

# **Distracted Driving**

# The Issue:

Distracted driving is a major contributor to motor vehicle crashes, deaths and injuries on U.S. roads.<sup>1</sup> The use of electronic devices for communications (such as text messaging and video calls) and entertainment (such as apps and video streaming) can readily distract drivers from the driving task as found by safety research, studies and data. The National Transportation Safety Board (NTSB) includes "Distracted Driving" as one of seven specific safety issues that need further action in its Highway focus area of advocacy.<sup>2</sup>

# The Impact:

- In 2022, 3,308 people were killed in crashes involving a distracted driver, according to the National Highway Traffic Safety Administration (NHTSA), accounting for 8% of all crash fatalities. Nonoccupants (pedestrians, bicyclists, and others) accounted for 19% (621) of distraction-affected fatalities in 2022. An estimated 289,310 people were injured in distraction-affected crashes in 2022.<sup>3</sup>
- Crashes in which at least one driver was identified as being distracted imposed an economic cost of \$98.2 billion in 2019.<sup>4</sup> Adjusted for inflation only, that amounts to \$120.32 billion in 2024 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% 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 2023, over 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 3 trillion megabytes in 2010 to 100.1 trillion in 2023.<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 handheld or hands-free) is equivalent to the behavior of drivers at the threshold of the legal limit for alcohol in most states (0.08% 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 handheld 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 (mph), this is the equivalent of driving the entire length of a football field blind.<sup>13</sup>
- 6% of drivers 15- to 20-years-old, 21- to 24-years old, 25- to 34-years old and those 75 and above involved in a fatal crash in 2022 were reported as distracted at the time of the crash. Each of these age groups has the largest percentage of drivers involved in fatal crashes who were distracted. The percentage of other age groups (ages 35 74) was lower.<sup>14</sup>
- Screen interaction fell in 2023 by 4.5%. While this is a welcome drop, the 2023 figures are still 17% higher than 2020.<sup>15</sup>
- According to NHTSA, the percentage of drivers visibly manipulating handheld devices while driving increased by 82% between 2013 and 2022.<sup>16</sup>
- The percentage of drivers holding cell phones to their ears while driving was 2.1 in 2022 according to NHTSA. This rate translates into just over 314,000 passenger vehicles driven by people using handheld cell phones at a typical daylight moment in 2022.<sup>17</sup>
- The findings of three surveys conducted between February and March 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% "always" or "often" read or send text messages while driving.
    - 51% "always" or "often" hold the phone while talking.
    - 49% "always" or "often" interact with cell phone apps.
  - $\circ~$  A March 2022 survey commissioned by Advocates and Selective Insurance Group found: ^19
    - 70% of licensed drivers have used a mobile device while driving for personal reasons in the last 90 days.
    - 86% 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% of drivers ages 18-34 used a mobile device while driving, a number that rises to 87% for drivers ages 35-44.
    - Nearly one in three Americans (31%) 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%).

- When asked about strategies to effectively reduce distracted driving or its impacts, 58% indicated advanced safety technologies and 50% affirmed comprehensive state laws.
- A March 2022 survey commissioned by Nationwide Insurance found:<sup>20</sup>
  - 34% of drivers believe it is very safe to hold your phone while driving. This finding was most pronounced among Gen Z and Millennials (39%).
  - Half of those surveyed (51%) had held a cell phone to talk, text or use an app while driving, despite 66% 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% 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** (<u>See Advocates' Roadmap to</u> <u>Safety Report for more information about specific state laws</u>.)

- A comprehensive approach including strong laws, appropriate and equitable enforcement, and effective 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 enhanced 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% 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, 89% of consumers supported legislation to curb distracted driving, and 87% supported legislation to prohibit handheld cellphone use while driving.<sup>24</sup>

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

The U.S. Department of Transportation (DOT) must expeditiously 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 fees 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) which 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) 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).<sup>26</sup>
  - In May 2024, U.S. DOT issued a Final Rule to require passenger vehicles be equipped with AEB that detect pedestrians.<sup>27</sup> NHTSA estimates that this action will save 362 lives and mitigate over 24,000 injuries annually. It is estimated to result in yearly cost benefit of between \$5.8-\$7.2 billion.<sup>28</sup> In July 2023, DOT issued a NPRM to require heavy vehicles weighing over 10,000 pounds to be equipped with AEB.<sup>29</sup>

# Driver Monitoring Systems:

- The European New Car Assessment Program (Euro NCAP) is evaluating driver monitoring systems (DMS) which can help "mitigate the very significant problems of driver distraction and impairment through alcohol, fatigue, etc."<sup>30</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>31</sup>
  - The IIHS has started rating vehicles on the performance of driving automation safeguards, including driver monitoring systems. Of the first 14 vehicles tested, 11 were rated poor, two were marginal, and only one was rated acceptable.<sup>32</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>33</sup>

#### Road Safety Infrastructure Improvements and the Safe System Approach<sup>34</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 to prevent fatalities and serious injuries.

Infrastructure improvements consistent with the SSA to limit conflicts include: *Curbing speed*:

• This can be accomplished by reducing speed limits, employing automated enforcement to augment traditional enforcement, adding speed humps, using realtime speed feedback signs, performing road diets and installing roundabouts.

Prioritizing infrastructure to promote safety:

• 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 consider 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 IIJA 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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<sup>&</sup>lt;sup>1</sup> Traffic Safety Facts Research Note: Distracted Driving 2022, April 2024, NHTSA, DOT HS 813 559, available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813559</u>.

