

A 6-minute review of CMT's Report: The State of US Road Risk in 2024



The State of US Road Risk in 2024

A data-driven analysis from Cambridge Mobile Telematics



5th Edition



The CMT DriveWell Fusion® Platform

Data Sources



IoT sensors



Phone sensors



Connected car sensors



Video



Fleet devices

1 trillion sensor data values daily

27 petabytes of data

Transform in DriveWell Fusion Platform

Insights Delivered

Risk scoring & driver improvement



Crash & claims



Road safety



2020-2023

US Road Risk Behaviors

	2020	2023	Change
Screen interaction time per hour	1:47	2:06	17.8%
Phone motion time per hour	1:26	1:31	5.8%
Phone motion above 50 mph	33.3%	35%	5.1%
Handheld call time per hour	0:31	0:27	-12.9%
Hands-free call time per hour	3:19	3:47	14.1%
Speeding time per hour	2:05	2:02	-2.4%
Hard braking per 100 miles	3.34	2.96	-11.4%



Distracted driving was responsible for an additional **216,000** crashes, **120,000** injuries, **985** fatalities, and **\$8.5 billion** in economic damages in 2023.





Distraction in the Context of Frequency & Severity

The past few years have seen record levels of road fatalities. In 2021, 42,915 people were killed on American roads according to NHTSA, the highest level since 2006. In 2022, the number dropped slightly to 42,795.

In this period, we've seen speeding and distracted driving increase significantly. In 2022, drivers in the US spent 2 minutes and 12 seconds of every hour on the road interacting with their phone, a 23% jump over 2020. Speeding rates were slightly higher at 2 minutes and 14 seconds of every hour.

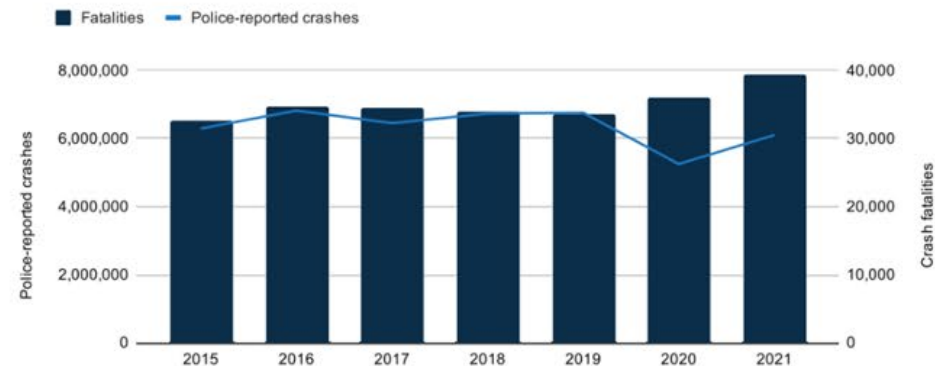
And yet, overall crashes were down in 2021 compared to the prior seven years. According to NHTSA, there were 6.1 million police-reported crashes in 2021. Since 2015, the only year with fewer crashes was 2020, at the height of the pandemic.

Crashes were lower, but fatalities were up. What's the cause of this?

With the rise of distracted driving and speeding over the past few years, severe crashes and fatalities increased. It's important to understand that distracted driving doesn't just lead to more crashes — it also raises the chance that they end in a fatality.

When crashes fell & fatalities rose

Source: NHTSA, Summary of Motor Vehicle Traffic Crashes, October 2023



The distraction metrics

In this section, we'll cover how the different metrics of distracted driving impact crash frequency and severity. The metrics speak to different behaviors while driving, and different levels of distraction and severity as a result.

We cover the technical definitions of CMT's distraction metrics in the section The latest Trends in Risk Behaviors on American Roads. One item to note here, however: CMT captures distraction events when the vehicle is traveling at least 9 mph. Now, let's focus on what actually happens while driving.

Handheld phone calls

Handheld phone calls are when the driver is making a call and the phone is in their hand. The phone is typically at their ear, but it can technically be anywhere, as long as the sound is coming out of the internal speaker.

Hands-free phone calls

Hands-free phone calls are when the driver makes a phone call but doesn't touch the phone during the call. This hands-free ability is available through Bluetooth systems, in-dashboard systems, and simply the speakerphone.

This isn't to say that hands-free phone calls can be entirely without phone interaction. The driver could pick up their phone (phone motion), dial a phone number (screen interaction), activate speaker phone (screen interaction again), put the phone down (phone motion again), and have a hands-free phone call. This is why hands-free laws are so important. While laws differ state by state, they generally define hands-free as never touching the phone.

Phone motion

Phone motion typically captures when the driver reaches for the phone and picks it up. Once the driver picks up the phone and the screen activates, the phone motion metric begins. Phone motion is typically the movement of the driver bringing the phone to them and then putting it down. Reaching for items has proven to increase crash risk among teen drivers.

Phone motion can also mean the driver is simply holding the phone and waving their hand back and forth. While this movement can happen, the more likely scenario for phone motion is when a driver is grabbing their phone to interact with it.

Screen interaction

Screen interaction is any tapping movement the driver makes with the phone while the screen is on. This can include dialing a phone number, sending a text message, playing a game, pressing the play button on a video or podcast, liking a post on a social network, and more.

This is part of the reason why screen interaction and phone motion have different engagement levels. In 2023, drivers engaged in screen interaction for 35 more seconds than phone motion. One difference is in the picking up and putting down movement, which is typically faster, versus the time spent interacting with the phone. The other is that screen interaction also captures distraction behaviors when the phone is in a mount.





Crash frequency

This is the first time we've published this type of data, detailing the physics of a smartphone during a crash. Our research in this area is continually evolving as we work to understand how smartphones impact crash conditions and post-crash outcomes.

In the graph below, we can see the four distraction metrics categorized into risk segments. Risk segment 1 is the group with the lowest level of that behavior. Risk segment 5 has the highest. The goal is to see how the different levels of behaviors impact crash frequency. We wanted to show the relative impact on crash frequency for each metric, but we've removed the Y-axis to protect proprietary information.

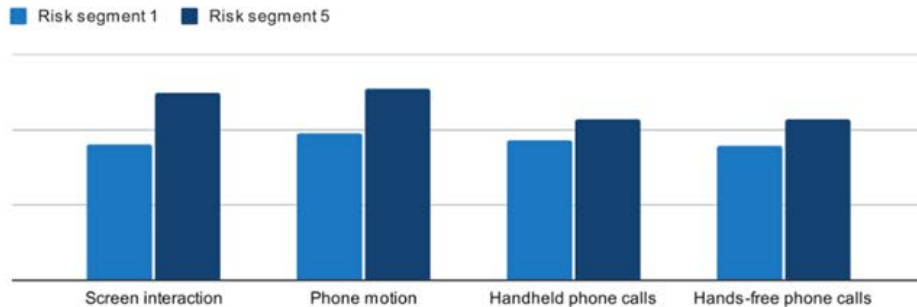
Each metric has lift to it. In other words, risk segment 1 and risk segment 5 see different levels of crash frequency. Across the board, the dark blue bar is higher than the light blue bar. Screen interaction has the highest lift of the group. Screen interaction and phone motion both have the biggest impact on crash frequency.

Despite hands-free phone calls happening without the additional distraction of a phone being in-hand, handheld and hands-free phone calls follow a similar pattern for their impact on crash frequency. That said, hands-free phone calls have a lower impact in both risk segments.

The result of heavy hands-free phone call users having a higher crash frequency speaks to the fact that any kind of behavior beyond driving can contribute to a higher likelihood of crashing. In fact, researchers at the National Institutes of Health have found that eating can increase the chance of crashing by 3X for younger drivers. And, there's a lingering impact of phone use as well — researchers have found a "distraction hangover" where the brain takes 27 seconds to refocus on the road after the driver uses a voice-to-text feature.

Despite the similar pattern handheld and hands-free calling have on impacting crash frequency, hands-free laws are still the most powerful legislative tool state and local governments have for reducing distracted driving. A hands-free strategy makes it easier to enforce the law simply by the fact that officers can better identify when a driver is interacting with their phone — texting laws are impossible to enforce. As we will see later in the section on state distraction, states with hands-free laws experience 9.5% lower distracted driving than states with just texting laws. We've also seen that hands-free laws have been able to reduce both handheld and hands-free phone use. In Ohio, handheld phone calls fell by 12% in the first six months. Hands-free phone calls fell by 8% in the same time period.

Crash frequency by distraction type



Crash severity

The impact of distracted driving on crash severity looks very different than frequency. As we've seen, any kind of cognitive load can increase frequency somewhat. What we discover by analyzing the severity of crashes that involve different kinds of distracted driving is that not all distraction is created equal.

The graph below shows the crash impact speed increase by distraction type compared to crashes with no distraction. The distraction event happens 10 seconds before the crash. One caveat here is that this study was observational, not causal, and we didn't control for other variables such as where the crash occurred. That said, observational data suggests speed severity at impact increases when distracted driving happens before the crash.

We find a huge discrepancy in the speed increase between hands-free phone calls and handheld calls. Hands-free call crashes see a 9% increase in speed compared to crashes with no distraction. Handheld call crashes experience the biggest increase in severity, raising the impact speed by 31%. Screen interaction, where the phone is likely in the driver's hand near the steering wheel, sees an average speed impact increase of 21%. Phone motion likely involves reaching, which has been shown to increase the likelihood of crashing more than texting, and raises the impact speed by 27%.

But these numbers are abstract. Let's make them real. Imagine a driver traveling down a typical city street where the speed limit is 35 mph. The driver is going a bit above the speed limit at 40 mph. The car in front of them stops suddenly, but it's not enough time to avoid the crash. The driver slams on the brakes and crashes into the car in front of them. Their speed of impact is 30 mph.

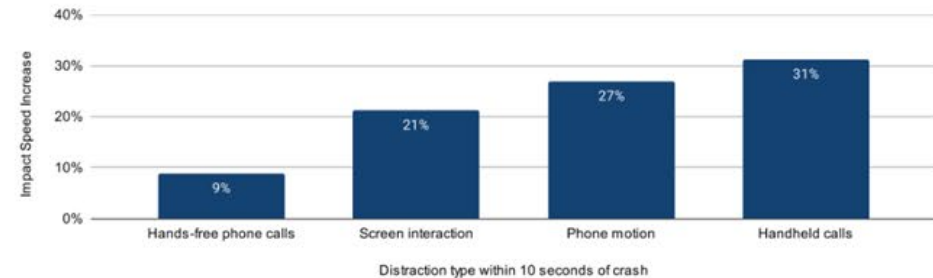
Now, let's look at the different distraction scenarios.

If the driver is making a hands-free phone call and crashes, their speed at impact will be 33 mph. If they're sending a text or writing an email, their speed at impact will be 36 mph. If they're grabbing their phone or putting it back in the cup holder, their speed at impact will be 38 mph. If they're making a handheld phone call, their speed at impact will be 39 mph.

Even a 5 mph difference in the speed at impact can mean the difference between life and death. IIHS research indicates a direct link between a 5 mph rise in state speed limits and an 8% uptick in fatality rates on interstates and freeways, along with a 3% increase in fatalities on other roadways. Another study revealed that lowering speed limits from 30 mph to 25 mph in Seattle resulted in up to a 20% reduction in severe injuries and fatalities.

The takeaway here is that while no phone use while driving is the perfect scenario, we also need to be realistic about legislation and enforcement. Hands-free laws make the distraction behaviors responsible for the deadliest crashes illegal. And, as we've seen, they also reduce hands-free calls.

