

The State of Distracted Driving in 2023 & the Future of Road Safety



4TH EDITION

A DATA-DRIVEN ANALYSIS FROM CAMBRIDGE MOBILE TELEMATICS

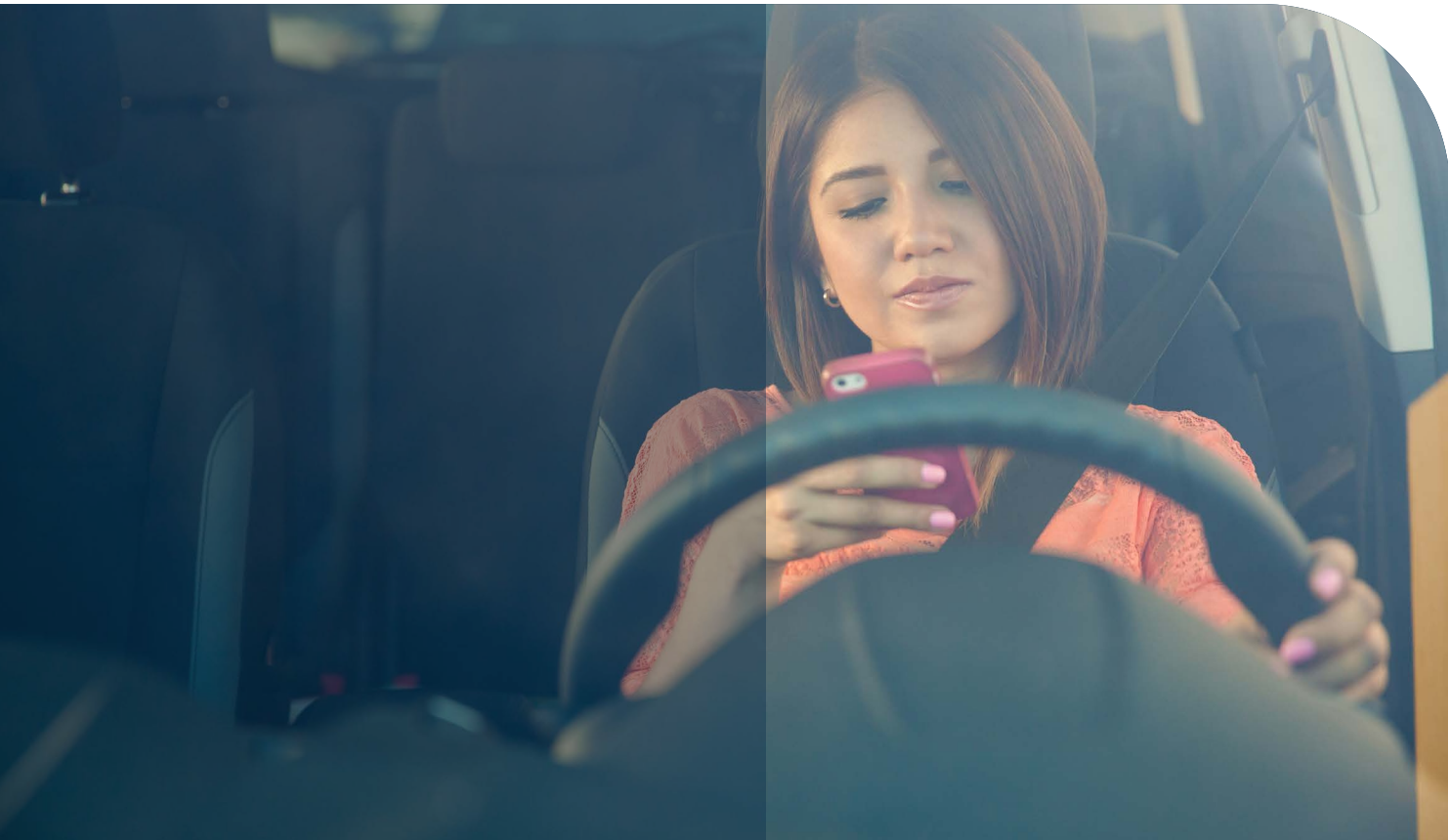




2020-2022

US Road Risk

| | 2020 | 2021 | CHANGE | | 2020 | 2022 | CHANGE |
|----------------------------------|--------|--------|--------|---|---------|---------|--------|
| FATALITIES | 38,824 | 42,915 | 10.5% | PERCENTAGE OF TRIPS WITH SCREEN INTERACTION | 54% | 58% | 7.6% |
| FATALITIES PER 100 MILLION MILES | 1.34% | 1.33% | -0.7% | SCREEN INTERACTION TIME | 0:01:47 | 0:02:12 | 23.4% |
| PEDESTRIAN FATALITIES | 6,516 | 7,485 | 14.9% | PERCENTAGE OF TRIPS WITH PHONE MOTION | 34% | 37% | 7.7% |
| CYCLIST FATALITIES | 938 | 985 | 5% | PHONE MOTION TIME | 0:01:26 | 0:01:44 | 20.9% |
| SMARTPHONE OWNERSHIP | 83% | 85% | 2.4% | PERCENTAGE OF TRIPS WITH HANDHELD CALLS | 4% | 4% | -7.4% |
| | | | | HANDHELD CALL TIME | 0:00:31 | 0:00:25 | -19.4% |
| | | | | PHONE MOTION ABOVE 50 MPH | 33% | 34% | 5.0% |
| | | | | VEHICLES ON US ROADS (IN MILLIONS) | 279 | 284 | 1.8% |
| | | | | TOTAL MILES DRIVEN (IN BILLIONS) | 222 | 264 | 18.9% |
| | | | | MILES PER PERSON PER DAY | 29.3 | 32 | 9.2% |



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Executive Summary

The Deadly Rise of Distracted Driving in America

Every 10% increase in distracted driving kills over 420 people and costs the American economy \$4 billion every year. With a 23% surge in distraction since 2020, CMT estimates that the increase in distracted driving caused an additional 420,000 crashes, 1,000 fatalities, and \$10 billion in damages to the US economy in 2022.

From 2020 to 2022, distracted driving increased by over 20% in the United States. The two foundational metrics for distracted driving, phone motion and screen interaction, rose by 21% and 23%, respectively, over the past 3 years. The increase in crashes when drivers handle their phones and interact with their screens is stark: The worst offenders are over 240% more likely to crash than the safest drivers.

The National Highway Traffic Safety Administration reports that 42,915 people were killed on American roads in 2021, the highest in 16 years. In 2020, American roadways were the most dangerous since 2007, reaching 1.3 fatalities per 100M miles.

Smartphone adoption has continued to surge in the face of the distracted driving crisis. When the iPhone was introduced in 2007, over 4,600 pedestrians were killed on American roadways. By 2021, 85% of Americans owned a smartphone, 7,485 pedestrians were killed — the most in 40 years — and there were 985 cycling deaths, the highest since 1990. NHTSA estimates that distracted driving killed 3,522 people in 2021, but caveats that the “estimates are almost certainly conservative because they are based only on identified distraction cases.”

By almost every metric CMT measures, distracted driving is more present than ever on US roadways. Drivers are spending more time using their phones while driving and doing it on more trips. Drivers interacted with their phones on nearly 58% of trips in 2022, up from 54% in 2020, an 8% rise. Thirty-four percent of phone motion distraction happens above 50 mph, the highest rate in 3 years.

Distracted driving has increased on major holidays since 2020, and is 2% higher than the typical day. In 2022, Thanksgiving had the highest percentage of trips with screen interaction of any day of the year, with over 62%, a 7% increase over 2020. Christmas had the highest percentage of trips with screen interaction over the past 3 years, averaging 61.5%. The average winter day for the last 3 years saw 51% of trips with screen interaction, 20% lower than Christmas.

Not surprisingly, Americans see the risks of distracted driving every day. CMT survey data shows that 3 in 4 Americans in states without a handheld ban see drivers texting while driving daily. Nearly 9 in 10 see drivers talking on the phone while driving. Close to 7 in 10 said texting and driving is the most dangerous activity you can do while driving.

Distracted driving significantly increases the chance of crashing. CMT research has uncovered two key insights on this front. The first is that drivers who crash are 2X more likely to interact with their phone the minute before the crash. In other words, drivers who crash are more likely to be distracted before the crash. The second finding is that of all the drivers who crash, 34% interacted with their phones within the minute before the crash.

There is hope to reduce distracted driving and dangerous driving behaviors. CMT has conducted research to study the impact of feedback and engagement on behavior for drivers in telematics programs. In one study, drivers who received feedback reduced risky behaviors like hard braking by 15%. A separate CMT study on driver feedback with a top 10 auto insurer showed that drivers who received a distraction score were 25% less distracted than the drivers who didn't. CMT's research into engagement shows that drivers who are highly engaged with their telematics app are 57% less distracted than unengaged drivers. Another study found that highly engaged drivers are not only less distracted in general, but reduce their distraction by 20% after 3 months in a telematics program.

These safety improvements from telematics programs have helped cities reduce risky behaviors on their roads. Starting in 2016, cities and states like Boston, Seattle, San Antonio, Los Angeles, and Oklahoma have partnered with CMT to run Safest Driver programs, with safe driving prizes reaching \$20,000. Boston's Safest Driver Program in 2019 reduced distracted driving by 48%, speeding by 38%, and hard braking by 57%. This kind of behavior change results in significant road safety improvements, reducing crashes and injuries by over 12%. With this reduction in risk, a program like LA's Safest Driver, which had 12,000 participants, would see over 90 fewer crashes and crash-related savings of over \$2.1 million.

CMT studied the level of distracted driving in eight states that introduced hands-free legislation since 2018, representing over 34 million drivers. On average, these states saw a 13% reduction in phone motion within three months of the law going into effect. With a sustained 13% reduction in distracted driving, these states could prevent over 38,000 crashes, save close to 100 lives, and prevent \$930 million in crash-related costs.

CMT also analyzed the power of news coverage and public awareness for the handheld ban in Virginia, beginning January 1, 2021. Google searches for

“phone law” in Virginia reached their peak the week of January 1, doubling the amount from the week before. During that same week, Virginia saw its steepest decline in phone engagement while driving, falling 21% compared to the month before. A 21% drop in distraction in Virginia for 1 week would help reduce the crash rate by 2.94%, prevent over 200 crashes, 1 fatality, and save the state nearly \$5 million in crash costs.

Despite these initial reductions in distraction after handheld bans went into effect, CMT research found that most drivers do not know what the law is in their state. In states with a handheld ban, just 32% of drivers said they knew about it. About 40% didn't know about the regulation or didn't understand what it meant. In states without a handheld ban, drivers were even less clear about the laws. Only 8% of drivers correctly said their state doesn't have a ban. Fifty-three percent thought there was a ban, and 58% didn't understand the details of the laws.

In addition to state governments, the auto insurance industry has taken significant steps to combat distracted driving. The industry as a whole invests billions of dollars every year to make drivers safer. Every top 10 auto insurer has a usage-based insurance program that incentivizes safe driving with premium discounts. Seven of the top 10 insurers use distraction as a pricing variable, meaning that if you handle your phone for texting, app use, or phone calls, your discount is at risk.

Telematics also gives road safety planners the ability to scale naturalistic driving behavior research at a highly efficient cost, which can transform the ways they create and evaluate highway safety plans. There are no other methodologies or data sources that provide them with population-level insight into the prevalence of aggressive driving, speeding, and distracted driving risk. Telematics is also the only data source that can give road safety planners ongoing visibility into the effectiveness of road safety programs before a crash. Relying on the absence of fatal crashes doesn't provide insights into the changes in behaviors that ultimately lead to crashes.



About

CMT's new report, "The State of Distracted Driving in 2023 & the Future of Road Safety" is a data-driven analysis made possible by mobile sensing and artificial intelligence.

CMT's research on distracted driving is rooted in the work our cofounders began in 2004 when they started the CarTel project at MIT to develop a mobile sensing system to collect and draw inferences from sensor data on mobile devices. Since its founding in 2012, CMT has gathered anonymized driving data on hundreds of billions of miles throughout the US with our AI-based telematics platform. In 2019, we began publishing annual reports on the latest trends and insights into distraction. This is our fourth research report on distracted driving since 2019.

Our work on distracted driving and road safety has been cited in [NHTSA's Traffic Safety Report](#), hailed as a [Vision Zero success story](#) by the Federal Highway Administration, used to uncover new insights in academic research from institutions like [UPENN](#), [Stanford](#), and [Johns Hopkins](#), and has helped the largest auto insurers around the world reduce crash frequency by as much as 24%.

CMT's AI-driven telematics platform has the unique ability to help society understand distracted driving behaviors in ways never before possible. It uses advanced signal processing and artificial intelligence to make sense of complex sensor data from connected vehicles, Tags, smartphones, and dashcams and extracts insights about distraction and other driving behaviors. It captures over 1 trillion

sensor time series points and processes over 25 petabytes of data per day. This technology and scale allow CMT to directly observe and analyze the most granular events of distracted driving in real time.

CMT analyzes distraction events with its DriveWell® platform. These events include when the phone is in motion, when there is screen interaction, when the phone is in a mount, when handheld and hands-free calls are made, and contextual information like speed bands, time of day, road types, weather, and more. In this report, we focus on the distraction elements that both governments and auto insurers seek to reduce through policy and pricing practices. These elements include handheld phone calls and handheld phone use, which includes phone motion and screen interaction. The telematics data cited in the report is from drivers within the first two weeks of their telematics program.

CMT is a privacy-first telematics service provider. The driving data CMT analyzes is based on the physics of the sensors embedded in vehicles, smartphones, Tags, and dashcams. This means that while we can detect behaviors like screen interaction, when the phone is in motion, and handheld phone calls, we do not know — nor do we want to know — what the content is or who is communicating. We do not know what apps are being used, what is on the screen, what the screen interaction is for, or who is texted, called, or in the communication. Video analytics include general behaviors like when the driver is holding their phone and taking their eyes off the road.



CMT's commitment to privacy

NO DATA SOLD

Consumer data is not used for any other services besides those offered by CMT. CMT does not sell driving data to third parties.

MINIMUM AMOUNT OF DATA

CMT only collects the minimum personal information necessary to provide its services. In general, the only PII CMT collects is Unique Identifier, GPS coordinates, and IP address.

END-TO-END ENCRYPTION

From collection to storage, data is encrypted at transfer and at rest.

TRANSPARENCY

CMT provides a clear explanation to its users of what data is collected and how it is used.

RETENTION

Data is only stored for as long as it's necessary to provide CMT's services.

CONSENT

Users must opt into a CMT program. They can opt-out at any time.

About Cambridge Mobile Telematics

Cambridge Mobile Telematics (CMT) is the world's largest telematics service provider. Its mission is to make the world's roads and drivers safer. The company's AI-driven platform, DriveWell®, gathers sensor data from millions of IoT devices — including smartphones, proprietary Tags, connected vehicles, dashcams, and third-party devices — and fuses them with contextual data to create a unified view of vehicle and driver behavior. Companies from personal and commercial auto insurance, automotive, rideshare, smart cities, wireless, financial services, and family safety industries use insights from CMT's platform to power their risk assessment, safety, claims, and driver improvement programs. Headquartered in Cambridge, MA, with offices in Budapest, Chennai, Seattle, Tokyo, and Zagreb, CMT serves millions of people through over 95 programs in 25 countries, including 21 of the top 25 US auto insurers.



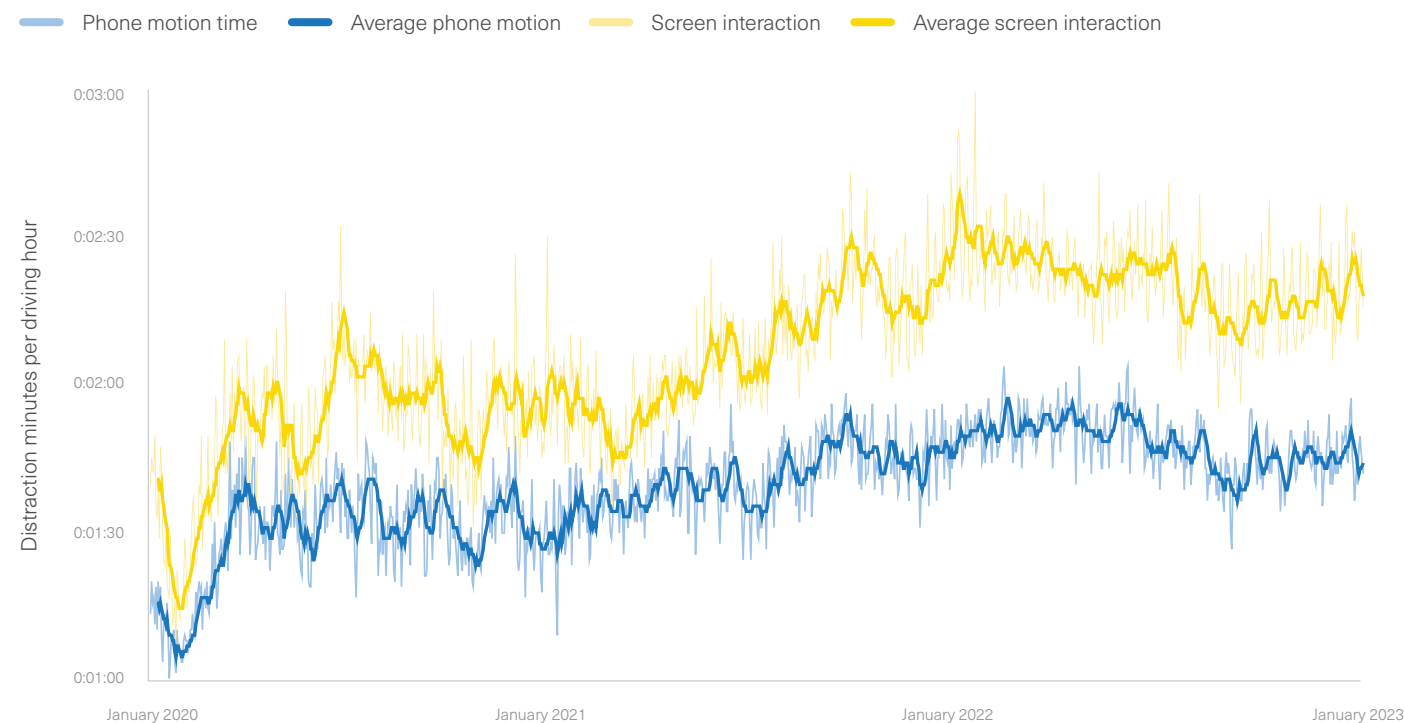
Distraction is the most urgent road safety crisis facing Americans today

Driving is perhaps the most dangerous activity Americans do every day. The National Highway Traffic Safety Administration reports that 42,915 people were killed on American roads in 2021, the largest number since 2002, and an outlier in the world. In 2020, American roadways reached 1.3 fatalities per 100M miles, their highest level since 2007. Pedestrian fatalities also set records in 2021 with 7,485 auto-related deaths, their highest point in 40 years. NHTSA puts the cost of these tragedies at a staggering \$340 billion annually for the US economy. Distracted driving sits at the heart of this crisis.

In a seminal study on the causes of car crashes, The Virginia Tech Transportation Institute found that 94% of all crashes are due to human actions or inactions, including human error, impairment, fatigue, and distraction. CMT data shows that 58% of trips in 2022 had some form of screen interaction, and that 34% of phone motion distraction occurred above 50 mph. By 2022, phone screen interactions and phone motion reached 2 minutes and 12 seconds (2:12) and 1:44 of every driving hour, respectively. CMT's research also shows that 34% of crashes happen within 1 minute after a driver interacts with their phone. NHTSA estimates that distracted driving killed 3,522 people in 2021.

PHONE MOTION & SCREEN INTERACTION TIME: 2020 - 2022

Source: Cambridge Mobile Telematics

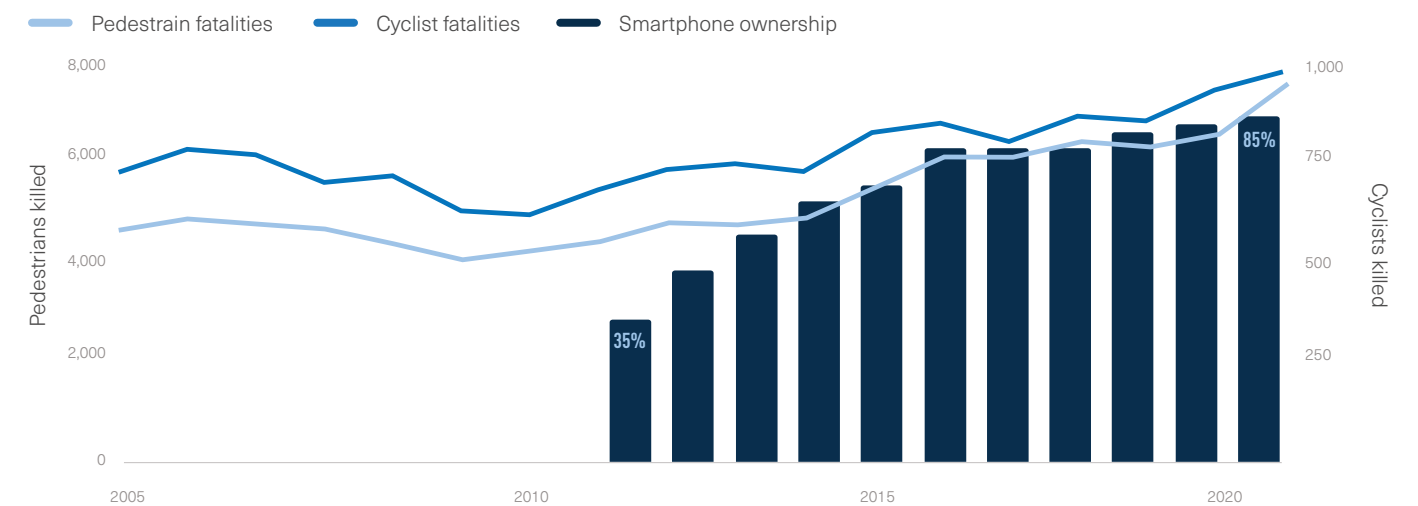


Distraction-related fatalities are likely much higher. NHTSA highlights the challenges of estimating the number of fatalities caused by distracted driving in The Economic and Societal Impact of Motor Vehicle Crashes, 2019: "These [fatality] estimates are almost certainly conservative because they are based only on identified distraction cases. Police records frequently fail to identify whether distraction was involved in the crash." The report also notes that "roughly 13 percent of all fatal crashes and 4 percent of all nonfatal crashes were coded in CRSS as 'not reported' or 'unknown if distracted.'"