<sup>&</sup>lt;sup>2</sup> National Transportation Safety Board (NTSB) Safety Issues, available at https://www.ntsb.gov/Advocacy/SafetyIssues/Pages/default.aspx.

<sup>&</sup>lt;sup>3</sup> Traffic Safety Facts Research Note: Distracted Driving 2022, April 2024, NHTSA, DOT HS 813 559, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813559.

<sup>&</sup>lt;sup>4</sup> The Economic and Societal Impact of Motor Vehicle Crashes, 2019, NHTSA, Feb. 2023, DOT HS 812 403, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813403.

<sup>&</sup>lt;sup>5</sup> Bureau of Labor Statistics Inflation Calculator, available at https://data.bls.gov/cgi-bin/cpicalc.pl; Jan. 2019 value compared to Jan. 2024 value.

<sup>&</sup>lt;sup>6</sup> Cost of Motor Vehicle Crashes to Employers 2019, NETS, 2018 data expressed in 2019 \$, available at https://trafficsafety.org/?ddownload=26813

- <sup>7</sup> Traffic Safety Facts Research Note: Distracted Driving 2022, April 2024, NHTSA, DOT HS 813 559, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813559.
- <sup>8</sup> ENGINE'S CARAVAN SURVEY Public Opinion Poll, January 2022, available at <u>https://saferoads.org/wp-content/uploads/2022/01/Advocates-January-2022-Poll-Report-Final.pdf</u>.
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- <sup>10</sup> Fatal Distraction? A Comparison of the Cell-Phone Driver and the Drunk Driver, Strayer, D.L., Drews, F.A., Crouch, D.J., University of Utah, Department of Psychology, available at <u>https://journals.sagepub.com/doi/10.1518/001872006777724471</u>.
- <sup>11</sup> McEvoy, S.P.; Stevenson, M.R.; McCartt A.T.; Woodward, M.; Haworth, C; Palamara, P.; and Cercarelli, R. 2005. Role of mobile phones in motor vehicle crashes resulting in hospital attendance: a case-crossover study. Britich Medical Journal 331(7514):428; available at <u>http://www.bmj.com/content/331/7514/428</u>; and Redelmeier, D.A. and Tibshirani, R.J. 1997. Association between cellular-telephone call and motor vehicle collisions. The New England Journal of Medicine 336:453-58, available at <u>http://www.stat.wmich.edu/naranjo/articles/nejmcellphone.pdf</u>.
- <sup>12</sup> What is Distracted Driving? Key Facts and Statistics, DOT NHTSA, citing Olson, R.L., Hanowski, R.J., Hickman, J.S., Bocanegra, J.; "Driver Distraction in Commercial Vehicle Operations", VTTI, Sep. 2009, available at <u>https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/DriverDistractionStudy.pdf</u>.
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- <sup>14</sup> Traffic Safety Facts Research Note: Distracted Driving 2022, April 2024, NHTSA, DOT HS 813 559, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813559.
- <sup>15</sup> 2023 US Distracted Driving Report, Cambridge Mobile Telematics, available at: <u>https://www.cmtelematics.com/distracted-driving-report-2023/</u>; The State of US Road Risk in 2024, Cambridge Mobile Telematics, available at https://www.cmtelematics.com/report-the-state-of-us-road-risk-in-2024/.
- <sup>16</sup> Traffic Safety Facts Research Note: Driver Electronic Device Use in 2021, Aug. 2022, NHTSA, DOT HS 813 357, available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813357</u>.
- <sup>17</sup> Traffic Safety Facts Research Note: Driver Electronic Device Use in 2022, Jan. 2024, NHTSA, DOT HS 813 531, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813531.
- <sup>18</sup> State Farm Enterprise Research Department, "What distracts you from driving safely?" April 21, 2022, available at: <u>https://newsroom.statefarm.com/what-distracts-you-from-driving-safely/</u>.
- <sup>19</sup> The Harris Poll, "Distracted Driving In America," March 2022, Commissioned by Selective Insurance and Advocates for Highway and Auto Safety, available at: <u>https://saferoads.org/wp-content/uploads/2022/03/Selective-Advocates-Distracted-Driving-Poll-Report-2022-FINAL.pdf</u>
- <sup>20</sup> Edelman Data & Intelligence, "Bad driving has Americans on Edge," March 2022, commissioned by Nationwide Insurance, available at: <u>https://news.nationwide.com/bad-driving-has-americans-on-edge/</u>.
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- <sup>28</sup> 89 FR 39686 (May 9, 2024); available at <u>https://www.regulations.gov/document/NHTSA-2023-0021-1065</u>.
- <sup>29</sup> 88 FR 43174 (Jul. 6, 2023); available at <u>https://www.regulations.gov/document/NHTSA-2023-0023-0001</u>.
- <sup>30</sup> Euro NCAP Safety Ratings Explained, Occupant Status Monitoring; <u>https://www.euroncap.com/en/car-safety/the-ratings-explained/safety-assist/occupant-status-monitoring/</u>.
- <sup>31</sup> "Disengagement from driving when using automation during a 4-week field trial," IIHS, October 2021, available at: <u>https://www.iihs.org/topics/bibliography/ref/2231;</u> "Addressing driver disengagement and proper system use: human factors recommendations for Level 2 driving automation design," IIHS, March 2021, available at: <u>https://www.iihs.org/topics/bibliography/ref/2200</u>.
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 <sup>34</sup> "Recommendations of the Safe System Consortium," Johns Hopkins University Center for Injury Research and Prevention, May 2021. Available here: <u>https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-injury-research-and-policy/our-impact/documents/recommendations-of-the-safe-system-consortium.pdf</u>.