

## **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

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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).

|                                   | Recall Rate | Recall Rate | Recall Rate | Recall Rate |
|-----------------------------------|-------------|-------------|-------------|-------------|
| Campaign                          | 2020        | 2019        | 2018        | 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 to 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

|              |        |        |       |         |         | Weighted |        |        |
|--------------|--------|--------|-------|---------|---------|----------|--------|--------|
|              | Census | Data*  | Surve | ey Data | Weights |          | Survey |        |
| Age<br>Range | 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%  |

<sup>\*</sup>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

$$W_p = \frac{\text{Percent of Population}}{\text{Percent of Respondents}} = \frac{P_i}{R_{lotal}}$$

## **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

|                     | 00-1      |           |               |         |  |  |
|---------------------|-----------|-----------|---------------|---------|--|--|
| 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 Califo | ornia          | Southern California |                |         |
|----------------|----------------|---------------------|----------------|---------|
| Calaveras      | Merced         | Santa Cruz          | Imperial       | Ventura |
| Fresno         | Monterey       | Stanislaus          | Los Angeles    |         |
| Kern           | San Benito     | Tulare              | Orange         |         |
| Kings          | San Joaquin    | Tuolumne            | Riverside      |         |
| Madera         | San Luis Obisp | 00                  | San Bernardino | )       |
| Mariposa       | Santa Barbara  |                     | San Diego      |         |

Table R2 shows the number of completed surveys by county.

| County        | Northern<br>California | Total | County          | Central<br>California | Total | County            | Southern California |
|---------------|------------------------|-------|-----------------|-----------------------|-------|-------------------|---------------------|
| Alameda       | 122                    | 4.3%  | Calaveras       | 5                     | 0.2%  | Imperial          | 5                   |
| Alpine        | 11                     | 0.4%  | Fresno          | 92                    | 3.2%  | Los Angeles       | 859                 |
| Amador        | 7                      | 0.2%  | Kern            | 49                    | 1.7%  | Orange            | 223                 |
| Butte         | 21                     | 0.7%  | Kings           | 4                     | 0.1%  | Riverside         | 120                 |
| Contra Costa  | 71                     | 2.5%  | Madera          | 7                     | 0.2%  | San<br>Bernardino | 142                 |
| Del Norte     | 9                      | 0.3%  | Mariposa        | 2                     | 0.1%  | San Diego         | 243                 |
| El Dorado     | 15                     | 0.5%  | Merced          | 8                     | 0.3%  | Ventura           | 46                  |
| 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%  |                 |                       |       |                   |                     |
|               |                        |       | i               |                       |       |                   |                     |

0.1%

0.6%

0.1%

4

18

15

856

29.9%

Sutter

All other

% of total

Yolo

Total

Total

0.2%

30.0%

7.8%

4.2%

5.0%

8.5%

1.6%

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<br>Completes | Percent | Weighted<br>Percent | 2019<br>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<br>California | Central<br>California | Southern<br>California | Total  | 2019<br>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<br>California | Central<br>California | Southern<br>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, | Not Signaling Lane Change/Merging |
| grooming, adjusting radio/stereo)              | 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<br>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               | % answers<br>2020 | % answers<br>2019 | % answers<br>2018 | % answers<br>2017 | % answers<br>2016 | % answers<br>2015 | % answers<br>2014 | % answers<br>2013 | % answers<br>2012 | % answers<br>2011 | % answers<br>2010 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 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%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 100.0%            | 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<br>California | Central<br>California | Southern<br>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<br>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                           | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 | Total<br>2013 | Total<br>2012 | Total<br>2011 | Total<br>2010 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 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%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>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<br>Region | Northern<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 |
|-----------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|
| Pogularly       | 120                    | 52                    | 256                    | 428           | 458           | 443           |
| Regularly       | 14.3%                  | 14.4%                 | 15.6%                  | 15.1%         | 35.4%         | 32.0%         |
| Sometimes       | 159                    | 61                    | 308                    | 528           | 380           | 295           |
| Sometimes       | 19.0%                  | 16.9%                 | 18.7%                  | 18.6%         | 29.4%         | 21.3%         |
| Rarely          | 252                    | 104                   | 516                    | 872           | 268           | 298           |
| Karely          | 30.0%                  | 28.8%                 | 31.4%                  | 30.7%         | 20.7%         | 21.5%         |
| Nover           | 308                    | 144                   | 563                    | 1,015         | 188           | 348           |
| Never           | 36.7%                  | 39.9%                 | 34.3%                  | 35.7%         | 14.5%         | 25.1%         |
| Total           | 839                    | 361                   | 1,643                  | 2,843         | 1,294         | 1,384         |
| TOLAT           | 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 | Total  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| year  | 2020   | 2019   | 2018   | 2017   | 2016   | 2015   | 2014   | 2013   | 2012   | 2011   | 2010   |
| Yes   | 1,263  | 665    | 634    | 670    | 550    | 744    | 858    | 866    | 827    | 802    | 766    |
| 165   | 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    |
| No    | 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% |