Crash impact speed increase by distraction type





What Behaviors Cause Crashes?

Over 8.5 million people have CMT's crash technology on their phones today. The technology spans over 20 programs across the world, implemented with different user experiences.

Many of the programs are with insurers who use the real-time crash detection technology to help customers who opt-in by sending emergency services to the scene of the crash. Some insurers are still experimenting with the user experience after a crash. Today, they're focused on using the data to accelerate the claims process for customers and to make it more efficient for their own operations. Many companies beyond insurance are using CMT's real-time crash detection to help drivers, such as automakers, wireless providers, and home security companies.

Drivers write us frequently to tell us how our technology has improved their lives. Recently, a man wrote us about his experience with emergency crash assistance. He was driving on a road in the country and had a hard attack. He fell unconscious and crashed his van into a tree at 17 mph. CMT's technology detected the crash and alerted emergency services. They dispatched paramedics to the crash location, who found the driver face down in a ditch with no pulse and no heartbeat. Paramedics revived him and sent him to a nearby medical center by helicopter. In his note to us, he said:

"Your app literally saved my life."

CMT's crash detection technology leverages advanced signal processing and machine learning techniques to identify crash events. This proprietary AI-powered approach allows CMT to detect crashes faster with higher accuracy and at lower impact speeds. When paired with CMT's IoT Tag device, which drivers stick to their windshield, this technology detects crashes at ultra-low speeds, including when the car is parked.

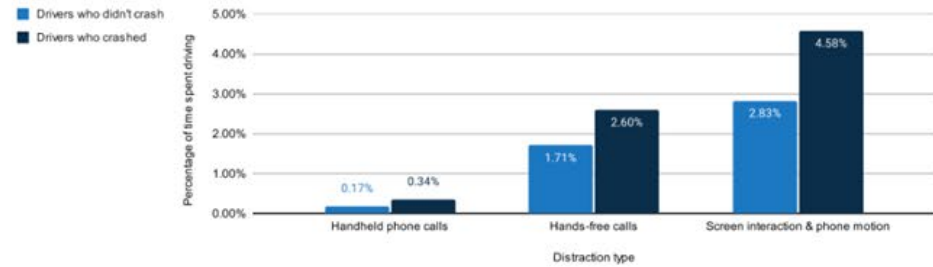
With over a decade of experience in risk analysis, paired with crash analysis and AI-driven reconstruction, CMT has the ability to build the largest naturalistic driving assessment, enabling CMT to have a highly scaled view of the cause of crashes. The scale provides CMT with a deeper understanding of how individual risk factors like distracted driving impact the likelihood of crashing.

One of these findings shows just how prevalent crashes caused by distracted driving are. In a study across multiple US auto insurers, we analyzed how often drivers were using their phones the minute before they crashed. We found that 34% of drivers who crashed had used their phones in this time frame.

Crash insights from over 1.8 million drivers in 2023 confirm what we reviewed in the section before on crash frequency and severity. The difference here is that we aren't dividing drivers by risk segments or calculating frequency or severity lift. Instead, we segmented 1.8 million drivers into two groups: those who crashed in 2023 and those who didn't. We then analyzed how often they engaged in risky behaviors. For example, drivers who didn't crash in 2023 interacted with their phone while driving 2.8% of the time. Among drivers who crashed, this figure was close to 4.6%, a 62% increase.

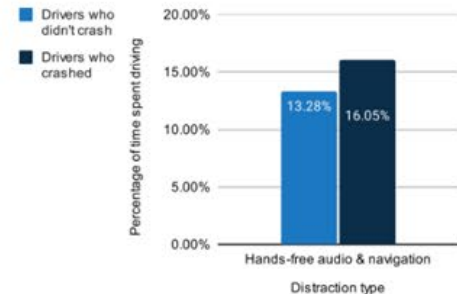


Driver crash profiles in 2023: Distraction metrics



Among the types of distraction events, hands-free calls had the lowest impact in increasing the likelihood of crashing. However, drivers who spent more time making hands-free calls had a 52% higher chance of crashing. Handheld phone calls had the biggest impact on crash risk among this group of drivers, increasing the chance of crashing by 100%.

Driver crash profiles in 2023: Distraction metrics



We also see that drivers who more frequently use hands-free phone features have a higher chance of crashing. This metric indicates that the screen is activated or that audio is playing, and that the driver isn't handling their phone. It covers a broad number of use cases, such as using navigation apps or listening to music, podcasts, or audiobooks. What this particular metric reveals is that increases in any distraction can lead to a higher chance of crashing, similar to the National Institutes of Health's finding that eating can increase the chance of crashing by 3X for younger drivers.

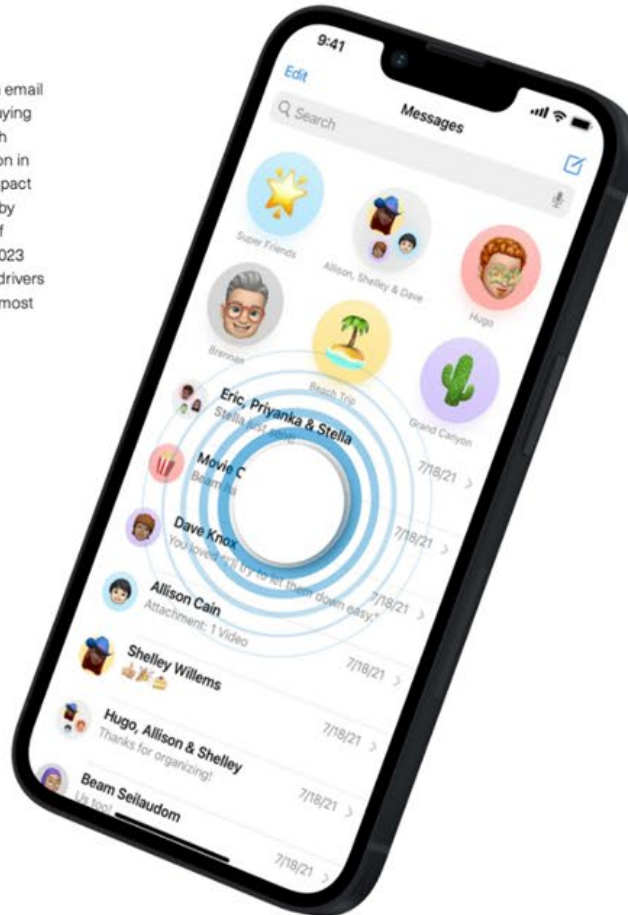




Key trends 2020 - 2023

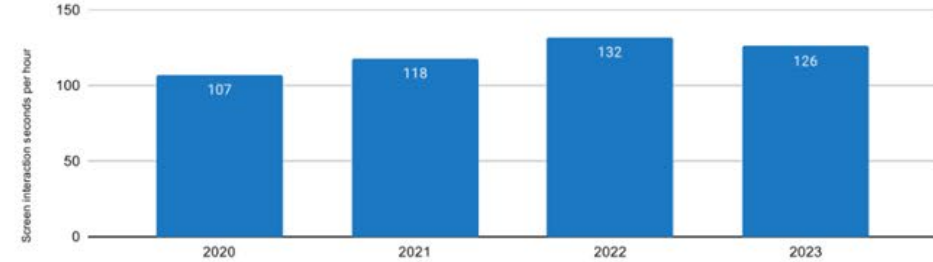
Screen interaction

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. Auto insurers use screen interaction in usage-based insurance pricing, which means it can impact a driver's premium. CMT measures screen interaction by time spent per hour of driving and by the percentage of trips that include screen interaction. 69.7% of trips in 2023 included some form of screen interaction. The 10% of drivers who interact with their phone screen while driving the most are 240% more likely to crash than drivers who don't.

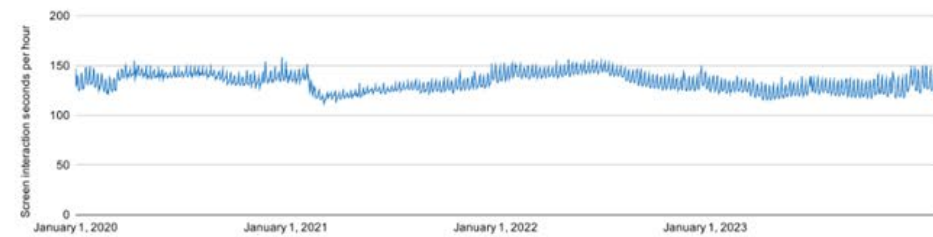


Following the trends reported by the NSC, screen interaction fell in 2023 by 4.5%. We estimate this reduction in distracted driving helped prevent 65,000 crashes, 31,000 injuries, 250 fatalities, and close to \$2.2 billion in economic damages in 2023. While this is a welcome drop, the 2023 figures are still 17% higher than 2020.

Annual screen interaction



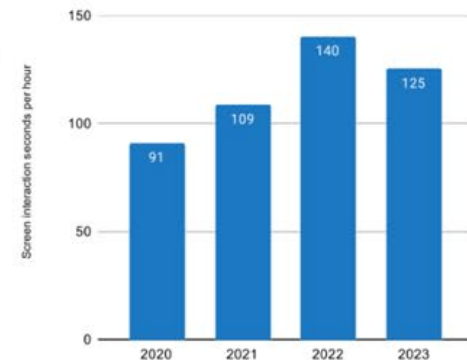
Screen interaction: 2020 - 2023



2020 saw the initial surge of distracted driving during the early days of the pandemic, reaching 1 minute and 47 seconds per hour. This wave of distraction continued to increase in 2021, hitting 1 minute and 58 seconds per hour, and into 2022, which saw 25 seconds more of distraction than in 2020. Last year, screen interaction fell to 2 minutes and 6 seconds per hour. Nearly seven in ten trips experienced screen interaction in 2023.

But if we look at the "pre-pandemic window" of 2020 and compare it to the same window during 2021 through 2023, we see an even larger wave of distracted driving. We're defining the "pre-pandemic window" here as January 1 through March 12 to normalize the impact across years. In 2020, drivers used their phones for 1 minute and 31 seconds per hour during this window. The "pre-pandemic window" in 2022 saw nearly 50 seconds more screen interaction, a 54% escalation. This window in 2023 was 38% higher over 2020.