Non-lethal distracted driving crashes offer another window into the scale of the problem. In 2020, NHTSA reported over 320,000 distraction-related injuries, with 420,000 in 2019. From 2015 to 2020, distraction-related crashes accounted for up to 16% of all crashes in the US.

SMARTPHONE OWNERSHIP AND PEDESTRIAN AND CYCLIST DEATHS ARE INCREASING

Source: NHTSA & Pew Research



According to Pew Research, smartphone adoption has continued to surge in the face of the distracted driving crisis. When the iPhone was introduced in 2007, over 4,600 pedestrians were killed on American roadways. Ten years later, in 2017, as smartphone penetration reached 77%, pedestrian fatalities increased by nearly 30%, topping 6,000. By 2021, smartphone penetration began to plateau, with 85% of Americans owning a smartphone. However, with record-breaking phone use while driving that year, pedestrian fatalities broke 40-year highs. Cycling deaths have followed the same trend, with 985 deaths in 2020, the highest number since 1990.

Distracted driving, particularly smartphone screen interaction and phone handling, has long been known to increase cognitive load, impairing drivers' ability to focus on the road. The Virginia Tech Transportation Institute found that sending or receiving a text message

takes a driver's eyes off the road for an average of 4.6 seconds, equivalent to traveling the length of a football field at 55 mph blindfolded. David Strayer, a cognitive psychologist at the University of Utah, found that drivers engaged in distracted driving experience a "technology hangover." After hanging up the phone, it takes the driver up to 27 seconds to regain focus.

The consequences are deadly. In collaboration with our insurance partners, CMT has studied the level of risk associated with different events, including distraction. The findings show that the most distracted drivers are 2.4 times more likely to crash than the least distracted drivers. Across all drivers, CMT has found that a 10% increase in distracted driving would increase the crash rate by 1.4%. A 1.4% rise in distraction would increase crashes by 168,000 and cause 420 fatalities.



The state of distracted driving on American roads

To help the public better understand the scope of distracted driving, NHTSA has actively measured how drivers use communication devices since 1994 through its National Occupant Protection Use Survey (NOPUS). NOPUS relies on roadside observers collecting data on distraction at red lights, offering a glimpse into the prevalence of distracted driving.

Since 2012, NOPUS findings have shown a decline in handheld cellphone use. In 2012, 5.2% of drivers were observed talking on handheld phones at red lights, compared to just 2.1% in 2021.

While observational studies like NOPUS provide valuable insights, their scope is limited to stationary vehicles, and they struggle to offer a comprehensive, nationwide understanding of phone-related distractions.

That's where telematics comes in. Auto insurers, automakers, rideshare providers, delivery platforms, local and state governments, wireless companies, financial services, and family safety organizations have turned to telematics as a scalable and accurate method for measuring driving behavior.

By almost every metric CMT measures, distracted driving is more present than ever on US roadways. Not only are drivers spending more time interacting with their phones, they're doing it on more trips. Drivers interacted with their phone on nearly 58% of trips in 2022, up from 54% in 2020, an 8% rise, leading to a potential increase in 158,000 crashes and 400 fatalities. They're also handling their phones at over 50 mph at the highest rate in 3 years. Speeding has increased since 2020, reaching 2:14 of every trip. In this section, we'll define and deconstruct the deadly behaviors happening on US roads.

CMT measures distracted driving using complex algorithms based on data from the phone's sensors, including the accelerometer, gyroscope, compass, and more. CMT provides contextual data on distracted driving, such as speeding, to understand the velocity people are traveling while distracted. CMT also identifies when distracted driving precedes a hard brake and crash.

The data enables CMT to identify and measure four distinct distraction behaviors. Each distraction behavior has its own risk profile, prevalence, and state regulations associated with it.



Defining distraction

PHONE MOTION

CMT defines phone motion events as when a phone is rotating with the screen on while the vehicle is moving. Auto insurers use phone motion in usage-based insurance pricing, which means it can impact a driver's premium. Phone motion indicates handheld activity, which has been [banned in 29 states](#). It's also illegal for teens and bus drivers to handle their phone while driving in most states. CMT reports on the time spent with the phone in motion as well as the percentage of trips that include phone motion. Drivers have spent more time handling their phone over the past two years, reaching 1:44 of every hour behind the wheel in 2022, rising nearly 21% from 2020. Drivers with the 10% highest levels of phone motion activity are 240% more likely to crash than those with the 10% lowest levels.

HANDHELD CALLS

CMT defines handheld calls as a call that's in progress with audio coming from the device while the car is moving. From 2020 to 2022, time spent making handheld calls while driving dropped over 19%, from 31 seconds to 25 seconds an hour, likely due to the increased availability of built-in Bluetooth systems in more sophisticated vehicles and handheld bans. Thirty-five states have made handheld calls illegal. Like screen interaction and phone motion, auto insurers use handheld phone calls in their usage-based insurance pricing. CMT measures handheld calls based on the time spent making a handheld call as well as the percentage of trips that include phone motion. The worst offenders making handheld phone calls are 135% more likely to crash than drivers who don't make handheld calls.

SCREEN INTERACTION

Screen interaction indicates everything from writing an email or a text, to using an app, entering a phone number, playing a game, and more. It measures physical interaction with the phone's screen. Like phone motion, auto insurers use screen interaction in usage-based insurance pricing. CMT measures screen interaction by time spent per hour of driving and by the percentage of trips that include screen interaction. Texting is illegal in every state in the US except for Montana and Missouri. Despite these laws, drivers spent 2:12 of every hour on the road interacting with their phone screen in 2022, an increase of over 23% since 2020. Like phone motion, drivers who interact with their phone screen while driving the most are 240% more likely to crash than drivers who don't interact with their screen.

HANDS-FREE

CMT classifies a call as hands-free when the audio is coming from Bluetooth, headphones, or speakerphone. With greater access to hands-free systems and mounting legislation against handheld calls, drivers make hands-free during 17% of their trips, a 30% increase since 2020. Currently, hands-free calls are legal in every state and have served as the foundation for hands-free legislation nationwide. Auto insurers do not use hands-free in usage-based insurance pricing. Because of this, we will not focus on hands-free calls in this report.

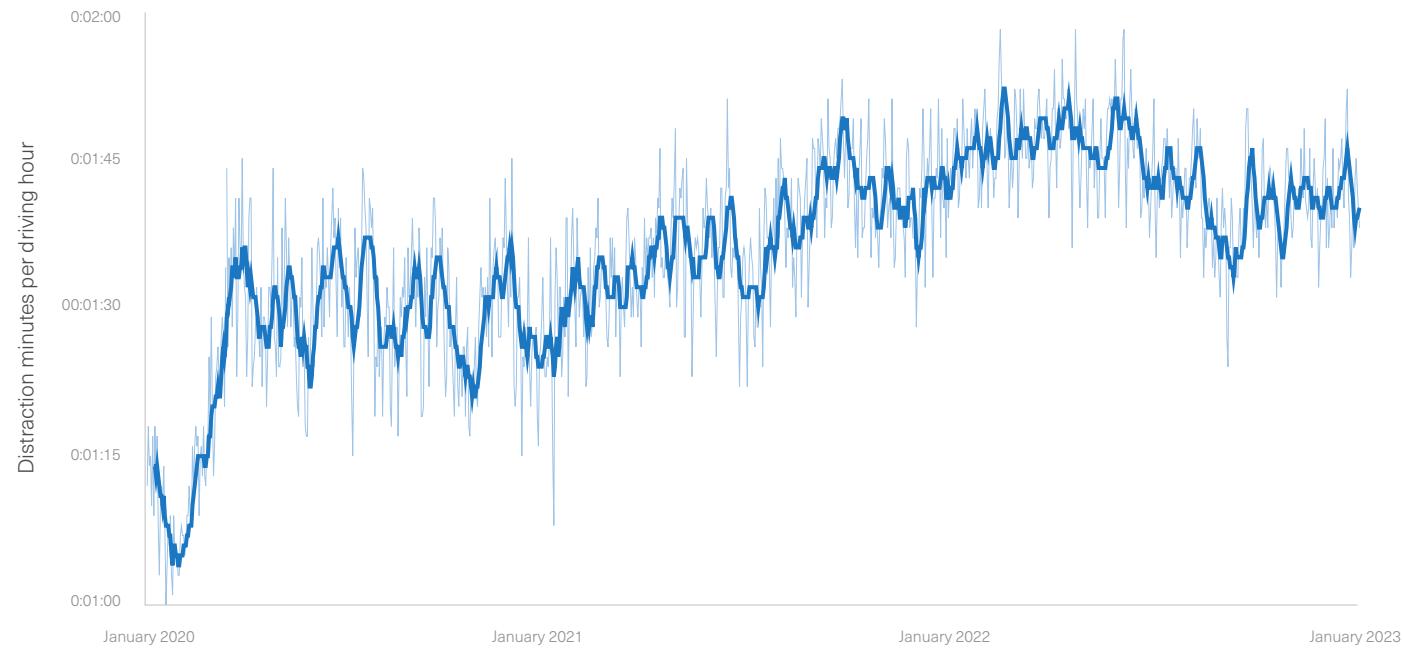


Phone motion KEY TRENDS 2020 - 2022

PHONE MOTION TIME

Source: Cambridge Mobile Telematics

Phone motion time Average phone motion time



Since 2020, drivers have spent more time handling their phone every year. In 2020, drivers handled their phone for 1:26 of every hour on the road. In 2021, that time leapt to 1:36, an increase of over 11%. By 2022, drivers were handling their phone for 1:44, an 8% increase over 2021, and a significant 21% jump over 2020. For context, 1:44 translates to driving over 1 mile at 35 mph.

Trips with phone motion events have increased as well. In 2020, 34% of trips included some form of phone motion. By 2022, that figure rose by nearly 8% to reach 37%.

PHONE MOTION TIME

Source: Cambridge Mobile Telematics



2020



2021



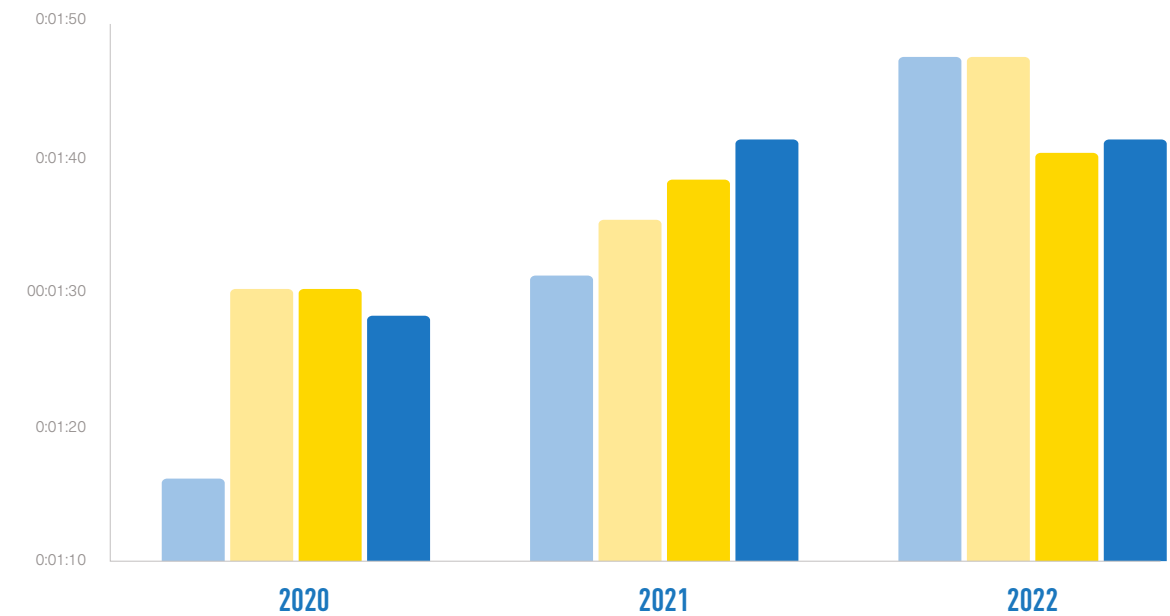
2022

Drivers use their phone at different rates throughout the year. Drivers interacted with their phone for 1:31 per hour during the winter from 2020 to 2022, 5% lower than summer averages. However, as phone motion increased over the years, winter caught up and surpassed the other seasons. By 2022, winter and spring were the highest months for phone motion, with 1:47 per hour each.

PHONE MOTION BY SEASON

Source: Cambridge Mobile Telematics

Winter Spring Summer Fall



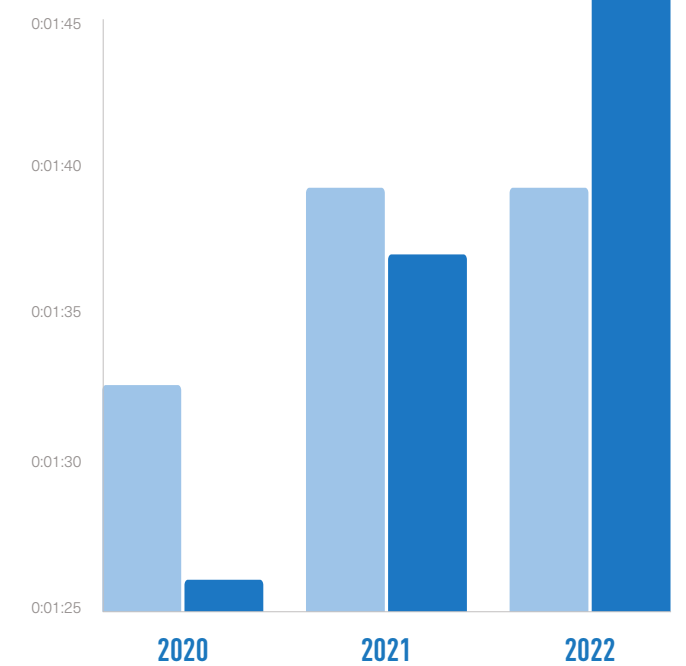
This flip in the seasons has also impacted back-to-school driving, which we define as from the beginning of August through Labor Day. In 2020, phone motion during back-to-school was 7% higher than the annual average. Back-to-school phone motion rose slower than the annual averages from 2020 through 2022, increasing 5% to the annual average's 21%. By 2022, phone motion during back to school was 6% lower than annual rates.

Weekly patterns for phone motion show that weekdays have higher phone motion times compared to weekends. The average phone motion time on weekdays was 1 minute and 37 seconds, while the weekend average was 1 minute and 32 seconds, 5.2% lower.

PHONE MOTION DURING BACK TO SCHOOL

Source: Cambridge Mobile Telematics

Back to school Annual average



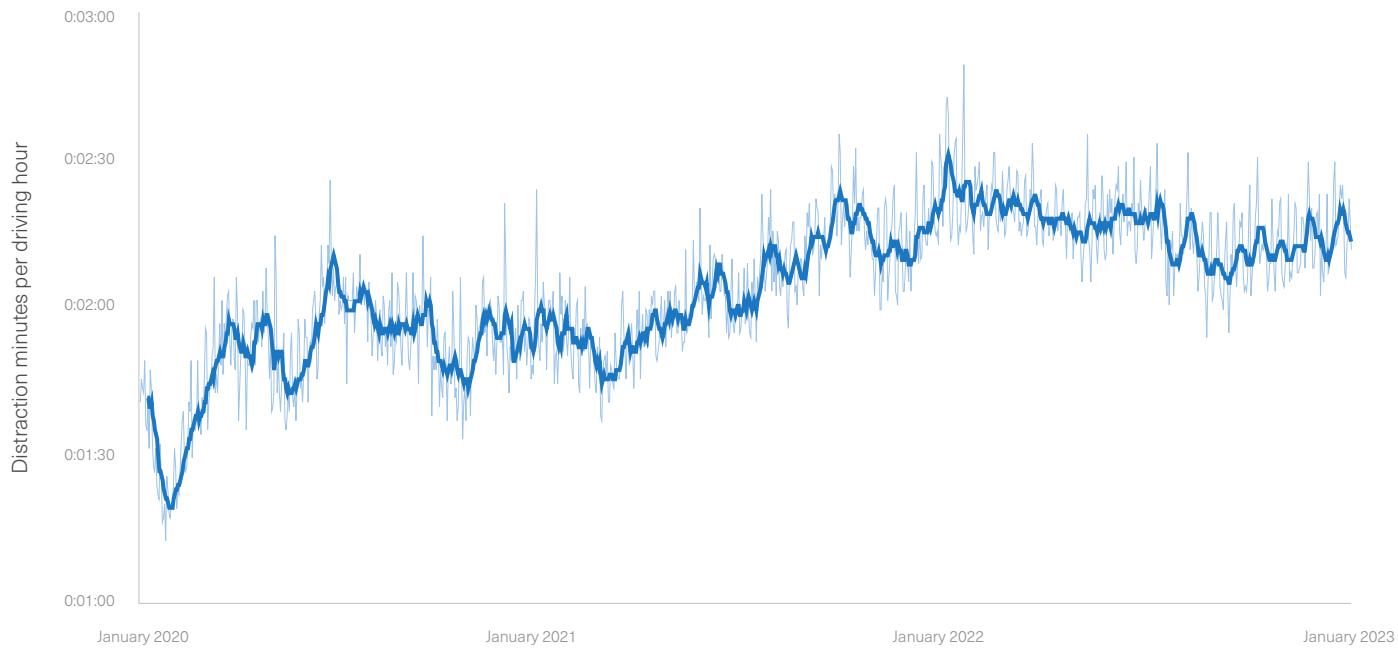


Screen interaction KEY TRENDS 2020 - 2022

SCREEN INTERACTION TIME

Source: Cambridge Mobile Telematics

— Screen interaction time — Average screen interaction time



Screen interaction has followed a similar pattern to phone motion since 2020, but more aggressively. It has increased every year in both duration and the percentage of trips. Since 2020, screen interaction time has increased by over 10% every year. By 2022, screen interaction time had skyrocketed over 23% to reach 2:12 of every driving hour, the equivalent of traveling over 1 ¼ miles at 35 mph. The percentage of trips with screen interaction reached 58% in 2022, an 8% increase over 2020.

TIME SPENT INTERACTING WITH PHONE SCREENS

Source: Cambridge Mobile Telematics

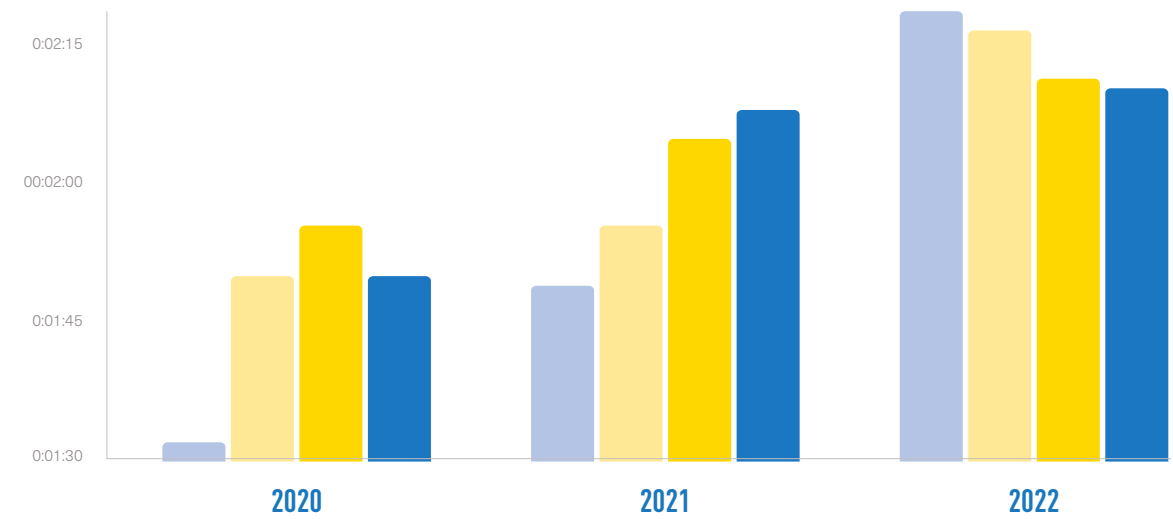


Like phone motion, drivers interact with their screens at different rates throughout the year. From 2020 to 2022, winter had the lowest rate of screen interaction at 1:52, about 9% lower than summer driving. Spring and fall follow at 1:59 and 2:01, respectively. Summer averaged 2:02 per hour. In 2020 and 2021, winter had the lowest rate of screen interaction. However, by 2022, the seasons essentially flipped. Winter had the highest levels of screen interaction at 2:16, followed by spring. Summer and fall were the lowest in 2022.

SCREEN INTERACTION TIME BY SEASON

Source: Cambridge Mobile Telematics

— Winter — Spring — Summer — Fall



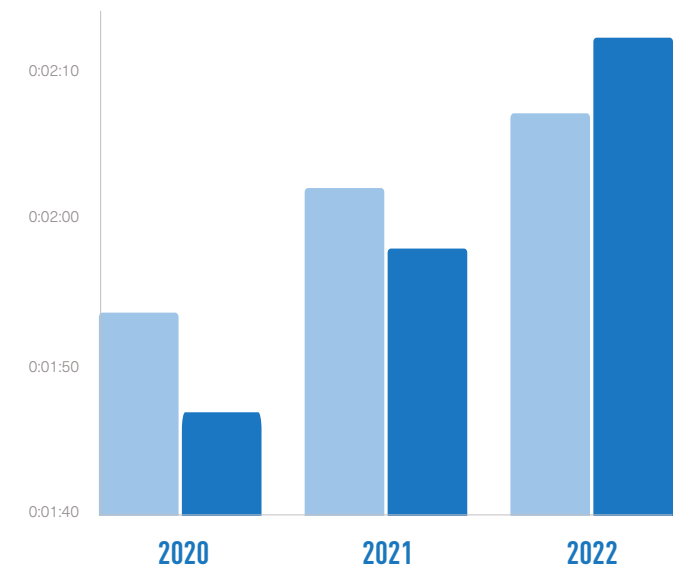
During the back-to-school period, both phone motion and screen interaction times increased from 1:54 in 2020 to 2:07 per hour in 2022. Back-to-school driving saw higher rates of screen interaction in 2020 and 2021, but was lower than the annual averages in 2022.

Drivers were more engaged with screen interaction on weekends than on weekdays for the past 3 years. The average screen interaction time on weekdays was 1:57. On weekends, it increased to 2:03, marking a 5.1% change.