## 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 | Total  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| year  | 2020   | 2019   | 2018   | 2017   | 2016   | 2015   | 2014   | 2013   | 2012   | 2011   | 2010   |
| Voc   | 1,466  | 739    | 852    | 827    | 685    | 1,117  | 1,098  | 421    | 1,067  | 1,038  | 912    |
| Yes   | 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    |
| No    | 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% |

### 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

| O7 by year     | Total  |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Q7 by year     | 2020   | 2019   | 2018   | 2017   | 2016   | 2015   | 2014   | 2013   | 2012   |
| Very Likely    | 679    | 269    | 314    | 287    | 272    | 444    | 424    | 493    | 368    |
| very Likely    | 23.9%  | 21.0%  | 23.0%  | 21.2%  | 21.5%  | 23.4%  | 23.4%  | 26.3%  | 20.1%  |
| Somewhat       | 792    | 288    | 344    | 277    | 265    | 459    | 416    | 599    | 570    |
| Likely         | 27.9%  | 22.4%  | 25.1%  | 20.4%  | 21.0%  | 24.2%  | 23.0%  | 31.9%  | 31.2%  |
| Neither Likely | 391    | 228    | 168    | 197    | 150    | 218    | 210    | 131    | 154    |
| or Unlikely    | 13.8%  | 17.8%  | 12.3%  | 14.5%  | 11.9%  | 11.5%  | 11.6%  | 7.0%   | 8.4%   |
| Somewhat       | 425    | 261    | 250    | 262    | 256    | 361    | 376    | 306    | 356    |
| Unlikely       | 15.0%  | 20.3%  | 18.3%  | 19.3%  | 20.3%  | 19.1%  | 20.8%  | 16.3%  | 19.5%  |
| VoncHalikoly   | 555    | 238    | 292    | 333    | 320    | 412    | 385    | 349    | 379    |
| Very Unlikely  | 19.5%  | 18.5%  | 21.3%  | 24.6%  | 25.3%  | 21.8%  | 21.3%  | 18.6%  | 20.7%  |
| Total          | 2,841  | 1,284  | 1,395  | 1,356  | 1,263  | 1,894  | 1,811  | 1,878  | 1,827  |
| TULAI          | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|
| Yes           | 199                    | 102                   | 443                    | 744           | 207           |
| 165           | 27.7%                  | 32.1%                 | 31.1%                  | 30.2%         | 16.4%         |
| No            | 519                    | 216                   | 981                    | 1,716         | 1052          |
| No            | 72.3%                  | 67.9%                 | 68.9%                  | 69.8%         | 83.6%         |
| Total         | 718                    | 318                   | 1,424                  | 2,460         | 1,259         |
| IUlai         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|
| Vaa           | 380                    | 177                   | 749                    | 1,306         | 439           | 577           | 518           | 515           |
| Yes           | 50.3%                  | 52.5%                 | 49.7%                  | 50.3%         | 34.8%         | 42.5%         | 38.4%         | 40.8%         |
| No            | 375                    | 160                   | 757                    | 1,292         | 821           | 781           | 830           | 747           |
| NO            | 49.7%                  | 47.5%                 | 50.3%                  | 49.7%         | 65.2%         | 57.5%         | 61.6%         | 59.2%         |
| Total         | 755                    | 337                   | 1,506                  | 2,598         | 1,260         | 1,358         | 1,348         | 1,262         |
| TOLAI         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|
| Yes           | 149                    | 57                    | 233                    | 439           | 206           | 183           | 229           |
| res           | 19.5%                  | 17.5%                 | 15.1%                  | 16.7%         | 16.3%         | 13.5%         | 17.1%         |
| No            | 614                    | 269                   | 1,313                  | 2,196         | 1,055         | 1,172         | 1,113         |
| INO           | 80.5%                  | 82.5%                 | 84.9%                  | 83.3%         | 83.7%         | 86.5%         | 82.9%         |
| Total         | 763                    | 326                   | 1,546                  | 2,635         | 1,261         | 1,355         | 1,342         |
| TOLAI         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br><b>201</b> 9 | Total<br>2018 | Total<br>2017 |
|---------------|------------------------|-----------------------|------------------------|---------------|-----------------------|---------------|---------------|
| Vos           | 337                    | 157                   | 597                    | 1,091         | 376                   | 585           | 394           |
| Yes           | 43.3%                  | 46.4%                 | 39.6%                  | 41.5%         | 30.1%                 | 43.0%         | 29.3%         |
| No            | 442                    | 181                   | 912                    | 1,535         | 874                   | 775           | 950           |
