

Road Rage in California: An Assessment for Years 2015-2018

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ABSTRACT

In an attempt to get never-before-gotten data regarding the phenomenon known as road rage in California, the authors developed a questionnaire to measure this phenomenon. The survey was uploaded to the Survey Monkey website in October 2018. The survey identified 10 common road rage incidents, and respondents were asked to select as many of these for which they had been victimized over a three-year period, 2015-2018. One hundred thirty-two California motorists responded; eighty-nine indicated victimization and forty-three indicated they had not been victimized. Our definition of road rage was taken from the National Highway Traffic Safety Administration's (NHTSA) definition of road rage, and the survey questions were developed from this same definition. The survey was distributed via snowball sample, which has limited the responses to date. The authors are seeking assistance to distribute the questionnaire to a wider and more random sample of California motorists. The data in this paper will be updated again when the authors have a more representative random sample.

Keywords: road rage, aggressive driving, survey, borderline personality disorder

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SECTION I-INTRODUCTION

Road rage is a term we hear often from the media. Traffic reporters often use the term to describe traffic accidents where one party or both had provoked the incident leading to the accident or forced one driver off the road where an assault or mutual combat occurs. Gestures, such as the “middle finger” or worse the brandishing of a weapon, often lead to the shoulder of the road where the confrontation can be words only or escalate into a minor battery or, much worse, being shot or beaten with a deadly weapon. Larger vehicles can “intimidate” smaller vehicles such as truck versus car or car versus motorcycle which can lead to injurious consequences or possibly death. Section I provides a background of the history and definitions of road rage. Section II reviews the data sources to include global and domestic frequencies and characteristics of road rage. Section III describes the methodology; Section IV analyzes the findings; and Section V posits the conclusions and recommendations.

Because road rage is a conglomeration of several crimes, it is virtually impossible to accurately measure by locating state statistics on crimes such reckless driving, battery, assault, ADW, and battery with great bodily injury. None of the 50 U.S. states attempt to specifically identify any of these crimes as having a road rage origin. We might ask, “Why is it important to know specific incidents of road rage?” The authors will address this in the conclusion and recommendations. The immediate answer is that it is important.

In California, there are six crimes that comprise the vast majority of road rage incidents: (1) aggressive or reckless driving (§23103 VC), assault (§240 PC), assault with a deadly weapon (§245a PC), (4) brandishing a firearm (§417 PC), battery (§242 PC), or battery with great bodily injury (§243d PC). No city police department, county sheriff’s office, nor the California Highway Patrol has a section on their crime reports that asks the reporting officers to identify during their investigation whether the crime was precipitated by road rage.

The authors will attempt to answer the following research questions:

1. What were the findings of our sample for the period 2015-2018 with regard to road rage in California?
2. Can road rage be labeled as a serious problem in California that needs solutions?
3. Are there possible solutions to at least ameliorate road rage?
4. Should road rage be a separate crime that can be quantified statistically as is done with most other crimes?
5. What are the possible costs in dollars of implementing strategies to ameliorate road rage?

The authors will focus the rest of this study on attempting to adequately answer these five research questions.

SECTION II-GLOBAL AND DOMESTIC FREQUENCIES

In 2017, the United States had a total of 34,247 fatal motor vehicle crashes resulting in approximately 11.4 deaths per 100,000 people and 1.16 deaths per 100 million miles traveled. For every fatal accident, hundreds of nonfatal but often debilitating injuries occur (DeAngelo & Hansen, 2014; Federal Highway Administration, 2018). *Road rage* may be described as a constellation of thoughts, emotions, and behaviors that occur in response to a perceived unjustified provocation while driving. There are many factors that impact how a driver responds

to external or internal stimuli. Demographic factors like gender and age, Psychiatric disorders, personality, and sociocultural beliefs all have been linked to Road rage (Sansone & Sansone, 2010).

