

# Distracted Driving in Washington State, 2019: Crash Statistics, Enforcement, and Results from the Statewide Observation Survey

Early Impacts from the 2017 Driving Under the Influence of Electronics Act (SSB 5289)

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## **EXECUTIVE SUMMARY OF REPORT FINDINGS**

On July 23, 2017 Washington enacted the Driving under the Influence of Electronics Act. Law enforcement began intensely enforcing that law in January 2018. This report describes the information on distracted driving available through 2019.

## Crashes Involving Distracted Drivers:

- In 2018 there was an unprecedented single-year <u>reduction</u> in fatalities involving a distracted driver (-25 percent), appearing to be an impact of the enhanced distracted driving law. While early fatality estimates from 2019 show a slight increase from 2018 (five percent), the decrease from 2017 is sustained.
- There was no clear reduction in serious injuries after the new distracted driving law went into effect. However, considering the limited historical information available for distracted driver involved serious injuries (since 2013), the highest single-year reduction (-5 percent) to date occurred in 2018.
- A greater decline, both in total numbers and proportion of injuries, has been achieved for persons with evident and possible injuries from crashes involving distracted drivers. These declines are consistent since 2015, so it is unclear what effect the enhanced distracted driving law has had on overall injuries.

## **Distracted Driving Enforcement:**

- Under the new law, enforcement officers issued 33,825 distracted driving citations in 2018 and 37,402 in 2019. This is compared to 24,226 citations in 2016: the last complete year of citations issued under the previous laws for hand-to-ear cell phone use and texting. This indicates the new law is easier to enforce, which was one of the intents of the new law.
- From 2018 to 2019 law enforcement issued 1,769 citations for "dangerously distracted"—a secondary violation that was established under the new law to address non-cell phone related distracted driving offenses.
- Since the law took effect in July 2017 law enforcement has issued 534 second or subsequent distracted driving citations, and that number increases as the pool of drivers receiving a first offence also increases.

## Statewide Distracted Driving Observation Survey

- The statewide estimate of Washington's driver distraction rate in 2019 was 6.8 percent. The driver distraction rate was highest on city streets at 8.1 percent, followed by county roads (6.5 percent) and state routes (6.6 percent).
- From 2016 to 2018 a similar distracted driver observation survey was conducted only at intersections, and although the results are not comparable to this survey, the distracted driver rate on city streets (where most intersections from the previous survey reside) was nearly identical to the 2018 survey conducted at intersections (8.1 versus 8.2 percent).
- Two of every three distracted drivers in Washington are either using or talking on a handheld cell phone (67.9 percent). This rate is highest on city streets (78.1 percent or four of every five distracted drivers) and lowest on state routes (63 percent). Other distractions include any activity that diverts attention and engagement from driving, such as grooming.

#### INTRODUCTION AND BACKGROUND

Driver distraction has always been a focus of prevention among the traffic safety community. Driver distraction includes all activities that divert attention and full engagement from the task of driving, including general inattention (lost in thought), smoking, eating, grooming, reading, interactions with passengers or vehicle controls, and electronic device use. *Healthy People 2020* identifies motor vehicle crashes due to distracted driving as a research area needed to better understand trends, causes, and prevention strategies (CDC, 2018). Numerous simulator studies, closed-track, in-vehicle camera, and other studies have shown significant increases in serious driving errors resulting from cell phone use while driving.

Traffic safety researchers agree that driver distractions of all kinds can greatly increase the risk that a crash will occur. Despites the public's knowledge of the dangers, distracted driving is still very common. According to the 2018 AAA Foundation Traffic Safety Culture Index:

- In the past month, 52.1 percent of drivers reported talking on a hand-held cell phone, 41.3 percent reported reading text/email, and 32.1% reported typing text/email while driving.
- Despite the high frequency of cell phone use while driving, more than 95 percent of drivers view reading or typing a text/email while driving to be very or extremely dangerous, and 80 percent of drivers view talking on a hand-held cell phone to be very or extremely dangerous.
- The majority of drivers (88 percent) support laws against reading, typing or sending text or email messages and 75 percent support laws against holding and talking on a cell phone while driving.

In 2017 Washington passed stricter distracted driving laws (<u>RCW 46.61.672</u> and <u>RCW 46.61.673</u>). The new laws ban all hand-held cell phone use while driving, even when stopped in traffic or at a traffic light. In addition, the cost charged per ticket increases for subsequent violations. A new secondary offense defined as "dangerously distracted" was also created. A secondary dangerously distracted citation may be issued to a person who engages in any activity not related to the operation of the vehicle in a manner that interferes with the safe operation of the vehicle. Dangerously distracted citations result in a \$99 fee in addition to the primary offense. Finally, the new laws make these infractions available to automobile insurance companies.

