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California Traffic Safety Survey 2020: Data Analysis and Comparison with 2010-2019
Survey Data Results

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CALIFORNIA TRAFFIC SAFETY SURVEY 2020

DATA ANALYSIS AND COMPARISON WITH 2010-2019 SURVEY DATA RESULTS

Conducted on Behalf of

The California Office of Traffic Safety
The Safe Transportation Research and Education Center
University of California, Berkeley

JULY 2020

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SUMMARY OF FINDINGS

Biggest Safety Concern (Q2)

“Distracted Driving because of TEXTING” was the biggest safety concern for 75.1% of surveyed drivers of the online panel, followed by “Speeding and Aggressive Driving” and “Drunk Driving”, mentioned by 72.5% and 67.9% respectively (Table Q2_2).

Most Serious Distraction (Q3)

Consistent with prior data collection waves, in 2020 “Texting While Driving” was reported as the most serious distraction by 68.5% of respondents (Table Q3_2).

Using Electronic Device While Driving (Q4)

The response trends of whether respondents use an electronic device while driving in 2020 are opposite from prior waves of data collection, where the majority of 2020 drivers report that they “Rarely” or “Never” use an electronic device (Table Q4).

Driving Mistake Due to Cell Phone Use (Q5)

Drivers in 2020 were significantly less likely to report ever having made a driving mistake while using a cell phone (Table Q5).

Near Crash Due to Talking/Texting (Q6)

While more than half of the respondents in 2020 report having been hit or nearly hit by another driving talking or texting on a cell phone, there was a significant reduction in the number since 2019 (Table Q6).

Recall of Traffic Safety Outreach Campaigns (Q8a-Q8d)

Similar to prior waves of data collection, in 2020 the outreach campaign with the highest recall rate was “Drive Sober or Get Pulled Over”, with more than half of the surveyed drivers having seen the campaign (Table Q8a-Q8e).

Campaign	Recall Rate 2020	Recall Rate 2019	Recall Rate 2018	Recall Rate 2017
“Go Safely California”	30.2%	16.4%	--	--
“Drive Sober or Get Pulled Over”	50.3%	34.8%	42.5%	38.4%
“Pedestrians Don’t Have Armor”	16.7%	16.3%	13.5%	17.1%
“DUI Doesn’t Just Mean Booze”	41.5%	30.1%	43.0%	29.3%
“Put Your Phone Down, Just Drive”	30.4%	17.1%	29.4%	--

Intoxicated Driving (Q9)

While the number of surveyed drivers who have driven after having too much to drink was similar in 2019 and 2020, the number who do not drink at all showed a significant decrease in 2020 (Table Q9_1).

Use of Ride Services (Q10)

In 2020, almost half of respondents say they have “Never” used a taxi or other ride share service when drinking in the last six months, a significant increase from 2019. The difference between 2019 and 2020 could be attributable to the external factor of the stay home ordinance taking place during survey administration (Table Q10).

Designated Sober Driver (Q11)

2020 saw a significant increase of respondents who “Never” have had a designated sober driver in the past six months compared to 2019. This outcome could be due to the shelter-in-place order taking place during survey administration (Table Q11).

Recall of Sobriety Checkpoints (Q12)

More than half of respondents in 2020 have seen or heard about police sobriety or DUI checkpoints, a significant increase compared to 2019 (Table Q12_1).

Likelihood of Arrest for Impaired Driving (Q14)

Central California drivers believe it to be “Very likely” to get arrested for driving impaired, compared to Northern California drivers who believe it is “Somewhat Likely” or “Somewhat Unlikely” (Table Q14).

Marijuana Impairing Driving Functions (Q15)

In 2020, Central California drivers had a slightly significantly higher rate of indicating that marijuana does not impair driving functions, compared to the other regions (Table Q15).

Safety of Driving 10 MPH Over Speed Limit (Q17)

Compared to 2019, in 2020 there is a significant –increase of drivers who stated that “It Depends” whether it is safe to drive 10 miles over the speed limit on freeways (Table Q17).

Safety of Driving 5 MPH Over Speed Limit (Q18)

Central California drivers were more likely to state it is safe to drive 5 mph over the speed limit on residential streets, but overall, in 2020 drivers were significantly less likely to say it is safe (Table Q18).

Chances of Being Ticketed for Speeding (Q19)

There is a significant increase of California drivers who say they believe they are “Very Likely” or “Somewhat Likely” to be ticketed for driving over the speed limit, compared to 2019 (Table Q19).

Driverless Vehicles and Road Safety (Q20)

The number of drivers who believe driverless vehicles will make roadways safer decreased significantly in 2020 (Table Q20).

Sharing Road with Driverless Vehicle (Q21)

Drivers in 2020 were significantly more likely to be “Somewhat Uncomfortable” or “Very Uncomfortable” sharing the road with driverless vehicles (Table Q21).

Legality of Bicyclists on Roadways (Q22)

Online panel respondents were significantly –less likely to indicate that they believe it is legal for bicycles to ride on roadways when there is no bike lane, for 63.0% compared to 80.2% 2019 (Table Q22).

Sharing Road with Bicyclists (Q24)

Respondents were significantly more likely to be “Somewhat Uncomfortable” or “Very Uncomfortable” sharing the road with bicyclists when there isn’t a designated bike lane (Table Q24).

OVERVIEW OF 2020 STUDY

The 2020 wave of data collection for the California Traffic Safety Study was conducted with an online panel of California drivers instead of an intercept interview, as were previous waves of data collection. This decision was made due to the COVID-19 pandemic occurring in 2020, and the need for an alternative data collection mode avoiding in-person contact between field interviewers and respondents. The survey questions and data analysis of survey items presented in this report are similar to previous waves of the survey, including survey items on traffic safety opinions and knowledge on traffic safety campaigns, distracted driving and perceptions about pedestrian and bicycle traffic interactions.

The participants for the online survey panel were obtained through Qualtrics, a commercial panel vendor utilizing multiple subcontractors, to provide a representative cross-section of pre-screened and qualified respondents. The panel was implemented anonymously and with distinct quota cell percentage ranges per age group and an equal gender distribution to match the field data collected in previous years as much as possible. Additionally, the presumed proportion of completed surveys by survey region was matched as closely as possible, although the overall number of completed surveys was higher this year than in previous years. Overall, 2,867 eligible panelists completed the online survey in 2020, while 1,298 completed intercept surveys in 2019.

SURVEY DATA ANALYSIS AND COMPARING RESULTS WITH PREVIOUS YEARS

Since 1) the survey administration differed in 2020 as compared to all previous years 2010-2019 and 2) that the COVID-19 pandemic affected transportation patterns in the State with decreased mobility, unemployment, statewide stay home policies, and more, a comparison of results between this year and previous years was challenging. Some of the survey item results show similarity between the 2020 data and previous waves and are indicative of an observable trend, while other discrepancies might be attributed more to the State's stay home order in place at the time of the online data collection.

In total, 2,867 drivers were surveyed, resulting in an overall confidence interval of +/- 1.83, at a confidence level of 95%.

The limitations in comparing between this year's and previous years' surveys may be particularly evident in that the previous years' intercept surveys included open-ended recall questions administered by field staff without offering answering options, whereas the online survey provided all answering options, which facilitated more responses. Additionally, some answers might have been affected by travel changes since the stay home order; e.g., the number of pedestrians reported to not be using crosswalks increased in 2020. This may have been due to increased numbers of pedestrians desiring to keep social distancing while walking on the streets and the necessity of going outside of the crosswalk to avoid other pedestrians. Another factor creating difficulty in comparisons among years is that some of the 2019 data were variances contrasted to all other waves of the survey, making it more difficult to draw comparisons in some responses between 2019 and 2020.

In reporting the results, statistically significant differences between 2019 and 2020 data were highlighted in the respective 2020 data column, significant differences within regions in 2020 are highlighted in the respective region column. Every effort has been made to match the sample by age, gender and geographic region, to minimize the differences.

