



## NATIONAL SAFETY COUNCIL

---

### Position/Policy Statement

#### Distraction on the Roadways

##### **Policy/Position:**

Distraction is a danger to all roadway users. Distraction caused by talking on the phone, browsing the internet, using apps, texting, and use of other electronic devices while driving puts all roadway users at risk. The National Safety Council (NSC) supports laws banning the use of electronic devices while driving. Drivers should also avoid other activity that takes a driver's eyes and mind off the task of driving. Further, NSC believes that:

- All employers should enact a distracted driving policy that prohibits all employees from using electronic devices, including hands-free and voice-command systems, while driving on or off the job except in emergencies.
  - Employers should also drive culture change by banning device-based meetings and other communications with employees while they are driving, affirming that their employees' lives are more valuable than any call, email, or text that arrives while they are focused on the drive.
  - Employers are encouraged to explore technology options to ensure compliance with their distracted driving policies. For example, IT departments can ensure electronic devices are equipped with apps that stop transmission of texts and calls to the driver while the vehicle is in motion. Also, the National Institute of Occupational Safety and Health has issued in-vehicle monitoring technology best practices.<sup>1</sup>
  - Employers should communicate to employees that violations of this policy may result in disciplinary action, up to and including termination.
- Legislators should pass strong laws prohibiting the use of electronic devices while driving and allow for robust enforcement and public education efforts.
  - NSC believes that a multi-pronged approach is necessary to change driver behavior when it comes to distracted driving, including stronger laws, effective enforcement, and widespread education.
  - Primary-enforced handheld electronic device bans are a step in the right direction, allowing for better enforcement and education about the risks of distracted driving. However, texting and handheld device bans do not mean that the use of other types of electronic devices is safe.

---

<sup>1</sup> <https://www.cdc.gov/niosh/motorvehicle/ncmvs/newsletter/ncmvsnewsletterv5n1.html>

- Banning all electronic device use while driving is the safest policy choice. States should ban all use of electronic devices, particularly for novice drivers.
  - NSC supports implementing countermeasures to reduce the impact of distraction for all road users, including pedestrians and bicyclists.
  - Effective enforcement requires primary enforcement.
  - NSC does not support the utilization of these types of laws to target specific populations, as outlined in its equity policy position, or to achieve anything other than the intended goal: to improve safety for all roadway users.
- Drivers should not manipulate electronic devices, including voice-command systems or interactive in-vehicle technology (such as dashboard touchscreens) while driving. Drivers should send or answer texts and emails, program navigation systems, and set-up radio stations and playlists before or after driving.
  - Vehicle and smartphone manufacturers should default to “driving modes” for electronic devices, including in-vehicle technology.
  - Prioritizing the Safe Systems approach<sup>2</sup> can help mitigate many of these risks, especially as it pertains to building safer infrastructure with all roadway users in mind.
    - The Safe Systems approach is a roadway safety strategy that focuses on five action areas: safe roads, safe speeds, safe road use, safe vehicles, and effective post-crash care.
    - The approach requires the involvement of all participants in the roadway transportation system in safety efforts and seeks to strengthen safety in all aspects of the roadway transportation system so that if one part fails, the others will still protect people from death or serious injury.<sup>3</sup>
  - Improved data related to distraction of roadway users is needed. NSC supports efforts by state and federal agencies to collect and report this data.

## **Background**

### **The Distracted Driving Problem**

Distracted driving occurs when drivers divert their attention from driving to another activity. Distractions may stem from use of electronic devices requiring driver interaction, including voice-command systems or interactive in-vehicle technology (such as dashboard touchscreens), while driving. Drivers should send or answer texts and emails, program navigation systems, and set up radio stations and playlists before or after driving. Drivers should also avoid other activity that takes a driver’s eyes and mind off the driving task.

### **Types of Distraction behind the Wheel**

- **Cognitive:** The mental workload associated with a task that involves thinking about something other than driving.
- **Manual:** Tasks that require the driver to take one or both hands off the steering wheel (e.g., manipulating an electronic device).