SCREEN INTERACTION DURING BACK TO SCHOOL

Source: Cambridge Mobile Telematics

— Back to school — Annual average



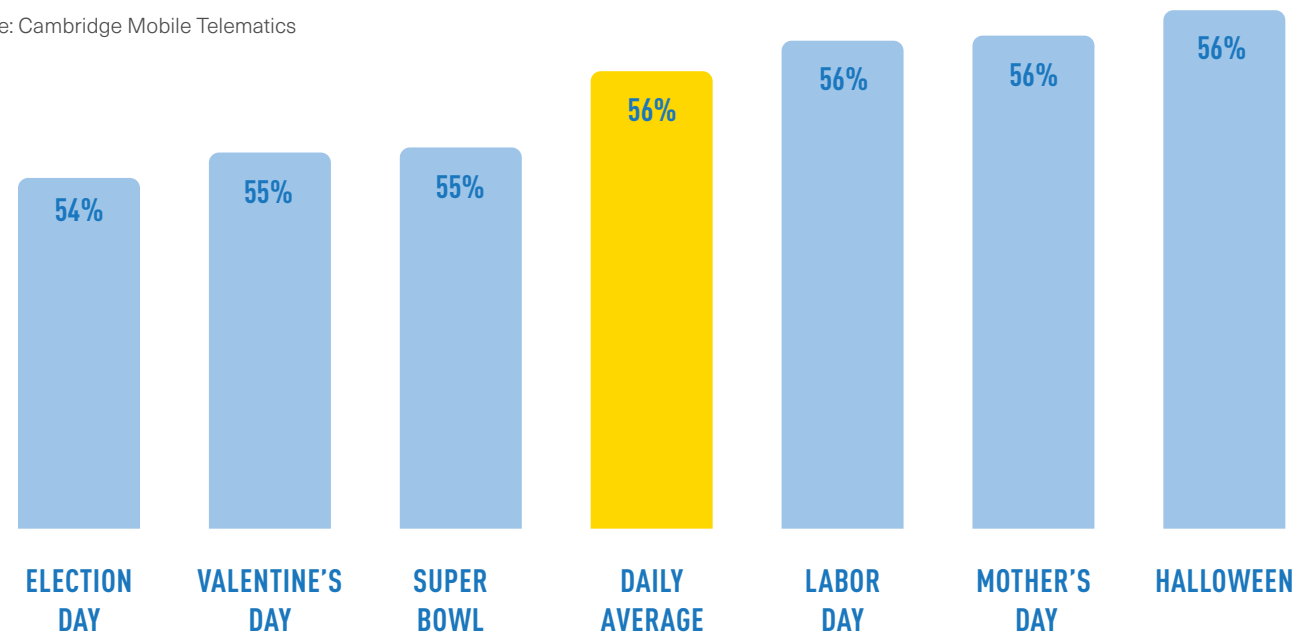


Screen interaction THE WORST DAYS OF THE YEAR

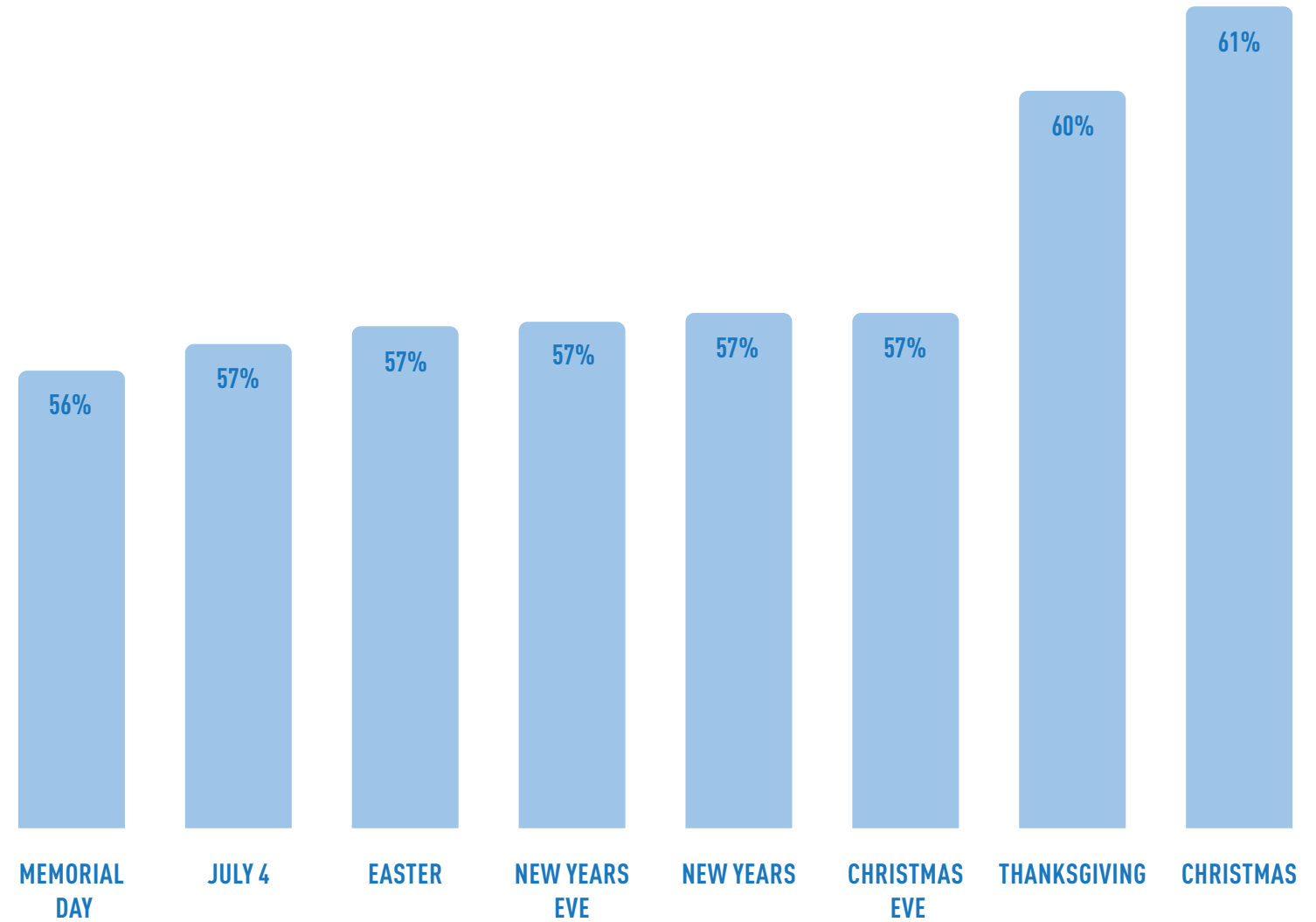
As with seasonal fluctuations, specific days throughout the year have higher levels of distracted driving. To uncover the days that see higher levels of distraction, we analyzed the percentage of trips with screen interaction throughout the year. We identified the major US holidays and cultural events, like the Super Bowl and Election Day, that would impact broader driving trends and measured their level of trips with screen interaction from 2020 through 2022. (For an event like Election Day, we only measured 2020 and 2022 when there were presidential and midterm elections.)

HOLIDAY TRIPS WITH PHONE INTERACTION

Source: Cambridge Mobile Telematics



What we found was that almost every holiday and cultural event we measured had higher levels of trips with screen interactions than the average day. For the past 3 years, 56% of trips had a screen interaction event. Only Election Day, Valentine's Day, and the Super Bowl had lower levels of screen interaction. Labor Day, Mother's Day, Halloween, and Memorial Day were all higher than the daily average, but by less than 2%. Easter, New Year's Eve, New Year's Day, and Christmas Eve were 2-3% higher than the average day.



The two holidays that stand apart are Thanksgiving and Christmas. Thanksgiving sees 60% of trips with screen interaction, an 8% increase over the daily average. Trips with screen interaction on Christmas are nearly 11% higher than average, over 61%. However, looking at the daily average masks the seasonal trends for the Christmas holiday. The average winter day for the past 3 years saw 51% of trips with screen interaction, 20% lower than Christmas.

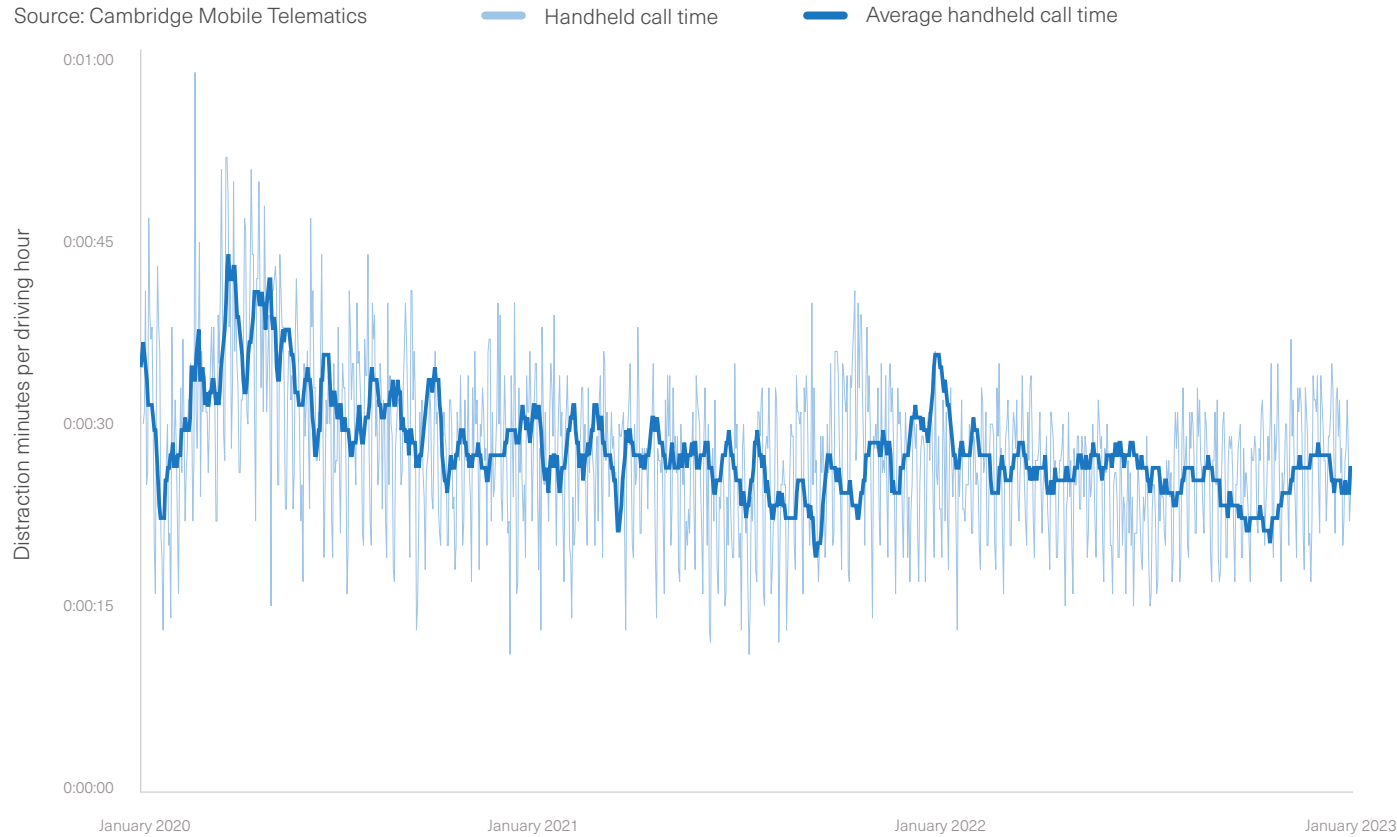
These findings show that while drivers need to focus on the road while driving every day, it's extra important for them to stay vigilant during the major holidays. On average, 118 people died on US roadways every day in 2021. The National Safety Council estimates there were 515 fatalities on Thanksgiving and 371 on Christmas that year.



Handheld calls KEY TRENDS 2020 - 2022

HANDEHD CALL TIME

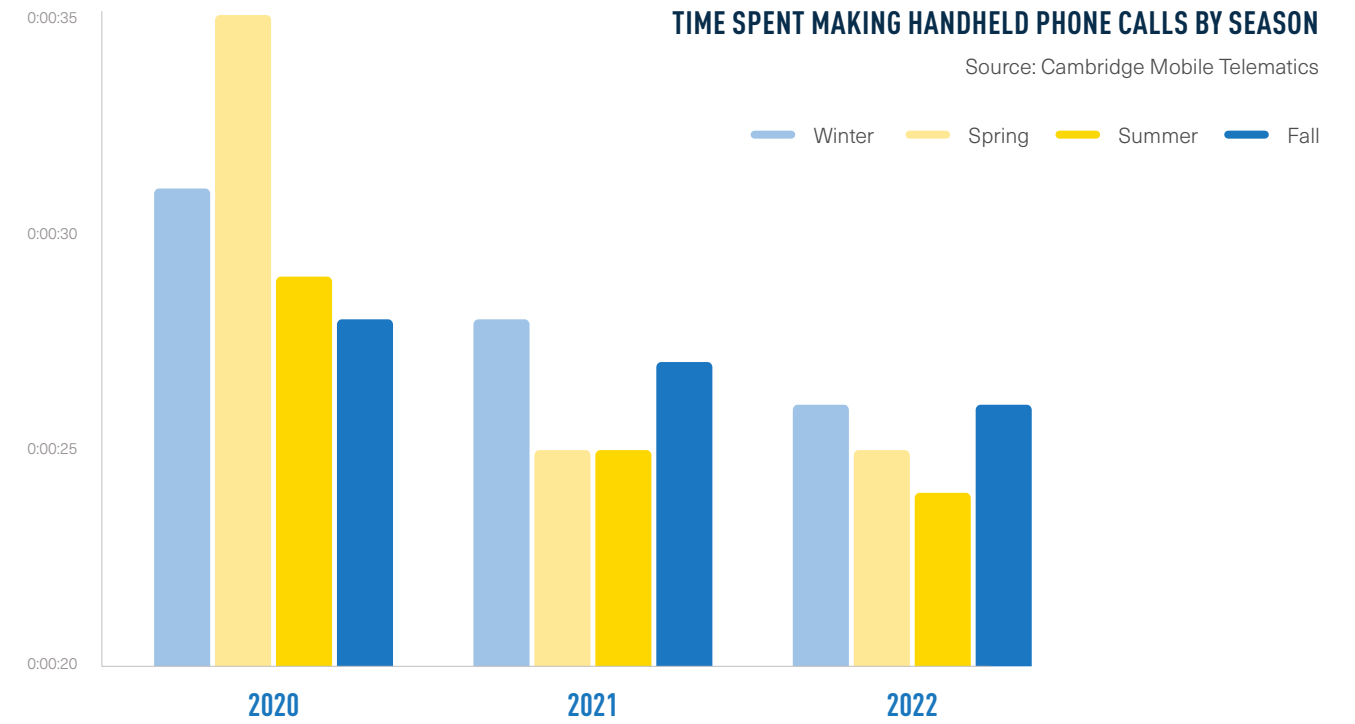
Source: Cambridge Mobile Telematics



Handheld calls, which have been banned in 35 states, have been declining both in time and percentage of trips since 2020. Handheld call duration has dropped from 31 seconds to 25 seconds per hour in the past 3 years, a difference of over 19%. The percentage of trips with handheld calls has also diminished since 2020, falling from 3.9% to 3.6% of all trips, an 8% decrease.

TIME SPENT MAKING HANDEHD PHONE CALLS

Source: Cambridge Mobile Telematics

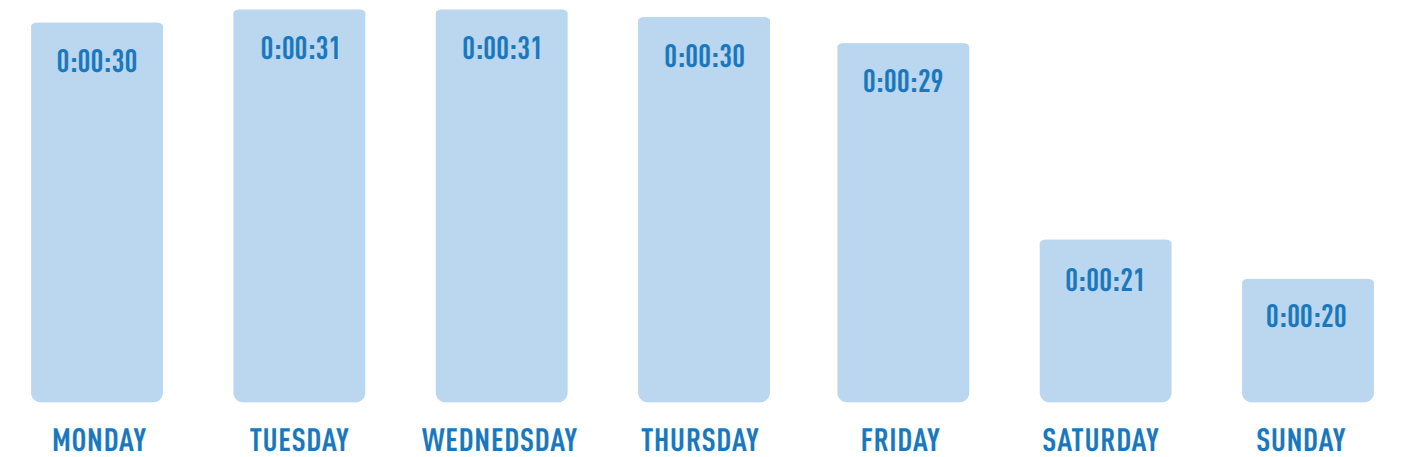


Seasonal trends for handheld calls have shifted since 2020. The season with the highest level of handheld calls was spring 2020, when drivers spent 35 seconds per hour on the phone. Spring 2020 includes the start of the Covid-19 pandemic, when roads opened up and risky behaviors increased. Since 2020, handheld calls in the spring have dropped to 25 seconds an hour. Handheld call duration has fallen during the back-to-school period as well, matching the annual 25-second-an-hour rate in 2022.

Handheld calls last longer during the week, averaging 30 seconds on weekdays compared to just 21 seconds on the weekends, a 31% change. The longest phone calls happen on Wednesdays, lasting 31 seconds.

TIME SPENT MAKING HANDEHD CALLS BY DAY

Source: Cambridge Mobile Telematics





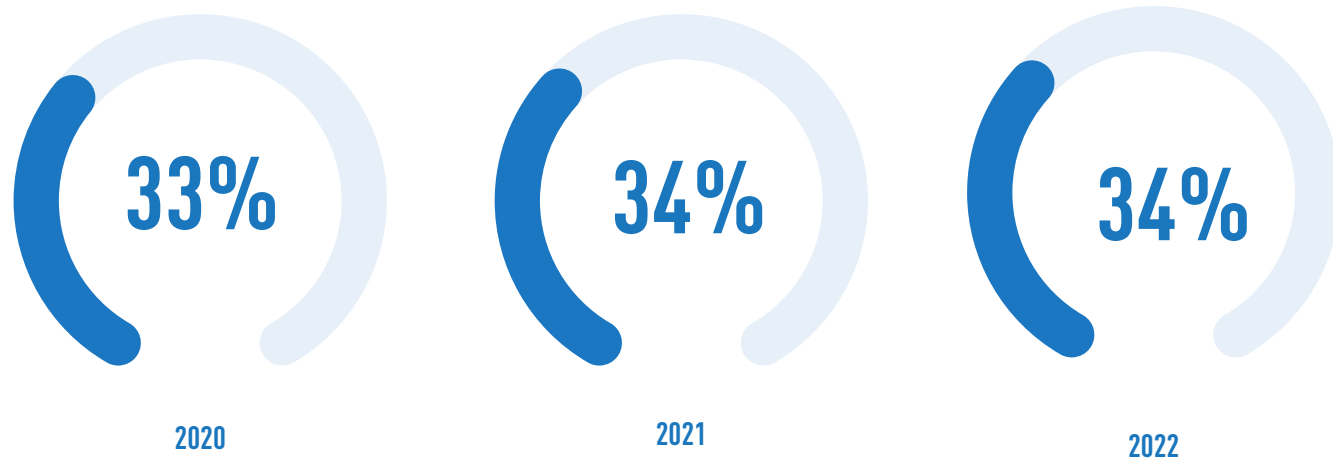
Phone motion above 50 mph

KEY TRENDS 2020 - 2022

Context helps when assessing driver risk. This is why CMT analyzes distraction risks and puts them in the context of other behaviors, like speeding. CMT's percentage of phone motion above 50 mph metric helps us understand how often distracted driving is happening at high speeds. The metric measures the percentage of phone motion that happens above 50 mph.

PERCENTAGE OF PHONE MOTION ABOVE 50 MPH

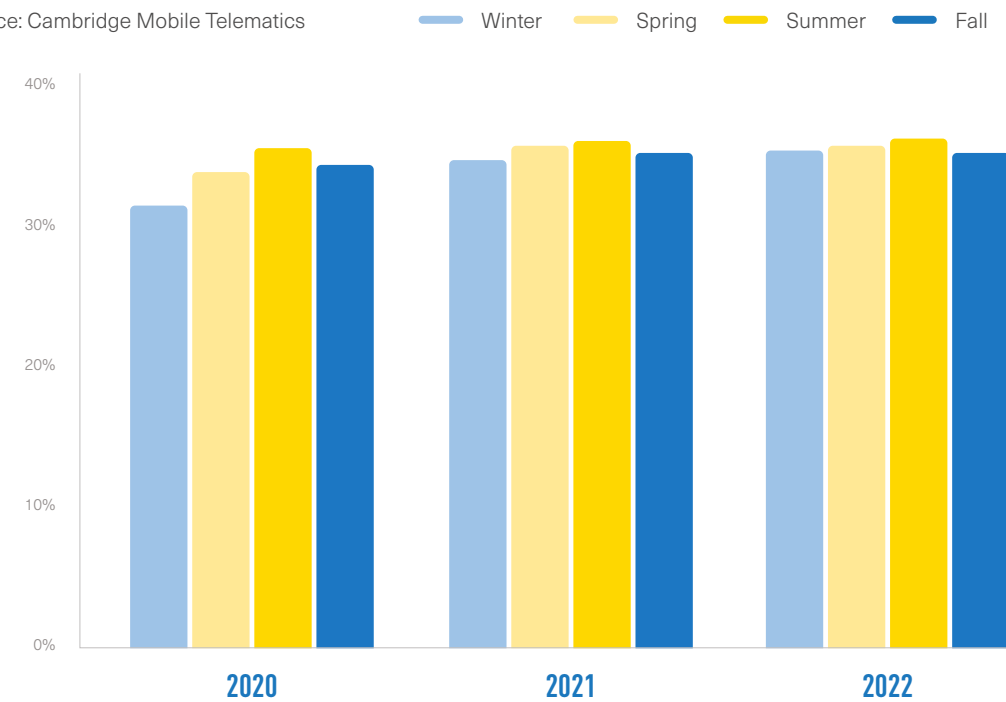
Source: Cambridge Mobile Telematics



Between 2020 and 2021, phone motion above 50 mph increased by 4.5% from 33% to 34%. In 2022, that number increased by a minimal 0.6%. Unlike the other distraction metrics, seasonal averages for phone motion above 50 mph were relatively consistent, with winter averaging 33%, spring and fall both averaging 34%, and summer averaging 35%. The back-to-school period saw phone motion above 50 mph higher than the annual average. As with other metrics, the annual average is growing faster than the back-to-school period, with less than a 0.5% gap in 2022.