All tables are based on valid answers provided, and excluding all reported “Don’t know” and “Prefer not to answer” options. The valid percentages of responses differ for each question due to the number of valid answers given to a particular question. The total number of answers for each question is reflected in the total number of completed surveys, which is listed in the tables. Some of the questions were also skipped over based on answers provided (to skip over questions which do not apply) and the number of responses per question vary accordingly. Due to rounding to one decimal point, some percentages presented do not always add up to the exact value of 100.0%.

Data Weights

The comparison of results with previous years’ data refers to the comparable longitudinal field surveys conducted with California vehicle drivers since 2010. The sample size of the 2020 online survey was almost double the sample size of the 2019 intercept data collection. The results of the 2020 online survey were weighted to the California adult population by age and gender to be comparable to the previous waves of data, and to provide more representativeness to the entire State of California due to the limitations of some of the comparisons that could not be made to previous waves of data collection (see Table Weights by Age and Gender).

Table Weights by Age and Gender. Census data, survey results and proportional weight calculation

Age Range	Census Data*		Survey Data		Weights		Weighted Survey Data	
	Male	Female	Male	Female	Male	Female	Male	Female
18-24	51.5%	48.5%	83.6%	16.4%	0.62	2.96	44.4%	55.6%
25-34	51.6%	48.4%	69.0%	31.0%	0.75	1.56	48.5%	51.5%
35-44	50.5%	49.5%	69.8%	30.2%	0.72	1.64	45.3%	54.7%
45-54	49.8%	50.2%	33.5%	66.5%	1.49	0.75	45.7%	54.3%
55-70	48.2%	51.8%	7.1%	92.9%	6.79	0.56	44.4%	55.6%
71 +	43.2%	56.8%	8.2%	91.8%	5.27	0.62	36.1%	63.9%
Total	49.3%	50.7%	50.3%	49.7%	0.98	1.02	44.2%	55.8%

*Source: Census.gov: ACS DEMOGRAPHIC AND HOUSING ESTIMATES 2019 American Community Survey

The population weights were calculated based on the formula described in the Table Weights Formula.

Table Weights Formula. Proportional weight calculation formula

$$W_p = \frac{\text{Percent of Population}}{\text{Percent of Respondents}} = \frac{P_i / P_{total}}{R_i / R_{total}}$$

Analysis Notes

For this survey effort, a convenience sample of a commercially available panel was chosen to avoid any contact of staff with potential survey respondents. The analysis below reflects the answers of a larger sample, albeit recruited and managed by a commercial vendor and a survey implementation online, compared to in-person interviews in the previous waves. Given the difference in the survey format and administration, some of the differences in findings are attributed to those mode differences.

Having the advantage of over a decade of collected in-person data allows for a comparison of different sampling modes and ultimately the effects of the survey administration: online versus in-person. Some of the changes in reported behavior since 2019 are therefore not tested for significance, as they would not reflect the change in behavior, but rather the effects of the data collection mode.

- ➡ For multiple choice questions, a respondent could give more than one answer. The listed “Percent of cases” column is calculated from the total number respondents who answered a question. The resulting percentage is more than 100.0% and reflects the percentage of respondents (not the percentage of answers given, which would add up to 100.0%).
- ➡ All findings are based on the weighted data with weights applied as outlined in Table Weights by Age and Gender.
- ➡ The significances outlined refer to a two-tailed probability with the resulting value of “z” and a *p* value indicating the difference between the listed (and assumed independent) proportion of drivers interviewed per wave. Where applicable, the significant differences calculated were adjusted for pairwise comparisons using the Bonferroni correction. Significant findings in table cells are highlighted in orange. Significant findings or highest response rates in tables mentioned in the text are highlighted.
- ➡ The survey version used was identical to the 2019 survey instrument.

Region Variable

All California counties were included in the online survey, and segmented into three regions: “Northern California,” “Central California,” and “Southern California,” similar to previous waves (Table R1). Of all 2,867 completed online surveys, 2,273 were from counties included in the 2019 data collection, 595 were from additional counties grouped into the three regions.

Table R1. Three geographic region definition by county

Northern California				
Alameda	El Dorado	Mendocino	Sacramento	Solano
Alpine	Glenn	Modoc	San Francisco	Sonoma
Amador	Humboldt	Mono	San Mateo	Sutter
Butte	Inyo	Napa	Santa Clara	Tehama
Colusa	Lake	Nevada	Shasta	Trinity
Contra Costa	Lassen	Placer	Sierra	Yolo
Del Norte	Marin	Plumas	Siskiyou	Yuba

Central California		Southern California
Calaveras	Merced	Santa Cruz
Fresno	Monterey	Stanislaus
Kern	San Benito	Tulare
Kings	San Joaquin	Tuolumne
Madera	San Luis Obispo	
Mariposa	Santa Barbara	
		Imperial
		Ventura
		Los Angeles
		Orange
		Riverside
		San Bernardino
		San Diego

Table R2 shows the number of completed surveys by county.

Table R2. Completed surveys by county

County	Northern California	Total	County	Central California	Total	County	Southern California	Total
Alameda	122	4.3%	Calaveras	5	0.2%	Imperial	5	0.2%
Alpine	11	0.4%	Fresno	92	3.2%	Los Angeles	859	30.0%
Amador	7	0.2%	Kern	49	1.7%	Orange	223	7.8%
Butte	21	0.7%	Kings	4	0.1%	Riverside	120	4.2%
Contra Costa	71	2.5%	Madera	7	0.2%	San Bernardino	142	5.0%
Del Norte	9	0.3%	Mariposa	2	0.1%	San Diego	243	8.5%
El Dorado	15	0.5%	Merced	8	0.3%	Ventura	46	1.6%
Glenn	3	0.1%	Monterey	26	0.9%	Total	1,638	
Humboldt	7	0.2%	San Benito	5	0.2%	% of total	57.1%	
Lake	5	0.2%	San Joaquin	41	1.4%			
Marin	13	0.5%	San Luis Obispo	14	0.5%			
Mendocino	5	0.2%	Santa Barbara	23	0.8%			
Napa	7	0.2%	Santa Cruz	23	0.8%			
Nevada	6	0.2%	Stanislaus	40	1.4%			
Placer	28	1.0%	Tulare	31	1.1%			
Sacramento	118	4.1%	Tuolumne	3	0.1%			
San Mateo	62	2.2%	Total	373				
San Francisco	100	3.5%	% of total	13.0%				
Santa Clara	115	4.0%						
Shasta	16	0.6%						
Siskiyou	4	0.1%						
Solano	31	1.1%						
Sonoma	43	1.5%						
Sutter	4	0.1%						
Yolo	18	0.6%						
All other	15	0.1%						
Total	856							
% of total	29.9%							

The number of completed surveys by region, both weighted and unweighted, is outlined in Table R3. The majority of completes (1,638) are from Southern California drivers, comparable to the California population distribution as well as the 2019 intercept data distribution of completed surveys.

Table R3. Completed surveys by region and year

Region	Number of Completes	Percent	Weighted Percent	2019 Percent
Northern California	856	29.9%	29.5%	32.6%
Central California	373	13.0%	12.7%	12.6%
Southern California	1,638	57.1%	57.8%	54.9%
Total	2,867	100.0%	100.0%	100.0%

Respondent Demographics

The respondents' age and gender distribution by region is shown in Table D1, together with the comparable distribution of the 2019 age ranges.

Table D1. Age and gender distribution by geographic regions and year comparison

Gender	Age Group	Northern California	Central California	Southern California	Total	2019 Total
Male	18-24	12.2%	11.2%	9.9%	10.7%	11.9%
	25-34	22.8%	26.0%	22.6%	23.1%	25.0%
	35-44	21.8%	21.3%	24.8%	23.6%	25.6%
	45-54	25.8%	26.6%	24.5%	25.1%	19.8%
	55-70	13.4%	11.8%	15.7%	14.6%	14.8%
	71 or older	4.0%	3.0%	2.4%	2.9%	3.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%
Female	18-24	9.2%	9.2%	10.9%	10.1%	17.1%
	25-34	19.6%	22.6%	22.6%	21.7%	25.3%
	35-44	24.3%	21.0%	23.2%	23.3%	19.3%
	45-54	25.0%	26.7%	24.9%	25.2%	19.9%
	55-70	16.4%	19.5%	14.6%	15.9%	15.5%
	71 or older	5.4%	1.0%	3.8%	3.9%	2.9%
Total		100.0%	100.0%	100.0%	100.0%	100.0%

The distribution by region and gender is shown in Table D2.

