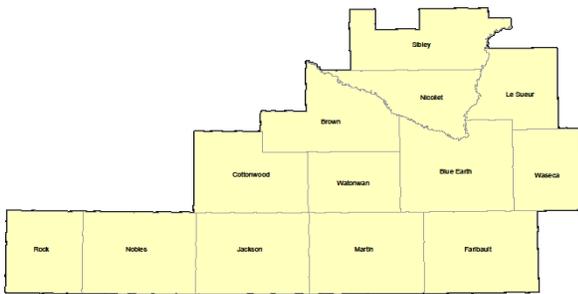
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Mission

To create a culture for which traffic 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.

Values

- ❖ Continuous improvements
- ❖ Engage partners
- ❖ Evidence-based approaches



The South Central Minnesota Toward Zero Deaths (TZD) program began in 2011. The counties involved include: Blue Earth, Brown, Cottonwood, Faribault, Jackson, Le Sueur, Martin, Nicollet, Nobles, Rock, Sibley, Waseca and Watonwan.

The South Central Minnesota Toward Zero Deaths program is led by a Steering Committee comprised of the "4 Es:"

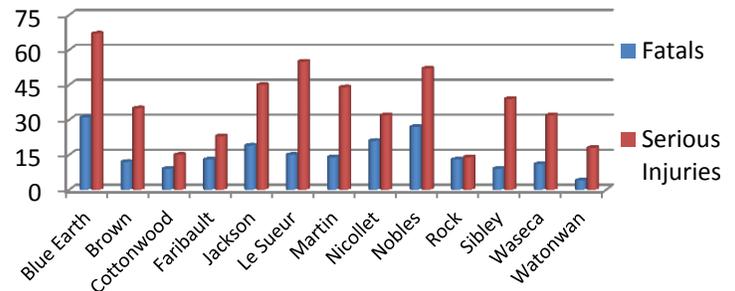
- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ EMS / Emergency and Trauma Services

South Central Traffic Information

The leading cause of deaths and severe injuries in south central Minnesota include:

- ❖ **Lack of Seatbelt Use**
2014 South Central Minnesota regional seat belt usage survey results: **84.6%** (down 3.1% from the 2013 rate)
- ❖ **Impaired Driving**
- ❖ **Speed and Aggressive Driving**
- ❖ **Inattentive Driving**

South Central Minnesota Fatal and Serious Injuries
by County (2009-2013)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run-off-Road**
- ❖ **Intersection-Related**

South Central Minnesota TZD Leadership Contacts

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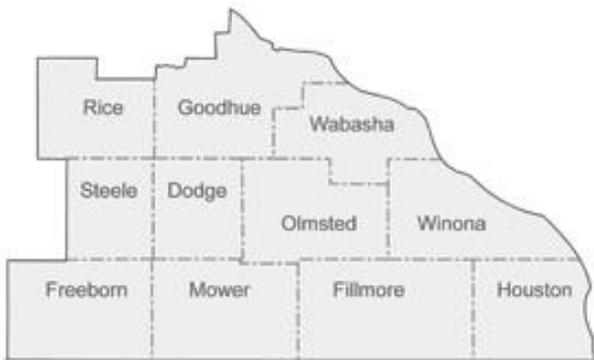
Southeast Minnesota Toward Zero Deaths

Mission

To create a culture for which traffic 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.

Values

- ❖ Continuous improvements
- ❖ Engage partners
- ❖ Evidence-based approaches

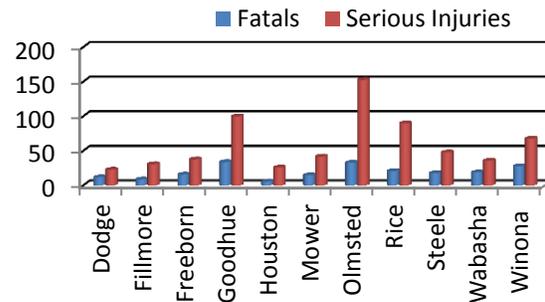


The Southeast Minnesota Toward Zero Deaths program began in 2005. The counties involved include: Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha and Winona.

The leading cause of traffic-related deaths and severe injuries in southeast Minnesota include:

- ❖ **Lack of Seatbelt Use**
- ❖ **Speed and Aggressive Driving**
- ❖ **Alcohol**

Southeast Minnesota Fatalities and Serious Injuries
by County (2010-2014)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run-off-Road**
- ❖ **Intersection-related**

The Southeast Minnesota Toward Zero Deaths program is led by a Steering Committee comprised of the "4 Es:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ EMS/Emergency Medical & Trauma Services

Southeast Minnesota TZD Leadership Contacts

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Mission

To create a culture for which traffic 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.

