Maryland Statewide FFY2023 Problem Identification

Overall

In 2020, 573 people were killed—a 7.1 percent increase from 2019—in 95,507 police-reported traffic crashes in Maryland, while 36,754 people were injured, and 69,630 crashes involved property damage only. In total, 349 drivers (268 vehicle drivers and 81 motorcycle operators), 153 non-motorists, and 71 passengers were killed on Maryland roads. The fatality rate for Maryland decreased from 0.93 in 2017 to 0.86 in 2018, then rose again to 0.89 in 2019 and to 1.13 in 2020; however, the overall fatality rate has consistently been lower than the national fatality rates every year since 1992.

On average in 2020, one person was killed every 15 hours, 100 people were injured each day (4 injured every hour), and 261 police-reported traffic crashes occurred every day.

On average, crashes in the Baltimore and Washington metropolitan regions accounted for 90.0% of the state's annual crashes. More than 17,000 crashes occurred in Baltimore and Prince George's Counties in 2020, accounting for over 36% of all crashes reported statewide. Prince George's County was also the site of the greatest number of fatal crashes in Maryland in 2020.

Crashes occurred consistently through the year on Maryland's roadways, spread relatively evenly through the calendar year. On average, however, slightly fewer crashes occurred in January, February, March, and April. Crashes tended to increase significantly in May but occurred most frequently in October, November, and December. Regardless of the month, more crashes occurred on Fridays and during afternoon or early evening hours in Maryland. Nine percent of daily crashes occurred from midnight to 5 am.

Young adult drivers, ages 21 to 29, represented approximately one in every five drivers (19.4%) involved in Maryland crashes. These young adults also comprised a large share of injuries (22.8%) and deaths (23.0%) resulting from crashes on Maryland roadways.

Females accounted for one-third (32.5%) of drivers involved in crashes yet accounted for nearly half (48.7%) of the drivers injured. Males accounted for 47.9% of drivers involved in crashes yet accounted for over three-quarters (77.9%) of fatally injured drivers.

Impaired Driving

The number of impaired driving crashes in 2020 decreased by approximately 9.4 percent since 2019, yielding the lowest point for impaired driving crashes within the past five years. Despite

¹Baltimore Region: Anne Arundel, Baltimore, Carroll, Harford, Howard, Queen Anne's, Baltimore City Washington Region: Calvert, Charles, Frederick, Montgomery, Prince George's, St. Mary's

the decrease in total crashes, fatal crashes involving alcohol and/or drugs increased by 32.1% since 2019, resulting in a 23.2% increase in the number of fatalities.

While one in 36 crashes involving driver impairment resulted in a fatality in 2020, almost one-third (31.7%) of all fatal crashes in the State involved alcohol and/or drugs. Although every impaired driving crash does not result in a fatality, impairment is often a factor when a fatality does occur. This relatively high rate of occurrence and correlation between impaired driving and fatal crashes and fatalities on Maryland roadways has made impaired driving a crucial focus point for traffic safety and law enforcement professionals throughout the state.

In 2020, Maryland law enforcement officers issued 38,022 citations for impaired driving (total of all citations issued, not total persons cited; in a single stop, an impaired driver may be cited for two or three violations), which translates to a total of 13,651 arrested drivers. This is compared to 18,279 in 2019 and 18,403 arrests in 2018. Comparably, the MHSO and its SHSP EAT partners are turning more attention to drugged driving in Maryland. In 2020, there were 6,892 citations issued to drivers for operating a vehicle while impaired by drugs or controlled dangerous substances (CDS), compared to 7,756 written in 2019 and 6,897 written in 2018.

Occupant Protection

In Maryland during 2020, nearly 2,050 unbelted occupants of passenger vehicles or light trucks were injured or killed in crashes. Despite increases in observed belt use rates in Maryland and across the nation, 22.3% of all Marylanders killed in motor vehicle crashes were not wearing seat belts. Research has shown that seat belts, when used properly, reduce the risk of fatal injury to front-seat passengers by 45.0% and reduce the risk of moderate to critical injury by 50.0%.