| No            | 56.7%                  | 53.6%                 | 60.4%                  | 58.5%         | 69.9%                 | 57.0%         | 70.7%         |
| Total         | 779                    | 338                   | 1,509                  | 2,626         | 1,250                 | 1,360         | 1,344         |
| Total         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%                | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|
| Vos           | 218                    | 96                    | 486                    | 800           | 213           | 398           |
| Yes           | 27.9%                  | 29.0%                 | 32.0%                  | 30.4%         | 17.1%         | 29.4%         |
| No            | 564                    | 235                   | 1031                   | 1,830         | 1,035         | 954           |
| No            | 72.1%                  | 71.0%                 | 68.0%                  | 69.6%         | 82.9%         | 70.6%         |
| Total         | 782                    | 331                   | 1,517                  | 2,630         | 1,248         | 1,352         |
| IUlai         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 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<br>Pulled Over | Pedestrians Don't<br>Have Armor | DUI Doesn't Just<br>Mean Booze | Put Your Phone<br>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  |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Q9 by year   | 2020   | 2019   | 2018   | 2017   | 2016   | 2015   | 2014   | 2013   | 2012   | 2011   | 2010   |
| Yes          | 223    | 95     | 88     | 137    | 83     | 138    | 162    | 119    | 102    | 120    | 99     |
| 163          | 7.8%   | 7.3%   | 6.3%   | 10.1%  | 6.6%   | 7.2%   | 8.8%   | 6.2%   | 5.5%   | 6.7%   | 6.0%   |
| No           | 1,945  | 766    | 980    | 918    | 816    | 1,264  | 1,258  | 1,452  | 1,263  | 1,267  | 1,214  |
| INO          | 68.2%  | 59.2%  | 70.5%  | 67.4%  | 64.5%  | 65.6%  | 68.3%  | 75.3%  | 68.6%  | 70.7%  | 73.5%  |
| I do not     | 685    | 433    | 322    | 307    | 367    | 525    | 422    | 358    | 475    | 405    | 338    |
| drink at all | 24.0%  | 33.5%  | 23.2%  | 22.5%  | 29.0%  | 27.2%  | 22.9%  | 18.6%  | 25.8%  | 22.6%  | 20.5%  |
| Total        | 2,853  | 1,294  | 1,390  | 1,362  | 1,266  | 1,927  | 1,842  | 1,929  | 1,840  | 1,792  | 1,671  |
| Total        | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 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        | Northern   | Central    | Southern   |
|--------------|------------|------------|------------|
| region       | California | California | California |
| Yes          | 63         | 28         | 132        |
| res          | 7.5%       | 7.7%       | 8.0%       |
| No           | 584        | 230        | 1,131      |
| INO          | 69.4%      | 63.5%      | 68.5%      |
| I do not     | 194        | 104        | 387        |
| drink at all | 23.1%      | 28.7%      | 23.5%      |
| Total        | 841        | 362        | 1,650      |
| Total        | 100.0%     | 100.0%     | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Almone        | 137                    | 47                    | 273                    | 457           | 316           | 330           | 278           | 187           | 319           | 150           |
| Always        | 21.2%                  | 18.6%                 | 21.7%                  | 21.2%         | 37.1%         | 31.2%         | 26.4%         | 20.8%         | 22.9%         | 10.6%         |
| Comotimos     | 102                    | 44                    | 243                    | 389           | 217           | 240           | 188           | 162           | 177           | 179           |
| Sometimes     | 15.8%                  | 17.4%                 | 19.3%                  | 18.1%         | 25.5%         | 22.7%         | 17.8%         | 18.0%         | 12.7%         | 12.7%         |
| Daroly        | 85                     | 28                    | 159                    | 272           | 88            | 115           | 147           | 111           | 184           | 189           |
| Rarely        | 13.2%                  | 11.1%                 | 12.7%                  | 12.6%         | 10.3%         | 10.9%         | 13.9%         | 12.3%         | 13.2%         | 13.4%         |
| Navan         | 321                    | 134                   | 581                    | 1,036         | 230           | 372           | 442           | 439           | 710           | 894           |
| Never         | 49.8%                  | 53.0%                 | 46.3%                  | 48.1%         | 27.0%         | 35.2%         | 41.9%         | 48.8%         | 51.1%         | 63.3%         |
| Total         | 645                    | 253                   | 1,256                  | 2,154         | 851           | 1,057         | 1,055         | 899           | 1,390         | 1,412         |
| Total         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        |

