



Legislative Council Staff
Nonpartisan Services for Colorado's Legislature

Demographic Note

Drafting Number:	LLS 20-0016	Date:	March 18, 2020
Prime Sponsors:	Sen. Hansen Rep. Roberts	Analyst:	Elizabeth Ramey 303-866-3522 Elizabeth.ramey@state.co.us
BILL TOPIC:	LIMIT MOBILE ELECTRONIC DEVICES WHILE DRIVING		
Demographics Analyzed:	<ul style="list-style-type: none"> • Race/Ethnicity • Sex 		
Direct Impact(s):	<input type="checkbox"/> Economic <input type="checkbox"/> Health <input checked="" type="checkbox"/> Public Safety <input type="checkbox"/> Employment <input type="checkbox"/> Education		
Bill Impact:	Considering available data, this bill is not expected to significantly impact existing public safety disparities across race/ethnicity or sex.		
Report Status:	This analysis reflects the reengrossed bill.		

Demographic Impact Summary

This demographic note¹ analyzes potential impacts of Senate Bill 20-065 on disparities in public safety and related outcomes by race/ethnicity, and sex.² The bill expands the existing prohibition on wireless telephone use while driving to all mobile electronic devices and to all drivers regardless of age. Prior research suggests that males and black/African Americans are more likely to be subject to traffic stops than other demographics. Based on available data, white individuals are most likely to experience a traffic stop for mobile device use, and males are slightly more likely to experience a traffic stop than females. Compared with other traffic stops, a relatively small number of individuals have been stopped historically for mobile device violations. Considering available data, this bill is not expected to significantly impact existing public safety disparities by race/ethnicity, or sex. Data are limited to information on traffic stops by the Colorado State Patrol, and do not include data at the local law enforcement level.

¹Pursuant to Section 2-2-322.5, C.R.S., this demographic note uses available data to outline the potential impacts of proposed legislation on disparities within the state. Disparities are defined by statute as the difference in economic, employment, health, education, or public safety outcomes between the state population as a whole and subgroups of the population, as defined by socioeconomic status, race, ethnicity, sex, gender identity, sexual orientation, disability, geography, or any other relevant characteristic for which data are available. It is beyond the scope of this analysis to examine each of the varied causes contributing to a given disparity. For further information on the contents of demographic notes, see "Demographic Notes Overview" Memorandum available at https://leg.colorado.gov/sites/default/files/images/lcs/demographic_notes_overview.pdf.

² Terminology used to distinguish demographic groups (e.g., black/African American, Hispanic or Latina/Latino) is based on the terminology used in the data sources referenced. These terms may differ from the self-identification of these populations and among data sources.

Key Provisions Impacting Demographic Disparities

Under current law, drivers under the age of 18 are prohibited from using a wireless telephone while driving. Drivers of all ages are prohibited from texting while driving. The bill would extend these provisions by prohibiting the use of any mobile electronic device while driving for drivers of all ages unless the driver is contacting a public safety entity, there is an emergency, the driver is performing duties as a first responder, or the driver is over 18 and using a hands-free accessory. For further background, consult the fiscal note for [SB 20-065](#).

Legislative background. Under current law, as enacted under Senate Bill 17-027, drivers aged 18 and over can receive a texting violation only if the texting is observed by a law enforcement officer and causes the operator to drive in a “careless and imprudent manner.”³ Prior to the effective date of SB 17-027, or June 1, 2017, a law enforcement officer could cite a driver for texting, whether or not the driver was observed driving carelessly. The bill would repeal the restrictions established by SB17- 027.

Analysis and Findings

The following analysis compares the populations affected by the bill to the relevant statewide or local populations across different demographic groups. Based on differences between affected and comparison populations, this analysis identifies potential effects of the bill on existing disparities. For detailed information on the data used, see Appendices A and B.