"Pre-pandemic window" screen interaction



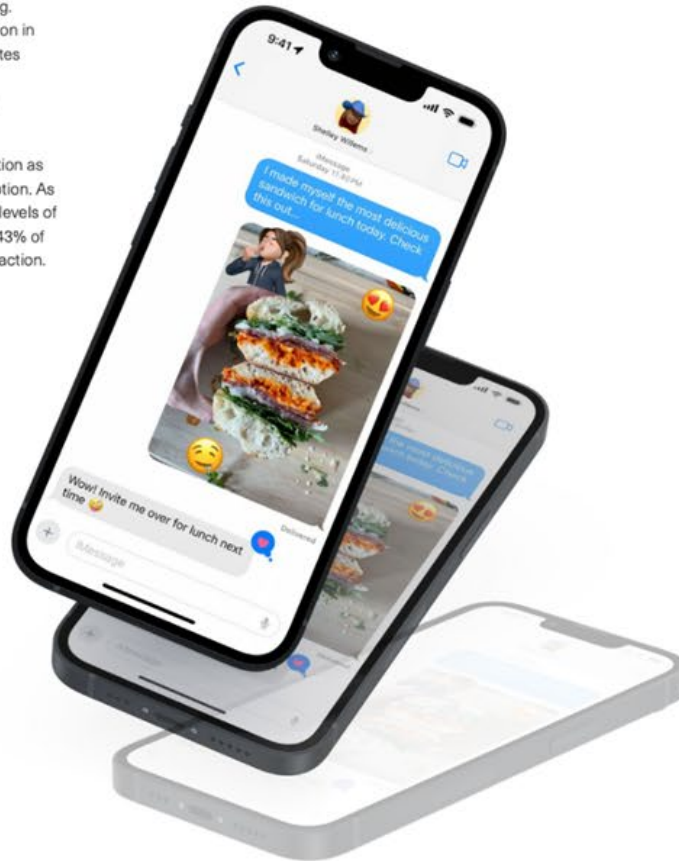


Key trends 2020 - 2023

Phone motion distraction

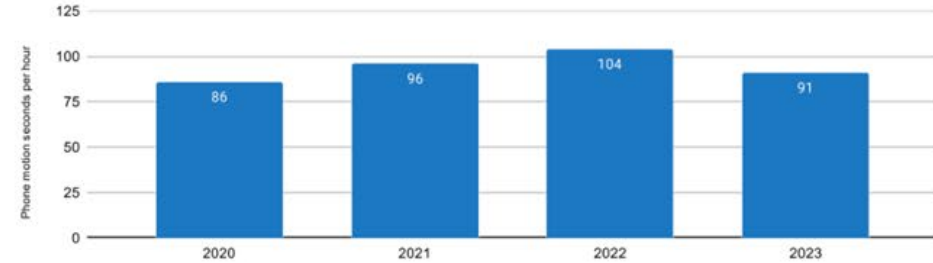
CMT defines phone motion events as when a phone is rotating with the screen on while the vehicle is moving. Like screen interaction, auto insurers use phone motion in usage-based insurance pricing. Phone motion indicates handheld phone activity, which has been banned in 29 states. It's also illegal for teens and bus drivers to handle their phones 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. As with screen interaction, drivers with the 10% highest levels of phone motion activity are 240% more likely to crash. 43% of all trips in 2023 had some form of phone motion distraction.

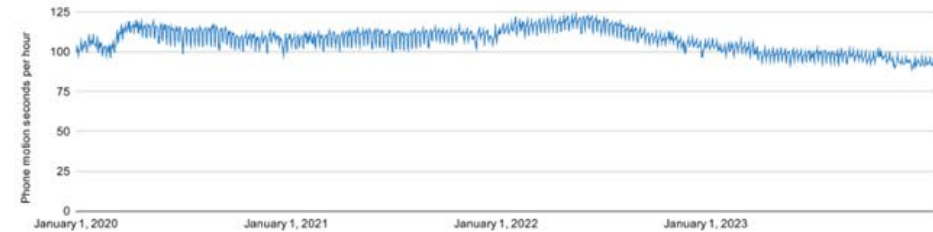


Phone motion trends follow a similar pattern to what we've seen with screen interactions. Compared to screen interaction, drivers engage in phone motion about 35 seconds less for every hour. As we discussed before, this is due to the nature of phone motion versus screen interaction. Phone motion is likely when the driver picks up their phone, a quicker movement. The figures are still alarmingly high.

Annual phone motion



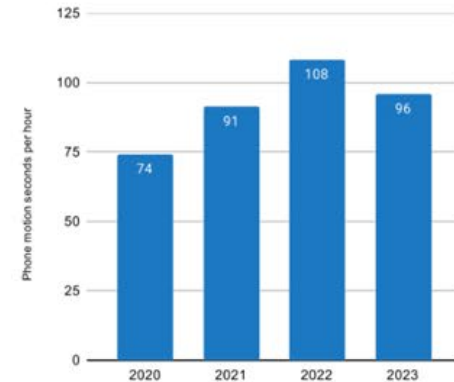
Phone motion distraction: 2020 - 2023



Like screen interaction, 2020 saw the lowest levels of phone motion over the past four years. It grew after the pandemic in 2021 and 2022 to reach 1 minute and 44 seconds, a 20% increase. 2023 saw phone motion fall to 1 minute and 31 seconds, a much-needed decrease, but still 5% higher than 2020.

The "pre-pandemic window" results are more dramatic than the annual figures. The period from January 1 through March 12 in 2023 saw phone motion levels 29% higher than the "pre-pandemic window" in 2020, 22 seconds more per hour. 2022, the peak of distraction over the past four years, was 46% higher.

"Pre-pandemic window" phone motion

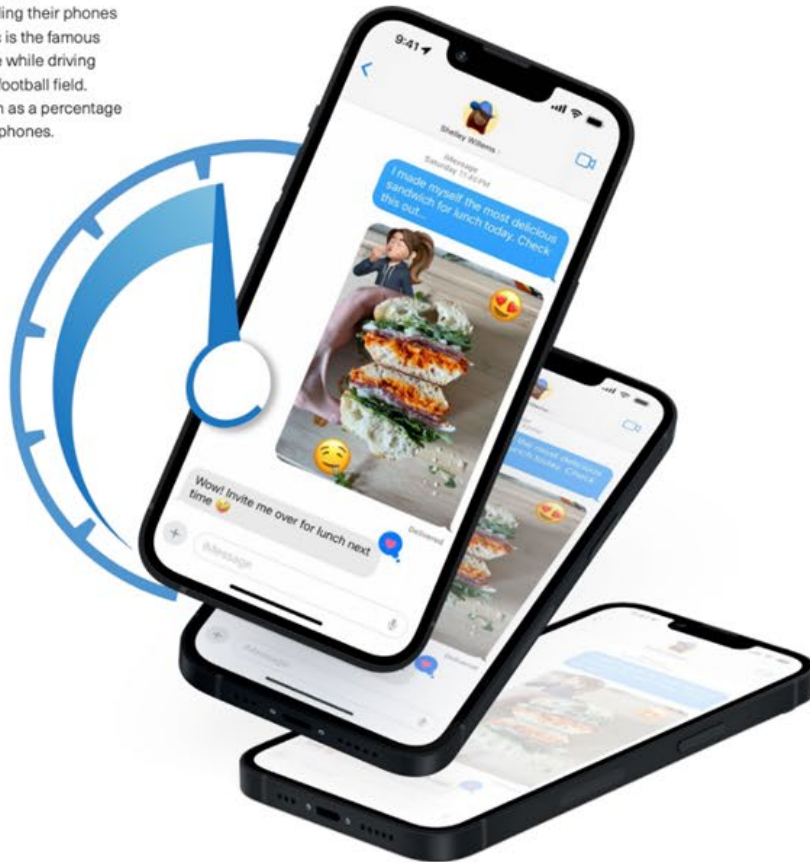




Key trends 2020 - 2023

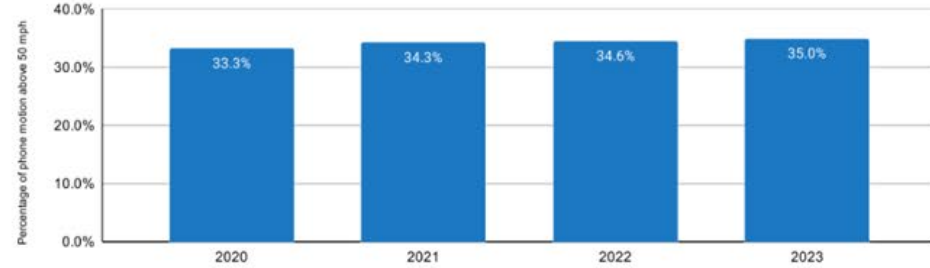
Phone motion above 50 mph

CMT can measure the speed drivers are traveling while using their phones. Our phone motion above 50 mph metric highlights the drivers who are holding their phones while traveling above 50 mph. This metric is the famous statistic that says if you check your phone while driving on the highway you travel the length of a football field. We measure phone motion above 50 mph as a percentage of total time drivers spend handling their phones.

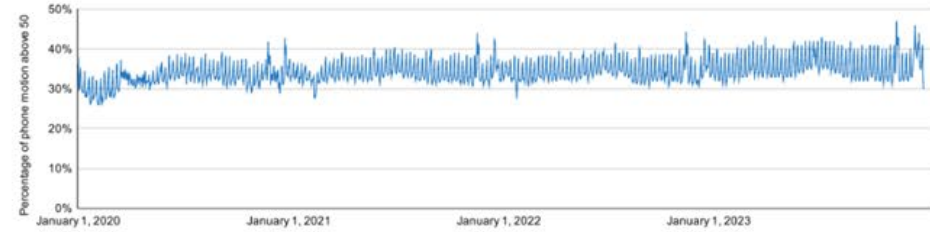


Unfortunately, phone motion above 50 mph has increased since 2020, which saw 33.3% of phone motion above 50 mph. Last year, 35% of phone motion happened over 50 mph. This is a 5% increase from 2020's figure.

Annual phone motion above 50 mph

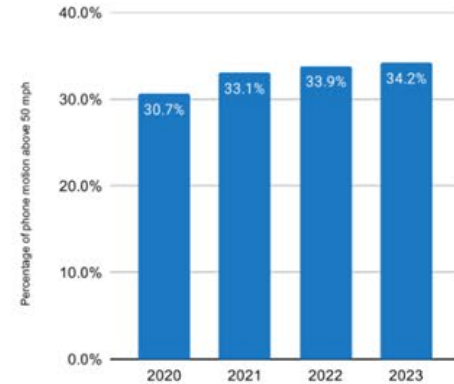


Phone motion above 50 mph: 2020 - 2023



The change in phone motion over 50 mph since 2020 is even more pronounced when analyzing performance during the "pre-pandemic window." Before the pandemic began, 30.7% of phone motion was above 50 mph. In 2023, this figure jumped to 34.2%, an 11.7% rise.

"Pre-pandemic window" phone motion above 50 mph



The 12 Most Distracted Holidays

Let's turn now to the holidays with the highest levels of distracted driving. The analysis spans January 2020 through December 2023. We ranked the holidays based on the size of the surge to measure the behavioral impact of each holiday.

Overall, increases in distracted driving on these 12 holidays for the past four years have been responsible for over 11,800 crashes, 6,600 injuries, 50 fatalities, and \$468 million in economic damages.