---

<sup>2</sup> See NSC Policy Position #149, Safe Systems, <https://www.nsc.org/getattachment/cbffc278-6c2b-4c16-ad11-959201b2755e/t-safe-systems-149>, adopted 2019

<sup>3</sup> Ibid.

- **Visual:** Tasks that require the driver to look away from the roadway or obstruct the field of view.
- **Visual/Manual:** Tasks that draw the eyes away from the roadway and one or both hands off of the steering wheel.

Research shows that people do not perform well when trying to accomplish two attention-demanding tasks at the same time.<sup>4</sup>

### **Cognitive Distraction and the Myth of Multitasking**

People often think they are effectively accomplishing two tasks at the same time when using electronics when driving, but it is a misconception that two tasks can be successfully done simultaneously. While the desire for increased productivity makes it tempting for drivers to engage in tasks that are unrelated to driving, a roadway user must always be prepared to respond to the unexpected.

The human brain is not capable of performing two tasks at the same time. Instead, the brain handles tasks sequentially, switching between one task and another.<sup>5</sup> Cognitive distraction occurs when a driver is concentrating on any task other than driving. NSC believes the main responsibility of people using roadways is to focus their attention on the primary task at hand, whether they are driving, walking, cycling, or being mobile in other ways. Other cognitively demanding tasks – like talking on the phone, responding to texts, using apps, programming a navigation system, or searching the internet – can be performed safely only when parked or otherwise not moving.

### **Distraction as a Crash Contributor**

The National Highway Traffic Safety Administration (NHTSA) estimates 36,560 lives were lost in motor vehicle crashes<sup>6</sup> in 2018. Distracted driving is the cause of 2,841 of those fatalities,<sup>7</sup> and an estimated 276,000 people were injured in distraction-affected crashes<sup>8</sup> in 2018. NHTSA estimates that, of the total number of fatal crashes due to distraction, 13.3% involved the use of handheld devices.<sup>9</sup>

Scientific studies, including epidemiological and simulator studies, have determined that drivers using wireless devices while driving have a four times higher risk of a crash than a driver not engaged in mobile phone conversation.<sup>10</sup> A study by the AAA Foundation for Traffic Safety also found that mobile phone manipulation was associated with approximately double the incidence of crash involvement relative to driving without performing any observable secondary tasks.<sup>11</sup>

---

<sup>4</sup> Hallowell, E. M. (2005). Overloaded circuits: Why smart people underperform. *Harvard Business Review*.

<sup>5</sup> <https://www.sciencemag.org/news/2010/04/multitasking-splits-brain>

<sup>6</sup> "2018 Fatal Motor Vehicle Crashes: Overview," NHTSA, October 2019, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826>, accessed on 2/9/21.

<sup>7</sup> Ibid.

<sup>8</sup> National Safety Council, *Injury Facts* (website). Distracted Driving. Retrieved from <https://injuryfacts.nsc.org/motor-vehicle/motor-vehiclesafety-issues/distracted-driving/> on Nov. 4, 2019

<sup>9</sup> Ibid.

<sup>10</sup> <https://newsinhealth.nih.gov/2014/02/distracted-driving-raises-crash-risk>

<sup>11</sup> [https://aaafoundation.org/wp-content/uploads/2018/01/CellPhoneCrashRisk\\_FINAL.pdf](https://aaafoundation.org/wp-content/uploads/2018/01/CellPhoneCrashRisk_FINAL.pdf)

In the four seconds it takes to reach for an electronic device and send or read a text or email message, a vehicle traveling at 55 miles per hour will travel approximately the length of a football field.<sup>12</sup> During that time, drivers can miss much of what is in their driving view, including stop signs and pedestrians.

Unfortunately, distracted driving due to mobile phone use is increasing – the percentage of drivers talking on handheld phones increased from 2.9% in 2017 to 3.2% in 2018.<sup>13</sup> According to an Insurance Institute for Highway Safety (IIHS) study, drivers were 57% more likely to be manipulating a mobile phone in 2018 than they were in 2014.<sup>14</sup> One study that continuously videotaped 109 drivers over the course of a year found that the risk of an at-fault crash or near-crash was 1.3 times higher when drivers were talking on handheld devices and 2.8 times as high when dialing or texting.<sup>15</sup> Following the implementation of texting and handheld bans, states saw an average 4% reduction in emergency room visits for motor vehicle crashes.<sup>16</sup>

NSC recommends that all drivers refrain from using electronic devices while driving. This recommendation should be supported by implementing strong primary-enforcement laws, robust and equitable enforcement, and public education efforts.