## Designated Sober Driver (QII) 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<br>region | Northern<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 |
|------------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Almania          | 214                    | 88                    | 409                    | 711           | 322           | 355           | 249           | 223           | 585           | 525           |
| Always           | 33.2%                  | 33.8%                 | 32.4%                  | 32.8%         | 38.5%         | 33.6%         | 23.6%         | 24.9%         | 42.2%         | 28.5%         |
| Comotinos        | 120                    | 44                    | 236                    | 400           | 213           | 248           | 222           | 184           | 226           | 338           |
| Sometimes        | 18.6%                  | 16.9%                 | 18.7%                  | 18.5%         | 25.4%         | 23.5%         | 21.1%         | 20.6%         | 16.3%         | 18.3%         |
| Daraly           | 72                     | 24                    | 144                    | 240           | 101           | 135           | 170           | 140           | 154           | 192           |
| Rarely           | 11.1%                  | 9.2%                  | 11.4%                  | 11.1%         | 12.1%         | 12.8%         | 16.1%         | 15.6%         | 11.1%         | 10.4%         |
| Nover            | 239                    | 104                   | 472                    | 815           | 201           | 317           | 413           | 348           | 421           | 790           |
| Never            | 37.1%                  | 40.0%                 | 37.4%                  | 37.6%         | 24.0%         | 30.0%         | 39.2%         | 38.9%         | 30.4%         | 42.8%         |
| Total            | 645                    | 260                   | 1,261                  | 2,166         | 837           | 1,055         | 1,054         | 895           | 1,386         | 1,845         |
| Total            | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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?"

