

# Driving Under the Influence of Alcohol

Final Report

Submitted to: Traffic Safety Commission of Puerto Rico



September 28, 2018

## TABLE OF CONTENT

<b>INTRODUCTION</b> .....	<b>3</b>
<b>METHODOLOGY</b> .....	<b>3</b>
<b>FINDINGS</b> .....	<b>3</b>
DEMOGRAPHIC PROFILE .....	3
GENERAL DRIVING HABITS.....	6
DRIVING UNDER THE INFLUENCE OF ALCOHOL.....	11

## INTRODUCTION

The Traffic Safety Commission of Puerto Rico (CST for its Spanish acronym) hired the firm Estudios Técnicos, Inc., to design and conduct a survey to assess the impact of driving under the Influence of alcohol campaigns. This report presents the results of the survey, conducted between August 22 and September 23, 2018.

## METHODOLOGY

A telephone survey was made to residents in Puerto Rico 16 years or older with an active driver's license. The survey used a stratified probabilistic sample. It uses geographic strata based on the number of active licenses by region. Telephone numbers were randomly chosen among a list of residential and mobile phone numbers generated randomly from a sample based on "Random Digit Dialing" (RDD). Based on the selected sample type, the estimated sampling error is  $\pm 4.4\%$  with a confidence level of 95%.

The research instrument for data collection consisted of a telephone interview using a Computer Assisted Telephone Interviewing System (CATI), by the Estudios Técnicos, Inc. staff.

## FINDINGS

### DEMOGRAPHIC PROFILE

---

A general demographic profile of the sample follows:

The gender distribution of the sample consisted of 253 males (50.6%) and 247 females (49.4%). The median age of the sample was 51 years, the average 50 years, the youngest participant 18 years old and the oldest was 86 years old.

#### Gender of the interviewee

	Freq.	%
Male	253	50.6%
Female	247	49.4%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

### Age

	Freq.
16 to 24 years	33
25 to 34 years	72
35 to 44 years	67
45 to 59 years	168
60 or older years	155
Does not say	5
<b>Total</b>	<b>500</b>
<b>Mean</b>	<b>50</b>
<b>Median</b>	<b>51</b>
<b>Minimum</b>	<b>18</b>
<b>Maximum</b>	<b>86</b>

N=500.

The average and median household size was 3 persons, including the participants.

### How many people live in your household, including yourself?

<b>Mean</b>	<b>3</b>
<b>Median</b>	<b>3</b>
<b>Minimum</b>	<b>1</b>
<b>Maximum</b>	<b>8</b>

N=495. Three did not respond.

One out of four participants (24.2%) have a high school diploma, while one out of three (30.0%) has a bachelor's degree. The median academic degree of the sample was between "some years of college" and "associate's degree". Almost 70% of the sample has some college education.

### Could you please tell me the last academic degree you completed?

	Freq.	%
High School or less	38	7.6%
High School Diploma	121	24.2%
Associate Degree or some years of college	138	27.6%
Bachelor's Degree	150	30.0%
Master's Degree	47	9.4%
Doctorate Degree	5	1.0%
Does not say	1	0.2%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

Almost half (42.4%) of the participants are currently “working full time”, while one out of ten (9.8%) are working “part time”. Also, one out of four (27.8%) are “retired / pensioner”.

### What is your current occupational status?

	Freq.	%
Working full time	212	42.4%
Retired / Pensioner	139	27.8%
Working part time	49	9.8%
Homemaker	38	7.6%
Working and studying	33	6.6%
Unemployed	12	2.4%
Only studying	8	1.6%
Other	7	1.4%
Does not say	2	0.4%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

Half (50.6%) of our participants are married and almost three out of ten (26.2%) is single.

### Civil status

	Freq.	%
Married	253	50.6%
Single	131	26.2%
Divorced	58	11.6%
Widowed	28	5.6%
Cohabiting	24	4.8%
Does not say	6	1.2%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

The median household income was between \$25,001 and \$35,000 per year.

