Berkeley SafeTREC

SAFE TRANSPORTATION RESEARCH AND EDUCATION CENTER

TRAFFIC SAFETY FACTS Distracted Driving

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PROBLEM IDENTIFICATION AND DATA ANALYSIS

The National Highway Traffic Safety Administration (NHTSA) defines distracted driving as activities that divert attention away from safe driving. This may include talking on the phone, texting, eating or drinking, manipulating audio systems, etc. According to the National Safety Council, cell phones remain a top distraction because of the length of time they are used by drivers on a daily basis.

The United States Department of Transportation uses the Safe System Approach to work towards zero roadway fatalities and serious injuries. The Safe System Approach recognizes that people may make unsafe decisions, such as driving distracted, or may have momentary lapses of attention, and designs a system with redundancies in place to protect everyone. The Federal Highway Administration names safe road users, safe vehicles, safe speeds, safe roads, and post-crash care as key elements of a Safe System. These elements together create multiple layers of protection to improve safety.

Analyses presented in the distracted driving program area are defined by a driver's inattention to driving due to some other activity. These analyses will focus exclusively on fatalities using the FARS data set as the SWITRS distracted driving data is limited to cell phone use.

KEY FINDINGS

NATIONAL DATA

In 2020, there were 3,142 fatalities in distraction-involved crashes, defined by NHTSA as a crash involving at least one driver who was distracted. This comprised 8.1 percent of all fatal traffic injuries in 2020 and a 0.7 percent increase from 3,119 fatalities in 2019 (see Figure 1).

The National Occupant Protection Use Survey (NOPUS) is the only probability-based survey on national driver electronic device use and is conducted by NTHSA. In 2020, NOPUS observed 2.6 percent of vehicle drivers to be talking on handheld phones, down from 2.9 percent in 2019. The 2.6 percent of drivers observed holding mobile devices to their ears translates to an estimated 354,415 drivers at a typical daylight moment in 2020. Breaking down handheld device in 2020 use by age, among drivers ages 16-24, the proportion was 2.6 percent, 2.8 percent among drivers ages 25-69, and 0.6 percent among drivers 70 and older.

NOPUS also observed a decrease of drivers manipulating handheld devices between 2019 (2.9 percent) and 2020 (2.8 percent). Of these drivers, among those ages16-24, the figure was 4.3 percent, 2.8 percent among drivers ages 25-69, and 0.5 percent among drivers 70 and older in 2020.





Source: FARS 2016-2019 Final File 2020, ARF

The 2020 Traffic Safety Culture Index by the American Automobile Association (AAA) Foundation for Traffic Safety found:

- Reading (94.9 percent) or typing (95.5 percent) on a hand-held device was viewed as "extremely or very dangerous," while 79.7 percent of respondents viewed holding and talking on a hand-held cell phone to be as dangerous.
- Only 20.2 percent reported that technology that allows hands-free use of their phones, such as Bluetooth or CarPlay, is extremely or very dangerous to use while driving.
- Almost one-quarter of respondents (22.7 percent) reported typing or sending a text/email on a handheld cell phone at least once in the past 30 days while driving.

TRAFFIC SAFETY FACTS

TRAFFIC SAFETY FACTS DISTRACTED DRIVING

CALIFORNIA DATA

Distracted driving fatalities decreased 24.3 percent in California from 2019 to 2020. There were 140 deaths in 2019 compared to 106 in 2020.

In 2021, the OTS sponsored Traffic Safety Survey of public opinion on traffic safety issues. Due to the COVID-19 pandemic, the survey was shifted from an intercept survey methodology to an electronic survey format.

- "Distracted Driving because of Texting" was the most frequently-reported response, reported by 74.3 percent of respondents to be among their top safety concerns and comprising 18.9 percent of all responses.
- Over half (51.9 percent) of respondents reported that they have been hit or nearly hit by a driver who was talking or texting on a cell phone.
- About one-third (33.9 percent) indicated that they "Regularly" or "Sometimes" used an electronic device while driving in the past 30 days.

State-level Analysis

The figures in this section refer to passenger vehicle occupants fatally injured in a distracted driving crash in California in 2020. These numbers are the products of UCB SafeTREC analysis of the FARS ARF 2020 dataset.

Fatal Distracted Driving Crashes

- By number, the counties with the greatest number of fatal injuries in 2020 were concentrated in southern California in Los Angeles, Riverside, San Diego, San Bernardino, and Orange counties, along with Stanislaus and Sacramento counties (see Figure 2).
- By rate, the highest fatal injuries in 2020 were in the small counties where one injury affects the rate significantly. Inyo, Amador, Lassen, Siskiyou, Nevada, Kings, Stanislaus, and Yuba, all had elevated rates by population.
- Twenty-seven of 58 counties recorded zero fatalities related to distracted driving in 2020.

Time and Day of Distracted Driving Fatal Injuries

 Distracted driving fatalities in 2020 were most common on Tuesdays, with 23.6 percent of fatalities, followed by Mondays, with 17.9 percent of fatalities, and Saturdays with 16.0 percent of fatalities.
Distracted driving fatalities occurred throughout the day, but were somewhat more common between noon and midnight, with 68.9 percent of fatalities.