PHONE MOTION ABOVE 50 MPH BY SEASON

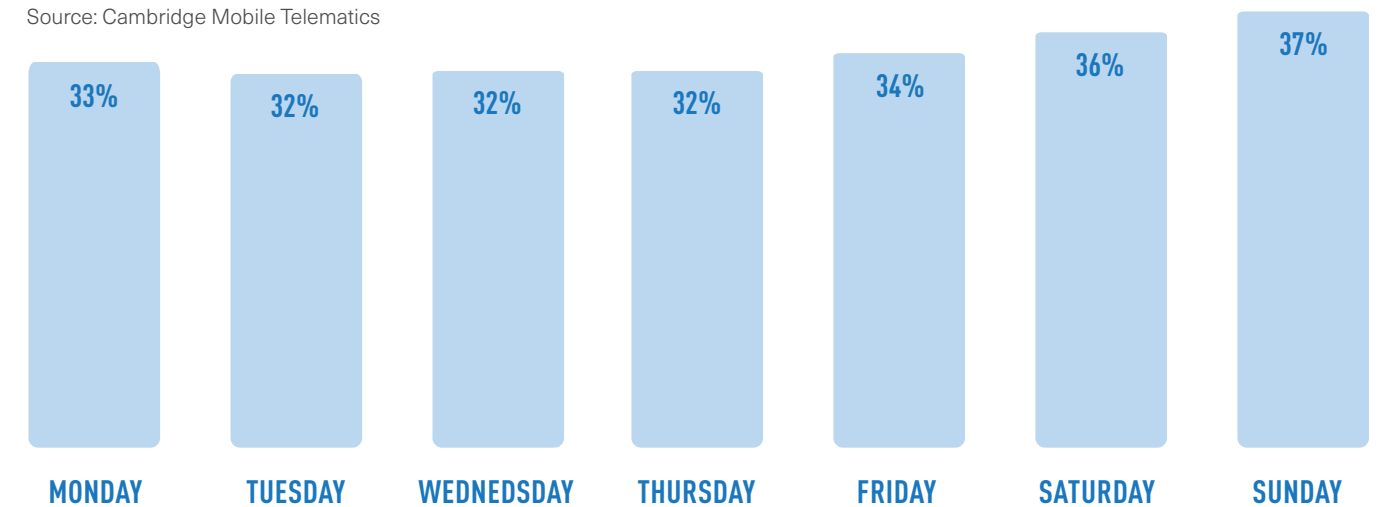
Source: Cambridge Mobile Telematics



The largest variation in phone motion above 50 mph is throughout the week. The average percentage on weekdays was 33%. The weekends see that number rise to 36%, a 12% increase. Sunday is the worst day of the week for phone motion above 50 mph, reaching 37%.

PERCENT OF PHONE MOTION ABOVE 50 MPH BY DAY

Source: Cambridge Mobile Telematics



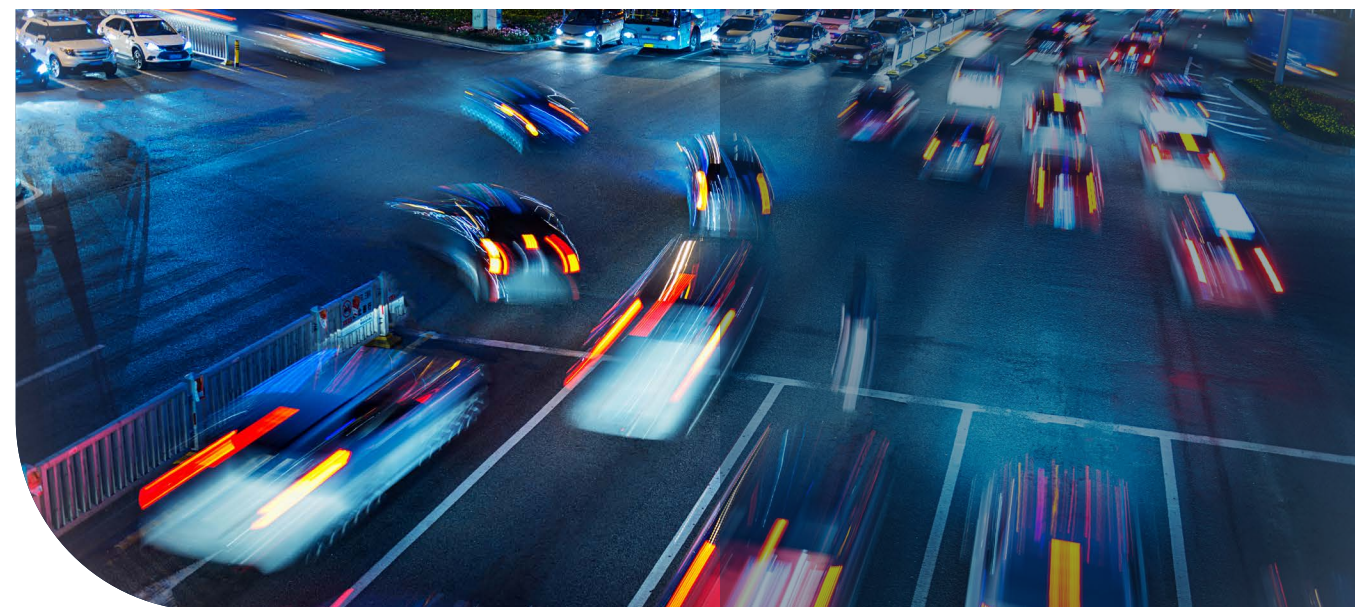


Speeding KEY TRENDS 2020 - 2022

Speeding has fluctuated greatly throughout the pandemic years. CMT defines speeding as when the vehicle is traveling 9.3 mph over the speed limit for at least 5 seconds. As we highlighted in our [2022 report](#), speeding increased when there were fewer drivers on the road during strong Covid-19 variants. Despite those swings, the amount of time drivers have spent speeding on US roadways has increased every year since 2020. By 2022, drivers were speeding for 2:14 of every hour on the road, a 7% increase over 2020.

TIME SPENT SPEEDING

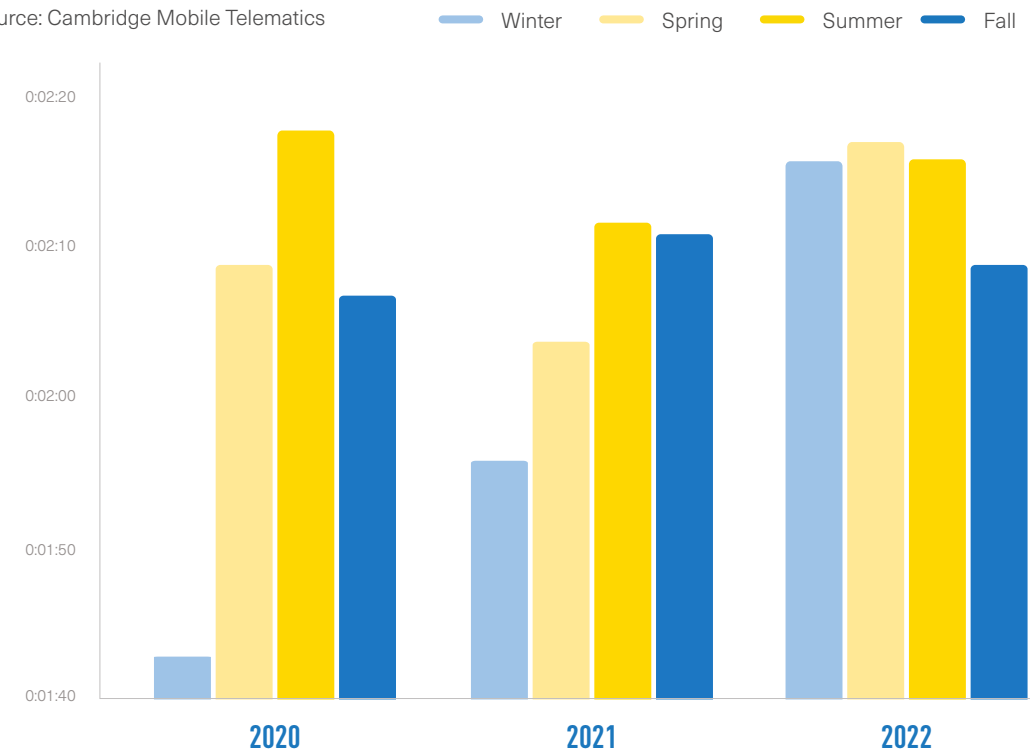
Source: Cambridge Mobile Telematics



Speeding also increases dramatically during the summer months. From 2020 to 2022, the average time spent speeding during the summer was 2:15, compared to winter's 1:58, a 14% difference. However, in 2022, spring had overtaken summer as the season with the most speeding. Winter also caught up with summer in 2022, registering 2:16 of speeding per hour each. Speeding during back-to-school tracks with other risk metrics. From 2020 to 2021, speeding was higher than the daily average. In 2022, the daily speeding average surpassed the back-to-school period.

TIME SPENT SPEEDING BY SEASON

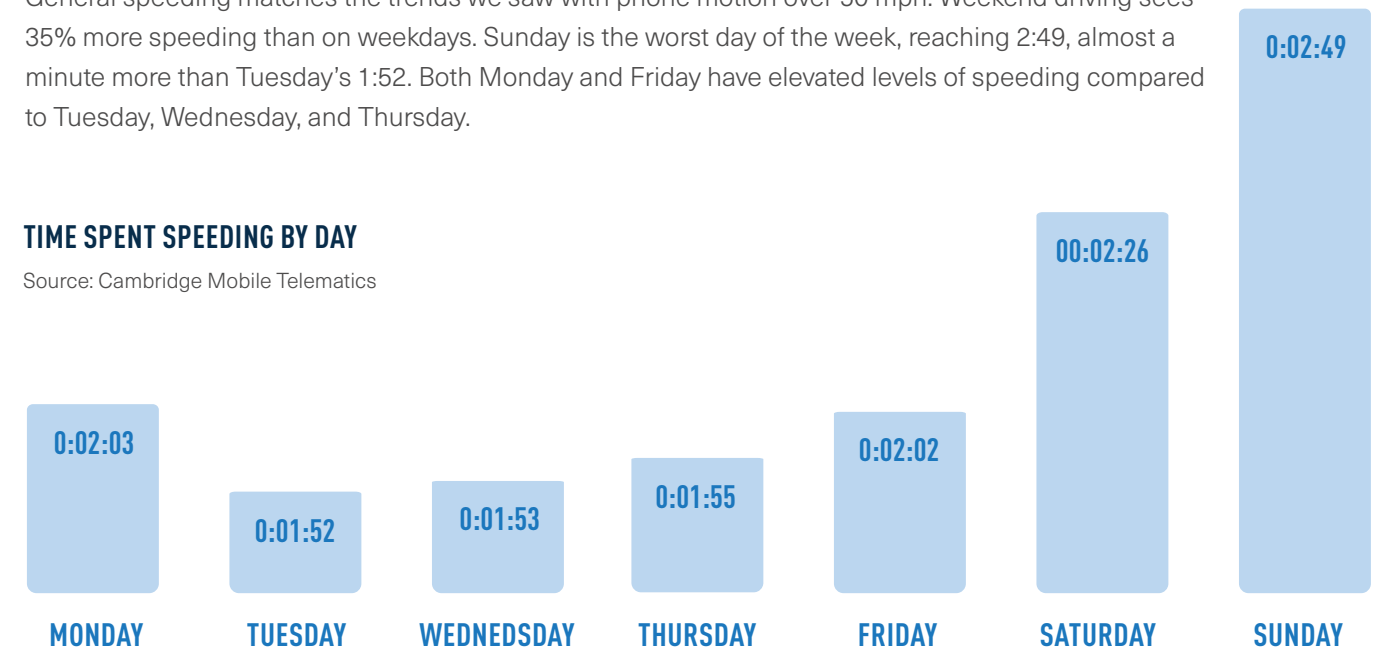
Source: Cambridge Mobile Telematics



General speeding matches the trends we saw with phone motion over 50 mph. Weekend driving sees 35% more speeding than on weekdays. Sunday is the worst day of the week, reaching 2:49, almost a minute more than Tuesday's 1:52. Both Monday and Friday have elevated levels of speeding compared to Tuesday, Wednesday, and Thursday.

TIME SPENT SPEEDING BY DAY

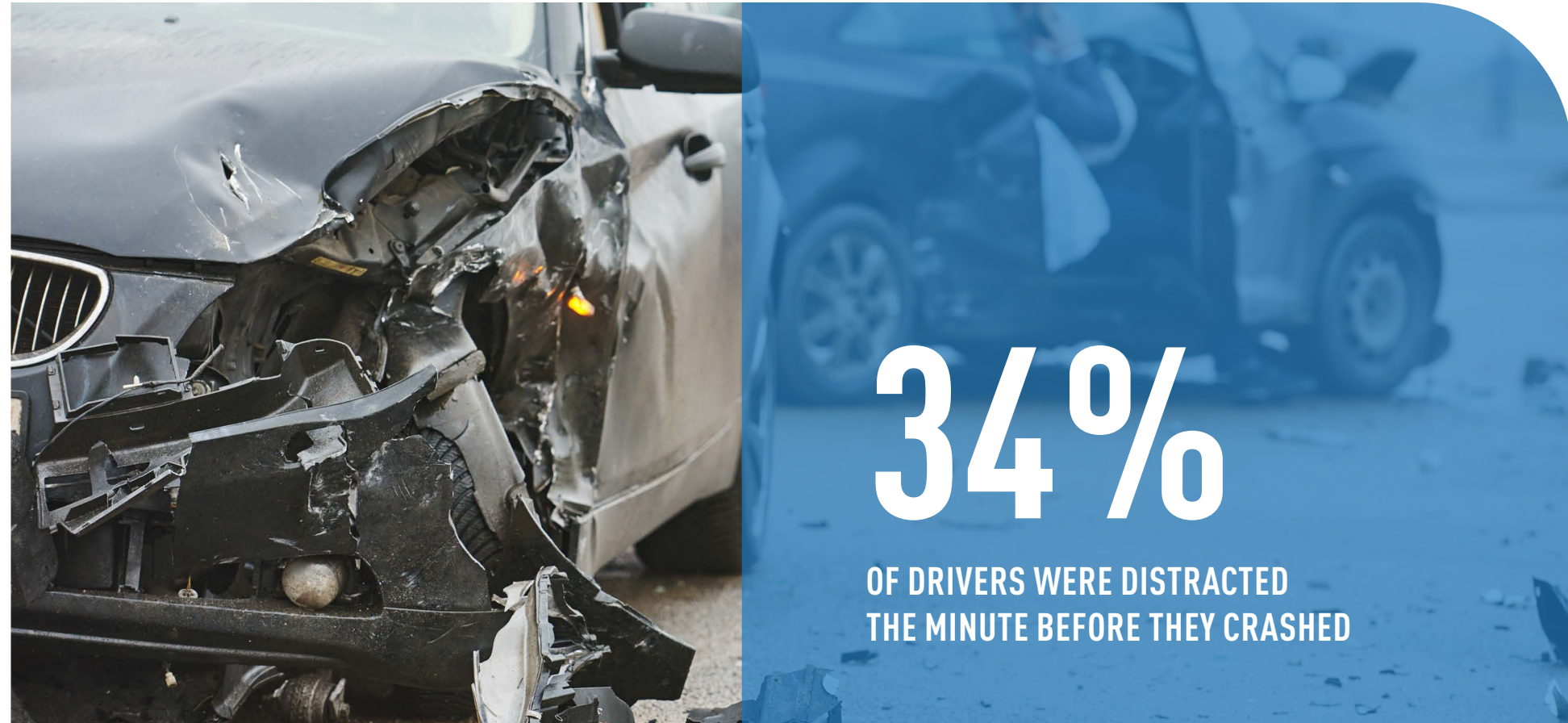
Source: Cambridge Mobile Telematics





The impact of distracted driving on crash risk.

CMT uses advanced sensor processing and machine learning to understand driving risk and when crashes occur. These insights enable us to develop a deeper understanding of how individual risk factors like distracted driving impact the likelihood of crashing.



34%

OF DRIVERS WERE DISTRACTED THE MINUTE BEFORE THEY CRASHED



DRIVERS WHO CRASH ARE

2X MORE LIKELY

TO USE WITH THEIR PHONE THE MINUTE BEFORE A CRASH

In a study across multiple US auto insurers, we analyzed how often distracted driving had occurred in the minute before a crash. We found that drivers who crashed were 2X more likely to have interacted with their phone in the minute before the crash.

The second finding from the study shows how prevalent distracted driving is among drivers who crash. Thirty-four percent of all drivers who crash interact with their phone in the minute before the crash.



The state of distracted driving on American roads: State by state

While the national trends point to a country racing towards higher distraction levels every year, each state tells a different story. To understand distinct driving patterns in states, CMT analyzed the behaviors of drivers new to telematics programs. There are clear leaders among states reducing distracted driving. There are also states that are far behind.

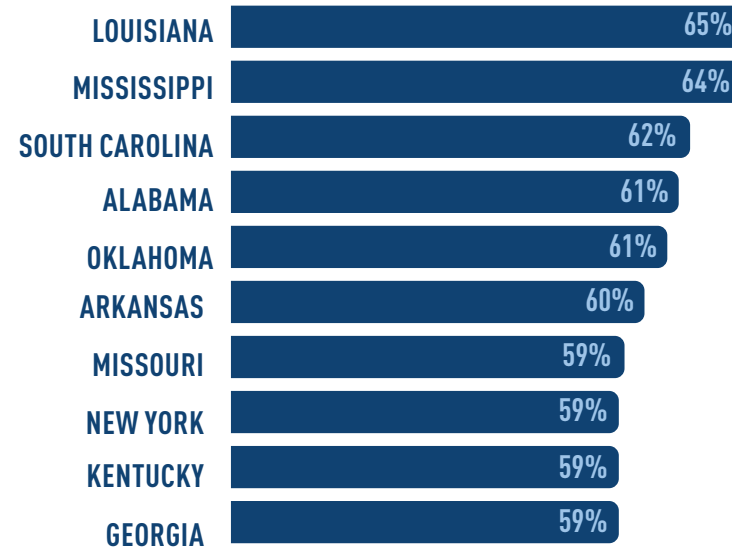
According to CMT data, the US saw an average of 58% of trips with screen interaction in 2022. The 10 worst-performing states were 4% higher, reaching 62% of trips with screen interaction. Louisiana and Mississippi

were the most distracted, with 68% and 66% of trips including screen interaction, respectively. Louisiana reported 151 fatal crashes linked to distraction in 2022. In contrast, the 10 best-performing states were well below the national average, with 52% of trips seeing screen interaction, 6% less. A difference of 6% in distraction reduces crash risk by 0.84%. At the national level, this would prevent over 119,000 crashes a year. Notably, in Oregon and Washington, less than half of trips included phone interaction, 48% and 49%, respectively. Oregon had 35 distraction road fatalities in 2022.

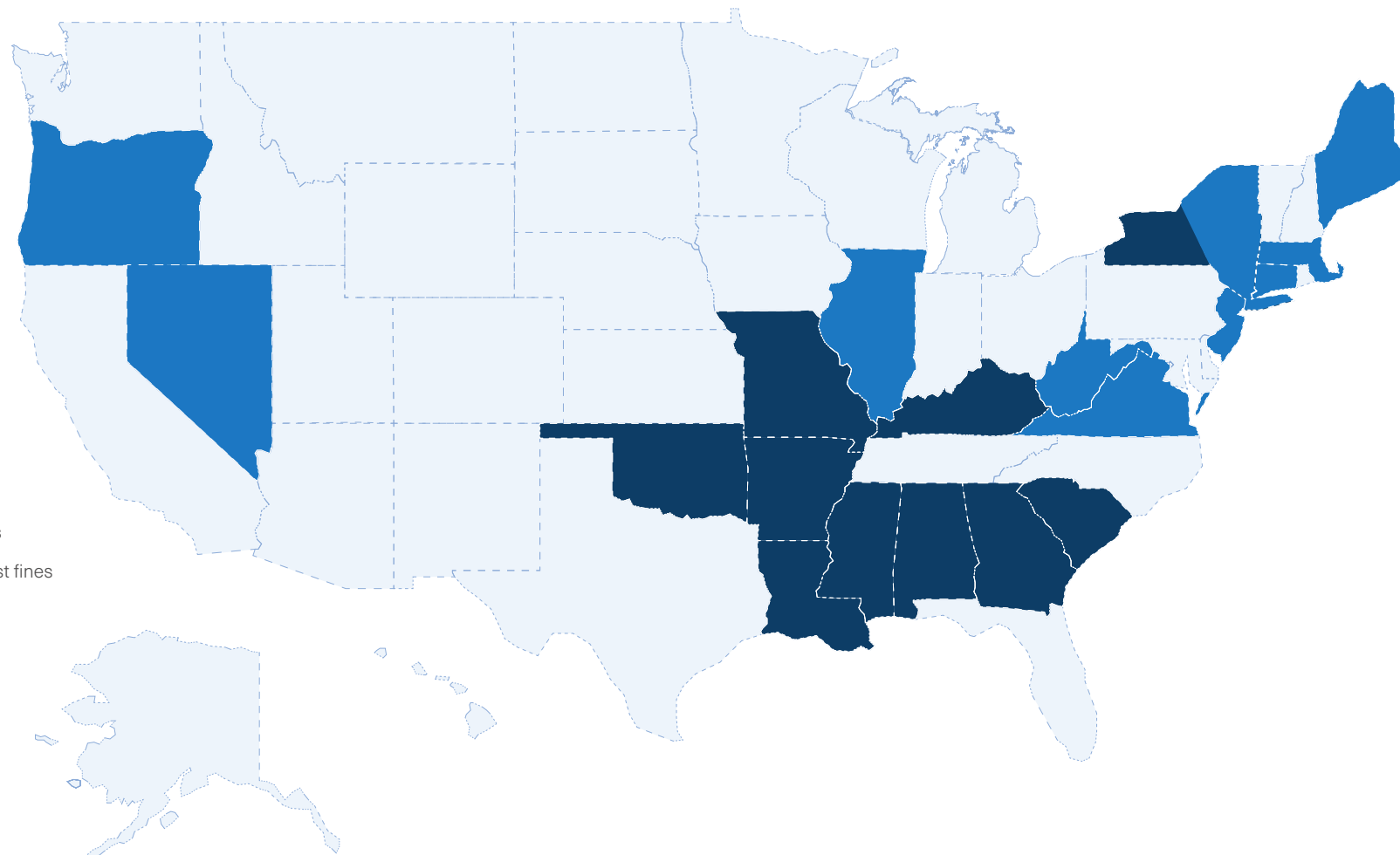
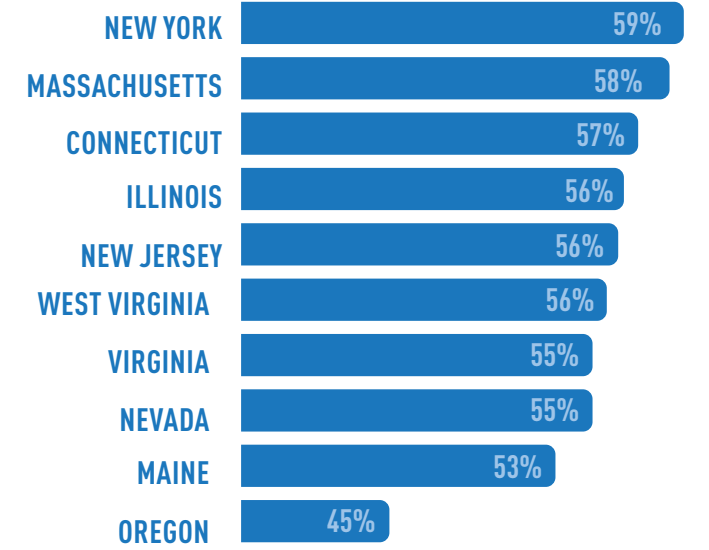
SHARE OF TRIPS WITH SCREEN INTERACTION PER STATE

Source: Cambridge Mobile Telematics

WORST 10 PERFORMING STATES



TOP 10 STATES WITH STRONGEST FINES



■ Worst 10 performing states
■ Top 10 states with strongest fines

The Distraction Gap Between the Safest and Riskiest States

Distraction has increased at different rates across states. The 10 worst states for screen interaction saw a 3% increase in 2022 compared to 2021. States with the heaviest distraction fines saw improvements of about 6%.