The new laws became effective on July 23, 2017. The majority of law enforcement delayed enforcement of these new laws in lieu of education opportunities with drivers. During this time, the Washington Traffic Safety Commission (WTSC) implemented an education campaign to ensure Washington drivers were aware of and understood the new law. The campaign ran from July 10 to July 30, 2017. The campaign was produced in six different languages and garnered 41.1 million impressions and more than two million video views. The campaign also received excellent media coverage earning 1.4 billion new media mentions.

Full enforcement began in January 2018. From July to December 2017, when the new law went into effect, just over 7,000 tickets were issued statewide during the "warning" period. In the first six months of 2018, over 20,000 tickets had been issued under the new laws.

In June 2018 the King County Target Zero Task Force sponsored a similar traffic safety culture index survey resulting in responses from 900 King County residents. Among King County adults:

- 13 percent reported talking on a hand-held cell phone and 34 percent reported talking on a hands-free cell phone regularly or fairly often while driving.
- 12 percent reported typing text messages and 20 percent reported reading text messages regularly or fairly often while driving.
- 18 percent reported using an application other than GPS regularly or fairly often while driving.

Similar to the AAA survey, 96 percent of King County residents perceive other drivers typing on a cell phone as a personal threat (24 percent) or very serious threat (72 percent). A large majority (79 percent) also perceive other drivers talking on a cell phone as a personal threat (28 percent) or very serious threat (51 percent). Finally, 83 percent perceive other drivers using apps other than GPS as a personal threat (43 percent) or very serious threat (40 percent). Despite the perception of threat from other drivers, three of four King County residents believe that it is very unlikely that they would crash their car while texting on a cell phone, and only 60 percent would stop using their cell phone while driving if they were in a crash from using their cell phone.

The King County survey showed high understanding of the new elements of the distracted driving law, such as not using the phone at intersections for any reason or talking on a hand-held cell phone. Unfortunately, when the survey was conducted, less than 10 percent believed it was likely or very likely to get a ticket for talking or typing on a cell phone. Since this survey was conducted, the King County Target Zero Task Force has used this information to focus education and outreach efforts and support high visibility enforcement campaigns in conjunction with state efforts.

In September 2019 the WTSC commissioned a positive traffic safety culture survey resulting in responses from 1,603 adult Washingtonians. According to the survey:

- Approximately three of four drivers (73.8 percent) know that using a hand-held cell phone while driving is illegal, however less (67.8 percent, or two of three drivers) know that using a hand-held cell phone while stopped at a traffic light is illegal.
- Nearly 70 percent of drivers believe that using a hand-held phone while driving is dangerous, yet 35 percent report doing it frequently.
- Two of every three adults reported being a passenger in a vehicle of a distracted driver and 83 percent of those passengers reported intervening with the driver's behavior.

Overall, survey respondents rated themselves as engaging in distracted driving behaviors less frequently than others in their county. Although nearly 90 percent of respondents believe safety is everyone's responsibility, less than half believe other drivers actually engage in safe behaviors (WTSC, 2019).

In June of each year from 2016 to 2018 the Washington Traffic Safety Commission conducted distracted driver observation surveys at controlled intersections. In 2018 the overall driver distraction rate dropped from 9.2 percent the previous two years to 8.2 percent, although this reduction was not statistically significant. However, there was a significant decrease of the percent of drivers in 2018 holding cell phones, from 5.4 percent to 3.4 percent. In 2019 the observation survey was expanded from controlled intersections to all road types and moving traffic, including city streets, county roads, and state highways and interstates.

This report provides an analysis of driver distraction in Washington prior to the new law's effective date and through 2019. This report includes analysis of injury crash data, enforcement data, and the results of the 2019 distracted driving observation survey. The results of the observation survey are not comparable to the 2016-2018 survey and therefore represents a new baseline for measuring the prevalence of distracted driving on Washington roadways.

#### DISTRACTED DRIVING CRASHES

In 2015 there was an unprecedented single-year increase in fatalities involving a distracted driver (32 percent) that coincided with a total fatality increase of 20 percent. Distracted driving claimed 171 lives in 2015. The 2015 increase in fatalities involving a distracted driver was a significant factor in the overall increase in fatalities that year, as evident by the increase in the proportion of total fatalities involving a distracted driver. (Figure 1). Fortunately, in 2018 there was an unprecedented single-year <u>reduction</u> in fatalities involving a distracted driver (-25 percent), appearing to be an impact of the enhanced distracted driving law that took effect on July 23, 2017. While early fatality estimates from 2019 show a slight increase from 2018 (five percent), the decrease from 2017 is sustained.