<u>by year</u>

| Q12<br>by year | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 | Total<br>2013 | Total<br>2012 | Total<br>2011 | Total<br>2010 |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Yes            | 1,415         | 489           | 593           | 706           | 735           | 1,094         | 1,327         | 993           | 1,263         | 1,300         | 1,006         |
| 163            | 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           |
| INO            | 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%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California |
|---------------|------------------------|-----------------------|------------------------|
| Yes           | 394                    | 209                   | 811                    |
| 165           | 53.5%                  | 64.1%                 | 54.6%                  |
| No            | 343                    | 117                   | 674                    |
| INO           | 46.5%                  | 35.9%                 | 45.4%                  |
| Total         | 737                    | 326                   | 1,485                  |
| TOLAI         | 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   | Central    | Southern   | Total  | Total  | Total  | Total  |
|---------------|------------|------------|------------|--------|--------|--------|--------|
| Q13 by region | California | California | California | 2020   | 2019   | 2018   | 2017   |
| Yes           | 757        | 330        | 1,485      | 2,572  | 1,132  | 1,263  | 1,209  |
| 165           | 89.8%      | 91.2%      | 90.4%      | 90.3%  | 90.0%  | 93.8%  | 91.2%  |
| No            | 86         | 32         | 157        | 275    | 126    | 83     | 116    |
| NO            | 10.2%      | 8.8%       | 9.6%       | 9.7%   | 10.0%  | 6.2%   | 8.8%   |
| Total         | 843        | 362        | 1,642      | 2,847  | 1,258  | 1,346  | 1,325  |
| TOLAI         | 100.0%     | 100.0%     | 100.0%     | 100.0% | 100.0% | 100.0% | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 |
|-----------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                 | 274                    | 179                   | 646                    | 1,099         | 571           | 569           | 519           | 519           | 643           | 808           |
| Very Likely     | 32.5%                  | 49.9%                 | 39.3%                  | 38.6%         | 45.4%         | 42.5%         | 38.7%         | 41.3%         | 34.7%         | 44.5%         |
| Comowhat Likely | 393                    | 126                   | 658                    | 1,177         | 394           | 454           | 446           | 377           | 625           | 515           |
| Somewhat Likely | 46.6%                  | 35.1%                 | 40.0%                  | 41.4%         | 31.3%         | 33.9%         | 33.2%         | 30.0%         | 33.7%         | 28.4%         |
| Somewhat        | 143                    | 39                    | 217                    | 299           | 213           | 206           | 243           | 264           | 373           | 316           |
| Unlikely        | 16.9%                  | 10.9%                 | 13.2%                  | 14.0%         | 16.9%         | 15.4%         | 18.1%         | 21.0%         | 20.1%         | 17.4%         |
| Very Unlikely   | 34                     | 15                    | 122                    | 171           | 81            | 109           | 134           | 97            | 214           | 175           |
| very offlikely  | 4.0%                   | 4.2%                  | 7.4%                   | 6.0%          | 6.4%          | 8.1%          | 10.0%         | 7.7%          | 11.5%         | 9.6%          |
| Total           | 844                    | 359                   | 1,643                  | 2,846         | 1,259         | 1,338         | 1,342         | 1,257         | 1,855         | 1,814         |
| IUlai           | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|
| Yes           | 662                    | 287                   | 1,322                  | 2,271         | 1,019         | 1,048         |
| 163           | 78.5%                  | 79.3%                 | 81.1%                  | 80.1%         | 80.0%         | 77.3%         |
| No            | 59                     | 38                    | 112                    | 209           | 125           | 98            |
| No            | 7.0%                   | 10.5%                 | 6.9%                   | 7.4%          | 9.8%          | 7.2%          |
| It Donands    | 122                    | 37                    | 197                    | 356           | 130           | 210           |
| It Depends    | 14.5%                  | 10.2%                 | 12.1%                  | 12.6%         | 10.2%         | 15.5%         |
| Total         | 843                    | 362                   | 1,631                  | 2,836         | 1,274         | 1,356         |
| Total         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020   | Total<br>2019   | Total<br>2018   | Total<br>2017   | Total<br>2016   | Total<br>2015   |
|---------------|------------------------|-----------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| A Very Big    | 443                    | 200                   | 843                    | 1,486           | 617             | 664             | 715             | 717             | 980             |
| Problem       | 52.8%                  | 55.4%                 | 51.3%                  | 52.3%           | 49.6%           | 49.3%           | 53.5%           | 58.1%           | 54.7%           |
| Somewhat of a | 296                    | 121                   | 589                    | 1,006           | 353             | 494             | 461             | 381             | 571             |
| Problem       | 35.3%                  | 33.5%                 | 35.9%                  | 35.4%           | 28.4%           | 36.7%           | 34.5%           | 30.9%           | 31.9%           |
| A Small       | 87                     | 29                    | 171                    | 287             | 237             | 140             | 122             | 113             | 193             |
| Problem       | 10.4%                  | 8.0%                  | 10.4%                  | 10.1%           | 19.1%           | 10.4%           | 9.1%            | 9.1%            | 10.8%           |
| Not a Problem | 13                     | 11                    | 39                     | 63              | 37              | 48              | 39              | 24              | 48              |
| at all        | 1.5%                   | 3.0%                  | 2.4%                   | 2.2%            | 3.0%            | 3.6%            | 2.9%            | 1.9%            | 2.7%            |