On a state-by-state basis, the difference between the safest and the most distracted states, in terms of the share of distracted trips, is over 20%. Oregon has the smallest share of distracted driving trips, with 47% of all journeys.

Among the states with the highest share of trips with screen interaction are Louisiana (68%), Mississippi (65%), Alabama (63%), South Carolina (63%), Oklahoma (62%), and Georgia (61%). This high rate of screen interaction tends to correlate with the absence of strong regulations. Mississippi, Alabama, and South Carolina don't have hands-free laws. Louisiana and Oklahoma have weak distracted driving laws.



NEARLY 6 IN 10 DRIVERS SAY THEY TEXT ONCE A MONTH IN STATES WITH NO HANDHELD BANS

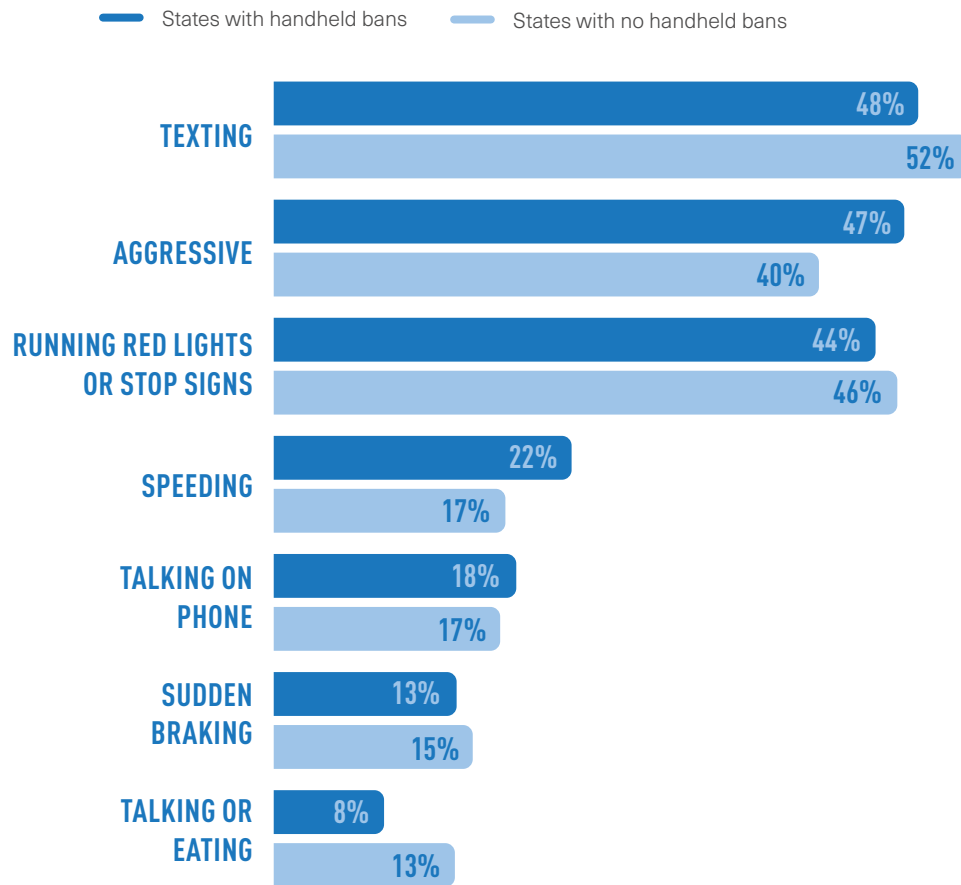
Driver Perspectives

With 63% of trips seeing some type of distraction, 58% with screen interaction, and 37% with phone motion, distracted driving is a scene that has become all too common in daily American life. It's so common that a CMT survey found that 3 in 4 Americans in states without a handheld ban see drivers texting while driving daily. Nearly 9 in 10 see drivers talking on the phone while driving.

Not surprisingly, Americans see the risks of distracted driving every day. They also say texting is the most dangerous activity you can do while driving. In a survey of over 1,000 Americans on driving risk, CMT found that Americans were most concerned with texting and driving, followed by speeding, and running red lights. Nearly 70% of people said texting and driving was riskier than speeding.

PRIORITIZE THE DRIVING BEHAVIORS THAT CONCERN YOU MOST

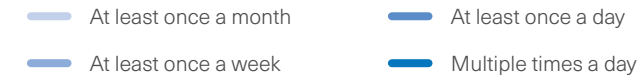
Source: Cambridge Mobile Telematics



To better understand the impact of legislation on drivers' perceptions, CMT compared drivers from states with handheld phone bans to those without. The results were similar, but there were noticeable differences. For example, 48% of people from states with texting laws said texting while driving was a problem, compared to 52% of people from states without bans. In general, people from states with handheld bans were more concerned with other forms of risky driving, like speeding than those without. This could be because they see it less frequently. Talking on the phone while driving was a low-level concern for respondents. Only 5% said they were most concerned by talking on the phone. People in states without bans rated the level of risk for handheld phone calls lower than eating while driving.

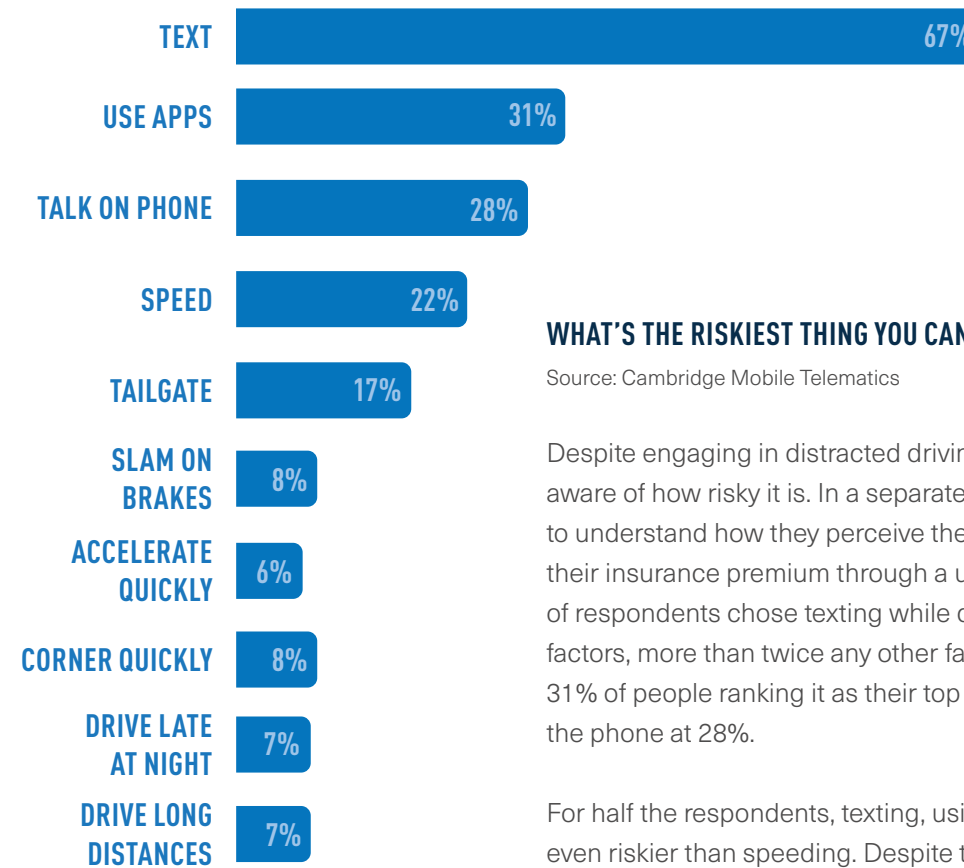
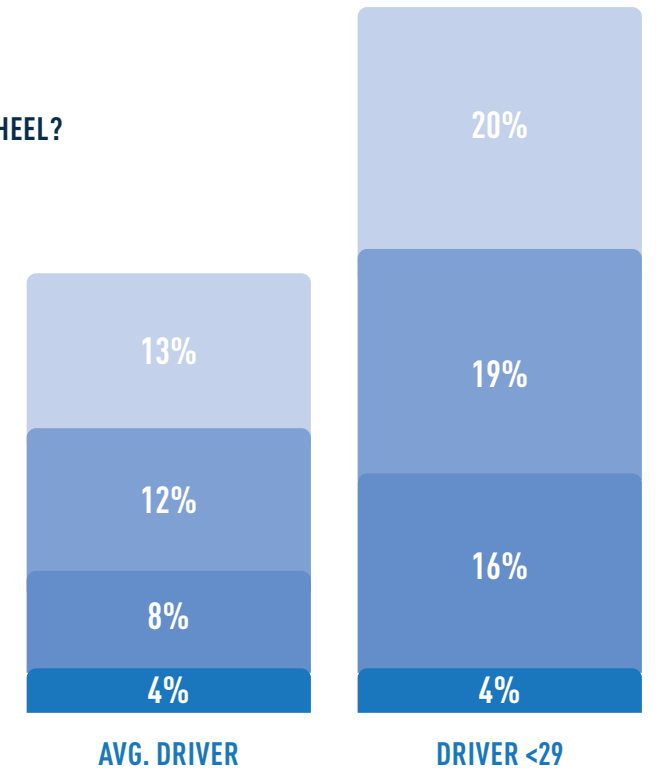
HOW OFTEN ARE YOU DISTRACTED BY YOUR PHONE AT THE WHEEL?

Source: Cambridge Mobile Telematics



Drivers from the survey confessed to driving distracted themselves. In states with handheld bans, 1 in 3 drivers said they had texted while driving at least once a month. This figure was even higher in states without a ban, reaching nearly 6 in 10 drivers.

Young drivers are even more distracted. Drivers under 29 are 63% more likely to send text messages and 33% more likely to make phone calls while driving than the average driver.



WHAT'S THE RISKIEST THING YOU CAN DO WHILE DRIVING?

Source: Cambridge Mobile Telematics

Despite engaging in distracted driving on a monthly basis, drivers are aware of how risky it is. In a separate study, CMT surveyed 1,000 drivers to understand how they perceive the risk of behaviors that could affect their insurance premium through a usage-based insurance program. 67% of respondents chose texting while driving as their top two highest risk factors, more than twice any other factor. App use came in second, with 31% of people ranking it as their top two concerns, followed by talking on the phone at 28%.

For half the respondents, texting, using apps, or talking on the phone was even riskier than speeding. Despite this risk, most drivers are still doing it.



Changing behaviors & improving road safety

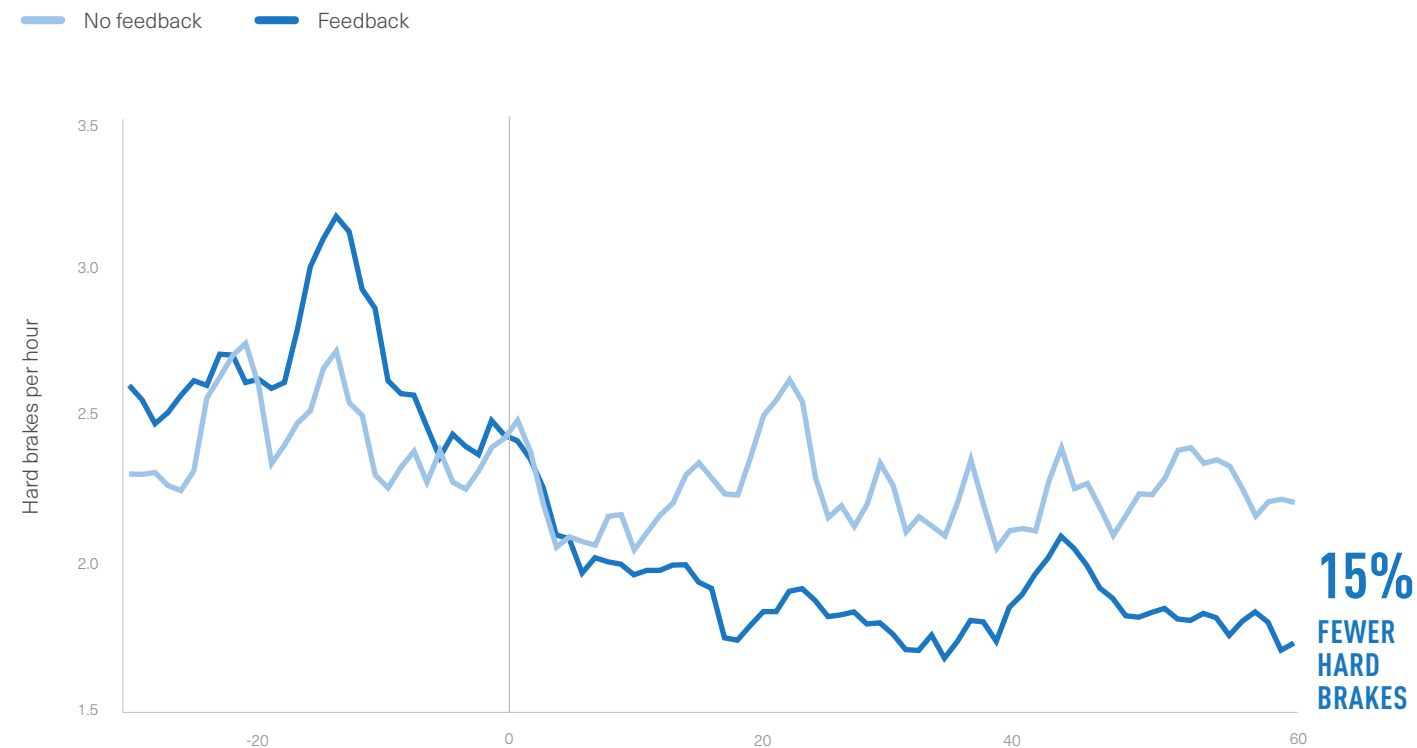
Making roads safer by changing behavior with telematics

Telematics provides a wide range of programs for drivers to save money, drive safer, and get help after a crash. Drivers who opt into usage-based insurance programs primarily do so to save money on their auto insurance by proving they're a safe driver.

Drivers enter telematics programs at different risk levels. CMT wanted to understand how driver feedback impacts driver risk. We conducted a study comparing two groups of drivers. Both groups knew they were in a study to understand driving behaviors. Both groups drove for 3 months with an app on CMT's DriveWell platform. Group 1 didn't receive any feedback or interactivity during the program. Group 2 received no feedback for the first month. Then, starting in month 2, they received a behavior score, trip maps with risk events like hard brakes and distracted driving, and leaderboards. Group 2 did not receive messages outside of the app during the program.

THE IMPACT OF FEEDBACK ON HARD BRAKING

Source: Cambridge Mobile Telematics



At the end of the program, the impact of the feedback on driving behaviors was clear. Group 1 averaged 2.1 hard brakes per hour. Group 2 averaged 1.8 hard brakes per hour, a 15% reduction. Providing drivers with feedback on their behaviors was able to significantly reduce a driving risk factor.

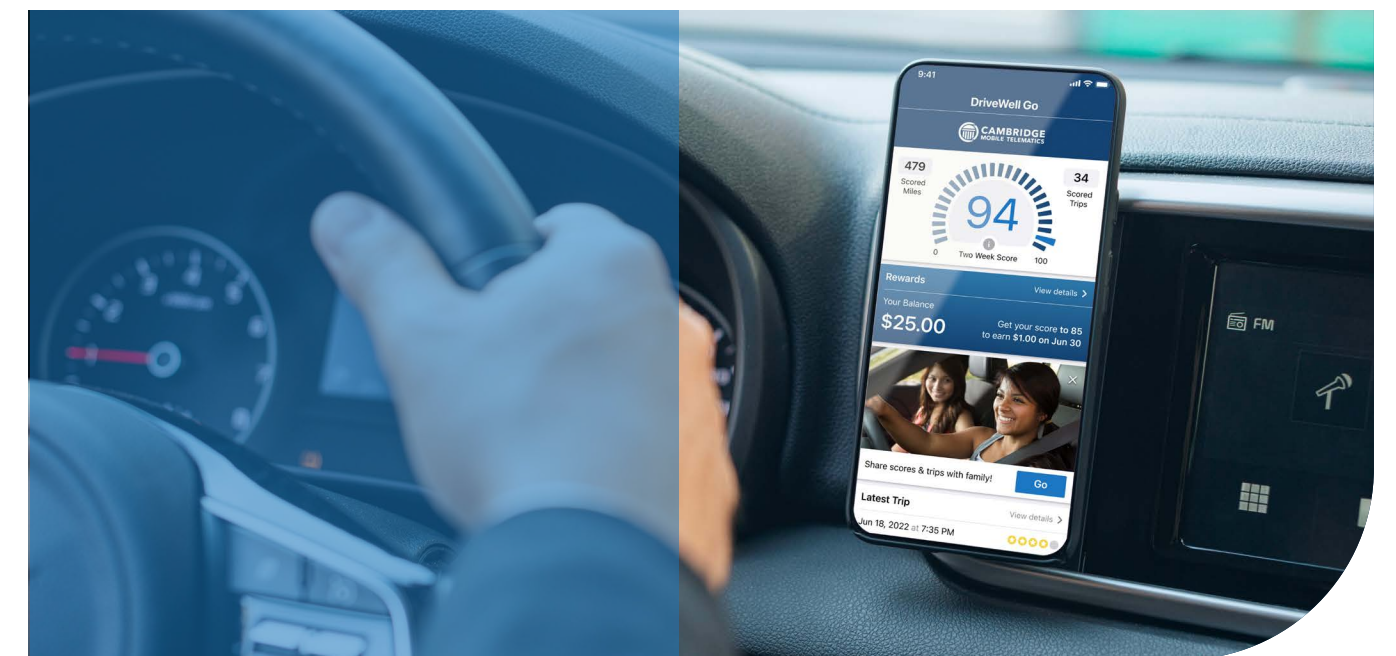
In a separate study on feedback, CMT partnered with a top auto insurer to run an experiment across tens of thousands of drivers to understand the impact of distracted driving awareness. The first group only received their standard risk scores, braking, speeding, and acceleration. The second group received a distraction score as well. The score was for education purposes only — it did not affect drivers' premium. The results showed that drivers who received a distraction score were 25% less distracted than the drivers who didn't.

CMT has also researched the role engagement plays in improving driving safety. Research across hundreds of thousands of usage-based insurance drivers shows

that drivers who engage with their telematics app more than 3 times per week are 65% safer. This means they produce fewer risk events while driving. This same group was 57% less distracted.

Like driving feedback, engagement can also improve behavior. In a separate study, CMT analyzed the level of driver engagement with a telematics program and their improvements in behavior over time. After 1 month of driving, there was a significant gap between highly engaged and unengaged drivers. Unengaged drivers spent 1:41 per hour on the road distracted. Highly engaged drivers, defined as interacting with their usage-based insurance app 20 or more times a month, spent just 29 seconds an hour distracted, a 73% gap.

After three months of driving, unengaged drivers became even more distracted behind the wheel. However, the engaged drivers reduced their distraction levels even more. After 3 months, engaged drivers averaged just 23 seconds of distraction per hour, 6 seconds less than month 1, a 20% reduction.





How cities are using telematics to change behavior, reduce crashes, and limit economic damage

City and state governments have been using telematics to reduce driving risk for years. Starting in 2016, cities and states like Boston, Seattle, San Antonio, LA, and Oklahoma have partnered with CMT to run Safest Driver programs. These Safest Driver programs last between 3-6 months, but can run indefinitely. The programs have prizes for participants in categories like least distracted, slow and steady, safest youth driver, to overall safest driver. Cities work with national and local businesses to fund the prizes. The businesses get good visibility for supporting a popular cause. Grand prizes for the programs have reached \$20,000.

The programs have all seen impressive results in reducing risky behaviors. Boston's Safest Driver Program in 2019 reduced distracted

driving by 48%, speeding by 38%, and hard braking by 57%. This kind of behavior change results in significant road safety improvements, reducing crashes and injuries by over 12%.

Let's look at what this would mean for a program like LA's Safest Driver, which ran in 2019 with 12,000 drivers. In a typical group of 12,000 drivers and a crash rate of 6.2%, we would see 745 crashes and 2 fatalities. With Safest Driver, and a reduced crash rate of 5.4% from lower distraction, speeding, and hard braking rates, there would be 92 fewer crashes overall. With an average \$24,00 cost per crash, based on NHTSA's crash cost estimates in 2019, the city would save over \$2.1 million.