The three most frequently mentioned safety problems in 2017 were “Speeding and Aggressive Driving” “Drunk Driving” and “Distracted Driving because of Texting”, accounting for 65.3% of all responses (Ewald & Wasserman, 2017). “Over three months in 1998, Sarkar et al. (2000) analyzed cellular phone calls to the California Highway Patrol from drivers in San Diego. They put 1,987 calls into five categories. They found that 20 percent of the calls were about drivers who were said to be speeding excessively; 25 percent were related to drivers mixing speeding with at least one other unsafe behaviour; 27 percent were related to drivers weaving in and out of traffic and cutting off other vehicles, but who were not speeding (usually in congested traffic); 12 percent referred to drivers who were tailgating; and 20 percent referred to drivers who were said to be perpetrating various types of road rage (the percentages include multiple responses for the categories)” (Woodside, 2008).

The connection between traffic deaths and unemployment, to fluctuations in annual death toll was made possible because of the statistical model designed by Charles Farmer (Federal Highway Administration, 2018). Traffic death data also reveal that the rate of fatalities is directly linked to an increased economy, i.e. in a stronger economy, people tend to drive more to include faster, riskier and discretionary driving. “Farmer found that a decline in the unemployment rate from 6 percent to 5 percent is associated with a 2 percent increase in vehicle miles traveled. That jump in exposure leads to an equivalent 2 percent jump in fatalities. However, after accounting for the change in miles traveled, the decline in the unemployment rate is associated with an additional 2 percent increase in road deaths. In other words, only half of the effect of an improved economy on traffic deaths is due to increased driving” (Insurance Institute for Highway Safety, 2017). In terms of demographics, drivers classified as speeders tend to be younger and male, and to have higher household incomes when compared to sometime speeders and non-speeders. Interestingly, 36% of all male drivers, one-half of drivers 16 to 20, and 42% of drivers with annual household incomes of \$100,000 or more were classified as speeders (Schroeder & Kostyniuk, 2013).

Woodside (2008) defines "Social demarketing" as the aspect of marketing that deals with discouraging customers in general or a certain class of customers on either a temporary or permanent basis. Some researchers (dePasquale *et al.* (2001), and [16] Dula and Ballard (2003) view road rage as anti-social behavior manifesting itself as antisocial personality disorder which is behavior that embodies selfishness to include disregard for the rights of others.

“Shinar (1998) proposed that certain drivers could be identified as 'aggressive drivers' and are those who display aggressive driving behaviors most of the time and are more likely to experience anger and frustration on the road.” Road rage incidents present challenges of accurate measurement. The Propensity for Angry Driving Scale identifies drivers who engage in driving behaviors or acts of road rage (DePasquale et al., 2001), the Driving Anger Scale which measures the trait of driving with anger or propensity to experience rage while driving (Deffenbacher et al., 1994), and the Driving Anger Expression Inventory (Deffenbacher et al., 2002) which measures the usual way of expressing anger while driving are few such questionnaires that are used to measure road rage.

“A study by Schroeder & Kostyniuk (2013) developed and used a driver typology based on the pattern of responses across six speeding behavior questions. Cluster analysis identified three distinct groups of drivers with similar overall behavioral tendencies and, among those

categorized, 30% are non-speeders, 40% are sometime speeders, and 30% are speeders. Driver type is a powerful predictor of norms and attitudes toward speeding behavior, speeding countermeasures, experience with sanctions and crash experience” (Schroeder & Kostyniuk, 2013). Drivers of high-performance vehicles may experience more frustration when they are prevented from using the full performance capacities of their vehicles by crowded urban roadways, thereby getting involved in road rage incidents. Increased rates of congested roads or longer travel distances are Situational factors that have shown a link to road rage (Smart et al, 2004; Rodrigo et al, 2015). Being aware of contributory factors such as alcohol and substance misuse, and borderline and antisocial personality disorders, in relation to road rage may improve general clinical awareness of the nature and treatment of perpetrators (Sansone & Sansone, 2010). There are some differences in driving habits and patterns among international drivers when compared to the US drivers. Australian drivers reported higher levels of anger than British motorists, but lower levels than American drivers.