Fatal Distracted Driving Victim Demographics

- The age category with the greatest number of distracted driving fatalities was age 35-44, with 18.9 percent of distracted driving fatalities. The next most common age category of distracted driving fatalities was 45-54, with 17.0 percent of fatalities. About twothirds, 68.9 percent, of distracted driving fatalities were male.
- For 37.7 percent of distracted driving fatalities, race was unknown. Of the victims with known race, 83.3 percent were white and 10.6 percent were Black or African American.

Crash Location for Fatal Distracted Driving Victims

- A majority (69.8 percent) of distracted driving fatalities occurred in urban areas while 30.2 percent occurred in rural areas. For comparison, about 18.5 percent of travel took place on rural roads in 2020.
- Almost half of distracted driving fatalities (46.2 percent) occurred on non-interstate principal arterial roadways, followed by non-interstate minor arterials (23.6 percent).

Vehicle Type for Fatally Injured Victims of Distracted Driving Crashes

Over one-third (39.6 percent) of distracted driving fatalities were non-motor vehicle occupants, such as pedestrians and bicyclists, and 38.7 percent were passenger cars.

REFERENCES

- AAA Foundation for Traffic Safety (2021, October). 2020 Traffic Safety Culture Index (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety. <u>https://aaafoundation.org/2020-traffic-safety-culture-index/</u>. Accessed March 31, 2022.
- California Department of Transportation. (2021, December). California Public Road Data 2020.
- Ewald & Wasserman Research Consultants, LLC. (2021, June). California Traffic Safety Survey 2021 Data Analysis and Comparison with 2010-2020 Survey Data Results. Elk Grove, CA: California Office of Traffic Safety. Accessed March 31, 2022.
- National Center for Statistics and Analysis. (2021, November). Driver electronic device use in 2020 (Traffic Safety Facts Research Note. Report No. DOT HS 813 184). Washington, DC: National Highway Traffic Safety Administration. Accessed March 31, 2022.
- National Center for Statistics and Analysis. (2022, March). Overview of motor vehicle crashes in 2020. (Traffic Safety Facts Research Note. Report No. DOT HS 813 266). National Highway Traffic Safety Administration. Accessed March 31, 2022.
- National Safety Council. <u>https://www.nsc.org/road/safety-topics/distracted-driving/distracted-driving-home</u>. Accessed March 31, 2022.

COUNTY TABLE: DISTRACTED DRIVING

Figure 2: Distracted Driving Fatalities and Serious Injuries, by Number and Rate, 2020

County	Population	Fatalities	Serious Injuries	Fatal & Serious Injuries (FSI)	FSI per 100K Population
Alameda	1,681,700	1	0	1	0.06
Alpine	1,199	0	0	0	0.00
Amador	40,506	2	0	2	4.94
Butte	211,216	1	0	1	0.47
Calaveras	45,277	0	0	0	0.00
Colusa	21,826	0	0	0	0.00
Contra Costa	1,166,669	3	0	3	0.26
Del Norte	27,745	0	0	0	0.00
El Dorado	191,282	0	0	0	0.00
Fresno	1,008,860	3	0	3	0.30
Glenn	28,822	0	0	0	0.00
Humboldt	136,514	0	0	0	0.00
Imperial	178,537	0	0	0	0.00
Inyo	18,977	3	0	3	15.81
Kern	907,021	4	0	4	0.44
Kings	153,085	2	0	2	1.31
Lake	68,099	0	0	0	0.00
Lassen	32,025	1	0	1	3.12
Los Angeles	10,012,474	11	0	11	0.11
Madera	156,519	0	0	0	0.00
Madera	262,410	1	0	1	0.38
Mariposa	17,123	0	0	0	0.38
Mariposa Mendocino	91,602	0	0	0	0.00
Merced	280,873	3	0	3	1.07
Modoc	8,703	0	0	0	0.00
Mono	13,185	0	0	0	0.00
Monterey	439,008	2	0	2	0.46
Napa	138,433	0	0	0	0.00
Nevada	102,392	2	0	2	1.95
Orange	3,184,513	5	0	5	0.16
Placer	405,308	0	0	0	0.00
Plumas	19,666	0	0	0	0.00
Riverside	2,421,480	11	0	11	0.45
Sacramento	1,585,666	5	0	5	0.32
San Benito	64,110	0	0	0	0.00
San Bernardino	2,181,983	8	0	8	0.37
San Diego	3,303,736	11	0	11	0.33
San Francisco	870,985	0	0	0	0.00
San Joaquin	780,676	4	0	4	0.51
San Luis Obispo	282,996	1	0	1	0.35
San Mateo	763,497	0	0	0	0.00
Santa Barbara	448,659	0	0	0	0.00
Santa Clara	1,933,516	4	0	4	0.21
Santa Cruz	272,360	1	0	1	0.37
Shasta	181,881	2	0	2	1.10
Sierra	3,233	0	0	0	0.00
Siskiyou	44,091	1	0	1	2.27
Solano	453,405	0	0	0	0.00
Sonoma	489,880	2	0	2	0.41
Stanislaus	553,995	7	0	7	1.26
Sutter	100,751	,	0	,	0.99
Tehama	65,643	0	0	0	0.00
Trinity	16,135	0	0	0	0.00
Tulare	473,482	2	0	2	0.42
Tuolumne	55,500	0	0	0	0.42
Ventura	844,545	1	0	1	0.12
	216,544	0	0	0	0.12
Yolo			-		
Yuba	81,468	1	0	1	1.23

Source: FARS ARF 2020; Provisional SWITRS 2020; California Department of Finance 2021.