### What is your annual household income?

	Freq.	%
Up to \$15,000	143	28.6%
\$15,001-\$25,000	91	18.2%
\$25,001-\$35,000	64	12.8%
\$35,001-\$50,000	43	8.6%
\$50,001-\$75,000	30	6.0%
\$75,001 or more	24	4.8%
Does not say	105	21.0%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

### GENERAL DRIVING HABITS

Most of the participants of the study (78%) drive their vehicles "every day". While only three percent drive "once a week".

### How often do you drive a motor vehicle?

	Freq.	%
Every day	390	78.0%
Almost every day	52	10.4%
Several times a week	44	8.8%
Once a week	14	2.8%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

"Regular cars" is the most frequent vehicle used among participants (half), followed by "SUV" preferred by three of every 10. One out of 10 participants reported the use of "pick-up truck", "truck", "minivan", "van" or "motorbike".

**¿What type of vehicle do you drive most frequently?**

	Freq.	%
Regular car	278	55.6%
SUV	157	31.4%
Pick-up truck or truck	48	9.6%
Mini van	8	1.6%
Van	4	0.8%
Other	4	0.8%
Does not know / Does not say	1	0.2%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

In a typical weekday the median amount of time participants spend driving was two hours, with some respondents driving as much as 16 hours. In a typical weekend day, two hours is the median amount of time participants spend driving, with respondents driving as much as 16 hours. The minimum time reported on week days was 5 minutes while on weekends some participants don't spend any time driving.

**On average, during a typical day of the week, approximately how much time do you spend driving a vehicle?**

Mean	2 hours 46 minutes
Median	2 hours
Minimum	5 minutes
Maximum	16 hours

N=499. Note: One did not respond.

**On average, during a typical day of the weekend, approximately how much time do you spend driving a vehicle?**

Mean	2 hours 20 minutes
Median	2 hours
Minimum	Does not drive
Maximum	16 hours

N=490. Note: Ten did not respond.

On weekdays, almost six of every 10 participants (57.4%) drive to “work”, followed by “Shopping” 48% while one out of 3 go to “medical appointments”. On weekends, the most frequent driving activity is “visiting family and friends” (50.2%) while “work” drops to 11.2%. “Shopping” was done on weekends by half of the participants.

**During a typical day of the week, to where do you drive or which places do you visit?**

	Freq.	%
Work	287	57.4%
Shopping (grocery store, etc.)	240	48.0%
Medical appointments	174	34.8%
School / College	131	26.2%
Visiting family and friends	118	23.6%
Entertainment (movie theater, the beach, the park, etc.)	45	9.0%
Traveling around different places and spending most of the time inside the vehicle	31	6.2%
Other	23	4.6%
Church	13	2.6%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.

**During a typical day of the weekend, to where do you drive or which places do you visit?**

	Freq.	%
Visiting family and friends	251	50.2%
Entertainment (movie theater, the beach, the park, etc.)	242	48.4%
Shopping (grocery store, etc.)	241	48.2%
Traveling around different places and spending most of the time inside the vehicle	161	32.2%
Work	56	11.2%
Church	52	10.4%
Medical appointments	44	8.8%
Other	17	3.4%
Does not drive on weekends	13	2.6%
School / College	10	2.0%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.



In a scale from one to 10, in which 10 was defined as very good, 19.8% of the participants rate driving in Puerto Rico as “five”. The most frequent score selected by three out of ten participants was “very bad”, and only 1.4% rated driving in Puerto Rico as “very good”.

**On a scale from 1 to 10, in which 10 means “very good” and 1 means “very bad”, according to your experience, how would you rate driving in Puerto Rico?**

	Freq.	%
1 - Very bad	144	28.8%
2	39	7.8%
3	55	11.0%
4	40	8.0%
5	99	19.8%
6	43	8.6%
7	37	7.4%
8	29	5.8%
9	2	0.4%
10 - Very good	7	1.4%
Does not know / Does not say	5	1.0%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

“Road conditions” is the main issue of concern for safety on the roads of Puerto Rico identified by seven out of ten participants. However, 66.4% mentioned “distracted drivers” as their secondary concern, while one out of four indicated “drunk driven” as another main concern.