Drivers who exhibit road rage can be either High-angry or Low (Passive) angry. Bumping other cars in protest, yelling, arguing, fighting, hitting are explosive expressions of High angry drivers while holding grudges against other drivers is seen in Low angry drivers. Individual and environmental factors serve as triggers, leading to the engagement of aggressive behavior for High-angry drivers. Environmental factors of distance travelled, traffic density, and nonspecific psychological factors (e.g., displaced aggression, attribution of blame to others), contribute to aggressive driving and road rage (Sansone & Sansone, 2010; Sagar, Chugh, & Mehta, 2013).

The relationship with general anger and driving anger and the effort-reward imbalance (ERI) model of work stress was examined by Hoggan & Dollard (2007) in a sample of 130 Australian workers. They concluded that ERI contributes to increased propensity for anger-based driving, and that those individuals who suffer from ERI have perceptions of imbalance as it relates to rewards and efforts at work. One could safely state that these issues of driving anger, emotional well-being, work stress can be a public health issue especially in the context of employee life. The presence, and impact of psychiatric and behavioral problems on aggressive driving patterns cannot be ignored either. Cognitive relaxation therapies appear to be effective in curbing road rage by reducing frequency and intensity of anger in individuals (Galovski, Blanchard & Veazey, 2002; Deffenbacher et al, 2003).

The driver typology developed by Schroeder & Kostyniuk (2013) appears to be useful in discriminating some driver attitudes and behaviors. Drivers classified as speeders report more risky behaviors than other drivers and appear to be the most resistant to conventional countermeasures and interventions aimed at speeding. On the other hand, drivers classified as non-speeders exhibit compliance with traffic laws and, in general, do not speed. Finding interventions that will work on the first group is challenging and requires continued efforts to identify effective measures. Extraordinary interventions for the non-speeder group are not needed, as normal public information programs and enforcement appear to work well (Schroeder & Kostyniuk, 2013).

It remains to be seen how the newer technologies such as crash avoidance tools or self-driving cars will impact incidents of road rage. Will driver anger be alleviated by the fact that he/she has no immediate control of the vehicle, or will this lead to additional frustrations for all parties involved?

SECTION III-METHODOLOGY

The methodology applied for our research is survey. A copy of the survey is identified as Appendix A. Questions 1-11 are demographic questions, and questions 12-25 are specific to the topic of road rage. Because road rage has not been an area of even nascent research, particularly in the U.S., there was no prototype questionnaire to model after. Therefore, the authors had to devise an original questionnaire based on our experience both as former criminal justice practitioners and currently educators in the criminal justice administration program at National University.

The survey was then uploaded into Survey Monkey. We then attempted to get cooperation from several agencies that have databases of California drivers in order to get our survey randomly distributed to 3,850 California drivers. Based on a known 26,000,000 licensed California drivers, we calculated a sample size of 385 with a confidence level of 95% with a margin of error of 5%. We assumed a 10% return rate thus determining a survey distribution total of 3,850 randomly selected drivers. We were unable to get any of the selected agencies (California DMV, California AAA, USAA) to assist us. Therefore, we were left with conducting a snowball sample by uploading the survey to social media and sending the survey to NU criminal justice students and friends of NU criminal justice faculty. As of the penning of this paper, we have 132 total responses.

SECTION IV-FINDINGS

Below are Tables 1-19 which display the data gathered from the questionnaires. Most are self-explanatory, but the authors have inserted narrative where further emphasis is necessary. There are several definitions of road rage, but this survey will use the National Highway Traffic Safety Administration's (NHTSA) definition: "When a driver commits moving traffic offenses so as to endanger other persons or property; an assault with a motor vehicle or other dangerous weapon by the operator or passenger of one motor vehicle on the operator or passengers of another motor vehicle."