Background

Existing disparities in traffic stops across race/ethnicities. Many studies find that certain demographics are more likely to be subject to traffic stops in the United States than others.⁴ For example, one 2019 large-scale study using data from 21 state patrol agencies (including the Colorado State Patrol) and 29 municipal police departments (including the Aurora Police Department) with nearly 100 million traffic stops nationwide, found significant disparities in traffic stops by race.⁵ In general, black drivers are stopped at higher rates than their share of the population, while whites and Hispanics are stopped at lower rates. Black and Hispanic drivers are searched more often than white drivers when stopped. Consistent with findings from other research, the 2019 study identified racial bias as a factor contributing to these disparities.⁶ This and other studies note that in many cases, racial bias cannot be established definitively with available data.

³ Section 42-4-239 (6)(b), C.R.S. See Legislative Council Staff Issue Brief, “Distracted Driving Laws in Colorado.” Available at: https://leg.colorado.gov/sites/default/files/ib_17-28_update_ip_memo_cell_phones_and_distracted_driving_laws_in_colorado.pdf.

⁴ Bureau of Justice Statistics. 2015. “Contacts Between Police and the Public, 2015.” Available at: <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6406>.

⁵ Stanford Computational Policy Lab. 2019. “A Large-scale Analysis of Racial Disparities in Police Stops Across the United States.” Available at: <https://openpolicing.stanford.edu/>. The data in this study is made available to the public through Stanford Open Policy Project.

⁶ See also Baumgartner, F., et al. 2017. “Racial Disparities in Traffic Stop Outcomes.” *Duke Forum for Law and Social Change*. 9(21).

Existing disparities in traffic stops across sex. Data suggest that a greater proportion of men than women are subject to traffic stops.⁷ However, this difference may be partly explained by differences in other factors, such as driver behavior or time spent on the road. For example, research has found that men are more likely to engage in aggressive driving behaviors and to drive more miles per year on average than women.⁸

Demographics of cell phone use while driving. The National Occupant Protection Use Survey (NOPUS), conducted annually by the National Highway Traffic Safety Administration (NHTSA), observed that driver behavior differs according to gender, race, and age, among other factors, with handheld cell phone use higher among females, blacks, and 16- to 24-year-olds.⁹ While this study addresses demographics associated with the behavior prohibited under the bill, it does not report on whether these behaviors result in traffic stops.

Bans on mobile device use in other states. As of February 2020, 21 states and the District of Columbia ban hand-held wireless device use for all drivers. All are primary enforcement laws, meaning an officer may cite a driver for using a handheld cellphone without any other traffic offense taking place.¹⁰ Massachusetts became the latest state to pass such a ban when the governor signed the legislation on January 1, 2020. Staff were unable to locate studies of traffic stops before and after the implementation of similar legislation.

Demographic Comparisons

For traffic stops, information on driver race, ethnicity, and gender is collected by the Colorado State Patrol, with race/ethnicity and sometimes gender attributed to drivers by officers at the scene of the stop.¹¹ In a small number of instances, officers reported “unknown” responses to demographic characteristics. Figure 1 provides a comparison of the racial/ethnic composition of the statewide population and the drivers who were issued a warning or ticket for violating existing law regarding the use of wireless telephones while driving in Colorado. Because the bill would return to the pre-2017 criteria for law enforcement officers to conduct such traffic stops, data are restricted to traffic stops that occurred in 2015 and 2016.¹² Relative to the statewide population, Figure 1 shows that whites are overrepresented among those who were issued a warning or ticket for wireless telephone use while driving, and that blacks, Hispanics, and individuals of other non-Hispanic races are underrepresented. The figure also shows that men are over- and women under-represented among the affected population relative to the statewide population.¹³

⁷ Bureau of Justice Statistics. 2015. “Contacts Between Police and the Public, 2015.” Available at: <https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6406>.

⁸ Rudisill, R. and Z. Motao. 2016. “Who Actually Receives Cell Phone Use While Driving Citations and How Much Are These Laws Enforced Among States?” Available at: <https://www.ncbi.nlm.nih.gov/pubmed/27301485>.

⁹ NHTSA. 2019. “Driver Electronic Device Use in 2018.” Available at:

<https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812818>. These differences are based on observations of a sample of drivers and may over- or under-estimate these differences in the population.