**Which would you say are the three main issues of concern in terms of your safety on the roads of Puerto Rico? (Total)**

	Freq.	%
Road conditions	363	72.6%
Distracted drivers	332	66.4%
Speed	234	46.8%
Drunk drivers	134	26.8%
Lane cutters	98	19.6%
Drivers running red lights	68	13.6%
Stray animals	67	13.4%
Riders on horsebacks	54	10.8%
Cyclists on the road	52	10.4%
Pedestrians	16	3.2%
Motorbikes	9	1.8%
Other	46	9.2%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.

**Which would you say are the three main issues of concern in terms of your safety on the roads of Puerto Rico? (First priority)**

	Freq.	%
Road conditions	215	43.0%
Distracted drivers	124	24.8%
Speed	80	16.0%
Drunk drivers	31	6.2%
Drivers running red lights	12	2.4%
Stray animals	11	2.2%
Lane cutters	7	1.4%
Riders on horsebacks	6	1.2%
Cyclists on the road	5	1.0%
Pedestrians	1	0.2%
Motorbikes	0	0.0%
Other	8	1.6%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.

**Which would you say are the three main issues of concern in terms of your safety on the roads of Puerto Rico? (Second priority)**

	Freq.	%
Distracted drivers	144	28.8%
Road conditions	90	18.0%
Speed	70	14.0%
Drunk drivers	52	10.4%
Lane cutters	39	7.8%
Cyclists on the road	22	4.4%
Stray animals	19	3.8%
Riders on horsebacks	17	3.4%
Drivers running red lights	17	3.4%
Pedestrians	4	0.8%
Motorbikes	3	0.6%
Other	17	3.4%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.

**Which would you say are the three main issues of concern in terms of your safety on the roads of Puerto Rico? (Third priority)**

	Freq.	%
Speed	84	16.8%
Distracted drivers	64	12.8%
Road conditions	58	11.6%
Lane cutters	52	10.4%
Drunk drivers	51	10.2%
Drivers running red lights	39	7.8%
Stray animals	37	7.4%
Riders on horsebacks	31	6.2%
Cyclists on the road	25	5.0%
Pedestrians	11	2.2%
Motorbikes	6	1.2%
Other	21	4.2%
<b>Total</b>	<b>500</b>	<b>-</b>

N=500. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned.

**DRIVING UNDER THE INFLUENCE OF ALCOHOL**

Of all the participants, 39.0% indicated having consumed alcoholic beverages at some point. The median consumption rate was about 2 to 3 times a month.

**Do you consume alcoholic beverages?**

	Freq.	%
Yes	195	39.0%
No	305	61.0%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

**How often do you consume alcoholic beverages?**

	Freq.	%
Everyday	2	1.0%
3 to 4 times a week	9	4.6%
1 to 2 times a week	56	28.7%
2 to 3 times a month	80	41.0%
Once a month or less	44	22.6%
Does not know	4	2.1%
<b>Total</b>	<b>195</b>	<b>100.0%</b>

n=195. Note: n is equal to the number of respondents that indicated consuming alcoholic beverages.

One out of ten of the participants (11.6%) admitted to have driven a vehicle after consuming alcoholic beverages during the past 30 days (most of them were males).

**During the last 30 days, have you driven a vehicle after consuming alcoholic beverages?**

	Freq.	%
Yes	58	11.6%
No	439	87.8%
Does not know	3	0.6%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

On average, the participants indicated to have driven two times a vehicle two hours after consuming alcoholic beverages in the last 30 days.