Source: Washington Fatality Analysis Reporting System \*Preliminary 2019 counts provided by WSDOT

When fatalities are viewed by quarter, the majority of the reduction occurred during the first two quarters of 2018. (Figure 2). Although the law went into effect in July 2017, most law enforcement agreed to delay issuing citations in lieu of education about the new law. This "grace period" ended January 2018. The annual distracted driving high visibility enforcement campaign took place in April 2018. These events correspond with the 2018 quarter one and two distracted driver involved fatality reductions. Although there were nearly double the number of distracted driver involved fatalities in the last two quarters compared to the first two quarters of 2018, both the third and fourth quarters of 2018 showed lower fatalities than those same time periods in 2016 and 2017.



Figure 2: CRASHES, Fatalities Involving a Distracted Driver by Quarter 2016-2018



Serious injuries occur in both fatal crashes (when at least one person is deceased), and in nonfatal crashes. Due to a coding change, distracted driver involved injuries are only available since 2013. There was no clear reduction in serious injuries after the new distracted driving law went into effect (Figure 3). However, considering the limited historical information available for distracted driver involved serious injuries, the highest single-year reduction (-5 percent) to date occurred in 2018. The proportion of serious injuries involving a distracted driver remains approximately one in four, before and after the law.





Source: WSDOT Multi-Row Flat File \*2019 preliminary counts provided by WSDOT.

A greater decline, both in total numbers and proportion of injuries, has been achieved for persons with evident and possible injuries from crashes involving distracted drivers (Figure 4). These declines are consistent since 2015, so it is unclear what effect the law has had on overall injuries. Despite consistent declines, one in three evident or possible injuries sustained in crashes involved a distracted driver.





## Limitations Regarding Distracted Driving Crash Analysis

Analysts suspect that distraction involvement in crashes is generally under-reported, especially distraction crashes related to cell phone use. Officers are reluctant to record specific distractions contributing to the crash without defensible proof. Even witness accounts of driver cell phone use in crash report narratives do not always mean that the driver is coded as being distracted in the crash-contributing circumstances, which are used for crash analysis. When distraction is coded, in more than two-thirds of the cases the distraction is coded as general "inattention." Starting in 2020 changes were made to the Washington Police Traffic Collision Report to perhaps better capture distraction among all road users involved in crashes. Most notably, inattention was removed to promote use of the more detailed distraction codes rather than defaulting to general inattention in distraction-related crashes.

Source: WSDOT Multi-Row Flat File \*2019 preliminary counts provided by WSDOT.

#### DISTRACTED DRIVING ENFORCEMENT

The National Highway Traffic Safety Administration conducts national media campaigns and provides funding support to states for enforcement of distracted driving laws every April. These high visibility enforcement campaigns are clearly shown in respect to distracted driving citations issued in Washington during the month of April (Figure 5). Prior to Washington's new distracted driving laws, citations issued during the month of April, while still high compared to the other months, had been notably declining since 2015. The transition from the old laws to the new laws occurred during the last half of 2017 during the enforcement education "grace period." The grace clearly expired in January 2018 when the number of citations nearly doubled from the previous month.

While the seasonal pattern of distracted driving enforcement of the new laws is very similar to enforcement of the old laws, the overall count of citations issued under the new law has increased, indicating the new laws are easier to enforce. In addition, Washington law enforcement issued more distracted driving citations during the April 2019 distracted driving high visibility enforcement campaign than any other month since Washington's first "texting" law became a primary offense in 2010.



Figure 5. ENFORCEMENT, Distracted Driving Courts of Limited Jurisdiction Case Filings

The new law increased the fine for a repeat cell phone offense within five years. A second and subsequent offense increases the fine from \$183 to \$234. While there have been only a few hundred citations issued for second and subsequent offenses, there is a sharp upward trend as the population of first-time offenders grows. The first second offense citations were issued just weeks after the law went into effect, indicating apprehension of chronic offenders (Figure 6).



Figure 6. ENFORCEMENT, Cell Phone Use 2<sup>nd</sup>+ Offense

Finally, the new law also made distracted driving citations available to insurance companies, whereas before they were exempt from reporting. According to the Northwest Insurance Council, when reviewing driver records during the application or renewal process, member insurance companies are taking note of distracted driving citations and are increasing premiums by varying amounts. As of September 2019 the highest increases were routinely connected to distracted driving citations given with another offense, such as a Driving Under the Influence (DUI) or in connection with a crash.