Values

- ❖ Continuous improvements,
- ❖ Engage partners and
- ❖ Evidence-based approaches

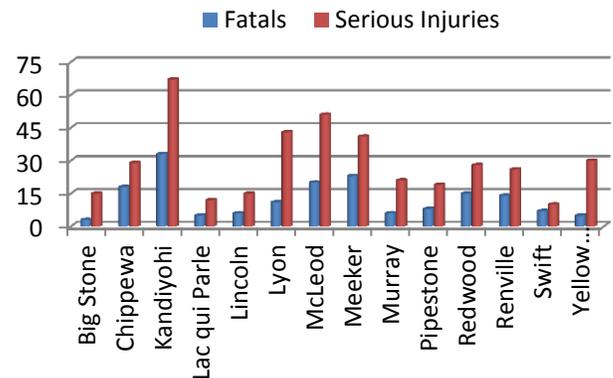


The Southwest Minnesota Toward Zero Deaths (TZD) program began in 2007. The counties involved include: Big Stone, Chippewa, Kandiyohi, Lac qui Parle, Lincoln, Lyon, McLeod, Meeker, Murray, Pipestone, Redwood, Renville, Swift and Yellow Medicine.

The leading cause of deaths and severe injuries in southwest Minnesota include:

- ❖ **Lack of Seatbelt Use**
2015 Southwest Minnesota regional seat belt usage survey results: **85.9** percent (up 3.6 percent from the 2014 rate)
- ❖ **Impaired Driving**
- ❖ **Speed and Aggressive Driving**
- ❖ **Inattentive Driving**

Southwest Minnesota Fatals and Serious Injuries
by County (2010-2014)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ **Run-off-Road**
- ❖ **Intersection-Related**

The Southwest Minnesota Toward Zero Deaths program is led by a Steering Committee comprised of the "4 Es:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ Emergency Medical and Trauma Services

Southwest Minnesota TZD Leadership Contacts

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Mission:

To create a culture for which traffic 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.

Values:

- ❖ Continuous Improvements
- ❖ Engaged Partners
- ❖ Evidence-based Approaches

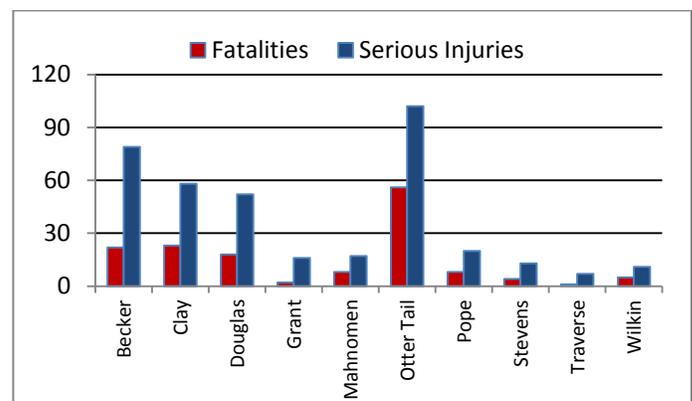


The West Central Minnesota Toward Zero Deaths (TZD) program is new this year. The counties involved include: Becker, Clay, Douglas, Grant, Mahnomen, Otter Tail, Pope, Stevens, Traverse, Wilkin

The leading cause of deaths and severe injuries in West Central Minnesota include:

- ❖ Impaired Driving
- ❖ Lack of Seatbelt Use
- ❖ Speed and Aggressive Driving
- ❖ Inattentive Driving

West Central Minnesota Fatals and Serious Injuries
by County (2009-2013)



The leading type of crash resulting in deaths and severe injuries include:

- ❖ Impaired Driving
- ❖ Run off the Road

The West Central Minnesota TZD program is led by a steering committee comprised of the "4 E's:"

- ❖ Enforcement
- ❖ Engineering
- ❖ Education
- ❖ EMS / Emergency and Trauma Services

West Central Minnesota TZD Leadership Contacts

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TZD Contacts

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TZD Events

The Minnesota TZD program hosts a variety of events annually. An [events calendar](#) is available on the website that lists these events as well as events hosted by TZD stakeholders that support the TZD program mission and goals.

Regular events hosted by the TZD program:

[Statewide Conference](#) – Hosted annually each fall, this conference provides a forum for sharing information on best practices in engineering, enforcement, education, and emergency medical/health services and for identifying new approaches to reducing the number of traffic fatalities and life-changing injuries on Minnesota roads.