CALCULATING CRASH COSTS

IN ITS REPORT THE ECONOMIC AND SOCIETAL IMPACT OF MOTOR VEHICLE CRASHES, 2019, NHTSA ESTIMATES THAT

1.42 MILLION CRASHES

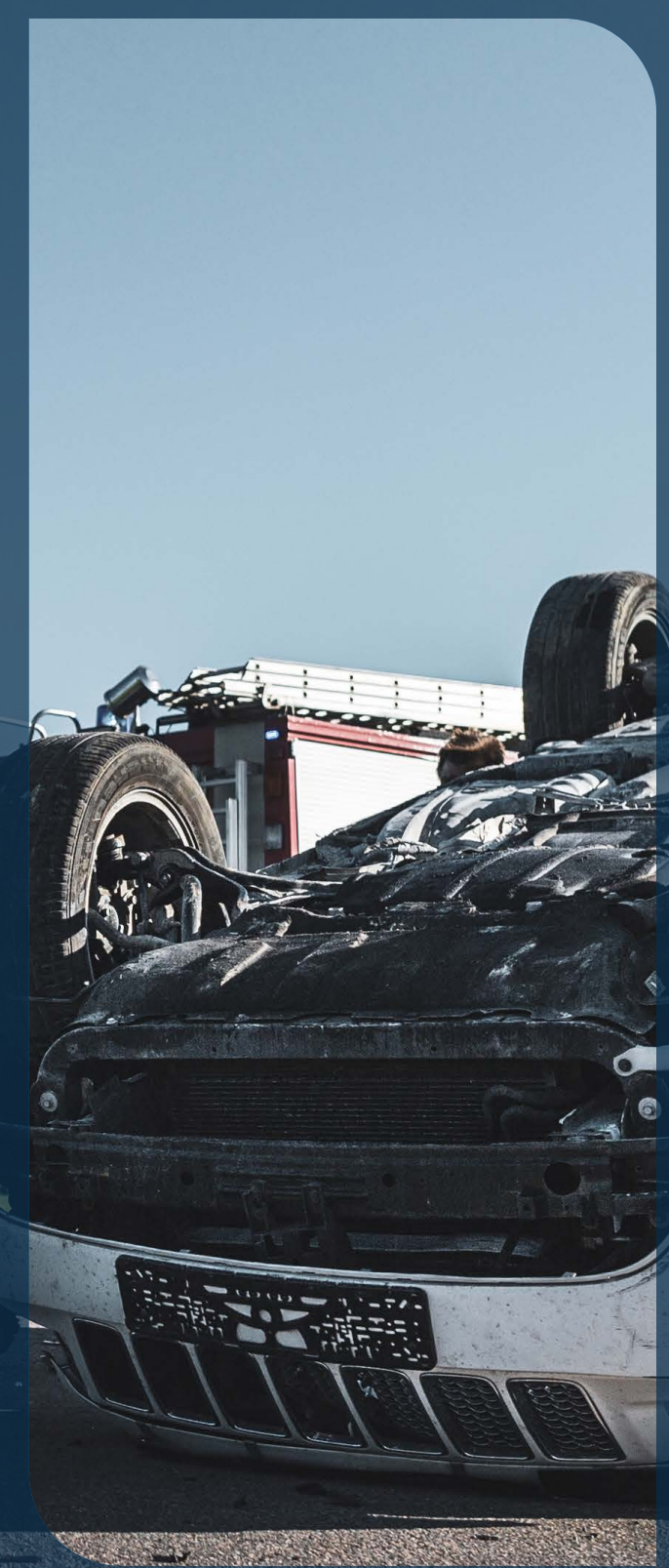
COST THE US ECONOMY

\$340 BILLION

IN 2019

BASED ON THIS DATA, THE AVERAGE CRASH COSTS THE US ECONOMY ABOUT

\$24,000





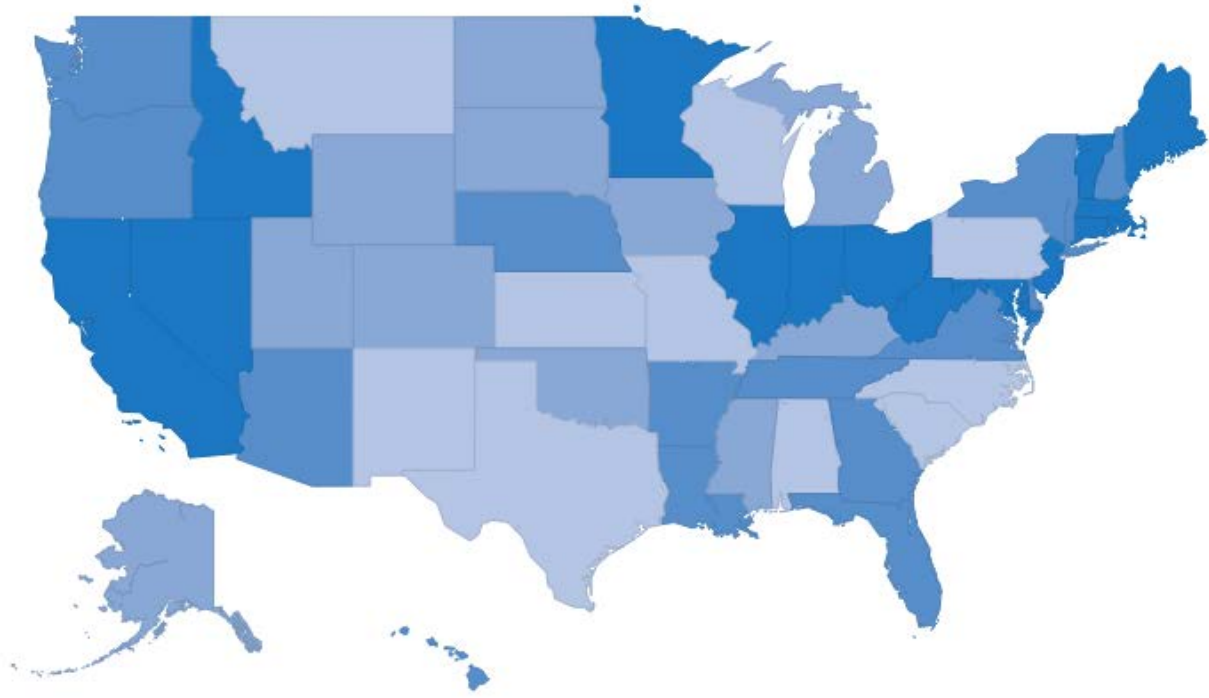
Hands-free legislation

How states are fighting distracted driving

As nearly every metric for distracted driving grows, the need to respond has become increasingly urgent. Since 2020, 9 states have enacted 12 distracted driving bills with mixed results.

HANDS-FREE REGULATIONS FROM STRICTEST (4) TO NON-EXISTENT (1)

Source: The map is a continuous evolution of the 2019 map built by Siegfried & Jense



The criteria used to assess the effectiveness of these laws include fatality rates per 100,000 drivers, the presence of handheld bans or texting bans, restrictions on bans, and enforcement and fine levels. Despite the introduction of numerous regulations in the past three years, the map of distraction laws in the US has remained relatively unchanged since 2019.

However, there has been progress since 2020. Idaho, Indiana, and Massachusetts enacted handheld bans in 2020. Virginia introduced a handheld ban at the start of 2021. Texas implemented a handheld and texting ban in school zones that same year. In 2022, Maine took a step back, repealing the all-cellphone ban for school bus drivers. Arkansas updated its handheld ban definition for drivers aged 18 to 20. Ohio is introducing a handheld ban in April 2023 that will be a primary offense. The law allows for some concessions on phone use.

TIMELINE OF THE LATEST CHANGES IN REGULATION

- 2018**
 - RHODE ISLAND**
Handheld ban for all drivers.
 - GEORGIA**
Handheld ban for all drivers.
- 2019**
 - MINNESOTA**
Handheld ban for all drivers.
 - TENNESSEE**
Handheld ban for all drivers.
- 2020**
 - IDAHO**
(HB 614) Handheld ban for all drivers.
 - INDIANA**
(HB 1070) Handheld ban for all drivers.
- 2021**
 - MASSACHUSETTS**
Handheld ban for all drivers.
 - SOUTH DAKOTA**
(HB 1169) Texting ban now a primary offense, including social media.
- 2022**
 - VIRGINIA**
(SB 160/HB 874) Handheld ban for all drivers.
 - TEXAS**
Handheld phone use and texting ban in school zones only. Bus drivers have an “all cell use ban” when carrying passengers under 21 years old.
- 2023**
 - ARKANSAS**
Handheld ban definition change for 18 to 20 years old. Phone use in school and work zones is now a primary infraction.
 - OHIO**
(SB288) Effective April 2023, handheld phone use while driving is a primary offense. There are some exceptions to the ban: Drivers are allowed to use a phone when the vehicle is parked or stopped at a red light. Emergency calls.



The impact of handheld bans on phone motion

To evaluate the impact of regulations, CMT analyzed millions of trips in 8 states that have introduced handheld bans since 2018: Rhode Island, Georgia, Tennessee, Minnesota, Massachusetts, Idaho, Indiana, and Virginia, representing over 34 million drivers. On average, these states saw a 13% reduction in phone motion within three months of the law going into effect. With a sustained 13% reduction in distracted driving, these states could prevent over 38,000 crashes and save close to 100 lives each year.

As we saw with the Los Angeles example above, there are economic benefits to this level of sustained reduction of distracted driving. Across these 8 states, with an average cost of \$24,000 per crash, preventing 38,000 crashes would save these states a combined \$930 billion every year. Minnesota, which had the largest gains after three months, would see 10,000 fewer crashes, over 20 fewer fatalities, and save over \$240 million in crash costs.

PHONE MOTION TIME PER STATE

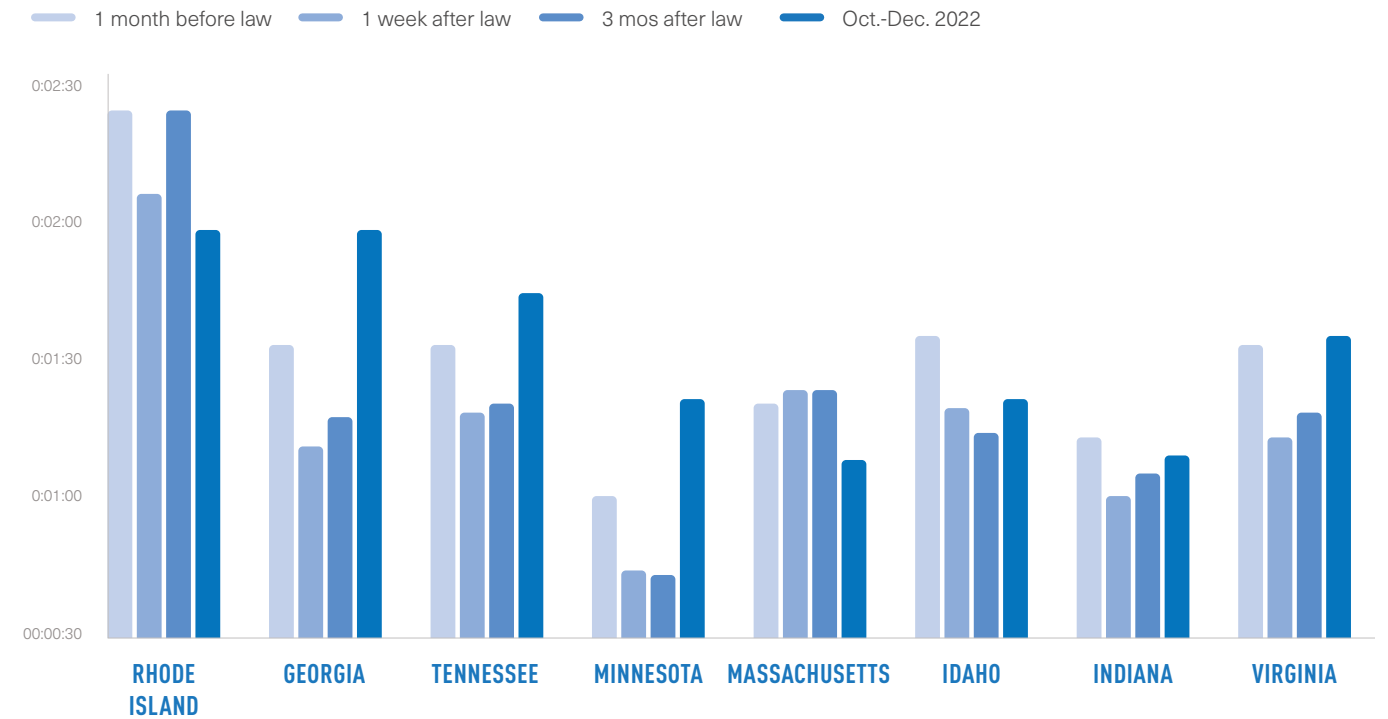
Source: Cambridge Mobile Telematics

| STATE | DATE | 1 MO BEFORE LAW | 3 MOS AFTER LAW | CHANGE |
|---------------|---------------|-----------------|-----------------|--------|
| Rhode Island | June 2018 | 0:02:25 | 0:02:25 | 0% |
| Georgia | July 2018 | 0:01:34 | 0:01:18 | -17% |
| Tennessee | July 2019 | 0:01:34 | 0:01:21 | -14% |
| Minnesota | August 2019 | 0:01:01 | 0:00:44 | -28% |
| Massachusetts | February 2020 | 0:01:21 | 0:01:24 | 4% |
| Idaho | July 2020 | 0:01:36 | 0:01:15 | -22% |
| Indiana | July 2020 | 0:01:14 | 0:01:06 | -11% |
| Virginia | January 2021 | 0:01:34 | 0:01:19 | -16% |

Out of the 8 states, 6 saw reductions greater than 10%. Minnesota roads had a reduction in phone motion of 28%. Phone motion in Idaho, Georgia, Virginia, Tennessee, and Indiana dropped 22%, 17%, 14%, and 11%, respectively. Only Rhode Island and Massachusetts didn't see reductions. Massachusetts introduced its [handheld ban](#) on February 23, 2020, just weeks before the WHO declared Covid-19 a global pandemic. As we wrote in our [2020 report](#), distracted driving spiked over 18% in the first few weeks of the pandemic, making it hard to gauge the impact of the Massachusetts law.

HANDHELD BANS & PHONE MOTION

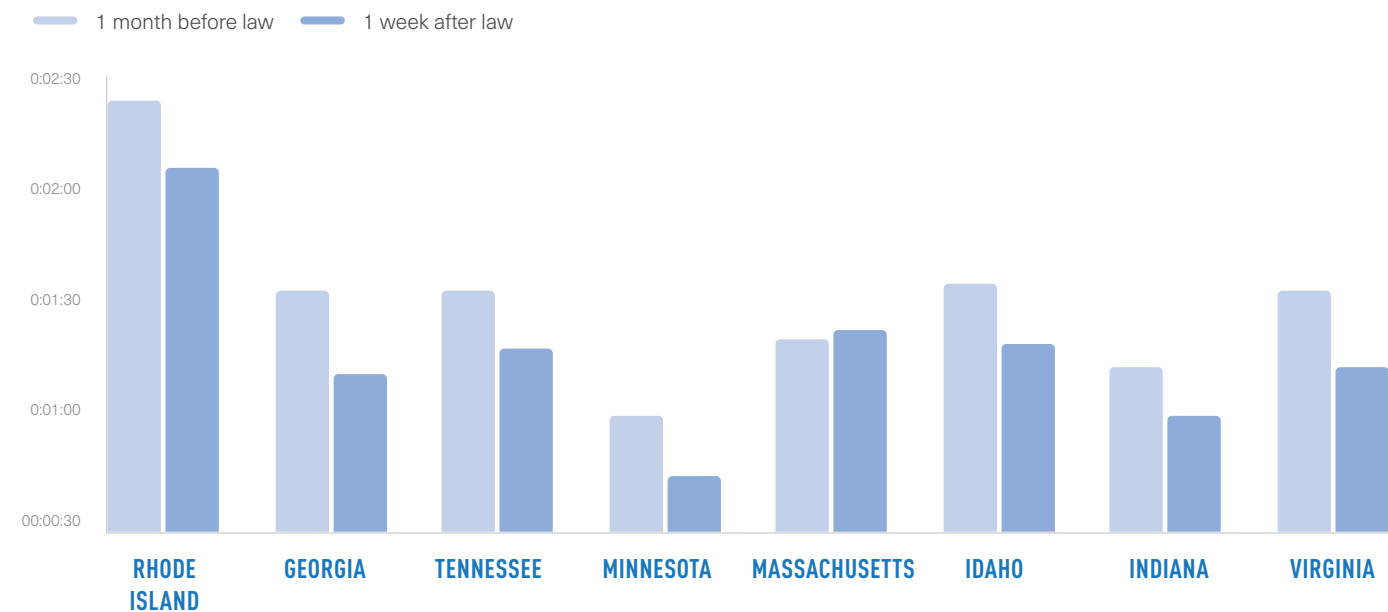
Source: Cambridge Mobile Telematics



News reports play a big role in reducing distraction after a handheld ban goes into effect. News and awareness around the law peak when the law begins. In our analysis, phone motion dropped by an average of 16% in the week after handheld bans began. Minnesota, Georgia, and Virginia all saw drops of over 20% in the first week. Every state experienced double-digit reductions in phone motion, except for Massachusetts, which increased by 4%.

THE IMPACT OF PUBLIC AWARENESS ON HANDHELD LAWS

Source: Cambridge Mobile Telematics





DEEP DIVE

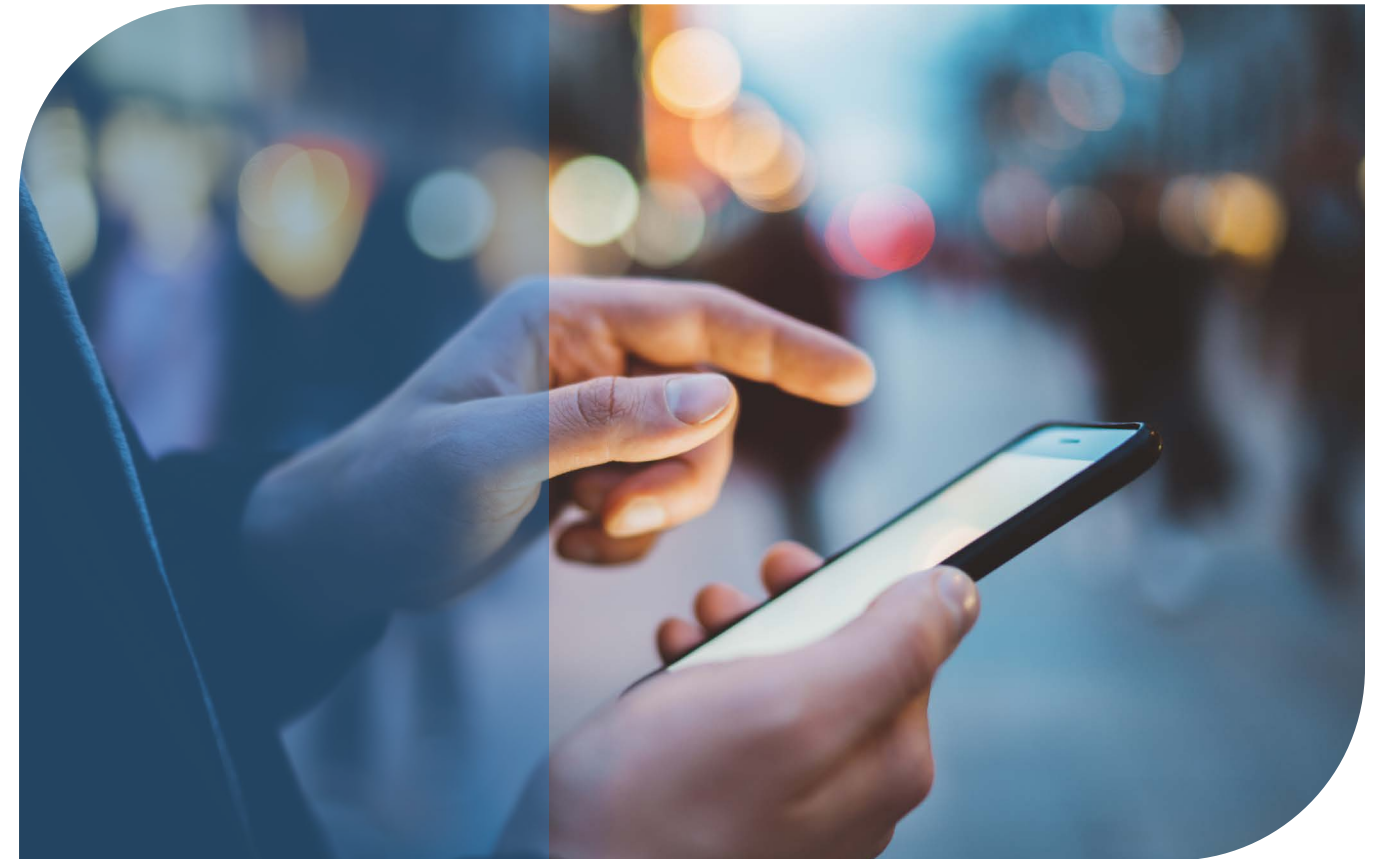
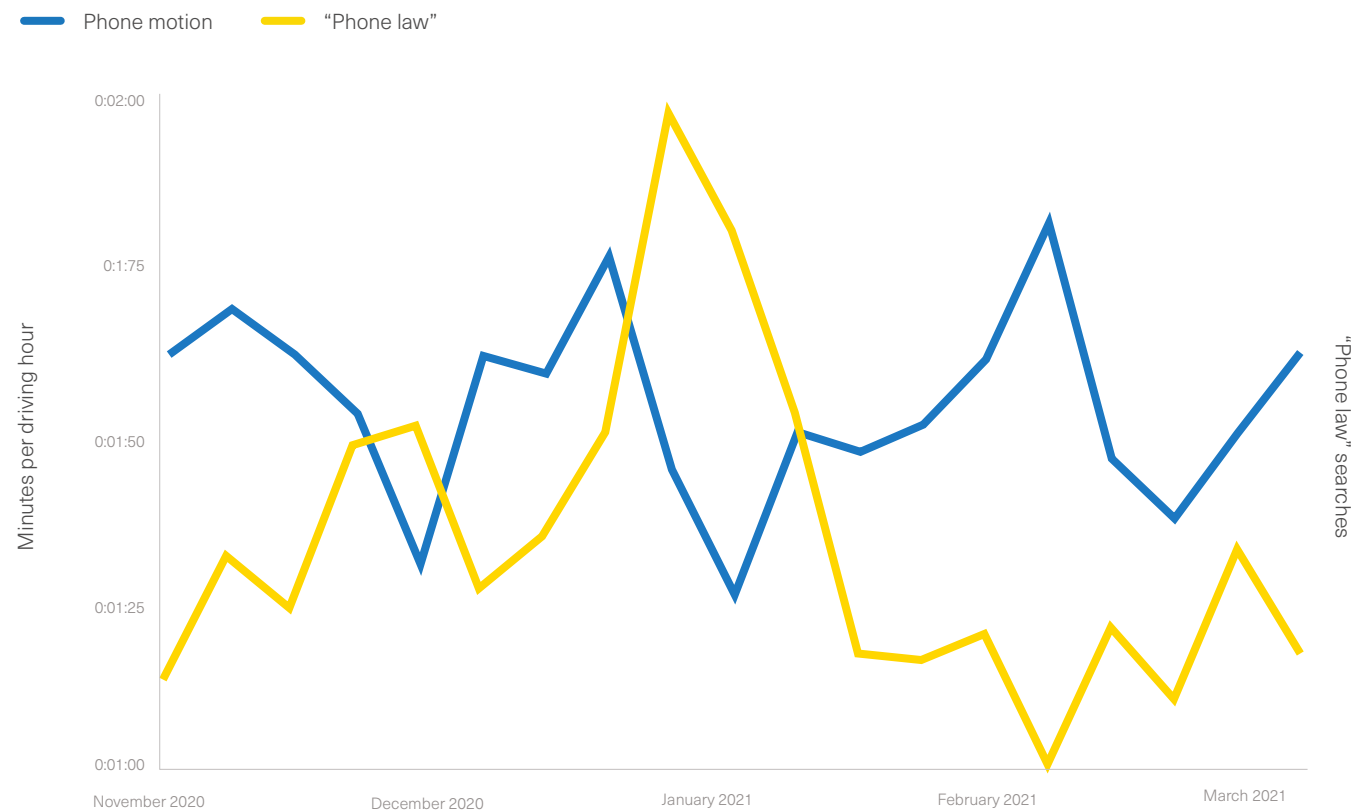
The power of public awareness on distracted driving

News coverage of the handheld laws can play a part in their effectiveness. In Virginia, where the new handheld ban went into effect on January 1, 2021, CMT identified 14 online articles related to the law, starting in late October 2020. Seven of the articles were from local TV news stations that typically air TV segments in addition to an online article. Ten of the articles were within one week of the law's start date.