Table D2. Gender distribution by geographic regions

Gender	Northern California	Central California	Southern California	Total
Male	47.6%	46.7%	52.2%	50.1%
Female	52.4%	53.3%	47.8%	49.9%
Total	100.0%	100.0%	100.0%	100.0%

Safety Concerns (Q2)

The biggest safety concern on California roadways was a multiple-choice question and the answer categories provided, and coded open-ended responses (highlighted in blue) are outlined in Table Q2_1.

Table Q2 1. “In your opinion, what are the biggest safety problems on California roadways?”

Drunk Driving	Congestion on Roadways
Speeding/Aggressive Driving	Construction on Roadways
Distracted Driving because of TALKING	Unlicensed/Uninsured Drivers
Distracted Driving because of TEXTING	Trash/Debris
Internal Car Distractions (passengers, eating, grooming, adjusting radio/stereo)	Not Signaling Lane Change/Merging Vehicles
Bad Road Surfaces	Running Red Lights & Stop Signs
Not Wearing Seatbelts	Infrastructure Issues
Drugged Driving	Perceived Driving Skills
Other (un-coded)	
Personal Behavior	

Overall, the survey respondents provided 10,770 responses to the question on the biggest safety problems on California roadways in 2020. The most frequently mentioned response was “Distracted Driving because of Texting” which accounted for 19.8% of all answers given, and stated by 75.1% of all respondents. This was followed by “Speeding and Aggressive Driving,” with 19.1% of all answers and mentioned by 72.5% of all drivers surveyed. The third most frequently mentioned response was “Drunk Driving”, with 17.9% of answers and mentioned by 67.9% of respondents (Table Q2_2).

Table Q2 2. Frequencies of Q2 by percent of answers and percent of drivers

Q2 all answers combined	Count	% of Answers	% of Drivers
Distracted Driving because of TEXTING	2,128	19.8%	75.1%
Speeding/Aggressive Driving	2,054	19.1%	72.5%
Drunk Driving	1,924	17.9%	67.9%
Drugged Driving	1,143	10.6%	40.3%
Bad Road Surfaces	1,134	10.5%	40.0%
Distracted Driving because of TALKING	969	9.0%	34.2%
Internal Car Distractions (passengers, eating, grooming, adjusting radio/stereo)	673	6.3%	23.8%
Not Wearing Seatbelts	666	6.2%	23.5%
Other	42	0.4%	1.3%
Unlicensed/Uninsured Drivers	20	0.2%	0.7%
Congestion on Roadways	8	0.1%	0.3%
Not Signaling Lane Change/Merging Vehicles	3	0.0%	0.1%
Perceived Driving Skills	3	0.0%	0.1%
Infrastructure Issues	2	0.0%	0.1%
Total	10,770	100.0%	380.1%

The most frequently mentioned responses to the biggest safety problem on California roadways compared with previous waves of data collection are shown in Table Q2_3 with the three highest percentage answers highlighted. As with all previous waves of data collection, “Distracted Driving because of Texting” and “Speeding and Aggressive Driving,” are still the most frequently mentioned safety problems. For the 2020 data collection wave “Drugged Driving” increased substantially in awareness.

Table Q2_3. Frequencies of top six responses to Q2 by percent of answers provided and by year of data collection

Q2 all answers combined	2020 % answers	2019 % answers	2018 % answers	2017 % answers	2016 % answers	2015 % answers	2014 % answers	2013 % answers	2012 % answers	2011 % answers	2010 % answers
Distracted Driving because of Texting	19.8%	19.4%	16.9%	14.7%	18.2%	16.1%	21.2%	20.3%	17.1%	18.5%	9.9%
Speeding/Aggressive Driving	19.1%	20.3%	19.4%	27.7%	19.2%	18.1%	20.2%	14.3%	15.6%	17.6%	18.2%
Drunk Driving	17.9%	9.2%	6.5%	22.9%	5.6%	6.6%	6.2%	5.7%	4.3%	12.6%	7.9%
Drugged Driving	10.6%	1.8%	1.3%	1.5%	--	--	--	--	--	--	--
Bad Road Surfaces	10.5%	11.0%	15.3%	3.8%	12.2%	13.0%	10.4%	9.2%	11.4%	11.6%	11.6%
Distracted Driving because of Talking	9.0%	15.7%	14.2%	11.9%	13.8%	11.7%	18.0%	16.0%	18.3%	20.3%	15.8%
All other responses combined	13.1%	22.6%	26.4%	17.5%	31.0%	34.5%	24.0%	34.5%	33.3%	19.4%	36.6%
Total responses	100.0%										

Safety Concerns (Q2) by California Region

The biggest safety concern by California region is shown in Table Q2_4, with the most frequently mentioned response in Northern California being “Speeding/Aggressive Driving” while “Distracted Driving because of Texting” was the biggest safety in both Central and Southern California.

Table Q2_4. Frequencies of top five safety concerns by Region

Q2 by Region	Northern California	Central California	Southern California
Distracted Driving because of TEXTING	19.3%	19.9%	19.9%
Speeding/Aggressive Driving	19.7%	17.4%	19.2%
Drunk Driving	17.3%	17.9%	18.1%
Bad Road Surfaces	11.3%	10.9%	10.1%
Drugged Driving	10.7%	11.2%	10.4%
All other responses combined	21.7%	22.7%	22.3%
Total	100.0%	100.0%	100.0%

Safety Concerns (Q2) by Age

The cross-tabulation of the five most frequently mentioned safety concerns by age is shown in Table Q2_5, with all age groups sharing a comparable pattern.

Table Q2_5. Cross-tabulation of top five safety concerns by age group

Q2 by Age	18-24	25-34	35-44	45-54	55-70	71 or older
Drunk Driving	21.0%	19.9%	17.1%	17.1%	16.0%	16.2%
Speeding/Aggressive Driving	19.0%	19.5%	19.4%	19.4%	17.5%	19.6%
Drugged Driving	11.5%	10.3%	10.1%	10.4%	11.6%	10.0%
Distracted Driving because of TEXTING	18.9%	18.8%	19.4%	20.9%	20.5%	19.1%
Bad Road Surfaces	9.0%	10.6%	11.1%	11.6%	9.1%	10.2%
All other responses combined	20.6%	20.9%	22.9%	20.6%	25.3%	24.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Most Serious Distraction (Q3): Coding Categories

All respondents were subsequently asked to identify the single most serious distraction for vehicle drivers on California roadways. Table Q3_1 shows the answer choices, with the created coding categories based on open-ended answers highlighted in blue.

Table Q3_1. “In your opinion, what is the MOST serious distraction for drivers” with additional code categories

Cell Phone Conversations (hand-held or hands-free)	Drunk Drivers
Texting While Driving	Drivers Distracted / Inattentive
Passengers in Car	Construction on Roadways
Eating While Driving	
Car Crashes/Vehicle Issues	
GPS/Navigation Systems	
Roadside Billboards	
Other	

Most Serious Distraction (Q3) by Survey Wave

According to surveyed drivers, the most serious distraction on California roadways in 2020 was “Texting While Driving”, similar to prior waves of data collection, going back to 2013 (highest percentage answer highlighted, Table Q3_2).