In 2020, Maryland law enforcement agencies issued a total of 16,858 citations for seat belt use violations (which includes 1,997 child safety seat violations), reflecting decreases of 43.2% and 52.7%, respectively, since 2019. There were 29,660 belt use citations issued in 2019 (3,787 of which were for child safety seat violations) and 27,342 issued in 2018 (3,689 for child safety seat violations). The increase in the fine had been cited as a possible cause for fewer citations being written in previous years, or the issuance of a warning in lieu of a moving violation. Also cited had been the "Ferguson effect" where the tense climate of public interactions with, and increased scrutiny of, law enforcement may be affecting the number of vehicle stops. The MHSO will continue to analyze these data trends and work with its law enforcement partners to understand the changes seen in law enforcement interventions for traffic violations.

Distracted Driving

Though the number of distracted driving crashes in 2020 fell by 20.0% from the previous year, the number of fatal crashes involving distracted driving increased by 12.0%. An average of more than 54,000 distracted driving crashes occurred on Maryland roads each year between 2016 and 2020. For this latest five-year period, distracted driving was a factor in an annual

average of approximately one-half of all traffic crashes (48.1%), more than half of all injury crashes (53.5%), and well over one third of all fatal crashes (37.4%). Distracted driving was a factor in 54.0% of injuries and 37.0% of fatalities. Thus, distracted driving is significantly over-represented in all crashes, and even more so in injury crashes. However, the difficulty in accurately capturing distracted driving as a cause on crash reports would indicate that distracted driving is, potentially, still under-reported. Combined with the significant contribution of identified crashes, distracted driving is most likely a larger problem than currently indicated. Hence, distracted driving is a major focus for traffic safety professionals in Maryland and across the nation.

In 2020, Maryland law enforcement officers issued 18,270 citations for handheld cell phone use and 943 citations for texting while driving. These numbers represent decreases of 41.1% and 60.2%, respectively, from those of the previous year. In 2019, there were 31,035 handheld cell phone citations issued along with 2,367 texting citations. In 2018, there were 30,781 handheld cell phone citations and 2,173 texting citations.

Aggressive Driving

In 2020, the number of fatal crashes involving aggressive driving increased by 48.6%, resulting in 56.4%, or 22, more fatalities than in 2019. The significant increase in fatalities and fatal crashes occurred despite the fact that the number of aggressive driving related crashes in 2020 declined by over one thousand, or by 27.3%. During the latest five-year period, 2016 through 2020, aggressive drivers have been involved in an average of 4,038 crashes on Maryland roads each year. For the same five-year period, aggressive driving accounted for an annual average of 3.6% of all traffic crashes, 4.4% of all injury crashes, and 8.1% of all fatal crashes in Maryland. Aggressive driving was a factor in 4.8% of injuries and 8.3% of fatalities during the five-year period, and 4.6% of injuries and 10.4% of fatalities in 2020.

In 2020, Maryland law enforcement officers issued 793 citations statewide for aggressive driver violations, compared to 824 in 2019 and 762 in 2018. Difficulties exist in obtaining convictions for violating the aggressive driving statute because of the requirement that officers observe three separate driving violations in order to issue an aggressive driving citation. This requirement almost certainly contributes to the low number of citations written each year for aggressive driving in Maryland, since law enforcement officers are typically trained to take immediate action upon seeing a violation. Waiting to observe two or more additional offenses before taking enforcement action is counter-intuitive to officers. It is suspected that many of the aggressive driving citations are directly related to police pursuits.

Among the 12 individual acts that comprise aggressive driving outlined in Maryland law, enforcement officers in 2020 cited 3,872 drivers for failing to yield, 24,527 for failing to obey traffic control devices (such as stopping for red lights and stop signs), and 9,216 drivers for lane violations. By comparison, in 2019 officers wrote 6,451 citations for failing to yield, 40,706 for failing to obey traffic control devices, and 13,402 drivers for lane violations.