To estimate Virginia drivers' awareness of the law, CMT analyzed [Google Trends data](#) for the search term "phone law" in Virginia. Searches for "phone law" reached their peak the week of January 1, doubling the amount from the week before. During that same week, Virginia saw its steepest decline in phone engagement while driving, falling 21% compared to the month before. A 21% drop in distracted driving in Virginia for 1 week helped reduce the crash rate by 2.9%, prevented over 200 crashes, 1 fatality, and saved the state \$4.9 million in crash costs.

AWARENESS PLAYS AN IMPORTANT ROLE: VIRGINIA

Source: Cambridge Mobile Telematics



To understand the link between people's awareness of phone usage laws and how much they use their phones while driving, we analyzed the relationship between phone usage and online searches for "phone laws." We did this by calculating the correlation coefficient.

We first looked at a period with fewer articles about the topic, from November 2020 to March 2021. During this time, the correlation coefficient was -0.45. This means there was a moderate relationship between awareness and phone usage while driving — when people were more aware of the laws, they tended to use their phones less.

Next, we focused on a time with more media coverage and many people searching for "phone use" from December 20, 2020, to January 10, 2021. The correlation coefficient during this period was -0.65, which shows a strong connection. The results suggest that as people became more aware of phone usage laws, they reduced their phone usage while driving.

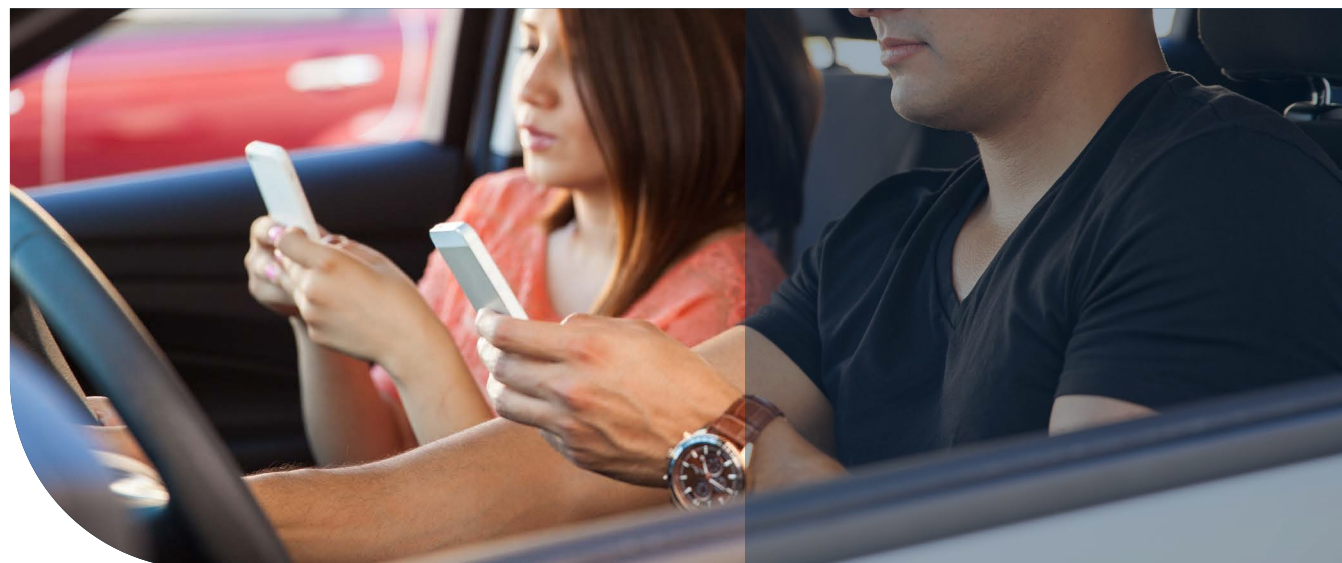


The long-term effects of handheld bans

The handheld bans in these 8 states had various levels of success after 1 week and 3 months of being enacted. But what about the long-term effects? To get a better understanding, we analyzed the same phone motion data for these 8 states at the end of 2022, from October through December. What we found was that only 4 of these states had lower levels of phone motion than they did before the handheld bans: Rhode Island, Massachusetts, Idaho, and Indiana. Only Idaho and Indiana had seen gains at 1 week, 3 months, and now at the end of 2022 after the law. After 3 months, Rhode Island had seen no improvement in phone motion and Massachusetts was 4% higher. Before the end of 2022, Rhode Island was 18% and Massachusetts 15% below their pre-handheld ban levels.

The states with the biggest gains at the beginning of their handheld ban saw the highest levels of phone motion at the end of 2022. Minnesota, which had dropped 28% after 3 months, saw 34% higher phone motion than when the law began at the end of 2022. Phone motion in Georgia had fallen by 17% 3 months after the law. By the end of 2022, phone motion was 27% higher.

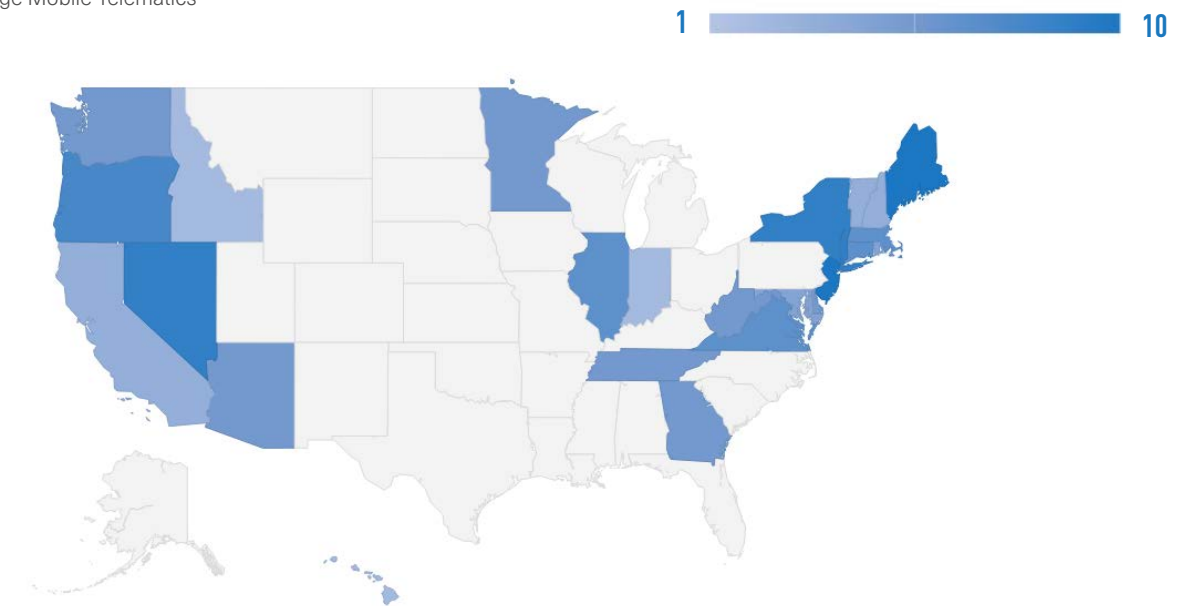
The broader implications of these findings are that handheld laws, enforcement, and public awareness go hand in hand. We've seen that news reports and awareness have a strong impact on the law's performance the week after it's enacted. After that, it's up to the states to ensure that the law remains in the public's mind and that police departments have the resources and mandate to educate the public and enforce the laws.



The impact of fines and enforcement on handheld bans

TOUGHEST FINES APPLIED FOR DISTRACTION CITATIONS ON A SCALE OF 1 TO 10 (10 BEING TOUGHEST)

Source: Cambridge Mobile Telematics



For state legislators, building support and developing the handheld law is the first step. As we've seen, when these bans begin, distraction can decrease from general awareness from news reports and other media. For long-term effects, however, legislators need to make sure these laws are strong enough to make an impact on driver behavior, that they can be enforced, and that there's a plan to maintain the public's awareness.

To gauge the strength of enforcement policies across states with bans on handheld phone use, we developed an index ranging from 1 to 10 based on factors such as the fine amount, the increase in fines between offenses, the inclusion of insurance surcharges, and the use of point systems and license suspensions.

To understand the impact of fines, we analyzed data from New Jersey, which has among the strongest fines for distraction in the country. New Jersey was also the second to introduce a handheld ban in the country, making it a primary offense in 2007. The fine for the first offense for distracted driving ranges from \$200 - \$400, among the highest in the country. Fines double for the second offense, \$400 - \$600, and are over \$800 for the

third offense. Drivers can lose 3 points on their license and face getting their license suspended on their third offense.

Despite the strength of these fines, New Jersey saw nearly 80,000 distraction-related crashes between 2012 and 2016. A recent State Police report showed that distracted driving was the cause of 194 fatal crashes in 2021. Screen interaction in New Jersey has also increased since 2020, when drivers spent 1:35 of every hour interacting with their screen. By 2022, that number increased by 29% to reach 2:03.

The takeaway is that it's hard for fines alone to reduce distracted driving. The challenge for policymakers is to devise a comprehensive strategy that goes beyond financial penalties to include education and public awareness programs.

A good example of a public awareness campaign comes from New York in 2017. The state launched Operation Hang Up, a crackdown on distracted driving that increased patrols and checkpoints. During the campaign, State Police issued over 2,000 tickets for distracted driving.



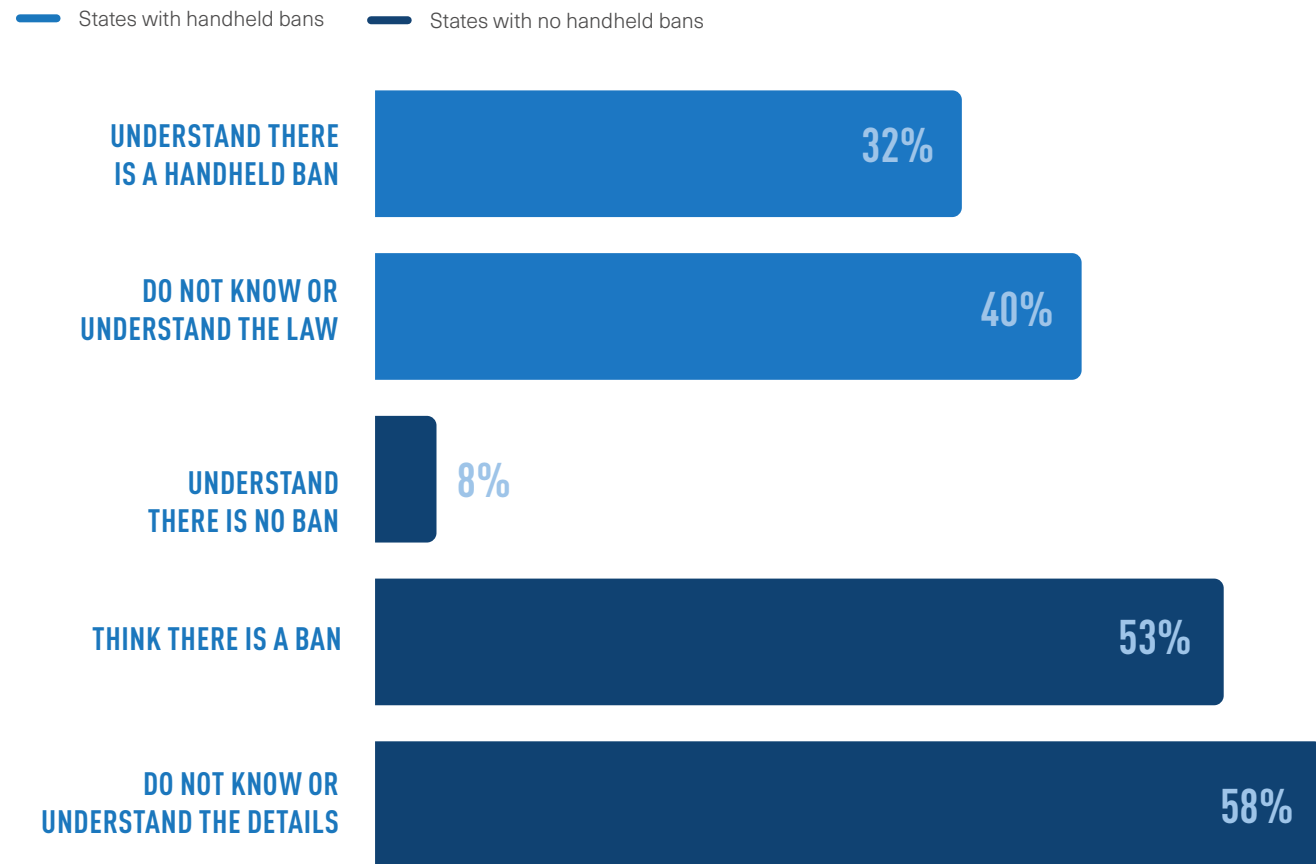
Drivers are confused about handheld laws

One of the reasons fines have trouble impacting driving behavior is that drivers are confused about the bigger issue: Do they have a handheld ban in their state? To better understand what drivers understand about the handheld laws in their state, CMT conducted a study of over 1,000 drivers in January 2023.

The findings show that most drivers do not know what the law is in their state. In states with a handheld ban, just 32% of drivers said they knew about it. About 40% didn't know about the regulation or didn't understand what it meant. In states without a handheld ban, drivers were even less clear about the laws. Only 8% of drivers correctly said their state doesn't have a ban. Fifty-three percent thought there was a ban, and 58% didn't understand the details of the laws.

DISTRACTION REGULATION: DRIVERS' UNDERSTANDING OF THE LAW

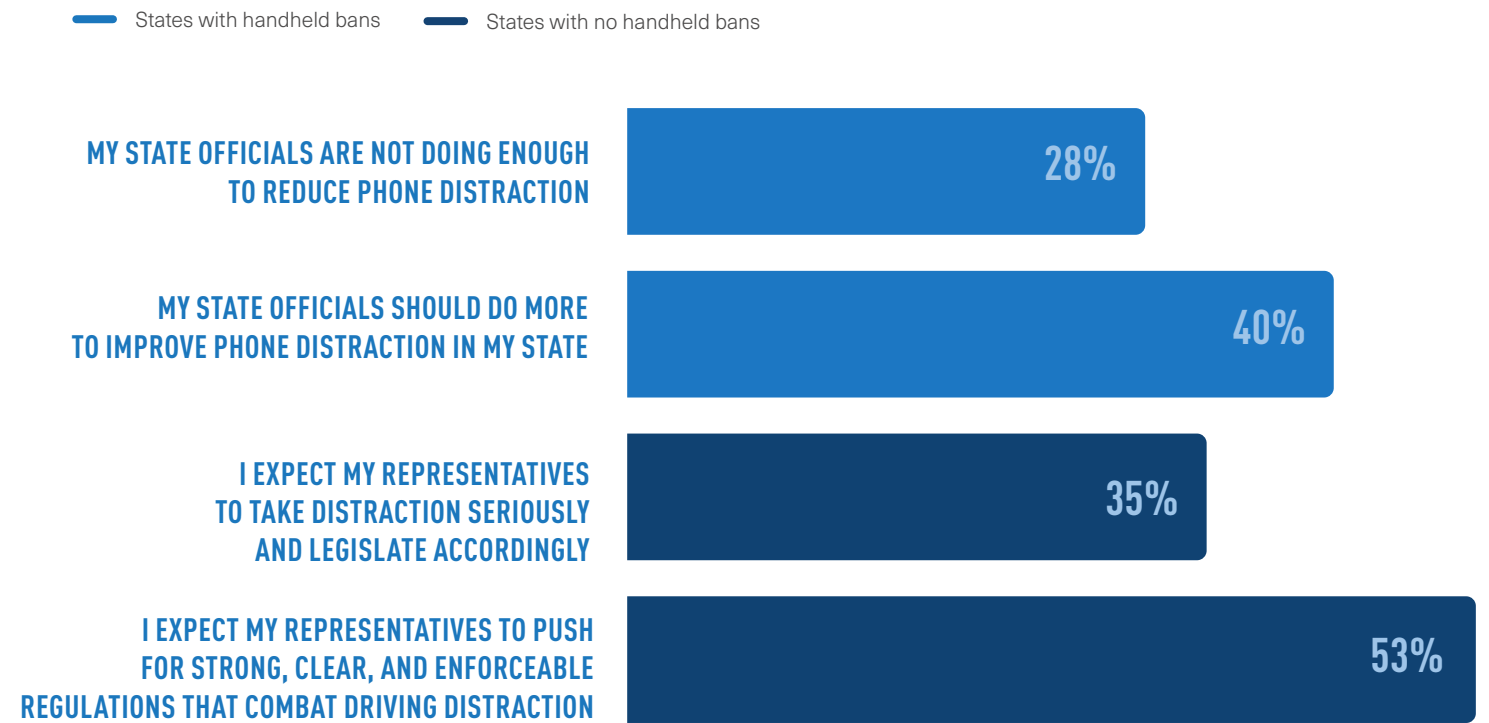
Source: Cambridge Mobile Telematics



Despite the confusion around the laws, drivers want government officials to do more to fight distracted driving. In states with hands-free laws, CMT's survey data shows that 68% of drivers believe their state officials aren't doing enough to fight distracted driving. In states without handheld bans, 88% of drivers want more action from their state officials.

DRIVERS WANT GOVERNMENT OFFICIALS TO FIGHT DISTRACTED DRIVING

Source: Cambridge Mobile Telematics



Drivers may agree that they want government officials to do more, but they don't have a unified solution. In states without handheld bans, 43% of drivers said they want stronger regulations that prohibit phone use and distraction. Just 5% are happy with the status quo.

In states without handheld regulation, an overwhelming majority of voters want their state governments to take action. This sentiment is especially strong in large states like Texas, Pennsylvania, and Florida, where over 94% of respondents want legislators to introduce distraction regulations.



The importance of future-proofing hands-free legislation

Legislation for handheld bans faces a number of hurdles to be successful, including the severity of the fines, education and awareness programs, and enforcement. However, there is another problem that's more fundamental to solving the distracted driving crisis.

How we talk about distracted driving is critical. Experts argue that distracted driving doesn't have a social stigma like drunk driving, making it a challenge to gain support and funding for it. The words we use to describe distracted driving are constantly evolving, complicating the efforts to define and legislate it. For instance, drivers don't just "text" today. They send direct messages, or "DMs." They don't just make phone calls. They FaceTime, Zoom, and WhatsApp. Social media platforms like Instagram and TikTok further exacerbate the problem. These apps use visuals instead of text, so drivers may not consider them distracted driving in the context of "don't text and drive" legislation or campaigns.

This is one of the reasons why legislation with a narrow focus on specific behaviors like "texting" gets stuck in time and becomes impossible to enforce. In response, some states, like South Dakota, have worked to make texting a primary offense, specifically referencing social media use in their legislation. Though not a full handheld ban, the language used in South Dakota's law emphasizes the hands-free approach.



Oregon's Distracted Driving Task Force is also searching for solutions to the limitations in existing legislation. The Task Force has created evidence-based proposals that include amendments to the current cell phone statute that would redefine "mobile communication device" as "mobile electronic device." They're also proposing higher fines for distracted driving offenses and education alternatives for first-time offenders.