## DISTRACTED DRIVING OBSERVATION SURVEY

Distracted driver observations were collected from 2016 to 2017 at randomly selected intersections. In order to determine if the new laws would impact the observed driver distractions, the data was collected following the exact same methods in 2018 (only at intersections). Beginning with the 2019 survey as presented in this report, driver distraction was measured on all road types

across the state, creating a new baseline measure of observed driver distractions. Driver behavior at intersections is different than driver behavior on other roadway types and scenarios, such as interstate driving. The results from this survey are not comparable to the 2016-2018 survey (WTSC, 2018), although both offer important insights on the effect of the new law.

Data was collected using an iPad application modified from the Washington State seat belt observation application to collect distracted driver observations. The observations were conducted for 20-minute periods at each site between the hours of 7 a.m. and 6 p.m. For each vehicle surveyed at a given site, one member of the team observed oncoming vehicles and driver distraction behavior and reported those observations verbally to the team's recorder (facing the observer), who entered that information into the data fields appearing on the iPad screen. A more detailed description of the data collection process is described in Appendix A.

## STATEWIDE RESULTS

The statewide estimate of Washington's driver distraction rate in 2019 was 6.8 percent. The driver distraction rate was highest on city streets at 8.1 percent, followed by county roads at 6.5 percent and state routes at 6.6 percent (Figure 7). These differences are not statistically significant; however, they align with the hypothesis that driver distractions are lower on roads with higher posted speeds.



Figure 7. DRIVER DISTRACTION RATES, All Distractions

From 2016 to 2018 a similar distracted driver observation survey was conducted only at intersections (WTSC, 2018). Although the results are not comparable to this survey, the distracted driver rate on city streets (where most intersections from the previous survey reside) was nearly identical to the 2018 survey conducted at intersections (8.1 versus 8.2 percent).

Cell phone use, especially holding a cell phone, is the most frequent source of driver distractions. Approximately five percent of drivers on city streets are holding and engaging with a cell phone. This frequency declines on county roads (3.4 percent) and state routes (2.7 percent). Figure 8 shows the frequency of types of distraction among all drivers. The figure on the following page also shows type of distraction, but as a frequency among distracted drivers.



## Figure 8. DRIVER DISTRACTION RATES, By Type of Distraction

In 2018 cell phones were the source of just over half of driver distractions, which was down from approximately three-quarters of all distractions from 2016 to 2017 (WTSC, 2018). According to the new 2019 baseline survey, cell phone-related distractions comprise approximately two-thirds of all driver distractions—47.4 percent holding phones and 20.5 percent with the phone to ear (Figure 9).



Figure 9. SOURCE OF DRIVER DISTRACTION, Proportion of All Distractions

City streets have higher rates of hand-held cell phone use, possibly due to lower posted speeds and more stops, such as at traffic lights. However, city and residential areas have lower posted speeds for good reason; these are the areas frequented by pedestrians, bicyclists, transit, and other road users. This level of multi-modal interaction requires driver engagement. Yet driver distraction, especially hand-held cell phone use, is higher on city streets. As speed limits increase from city streets, county roads, and state routes, hand-held cell phone use decreases (Figure 9). Interestingly, the rate of cell phone to ear distractions is much lower on city streets, possibly due to the increased risk of law enforcement apprehension at lower speeds.

#### **COUNTY RESULTS**

Distracted driver rates varied widely among sampled counties (Figure 10). According to the survey, Okanogan county had the highest rate driver distraction, nearly one in five drivers. Cowlitz county had the lowest rate of distracted drivers at just 1.9 percent.





The type of distraction also varied greatly by county (Figure 11). Although Okanogan county had the highest distracted driver rate, the proportion of drivers engaging in holding a cell phone is low compared to other counties. However, the frequency of driver holding the phone to ear is highest in Okanogan county, as is other distractions not cell phone related. Nearly all distractions in Cowlitz county (the county with the lowest overall distracted driver rate) is attributed to cell phone use. The results in Figure 11 indicate that cell phone related distractions are more common in more urban counties, whereas other distractions not related to cell phone use is higher in more rural counties (most notably Ferry, Grant, Lincoln, Mason, Okanogan, Stevens, and Walla Walla).



Figure 11. DRIVER DISTRACTION RATES, By County, Type of Distraction

The figure on the following page also shows type of distraction, but as a frequency among distracted drivers.

Among distracted drivers, the source of distraction varies among counties (Figure 12). Several counties have distracted driving rates that are more than 80 percent attributable to either holding a cell phone or holding the cell phone to ear, i.e. four out of every five distracted drivers. These counties are Benton, Cowlitz, Grays Harbor, Lewis, and Snohomish. Franklin, King, Thurston, and Yakima counties have distracted driving rates that are more than 75 percent attributable to cell phone use, or three out of every four distracted drivers. As noted earlier, more rural counties have a distraction rate more attributable to the "other distractions" (see Ferry, Stevens, and Whatcom counties).