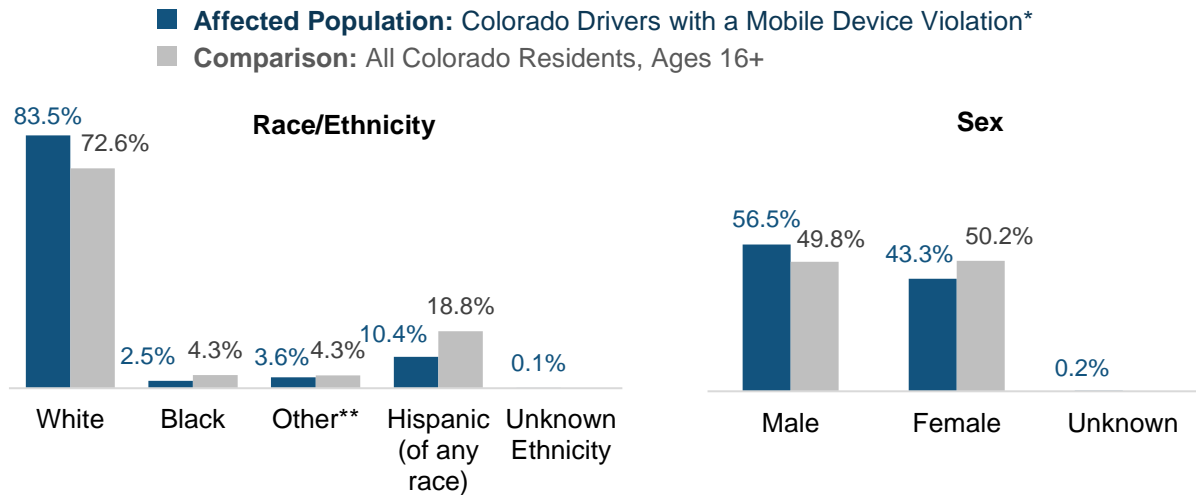
¹⁰ Governor’s Highway Safety Association. 2020. “Distracted Driving Laws by State.” Available at: https://www.ghsa.org/sites/default/files/2020-02/DistractedDrivingLawChart-FEB20_0.pdf.

¹¹ Beginning on March 1, 2017, with the passage of HB 16-1021, applicants for driver’s licenses and state-issued identification cards are given the opportunity to self-identify race or ethnicity. This information is stored in the card’s magnetic strip and accessible to law enforcement officers. This may improve the accuracy of race/ethnicity data gathered by Colorado law enforcement agencies.

¹² Similar results hold when all data from 2014 to 2019 are included.

¹³ In addition, minor drivers (ages 16 to 17), were not found to be disproportionately over- or under-represented among those with wireless telephone use violations compared to the presence of 16 to 17 year-olds in the statewide population.

Figure 1
Population Comparisons, 2015-2016
Share of Total Population



Sources: Colorado State Patrol, Crime Analysis Unit; Colorado State Demography Office.

*Includes individuals receiving either a ticket or verbal/written warning.

**"Other" includes Asian, American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, and for Colorado drivers, non-Hispanic, unknown race.

Data Limitations. Available data are limited to information on traffic stops by the Colorado State Patrol, and do not include information about local Colorado law enforcement activities, including traffic stops for municipal police officers and county sheriffs who are expected to be more likely to conduct traffic stops for mobile device use.

Direct Impacts

In general, evidence suggests that traffic stops for cell phone use account for a small proportion of traffic violations. One multi-state study found cell phone use while driving citations comprised 1 percent of all traffic citations.¹⁴ Based on the small population impact of these types of traffic citations, as well as on the comparison between the statewide and affected populations shown in Figure 1, this analysis suggests that SB 20-065 will not significantly impact existing racial/ethnic or gender disparities in traffic stops; however, the full impact of historical cell phone prohibitions is not known for Colorado due to the data limitations discussed above. Data in Figure 1 do suggest that white males will be most likely to receive a citation based on historical data. However, the number of individuals impacted is expected to be small relative to other traffic violations.

