February 3, 2017

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Ave., SE
Room W12-140
Washington, D.C. 20590

Re: Docket Number NHTSA-2013-0137

Dear Docket Officer:

We appreciate the opportunity to comment on the proposed National Highway Traffic Safety Administration (NHTSA) Driver Distraction Guidelines (Phase 2 Guidelines) for Portable and Aftermarket Devices.

The National Safety Council (NSC) is a 100-year-old nonprofit committed to eliminating preventable deaths in our lifetime by focusing on injuries in workplaces, on the road and in homes and communities. Our more than 13,500 member companies represent employees at more than 50,000 U.S. worksites.

Motor vehicle crashes are the leading cause of unintentional death for people from 3 to 25 years of age and a leading killer in all age groups.[1] Driver behavior is a contributor to about 94% of motor vehicle crashes, according to NHTSA, and has proven to be the hardest problem to solve. NHTSA data show that 10% of fatal crashes, 18% of injury crashes and 16% of all police-reported motor vehicle traffic crashes in 2014 were reported as distraction-affected crashes.[2] Included among these crashes are distractions resulting from using technology, either built in to vehicles or brought in by drivers. Despite years of prominent public education campaigns, state laws and enforcement, and despite drivers understanding the risk of distraction behind the wheel, driver use of electronic communications devices remains prevalent.[3]

The Problem

Technology has developed rapidly, resulting in many visual, manual and cognitive distractions with devices that are built in or brought into the vehicle. These distractions have evolved from primarily phone calls and text messages, to encompass social media, photos, video, a variety of apps and more. According to a 2016 NSC survey of more than 3,400 drivers nationwide, adult drivers were willing to engage in the following distracting behaviors often or occasionally while behind the wheel:[4]

- 20% make or answer phone calls with handheld devices
- 50% make or answer calls hands-free with headsets, speakerphones and in-vehicle systems

[1] National Safety Council, *Injury Facts,* 2016
[2] Distracted Driving 2014, NHTSA Traffic Safety Facts, April 2016
[3] Driver Electronic Device Use in 2015, NHTSA Traffic Safety Facts, September 2016
[4] http://www.nsc.org/DistractedDrivingDocuments/Methodology%20Summary%20-%20All%20Drivers.pdf

Deborah A.P. Hersman, PRESIDENT & CEO

- 32% read and send text messages
- 23% read and send email
- 23% read and post social media
- 20% surf the internet
- 19% take and post photos and video
- 14% watch a movie/video or participate in a video chat

Among teen drivers in the same survey, the percentage willing to engage in these behaviors was even higher.

Almost a quarter of adult drivers reported willingness to engage in social media while driving, they were willing to use these apps often or occasionally while driving:

- Facebook (74%)
- YouTube (37%)Twitter (35%)
- Instagram (33%)
- Snapchat (24%)

A significantly higher percent of teen drivers, 35%, expressed a willingness to use social media while driving often or occasionally. These teen drivers were willing to use the following apps:

- Twitter (teens 47%, adults 35%)
- Instagram (teens 50%, adults 33%)
- Snapchat (teens 47%, adults 24%)
- WhatsApp (teens 29%, adults 13%)

These are highly engaging apps that involve video and image viewing while driving.

About one-third of the surveyed drivers told NSC that they use voice-activated controls by pairing their nomadic devices with their vehicle to review and send emails and text messages while driving. About 26% of drivers would be willing to use vehicle and phone voice features to read or post to social media while driving.

Because social engagement through electronic communications holds a strong appeal for drivers despite the crash risks, NSC believes we must go beyond education and laws if we want to successfully solve the problem. Technology created this problem, but it can also provide the solution.

NSC Feedback on Phase 2 Guidelines

Drivers are willing to use a wide range of technology that detracts from the driving task, putting themselves, their passengers, other vehicle occupants, pedestrians, bicyclists and other roadway users at risk. As technology in general is quickly advancing, more potentially distracting features could be incorporated into vehicles. These Guidelines are needed to provide a framework for safe operation of vehicles. Electronic devices are ubiquitous in our lives, many vehicles enable communication and entertainment devices to be "paired" with or integrated into the vehicle or they may be operated by touch or voice commands that distract drivers from operating the vehicle safely.

We support NHTSA's proposed "Driver Mode" feature that automatically engages and locks all communication features on the phone that aren't essential to driving. We also realize that technologies already exist in free and paid apps and devices to enable a "driver mode." Unfortunately, most consumers do not know about or embrace these technologies. However, we asked drivers in the 2016 survey what they would do if their car or mobile device came pre-set with technological solutions to block some outgoing and incoming communications distractions. Fifty-five percent of drivers said they would leave those technologies in place to avoid being distracted. Only 23% of drivers said they would deactivate the technologies.

Thus, to significantly reduce the crash risk and resulting fatalities and injuries from distracting device use, limiting the use of non-driving, non-emergency communications should be automatic. The research shows that education and legislation have raised awareness, but behavior has been harder to influence as these devices are compelling, multi-use (may provide information such as mapping or addresses to support the driving task) and many users find it extremely difficult to disconnect – even for short periods while behind the wheel. We support the further development of technologies that can automatically detect when a phone user is a driver versus a passenger, and we hope companies will continue to develop and refine this technology.

