



Statement of

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National Transportation Safety Board

Before the

Joint Interim Transportation Committee

Kentucky General Assembly

— On —

Bill Request 828

Prohibiting driving while using electronic communications device

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An Independent Federal Agency

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation—railroad, highway, marine, and pipeline. We determine the probable cause of each accident we investigate and make safety recommendations aimed at preventing future accidents and crashes. The recommendations that arise from our investigations and safety studies are our most important product.

Our accident investigations have clearly shown us that distraction is a growing and life-threatening problem in all modes of transportation. To reduce crashes, injuries, and deaths, drivers and other operators must completely disconnect from an increasing variety of deadly distractions. Bill Request 828 can be an important step towards changing the culture of driving while distracted by portable electronic devices.

We are extremely concerned about the growing number of highway crashes that involve driver distraction, particularly distraction by portable electronic devices. More than 36,000 people were killed on our nation's highways in 2019, and the National Highway Traffic Safety Administration estimates that nine percent of those fatalities involved distracted drivers¹—deaths that were completely preventable.

Although data on distracted driving are being collected, there is currently no reliable method to accurately determine exactly how many crashes involve portable electronic devices or other distractions; therefore, it is impossible to quantify the true scope of the problem. Police crash reports, for example, are unreliable when it comes to the number of collisions involving electronic device use because drivers are not inclined to volunteer that information. However, our accident investigations and safety studies, and research performed by other agencies, paint a clear picture.

NTSB Investigations and Recommendations

NTSB has investigated a number of major highway crashes in which distraction due to the use of a portable electronic device was a causal or contributing factor, including a March 26, 2010, crash on I-65 near Munfordville, Kentucky. In that crash, a tractor-trailer went off the left side of the interstate, crossed the median, and collided with a 15-passenger van that was traveling in the opposite direction. Eleven people, including the truck driver, died. Our investigation found that the truck driver had used his telephone to make and receive calls, or to send and receive text messages a total of 69 times while driving in the 24-hour period prior to the accident, and we determined that he failed to maintain control of his vehicle because he was distracted by using his cell phone at the time of the crash.

Given the accelerating frequency of highway crashes that involve distracted driving, the trends, and the dangerous habits we discovered in many of our investigations, in December 2011, we called for a nationwide ban on the use of portable electronic devices while driving.² Whereas

¹ National Center for Statistics and Analysis. (2021, April). Distracted driving 2019 (Research Note. Report No. DOT HS 813 111). National Highway Traffic Safety Administration.

² NTSB Safety Recommendation H-11-39

previous recommendations addressed specific populations, such as commercial drivers and young drivers, this recommendation applied to all drivers.

That safety recommendation also urged using targeted education and enforcement campaigns to support these bans. Merely enacting a law by itself is not sufficient to address the problem. Likewise, education by itself, without a strong law to support it, is not sufficient to address the problem.

The 2011 recommendations were the culmination of a decade of accident investigations involving distractions in all modes of transportation, which provided 10 years of compelling firsthand investigatory experience and the known risks of distracted driving.

In the past, the NTSB did not start an investigation looking at distraction. But it is now standard practice for our investigators to review wireless records and obtain any electronic devices that might have been a factor in a crash because their use is so pervasive. We have seen collisions and crashes resulting from electronic device distraction in all modes of transportation:

- On September 12, 2008, near Chatsworth, California, a commuter train engineer, who routinely used his cell phone for personal communications while on duty, missed a red signal while distracted by a texting conversation. His train collided head-on with a freight train, killing 25 people, and injuring over 100 people.
- On July 7, 2010, in Philadelphia, a barge being towed by a tugboat ran over an amphibious “duck” boat in the Delaware River, killing two tourists. The tugboat operator was distracted by his repeated use of a cell phone and laptop computer and failed to maintain a proper lookout.
- On May 28, 2013, in Rosedale, Maryland, a 2003 Mack truck traveling northwest on an access road toward a private grade crossing was struck by a CSX freight train on the right side near the rear axle as the truck crossed the second set of tracks. The impact caused the truck to rotate and overturn. The first 15 cars of the train derailed and a postcrash fire ensued. The driver and responders sustained injuries. Contributing to the crash was the truck driver’s distraction due to a hands-free cell phone conversation.
- On May 31, 2014, near Watkins, Colorado, a pilot and/or his passenger appear to have been taking pictures of themselves when the pilot lost control of the plane, causing it to crash. Both the pilot and the passenger were killed.

We recognize that distraction is complex safety issue, and we are still learning what the human brain can—and cannot—handle. What we do know is that the risk of a crash increases if a driver is texting. Likewise reaching for a phone and dialing are dangerous behind the wheel. And talking on a phone, whether hand-held or hands-free, increases crash risk.

Crash Risk is Higher When a Driver Uses a Personal Electronic Device

Epidemiological, driver-simulator, and naturalistic studies all show that the risk of a crash is higher when a driver uses a personal electronic device. These studies, conducted by a variety of institutions, have made the case that portable electronic devices are dangerously distracting to motor vehicle operators.