### **Driver Safety Culture**

Roadway users are under a misconception that hands-free device use is safer than handheld use even though the cognitive load is equally as dangerous. Recent research from AAA found that:

- 69% of people are more accepting of hands-free mobile phone use while driving, compared to 24.6% supporting handheld mobile phone use<sup>17</sup>
- A study conducted over a one-month period observed 60.5% of drivers talked on a hands-free mobile phone and 49.1% talked on a handheld mobile phone<sup>18</sup>
- Only 40.9% of respondents support an outright ban on using any type of mobile phone, including hands-free, while driving.<sup>19</sup>

Distracted drivers – including those using hands-free devices – experience inattention blindness, meaning that, even when looking out the windshield, they do not process everything in the roadway environment necessary to monitor their surroundings effectively, identify potential hazards, and respond to unexpected situations. An on-road assessment of cognitive distraction found that drivers using hands-free devices spent less time looking to peripheral areas and reduced their visual monitoring of instruments and mirrors, with some drivers abandoning these tasks entirely.<sup>20</sup>

---

<sup>12</sup> <https://www.nhtsa.gov/risky-driving/distracted-driving>

<sup>13</sup> Driver Electronic Device Use in 2018, NHTSA, October 19, 2018, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812818>, accessed 2/9/21

<sup>14</sup> <https://www.iihs.org/api/datastoredocument/status-report/pdf/54/1>

<sup>15</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4001674/>

<sup>16</sup> <https://ajph.aphapublications.org/doi/10.2105/AJPH.2019.304999>

<sup>17</sup> Ibid.

<sup>18</sup> <https://aaaafoundation.org/wp-content/uploads/2018/03/AAAFTS-TSCI-Fact-Sheet.pdf>

<sup>19</sup> Ibid.

<sup>20</sup> Harbluk, J. L., Noy, Y. I., Trbovich, P. L., & Eizenman, M. (2007). An on-road assessment of cognitive distraction: Impacts on drivers' visual behavior and braking performance. *Accident Analysis and Prevention*, 39(2), 372-378.

Every roadway user should be discouraged from using an electronic device while operating on the roadway. Technology can also be part of the solution by preventing roadway users from engaging in distracted driving. Drivers should consider using built-in features or downloading applications that will prohibit use of electronic devices while the car is in motion.

Device manufacturers should make features that block phone use while in motion standard on all electronic devices.

### **Texting and Handheld Bans are a Necessary First Step – but not Sufficient**

Because of widespread media and public attention on the safety issue of texting while driving, texting bans have been enacted in 48 states plus the District of Columbia. While no state yet prohibits all electronic device use by adult drivers, 25 states plus the District of Columbia prohibit handheld mobile phone use and 37 states plus the District of Columbia prohibit novice drivers – someone driving under the jurisdiction’s graduated driver licensing laws – from any mobile phone use.<sup>21</sup>

A comprehensive strategy is necessary to change driver behavior when it comes to distracted driving, including more effective legislation, education, and equitable enforcement. The safest policy choice is a ban on all electronic device use while driving; primary-enforcement handheld bans are recommended as an initial step.

### **Pedestrian and Bicyclist Distraction**

In 2018, there were 6,238 pedestrians killed in motor vehicle crashes, a more than a 3% increase from 2017 and a 53% increase since 2009.<sup>22, 23</sup> This is the highest pedestrian fatality rate in the U.S. since 1990.<sup>24</sup> Bicyclist fatalities have also increased by over 6% in the past year and 48% since 2009, with a total of 859 fatalities in 2018.<sup>25, 26</sup>

While driver distraction likely plays a role in some of these fatalities,<sup>27</sup> there is evidence indicating a negative link between pedestrian safety and electronic device use. Walking while performing visual smartphone tasks, such as texting, email messaging, or playing games can increase unsafe pedestrian crossing behaviors like failing to look, missing opportunities, and not waiting before crossing.<sup>28</sup>

---

<sup>21</sup> <https://www.iihs.org/topics/distracted-driving>

<sup>22</sup> “2018 Fatal Motor Vehicle Crashes: Overview,” NHTSA, October 2019, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826>, accessed on 2/9/21.