Overall, increases in distracted driving on these 12 holidays for the past four years have been responsible for over:

11,800

crashes

6,600

injuries

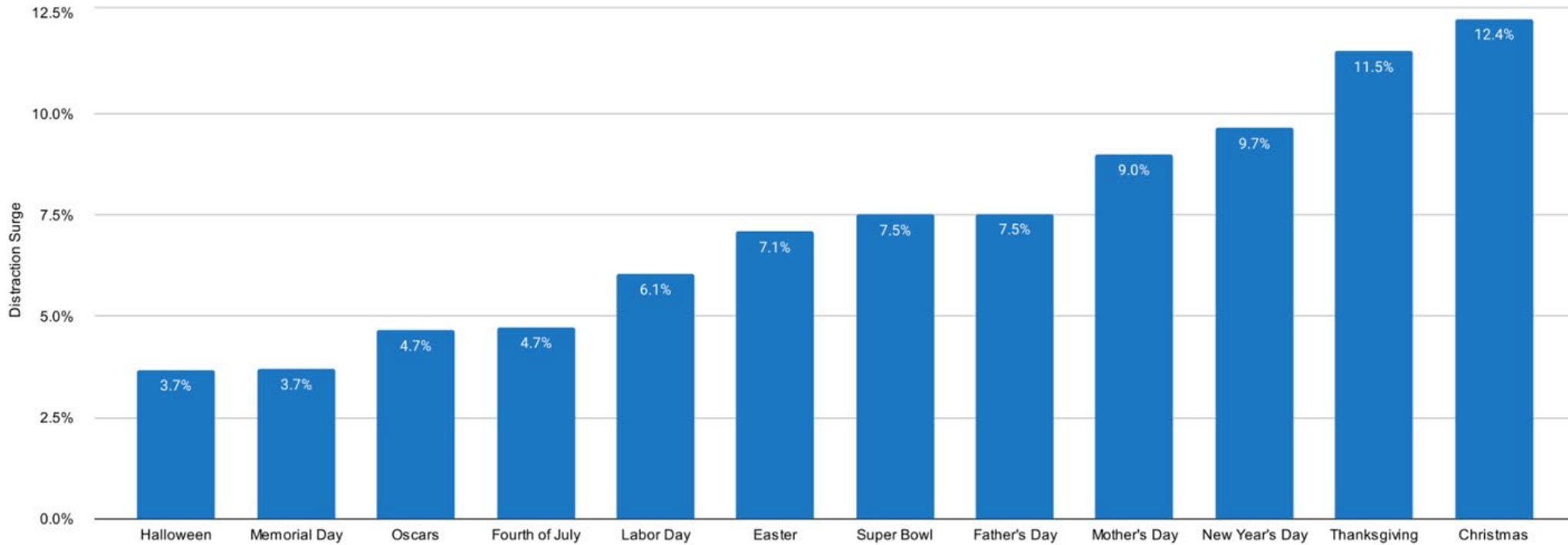
50

fatalities

\$468 million

in economic damages

The holiday distraction surge





#12: Halloween

Distracted driving surges on Halloween during the peak hours of trick-or-treating, from 5:00 pm to 9:00 pm. On a typical day in October, drivers spend 2 minutes and 29 seconds per hour driving distracted in the evening. On Halloween, that time jumps to 2 minutes and 37 seconds, a 5.6% increase.

3.7%

Distraction surge

500

Crashes from distraction

2 minutes 15 seconds

Screen interaction

280

Injuries

2021

2 minutes 22 seconds

Highest distraction level

2

Fatalities

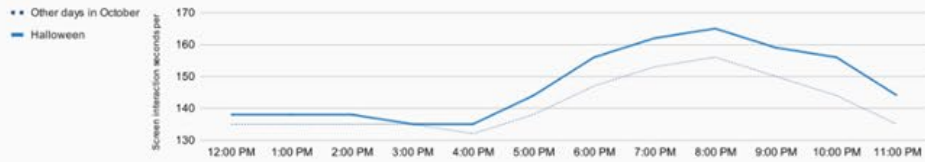
71.7% | 1% increase

Trips with screen interaction

\$19.7 million

Economic damage

Screen interaction hours on Halloween



#10: Oscars

The Oscars drew 18.7 million viewers in 2023, running from 8:00 p.m. EDT until 11:00 p.m., around the time when the best picture award is announced. In 2023, 11:00 p.m. on the day of the Oscars saw distracted driving rise by 9% more than the average day. When we compare it to the Sundays immediately before and after the Oscars, CMT's data shows that 11:00 the night of the Oscars has 12 seconds more distracted driving, an 8% difference.

4.7%

Distraction surge

630

Crashes from distraction

2 minutes 17 seconds

Screen interaction

355

Injuries

2022

2 minutes 28 seconds

Highest distraction level

3

Fatalities

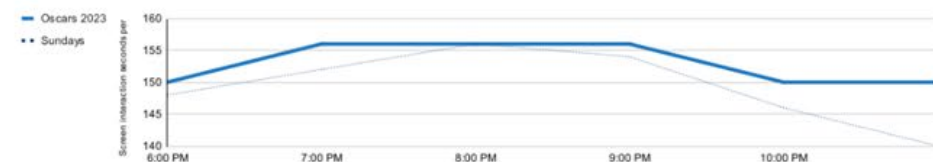
71.9% | 7% increase

Trips with screen interaction

\$25.1 million

Economic damage

Distraction lingers during the Oscars



#11: Memorial Day

Memorial Day is the official kickoff of the summer and the 100 Deadliest Days of Summer period. According to AAA, the holiday sees elevated levels of travel, with families and friends going to the beach and to barbecues.

3.7%

Distraction surge

500

Crashes from distraction

2 minutes 18 seconds

Screen interaction

280

Injuries

2022

2 minutes 30 seconds

Highest distraction level

2

Fatalities

72.9% | 1.4% increase

Trips with screen interaction

\$19.7 million

Economic damage

#9: 4th of July

According to AAA, 50.7 million Americans traveled 50 miles or more during the 2023 4th of July Weekend. It's also a dangerous time for driving. NHTSA reports that there were 1,460 drivers killed on US roadways on the 4th of July from 2017 through 2021. Distracted driving rises by 4.7% and expands by 2.4% on July 4th.

4.7%

Distraction surge

630

Crashes from distraction

2 minutes 21 seconds

Screen interaction

355

Injuries

2022

2 minute 34 seconds

Highest distraction level

3

Fatalities

73.8% | 2.4% increase

Trips with screen interaction

\$25.1 million

Economic damage



#8: Labor Day

Pew Research reports that 85% of students are already back in school by the time Labor Day comes around. It represents their first three-day weekend of the school year. For others, it's the last day before school begins, time for last-minute shopping and preparations. It's also a day for friends and family to get together, have a barbecue, and enjoy the last days of summer. Labor Day is the last day of the 100 Deadliest Days of Summer.

6.1%

Distraction surge

2 minutes 20 seconds

Screen interaction

2020

2 minutes 24 seconds

Highest distraction level

72.9% | 1.8% increase

Trips with screen interaction

820

Crashes from distraction

460

Injuries

3

Fatalities

\$32.6 million

Economic damage

#6: Super Bowl

Whether people watch it for the ads, the half-time show, or the game itself, The Super Bowl is the biggest TV event of the year. It's a cultural draw unlike any other annual event, and in 2024, it attracted over 123 million viewers. Before and after the game, when people are traveling for Super Bowl parties, distracted driving is 6.6% higher than normal. During the game, when people are at their Super Bowl events, distracted driving falls to 5% lower than average levels.

7.5%

Distraction surge

2 minutes 25 seconds

Screen interaction

2022

2 minutes 31 seconds

Highest distraction level

71.9% | 9% increase

Trips with screen interaction

1,000

Crashes from distraction

560

Injuries

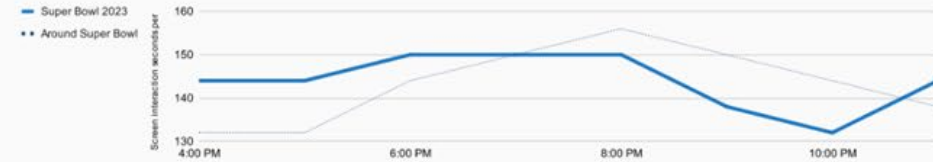
5

Fatalities

\$40.1 million

Economic damage

Distracted driving before & after the Super Bowl



#7: Easter

Easter Sunday doesn't just see more distracted driving than the average day around it. The average Sunday from March through May has a 2.65% higher rate of screen interaction than the average day. Despite higher levels of screen interaction on Sundays in early spring, Easter Sunday still experiences 4.2% more screen interaction than other Sundays.

7.1%

Distraction surge

2 minutes 21 seconds

Screen interaction

2022

2 minutes 35 seconds

Highest distraction level

72.8% | 2.2% increase

Trips with screen interaction

950

Crashes from distraction

530

Injuries

3

Fatalities

\$37.9 million

Economic damage

#5: Father's Day

Father's Day and Mother's Day have the same level of distracted driving, 2 minutes and 24 seconds, but Father's Day falls during a more distracted period, reducing its distraction surge. Father's Day ties Mother's Day for the second most distracted day over the past four years, with 2 minutes and 36 seconds in 2022.

7.5%

Distraction surge

2 minutes 24 seconds

Screen interaction

2022

2 minutes 36 seconds

Highest distraction level

73.1% | 1.5% increase

Trips with screen interaction

1,000

Crashes from distraction

570

Injuries

5

Fatalities

\$40.3 million

Economic damage





The Most Dangerous Hours for Distracted Driving

In late 2023, The New York Times published an article that asked the question: Why are so many American pedestrians dying at night? We worked with New York Times reporters to provide them with time-of-day data showing when distracted driving peaks throughout the day. The results showed that road users face higher levels of distracted driving risk at night.

For this report, we've expanded our time-of-day analysis. We've looked at the driving data from 1 billion trips from January 2020 through December 2023. We've run analyses on the various types of distracted driving to see what differences emerge. We've looked at how seasons and the days of the week impact distraction levels throughout the day. We've also evaluated daylight saving's impact on distracted driving.



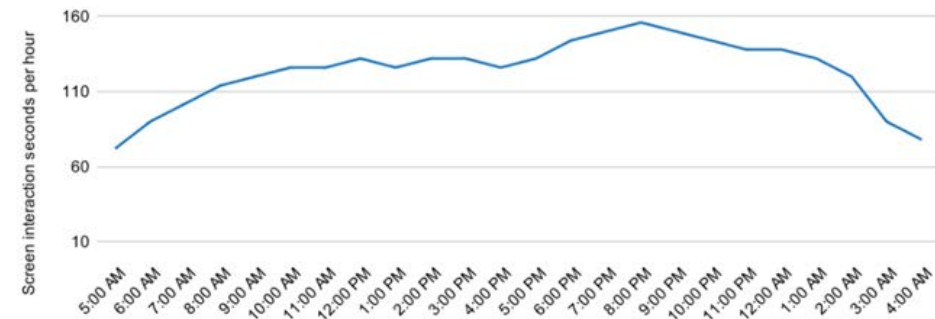
2020 - 2023

Distracted driving by hour

There is a clear split between the core phone interactions throughout the day. Screen interactions, like texting and app use, and phone motion, which indicates that the driver is holding the phone, follow a similar trajectory. They both start relatively low in the early morning hours and begin to grow as rush hour approaches.

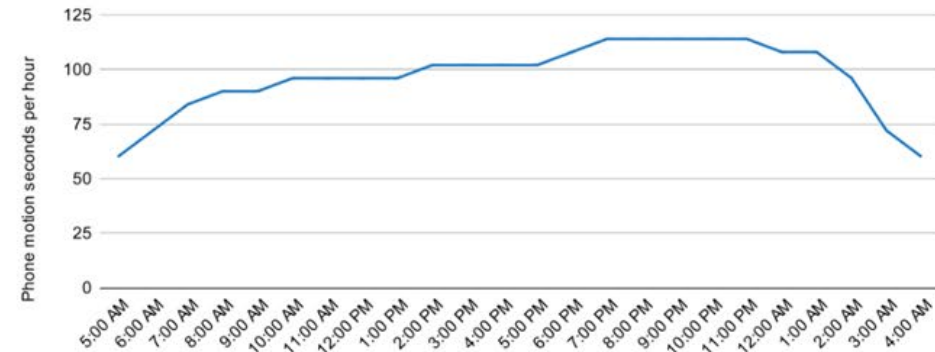
Then, instead of dipping down during working hours as one might expect, the screen interaction metric hovers in the afternoon until the early evening. At 5:00 p.m., it begins a steady upward journey until 8:00 p.m., where it peaks at 2 minutes and 36 seconds. From there, it steadily drops throughout the late-night hours.

Screen interaction throughout the day



Phone motion, instead of hovering, takes incremental steps upwards throughout the afternoon. It jumps significantly at 7:00 p.m. to 1 minute and 54 seconds, where it stays until midnight. Then, like screen interaction, it falls quickly until 4:00 a.m.

