

Distracted Driving

The Issue:

Distracted driving is a major contributor to motor vehicle crashes, deaths and injuries on our roads.¹ 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 "Eliminate Distracted Driving" on its 2021-2023 Most Wanted List of Transportation Safety Improvements.²

The Impact:

- In 2020, 3,522 people were killed in crashes involving a distracted driver, according to the National Highway Traffic Safety Administration (NHTSA), accounting for eight percent of all crash fatalities. Nonoccupants (pedestrians, pedalcyclists, and others) accounted for 18 percent (644) of distraction-affected fatalities in 2021. An estimated 362,415 people were injured in distraction-affected crashes in 2021.³
- Crashes in which at least one driver was identified as being distracted imposed an economic cost of \$98.2 billion in 2019.⁴ Adjusted for inflation only, that amounts to \$119.78 billion in 2023 dollars.⁵ In 2018, distracted driving crashes cost employers nearly \$19 billion.⁶
- 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.⁷
- 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.⁸

The Facts:

- In 2022, 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 less than 0.4 trillion megabytes in 2010 to 73.7 trillion in 2021.⁹
- 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 percent blood alcohol concentration).¹⁰
- 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.¹¹
- 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.¹²
- 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.¹³
- Seven percent of 15- to 20-year-old drivers involved in a fatal crash in 2021 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.¹⁴
- Average time spent actively using a phone while driving increased during the COVID-19 pandemic, reaching one minute and 38 seconds per driving hour in February 2022, a 30 percent increase over February 2020.¹⁵
- According to NHTSA, the percentage of drivers visibly manipulating handheld devices while driving increased by 127 percent between 2012 and 2021.¹⁶

- 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 handheld cell phones at a typical daylight moment in 2021.¹⁷
- 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:¹⁸
 - 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:¹⁹
 - 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 ages 18-34 used a mobile device while driving, a number that rises to 87 percent for drivers ages 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:²⁰
 - 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.²¹

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 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)."²²
- 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.²³

In a survey commissioned by Nationwide Insurance, 88 percent of consumers supported legislation to curb distracted driving, and 86 percent supported legislation to prohibit handheld cellphone use while driving.²⁴

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.²⁵
- 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).²⁶
- The U.S. DOT issued a Notice of Proposed Rulemaking (NPRM) to require passenger vehicles be equipped with AEB that detect pedestrians in May 2023.²⁷ In July 2023, DOT issued a NPRM to require heavy vehicles weighing over 10,000 pounds to be equipped with AEB.²⁸

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."²⁹ 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.³⁰
- 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.³¹

Road Safety Infrastructure Improvements and the Safe System Approach³²

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:

- <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 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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¹ Traffic Safety Facts Research Note: Distracted Driving 2021, May 2023, NHTSA, DOT HS 813 443, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813443.

¹⁹ The Harris Poll, "Distracted Driving In America," March 2022, Commissioned by Selective Insurance and Advocates for Highway and Auto Safety, available at: https://saferoads.org/wp-content/uploads/2022/03/Selective-Advocates-Distracted-Driving-Poll-Report-2022-FINAL.pdf

² National Transportation Safety Board (NTSB) 2021-2023 Most Wanted List of Transportation Safety Improvements, available at https://www.ntsb.gov/Advocacy/mwl/Pages/default.aspx.

³ Traffic Safety Facts Research Note: Distracted Driving 2021, May 2023, NHTSA, DOT HS 813 443, available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813443</u>.

⁴ 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.

⁵ Bureau of Labor Statistics Inflation Calculator, available at <u>https://www.bls.gov/data/inflation_calculator.htm;</u> Jan. 2019 value compared to Jan. 2023 value.

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

⁷ Traffic Safety Facts Research Note: Distracted Driving 2021, May 2023, NHTSA, DOT HS 813 443, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813443.

⁸ ENGINE'S CARAVAN SURVEY Public Opinion Poll, January 2022, available at <u>https://saferoads.org/wp-content/uploads/2022/01/Advocates-January-2022-</u> Poll-Report-Final.pdf.

