

## **Distracted Driving**

## The Issue:

Distracted driving is a major contributor to motor vehicle crashes, deaths and injuries on our roads.<sup>1</sup> The use of electronic devices for communications (such as text messaging, video calls, and apps), and entertainment can readily distract drivers from the driving task as found by safety research, studies and data. The National Transportation Safety Board (NTSB) includes "Eliminate Distracted Driving" on its 2021-2022 Most Wanted List of Transportation Safety Improvements.<sup>2</sup>

## The Impact:

- In 2020, 3,142 people were killed in crashes involving a distracted driver according to the National Highway Traffic Safety Administration (NHTSA), accounting for 8 percent of all crash fatalities. Nonoccupants (pedestrians, pedalcyclists, and others) accounted for almost 19 percent (587) of distraction-affected fatalities in 2020. An estimated 324,652 people were injured in distraction-affected crashes in 2020.<sup>3</sup>
- Crashes in which at least one driver was identified as being distracted imposed an economic cost of \$40 billion in 2010.<sup>4</sup> Adjusted for inflation only, that amounts to \$52 billion in 2022 dollars.<sup>5</sup> In 2018, distracted driving crashes cost employers nearly \$19 billion.<sup>6</sup>
- The true impact of distracted driving remains unclear due to issues with the underreporting of crashes involving distraction, including differences in police crash report coding and database limitations.<sup>7</sup>
- According to an opinion poll commissioned by Advocates and conducted by ENGINE Insights in December 2021, 84 percent of respondents were "very" or "extremely" concerned with distracted driving caused by talking on cell phones, texting, or using other mobile devices.<sup>8</sup>

## The Facts:

- In 2021, two trillion text and multimedia messages were sent or received in the U.S. Mobile wireless data traffic has risen dramatically over the last decade, from less than 0.4 trillion megabytes in 2010 to 53.4 trillion in 2020.<sup>9</sup>
- Research has shown that because of the degree of cognitive distraction these devices cause, the behavior of drivers using mobile phones (whether hand-held or hands-free) is equivalent to the behavior of drivers at the threshold of the legal limit for alcohol (0.08 percent blood alcohol concentration).<sup>10</sup>
- Crash risk increases dramatically as much as four times higher when a driver is using a mobile phone, with no significant safety difference between hand-held and hands-free phones observed in many studies.<sup>11</sup>
- A study by the Virginia Tech Transportation Institute found that text messaging increased the risk of a safety-critical driving event (i.e., crashes, near-crashes, crash-relevant conflicts, and unintentional lane deviations) by 23.2 times.<sup>12</sup>
- Sending or receiving a text message causes the driver's eyes to be off the road for an average of 4.6 seconds. When driving 55 miles per hour, this is the equivalent of driving the entire length of a football field blind.<sup>13</sup>
- Seven percent of 15- to 20-year-old drivers involved in a fatal crash in 2020 were reported as distracted at the time of the crash. This age group has the largest proportion of drivers involved in fatal crashes who were distracted.<sup>14</sup>
- Average time spent actively using a phone while driving increased during the pandemic, reaching one minute and 38 seconds per driving hour in February 2022, a 30 percent increase over February 2020.<sup>15</sup>
- According to NHTSA, the percentage of drivers visibly manipulating hand-held devices while driving increased by 127 percent between 2012 and 2021.<sup>16</sup>

- The percentage of drivers holding cell phones to their ears while driving was 2.5 in 2021 according to NHTSA. This rate translates into nearly 373,000 passenger vehicles driven by people using hand-held cell phones at a typical daylight moment in 2021.<sup>17</sup>
- The findings of three surveys conducted between February and March of 2022 confirm the prevalence of device use while driving:
  - > A February 2022 survey commissioned by State Farm found that among licensed drivers:<sup>18</sup>
    - 55 percent "always" or "often" read or send text messages while driving.
    - 51 percent "always" or "often" hold the phone while talking.
    - 49 percent "always" or "often" interact with cell phone apps.
  - > A March 2022 survey commissioned by Advocates and Selective Insurance Group found:<sup>19</sup>
    - 70 percent of licensed drivers have used a mobile device while driving for personal reasons in the last 90 days.
    - 86 percent of those whose jobs require them to drive at least sometimes report using a mobile device while driving for work purposes in the last 90 days.
    - 84 percent of drivers age 18-34 used a mobile device while driving, a number that rises to 87 percent for drivers age 35-44.
    - Nearly one in three Americans (31 percent) have either been in or know someone who has been in a crash that occurred while a driver was using a mobile device.
    - More than half of Americans have seen people driving while distracted by a mobile device in the past two weeks (56 percent).
    - When asked about strategies to effectively reduce distracted driving or its impacts, 58 percent indicated advanced safety technologies and 50 percent affirmed comprehensive state laws.
  - > A March 2022 survey commissioned by Nationwide Insurance found that:<sup>20</sup>
    - 34 percent of drivers believe it is very safe to hold your phone while driving. This finding was most pronounced among Gen Z and Millennials (39 percent).
    - Half of those surveyed (51 percent) had held a cell phone to talk, text or use an app while driving, despite 66 percent saying that such behavior is dangerous.
  - NHTSA's most recent survey on the issue found when compared to prior surveys that twice as many people reported cell phone use whether talking or texting when they were involved in a crash or near crash. The survey also indicated a high level of support for laws banning the behavior, 92 percent of respondents supported state laws banning texting or emailing while driving.<sup>21</sup>