Phone motion throughout the day



How phone motion changes throughout the week

Now, let's turn to how distracted driving patterns change by the hour throughout the week. To make this analysis easier to follow, and to capture the main behaviors for hours at a time, we've broken down the hours of the day into broader periods:

Early morning

5:00 AM - 6:00 AM

Morning

7:00 AM - 9:00 AM

Late morning

10:00 AM - 11:00 AM

Afternoon

12:00 PM - 4:00 PM

Early evening

5:00 PM - 6:00 PM

Evening

7:00 PM - 9:00 PM

Late evening

10:00 PM - 11:00 PM

Late night

12:00 AM - 1:00 AM

Deep night

2:00 AM - 4:00 AM

What we found was that phone motion follows similar patterns Monday through Thursday. Phone motion distraction increases throughout the day, reaching its top point in the evening and the late evening, an average of 2 minutes and 2 seconds.

Phone motion: Seconds per time period

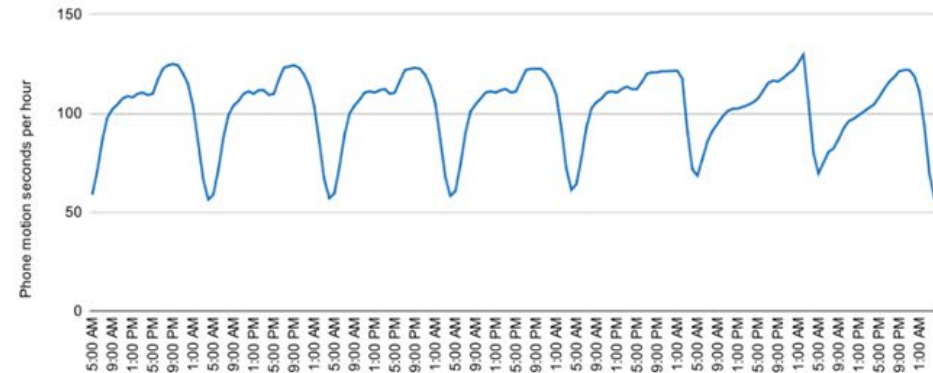
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Late night	115	109	109	110	113	121	124
Deep night	73	69	70	71	75	93	105
Early morning	65	65	66	67	71	73	72
Morning	95	97	97	98	100	91	83
Late morning	106	108	109	109	109	100	94
Afternoon	109	111	111	111	112	103	101
Early evening	113	113	113	114	114	109	110
Evening	124	124	122	122	120	116	118
Late evening	122	121	121	121	121	119	122

In the table above, where we highlight distraction above 2 minutes an hour, we can see that Friday's pattern shifts an hour later, if slightly. As Thursday night rolls into midnight, distracted driving rates are somewhat higher than earlier in the week.

As we move from Friday late evening into Saturday late night and deep night, we see the highest levels yet for deep night distraction, 1 minute and 33 seconds. This is a 31% increase compared to late night distraction from Monday through Thursday.

We see the same pattern from Saturday late evening to Sunday late night and deep night. Sunday's deep night is the highest of the week at 1 minute and 45 seconds, a 48% increase over Monday through Thursday. Sunday late evening surges again, reaching 2 minutes and 1 second, with Monday late night seeing higher levels than those during mid-week.

Phone motion throughout the week



The most distracted hour of the week is Sunday at 2:00 a.m., when phone motion distraction hits 2 minutes and 9 seconds per hour. The least distracted hour of the week is Tuesday at 4:00 a.m., with 56 seconds per hour.

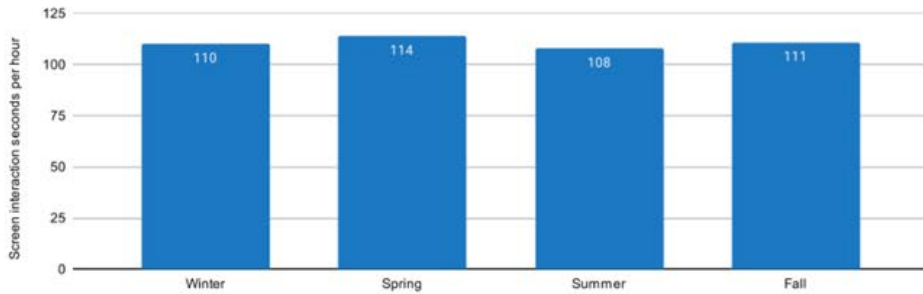




How the seasons impact hourly distracted driving

The amount of distraction risk drivers face throughout the day changes per season. For example, morning commuters, traveling between 7:00 a.m. until 9:00 a.m., see an average 1 minute and 50 seconds of distracted driving in the winter.

Morning commute screen interaction by season



This rises to 1 minute and 54 seconds during the spring, its highest point of the year. Then, as people go on summer vacation, distraction falls during the morning commute to 1 minute and 48 seconds. In the fall, it returns towards winter levels.

We see a similar pattern with evening driving, from 8:00 p.m. to 11:00 p.m., during the summer. Spring sees 2 minutes and 32 seconds of distraction. This drops to 2 minutes and 24 seconds during the summer, a 5% fall.

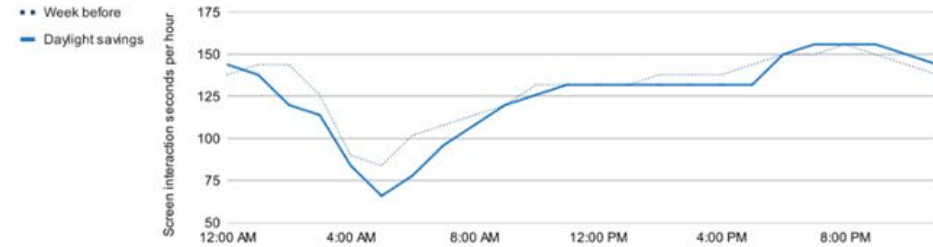
The biggest change throughout the seasons is in late-night driving, from 12:00 a.m. to 4:00 a.m. Late-night drivers during the winter see 1 minute and 53 seconds of distraction, which falls to 1 minute and 44 seconds during the spring. It then surges back to 1 minute and 50 seconds during the summer.

How daylight savings impacted distraction behaviors in 2023

A question we get frequently is: How does daylight savings impact distracted driving? Drivers are losing or gaining an hour. Certainly, the reasoning goes, this has some impact on their amount of distracted driving.

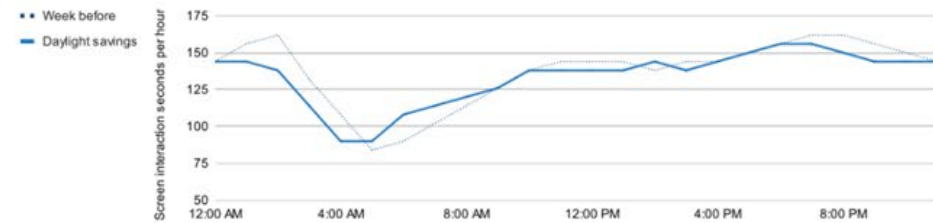
However, in our analysis of daylight savings in 2023, we found little evidence that drivers change behaviors when springing forward. Falling back, however, saw elevated levels in the morning after.

Spring forward: Screen interaction



In 2023, daylight savings sprang forward on March 12, which saw 2 minutes and 6 seconds of screen interaction. Compared to the Sunday before, March 12 had 3.6% less distracted driving. Drivers were less distracted throughout various periods of the day as well. Morning driving, from 5:00 a.m. to 11:00 a.m., was 8% less distracted on March 12. The only period that saw more distraction was evening driving, a minimal 1.1% increase.

Fall back: Screen interaction



We find similar results throughout the day for when daylight savings fell back in 2023. November 5, when clocks turned back an hour, was 2.6% less distracted than the Sunday before. Late-night driving, which in this analysis was from 12:00 a.m. to 4:00 a.m., was 15% lower on November 5.

However, the morning saw significantly elevated levels of distracted driving. At 6:00 a.m., drivers on November 5 were 20% more distracted than the week before, an 18-second surge. At 7:00 a.m., the difference was nearly 12%, followed by a 5% gap at 8:00 a.m. By 9:00 a.m., the surge was over.



The National Alert Sent Distracted Driving Skyrocketing

Around 2:20 p.m. EDT on Wednesday, October 4, 2023, smartphones blared in the White House briefing room. At the same time at the University of Texas at Austin, phones interrupted a speech from Secretary of State Antony Blinken.

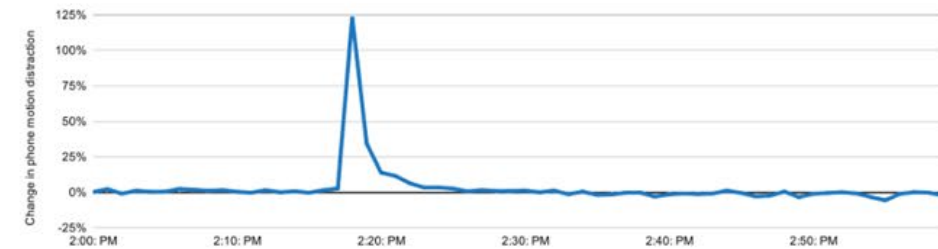
Across the United States that Wednesday, phones buzzed at the same time as the federal government tested the national emergency alert system. FEMA, which conducted the test, estimates that hundreds of millions of people received the alert.

The only way to avoid getting the alert was to turn off your phone, activate airplane mode, or disconnect your phone from the network.

Drivers got the alert as well.



Distracted driving spiked during the national alert



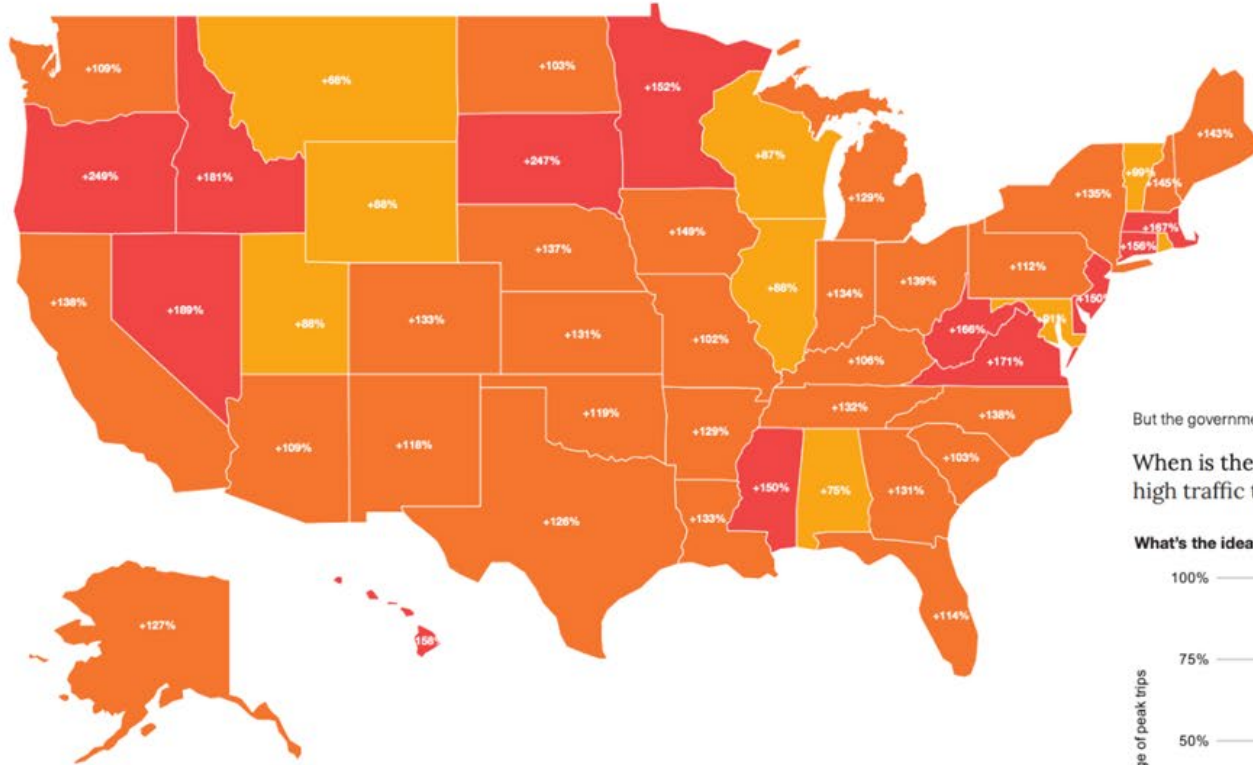
CMT's data shows that phone motion distraction, when the screen is on and the driver is handling the phone, skyrocketed that Wednesday around 2:20 p.m. CMT analyzed the driving data from over 1 million drivers across the US on Wednesday, October 4, and compared it to the levels of phone motion distraction on Tuesday, October 3.