Table Q3_2. Frequencies of Q3 by survey year

Q3	2020 Total	2019 Total	2018 Total	2017 Total	2016 Total	2015 Total	2014 Total	2013 Total	2012 Total	2011 Total	2010 Total
Texting While Driving	68.5%	46.7%	44.5%	50.8%	44.1%	39.0%	51.8%	47.9%	37.2%	27.6%	12.7%
Cell Phone Conversations	17.4%	23.1%	32.2%	31.9%	33.5%	22.2%	29.5%	33.4%	42.8%	56.0%	61.9%
Car Crashes/Vehicle Issues	6.4%	6.2%	5.3%	1.4%	1.7%	1.6%	1.3%	1.4%	2.9%	1.9%	1.9%
GPS/Navigation Systems	1.7%	2.5%	0.8%	1.3%	1.7%	0.7%	0.9%	0.4%	0.5%	0.5%	0.2%
Eating While Driving	1.7%	2.4%	0.5%	1.3%	0.6%	1.5%	1.8%	0.5%	0.8%	1.2%	1.9%
Roadside Billboards	1.5%	2.3%	1.7%	1.2%	1.5%	2.6%	0.9%	1.8%	1.9%	1.3%	2.1%
Passengers in Car	1.2%	4.1%	2.3%	1.7%	0.6%	1.2%	2.0%	1.5%	1.4%	1.8%	3.3%
All other responses combined	1.6%	12.7%	12.7%	10.4%	16.3%	31.2%	11.8%	13.1%	12.5%	9.7%	16.0%
Total	100.0%										

Most Serious Distraction (Q3) by Region

“Texting While Driving,” was also consistently indicated as the most serious distraction among all three California regions (Table Q3_3).

Table Q3 3. Frequencies of Q3 by California region

Q3 by region	Northern California	Central California	Southern California
Texting While Driving	64.6%	69.9%	70.1%
Cell Phone Conversations	18.9%	15.9%	16.9%
Car Crashes/Vehicle Issues	8.3%	5.8%	5.6%
Other	1.7%	0.3%	0.7%
Roadside Billboards	0.6%	3.9%	1.5%
GPS/Navigation Systems	2.3%	1.7%	1.5%
Passengers in Car	1.8%	0.8%	1.0%
Drunk Drivers	0.6%	0.0%	0.2%
Construction on Roadways	0.0%	0.3%	0.1%
Eating While Driving	1.3%	1.1%	2.1%
Drivers Distracted / Inattentive	0.0%	0.3%	0.4%
Total	100.0%	100.0%	100.0%

Using electronic device while driving (Q4) by Region and Wave

About a third of respondents (33.7%) “Regularly” or “Sometimes” used an electronic wireless device while driving in the past 30 days, while another two-thirds “Rarely” or “Never” did. The differences between California regions are not significant (Table Q4), but the answers provided in the online survey are significantly different and the opposite trend of the reported frequencies from 2019 (p<0.01).

Table Q4. “How often in the past 30 days have you used an electronic wireless device, like a cell phone when driving?” by region and year

Q4 by Region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Regularly	120	52	256	428	458	443
	14.3%	14.4%	15.6%	15.1%	35.4%	32.0%
Sometimes	159	61	308	528	380	295
	19.0%	16.9%	18.7%	18.6%	29.4%	21.3%
Rarely	252	104	516	872	268	298
	30.0%	28.8%	31.4%	30.7%	20.7%	21.5%
Never	308	144	563	1,015	188	348
	36.7%	39.9%	34.3%	35.7%	14.5%	25.1%
Total	839	361	1,643	2,843	1,294	1,384
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Driving Mistake Due to Cell Phone Use (Q5) by Wave

Having ever made a driving mistake while on a cell phone is shown in Table Q5, with 44.7% of drivers having made a mistake due to cell phone use. In 2019, the majority of 51.3% of drivers reported having made a driving mistake when using a cell phone, the 6.6% reported decrease in 2020 is significant ($p<0.01$).

Table Q5. "Have you EVER made a driving mistake while talking on a cell phone?" by year

Q5 by year	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014	Total 2013	Total 2012	Total 2011	Total 2010
Yes	1,263	665	634	670	550	744	858	866	827	802	766
	44.7%	51.3%	46.0%	49.3%	43.9%	39.4%	47.1%	45.0%	44.6%	45.8%	46.5%
No	1,561	632	743	690	704	1,143	965	1,060	1,027	951	883
	55.3%	48.7%	54.0%	50.7%	56.1%	60.6%	52.9%	55.0%	55.4%	54.2%	53.5%
Total	2,824	1,297	1,377	1,360	1,254	1,887	1,823	1,926	1,854	1,753	1,649
Total 100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Near Crash Due to Other Driver Talking/Texting (Q6) by Wave

Asked if they ever have been hit or nearly hit by another driver who was talking or texting on a cell phone, more than half of all drivers (51.7%) said "Yes" (Table Q6). The 6.2% decrease since 2019 is significant at $p<0.01$.

Table Q6. "Have you ever been hit or nearly hit by a driver who was talking or texting on a cell phone?" by year

Q6 by year	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014	Total 2013	Total 2012	Total 2011	Total 2010
Yes	1,466	739	852	827	685	1,117	1,098	421	1,067	1,038	912
	51.7%	57.9%	62.3%	61.0%	54.6%	59.6%	61.2%	59.5%	60.1%	60.1%	57.5%
No	1,371	538	515	528	570	756	697	286	708	689	673
	48.3%	42.1	37.7%	39.0%	45.4%	40.4%	38.8%	40.5%	39.9%	39.9%	42.5%
Total	2,837	1,277	1,367	1,355	1,255	1,873	1,795	707	1,775	1,727	1,585
Total 100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Likelihood of Being Ticketed for Hand-Held Phone Use or Texting (Q7) by Wave

Drivers' perception of the likelihood of being ticketed for using a hand-held cell phone is shown in Table Q7. Overall, 51.8% responded they believe it is "Very Likely" or "Somewhat Likely" to be ticketed, while 34.5% believe it is "Somewhat Unlikely" or "Very Unlikely". The online respondents in 2020 believed it to be more likely to receive a ticket for using a phone while driving, compared to respondents in 2019 ($p<0.01$).

Table Q7. "What do you think is the likelihood of being ticketed for hand-held cell phone use or texting?" by year

Q7 by year	Total							
	2020	2019	2018	2017	2016	2015	2014	
Very Likely	679	269	314	287	272	444	424	493
	23.9%	21.0%	23.0%	21.2%	21.5%	23.4%	23.4%	26.3%
Somewhat Likely	792	288	344	277	265	459	416	599
	27.9%	22.4%	25.1%	20.4%	21.0%	24.2%	23.0%	31.9%
Neither Likely or Unlikely	391	228	168	197	150	218	210	131
	13.8%	17.8%	12.3%	14.5%	11.9%	11.5%	11.6%	7.0%
Somewhat Unlikely	425	261	250	262	256	361	376	306
	15.0%	20.3%	18.3%	19.3%	20.3%	19.1%	20.8%	16.3%
Very Unlikely	555	238	292	333	320	412	385	349
	19.5%	18.5%	21.3%	24.6%	25.3%	21.8%	21.3%	18.6%
Total	2,841	1,284	1,395	1,356	1,263	1,894	1,811	1,878
Total	100.0%							

Recall of "Go Safely California" (Q8a) by Region and Wave

Overall, 30.2% of respondents recalled the "Go Safely California" campaign, with a similar distribution across the three California regions, but a significant 13.8% increase in recall since 2019 ($p<0.01$, Table Q8a).