Table 1—Based on the Definition of Road Rage by the National Highway Traffic Administration, do you believe you were the Victim of Road Rage?

Yes	67.42 Percent
No	32.58 Percent
Responded = 132 out of 132	

Note: The 132 responses represent all respondents to the questionnaire. Tables 2-19 represent the responses of those who indicated "Yes" in Table 1.

Table 2—My Gender is

Male	37.65%
Female	62.35%
Responded 85 out of 132	

*It is interesting to note that almost 2/3rds of the victims were female.

Table 3—My Age is

Mean = 37.135
Range = 21 - 70

Responded 88 out of 132

Table 4—My Race/Ethnicity is

Black/African American	12.36%
White	59.55%
Asian	6.74%
Hawaiian/Pacific Islander	2.25%
Native American	0.00%
Two or More Races	10.11%
Decline	8.99%
Responded 89 out of 132	

*This table probably does not accurately represent the victimized ethnicities because the snowball sample was directed more toward White and Asian respondents, but not by design.

Table 5—I live in City/Town and State

Southern California	88.67%
Northern California	11.36%
Responded 88 out of 132	

Table 6—I have been driving for _____ years

Mean	20.68
Range	3 to 54
Standard Deviation	12.24
Responded 89 out of 132	

Table 7—My occupation is _____

Professional	46	51.11%
Skilled	12	13.33
Semi-Skilled	7	7.70
Student	5	5.50
Medical	1	1.10
Unemployed	1	1.10
Military	13	14.44
Retired	4	05.56
89 out of 132 responded	89	100.00%

Table 8—The following are examples of road rage incidents. Please identify the specific road rage incident or incidences that you encountered.

an aggressive driver who tailgates you at high speeds	55
being “cut-off” by an aggressive driver changing lanes dangerously causing you to brake suddenly	50
an aggressive driver who drives up next to you and makes threatening gestures (including showing the middle finger), or who swerves his/her car at yours	40
an aggressive driver who waives a firearm or points it at you	2
an aggressive driver who forces you off the road onto the shoulder and then assaults you physically causing minor injury such as shoving	2
an aggressive driver who forces you off the road and then assaults you causing serious injury requiring hospitalization	1
an aggressive driver who forces you off the road and then displays a firearm or other deadly weapon such as a knife, chain, tire iron, etc.	1
an aggressive driver who forces you off the road and then displays a firearm and fires the weapon in your direction or wounds you	1
an aggressive driver who chases you at high speeds endangering you or you and your family	16
82 responses out of 132	Total incidents = 168

*If our sample is somewhat representative of the population, fortunately most of the incidents would fall into the infraction/misdemeanor variety versus felonies.

Table 9—If none of the scenarios in Table 8 fits with your road rage incident, briefly describe your specific incident

aggressive driver break-checked (pumped brakes in front of my car)	3
aggressive driver ran me off the road and sped off	1
aggressive driver made threatening gesture and threw drink and cup at me	1
aggressive driver threw coins at my car; would not let me accelerate; approached driver side screaming at me and my son	1
aggressive motorcyclist splitting lanes hit my car with an object	1
aggressive driver cut me off and came to a complete stop on freeway at 65 mph	1
Total	8

Table 10—Think back 2 years, how many separate times did the road rage described occur?

1	21.95%
2	24.39%
3	7.32%
4	37.80%
82 responses out of 132	

*This table tells us 22% of victims had just 1 road incident over the 3 years; 24% experience 2; 7% 3; and 38% 4. There could be more than one explanation: the multiple victimizations could be the result of more frequent driving, or perhaps their driving habits result in more incidents.

Table 11—Did you make a formal, written report of the incident or incidents to law enforcement?

Yes	8.43%
No	91.57%
83 responses out of 132	

*This is perhaps the most alarming statistic. The most likely explanation is the difficulty of reporting road rage until hours after the incident when the shock of the incident has subsided.