At 2:18 p.m. on October 4, phone motion distraction was 124% higher than the day before. A minute later, it was 34% higher. By 2:26 p.m., phone motion distraction returned to normal daily levels.

To identify phone motion distraction, CMT processes smartphone sensor data and uses machine learning to interpret the phone's physical movements. The data from this analysis indicates that drivers received the national alert and interacted with their phones immediately.



Percent increase in phone motion at the peak of the alert compared to the previous day



The alert impacted distracted driving rates across the country. Even in states that have recently enacted hands-free laws, like Ohio and Michigan, distraction spiked 139% and 129%, respectively. Montana drivers had the lowest level of interaction with the alert, with a 68% increase. Oregon, the state with the lowest levels of distracted driving in 2023, saw the highest jump in distraction with a 249% rise.

In preparing for the national test, FEMA worked to limit creating dangerous situations for millions of people. For people who keep a secret phone for emergencies, FEMA recommended turning off their phones from 2:20 to 2:50 p.m.

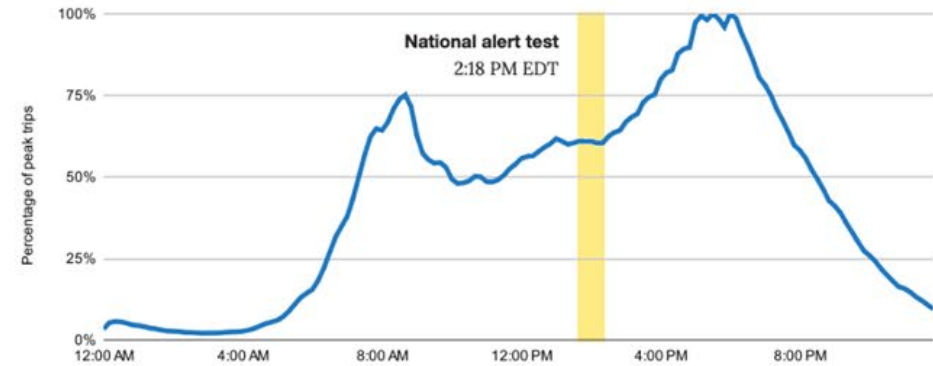
CMT's data shows that the alerts can also cause dangerous situations for millions of drivers. Turning off their phone may not be practical for many drivers who rely on navigation apps.

Do Not Disturb While Driving is a feature that blocks most incoming notifications that activates automatically using the phone's sensors. To reduce another surge of distracted driving from the next national alert, federal officials should consider a solution that works with the phone's operating systems. This strategy could delay the alert until the drive is finished, similar to how Do Not Disturb While Driving blocks other notifications, and avoid dangerous distracted driving events. However, as we see in the section Do Not Disturb While Driving Has Failed. Why?, only 20% of drivers use the feature consistently.

But the government faces a dilemma:

When is the ideal time to test an alert, while avoiding high traffic times during the week?

What's the ideal time for a national alert for drivers?



For national traffic volumes, the answer falls between 10:00 a.m. and 3:00 p.m. EDT. 10:00 a.m. EDT is too early for people on the West Coast. And then, 11:00 a.m. until 1:00 p.m. on the East Coast is a high traffic period for the West Coast.

The lowest traffic point across the country from 1:00 p.m. until 3:00 p.m. is... 2:20 p.m., exactly when the government sent the alert. The traffic volumes at 2:20 p.m. are 60% of the peak during the day. So, for the ideal timing, the government got it right. While distraction skyrocketed at 2:20 p.m. EDT that Wednesday, it could have been a lot worse if the alert had gone out at 5:30 p.m. EDT, at the height of traffic volumes.





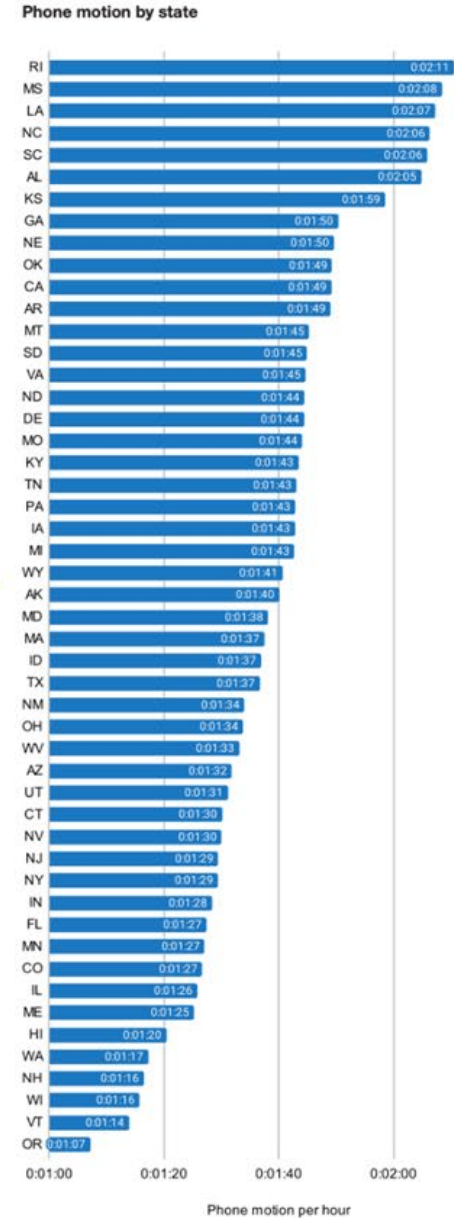
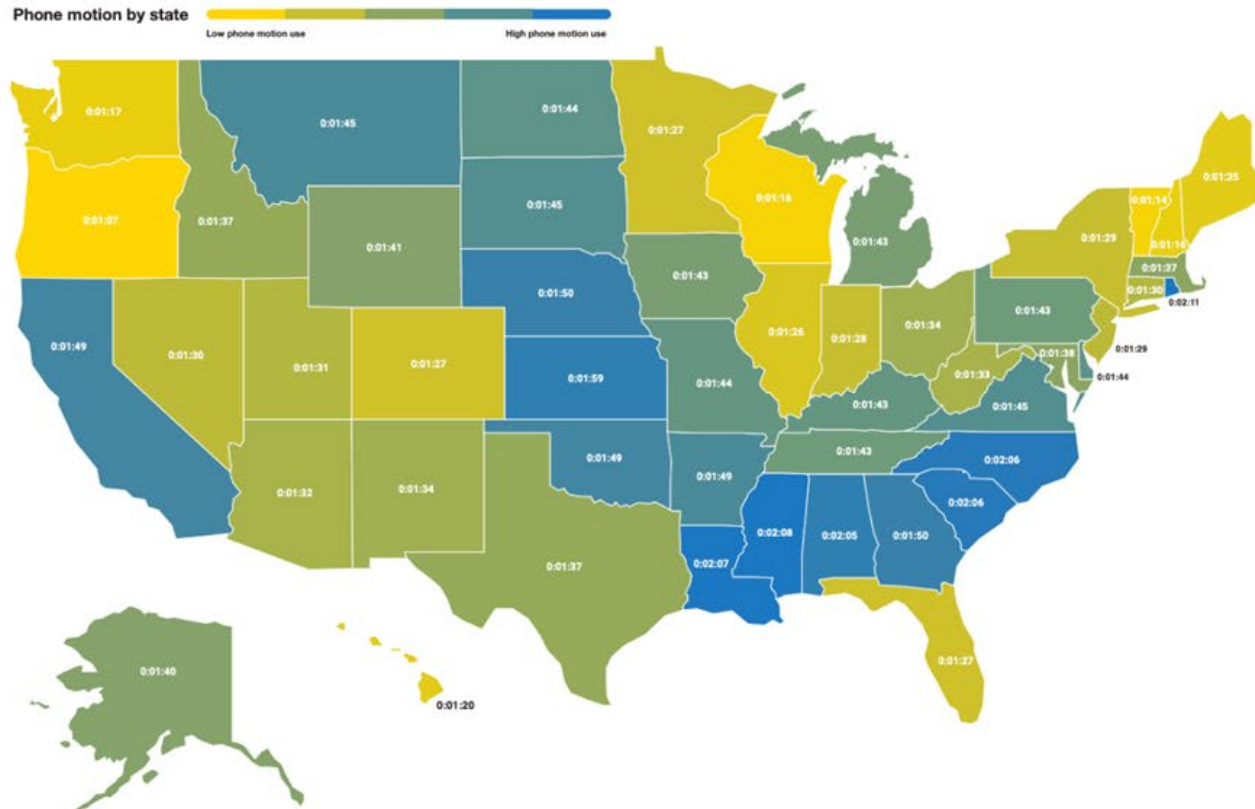
Distracted Driving Across the United States

How high is the distraction risk in your state?

As we've seen, drivers face higher distracted driving risk depending on the season, month, day of the week, and even the hour they drive. It changes annually as well.

Drivers also have to contend with different risk levels depending on their state. In Oregon in 2023, drivers handled their phones for 1 minute and 7 seconds of every hour on the road, the lowest in the nation. Rhode Island was on the other side of the distraction spectrum, with 2 minutes and 11 seconds, 96% higher. This means that drivers in Rhode Island were 14% more likely to be in a fatal crash caused by distracted driving than drivers in Oregon in 2023.

The gap between the top ten best and worst states in phone motion distraction is significant. The least distracted states saw 1 minute and 20 seconds of distraction in 2023. In the most distracted states, this number was 2 minutes and 1 second, 51% higher. The 35.8 million drivers in these 10 worst states for distracted driving faced a 7.8% higher chance of being injured or killed by a distracted driving crash.





Safer hands-free law states

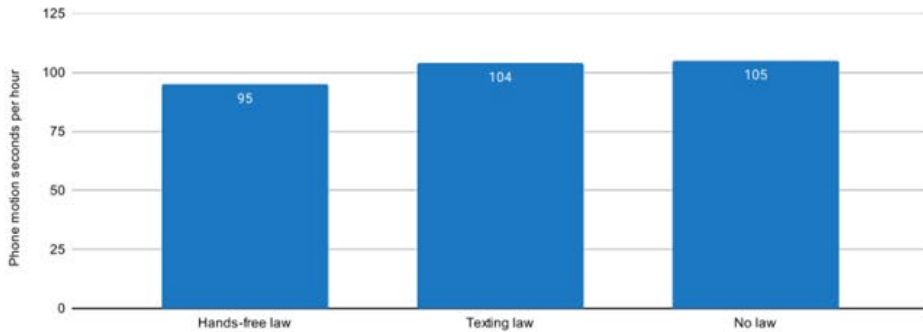
Today, 29 states have a hands-free law. These laws make it illegal for drivers to handle their phone in any fashion while driving. Texting while driving is now illegal in every state except for Montana, which saw the biggest increase in phone motion distraction in 2023, rising nearly 11%.