Drivers are more than just visually or manually distracted when using a cell phone or other type of device; they are also cognitively distracted. Using mobile phones can cause drivers to take their eyes off the road, their hands off the steering wheel, and their minds off the road and the surrounding situation. It is this cognitive distraction that appears to have the biggest impact on driving behavior. The distraction caused by mobile devices affects performance by causing longer reaction times (notably braking reaction time, but also reaction to traffic signals), impairing a driver's ability to keep in the correct lane, shortening following distances, and reducing awareness of the driving situation, overall.³

The impact of using a mobile phone on crash risk is difficult to ascertain, but studies suggest that drivers who do so are approximately four times more likely to be involved in a crash. This increased risk appears to be similar for both handheld and hands-free phones, suggesting that it is the cognitive distraction that results from using a portable device has the most impact on crash risk.⁴ Two studies examining crash data, one published in the *New England Journal of Medicine* in 1997 and one published in the *British Medical Journal* in 2005, identified as much as a fourfold increase in crash risk when engaging in a cell phone conversation. More recently, in 2011, the Swedish National Road and Transport Research Institute reviewed studies that examined distraction resulting from cell phone use and found people had longer reaction times when using cell phones, regardless of whether the phone was handheld or hands-free. Likewise, reviews conducted by researchers at Monash University in 2007 and at the University of Calgary in 2008 concluded that performance was degraded when subjects used either a handheld or hands-free cell phone. Further, a series of naturalistic studies by the Virginia Tech Transportation Institute found that the odds ratio for a motor vehicle crash or near-crash involving an experienced driver was 2.49 for dialing and 1.37 for reaching for a phone. A recent study by the AAA Foundation also shows that hands-free is not the same as risk-free. In fact, a driver's level of cognitive distraction is about equal whether using a hands-free or handheld cell phone. Even voice-based systems may not eliminate distraction and may have unintended effects on traffic safety.

Multipronged Approach to Improve Safety – Education, Legislation, Enforcement

Nearly 80 percent of Americans think that using a cell phone while driving is dangerous. In its 2019 Traffic Safety Culture Index, the AAA Foundation for Traffic Safety reports that most drivers support laws against distracted driving, with over 76 percent of drivers supporting a law

³ World Health Organization. Mobile phone use: a growing problem of driver distraction. Geneva, Switzerland: 2011.

⁴ Ibid.

against holding and talking on a cell phone, and about 86 percent of drivers supporting a law against reading, typing, or sending a text or e-mail while driving.⁵

Despite those numbers, the AAA Foundation reported that 43.2 percent of drivers report having driven while talking on a handheld cell phone at least once in past 30 days. More than a third (38.6 percent) of drivers admitted to reading, and almost a third (29.3 percent) to typing a text message or e-mail on a handheld cell phone while driving.

Changing drivers' behavior will undoubtedly require a cultural shift, and that shift will require a three-pronged approach including better laws, education, and enforcement. Public education continues to be important for reaching drivers, operators, and safety-critical personnel about the dangers of distractions, but education campaigns must be built on a foundation of strong laws and effective, visible enforcement.

We have seen this approach work with other highway safety initiatives, such as increasing seat belt and child restraint use and curbing drunk and drugged driving. Past safety campaigns have shown that laws aimed at changing behavior are much more likely to have long-term success when combined with high-visibility enforcement and public information campaigns. For example, only 14 percent of vehicle occupants used seat belts before states started passing laws requiring them. After laws were enacted, belt use jumped to 59 percent in approximately 8 years. Today, with stronger seat belt laws, high-visibility enforcement, and education campaigns, daytime seat belt use is 90 percent. Other issues have seen similar results. Over the last 30 years, this multipronged approach has changed the way drinking and driving is perceived—it is no longer socially acceptable to consume alcohol or other drugs and drive. Education, legislation, and enforcement complement each other.

Conclusion

Efforts to date have tackled specific aspects of personal electronic device distraction. For example, 24 states and the District of Columbia (including 6 of the 8 states that border Kentucky) ban handheld phone conversations by all drivers. In a study of three early hands-free laws, the Insurance Institute for Highway Safety found that all-driver bans on handheld phone conversations can have large and lasting effects on phone use.⁶ However, although they have a positive effect on safety, these laws do nothing to address the distraction posed by hands-free device use.

Using a personal electronic device while driving takes the driver's attention away from the driving task and increases the risk of distraction, regardless of whether the device is used for texting or hands-free talking and listening. What's more, as the number of drivers using personal electronic devices continues to increase, so does the risk to everyone on the road.

⁵ AAA Foundation for Traffic Safety (2020). *2019 Traffic Safety Culture Index* (Technical Report). Washington, DC: AAA Foundation for Traffic Safety.

⁶ McCart AT, Hellinga LA, Strouse LM, Farmer, CM. *Traffic Injury Prevention (TIP) Master File*, March 2010.

Distraction is not just about holding a device in your hand or glancing away from the road; it is also about mentally straying from the driving task. Drivers may think that effective multitasking is possible, but research studies, statistics, and lives lost show this is not the case. Even a driver's momentary distraction from the driving task—such as by scanning a text message or talking on a hands-free phone—can have catastrophic consequences.

The NTSB's mission is to improve safety by recommending measures to prevent crashes, reduce injuries, and save lives. Our investigations suggest that this means getting drivers to focus on driving safely, rather than engaging in a conversation or text message on a cell phone or other portable electronic device.

We believe lives will be saved and injuries prevented if Kentucky expands and strengthens its law to prohibit the nonemergency use of all portable electronic devices while driving. We must establish a culture of safety that deems distracted driving as unacceptable as alcohol and other drug impaired driving. BR 828 sends a clear message – distracted driving is unacceptable. It is time to acknowledge that distracted driving is preventable and a serious safety risk, not just to distracted drivers, but to everyone on the road. No text, no call, no update is ever worth a human life.

Thank you for your consideration of this important issue.