| Total         | 839<br>100.0%          | 361<br>100.0%         | 1,642<br>100.0%        | 2,842<br>100.0% | 1,244<br>100.0% | 1,346<br>100.0% | 1,337<br>100.0% | 1,235<br>100.0% | 1,792<br>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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Yes           | 296                    | 130                   | 597                    | 1,023         | 764           | 788           | 879           | 755           | 1,110         | 1,104         |
| 163           | 35.2%                  | 36.0%                 | 36.2%                  | 35.9%         | 59.5%         | 56.9%         | 65.0%         | 59.5%         | 57.5%         | 59.3%         |
| No            | 220                    | 108                   | 414                    | 742           | 337           | 266           | 253           | 275           | 481           | 449           |
| No            | 26.1%                  | 29.9%                 | 25.1%                  | 26.0%         | 26.2%         | 19.2%         | 18.7%         | 21.7%         | 24.9%         | 24.1%         |
| It Danands    | 326                    | 123                   | 638                    | 1,087         | 183           | 332           | 220           | 238           | 341           | 309           |
| It Depends    | 38.7%                  | 34.1%                 | 38.7%                  | 38.1%         | 14.3%         | 24.0%         | 16.3%         | 18.8%         | 17.7%         | 16.6%         |
| Total         | 842                    | 361                   | 1,649                  | 2,852         | 1,284         | 1,386         | 1,352         | 1,268         | 1,932         | 1,862         |
| Total         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 | Total<br>2016 | Total<br>2015 | Total<br>2014 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Yes           | 223                    | 81                    | 425                    | 729           | 506           | 460           | 545           | 465           | 750           | 577           |
| 162           | 26.6%                  | 22.4%                 | 25.8%                  | 25.6%         | 39.5%         | 33.2%         | 40.3%         | 36.6%         | 38.8%         | 31.0%         |
| No            | 438                    | 211                   | 827                    | 1,476         | 639           | 701           | 598           | 585           | 905           | 978           |
| No            | 52.3%                  | 58.3%                 | 50.2%                  | 51.8%         | 49.8%         | 50.7%         | 44.3%         | 46.1%         | 46.8%         | 52.6%         |
| It depends    | 177                    | 70                    | 396                    | 643           | 137           | 223           | 208           | 220           | 279           | 306           |
| It depends    | 21.1%                  | 19.3%                 | 24.0%                  | 22.6%         | 10.7%         | 16.1%         | 15.4%         | 17.3%         | 14.4%         | 16.4%         |
| Total         | 838                    | 362                   | 1,648                  | 2,848         | 1,282         | 1,384         | 1,351         | 1,270         | 1,934         | 1,861         |
| TOLAI         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 100.0%        | 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<br>California | Central<br>California | Southern<br>California | Total<br>2020   | Total<br>2019   | Total<br>2018   | Total<br>2017   | Total<br>2016   | Total<br>2015   | Total<br>2014   |
|---------------|------------------------|-----------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Vorulikoly    | 156                    | 91                    | 367                    | 614             | 345             | 267             | 290             | 267             | 398             | 413             |
| Very Likely   | 18.7%                  | 25.3%                 | 22.3%                  | 21.6%           | 27.7%           | 20.1%           | 21.6%           | 21.3%           | 21.5%           | 22.5%           |
| Somewhat      | 401                    | 164                   | 750                    | 1,315           | 410             | 552             | 484             | 460             | 741             | 691             |
| Likely        | 48.0%                  | 45.6%                 | 45.5%                  | 46.2%           | 32.9%           | 41.6%           | 36.0%           | 36.7%           | 40.0%           | 37.6%           |
| Somewhat      | 217                    | 79                    | 421                    | 717             | 354             | 321             | 334             | 341             | 467             | 484             |
| Unlikely      | 26.2%                  | 21.9%                 | 25.5%                  | 25.2%           | 28.4%           | 24.2%           | 24.9%           | 27.2%           | 25.2%           | 26.4%           |
| Vorullalikoly | 62                     | 26                    | 110                    | 198             | 138             | 186             | 236             | 186             | 245             | 248             |
| Very Unlikely | 7.4%                   | 7.2%                  | 6.7%                   | 7.0%            | 11.1%           | 14.0%           | 17.6%           | 14.8%           | 13.2%           | 13.5%           |
| Total         | 836<br>100.0%          | 360<br>100.0%         | 1,648<br>100.0%        | 2,844<br>100.0% | 1,247<br>100.0% | 1,326<br>100.0% | 1,344<br>100.0% | 1,254<br>100.0% | 1,851<br>100.0% | 1,836<br>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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 | Total<br>2017 |
|---------------|------------------------|-----------------------|------------------------|---------------|---------------|---------------|---------------|
| Yes           | 202                    | 73                    | 408                    | 683           | 444           | 319           | 351           |
| 162           | 24.1%                  | 20.3%                 | 24.8%                  | 24.0%         | 35.9%         | 23.8%         | 27.7%         |
| No            | 377                    | 197                   | 736                    | 1,310         | 534           | 642           | 614           |
| No            | 45.0%                  | 54.9%                 | 44.7%                  | 46.1%         | 43.2%         | 47.9%         | 48.5%         |
| It Donands    | 259                    | 89                    | 501                    | 849           | 258           | 380           | 301           |
| It Depends    | 30.9%                  | 24.8%                 | 30.5%                  | 29.9%         | 20.9%         | 28.3%         | 23.8%         |
| Total         | 838                    | 359                   | 1,645                  | 2,842         | 1,236         | 1,341         | 1,266         |
| Total         | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        | 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