NSC recommends that NHTSA add to the guidelines a recommendation that vehicle manufacturers and portable and aftermarket device manufacturers make it easy for consumers to opt-out of automatic pairing. When consumers choose to pair their devices with the vehicle, there should be a warning about the dangers of distraction while driving.

Unfortunately, the guidelines seem to disregard the research conducted by the AAA Foundation for Traffic Safety and University of Utah,[5] Texas A&M Transportation Institute,[6] Massachusetts Institute of Technology and the Insurance Institute for Highway Safety,[7] [8] which found voice-based text messages, music menu navigation, phone call contact look-up and phone conversations were distracting to drivers. The difficulties with executing tasks that involved voice recognition resulted in drivers looking away from the road for longer than expected to check for errors, resulting in frustration and confusion for drivers. There was some evidence that voice texting was more distracting to drivers than typing texts while driving. One MIT report noted that some voice interactions they tested would not meet the total eyes off road glance time criteria in Phase 1 Guidelines.[9] The automatic pairing allowed by the Phase 2 Guidelines enable drivers to use voice-based communications with their communications devices, and NSC believes the research outlined above should be explicitly considered before moving forward with this component of the Guidelines.

---

[5] AAA Foundation for Traffic Safety, *Measuring Cognitive Distraction in the Automobile III: A Comparison of Ten 2015 In-Vehicle Information Systems*, 2015. http://newsroom.aaa.com/wp-content/uploads/2015/10/Phase-III-Research-Report.pdf

[6] Texas A&M Transportation Institute, *An Evaluation of the Effectiveness of Voice-to-Text Programs at Reducing Incidences of Distracted Driving*, 2013. http://static.tti.tamu.edu/swutc.tamu.edu/publications/technicalreports/600451-00011-1.pdf

[7] Insurance Institute for Highway Safety, *Multi-modal assessment of on-road demand of voice and manual phone calling and voice navigation entry across two embedded vehicle systems*, 2015.

[8] Insurance Institute for Highway Safety, *Multi-Modal Demands of a Smartphone Used to Place Calls and Enter Addresses during Highway Driving Relative to Two Embedded Systems*, 2015.

[9] Massachusetts Institute of Technology, *The Effects of a Production Level "Voice Command" Interface on Driver Behavior: Summary Findings on Reported Workload, Physiology, Visual Attention, and Driving Performance*, 2013. http://agelab.mit.edu/files/MIT_AgeLab_White_Paper_2013-18A_(Voice_Interfaces).pdf

We recognize the difficulties with establishing crash risk beyond the distraction to drivers, which is more easily isolated and measured. We believe the significant distractions with voice-based features on portable devices and in-vehicle systems found in this initial research are concerning enough that investment must be made in continuing research to further track driver distraction and crash risk of voice-based systems. Unfortunately, these technologies are released in nomadic devices and vehicles faster than independent safety research can keep up with testing their distraction and crash risk potential. We urge the following:

- Increased investment by NHTSA and other federal agencies and foundations in continuing research on voice features
- Updated Phase 1 and Phase 2 guidelines if new research shows a need to strengthen the guidelines
- Incentivized training of crash investigators and updates of state crash reports to capture data on the involvement of any driver use of portable, aftermarket and in-vehicle communication use in crashes
- Updated fatality analysis reporting system data to capture data on fatal crash involvement of driver use of manual and voice/hands-free with portable, aftermarket and in-vehicle communications devices
- Improved consumer education on the dangers of distracted driving and effective countermeasures

As technology is developing rapidly, we support guidelines that are flexible to apply beyond smartphones to tablets, navigation devices, wearable technology, head-up displays and future technology.

Voluntary Guidelines and Monitoring Adoption

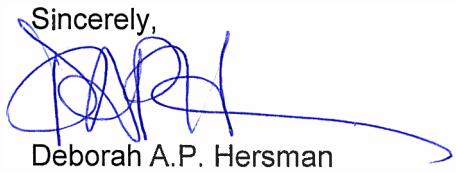
Because the guidelines are voluntary, NSC has concerns about industry participation. The Phase 2 Guidelines state that NHTSA intends to monitor manufacturers' voluntary adoption of the Phase 1 Guidelines. We recommend extending this monitoring to include Phase 2 Guidelines and that any results be transparent and public. Encouraging driver use of electronic devices serves to normalize this behavior and support the widespread misunderstanding that they are safe to use while driving. It is clear from the technology industry's own projections that they do not see sales of products slowing down regardless of NHTSA guidelines or other actions to reduce use of distracting devices by drivers.[10]

NSC applauds both NHTSA and the Department of Transportation (DOT) for your efforts to reduce driver distraction. Our best hope at significantly reducing death and injury resulting from driver distraction by our communication devices may be widespread adoption of a "Driver Mode" that automatically detects when the user is driving and locks non-driving, non-emergency features.

[10] https://www.cta.tech/News/Press-Releases/2017/January/Consumer-Confidence-on-Tech-Spending,-Overall-Econ.aspx

It is clear that driving distracted is dangerous and can be fatal. However, we are often caught debating the true extent of the risk because of the lack of precise data. More should be done to collect accurate data to show the true scope of the problem and, in the meantime, more should be done to provide and publicize technology solutions to allow drivers to choose a safer option.

Sincerely,



Deborah A.P. Hersman