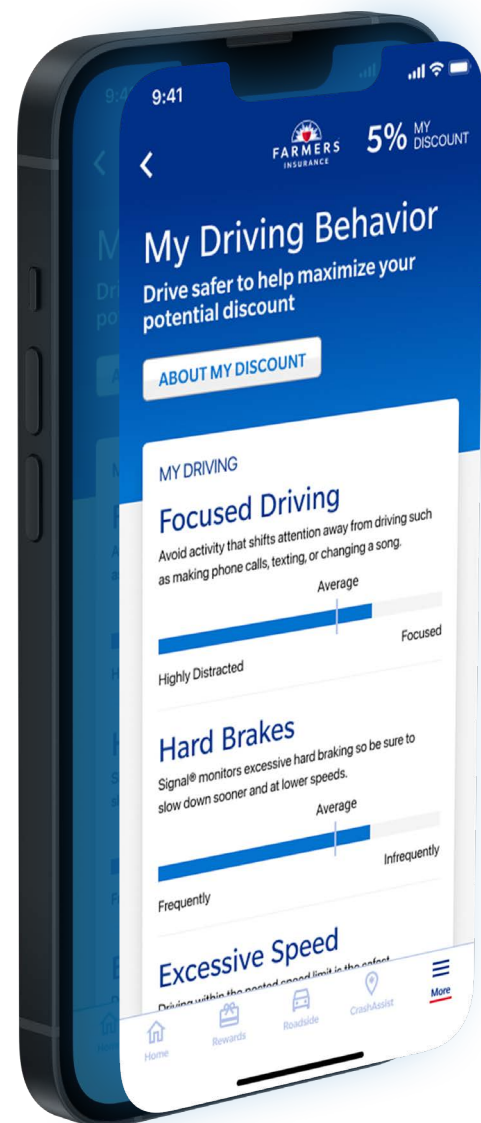
As lawmakers search for the best language to use to reduce distracted driving while balancing drivers' freedom, they've introduced complex hands-free legislation that makes it difficult for drivers to understand what's illegal. They make tradeoffs by creating legislation that defines distracted driving as a secondary offense, which is harder to enforce. As we saw in New Jersey, a primary offense carries significant fines and other penalties like license points and suspension. Secondary laws send mixed signals about the importance the handheld bans.

A good example of this complexity is in Ohio, where legislators have made handheld phone use while driving a primary offense for all drivers. Prior to the new law, effective April 3, 2023, distracted driving was a primary offense only for drivers under 18. Penalties with the new law for driving distracted include a fine of up to \$150 for a driver's first offense and two points on their license, unless they complete a distracted driving safety course. However, the exceptions to the law make it more complex and difficult to enforce. Drivers can make handheld phone calls in emergencies and use their phone while stopped at a red light.



How auto insurers are fighting distracted driving

The auto insurance industry has taken significant steps to combat distracted driving. The industry as a whole invests billions of dollars every year to make drivers safer. Every top 10 auto insurer has a usage-based insurance program that incentivizes safe driving with premium discounts.



Over the past few years, insurers have introduced distracted driving into their program, either as a variable that impacts the customer's price or as an educational measurement. According to a CMT analysis, seven of the top 10 insurers use distraction as a pricing variable, meaning that if a driver handles their phone for texting, app use, or phone calls, their discount is at risk. Two of the top 10 insurers use distracted driving insights to educate drivers on their levels of distraction.

Auto insurers are taking this approach of focus and awareness around distracted driving and adding a level of gamification to it. For example, Farmers Insurance offers its usage-based insurance customers a monthly contest for distracted driving. Here's how the [Farmers website](#) describes the program: "Every month, if you drive safely with a focused driving score at 80% or better, you're automatically entered into a drawing for rewards worth up to \$100."

Beyond adding distracted driving metrics to their usage-based insurance and rewards programs, auto insurers are actively advocating to reduce distracted driving. In 2022, the Travelers Institute partnered with CMT to release an educational guide on distracted driving entitled "[Every Second Matters®: Reducing Distracted Driving, One Voice at a Time.](#)" The guide educates people on the dangers of distracted driving and gives them practical advice on how they can reduce their own distracted driving, as well as speak up if they are in a car with a distracted driver. The guide recommends adopting a professional driver's mindset, avoiding texting while driving, utilizing the "do not disturb" feature on their phones, and participating in a telematics program. The report also covers how telematics programs can help safe drivers save money on insurance and reduce their driving risk.

In 2022, Nationwide ran a [campaign](#) advocating for states to pass hands-free laws. As part of the campaign, Nationwide released a study that found that 86% of drivers support hands-free legislation. Nationwide's CEO, Kirt Walker, said: "Despite fewer people on roads and highways during the pandemic, more people are dying in fatal crashes. While it isn't practical to remove every distraction from motor vehicles, making it a primary offense for the use of handheld devices will reduce crashes and save lives." Nationwide mentioned its work with CMT to "make distracted driving technology available to drivers to help correct dangerous driving behaviors."

In 2019, GEICO launched a campaign to spread awareness about the dangers of distracted driving called [Smartdogs](#), developed by The Martin Agency. The ad begins: "Experts estimate one in three crashes are caused by distracted driving. But nobody listens to the people telling people to stop. What we need is a non-person drivers will actually pay attention to... Smartdogs!" The ad goes on to inform audiences that GEICO isn't introducing smartdogs. Instead, they should activate Do Not Disturb While Driving on their phones. TV ad measurement company iSpot.TV estimates the ad ran on television from April 4, 2019, to January 1, 2020, had 2.5 billion impressions, and cost \$33.5 million in television ad buying.

State Farm has released multiple reports on the prevalence and impact of distracted driving. In 2022, State Farm published [findings](#) from a survey on distracted driving. Among the insights they shared was that more than half of drivers said they "always" or "often" read or send texts, and that nearly half interact with apps while driving.

In 2017, Progressive released a [report](#) showing that 1 in 3 drivers feel confident that they can text and drive, while the majority believe distracted driving is the biggest cause of crashes. More than 90% said driving distracted should be illegal. Progressive's usage-based insurance leader at the time said: "We're optimistic that personalized feedback will encourage safer behavior [among Snapshot drivers.]"

In 2019, USAA published [advice](#) on how to avoid distracted driving. "Studies have proven over and over again that driving is not automatic," said Sean Scaturro, Director of Insurance Advice for USAA. "We need to make certain our hands are on the wheel, eyes on the road, and mind is focused on the drive." He continued: "You're splitting focus between the conversation and driving, which can cause you to be distracted."

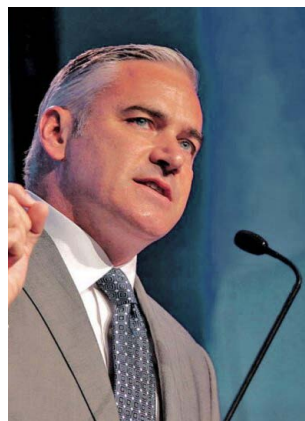
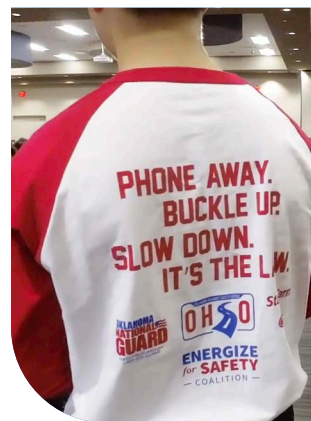


TV ESTIMATES THE AD RAN ON TELEVISION FROM APRIL 4, 2019, TO JANUARY 1, 2020, AND HAD 2.5 BILLION IMPRESSIONS, AND COST \$33.5 MILLION IN TELEVISION AD BUYING.

How grassroots organizations are changing distracted driving in America

Safe driving organizations are all too aware that distracted driving crashes are significantly underreported. To gain national awareness to combat this dangerous behavior, these organizations work to educate the public, raise awareness, collaborate with legislators to enact distracted driving laws, and leverage telematics data to spark change.

The Kiefer Foundation, Stop Distractions, Oklahoma Challenge, Safe Roads Alliance, and EndDD.org are just a few of many organizations changing the culture around distracted driving. In this section, we'll introduce you to each of them.



From tragedy to national change

In 2016, the Kiefer family experienced a tragedy no family should ever have to face: their 18-year-old son, Mitchel Kiefer, was killed in a car crash caused by a distracted driver. Steve Kiefer, Mitchel's father, who was SVP and President of South America and International Operations at General Motors prior to his retirement in April 2022, founded the Kiefer Foundation in Mitchel's memory with the goal of ending distracted driving. To fight distraction, the foundation focuses on three pillars: awareness, policy, and technology.

The foundation's work includes advocating for hands-free legislation across the country, like the bill passed by the Michigan state legislature in 2022. "The statistics show that 10 people are killed each day by distracted drivers in the US — some estimates are as high as 50 people killed each day," Kiefer said. "This is a senseless, selfish behavior that must change. Drivers need to take personal accountability when they're behind the wheel and just drive."

To raise awareness of the dangers of distracted driving, the Kiefer Foundation engages in various campaigns and initiatives, partnering with schools and community organizations. They also collaborate with law enforcement agencies, advocating for stronger policies and stricter penalties for distracted drivers. The foundation supports the development and implementation of new technologies aimed at reducing distractions and improving road safety.

In May 2022, CMT and the Kiefer Foundation partnered to combat distracted driving through the foundation's annual "Swing for Safe Driving" Ball Golf Tournament. Mitchel was a hockey player on



the state championship Detroit Catholic Central hockey team and a passionate disc golfer, which he simply called "golf." Mitchel called regular golf "ball golf," which is where the memorial "Swing for Safe Driving" Ball Golf Tournament got its name.

"I've dedicated my working life thus far to the automotive industry, now I intend to focus on my passion – saving lives on the road," said Kiefer. "This is not a passion I chose, but one that was thrust upon me by the loss of my son, Mitchel. Mitchel's death in a distracted driving crash changed my life forever, and I want to work towards a future where no parent has to bury a child as a result of a preventable car crash."

In April 2023, Steve Kiefer joined CMT's Road Safety Board as chairperson. The Safety Board will have access to CMT's extensive resources, giving them an unprecedented view into the real-time dangers facing people on the road today. The Safety Board will focus on developing high-impact policies and initiatives that will make the world's roads and drivers safer.

Making distracted driving a national priority

In 2008, Jennifer Smith's life changed in an instant when her mother was killed in a distracted driving crash. Losing her mother sparked a mission to make distracted driving a national priority.

Smith co-founded StopDistractions.org, a non-profit organization dedicated to eliminating distracted driving. StopDistractions.org's goal is to raise awareness across the country so others don't have to experience the pain of losing someone to distracted driving.

"It is no longer a matter of if this is going to happen to someone you love, it's when. If it hasn't already," Smith said.

StopDistractions.org's approach is multifaceted, focusing on three main pillars of road safety: education and awareness, law enforcement and policy, and technology and engineering. The organization seeks to create a cultural shift in attitudes toward distracted driving by sharing personal stories and experiences. One of Smith's primary goals is lobbying lawmakers

to create, change, and enforce distracted driving laws. She's a strong advocate for the use of telematics data, which provides critical evidence of the dangers posed by distracted drivers.

"Now, we're no longer just telling our stories. We finally have the validation as families that this isn't just happening to me and my family, but to many other people," Smith said. "Everyone has always believed the family's stories, but having that data gives them the support that they need."

"My ultimate goal is to put my organization out of business," Smith said. "That means that distracted driving crashes will have stopped happening, risky driving behavior will have ended, and technological and infrastructure solutions will be in place, so we don't have to work on this issue anymore."

"We have the tools at our disposal to stop these crashes from happening. Insurers, telematics, and driving technologies can end distracted driving," Smith said.



Oklahoma Challenge

How the Oklahoma Challenge is empowering teens to drive safer

Linda Terrell and the Oklahoma Challenge are dedicated to promoting safe driving throughout the Sooner State. Terrell's focus on fighting distracted driving stems from a deeply personal place. She's seen too many Oklahoma teens die from distracted driving crashes.

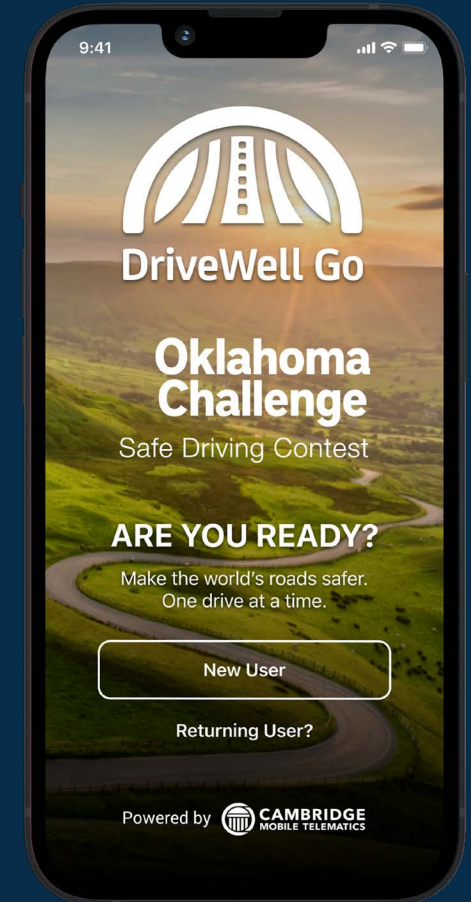
"We can't just sit back and let this continue to happen. Distracted driving is preventable, and it's up to us to take action," Terrell said.

Oklahoma Challenge, a safe driving organization focused on empowering young drivers, adopted an innovative approach to tackling the issue of distracted driving. It partnered with CMT to use its Safest Driver platform to encourage positive behavior change among drivers.

In October 2020, Oklahoma Challenge launched a contest using the Safest Driver app at local high schools, promoting safe driving habits among students. Students signed up and competed to become the safest drivers in their community.

"So many people were talking about this, and then we were able to start giving away gift cards. Coming from a poor state like Oklahoma, those gift cards made a huge impact on the kids and started a light-hearted, friendly competition," explained Terrell.

"One of the most important things we've heard from students is that they do not want to cause death. No one wants their friends to die. No one wants their family to die. And they do not want to be the ones to cause anyone to lose a loved one," she said.



Throughout the contest, Oklahoma Challenge provided teachers with vital information, sparking conversations about safe driving in the classroom. Terrell believes that education and awareness are crucial in the fight against distracted driving.

"Research shows now that if we explain to kids that this could happen to them, they are more likely to listen. We don't want to use these horrible scare tactics that are overwhelming. We give them real information. This can happen to anyone. And we give them tools on how to drive safely," she said.

"These high school kids can change the generation," Terrell said. "They can work with younger kids and work with their parents. It's all about youth empowerment. We want them to own the message and share it. It's about positive peer pressure."



How Emily Stein and Safe Roads Alliance are educating parents to end distracted driving and promote road safety

Emily Stein, President of the Safe Roads Alliance, has made it her mission to tackle distracted driving head-on, championing safer roads and a more responsible driving culture.

Stein's dedication to fighting distracted driving is personal. In 2011, her father was killed by a distracted driver who was programming her GPS while driving. In 2016, Stein transformed her tragedy into action, joining the Safe Roads Alliance to advocate for stricter laws, increased awareness, and improved road safety. Under Stein's leadership, the Safe Roads Alliance collaborates with policymakers, law enforcement agencies, and the public.

Stein and her team are working to change the way we perceive and approach distracted driving. "We call them crashes, not accidents, because 94% of all crashes are due to human error – usually risky behavior that we know can cause a crash: speeding, aggressive driving, drunk or drugged driving, distracted driving, and not wearing a seatbelt," Stein said.

Education and awareness also play a significant role in the Safe Roads Alliance's strategy. Stein has developed programs and campaigns to inform drivers of the potential consequences of their actions on the road.

"Parents play a critical role in teen driver safety and communicating important driving safety information," said Stein. "New teen drivers are still gaining experience behind the wheel, which increases the chance of dangerous situations for the teen and other roadway users around them. This is why it's important for parents to have these discussions with their teens. Start the conversation today and continue it every day."

Stein's advocacy has led to tangible results. Her work in lobbying for stricter distracted driving laws contributed to the passage of crucial legislation in multiple states, including Massachusetts, where she successfully pushed for a hands-free driving law, which began in 2020.



EndDD.org fights distracted driving through education and personal storytelling

Joel Feldman lost his daughter Casey in a distracted driving crash after a driver took his eyes off the road for a couple of seconds. Joel and his wife Diane, made it their mission to honor their daughter's life by creating the Casey Feldman Foundation and EndDD.org.

"I can handle it. I know how to multitask. It's just a few seconds," Feldman said of how distracted drivers rationalize their decision. "Each and every one of those excuses have thousands of deaths under them."

EndDD.org fights distracted driving through education. Since 2012, volunteer speakers like nurses, physicians, safety experts, driver's education instructors, lawyers,

and others have given distracted driving presentations to over 500,000 teens and adults. These presentations are science-based education programs that teach people how to stop driving distracted and speak up when they see others drive distracted.

By targeting younger generations, EndDD.org aims to shape the attitudes and behaviors of future drivers who refuse to accept distracted driving as the norm. "Studies show, and we teach this, kids have incredible power to change those behaviors. 90% of kids say they put their phone down if their friend asks them to." Joel credits kids being open-minded to new ideas as one of the reasons for this change.





National distracted driving coalition

In an effort to combat distracted driving, the National Distracted Driving Coalition has united over 60 private, non-profit, governmental, and academic organizations to spearhead a range of initiatives at both the national and state levels. The member-funded organization focuses on four key areas: legislative action, distraction prevalence research, enforcement training, and education.

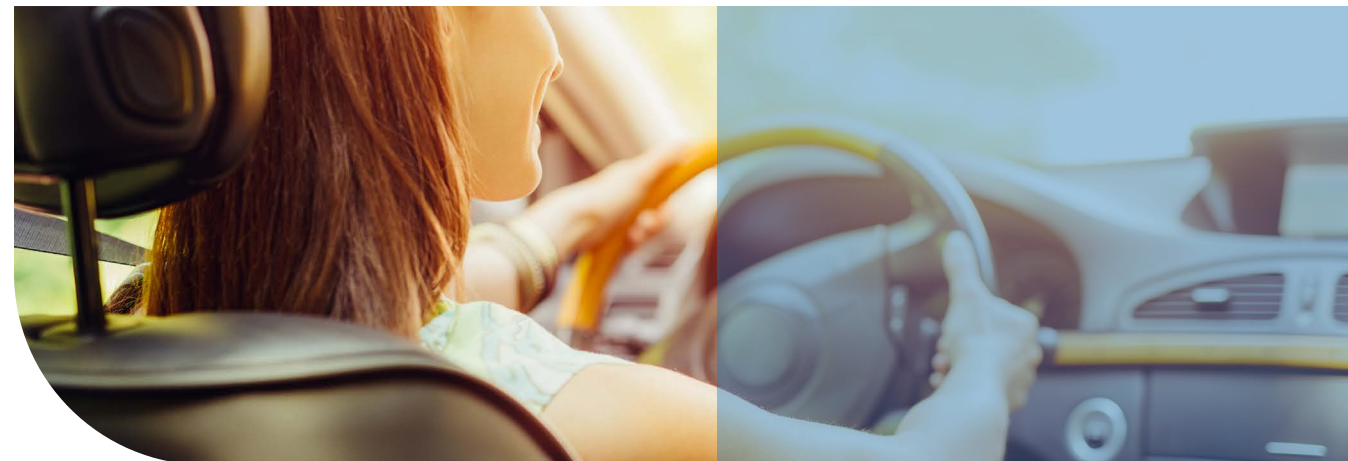
As a resource for legislative action, the coalition works to introduce hands-free bills and plans to establish committees in 15 states for 2023 hands-free bill support. The coalition also evaluates existing bills and laws to enhance efficiency and effectiveness and prepares templates for policy development.

The coalition seeks to provide more accurate data on crashes caused by distraction, summarize available resources, identify data gaps and underreporting, track improvements to the Fatality Analysis Reporting System (FARS), and identify new technologies to bolster enforceability.

The coalition also encourages studies to evaluate the effectiveness of distraction laws and researches technologies that directly impact driver distraction.

The coalition collaborates with the International Association of Chiefs of Police and the National Sheriffs Association to offer training on distracted driving prevention and laws. The organization emphasizes the importance of data collection, informs law enforcement about new enforcement technologies, advocates for equitable enforcement, and identifies the information jurisdictions should collect to evaluate the effectiveness of distracted driving laws.

The coalition works on developing or identifying campaign materials to educate drivers, engages with children and young drivers to increase distracted driving prevention strategies, and develops educational messaging to raise awareness about the risks associated with hands-free communication technologies.



NDDC Steering committee and stakeholders

PRIVATE COMPANIES

- Alliance for Automotive Innovation
- American Property and Casualty Insurance Association
- American Trucking Associations
- Cambridge Mobile Telematics
- CAN-AM IT Solutions
- Carbon Express Inc
- Google Android Auto
- Imagine!
- Indiana Motor Truck Association
- J. J. Keller and Associates, Inc
- Just Drive
- National Tank Truck Carriers
- NoCELL Technologies, LLC
- Official Driving School
- ORIGOSafeDriver
- PathZero.ai
- Piedmont Heart Institute
- Physicians
- Pulse Labs
- Seeing Machines
- State Farm
- Travelers
- Veoneer

ASSOCIATIONS

- Auto Club of Missouri
- Auto Club of Southern California
- National Waste & Recycling Association

NOT-FOR-PROFIT ORGANIZATIONS

- Ad Council
- Advocates for Highway and Auto Safety
- Colorado Drive Safe
- DRIVE SMART Virginia
- EndDD
- Governors Highway Safety Association
- Impact Teen Drivers
- Insurance Institute for Highway Safety
- International Association of Chiefs of Police
- Local Motion
- Lutzie 43 Foundation
- Mercy Hospital
- Missourians for Responsible Transportation
- National District Attorneys Association
- National Safety Council
- National Transportation Safety Board
- Oklahoma Challenge
- Safe Roads Alliance
- Stopdistractions.org
- Students Against Destructive Decisions
- TBWA/Chiatt/Day
- The Kiefer Foundation
- Together For Safer Roads
- Traffic Injury Research Foundation

ACADEMIA

- Massachusetts Institute of Technology
- Montana State University
- Upper Great Plains Transportation Institute (UGPTI), North Dakota State University
- Virginia Tech Transportation Institute
- Yale University

GOVERNMENT

- Centers for Disease Control and Prevention
- Delaware Office of Highway Safety
- Federal Motor Carrier Safety Administration
- Georgia House of Representatives
- National Highway Traffic Safety Administration
- National Sheriffs Association
- Ohio DoT



CMT's mission is to make the world's roads & drivers **safer.**

Cambridge Mobile Telematics (CMT) is the world's largest telematics service provider. Its mission is to make the world's roads and drivers safer. The company's AI-driven platform, DriveWell®, gathers sensor data from millions of IoT devices — including smartphones, proprietary Tags, connected vehicles, dashcams, and third-party devices — and fuses them with contextual data to create a unified view of vehicle and driver behavior. Companies from personal and commercial auto insurance, automotive, rideshare, smart cities, wireless, financial services, and family safety industries use insights from CMT's platform to power their risk assessment, safety, claims, and driver improvement programs. Headquartered in Cambridge, MA, with offices in Budapest, Chennai, Seattle, Tokyo, and Zagreb, CMT serves millions of people through over 95 programs in 25 countries, including 21 of the top 25 US auto insurers. Learn more at CMT.ai.

314 Main St Suite 1200, Cambridge, MA 02142
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