On average, the 29 states with hands-free laws enjoy a significantly lower level of distracted driving. States with hands-free laws saw 1 minute and 35 seconds of phone motion distraction per hour in 2023. The states without a hands-free law, however, suffered 1 minute and 44 seconds of phone motion distraction per hour on average, an increase

of 9.5%. Montana, the only state without a texting law, experienced 1 minute and 45 seconds of phone motion distraction. The Montana result is essentially the same as states with texting laws, which speaks to their general lack of effectiveness.

The disparity between the states with hands-free laws and those without puts 120 million drivers at higher risk from distracted driving. In 2023, we estimate the higher levels of distracted driving facing drivers in non hands-free states resulted in an additional 34,000 injuries and 280 fatalities.

Phone motion by state laws



Higher distraction in rural states

Beyond the hands-free classification and comparison, we can also look at other factors that could impact distracted driving. One factor is how rural or urban a state is.

The statistical analysis and data-driven publication FiveThirtyEight developed an urbanization index to determine how urban every state is. Here's how they describe their methodology:

Essentially, we calculated the average number of people living within a five-mile radius of every census tract and took the natural logarithm to create an "urbanization index," or a calculation of how urban or rural a given area is. And this number can be calculated (via a weighted average based on each census tract's population) for states, congressional districts, counties – or anything that is made up of census tracts.

To understand the impact of rural and urban settings on distracted driving, we took FiveThirtyEight's work by state and added our phone motion data. What we found was that there's a correlation coefficient of -.31, indicating a weak to moderate negative relationship between urban/rural levels and phone motion. In other words, as states become more rural, distraction can somewhat increase.

To categorize a state as urban or rural, we took an average of the urbanization index and split the country into two — states above or below the average. This classification helped uncover the broader trends between the states.

States with an "urban" classification averaged 1 minute and 34 seconds of phone motion distraction per hour in 2023. "Rural" states averaged 1 minute and 45 seconds, 11.8% higher. An 11.8% discrepancy increases the fatality risk from distraction by 1.8%.

The top ten most "urban" and "rural" states saw an even larger gap in distracted driving. The most urban states saw 1 minute and 30 seconds of phone motion per hour in 2023. The most rural states experienced 15.3% more distraction, with 1 minute and 44 seconds.

This higher level of distracted driving in "rural" states could be due to fewer drivers and roads with fewer obstacles, which can give people a false sense of security when using their phone while driving. We saw this in the early days of the pandemic, when drivers stopped using their cars, roads cleared out, and distraction surged. This phenomenon of higher distraction with fewer drivers repeated with major Covid variants, like Omicron and Delta. (Read our 2023 and 2022 reports for more on the pandemic's impact on distracted driving.)

The most urban states and phone motion distraction

State	Urbanization Index	Phone Motion
New York	12.56	0:01:29
New Jersey	12.24	0:01:29
California	12.19	0:01:49
Massachusetts	11.84	0:01:37
Nevada	11.77	0:01:30
Rhode Island	11.72	0:01:07
Maryland	11.71	0:01:38
Illinois	11.62	0:01:26
Florida	11.46	0:01:27
Connecticut	11.41	0:01:30

The most rural states and phone motion distraction

State	Urbanization Index	Phone Motion
Wyoming	8.26	0:01:33
Montana	8.47	0:01:45
South Dakota	8.73	0:02:11
Alaska	8.74	0:01:40
Vermont	8.84	0:01:37
Mississippi	8.91	0:02:08
Maine	9.04	0:01:25
North Dakota	9.05	0:01:29
West Virginia	9.11	0:01:45
Arkansas	9.26	0:01:49





The Impact of Hands-Free Legislation

2023 was a landmark year for hands-free legislation. Ohio introduced the first hands-free law of the year on April 4, 2023. Alabama followed on June 16, with Michigan not far behind on June 30. Missouri, the last of the four states, introduced its law on August 28, 2023. To date, there are 29 states with hands-free legislation.

2023 was an important year not just for hands-free laws being implemented, but also for understanding their impact. CMT measured each law's impact on distracted driving throughout the year, working with road safety officials to inform them of the law's progress. To our knowledge, this is the first time that anyone has reported on the distraction impact of hands-free laws in near real time.

These distraction metrics fill a critical gap that states have in understanding the effectiveness of road safety laws. In the past, states would rely on crash reports, which thankfully happen infrequently, but make it difficult to detect granular signals that indicate that behaviors are changing. When a crash happens, it's already too late for the driver and victims.

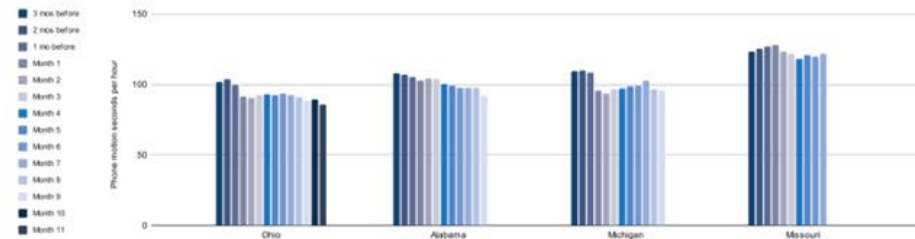
The availability of always-on metrics for distracted driving in these states also allows state officials to create more frequent media moments. When relying on crash and fatality statistics alone, officials have waited six to 12 months to announce the preliminary results of the law. With daily distraction metrics

at their fingertips, officials can create a media strategy that supports continued awareness of the law and numerous opportunities to tout its results. Good media milestones tend to be one month, three months, six months, and one year after the law begins. The benefit of continued awareness is that the more aware drivers are about distracted driving the less distracted they are. (Learn more on the impact of awareness in the section Changing Behaviors & Improving Road Safety.)

The new hands-free laws in these states also give us an opportunity to measure the impact of this kind of legislation after the pandemic. Eight states introduced hands-free laws from 2018 through 2021, but the combination of the pandemic's surge of distracted driving and the effect of fading awareness reduce the overall impact of the law on driving behaviors. With Ohio, Alabama, Michigan, and Missouri we can better understand the results from hands-free legislation in a post-pandemic world.

Just by reviewing the graph below, we can see that distraction has fallen consistently across Ohio, Alabama, Michigan, and Missouri. The graph covers a time frame of three months before the hands-free law begins through early March 2024. Ohio, which introduced its hands-free law first, has 11 months of data to review. Missouri, the latest of the group, has seven months. By combining the four states onto one graph, it's clear that distraction has fallen across the board.

Phone motion trends: Before & after hands-free laws

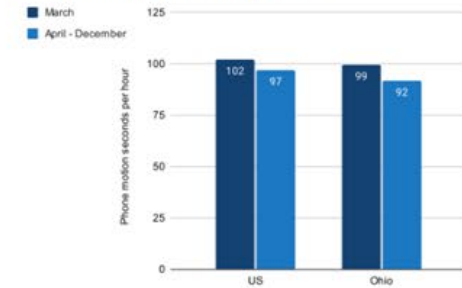


Hands-free states vs. national averages

To ensure the results for the new hands-free states were from the implementation of the new laws and not the general downward trend in distracted driving in 2023, we compared each state's performance to national performance for the window before and after the law. The average reduction in distracted driving nationally in these windows was 2.8%. The hands-free states saw a 7.1% drop on average, a 153% difference.

Ohio has the most data to analyze of the group. In March 2023, one month before the law began, Ohio drivers spent 1 minute and 39 seconds handling their phones per hour. At the national level, drivers spent 1 minute and 42 seconds. From April through December 2023, the average amount of time for phone motion distraction across the country was 1 minute and 37 seconds, a 5.3% fall compared to March 2023. In the same time frame in Ohio, the average time was 1 minute and 32 seconds, a reduction of 8.5%, a 60% difference compared to the national performance.

Phone motion distraction: US & Ohio



Hands-free's impact on distracted driving & fatalities

Overall, Ohio, Alabama, Michigan, and Missouri averaged a phone motion reduction of 7.1% after their laws began. This represents the change in distracted driving from the month before the law began compared to the months through early March 2024. The impact of this drop in distraction across the states' 24.6 million drivers is significant.

By analyzing phone distraction metrics against real crash data, we're able to estimate the law's impact on each state's roads and drivers. Distraction impacts both the frequency of crashes and the severity, which affects the number of injuries and fatalities. Distraction's effect on severity is a new addition to our methodology, helping us better account for the higher impact speeds caused by looking at a phone

instead of the road, which we cover in-depth in the section Distraction in the Context of Frequency & Severity.

To understand the results of each law, we calculate the number of drivers per state, the effect of distracted driving on crash frequency and severity, as well as its impact on economic costs. Based on crash statistics from NHTSA in its 2023 report, the average crash costs the economy about \$24,000.

Using this methodology, we estimate that the cumulative effect of these laws across the states prevented 8,200 crashes, 4,600 injuries, 37 fatalities, and \$325 million in economic damages.

	Ohio	Alabama	Michigan	Missouri
Drivers	8.2M	4.0M	7.9M	4.2M
Law start	Apr 4, 2023	Jun 16, 2023	Jun 30, 2023	Aug 28, 2023
Phone motion reduction	-8.6%	-5.7%	-10.2%	-4.0%
Crashes prevented	3,659	926	3,118	512
Injuries prevented	2,049	519	1,747	287
Fatalities prevented	17	4	14	2
Economic damage prevented	\$144,879,782	\$36,667,427	\$123,487,073	\$20,282,530





Why Are US Drivers More Distracted?

One of the benefits of measuring how over 36 million people drive across the world is that you can begin to understand how the differences impact road safety in different countries. If you combine this data-driven research with driving culture surveys in each country, you get a clearer picture of why people behave behind the wheel the way they do. From there, you can develop solutions to improve road safety.

This is the approach we took to understand the differences in distracted driving between US and UK drivers. We analyzed screen interaction behaviors — which can indicate that a driver is texting, emailing, TikToking, playing games, and more — across hundreds of thousands of drivers in the UK and the US from January 2021 through December 2023. We then surveyed over 1,000 drivers in both the US and the UK to better understand distracted driving, road safety, and cultural patterns in each country. We conducted the survey in November 2023.

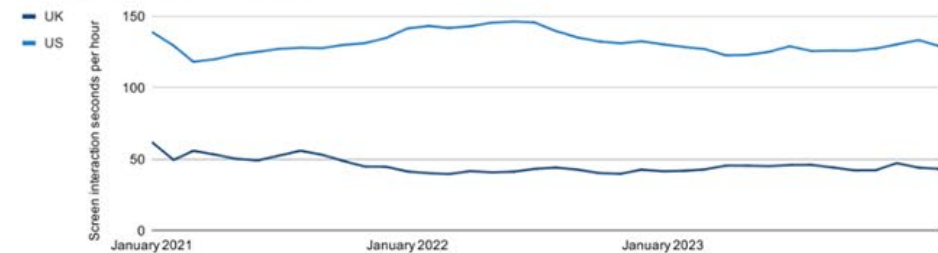


US drivers are nearly 3x more distracted than UK drivers

What we found was that US drivers are nearly three times more distracted than UK drivers. From January 2021 to December 2023, US drivers spent an average of 2 minutes and 12 seconds driving distracted for every hour on the road. In the UK, this figure was 46 seconds for every hour on the road, 187% lower.