[Stakeholder Breakfasts](#) – Hosted quarterly, these free breakfasts are open to the public and give attendees a chance to discuss recent TZD efforts and progress. The meetings also feature a presentation on a traffic safety-related topic.

[Regional Workshops](#) - Regional TZD partnerships host annual workshops to help facilitate the implementation of TZD in their local communities.

[Traffic Topics Presentations](#) - MnDOT Traffic Topics are monthly one-hour presentations about timely traffic engineering topics. Presentations are generally on the first Thursday of each month at 1:30 p.m. (Central). The topics are presented by MnDOT staff or guest speakers.

4. Younger Driver PowerPoint Template

This *Younger Driver Toolkit for Local Agencies* is intended to provide Minnesota local city and county transportation and traffic safety engineering staff with the information needed to conduct focused presentations to engage local communities to improve safety for Minnesota’s highest risk driving population—*younger drivers ages 15-29*.

As a supplement to the toolkit, a PowerPoint template was developed that includes the majority of the information included in this toolkit. The purpose of this template is to provide local agencies with all of the information they need to give presentations on the topic of younger drivers. Examples of a few of the slides are shown below. Users are encouraged to download the template and modify it to fit their needs, delete any data that does not apply and add new information that may be specific to their community.

The PowerPoint template can be downloaded from the LRRB website here:
<http://www.dot.state.mn.us/research/documents/YoungerDrivers.pptx>

Example PowerPoint slides



Understanding Younger Drivers



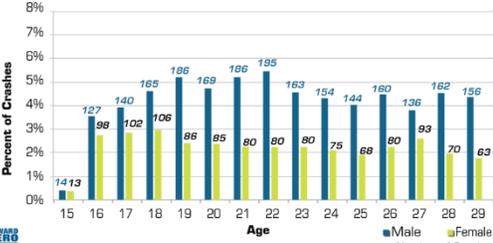
Name

Agency

Date, Year

All Younger Drivers Crashes by Age and Gender

66% 66% of younger drivers in severe crashes are male.



Age	Male (Crashes)	Female (Crashes)
15	14	13
16	127	98
17	140	102
18	165	106
19	186	88
20	169	85
21	188	80
22	185	80
23	163	80
24	154	75
25	144	68
26	160	80
27	136	93
28	162	70
29	156	63

xx = Number of Crashes

Unbelted Younger Occupants Overview

24% of crashes involving younger occupants were unbelted

Severe Crashes Summary (2009-2013)

Category	Total	Per Year
All Drivers	6,764	1,353
Younger Drivers	3,088	618
All Unbelted Drivers or Passengers	1,286	257
Unbelted Younger Drivers or Passengers	740	148

Distracted Younger Drivers PSA Video



http://www.youtube.com/watch?v=mnw_7xI5kIM

Appendix A: Younger Driver Attitudes/Motivation Sources

The following is a list of resources listed in the section of this report titled “Understanding Younger Drivers’ Attitudes and Motivations for High-Risk Driving.” Many of these resources are not available online, however, you can get access to them by contacting the [MnDOT library](#).

1. Lerner, Neil, Jeremiah Singer, and James Jenness, 2010. “Safer Drivers.” White Papers for: *Toward Zero Deaths: A National Strategy on Highway Safety*. White Paper No. 3. American Association of State Highway and Transportation Officials (AASHTO) and National Cooperative Highway Research Program (NCHRP): Washington, DC. July 12.
2. Office of Traffic Safety. Motor Vehicles Crash Facts 2013, Minnesota Department of Public Safety.
3. National Highway Traffic Safety Administration. Young drivers, traffic safety facts-2011 data. U.S: Department of Transportation; 2013.
4. Romer D. Adolescent risk taking, impulsivity, and brain development: Implications for prevention. *Dev Psychobiol* 2010;52:263e76.
5. Shope JT, Bingham CR. Teen driving Motor-vehicle crashes and factors that contribute. *Am J Prev Med* 2008;35:S261e71.
6. Office of Traffic safety, <https://dps.mn.gov/DIVISIONS/OTS/TEEN-DRIVING/Pages/default.aspx>
7. Sarkar S, Andreas M. Acceptance of and engagement in risky driving behaviors by teenagers. *Adolescence* 2004;39:687e700.

Speeding Sources:

8. Office of Traffic Safety, <https://dps.mn.gov/divisions/ots/reports-statistics/Documents/speed-fact-sheet-overview-2011-2013.pdf>
9. Motivations for Speeding: Volume I – Summary Report, Battelle’s Center for Human Performance and Safety, NHTSA, Office of behavioral Safety Research, 2012
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid.
14. Ibid.
15. Ibid.