Table Q8a. "In the past 6 months, do you recall: Go Safely California?" by region and year

Q8a by region	Northern California	Central California	Southern California	Total 2020	Total 2019
	Yes	No	No	Total	Total
Yes	199 27.7%	102 32.1%	443 31.1%	744 30.2%	207 16.4%
No	519 72.3%	216 67.9%	981 68.9%	1,716 69.8%	1,052 83.6%
Total	718 100.0%	318 100.0%	1,424 100.0%	2,460 100.0%	1,259 100.0%

Recall of “Drive Sober or Get Pulled Over” (Q8b) by Region and Wave

The “Drive Sober or Get Pulled Over” campaign was recalled by over half (50.3%) of all respondents, with a comparable recollection by region (Table Q8b). Since 2019, the recall has increased by 15.5% ($p<0.01$)

Table Q8b. “In the past 6 months, do you recall: Drive Sober or Get Pulled Over?” by region and year

Q8b by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016
Yes	380 50.3%	177 52.5%	749 49.7%	1,306 50.3%	439 34.8%	577 42.5%	518 38.4%	515 40.8%
No	375 49.7%	160 47.5%	757 50.3%	1,292 49.7%	821 65.2%	781 57.5%	830 61.6%	747 59.2%
Total	755 100.0%	337 100.0%	1,506 100.0%	2,598 100.0%	1,260 100.0%	1,358 100.0%	1,348 100.0%	1,262 100.0%

Recall of “Pedestrians Don’t Have Armor” Campaign (Q8c) by Region and Wave

The campaign “Pedestrians Don’t Have Armor” shows a slight difference in recall by region, with a mildly higher recall in Northern California counties ($p<0.05$, Table Q8c.), but no difference to the 2019 data.

Table Q8c. “In the past 6 months, do you recall: “Pedestrians Don’t Have Armor?” by region and year

Q8c by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017
Yes	149 19.5%	57 17.5%	233 15.1%	439 16.7%	206 16.3%	183 13.5%	229 17.1%
No	614 80.5%	269 82.5%	1,313 84.9%	2,196 83.3%	1,055 83.7%	1,172 86.5%	1,113 82.9%
Total	763 100.0%	326 100.0%	1,546 100.0%	2,635 100.0%	1,261 100.0%	1,355 100.0%	1,342 100.0%

Recall of “DUI Doesn’t Just Mean Booze” (Q8d) by Region and Wave

The comparison of the campaign recall “DUI Doesn’t Just Mean Booze” showed a mild difference between regions, but a significant 11.4% increase in recall since 2019 ($p<0.01$, Table Q8d).

Table Q8d. “In the past 6 months, do you recall: DUI Doesn’t Just Mean Booze” by region and year

Q8d by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017
Yes	337 43.3%	157 46.4%	597 39.6%	1,091 41.5%	376 30.1%	585 43.0%	394 29.3%
No	442 56.7%	181 53.6%	912 60.4%	1,535 58.5%	874 69.9%	775 57.0%	950 70.7%
Total	779 100.0%	338 100.0%	1,509 100.0%	2,626 100.0%	1,250 100.0%	1,360 100.0%	1,344 100.0%

Recall of “Put Your Phone Down, Just Drive” (Q8e) by Region and Wave

The recall is comparable among all regions for the “Put your Phone Down, Just Drive” campaign, but shows a 13.3% increase since the 2019 field data collection ($p<0.01$, Table Q8e).

Table Q8e. “In the past 6 months, do you recall: Put Your Phone Down, Just Drive” by region and year

Q8e by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Yes	218 27.9%	96 29.0%	486 32.0%	800 30.4%	213 17.1%	398 29.4%
No	564 72.1%	235 71.0%	1,031 68.0%	1,830 69.6%	1,035 82.9%	954 70.6%
Total	782 100.0%	331 100.0%	1,517 100.0%	2,630 100.0%	1,248 100.0%	1,352 100.0%

Safety Campaign Source of Recall (Q8a-e)

The recall of the surveyed safety campaigns was followed up with a question on where respondents had seen or heard about it, and the results shown for all five campaigns is outlined in Table Q8a_e, with the highest percentage of answers by campaign highlighted. The overall most frequently mentioned response was "Road Sign", which included bill boards and changeable message signs, followed by "TV" and "Facebook".

Table Q8a_e Follow-Up: "Where did you See or Hear...?" respective campaign source

Q8a-e	Go Safely California	Drive Sober or Get Pulled Over	Pedestrians Don't Have Armor	DUI Doesn't Just Mean Booze	Put Your Phone Down, Just Drive
Road Sign	25.2%	40.6%	23.5%	41.3%	29.5%
TV	19.8%	21.2%	17.3%	22.7%	17.1%
Facebook	19.6%	11.8%	21.0%	12.3%	17.0%
Twitter	10.3%	7.7%	13.6%	7.5%	11.4%
Instagram	14.5%	9.9%	14.7%	8.1%	12.0%
Web	10.6%	8.9%	9.8%	8.1%	13.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Intoxicated Driving (Q9) by Wave

Comparable with 2019 data, 7.8% of respondents noted that they drove after having too much to drink in the past six months, while 24.0% do not drink at all, which is a significant 9.5% reduction compared to 2019 ($p<0.01$, Table Q9_1), but overall comparable with previous years of field intercept data collected. The lower number of non-drinkers might be a side effect of the stay-at-home order in place at the time of the survey.

Table Q9_1. "In the past 6 months, did you drive when you thought you had too much alcohol to drive safely?" by year

Q9 by year	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014	Total 2013	Total 2012	Total 2011	Total 2010
Yes	223	95	88	137	83	138	162	119	102	120	99
No	1,945	766	980	918	816	1,264	1,258	1,452	1,263	1,267	1,214
I do not drink at all	68.2%	59.2%	70.5%	67.4%	64.5%	65.6%	68.3%	75.3%	68.6%	70.7%	73.5%
Total	2,853	1,294	1,390	1,362	1,266	1,927	1,842	1,929	1,840	1,792	1,671
	100.0%										

Intoxicated Driving (Q9) by Region

The comparison of intoxicated driving by region shows no significant differences (Table Q9_2).

Table Q9 2. “In the past 6 months, did you drive when you thought you had too much alcohol to drive safely?” by region

Q9 by region	Northern California	Central California	Southern California
Yes	63 7.5%	28 7.7%	132 8.0%
No	584 69.4%	230 63.5%	1,131 68.5%
I do not drink at all	194 23.1%	104 28.7%	387 23.5%
Total	841 100.0%	362 100.0%	1,650 100.0%

Use of Alternative Ride Services When Drinking (Q10) by Region and Wave

There are no significant differences among survey respondents on using alternative ride services after drinking alcohol, with 39.3% having “Always” or “Sometimes” used a taxi or alternative ride service (Table Q10). Overall, fewer respondents in 2020 used ride services when drinking compared to 2019. In 2020 almost half of respondents “Never” did ($p<0.01$), which is probably more attributable to the shelter-in-place ordinance taking place during survey administration, as an external factor.

Table Q10. “In the past 6 months, how often have you used a taxi or other ride service when drinking with others or alone?” by region and year

Q10 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
Always	137 21.2%	47 18.6%	273 21.7%	457	316	330	278	187	319	150
Sometimes	102 15.8%	44 17.4%	243 19.3%	389	217	240	188	162	177	179
Rarely	85 13.2%	28 11.1%	159 12.7%	272	88	115	147	111	184	189
Never	321 49.8%	134 53.0%	581 46.3%	1,036	230	372	442	439	710	894
Total	645 100.0%	253 100.0%	1,256 100.0%	2,154 100.0%	851 100.0%	1,057 100.0%	1,055 100.0%	899 100.0%	1,390 100.0%	1,412 100.0%

Designated Sober Driver (Q11) by Region and Wave

There are no regional differences in the number of designated drivers appointed by respondents in the past six months, with almost a third (32.8%) “Always” choosing or being a designated driver. There is a higher number of drivers who “Never” have a designated driver compared to the 2019 field data, and while that number is an 13.6% increase, significant at p<0.01 and comparable to 2016/2017 percentages, this can also be the result of the shelter-in-place (Table Q11).