Table 12--Which law enforcement agency investigated your complaint or complaints?

California Highway Patrol	44.44%
California Department of Motor Vehicles	11.11%
Local Sheriff's Department	00.00%
Local Police Department	44.44%
Other	00.00%
85 responses out of 132	

Table 13—If law enforcement did investigate your reported incident or incidences, what was the outcome of the investigation?

Driver charged with a crime	16.13%
Driver not charged with a crime	83.87%
31 responses	

*This low charge rate also may have several causes: the low reporting rate, the lack of evidence such as license plates and driver description, and memory loss that might occur after a hiatus in reporting.

Table 14—Do you believe you may have precipitated (caused) the road rage incident by poor driving behavior of your own such as: (a) talking on a cell phone or otherwise being distracted, (b) switching lanes suddenly without caution or without using your turn signal, (c) failing to check your blind spot before switching lanes, (d) tailgating or flashing your headlights at a driver in front of you, (e) honking your horn often, or (f) using obscene gestures or otherwise communicating angrily at another driver.

Yes	26.51%
No	51.81%
Don't Know	21.69%
83 responses out of 132	

Table 15—Do you believe Road Rage is a serious problem on California roads?

Yes	97.62%
No	2.38%
84 responses out of 132	

*Even with only 84 responses, this statistic clearly indicates that road rage needs to be taken more seriously.

Table 16—Do you believe drivers who engage in road rage are under stress in their lives and take out their stress on other drivers?

Yes	69.41%
No	10.59%
Don't know	20.00%
84 responses out of 132	

Table 17--Borderline Personality Disorder (BPD) is a mental illness marked by an on-going pattern of varying moods, self-image, and behavior. Do you believe people afflicted with this disorder might be more prone to road rage?

Yes	70.59%
No	3.53%
Not sure	25.88%
85 responses out of 132	

Table 18--Do you believe there should be a separate crime of road rage in the PC or VC?

Yes	75.29%
No	8.24%
Not sure	16.47%
85 responses out of 132	

Table 19--Should the California Department of Motor Vehicles or the California Highway Patrol have a section on their website that allows for motorists to report incidents of road rage?

Yes	89.41%
No	3.53%
Not sure	7.06%
85 responses out of 132	

*This statistic indicates that the 85 respondents clearly see a need for a more efficient and more instantaneous method of reporting road rage.

SECTION V-CONCLUSIONS AND RECOMMENDATIONS

California Vehicle Code §13210 specifically addresses road rage. It provides for suspension of the driving privilege of any operator of a motor vehicle who commits an assault as described under Penal Code §245(a)[Assault with a Deadly Weapon]. A first offense conviction will result in a suspension of one's driver's license for six months; one year for second or subsequent offenses. In addition to suspension or as an alternative, the court can order anger management or a road rage course. This punishment may reflect California's inertia insofar as road rage is concern, because ADW is a felony carrying prison time; whereas, a driver's license suspension and/or anger management class is a minor misdemeanor at best. Moreover, there is very little indication that judges are using the anger management option to any extent, and a search of the internet did not reveal a separate class for road rage. So, there is a clear disconnect from our survey where 97% of the respondents felt road rage was a serious problem in California, versus the penalties currently assessed for conviction.

Moreover, the literature on road rage and our survey suggests that serial road rage offenders are most likely psychotic individuals, and most likely Borderline Personality Disorder.

What exactly is Borderline Personality Disorder?

Baskin and Paris (2012) describe BPD as follows:

Borderline personality disorder is a mental illness marked by an ongoing pattern of varying moods, self-image, and behavior. These symptoms often result in impulsive actions and problems in relationships. People with borderline personality disorder may experience intense episodes of anger, depression, and anxiety that can last from a few hours to days. Borderline personality disorder is characterized by intense, rapidly fluctuating moods combined with impulsivity and interpersonal difficulties. Patients with the disorder are frequently encountered in clinical practice, despite prevalence in the community of 1%-2% (p. 1897).