<sup>23</sup> <https://www.iihs.org/topics/fatality-statistics/detail/pedestrians>

<sup>24</sup> “2018 Fatal Motor Vehicle Crashes: Overview,” NHTSA, October 2019, <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812826>, accessed on 2/9/21.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> <https://pubmed.ncbi.nlm.nih.gov/24179255/>

<sup>28</sup> Rachel Osborne, Tim Horberry, Kristie L. Young, Pedestrian distraction from Smartphones: An end-user perspective on current and future countermeasures, Transportation Research Part F: Traffic Psychology and Behaviour, Volume 73, 2020, Pages 348-361, ISSN 1369-8478, <https://doi.org/10.1016/j.trf.2020.07.007>.

A study found that emergency department visits increased for pedestrians using mobile devices during the ten-year period between 2000-10.<sup>29</sup> However, more research is needed to provide clear insight into the risk pedestrians and cyclists face while using electronic devices. This will help quantify the problem and, ultimately, identify effective interventions.

NSC recommends all pedestrians and bicyclists [follow recommended safety tips](#). NSC also urges all governmental jurisdictions to initiate, organize, and implement ongoing, comprehensive community-based pedestrian and bicyclist safety programs.

## **The Role of Employers**

As NSC outlines in its report *Understanding Driver Distraction*,<sup>30</sup> employers should enact a distracted-driving policy banning all employee use of electronic devices while driving on or off the job, including hands-free and-voice command systems. Employees should read, send or answer instant messages, texts and emails, program navigation systems and set up radio stations and playlists before or after driving. It is critical that employers recognize and communicate to employees the significant safety risks and potential legal liabilities of distracted driving by instituting comprehensive policies that prohibit the use of electronic devices for all employees and all types of vehicles while driving.

Complacency due to over reliance on advanced vehicle technology has been noted by the National Transportation Safety Board as a contributor to roadway incidents in all modes of transportation. Employers should educate employees about vehicle automation complacency. Even when advanced vehicle safety systems are activated, drivers must remain actively engaged in the task of driving. An IIHS study found that the more comfortable drivers get with partial automation, the more disengaged they become: taking their hands off the wheel, using a mobile phone, and utilizing the in-vehicle technology more frequently.<sup>31</sup>

A 2019 study found that use of adaptive cruise control and lane-keeping assistance at the same time resulted in a 50% increase in engaging in any type of secondary task and an 80% increase in engaging in visual and/or manual secondary tasks, as compared to the same drivers when not using the automated systems.<sup>32</sup>

Implementing and enforcing total-ban policies will not only help protect employees from crashes and injury but also help protect employers from potential liability claims. These policies may need to be tailored for specific occupations to allow for use in emergency situations.

*This position statement reflects the opinions of the National Safety Council but not necessarily those of each member organization.*

---

<sup>29</sup> D.C. Smith et al. / Journal of Safety Research 47 (2013) 19–23

<sup>30</sup> *Understanding Driver Distraction* can be downloaded at: <https://www.nsc.org/road-safety/safety-topics/distracted-driving/distracted-brain>

<sup>31</sup> <https://www.iihs.org/news/detail/drivers-let-their-focus-slip-as-they-get-used-to-partial-automation>

<sup>32</sup> Dunn, N., Dingus, T.A., & Socolich, S. (2019). Understanding the Impact of Technology: Do Advanced Driver Assistance and Semi-Automated Vehicle Systems Lead to Improper Driving Behavior? [Abstract.] AAA Foundation for Traffic Safety.

Adopted by the National Safety Council, February 2021. Supersedes Cell Phone & Text Messaging Restrictions, Policy #109