| O21 by region            | Northern   | Central    | Southern   | Total  | Total  | Total  | Total  |
|--------------------------|------------|------------|------------|--------|--------|--------|--------|
| Q21 by region            | California | California | California | 2020   | 2019   | 2018   | 2017   |
| Very Comfortable         | 110        | 51         | 220        | 381    | 246    | 234    | 269    |
| very conflortable        | 13.2%      | 14.2%      | 13.4%      | 13.4%  | 20.2%  | 17.7%  | 21.0%  |
| Somewhat Comfortable     | 267        | 88         | 475        | 830    | 409    | 318    | 287    |
| Somewhat Comfortable     | 31.9%      | 24.4%      | 28.9%      | 29.2%  | 33.6%  | 24.0%  | 22.4%  |
| Somewhat Uncomfortable   | 266        | 109        | 517        | 892    | 323    | 350    | 279    |
| Somewhat Officonhortable | 31.8%      | 30.3%      | 31.4%      | 31.4%  | 26.5%  | 26.4%  | 21.6%  |
| Vary Uncomfortable       | 193        | 112        | 433        | 738    | 239    | 423    | 449    |
| Very Uncomfortable       | 23.1%      | 31.1%      | 26.3%      | 26.0%  | 19.6%  | 31.9%  | 35.0%  |
| Total                    | 836        | 360        | 1,645      | 2,841  | 1,217  | 1,325  | 1,284  |
| lotai                    | 100.0%     | 100.0%     | 100.0%     | 100.0% | 100.0% | 100.0% | 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 | Northern   | Central    | Southern   | Total  |
|--------|------------|------------|------------|--------|--------|--------|--------|--------|--------|--------|
| region | California | California | California | 2020   | 2019   | 2018   | 2017   | 2016   | 2015   | 2014   |
| Voc    | 517        | 207        | 1,040      | 1,764  | 993    | 984    | 956    | 838    | 1,260  | 1,204  |
| Yes    | 62.9%      | 58.8%      | 63.9%      | 63.0%  | 80.2%  | 73.8%  | 72.2%  | 68.0%  | 68.6%  | 68.7%  |
| No     | 305        | 145        | 588        | 1,038  | 245    | 349    | 369    | 395    | 577    | 549    |
| No     | 37.1%      | 41.2%      | 36.1%      | 37.0%  | 19.8%  | 26.2%  | 27.8%  | 32.0%  | 31.4%  | 31.3%  |
| Tatal  | 822        | 352        | 1,628      | 2,802  | 1,238  | 1,333  | 1,325  | 1,233  | 1,837  | 1,753  |
| Total  | 100.0%     | 100.0%     | 100.0%     | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 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   | Central    | Southern   | Total  | Total  | Total  |
|-------------------|------------|------------|------------|--------|--------|--------|
| Q23 by region     | California | California | California | 2020   | 2019   | 2018   |
| Vam. Camafamtable | 302        | 137        | 595        | 1,034  | 570    | 634    |
| Very Comfortable  | 36.0%      | 37.7%      | 36.0%      | 36.2%  | 45.1%  | 46.3%  |
| Somewhat          | 300        | 141        | 604        | 1,045  | 395    | 369    |
| Comfortable       | 35.7%      | 38.8%      | 36.6%      | 36.6%  | 31.3%  | 27.0%  |
| Somewhat          | 158        | 68         | 280        | 506    | 171    | 205    |
| Uncomfortable     | 18.8%      | 18.7%      | 17.0%      | 17.7%  | 13.5%  | 15.0%  |
| Very              | 80         | 17         | 172        | 269    | 127    | 160    |
| Uncomfortable     | 9.5%       | 4.7%       | 10.4%      | 9.4%   | 10.1%  | 11.7%  |
| Total             | 840        | 363        | 1,651      | 2,854  | 1,263  | 1,368  |
| Total             | 100.0%     | 100.0%     | 100.0%     | 100.0% | 100.0% | 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).