⁹ 2023 Annual Survey Highlights, CTIA: The Wireless Association, available at <u>https://api.ctia.org/wp-content/uploads/2023/07/2023-Annual-Survey.-</u> <u>Highlights.pdf</u>.

¹⁰ 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>.

¹¹ 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>.

 ¹² 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>.
 ¹³ Physician Ending Ending Distributed Distributed At any files of the provided At any

³ Blueprint for Ending Distracted Driving, NHTSA, June 2012, DOT HS 811 629, available at https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/811629.pdf.

¹⁴ Traffic Safety Facts Research Note: Distracted Driving 2021, May 2023, NHTSA, DOT HS 813 443, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813443.

 ¹⁵ 2022 US Distracted Driving Report, Cambridge Mobile Telematics, available at: <u>https://www.cmtelematics.com/the-2022-us-distracted-driving-report/</u>.

¹⁶ Traffic Safety Facts Research Note: Driver Electronic Device Use in 2021, Aug. 2022, NHTSA, DOT HS 813 357, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813357.

¹⁷ Traffic Safety Facts Research Note: Driver Electronic Device Use in 2021, Aug. 2022, NHTSA, DOT HS 813 357, available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813357.

¹⁸ 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>.

²⁰ Edelman Data & Intelligence, "Bad driving has Americans on Edge," March 2022, commissioned by Nationwide Insurance, available at: https://news.nationwide.com/bad-driving-has-americans-on-edge/.

²¹ Schroeder, P., Wilbur, M., & Peña, R. (2018, March). National survey on distracted driving attitudes and behaviors – 2015 (Report No. DOT HS 812 461). Washington, DC: National Highway Traffic Safety Administration. Available at: <u>https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13123-2015_natl_survey_distracted_driving_031418_v5_tag.pdf</u>.

²² Using Electronic Devices While Driving: legislations and Enforcement Implications (2021), TRB, available at <u>https://www.nap.edu/catalog/26082/using-electronic-devices-while-driving-legislation-and-enforcement-implications</u>.

²³ The Harris Poll, "Distracted Driving In America," March 2022, Commissioned by Selective Insurance and Advocates for Highway and Auto Safety, available at: https://saferoads.org/wp-content/uploads/2022/03/Selective-Advocates-Distracted-Driving-Poll-Report-2022-FINAL.pdf.

²⁴ Edelman Data & Intelligence, "Driving Behaviors Survey Findings: Consumers & Agents," April 2022, commissioned by Nationwide Agency Forward, available at: https://news.nationwide.com/download/1161352/nationwidedrivingbehaviorsfindings-consumersampagents4.8.22.pdf.

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²⁶ Infrastructure Investment and Jobs Act (IIJA, Pub. L. 117-58), November 15, 2021, Sections 24208 and 23010, available at: https://www.govinfo.gov/content/pkg/PLAW-117publ58/pdf/PLAW-117publ58.pdf.

²⁷ 88 FR 38632 (Jun. 13, 2023); available at <u>https://www.govinfo.gov/content/pkg/FR-2023-06-13/pdf/2023-11863.pdf</u>.

²⁸ 88 FR 43174 (Jul. 6, 2023) ; available at <u>https://www.govinfo.gov/content/pkg/FR-2023-07-06/pdf/2023-13622.pdf</u>.

²⁹ Euro NCAP 2025 Roadmap: In Pursuit of Vision Zero, Euro NCAP; <u>https://cdn.euroncap.com/media/30700/euroncap-roadmap-2025-v4.pdf</u>.

³⁰ "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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 ³² "Recommendations of the Safe System Consortium," Johns Hopkins University Center for Injury Research and Prevention, May 2021. Available here:
- ³² "Recommendations of the Safe System Consortium," Johns Hopkins University Center for Injury Research and Prevention, May 2021. Available here: https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-injury-research-and-policy/our-impact/documents/recommendations-of-the-safesystem-consortium.pdf.