Figure 12. SOURCE OF DRIVER DISTRACTION, By County, Proportion of All Distractions

#### DISCUSSION

This report is based on Washington's statewide observation survey of distracted driving, representing benchmark measures of estimated driver distraction. A similar study was conducted in 2013 and 2014 by the Harborview Injury Prevention and Research Center, collecting information in King, Spokane, and Whatcom Counties. Despite the differences in these studies, the results were similar; the majority of distracted drivers are using a cell phone. These efforts to measure the frequency of distracted driving in Washington are critical due to significant data limitations from other sources, such as crash data.

On January 1, 2006 the Washington State Department of Transportation (WSDOT) and the Washington State Patrol implemented Legislature-enacted changes to the state's Police Traffic Collision Report, adding 12 new and specific distraction codes to the collision report form. This change increased the frequency of crash investigators' reporting of driver distraction from 6.1 percent of crashes in 2005 to 11.1 percent in 2006. Through 2012, that proportion remained fairly steady, after which an even larger increase occurred in 2013 as a result of administrative changes to collision coding practices at the WSDOT. When analyzing distraction involvement in crashes from WSDOT's statewide collision database, the baseline benchmark is now year 2013 as previous years are not comparable.

In addition to collision data challenges, there are good reasons to believe that police investigators under-report the involvement of driver distraction in crashes. One important reason is the difficulty of gaining access to driver cell phone records during the investigation of crashes. Even when police suspect that cell phone-based distraction has played a role in a crash, unless they are able to establish probable cause (e.g., through witness statements or other evidence) they will be unable to obtain a warrant for a driver's cell phone records.

Considering these limitations along with other data sources, this study provides important information regarding the nature of distracted driving in Washington State. The distracted driving laws implemented in 2017 seem to have had immediate effect on driver behavior, although further evaluation is required. It remains to be seen further effects the enhanced law and other traffic safety measures have on protecting the lives of Washington road users.

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### **APPENDIX A: Distracted Driver Observation Survey Data Collection**

Data was collected at each site selected for Washington's annual seat belt use observation survey. Sites included strategic viewing locations on city streets, county roads, and state/U.S. routes, representing a variety of roadway types, conditions, posted speeds, and traffic flow. Each pre-selected site was observed by a two-person team for a 20-minute period between the hours of 7 a.m. and 6 p.m. during the month of June. Teams collected driver behavior data on passenger vehicles and commercial vehicles with a gross vehicle weight of 10,000 pounds or less (such as a pizza delivery driver), including cars, vans, pickups, and SUVs.

Each team was comprised of two positions: an Observer and a Recorder. Teams could alternate positions when moving between sites, but could not change positions when in the middle of a site observation. The team proceeded to the location per the site data sheet and observed the predetermined traffic flow. If the team reached a site that included multiple lanes eligible for observation then traffic was observed for a few minutes in order to make an assessment of how many lanes could accurately be observed.

During data collection, the Recorder was positioned either in front of or parallel to the Observer so they could best hear the observations as they were called out. The Observer called out the initial observation to the Recorder who entered the data in the iPad survey application. In addition, field training revealed that the presence of the observers obviously looking inside vehicles was in and of itself causing distraction. Having the observer and recorder facing each other made it appear that they were in conversation rather than observing vehicles. This technique significantly reduced the amount of driver attention diverted to the observer team.

Data was only collected on drivers. Data collected on each driver included whether the driver had no distraction, cell phone to ear, holding/manipulating phone, or other distraction (such as eating, radio, and pets). Drinking a beverage or smoking did NOT count as distractions so long as the driver was not clearly distracted otherwise. Only the initial behavior at the observation point was recorded. If the driver changed behavior while being observed, only the initial observation was recorded.

Quality Control (QC) Monitors made unannounced visits to at least five percent of the total survey sites. During these visits, the QC Monitor first evaluated the data collector team's performance from a distance (if possible), and then observed from beside the team to monitor data recording. The QC Monitor ensured that the data collector team was following all survey protocols including: being at the assigned sites, making accurate observations, and accurately entering the data into the iPad survey app. For every visit, the QC Monitor prepared a site report indicating data collector team names, date and time of observation, site ID, photo of team in action, and any problems with data collection site locations and data collector team performance.

For more information regarding the observation survey sites, methods, weights, or analysis, please contact the Research and Data Division at the WTSC.