Texting While Driving

RURAL TRANSPORTATION SAFETY AND SECURITY CENTER

Upper Great Plains Transportation Institute • North Dakota State University

Issue brief: October 2010

Distracted driving has become a prominent traffic safety issue recently, with a significant emphasis on texting while driving (TWD). Although distracted driving encompasses many behaviors, it is text messaging behind the wheel that is generating great concern as cell phone use proliferates and TWD becomes routine. Thirty states currently pro-

hibit texting while driving for all drivers (see map). Additional states have laws prohibiting novice or young drivers from TWD. North Dakota is not among either of these groups.

Research

Research on the broad scope of distracted driving does not always reveal the impacts of TWD on numbers of crashes or crash severity. Traditionally, data on driver distraction where it impacts crashes is difficult to quantify due to the nature of self-reporting, as well as disparity of data collection methods and categorization among law enforcement jurisdictions. Despite the reporting limitations, research to examine the potential effects of texting and driving has been carried out using various research methods. A snapshot of some of the research follows.

Researchers at Monash University Accident Research Centre, Australia, used a simulator to measure the effects of TWD on young, novice drivers. Outcomes demonstrated that texting increased the amount of time drivers spent looking inside their vehicles and decreased their ability to maintain constant lane position, carry out car-following tasks and respond appropriately to lane change signs. The researchers found drivers tended to increase their following distance, but no effects were found on driving speeds or detection and response to hazards (Hosking et al. 2006).

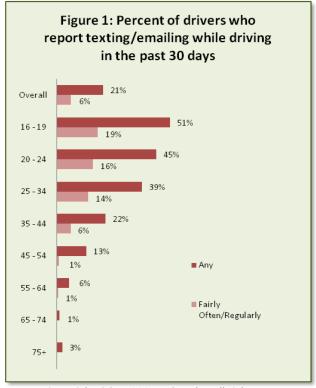
The 100-Car Naturalistic Study by Dingus et al. (2006) outfitted 100 cars traveling in the Washington, D.C. area with 5 in-vehicle video cameras recording driver actions/reactions/motions and views from outside the vehicle in all directions. The study revealed no specific data on TWD, but did address the broader description of dis-



tracted driving. Complex secondary-task distraction was a factor in 23% of all crashes and near-crashes.

Recent research by the Highway Loss Data Institute (an affiliate of the Insurance Institute for Highway Safety) does not support the effectiveness of TWD bans in reducing crashes. Researchers measured rates of collision claims in several states, prior to and following TWD bans, compared to control states with similar characteristics but where no ban existed. The texting bans were not found to reduce the number of crashes based on reported collision claims. Monthly fluctuations stayed fairly constant and closely followed the patterns of the control states. In a previous study of states that enacted hand-held cell phone bans, trends in collision rates also did not vary (IIHS 2010).

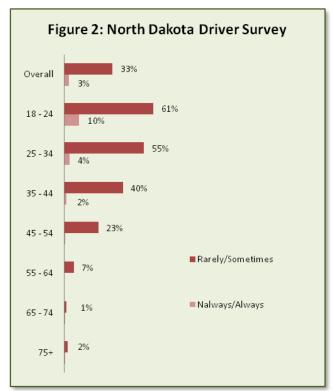
Whereas, TWD is believed to be a considerable hazard to traffic safety, understanding the prevalence of this behavior is necessary. A survey of teens conducted by the Pew Research Center found 34% of study participants, ages 12 to 17, reported texting while driving (Madden and Lenhart 2009). Additional findings indicated 48% of teens, of the same age group, have been passengers when a driver is TWD. The likelihood of this increases to 64% for older teens, 16 to 17 years.