If the consensus, both in this survey and in the literature is true, a significant number of road rage instigators are on the Borderline Personality Disorder (BPD) spectrum. This tells us that routine

rehabilitative methods to reduce road rage, such as anger management, will not be effective in rehabilitating road rage perpetrators. A more define clinical approach may be necessary.

What are possible therapies for Serial Road Rage Perpetrators?

According to Baskin and Paris (2012):

Psychotherapy is the most important component in the treatment of borderline personality disorder, leading to large reductions in symptoms that persist over time. Over the past two decades, many forms of psychotherapy have been developed specifically to treat the disorder. The best studied are dialectical behavior therapy, mentalization-based treatment, transference-focused psychotherapy, and systems training for emotional predictability and problem solving (p. 1898).

The point to be made is that anger management classes are insufficient to ameliorate the serious implications of allowing serial road rage convicted individuals to undergo anger management classes that are insufficient solutions to a much more deep-seeded psychiatric problem. California must implement a state-wide program that requires serial road rage perpetrators to attend therapeutic Borderline Personality Disorder (BPD) therapy before the offender is given renewed driving privileges.

Reporting of Road Rage Incidents:

Because there is not a specific violation called road rage, the California Department of Transportation and California DMV are not able to identify the extent of road rage in California. The authors recommend that traffic and crime reports for all law enforcement agencies contain check-off boxes on penal and vehicle code reports that identify the crime as road rage or not. This will allow California to determine the extent of road rage incidents.

The authors also recommend that the California Highway Patrol develop a road rage reporting link on their website to make it easier for motorist to report an incident immediately after it has happened. This would allow motorist to take the next exit off the freeway or to pull over to the shoulder on surface streets and report using a cellphone. Our survey revealed that almost 90% of the respondents felt this was necessary, and the 92% of respondents who did not report their incident to law enforcement bears this out.

Regular California DMV Questionnaires to Determine the Extent of Road Rage:

Finally, the authors recommend that the California DMV conduct regular surveys such as this one to determine the extent of road rage. This will assess whether the intervention programs recommended in the research are working.

Recommending Punishments and Estimating Costs for Road Rage Incidents

Recommended Punishments

In this final subheading, the authors have (1) recommended punishments for road rage, and (2) estimated the cost to California to implement the recommendations made in this final section. Below is Table 20, Recommended Punishments for Road Rage in California.

Table 20--Recommended Punishments for Road Rage in California.

Road Rage Crime	Level of Crime	First Offense Conviction	Second Offense Conviction	Subsequent Offenses Convictions
§13210(a) VC [Equivalent of 245a PC and 243d PC]	Felony/Wobbler	6 months county jail + 1-year loss of license	2 years state prison + mandatory psychotherapy	4+ years state prison + mandatory psychotherapy
§13210(b) VC [Equivalent of 240 PC 417 PC 242 PC 23103 VC]	All misdemeanors	\$1,000 fine Loss of license 1 year	1-year county jail + mandatory psychotherapy	2 years state prison + mandatory psychotherapy
§13210(c) VC	Infractions An aggressive driver who does one of the following: (a) tailgates dangerously (b) changes lanes dangerously “cutting off” other drivers. (c) swerves his/her car intentionally at another driver (d) “brake pumps” cars behind him/her (e) Makes threatening gestures such as the “middle finger” after making eye-contact.	Warning by mail from CHP or another agency	\$500 fine + 6 months loss of license.	\$1,000 fine + 1-year loss of license + Mandatory psychotherapy

Table 20 gives clear definition to road rage which is needed to make road rage the serious crime that it is in California and certainly in all 50 states. The listed infractions should be codified in the California Vehicle Code, perhaps under §13210. Psychotherapy is reserved for all second offenses, because the authors feel this is enough to establish the concept of serial road rage.