**During the past 30 days, how many times have you driven a motor vehicle two hours after consuming alcoholic beverages?**

	Freq
0	8
1	18
2	15
3	3
4	7
6	1
9	1
Does not know / Does not say	5
<b>Total</b>	<b>58</b>
<b>Mean</b>	<b>2</b>
<b>Median</b>	<b>2</b>
<b>Minimum</b>	<b>0</b>
<b>Maximum</b>	<b>9</b>

n=58. Note: n is equal to the number of respondents that indicated having driven a vehicle after consuming alcoholic beverages.

One out of three of the participants said that they know the blood alcohol content allowed for drivers 18 to 20 years old (33.2%) and drivers with 21 years and older (36.8%). When asked about the specific percentage of blood alcohol content allowed, the average was 0.05% and 0.06 respectively while the median was 0.08% in both cases.

**According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for drivers 18 to 20 years old...**

	Freq.	%
Yes	166	33.2%
No	225	45.0%
Does not know	109	21.8%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

**According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for drivers 18 to 20 years old...**

	Freq
0	10
0.01	11
0.02	14
0.03	8
0.04	6
0.05	13
0.06	6
0.07	7
0.08	87
Does not know / Does not say	4
<b>Total</b>	<b>166</b>
<b>Mean</b>	<b>0.05</b>
<b>Median</b>	<b>0.08</b>
<b>Minimum</b>	<b>0</b>
<b>Maximum</b>	<b>0.08</b>

n=166. Note: n is equal to the number of respondents that indicated knowing the blood alcohol content allowed for drivers 18 to 20 years old.

**According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for drivers 21 years or older...**

	Freq.	%
Yes	184	36.8%
No	213	42.6%
Does not know	103	20.6%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

**According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for drivers 21 years or older...**

	Freq
0	1
0.01	17
0.02	9
0.03	7
0.04	4
0.05	7
0.06	4
0.07	16
0.08	116
0.09	1
Does not know / Does not say	2
<b>Total</b>	<b>184</b>
<b>Mean</b>	<b>0.06</b>
<b>Median</b>	<b>0.08</b>
<b>Minimum</b>	<b>0</b>
<b>Maximum</b>	<b>0.09</b>

n=184. Note: n is equal to the number of respondents that indicated knowing the blood alcohol content allowed for drivers 21 years or older.

Also, 8 out of 10 (80.6%) of the participants said that they know what a designated driver is.

**Do you know what a designated driver is?**

	Freq.	%
Yes	403	80.6%
No	91	18.2%
Does not know	6	1.2%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

Participants perceive that in Puerto Rico a drunk driver faces a high probability of being arrested. Participants indicated that it is “very likely” (44.6%) and “likely” (37.4%) to get arrested for driving under the influence. This perception seems to be independent of gender or age group.

**How likely is it that a driver gets arrested for driving under the influence of alcohol?**

	Freq.	%
Very likely	223	44.6%
Likely	187	37.4%
Unlikely	46	9.2%
Very unlikely	28	5.6%
Does not know / Does not say	16	3.2%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

It’s important to mention that none of the participants were pulled over for driving under the influence of alcohol nor have they been in a car accident for the same reason (during the past 12 months).

**During the past 12 months, have you been pulled over for driving under the influence of alcohol?**

	Freq.	%
No	500	100.0%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

**During the past 12 months, have you been in any car accidents due to driving under the influence of alcohol?**

	Freq.	%
No	498	99.6%
Does not say	2	0.4%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

As to police enforcement efforts and awareness of media campaigns for DUI, only one out of three participants (34.6%) had seen, read or heard of police enforcement efforts regarding impaired driving (driving under the influence of alcohol) in the past 30 days.

**During the past 30 days, have you seen, read, or heard about any efforts from the police regarding driving under the influence of alcohol?**

	Freq.	%
Yes	173	34.6%
No	320	64.0%
Does not know	7	1.4%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.

Regarding the awareness of media campaigns for DUI's, almost half of the participants (44.8%) recalled at least one type of message during the last 30 days.

**During the last 30 days, do you remember seeing, reading or hearing any messages as part of a campaign regarding driving under the influence of alcohol?**

	Freq.	%
Yes	224	44.8%
No	273	54.6%
Does not know	3	0.6%
<b>Total</b>	<b>500</b>	<b>100.0%</b>

N=500.