Table Q11. “In the past 6 months, how often have you had a designated sober driver, including yourself?” by region and year

Q11 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
Always	214 33.2%	88 33.8%	409 32.4%	711 38.5%	322 33.6%	355 23.6%	249 24.9%	223 24.9%	585 42.2%	525 28.5%
Sometimes	120 18.6%	44 16.9%	236 18.7%	400 18.5%	213 25.4%	248 23.5%	222 21.1%	184 20.6%	226 16.3%	338 18.3%
Rarely	72 11.1%	24 9.2%	144 11.4%	240 11.1%	101 12.1%	135 12.8%	170 16.1%	140 15.6%	154 11.1%	192 10.4%
Never	239 37.1%	104 40.0%	472 37.4%	815 37.6%	201 24.0%	317 30.0%	413 39.2%	348 38.9%	421 30.4%	790 42.8%
Total	645 100.0%	260 100.0%	1,261 100.0%	2,166 100.0%	837 100.0%	1,055 100.0%	1,054 100.0%	895 100.0%	1,386 100.0%	1,845 100.0%

Recall of Sobriety/DUI Checkpoints in Past 6 Months (Q12) by Wave

More than half of respondents (55.5%) have seen or heard something about the police setting up sobriety or DUI checkpoints in the past six months. This is a significant increase compared to 2019 (15.4%, p< 0.01, Table Q12_1).

Table Q12_1. “In the past 6 months, have you seen/heard anything about police setting up sobriety/DUI checkpoints to catch drunk drivers?” by year

Q12 by year	Total	2010									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	
Yes	1,415	489	593	706	735	1,094	1,327	993	1,263	1,300	1,006
	55.5%	40.1%	45.7%	52.9%	57.9%	56.8%	71.3%	51.6%	67.8%	72.9%	60.6%
No	1,135	730	704	629	535	831	535	931	599	483	653
	44.5%	59.9%	54.3%	47.1%	42.1%	43.2%	28.7%	48.4%	32.2%	27.1%	39.4%
Total	2,550	1,219	1,297	1,335	1,270	1,925	1,862	1,924	1,862	1,783	1,659
Total	100.0%										

Recall of Sobriety/DUI Checkpoints in Past 6 Months (Q12) by Region

The recall of sobriety/DUI checkpoints by region shows some significant differences with respondents in Central California reporting a significant higher recall than both other regions ($p<0.01$, Table Q12_2)

Table Q12_2. “In the past 6 months, have you seen/heard anything about police setting up sobriety/DUI checkpoints to catch drunk drivers?” by region

Q12 by region	Northern California	Central California	Southern California
Yes	394	209	811
	53.5%	64.1%	54.6%
No	343	117	674
	46.5%	35.9%	45.4%
Total	737	326	1,485
	100.0%	100.0%	100.0%

Awareness of DUI (Q13) by Region and Wave

The majority of respondents, 90.3%, were aware that one can get a DUI for driving under the influence of legal as well as illegal drugs, without significant differences between region and without change compared to the 2019 data (Table Q13).

Table Q13. “Did you know that you can get a DUI if you drive under the influence of legal or illegal drugs” by region and year

Q13 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017
Yes	757 89.8%	330 91.2%	1,485 90.4%	2,572 90.3%	1,132 90.0%	1,263 93.8%	1,209 91.2%
No	86 10.2%	32 8.8%	157 9.6%	275 9.7%	126 10.0%	83 6.2%	116 8.8%
Total	843 100.0%	362 100.0%	1,642 100.0%	2,847 100.0%	1,258 100.0%	1,346 100.0%	1,325 100.0%

Likelihood of Getting Arrested for Driving Impaired (Q14) by Region and Wave

The perception of the likelihood of getting arrested for driving impaired shows a significant difference by California region. Drivers in Central California stated more frequently, that it is “Very Likely” to get arrested for driving impaired, compared to Northern California drivers, who more frequently believe this to be “Somewhat Likely” or “Somewhat Unlikely”, compared to the other regions (Table Q14, $p<0.00$). In comparison to 2019, the perception of it being “Very Likely” of getting arrested for driving impaired decreased significantly by 6.8% ($p<0.00$).

Table Q14. “How likely is it for someone to get arrested if they drive impaired?” by region and year

Q14 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
Very Likely	274 32.5%	179 49.9%	646 39.3%	1,099 38.6%	571 45.4%	569 42.5%	454 38.7%	519 38.7%	519 41.3%	643 34.7%
Somewhat Likely	393 46.6%	126 35.1%	658 40.0%	1,177 41.4%	394 31.3%	454 33.9%	394 33.2%	446 30.0%	377 30.0%	625 33.7%
Somewhat Unlikely	143 16.9%	39 10.9%	217 13.2%	299 14.0%	213 16.9%	206 15.4%	206 18.1%	243 21.0%	264 21.0%	373 20.1%
Very Unlikely	34 4.0%	15 4.2%	122 7.4%	171 6.0%	81 6.4%	109 8.1%	134 10.0%	97 10.0%	97 7.7%	214 11.5%
Total	844 100.0%	359 100.0%	1,643 100.0%	2,846 100.0%	1,259 100.0%	1,338 100.0%	1,342 100.0%	1,257 100.0%	1,855 100.0%	1,814 100.0%

Perception of Marijuana Impairing Driving Functions (Q15) by Region and Wave

There are no significant differences in the perception of marijuana use impairing driving functions among California drivers compared to 2019, but a slightly higher percentage of drivers in Central California who do not believe that it does ($p<0.05$, Table Q15).

Table Q15. “Do you think marijuana can impair driving related functions, such as reaction time, distance perception, lane tracking, coordination and balance?” by region and year

Q15 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Yes	662 78.5%	287 79.3%	1,322 81.1%	2,271 80.1%	1,019 80.0%	1,048 77.3%
No	59 7.0%	38 10.5%	112 6.9%	209 7.4%	125 9.8%	98 7.2%
It Depends	122 14.5%	37 10.2%	197 12.1%	356 12.6%	130 10.2%	210 15.5%
Total	843 100.0%	362 100.0%	1,631 100.0%	2,836 100.0%	1,274 100.0%	1,356 100.0%

Perception of DUI of Drugs, Legal and Illegal (Q16) by Region and Wave

Over half of all California drivers believe that driving under the influence of drugs is “A Very Big Problem”, comparable to 2019 data (Table Q16).

Table Q16. “How serious of a problem is driving under the influence of drugs: including marijuana, prescription, and illegal?” by region and year

Q16 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015
A Very Big Problem	443 52.8%	200 55.4%	843 51.3%	1,486 52.3%	617 49.6%	664 49.3%	715 53.5%	717 58.1%	980 54.7%
Somewhat of a Problem	296 35.3%	121 33.5%	589 35.9%	1,006 35.4%	353 28.4%	494 36.7%	461 34.5%	381 30.9%	571 31.9%
A Small Problem	87 10.4%	29 8.0%	171 10.4%	287 10.1%	237 19.1%	140 10.4%	122 9.1%	113 9.1%	193 10.8%
Not a Problem at all	13 1.5%	11 3.0%	39 2.4%	63 2.2%	37 3.0%	48 3.6%	39 2.9%	24 1.9%	48 2.7%
Total	839 100.0%	361 100.0%	1,642 100.0%	2,842 100.0%	1,244 100.0%	1,346 100.0%	1,337 100.0%	1,235 100.0%	1,792 100.0%

Safety of Driving 10 Miles Over the Speed Limit on Freeways (Q17) by Region and Wave

There are no significant differences between the California regions on the perception of whether it is safe to drive 10 miles over the speed limit on freeways. There is, however, a significant 23.8% increase of drivers who believe that “It Depends” and a significant 23.6% fewer drivers who believe it is safe compared to 2019($p<0.01$, Table Q17).

Table Q17. “Do you think it’s safe to drive 10 miles over the speed limit on freeways?” by region and year

Q17 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
					2019	2018	2017	2016	2015	2014
Yes	296 35.2%	130 36.0%	597 36.2%	1,023 35.9%	764 59.5%	788 56.9%	879 65.0%	755 59.5%	1,110 57.5%	1,104 59.3%
No	220 26.1%	108 29.9%	414 25.1%	742 26.0%	337 26.2%	183 19.2%	266 18.7%	253 21.7%	275 21.7%	481 24.9%
It Depends	326 38.7%	123 34.1%	638 38.7%	1,087 38.1%	183 14.3%	332 24.0%	220 16.3%	238 18.8%	341 17.7%	449 16.6%
Total	842 100.0%	361 100.0%	1,649 100.0%	2,852 100.0%	1,284 100.0%	1,386 100.0%	1,352 100.0%	1,268 100.0%	1,932 100.0%	1,862 100.0%

Safety of Driving 5 Miles Over the Speed Limit on Residential Streets (Q18) by Region and Wave

Asked whether it is safe to drive five miles over the speed limit on residential streets, drivers in Central California more frequently disagreed ($p<0.05$). Compared to the results of 2019, a significantly fewer percentage of drivers believe it is safe and a significant increase of drivers believe that “It depends” ($p<0.01$, Table Q18).