Estimated Costs

It is difficult to determine a finite dollar amount to implement an aggressive road rage enforcement in California. There will be additional convictions and jail and prison sentences which add to the cost of incarceration. On the other hand, fines may offset these incarceration costs. Psychotherapy outside of incarceration must be borne by the offender, so there will be no costs here. Suspended licenses must be maintained as such until an offender has successfully completed psychotherapy. Estimating psychotherapy costs in prison is much more difficult.

Establishing a section on California DMV's website for road rage reporting seems to be a small expense as well. Estimating the cost of investigating the reports to the road rage section of DMV's road rage website that is not reported directly to 911 is also difficult to estimate. Road rage victims should be encouraged to submit evidence that can be uploaded to the DMV website such as cell phone photos of license plates, description of the driver, etc. that can make for a successful investigation. The authors believe any costs that are not offset by fines will be negligible and are absolutely necessary to ensure the safety of the California Driving Public.

Finally, to be able to monitor road rage year-after-year, there must be a method of codifying each occurrence which is not currently being done. This is a fairly simple fix. All law enforcement agencies in California should simply add a check-off box on their crime and vehicle reports that reads, "Road Rage Incident." By doing this, agencies could enter this data into a computer data base that the CHP would establish and into which all other California law enforcement agencies would have access to. It is difficult to estimate this cost, but intuitively it should not be significant, and would give California the ability to publish yearly the number of road rage incidents. California would be the first state to declare this magnitude of road rage enforcement.



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APPENDIX A**ROAD RAGE QUESTIONNAIRE***Part 1—General Information*

This questionnaire and the subsequent research project are intended to get a small “snapshot” of the extent of “road rage” in both Northern and Southern California. You are being asked to respond to this questionnaire so that you will be a contributor to understanding the extent of this phenomenon in Northern and Southern California. The authors refer to road rage as a phenomenon because it is not an independent, stand-alone crime, rather it is a combination of penal code and vehicle code crimes that the responding law enforcement officer must decide to charge.

For this research to be significant, the authors need respondents who have been the victims of road rage **as well as respondents who have not**. Questionnaire respondents who have not been the victim of road rage will answer Question 1 below only.

You have probably heard the term “road rage.” There is no single crime in either the California Vehicle Code or Penal Code for road rage. California’s enforcement of road rage is most often charged as one of the following crimes: (1) aggressive or reckless driving (23103 VC), (2) assault (240 PC), (3) assault with a deadly weapon (245a PC), (4) brandishing a fire arm (417 PC), (5) battery (242 PC), or (6) battery with serious bodily injury (243d PC). There are several definitions of road rage, but this survey will use the National Highway Traffic Safety Administration’s (NHTSA) definition: **“When a driver commits moving traffic offenses so as to endanger other persons or property; an assault with a motor vehicle or other dangerous weapon by the operator or passenger of one motor vehicle on the operator or passengers of another motor vehicle.”**

Part 2: Demographic and Background Information

Directions: Choose the applicable answer or fill-in the blank

Question 1: I have been the victim of road rage in California as defined by the NHTSA’s definition above.

(a) Yes (b) No (You have finished the questionnaire; please submit)

If you answered Yes to Question 1, please continue with the below questions:

Question 2: I am (a) male (b) female (c) other

Question 3: My age is _____

Question 4: My race is (a) Black (b) White (c) Hispanic (d) Asian (e) Other

Question 5: I live in (city/town and state) _____

Question 6: I have been driving for (years) _____

Question 7: My occupation is _____

Question 8: I have received (number) _____ traffic citations this past year (2017)

Question 9: Have you ever been arrested for a traffic offense? (a) Yes (b) No

Question 10: If the answer to # 9 is yes, what traffic violation or violations were you arrested for? _____

Question 11: Referring to Question 10, were you convicted? (a) Yes (b) No

Part 3—Road Rage Questionnaire

The following are scenarios that might be considered to be a **type of road rage**. Please read each of these and answer the questions at the end of these scenarios/incidents.