Among those that recalled the campaign, Local TV (82.6%), Radio (24.6%) and Newspaper (9.4%) were the main outlets of the participants for hearing, reading or seeing said campaign.

**How did you hear, read, or see this message about driving under the influence of alcohol?**

	Freq.	%
Local TV	185	82.6%
Radio	55	24.6%
Newspaper	21	9.4%
Cable TV and/or satellite	20	8.9%
Social media	12	5.4%
Billboards or posters at bus stops or other public places	9	4.0%
Other internet websites	7	3.1%
Movie theater	2	0.9%
Magazine	1	0.4%
Other	4	1.8%
<b>Total</b>	<b>224</b>	<b>-</b>

n=224. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned. n is equal to the number of respondents that indicated remembering any messages related to a campaign regarding driving under the influence of alcohol.

Half of participants (50.0%) that recalled the campaign, remembered slogans or phrases.

**Do you remember any slogan or phrase you saw, read, or heard as part of this campaign about driving under the influence of alcohol?**

	Freq.	%
Yes	112	50.0%
No	109	48.7%
Does not know	3	1.3%
<b>Total</b>	<b>224</b>	<b>100.0%</b>

n=224. Note: n is equal to the number of respondents that indicated remembering any messages related to a campaign regarding driving under the influence of alcohol.

The following table summarizes the slogan recall of the participants:

**What slogan, slogans, or phrases you remember seeing, reading, or hearing as part of this campaign about driving under the influence of alcohol?**

	Freq.	%
Si manejas borracho, serás arrestado	45	40.2%
Pasa la llave	22	19.6%
Si guías borracho, pagas	13	11.6%
Cántalo, pero no guíes	9	8.0%
Si guías, no bebas	6	5.4%
Si te cogen borracho, vas preso	5	4.5%
Guiar borracho es un crimen serás arrestado	3	2.7%
...te vamos a arrestar	1	0.9%
Aunque hayas tomado poquito, estás borracho	1	0.9%
Conducir borracho tiene sus consecuencias	1	0.9%
De conducir ebrio, ...	1	0.9%
El martirio de la familia si el conductor ebrio es arrestado	1	0.9%
Es una mala combinación, velocidad y bebida	1	0.9%
Guiar borracho es un delito y paga tu familia	1	0.9%
Muchacho cantando a muchacha	1	0.9%
No solamente sufre el accidentado si no la familia	1	0.9%
Pagamos todos	1	0.9%
Si bebes, serás multado	1	0.9%
Si conduces ebrio, tu familia sufre	1	0.9%
Si hace uso de bebidas embriagantes, no use ningún vehículo de motor ni maquinaria	1	0.9%
Si tomas, no guíes y usa el conductor designado	1	0.9%
Si violas la ley, serás arrestado	1	0.9%
Tiene que ver con un chofer designado	1	0.9%
No recuerda	1	0.9%
<b>Total</b>	<b>112</b>	<b>-</b>

n=112. Note: The sum of percentages may be different to 100% since this is a multiple answer question, therefore and independent count is performed for each of the answers mentioned. n is equal to the number of respondents that indicated remembering any slogans, themes or phrases related to a campaign regarding driving under the influence of alcohol.

Half (45.5%) that recalled the campaign said that the message was “very effective” and only 8.9% said it was “not effective at all”.

**On a scale of 1 to 5, in which 5 means “very effective” and 1 means “not effective at all”, how effective do you think is the message you remember seeing, reading, or hearing about driving under the influence of alcohol?**

	Freq.	%
1 - Not at all effective	10	8.9%
2	4	3.6%
3	17	15.2%
4	30	26.8%
5 - Very effective	51	45.5%
<b>Total</b>	<b>112</b>	<b>100.0%</b>

n=112. Note: n is equal to the number of respondents that indicated remembering any slogans, themes or phrases related to a campaign regarding driving under the influence of alcohol.