Speeding

The number of fatal crashes involving speed increased by 40.3% in 2020, resulting in 34 more fatalities than in 2019. The significant increase in fatalities and fatal crashes occurred even though the number of speed-related crashes in the State in 2020 declined by 17.6%, from 9,182 to 7,564. Still, between 2016 and 2020, an average of 9,474 speed-related crashes occurred on Maryland roadways each year. For the same five-year period, speeding was involved in an annual average of 8.4% of all traffic crashes, 9.0% of all injury crashes, and 16.0% of all fatal crashes in Maryland. In addition, driver speed was a factor in 8.9% of injured persons and 16.5% of fatalities for the five-year period, and 8.2% of injuries and 19.2% of fatalities in 2020.

In 2020, Maryland law enforcement officers issued 151,419 citations to drivers for speeding violations, compared to 182,213 in 2019 and 195,649 in 2018. The number of speed-related citations issued in 2020 represent a 16.9% decrease from the previous year and a 22.6% decrease since 2018.

Motorcycle-Involved

Compared to the previous year, motorcycle-involved crashes in 2020 increased by 2.3%, as fatality crashes increased by 9.5% over the same period. Between 2016 and 2020, an average of 1,357 motorcycle-involved crashes occurred on Maryland roads each year.

From 2016 through 2020 in Maryland, motorcycle-involved crashes accounted for 2.4% of injuries and 13.9% of fatalities. Thus, motorcycles are significantly over-represented in fatal crashes.

While a relatively low 5.4% of motorcycle crashes result in a fatality, the fact that 13.9% of all statewide fatalities involve a motorcycle is cause for concern among traffic safety experts. This significant involvement of motorcycles in fatal crashes and their effects on overall traffic fatalities in Maryland indicate the need for greater motorcycle safety efforts such as awareness, education, training, and enforcement.

Pedestrian-Involved

The incidence of pedestrian on foot -involved crashes in Maryland in 2020 decreased by 25.3% since 2019, but fatalities increased by 5.6% (from 124 to 131 deaths) over the same period. Approximately 2,345 pedestrian-involved crashes occurred on Maryland roads in 2020, and an average of 3,142 such crashes occurred per year between 2016 and 2020.

For the same five-year period, pedestrians were involved in an annual average of 2.8% of all traffic crashes, 8.6% of injury crashes, and more than one in five (23.7%) of fatal crashes. Pedestrians involved in crashes accounted for 6.7% of injuries and 22.4% of all fatalities, although only 3.8% of pedestrian-involved crashes resulted in a fatality. These facts alone show cause for concern among safety professionals, as pedestrians are significantly over-represented

in fatal crashes. The apparent risk to pedestrians involved in Maryland crashes calls for improved pedestrian safety as a major focus for traffic safety professionals across the State.

Bicycle-Involved

The 2020 incidence of bicycle-involved crashes in Maryland decreased by 15.5% when compared to 2019. However, bicycle-involved fatalities increased from 10 in 2019 to 16 in 2020. From 2016-2020, an average of approximately 805 bicycle-involved crashes occurred on Maryland roadways each year. During the same period, bicycles were involved in an annual average of fewer than one in 100 (0.7%) of all statewide traffic crashes, 2.0% of statewide injury crashes, and 2.4% of statewide fatal crashes. Bicycle-involved crashes accounted for 1.5% of statewide injuries and 2.2% of statewide fatalities during the same period.

Bicycle crashes are more likely to involve younger than older riders. Approximately one-quarter (25.5%) of crashes in 2020 involved children of age 17 or under. By contrast, bicycle riders aged 20 to 29 accounted for 19.1% of all crashes and riders aged 40 to 54 accounted for 17.1% of all crashes.

Bicycle riders, like pedestrians, do not have the structural protection afforded by vehicles, are not as visible as other vehicles, and are not motorized. These factors together put bicycles at a great disadvantage on roadways, especially where motorized vehicles are traveling at much higher rates of speed. From 2016-2020, more than half of all bicycle-involved crashes (57.3%) occurred on state, county, and federal roadways, but 86.5% of all fatal crashes involving bicycles occurred on the same roadways.

Note: Citation frequencies and percentages reported here may be underestimates of actual issued citations due to an ongoing system conversion.