1. An aggressive driver who tailgates you at high speeds.
2. Being “cut-off” by an aggressive driver changing lanes dangerously causing you to brake suddenly.
3. An aggressive driver who drives up next to you and makes threatening gestures (including showing the middle finger), or who swerves his/her car at yours.
4. An aggressive driver who waives a firearm or points it at you.
5. An aggressive driver who forces you off the road onto the shoulder and then assaults you physically causing minor injury such a shoving.
6. An aggressive driver who forces you off the road and then assaults you causing serious injury requiring hospitalization.
7. An aggressive driver who forces you off the road and then displays a firearm or other deadly weapon such as a knife, chain, tire iron, etc.
8. An aggressive driver who forces you off the road and then displays a firearm and fires the weapon in your direction or wounds you.
9. An aggressive driver who chases you at high speeds endangering you or you (and) your family.
10. If you believe you were the victim of road rage, but none of the above circumstances fit your victimization, please give a very brief description of your occurrence.

Question 12: Think back 2 years; during these 2 years, approximately how many separate times were you the victim of one of these incidents?

- a. 1 b. 2 c. 3 d. 4 e. More than four

Question 13: Please identify all of the incidents (1 through 10) that you experienced.

Question 14: Did you make a formal, written report of the incident or incidents to law enforcement?

- a. Yes b. No

Question 15: Did law enforcement investigate your reported incident or incidences?

- a. Yes b. No

Question 16: If law enforcement did investigate your reported incident or incidences, what was the outcome of the investigation?

- a. Driver charged with crime or crimes
b. Driver **not** charged with a crime or crimes

Question 17: Which law enforcement agency investigated your complaint or complaints?

- a. California Highway Patrol b. California Department of Motor Vehicles
b. Local Sheriff’s Department d. Local Police Department

Question 18: Do you believe you may have precipitated (caused) the behavior by poor driving behavior of you own such as (a) talking on a cell phone or otherwise being distracted, (b) switching lanes suddenly without caution or without using your turn signal, (c) failing to check your blind spot before switching lanes to make sure you aren't cutting someone off, (d) tailgating or flashing your headlights at a driver in front of you that you believe is driving too slowly, (e) honking your horn often, or (f) using obscene gestures or otherwise communicating angrily at another driver.

- a. Yes b. No

ADDITIONAL QUESTIONS

Question 19: Do you believe road rage is a serious problem on California's Highways?

- a. Yes b. No

Question 20: Do you believe that drivers who engage in road rage are under stress in their lives and "take out" their stress on other drivers?

- a. Yes b. No c. Don't Know

Question 21: Borderline Personality Disorder (BPD) is a mental illness marked by an ongoing pattern of varying moods, self-image, and behavior. These symptoms often result in impulsive actions and problems in relationships. Do you believe people afflicted with this disorder might be more prone to road rage?

- a. Yes b. No c. Don't Know

Question 22: Do you believe there should be a separate crime of road rage in the penal or vehicle code?

- a. Yes b. No c. Not Sure

Question 23: Should the DVM or California Highway Patrol have a section on their websites that allows for motorist to report incidents of road rage online?

- a. Yes b. No c. Not Sure

Question 24: Should there be one law enforcement agency that investigates road rage incidents exclusively?

- a. Yes b. No c. Not sure

Question 25: If you answered Yes to Question 24, which of the following agencies do you believe should exclusively investigate road rage?

- a. CHP b. DMV c. Police Agency of Occurrence d. Not sure

**THANKS SO MUCH FOR YOUR PARTICIPATION IN THIS RESEARCH PROJECT!!
THE RESEARCHERS BELIEVE YOUR PARTICIPATION WILL RESULT IN A
MORE CONSISTENT AND DIRECTED ENFORCEMENT OF ROAD RAGE.**