This discrepancy in distracted driving behaviors has translated to more road fatalities in the US per driver. NHTSA estimates that distracted driving killed over 3,500 people in the US in 2021, though they say the real number is likely much higher. In the UK, the Department for Transport estimates that close to 350 people were killed by distraction or impairment in 2022. With 231 million drivers in the US and 51 million in the UK, this means that US drivers are 120% more likely to be killed by a distracted driver.

Monthly screen interaction in the US & UK



Opposite distraction trends

The two countries have trended in opposite directions for distracted driving since 2021. In the US, distracted driving rose from 2021 to 2022 by 11.9%. It then fell 4.5% in 2023, hitting 2 minutes and 6 seconds per hour.

The UK has seen the opposite. Distraction dropped by nearly 20% in 2022 to 41 seconds per hour. In 2023, it increased by 6.5%, reaching 46 seconds.

The difference in distraction levels has fluctuated over the years. The biggest gap between the US and the UK was in March 2022, when drivers in the US were distracted for 2 minutes and 22 seconds versus the UK's 39 seconds, a 239% difference. The smallest gap was one year earlier in March 2021, when distraction in the UK reached 56 seconds compared to 1 minute and 58 seconds in the US, a 112% difference.





A deeper look at the top 10 most-used apps while driving

While some apps, like Instagram, may be universally known, others may be new to you. In this section, we give you an overview of each of the top 10 apps, explain what it is, how people typically use it, and what the typical phone interaction is like. The goal is to reveal the kinds of phone interactions people have with these apps behind the wheel and what their potential motivators are.

Social networking

#1: Instagram | 24%

Instagram is a social networking app focused on photo and video sharing.

How people use it

Users download it to connect with friends, share moments through posts and stories, and explore content from others worldwide.

Typical phone interactions

Interaction involves scrolling through a feed, uploading photos or videos, liking, commenting, and direct messaging.

Photo & video

#2: Camera App | 23%

The Camera app on smartphones is used for capturing photos and videos.

How people use it

People use it to document moments, from everyday snapshots to significant events.

Typical phone interactions

Interactions include tapping to take pictures, pressing and holding to record videos, and swiping to switch between different modes like portrait, video, and slow motion.

Social networking

#3: WhatsApp Messenger | 20%

WhatsApp Messenger is a messaging app offering end-to-end encrypted text, voice, and video communication.

How people use it

Users download it for free messaging and calls over the internet, especially valuable for international contacts without incurring SMS or call charges.

Typical phone interactions

Interaction involves typing messages, making voice or video calls, and sending media or documents.

Photo & video

#4: Facebook | 19%

Facebook is a social networking platform where users connect with friends, family, and communities.

How people use it

People download it to share updates, photos, and links, join groups, and follow pages of interest.

Typical phone interactions

Interactions include scrolling through the News Feed, posting updates, commenting, and reacting to posts.



Entertainment

#9: Afterpay | 15%

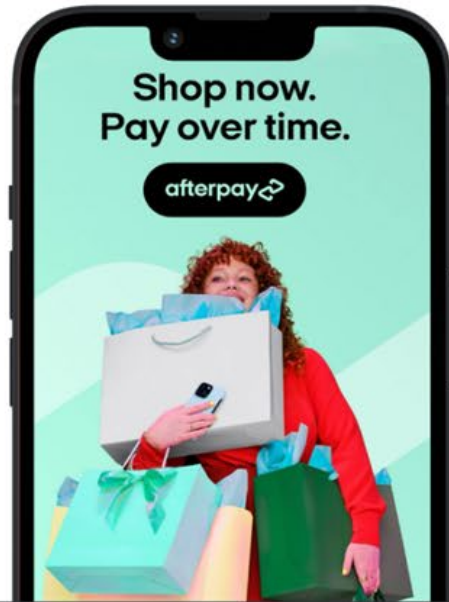
Afterpay is a financial app that allows users to make purchases and pay for them in four interest-free installments.

How people use it

Users download it to shop without paying the full amount upfront, making high-cost items more accessible.

Typical phone interactions:

Interaction includes browsing partner stores, selecting the Afterpay payment option at checkout, and managing payment schedules within the app.



Productivity

#10: Phone App | 15%

The Phone app is a default application on smartphones used for making voice calls

How people use it

Users rely on it for direct communication with contacts via dialing phone numbers or selecting contacts from their address book.

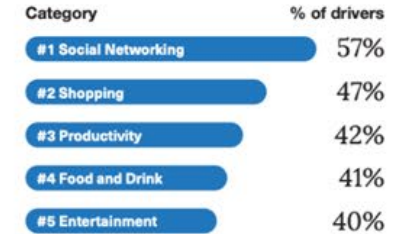
Typical phone interactions

Interaction primarily involves tapping numbers on a keypad to dial or selecting contacts from a list, with additional features like voicemail access, call history, and sometimes integrating with other communication apps for enhanced functionality.



The top app categories

With social networking apps dominating the top 10, it isn't a big surprise that the most-used app category while driving is social networking. 57% of all drivers who used an app while driving say they used a social networking app. Shopping apps, like Amazon, Afterpay, and AliExpress Shopping, are the second most-used app category with 47% of drivers. 42% of drivers use productivity apps, like Gmail and Chrome, followed closely by Food and Drink apps like McDonald's and Domino's Pizza with 41%. YouTube, Disney+, and Amazon Prime Video are the top three apps in the Entertainment category, which 40% of drivers admit to using behind the wheel.



Who is using these apps?

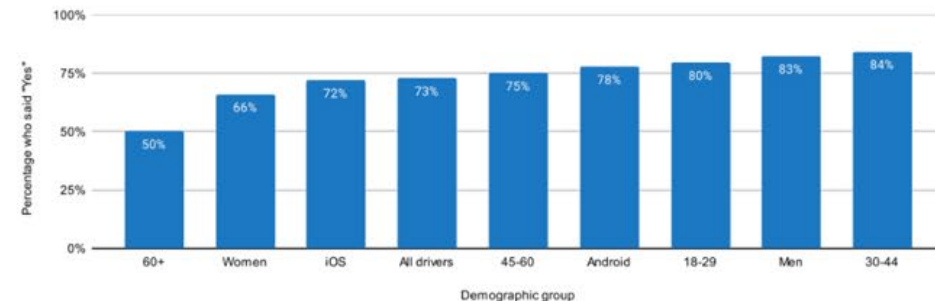
Overall, 73% of drivers said they had used their phone while driving in the past month. More men were distracted than women by a significant amount, 83% to 66%. As a demographic segment, men are the second most-distracted group behind people 30-44 years old. Beyond Instagram, Camera, WhatsApp Messenger, and YouTube, most of the apps they used were different. Men used more shopping and travel apps like Afterpay, AliExpress Shopping, and Airbnb. Women used more social and communications apps, like Facebook, Facebook Messenger, and FaceTime. Both men and women had a food app in their top 10. Men used the Domino's Pizza app. Women used the McDonald's app.

More younger drivers reported using their phones than older drivers, with 80% of 18-29-year-olds and 84% of 30-44-year-olds saying they used an app while driving in the past month. The 30-44-year-old group is the most distracted of every demographic segment. Only 50% of drivers 60+ said they had used an app while driving.

FaceTime and Amazon made it onto the 18-29-year-old's top 10 list. Both the 30-44 and the 45-60-year-olds had the Afterpay app in their top 10. Like the younger group, the 60+ segment also uses Amazon. McDonald's is also in their top 10.

More Android users said they had been distracted by apps in the past month while driving than Apple users, 78% to 72%. Android users have more shopping apps in their top 10 with Afterpay and AliExpress Shopping. Apple users say they use more Apple apps like FaceTime and Apple Messenger.

Who used their phone while driving last month?





Changing Behaviors & Improving Road Safety

Telematics and usage-based insurance programs do more than just provide drivers with safe driving discounts. They actually help make roads and drivers safer. In this section, we'll explore a number of studies CMT has conducted on its own and in partnership with the road safety community into the telematics-driven programs that reduce road risk.

How engagement improves road safety

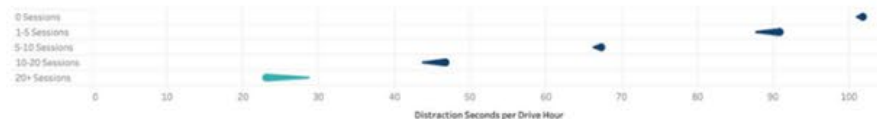
Earlier this year, CMT published a new study titled "The Importance of Engagement in Safe Driving Programs." The study follows the driving performance of 100,000 drivers enrolled in usage-based insurance programs in the US over the course of three months. It offers a comprehensive look at the crucial role user engagement in telematics programs plays in reducing road risk. It also demonstrates how crucial program design is for telematics programs.

We compared each driver's performance from Month 1, when they were new to a UBI program, to Month 3. We looked at how their hard braking, phone distraction, and speeding evolved. To control for survivorship bias, the driver had to take at least one drive in the first month and one drive in the month after the study was completed. CMT researchers divided the drivers into risk groups based on driving score, with 20% falling into the riskiest driving population.

This is the first research that establishes a connection between driver improvement and UBI program engagement. Previous studies have only looked at a single behavior. This study examines multiple risky driving behaviors. It includes the behaviors CMT's actuarial models calculate to be highly predictive of crash risk: hard braking, phone distraction, and speeding.

To explore the relationship between app engagement and driving behaviors, we also looked at how frequently these drivers interacted with our UBI mobile app. When drivers check the app, they can see driving details and areas for improvement. We define highly engaged as opening the app 20 times over a month. About 12% of drivers fall into the highly engaged category.

(a) Initially Low Scoring Users (<70)



Month 3 Engagement	Percentage of Users Who Improve			
	Low Scoring (<70)	Low/Mid Scoring (70-80)	Mid-Range Scoring (80-90)	High Scoring (90+)
Unengaged (0 Sessions)	45%	46%	39%	29%
Minimally Engaged (1-5 Sessions)	47%	47%	41%	30%
Less Engaged (5-10 Sessions)	53%	51%	45%	34%
Moderately Engaged (10-20 Sessions)	59%	56%	48%	37%
Highly Engaged (20+ Sessions)	63%	59%	59%	44%

We found that engaged drivers are safer drivers across the board. More specifically, we found that the riskiest drivers who were highly engaged with their UBI program improved the most out of any group. These risky drivers improved distracted driving by 20%, hard braking by 9%, and speeding by 27% over the course of the study.

We also uncovered that engaged users improved at higher rates than unengaged users. In fact, 63% of highly engaged risky drivers improved, compared to just 45% of unengaged risky drivers, a 40% difference. As driver groups increase in safety, the impact of engagement falls because the gains are smaller. Among the safest drivers, those scoring above 90, 44% of the most engaged improve their behaviors versus 29% among the unengaged, a 50% gap.

By analyzing telematics data against 1,500 real insurance claims, we were able to tie the change in risky behavior to claims. We calculate that the improvement in driving performance among the riskiest drivers would result in a reduction of crashes with injuries by 5.5% and save lives.

The study shows promising results for road safety. We unveiled our findings at the 2024 Transportation Research Board's Annual Meeting to thousands of transportation experts, policymakers, and researchers who want to make their districts' roads safer and reduce fatalities.



Thank you

Let's make the world's
roads & drivers safer together



Download the report