Distracted Driving Sources:

16. Understanding the distracted brain: Why driving while using hands-free cell phones is risky behavior. National Safety Council, White Paper, April 2012

17. Strayer, D. L. (2007, February 28). Presentation at Cell Phones and Driver Distraction. Traffic Safety Coalition, Washington DC.
18. Maples, W. C., DeRosier, W., Hoenes, R., Bendure, R., & Moore S. (2008). The effects of cell phone use on peripheral vision. *Optometry – Journal of the American Optometric Association*. 79 (1), 36-42
19. Atchley, P., Three Things You Need to Know About Distracted Driving Science, Minnesota Toward Zero Deaths Conference, 2014
20. NHTSA, www.Distracted.gov
21. Ibid.
22. C. Raymond Bingham, Driver Distraction: A Perennial but Preventable Public Health Threat to Adolescents, *Journal of Adolescent Health*, Volume 54, Issue 5, Supplement, May 2014, Pages S3–S5
23. Ibid.
24. State of the Nation: of cell phone distracted driving, National Safety Council, 2010
25. Ibid.
26. Office of Traffic Safety, <https://dps.mn.gov/divisions/ots/distracted-driving/Pages/default.aspx>
27. National Phone Survey on Distracted Driving Attitudes and Behaviors, NTSHA, DOT HS 811 555, December 2011
28. Weinschenk, S., Why We're All Addicted to Texts, Twitter and Google: Dopamine makes you addicted to seeking information in an endless loop, *Brain Wise*, September, 2012 <http://www.psychologytoday.com/blog/brain-wise/201209/why-were-all-addicted-texts-twitter-and-google>
29. Ibid.
30. Office of Traffic Safety, <https://dps.mn.gov/divisions/ots/distracted-driving/Pages/default.aspx>
31. Patrick M. Carter, Raymond Bingham, Jennifer S. Zakrajsek, Jean T. Shope, Ph.D. and Tina B. Sayer, Social Norms and Risk Perception: Predictors of Distracted Driving Behavior Among Novice Adolescent Drivers, *Journal of Adolescent Health*, January 7, 2014 ([Check on reference.](#))
32. Ibid.

Unbelted Vehicle Occupants:

33. Office of Traffic Safety, 2013 Minnesota Seat Belt Overview, <https://dps.mn.gov/divisions/ots/reports-statistics/Documents/Minnesota-Seat-Belts-Overview-2013.pdf>
34. GHSA, Getting It To Click! Connecting Teens And Seat Belt Use, July, 2014 <http://www.ghsa.org/html/publications/pdf/gitc.pdf>
35. NHTSA. Traffic Safety Facts. 2012 Data. Occupant Protection. DOT HS 811 892, March 2014. <http://www-nrd.nhtsa.dot.gov/Pubs/811892.pdf>

36. Houston, Marcus; Cassabaum, Vicky; Matzick, Susan; Rapstine, Theresa BSN, RN; Terry, Shirley BSN, RN; Uribe, Phyllis BSN, RN; Harwood, Jeri PhD; Moulton, Steven MD; Mile-High Regional Emergency Medical and Trauma Advisory Council (MHRETAC); Teen Traffic Safety Campaign: Competition Is the Key; *Journal of Trauma-Injury Infection & Critical Care*: March 2010 – Volume 68 – Issue 3 – pp 511-514
37. Human Factors Related to Seat Belt Use; Source: Compendium of Technical Papers. ITE 2008 Technical Conference and Exhibit, March 30-April 2, 2008, Miami, Florida, Sunanda Dissanayake, Department of Civil Engineering, Kansas State University, 2008
38. Ibid.
39. Predicting Motivational Determinants of Seatbelt Non-use in the Front Seat: A field study; Kazuko Okamura, Goro Fujita, Makoto Kihira, Ritsu Kosuge, Tatsuro Mitsui; *Transportation Research Part F: Traffic Psychology and Behavior*, Vol. 15, Issue 5, September 2012, Pages 502–513
40. Kris Brijs, Stijn Daniels, Tom Brijs, Geert Wets, An experimental approach towards the evaluation of a seat belt campaign with an inside view on the psychology behind seat belt use, *Transportation Research Part F: Traffic Psychology and Behavior*, Vol. 14, No. 6, pp. 600-613, Nov. 2011
41. Ibid.
42. GHSA, Getting It To Click! Connecting Teens And Seat Belt Use, July, 2014
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Impaired and Alcohol-Related Resources:

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