<u>Table Q24. "How comfortable are you with sharing the road with bicyclists when there ISN'T a designated bike lane?" by region and year</u>

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

<u>Table Q25\_1.</u> "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      |
| Lack of sidewalks                |
| NONE                             |
| Other                            |

| Drivers don't see or look for pedestrians |
|---|
| Drivers not paying attention              |
| Drivers stopping in the crosswalk         |
| 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<br>Drivers<br>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

| The state of the s | Northorn Control Southorn |                       | Total                  | Total         |               |               |
|--|---------------------------|-----------------------|------------------------|---------------|---------------|---------------|
| Q25 by region  | Northern<br>California    | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 |
|  |                           |                       |                        |               |               |               |
| Cars going too fast  | 488                       | 198                   | 912                    | 1,598         | 336           | 239           |
|  | 20.9%                     | 20.8%                 | 20.5%                  | 20.7%         | 17.7%         | 12.3%         |
| Cars not stopping  | 442                       | 159                   | 802                    | 1,403         | 432           | 336           |
|  | 19.0%                     | 16.7%                 | 18.0%                  | 18.1%         | 22.8%         | 17.3%         |
| Distracted drivers (cell   | 348                       | 168                   | 730                    | 1,246         | 348           | 426           |
| phones)  | 14.9%                     | 17.7%                 | 16.4%                  | 16.1%         | 18.4%         | 21.9%         |
| Lack of sidewalks  | 269                       | 124                   | 464                    | 858           | 37            | 52            |
| Edek of Side Walks   | 11.5%                     | 13.0%                 | 10.4%                  | 11.1%         | 2.0%          | 2.7%          |
| Almost getting hit by a  | 219                       | 85                    | 437                    | 741           | 197           | 185           |
| car  | 9.4%                      | 9.0%                  | 9.8%                   | 9.6%          | 10.4%         | 9.5%          |
| Lots of traffic  | 228                       | 88                    | 475                    | 791           | 98            | 106           |
|  | 9.8%                      | 9.2%                  | 10.7%                  | 10.2%         | 5.2%          | 5.5%          |
| Bicyclists not stopping  | 249                       | 73                    | 396                    | 718           | 69            | 67            |
|  | 10.7%                     | 7.7%                  | 8.9%                   | 9.3%          | 3.6%          | 3.5%          |
| NONE   | 71                        | 53                    | 196                    | 320           | 308           | 352           |
|  | 3.0%                      | 5.6%                  | 4.4%                   | 4.1%          | 16.3%         | 18.1%         |
| Other  | 14                        | 3                     | 33                     | 50            | 28            | 101           |
|  | 0.6%                      | 0.3%                  | 0.7%                   | 0.6%          | 1.5%          | 5.2%          |
| Drivers stopping in the  | 0                         | 1                     | 3                      | 4             | 10            | 15            |
| crosswalk  | 0.0%                      | 0.1%                  | 0.1%                   | 0.0%          | 0.5%          | 0.8%          |
| Drivers don't see or look  | 2                         | 0                     | 1                      | 3             | 7             | 17            |
| for pedestrians  | 0.2%                      | 0.0%                  | 0.0%                   | 0.0%          | 0.4%          | 0.9%          |
| Drivers not paying   | 0                         | 0                     | 1                      | 1             | 5             | 19            |
| attention  | 0.0%                      | 0.0%                  | 0.0%                   | 0.0%          | 0.3%          | 1.0%          |
| No bike lanes  | 2                         | 0                     | 2                      | 4             | 3             | 10            |
|  | 0.1%                      | 0.0%                  | 0.1%                   | 0.0%          | 0.2%          | 0.5%          |
| Total  | 2,333                     | 952                   | 4,451                  | 7,736         | 1,894         | 1,942         |
|  | 100.0%                    | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 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<br>Drivers<br>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<br>California | Central<br>California | Southern<br>California | Total<br>2020 | Total<br>2019 | Total<br>2018 |
|---|------------------------|-----------------------|------------------------|---------------|---------------|---------------|
| Pedestrians not using   | 473                    | 217                   | 922                    | 1,612         | 300           | 294           |
| crosswalks  | 18.2%                  | 19.4%                 | 18.4%                  | 18.5%         | 15.2%         | 14.8%         |
| Pedestrians stepping off curb   | 433                    | 183                   | 836                    | 1,453         | 321           | 179           |
| without looking   | 16.7%                  | 16.4%                 | 16.7%                  | 16.7%         | 16.2%         | 9.0%          |
| Cyclists not stopping at stop signs or traffic lights                 | 465                    | 173                   | 747                    | 1,385         | 321           | 179           |
|   | 17.9%                  | 15.4%                 | 14.9%                  | 15.9%         | 10.7%         | 10.6%         |
| Pedestrians/cyclists distracted behavior (phones, ear pods, headsets) | 355                    | 146                   | 672                    | 1,174         | 332           | 264           |
|   | 13.7%                  | 13.1%                 | 13.4%                  | 13.5%         | 16.8%         | 13.3%         |
| Pedestrians/cyclists not being visible enough                         | 330                    | 147                   | 665                    | 1,143         | 194           | 169           |
|   | 12.7%                  | 13.1%                 | 13.3%                  | 13.1%         | 9.8%          | 8.5%          |
| Cyclists being in the road or blocking traffic                        | 302                    | 126                   | 619                    | 1,047         | 269           | 187           |
|   | 11.6%                  | 11.2%                 | 12.4%                  | 12.0%         | 13.6%         | 9.4%          |
| Lack of sidewalks or clear cross walks                                | 174                    | 98                    | 380                    | 652           | 38            | 108           |
|   | 6.7%                   | 8.8%                  | 7.6%                   | 7.5%          | 1.9%          | 5.5%          |
| NONE  | 54                     | 27                    | 142                    | 223           | 242           | 356           |
|   | 2.1%                   | 2.4%                  | 2.8%                   | 2.6%          | 12.2%         | 18.0%         |
| Other   | 12                     | 2                     | 23                     | 36            | 47            | 76            |
|   | 0.4%                   | 0.1%                  | 0.5%                   | 0.4%          | 2.4%          | 3.8%          |
| Total   | 2,598                  | 1,119                 | 5,008                  | 8,725         | 1,979         | 1,942         |
|   | 100.0%                 | 100.0%                | 100.0%                 | 100.0%        | 100.0%        | 100.0%        |