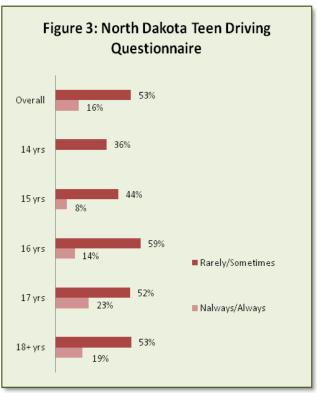
Source: Safety Culture, AAA Foundation for Traffic Safety

In October, 2009, the AAA Foundation for Traffic Safety reported findings on a phone survey conducted the previous spring. The survey found that "over one in five (respondents) admit reading or sending text messages or emails while driving", and overall, 6.4% classify their TWD as "Fairly Often/Regularly" (Figure 1).

An assessment of the texting behavior of drivers in North Dakota can be made using data from surveys administered by the UGPTI in 2010 on behalf of the NDDOT Traffic Safety Office. The ND Driver Survey sampled the general driving population, ages 18 to 75+, while the Teen Driving Questionnaire targeted young drivers (14 - 18+ years) from a number of participating high schools in North Dakota. Both surveys consisted of questions regarding driving practices and traffic safety awareness. Data for TWD was captured in the responses to the following question, "How often do you text message on a cell phone while driving?" The responses of "Rarely" and "Sometimes" were grouped for this analysis, as were "Nearly Always" and "Always." The results are illustrated in Figures 2 and 3. ND adult drivers demonstrate lower TWD rates when comparing high frequency behavior to AAA Foundation's findings (3% versus 6.4% overall) and this holds true through age stratifications. However, the results for ND teen drivers, 16 - 18+ years, with higher TWD frequency are equivalent to AAA Foundation's survey results for 16 - 19 year olds



Source: UGPTI/NDDOT ND Driver Survey - 2010



Source: UGPTI/NDDOT Teen Driving Questionnaire - 2010

(18.7%). Note the 18 - 75+ driver information can be generalized to the state's population, however, the 14 - 18+ teen survey is a convenience sample that is not statistically representative of the younger population.

North Dakota Initiatives

Steps are being taken in North Dakota, by traffic safety officials and stakeholders, to raise awareness about the inherent dangers of TWD and the crash implications.

- Since June, 2009, North Dakota has included additional elements of driver distraction in the crash report (GHSA 2010).
- North Dakota State Fleet Policy forbids text messaging and other types of electronic communication while operating fleet vehicles.
- Although a statewide texting ban has not met with legislative approval, Grand Forks City Council passed the first citywide texting ban in September 2010. Bismarck followed with a TWD ban the end of October. Violators are issued \$15 and \$50 citations respectively.
- The Fargo Police Department is implementing a texting ban and limiting cell phone use for all Fargo police employees.
- Anti-texting public service announcements and advertising campaigns have been developed. Newman Outdoor Advertising has billboards on display in the Fargo-Moorhead area and other locations across the state with the graphic "DNT TXT & DRV." The billboards were designed as a public service campaign to encourage the public to refrain from TWD. (Rathjen 2010).
- NDDOT expanded their Click It or Ticket campaign and renamed it Click It Quick with supplemental efforts towards educating area youth on the hazards of TWD.
- The NDDOT offers a webpage specifically geared to the hazards of cell phone use and texting while driving, TNT-KABOOM. http://www.ndteendrivers.com/tnt-kaboom/distracted.php

Recommendations made by the Governors Highway Safety
Association (GHSA)

- The federal government should fund research to develop effective methods for enforcing texting and cell phone bans.
- States should ban text messaging for all drivers.
- The private sector should ban cell phone use/texting by all employees driving for business purposes.
- Parents should set a good example by not using a cell phone while driving.

Summary

Distracted driving is becoming synonymous with cell phone use and texting in the minds of the public. Every year, TWD is more commonplace among drivers. While some young drivers express concern about the dangers of TWD (Pew 2009), there are drivers within this demographic who feel capable of both tasks and if in a crash, tend to blame other factors. While the IIHS studies do not support wide-spread cell phone and texting bans, other studies do show cognitive, manual, and visual impairment when TWD. Public awareness of the risks of all types of distracted driving would seem germane to policy and education considerations during all TWD discussions.

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