¹⁴ Rudisill, R. and Z. Motao. 2016. "Who Actually Receives Cell Phone Use While Driving Citations and How Much Are These Laws Enforced Among States?" Available at: <https://www.ncbi.nlm.nih.gov/pubmed/27301485>.

Indirect Impacts

To the extent that the bill results in a lower incidence of distracted driving, the resulting increases in safety could reduce public safety disparities for those vulnerable to injury by distracted drivers, including pedestrians, bicyclists, and people with disabilities. This may also improve outcomes for low-income individuals who are more likely to lack access to health care or to lose income or employment in the event of an accident or injury.

Demographics Not Analyzed

Some demographic groups could not be included in this analysis due to data limitations. Data on the relevant populations delineated by socioeconomic status, disability, gender identity, and sexual orientation were not available at the time of the analysis. Data delineated by geography are available in some cases, but are incomplete. Should data become available, this analysis may be updated.

Data Sources and Agencies Contacted

Department of Public Safety, Colorado State Patrol

**Appendix A
Statewide and Affected Populations**

As required by state statute, this demographic note compares the population affected by a bill to a statewide population in order to examine the extent to which a bill might affect disparities across groups within the state of Colorado. The statewide population in this case is the population of Colorado drivers in 2020 and beyond. The population affected by SB 20-065 is assumed to be members of the statewide population who will be stopped by a Colorado law enforcement officer for a violation related to the use of mobile electronic devices while driving. Due to data limitations, proxy populations that estimate the affected and statewide comparison population are used in this analysis. These proxy populations are summarized in the table below.

Population	Direct Measure	Proxy Measure(s) Used	Data Sources Used
Population Affected by the Bill	Members of the population of drivers who will be stopped by a Colorado law enforcement officers for a violation related to the use of mobile electronic devices while driving	Colorado drivers issued a warning or cited for a violation by the Colorado State Patrol, 2015-2016,	Colorado State Patrol, Crime Analysis Unit
Statewide Comparison Population	All Colorado drivers who use mobile electronic devices while driving	All Colorado residents, average 2015-2016	Colorado State Demography Office

**Appendix B
 Population Data Used in Analysis**

Race/Ethnicity

Race/Ethnicity	Affected Population <i>Colorado Drivers with a Mobile Device Violation, 2015-2016*</i>		Statewide Comparison <i>All Colorado Residents, 16 and Over, 2015-2016 Average</i>	
	Population	Share of Total	Population	Share of Total
White	2,506	83.5%	3,178,810	72.6%
Black	74	2.5%	188,106	4.3%
Other**	107	3.6%	186,734	4.3%
Hispanic (of any race)	312	10.4%	824,430	18.8%
Unknown Ethnicity	3	0.1%	N/A	
TOTAL	3,002	100.0%	4,378,080	100.0%

Sources: Colorado State Patrol, Crime Analysis Unit; Colorado State Demography Office

*Includes individuals receiving either a ticket or verbal/written warning for adult texting while driving and under eighteen use of telephone while driving;

**"Other" includes Asian, American Indian or Native Alaskan, Native Hawaiian or other Pacific Islander, and for Colorado drivers, non-Hispanic, unknown race

Gender

Gender	Affected Population <i>Colorado Drivers with a Mobile Device Violation, 2015-2016*</i>		Statewide Comparison <i>All Colorado Residents, 16 and Over, 2015-2016 Average</i>	
	Population	Share of Total	Population	Share of Total
Male	1,697	56.5%	2,181,405	49.8%
Female	1,300	43.3%	2,196,675	50.2%
Unknown	5	0.2%	N/A	
TOTAL	3,002	100.0%	4,378,080	100.0%

Sources: Colorado State Patrol, Crime Analysis Unit; Colorado State Demography Office

* Includes individuals receiving either a ticket or verbal/written warning for adult texting while driving and under eighteen use of telephone while driving