## The Solutions: Laws, Technology and Road Safety Infrastructure

# **Comprehensive State Laws to Deter Distracted Driving** (*See Advocates' Roadmap to Safety Report for more information about specific state laws.*)

- A comprehensive approach including strong laws, appropriate and equitable enforcement, and education can deter distracted driving. In addition to all-driver texting bans and graduated driver licensing (GDL) cell phone bans, distracted driving laws should curb distracting viewing and manual use.
- As technology on mobile devices has developed to include other electronic communications and uses such as video chatting, streaming, posting to social media and "apps," states have begun enhancing their texting ban laws by prohibiting these and other distracting electronic communications and uses while driving.
- A report on distracted driving laws by the Transportation Research Board (TRB) recommends that state laws should "be in effect at all times when the vehicle is traveling on public roads, this includes at stop lights and when temporarily slowed or stopped in traffic" and prohibit the use of "an electronic device to stream, record, or broadcast video. This includes when the device is used hands-free (mounted, affixed, or resting somewhere in the vehicle)."<sup>22</sup>
- The public supports legislation to discourage and reduce distracted driving:
  - In a survey commissioned by Advocates and Selective Insurance, 50 percent think comprehensive state laws can effectively reduce distracted driving. Views on strategies to address distracted driving were consistent across political party lines.<sup>23</sup>

In a survey commissioned by Nationwide Insurance, 88 percent of consumers supported legislation to curb distracted driving, and 86 percent supported legislation to prohibit hand-held cellphone use while driving.<sup>24</sup>

#### Safety Technologies and Safety Standards Can Protect Vehicle Occupants and Other Road Users

The U.S. Department of Transportation (DOT) must expeditiously use its authority to advance minimum performance standards for vehicle safety technologies which can prevent or mitigate crashes and protect vehicle occupants and road users. These safety technologies should be standard, not optional, equipment in new vehicles. This action will achieve safety equity by both ensuring that the technology responds to and benefits all road users and that consumers buying new vehicles are not charged extra for the technology. Moreover, requiring equipment as standard can reduce the base cost of technology due to economies of scale.

- Advanced Driver Assistance Systems (ADAS):
  - According to the AAA Foundation for Traffic Safety, equipping all cars, pickup trucks, vans, minivans and SUVs with forward collision warning (FCW) / automatic emergency braking (AEB) that respond to pedestrians / bicyclists as well as vehicles could prevent 1.9 million crashes, nearly 900,000 injuries, and more than 4,700 deaths annually.<sup>25</sup>
  - The Infrastructure Investment and Jobs Act (IIJA, Pub. L. 117-58), signed into law on November 15, 2021, directs the U.S. DOT to issue final rules on minimum performance standards and requirements for ADAS technologies including AEB, FCW, lane departure warning (LDW) and lane keeping assist (LKA). However, the law does not mandate that the technology will be capable of responding to pedestrians, bicyclists and other road users as appropriate, does not include a date certain for rulemaking and compliance for ADAS in passenger vehicles, and does not include Class 3 6 trucks for the AEB requirement.<sup>26</sup>
- Driver Monitoring Systems:
  - The European New Car Assessment Program (Euro NCAP) has started evaluating driver monitoring systems (DMS) which can help "mitigate the very significant problems of driver distraction and impairment through alcohol, fatigue, etc."<sup>27</sup> in its rating program.
  - Researchers studying automation complacency, a phenomenon which has been found to affect drivers in vehicles equipped with automated driving technology, recommend DMS as a countermeasure for driver disengagement and distraction.<sup>28</sup>
  - The NTSB has investigated crashes involving driver inattention and automated driving systems (ADS), and issued recommendations calling for safety standards and requirements for DMS in vehicles equipped with Level 2 automation. SAE International (formerly the Society of Automotive Engineers) defines Level 2 as vehicles equipped with technology that provides steering, braking and acceleration support to the driver. Level 2 features include lane centering combined with adaptive cruise control.<sup>29</sup>

### Road Safety Infrastructure Improvements and The Safe System Approach<sup>30</sup>

The Safe System Approach (SSA) assumes that humans will make mistakes and that we must anticipate this and make accommodations to account for limited human injury tolerances through five elements: Safe Vehicles, Safe Road Users, Safe Roads, Safe Speed and Post-Crash Care. By improving the design and operation of roadways to accommodate all road users safely, the SSA seeks to avoid conflicts between road users (drivers of vehicles, motorcycle riders, pedestrians, bicyclists, micromobility riders, wheelchair users and others) and minimize impact forces when they do occur in order to prevent fatalities and serious injuries.

Infrastructure improvements consistent with the SSA to limit conflicts include:

- <u>Curbing speed</u> This can be accomplished by reducing speed limits, employing automated enforcement to augment traditional enforcement, adding speed humps, using real-time speed feedback signs, performing road diets and installing roundabouts.
- <u>Prioritizing infrastructure to promote safety</u> This includes changes such as adding lighting and sight lines, leading intervals, pedestrian hybrid beacons, curb extensions, accessible sidewalks, rumble strips, protected intersections, separated bike lanes, and road separations that take into account all users.

Localities can advance these and other infrastructure improvements systemically by requiring their adoption as appropriate in all road design and maintenance projects.

The Infrastructure Investment and Jobs Act, Pub. L. 117-58, includes multiple provisions that advance the SSA including expanded funding for safety infrastructure upgrades. It also provides support and guidance for localities planning to apply for such, permits use of certain federal funds for automated enforcement programs in school and work zones, directs requirements for vehicle safety improvements including crash avoidance technologies, and ensures funds are used to improve vulnerable road user safety.

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