Table Q18. “Do you think it’s safe to drive five miles over the speed limit on residential streets?” by region and year

Q18 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
					2019	2018	2017	2016	2015	2014
Yes	223 26.6%	81 22.4%	425 25.8%	729 25.6%	506 39.5%	460 33.2%	460 40.3%	545 44.3%	465 36.6%	750 38.8%
No	438 52.3%	211 58.3%	827 50.2%	1,476 51.8%	639 49.8%	701 50.7%	701 44.3%	598 44.3%	585 46.1%	905 46.8%
It Depends	177 21.1%	70 19.3%	396 24.0%	643 22.6%	137 10.7%	223 16.1%	208 15.4%	220 17.3%	279 14.4%	306 16.4%
Total	838 100.0%	362 100.0%	1,648 100.0%	2,848 100.0%	1,282 100.0%	1,384 100.0%	1,351 100.0%	1,270 100.0%	1,934 100.0%	1,861 100.0%

Chance of Being Ticketed for Driving Over Speed Limit (Q19) by Region and Wave

The chances of getting a ticket for driving over the speed limit is perceived similarly among all three regions, with over two-thirds of drivers (67.8%) believing it is “Very Likely” or “Somewhat Likely”. In comparison to the 2019 data, this is a 7.2% significant increase ($p<0.00$, Table Q19).

Table Q19. “What do you think the chances are of getting a ticket if you drive over the speed limit?” by region and year

Q19 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
Very Likely	156 18.7%	91 25.3%	367 22.3%	614 21.6%	345 27.7%	267 20.1%	290 21.6%	267 21.3%	398 21.5%	413 22.5%
Somewhat Likely	401 48.0%	164 45.6%	750 45.5%	1,315 46.2%	410 32.9%	552 41.6%	484 36.0%	460 36.7%	741 40.0%	691 37.6%
Somewhat Unlikely	217 26.2%	79 21.9%	421 25.5%	717 25.2%	354 28.4%	321 24.2%	334 24.9%	341 27.2%	467 25.2%	484 26.4%
Very Unlikely	62 7.4%	26 7.2%	110 6.7%	198 7.0%	138 11.1%	186 14.0%	236 17.6%	186 14.8%	245 13.2%	248 13.5%
Total	836 100.0%	360 100.0%	1,648 100.0%	2,844 100.0%	1,247 100.0%	1,326 100.0%	1,344 100.0%	1,254 100.0%	1,851 100.0%	1,836 100.0%

Perception of driverless vehicles and road safety (Q20) by Region and Wave

Asked whether driverless vehicles will make roads safer, less than a quarter of respondents (24.0%) believed they will. In 2019 over a third of respondents (35.9%) believed that driverless cars make roads safer, which decreased significantly by 11.9% in 2020. However, the 2020 results are similar to the 2017/2018 findings ($p<0.01$, Table Q20).

Table Q20. “Do you think driverless vehicles will make our roadways safer?” by region and year

Q20 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017
Yes	202 24.1%	73 20.3%	408 24.8%	683 24.0%	444 35.9%	319 23.8%	351 27.7%
No	377 45.0%	197 54.9%	736 44.7%	1,310 46.1%	534 43.2%	47.9%	48.5%
It Depends	259 30.9%	89 24.8%	501 30.5%	849 29.9%	258 20.9%	380 28.3%	301 23.8%
Total	838 100.0%	359 100.0%	1,645 100.0%	2,842 100.0%	1,236 100.0%	1,341 100.0%	1,266 100.0%

Sharing roads with driverless vehicles (Q21) by Region and Wave

A total of 57.4% of drivers are “Somewhat Uncomfortable” or “Very Uncomfortable” sharing the road with driverless vehicles, compared to 46.1% of drivers in 2019. The 11.3% increase is significant ($p<0.01$, Table Q21). There are no significant differences between California regions in the perception about driverless cars.

Table Q21. “How comfortable are you about sharing the road with driverless vehicles?” by region and year

Q21 by region	Northern California			Southern California	Total 2020	Total 2019	Total 2018	Total 2017
	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	
Very Comfortable	110 13.2%	51 14.2%	220 13.4%	381 13.4%	246 20.2%	234 17.7%	269 21.0%	
Somewhat Comfortable	267 31.9%	88 24.4%	475 28.9%	830 29.2%	409 33.6%	318 24.0%	287 22.4%	
Somewhat Uncomfortable	266 31.8%	109 30.3%	517 31.4%	892 31.4%	323 26.5%	350 26.4%	279 21.6%	
Very Uncomfortable	193 23.1%	112 31.1%	433 26.3%	738 26.0%	239 19.6%	423 31.9%	449 35.0%	
Total	836 100.0%	360 100.0%	1,645 100.0%	2,841 100.0%	1,217 100.0%	1,325 100.0%	1,284 100.0%	

Perception of Legality for Bikes on Roadways (Q22) by Region and Wave

Less than two-thirds of respondents (63.0%) believe it is legal for bicyclists to ride on roadways when there is no bike lane, with a comparable distribution among regions. Compared to 2019, when 80.2% of the intercept respondents believed this to be legal, the 2020 data shows a 17.2% significant reduction by the online respondents ($p<0.01$, Table Q22).

Table Q22. “Do you think it is legal for bicyclists to ride on roadways when there is no bike lane?” by region and year

Q22 by region	Northern California			Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014
	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018	Total 2017	Total 2016	Total 2015	Total 2014	
Yes	517 62.9%	207 58.8%	1,040 63.9%	1,764 63.0%	993 80.2%	984 73.8%	956 72.2%	838 68.0%	1,260 68.6%	1,204 68.7%	
No	305 37.1%	145 41.2%	588 36.1%	1,038 37.0%	245 19.8%	349 26.2%	369 27.8%	395 32.0%	577 31.4%	549 31.3%	
Total	822 100.0%	352 100.0%	1,628 100.0%	2,802 100.0%	1,238 100.0%	1,333 100.0%	1,325 100.0%	1,233 100.0%	1,837 100.0%	1,753 100.0%	

Level of Comfort Sharing Road with Bicyclists with Bike Lanes (Q23) by Region and Wave

Combined, 72.8% of drivers are “Very Comfortable”, or “Somewhat Comfortable” with sharing the road with bicyclists in bike lanes, similar to the 2019 data and among the California regions (Table Q23).

Table Q23. “How comfortable are you with sharing the road with bicyclists when there IS a designated bike lane?” by region and year

Q23 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Very Comfortable	302 36.0%	137 37.7%	595 36.0%	1,034 36.2%	570 45.1%	634 46.3%
Somewhat Comfortable	300 35.7%	141 38.8%	604 36.6%	1,045 36.6%	395 31.3%	369 27.0%
Somewhat Uncomfortable	158 18.8%	68 18.7%	280 17.0%	506 17.7%	171 13.5%	205 15.0%
Very Uncomfortable	80 9.5%	17 4.7%	172 10.4%	269 9.4%	127 10.1%	160 11.7%
Total	840 100.0%	363 100.0%	1,651 100.0%	2,854 100.0%	1,263 100.0%	1,368 100.0%

Sharing Road with Bicyclists without Bike Lane (Q24) by Region and Wave

Sharing the road with bicyclists without a bike lane by region and compared to previous waves of data collection is shown in Table Q24. A total of 61.3% of respondents were “Somewhat Uncomfortable” or “Very Uncomfortable” sharing the road with bicyclists, without a bike lane compared to 51.2% in 2019. The 10.1% increase is significant ($p<0.01$).

Table Q24. “How comfortable are you with sharing the road with bicyclists when there ISN’T a designated bike lane?” by region and year

Q24 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Very Comfortable	119 14.2%	60 16.7%	217 13.2%	396 13.9%	289 22.9%	237 17.4%
Somewhat Comfortable	201 23.9%	84 23.3%	417 25.4%	702 24.7%	327 25.9%	329 24.2%
Somewhat Uncomfortable	265 31.5%	106 29.4%	516 31.5%	887 31.2%	281 22.3%	348 25.6%
Very Uncomfortable	255 30.4%	110 30.6%	490 29.9%	855 30.1%	364 28.9%	446 32.8%
Total	840 100.0%	360 100.0%	1,640 100.0%	2,840 100.0%	1,261 100.0%	1,360 100.0%

Safety Problems Experienced as Pedestrian or Bicyclist (Q25)

The safety problems respondents experienced as a pedestrian or bicyclist were coded from multiple-choices answers into the coding categories outlined in Table Q25_1, with added categories highlighted in blue.

Table Q25_1. “Think of the times you have been a pedestrian or bicyclist in the last 6 months. What safety problems did you experience, if any?” Coding Categories

Distracted Drivers (cell phones)	
Cars not stopping	
Cars going too fast	
Bicyclists not stopping	
Lots of traffic	
Almost getting hit by a car	Drivers don't see or look for pedestrians
Lack of sidewalks	Drivers not paying attention
NONE	Drivers stopping in the crosswalk
Other	No bike lanes

In total, 7,736 responses were provided, and the most frequently indicated safety problem was “Cars going too fast”, which accounted for 20.7% of answers and was mentioned by 56.4% of all respondents. This was followed by “Cars not stopping”, mentioned by 49.5% of drivers and “Distracted driver” due to cell phone” mentioned by 44.0% of drivers (Table Q25_2).

Table Q25_2. Frequencies Q25 by percent of answers and percent of drivers

Q25 all answers combined	Count	% of answers	% of Drivers 2020
Cars going too fast	1,598	20.7%	56.4%
Cars not stopping	1,403	18.1%	49.5%
Distracted drivers (cell phones)	1,246	16.1%	44.0%
Lack of sidewalks	858	11.1%	30.3%
Almost getting hit by car	741	9.6%	26.1%
Lots of traffic	791	10.2%	27.9%
Bicyclists not stopping	718	9.3%	25.3%
NONE	320	4.1%	11.3%
Other	50	0.6%	1.8%
Drivers don't see or look for pedestrians	3	0.0%	0.1%
Drivers not paying attention	1	0.0%	0.0%
Drivers stopping in the crosswalk	4	0.0%	0.1%
No bike lanes	4	0.1%	0.2%
Total	7,736	100.0%	273.0%

Safety Problems Experienced as Pedestrian or Bicyclist (Q25) by Region and Wave

The safety problems experienced as pedestrians or bicyclist by California region and survey year is shown in Table Q25_3, with comparable results among regions and compared to the 2019 data.

Table Q25_3. “Think of the times you have been a pedestrian or bicyclist in the last 6 months. What safety problems did you experience, if any?” by region and year

Q25 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Cars going too fast	488 20.9%	198 20.8%	912 20.5%	1,598 20.7%	336 17.7%	239 12.3%
Cars not stopping	442 19.0%	159 16.7%	802 18.0%	1,403 18.1%	432 22.8%	336 17.3%
Distracted drivers (cell phones)	348 14.9%	168 17.7%	730 16.4%	1,246 16.1%	348 18.4%	426 21.9%
Lack of sidewalks	269 11.5%	124 13.0%	464 10.4%	858 11.1%	37 2.0%	52 2.7%
Almost getting hit by a car	219 9.4%	85 9.0%	437 9.8%	741 9.6%	197 10.4%	185 9.5%
Lots of traffic	228 9.8%	88 9.2%	475 10.7%	791 10.2%	98 5.2%	106 5.5%
Bicyclists not stopping	249 10.7%	73 7.7%	396 8.9%	718 9.3%	69 3.6%	67 3.5%
NONE	71 3.0%	53 5.6%	196 4.4%	320 4.1%	308 16.3%	352 18.1%
Other	14 0.6%	3 0.3%	33 0.7%	50 0.6%	28 1.5%	101 5.2%
Drivers stopping in the crosswalk	0 0.0%	1 0.1%	3 0.1%	4 0.0%	10 0.5%	15 0.8%
Drivers don't see or look for pedestrians	2 0.2%	0 0.0%	1 0.0%	3 0.0%	7 0.4%	17 0.9%
Drivers not paying attention	0 0.0%	0 0.0%	1 0.0%	1 0.0%	5 0.3%	19 1.0%
No bike lanes	2 0.1%	0 0.0%	2 0.1%	4 0.0%	3 0.2%	10 0.5%
Total	2,333 100.0%	952 100.0%	4,451 100.0%	7,736 100.0%	1,894 100.0%	1,942 100.0%

Safety Problems Experienced as Driver around Pedestrians and Bicyclists (Q26)

The safety problems experienced around pedestrians and bicyclists as a driver is outlined in Table Q26_1, based on 8,725 responses. The most frequently mentioned answer was “Pedestrians not using crosswalk”, which was given by 56.6% of all respondents.

Table Q26 1. Frequencies Q26 by percent of answers and percent of drivers

Q26 all answers combined	Count	% of answers	% of Drivers 2020
Pedestrians not using crosswalks	1,612	18.5%	56.6%
Pedestrians stepping off curb without looking	1,453	16.7%	51.1%
Pedestrians/cyclists not being visible enough	1,143	13.1%	40.2%
Pedestrians/cyclists distracted behavior (phones, ear pods, headsets)	1,174	13.5%	41.2%
Cyclists not stopping at stop signs or traffic lights	1,385	15.9%	48.7%
Cyclists being in the road or blocking traffic	1,047	12.0%	36.8%
Lack of sidewalks or clear cross walks	652	7.5%	22.9%
None	223	2.6%	7.9%
Other	36	0.4%	1.3%
Total	8,725	100.0%	306.6%

Safety Problems Experienced as Driver around Pedestrians and Bicyclists (Q26) by Region and Wave

The safety problems experienced as a driver around pedestrians and bicyclists by California region shows a comparable distribution of answers and comparable results to 2019 data, with the exception of much fewer respondents in 2020 believing that there is no problem (Table Q26_2).

Table Q26_2. “Think of the times you have been a DRIVER around pedestrian or bicyclist in the last 6 months. What safety problems did you experience, if any?” by region and year

Q26 by region	Northern California	Central California	Southern California	Total 2020	Total 2019	Total 2018
Pedestrians not using crosswalks	473 18.2%	217 19.4%	922 18.4%	1,612 18.5%	300 15.2%	294 14.8%
Pedestrians stepping off curb without looking	433 16.7%	183 16.4%	836 16.7%	1,453 16.7%	321 16.2%	179 9.0%
Cyclists not stopping at stop signs or traffic lights	465 17.9%	173 15.4%	747 14.9%	1,385 15.9%	321 10.7%	179 10.6%
Pedestrians/cyclists distracted behavior (phones, ear pods, headsets)	355 13.7%	146 13.1%	672 13.4%	1,174 13.5%	332 16.8%	264 13.3%
Pedestrians/cyclists not being visible enough	330 12.7%	147 13.1%	665 13.3%	1,143 13.1%	194 9.8%	169 8.5%
Cyclists being in the road or blocking traffic	302 11.6%	126 11.2%	619 12.4%	1,047 12.0%	269 13.6%	187 9.4%
Lack of sidewalks or clear cross walks	174 6.7%	98 8.8%	380 7.6%	652 7.5%	38 1.9%	108 5.5%
NONE	54 2.1%	27 2.4%	142 2.8%	223 2.6%	242 12.2%	356 18.0%
Other	12 0.4%	2 0.1%	23 0.5%	36 0.4%	47 2.4%	76 3.8%
Total	2,598 100.0%	1,119 100.0%	5,008 100.0%	8,725 100.0%	1,979 100.0%	1,942 100.0%