

# Study about the campaign "Driving Under the Influence of Alcohol"

Final Report

Submitted to: Traffic Safety Commission of Puerto Rico



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#### 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 the campaign "Driving under the Influence of alcohol". This report provides a description of the methodology and the results of the of survey, which was conducted between February 17 and March 2, 2022.

#### **METHODOLOGY**

To assess the impact of the campaign, a telephone survey was carried out among residents of Puerto Rico 16 years or older with an active driver's license. The survey was based on a probabilistic sample consisting of 500 individuals. Telephone numbers were randomly chosen among a list of residential and mobile phone numbers generated through the technique of "Random Digit Dialing" (RDD). Based on the selected sample type, the estimated sampling error is ±4.4% with a confidence level of 95% for the total sample.

The research instrument for data collection was composed of 34 items, mainly closed-ended. Interviewers used a Computer Assisted Telephone Interviewing System (CATI), to perform the interviews.

#### **FINDINGS**

#### **DEMOGRAPHIC PROFILE**

The gender distribution of the sample consisted of 236 males (47.2%) and 264 females (52.8%). Both, the median age of the sample and the average were 48 years, while the youngest participant was 17 years old and the oldest was 86 years old.

#### Gender of the interviewee

	Freq.	%
Male	236	47.2%
Female	264	52.8%
Total	500	100.0%

N=500.

Age
-----

	Freq.
16 to 24	34
25 to 34	87
35 to 44	87
45 to 59	162
60 or older	128
Does not know	2
Total	500
Mean	48
Median	48
Minimum	18
Maximum	86

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

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

371	
Mean	3
Median	3
Minimum	1
Maximum	7

N=489. Elev en did not respond.

One out of four (25.2%) has a bachelor's degree. The median academic degree of the sample was between "some years of college" and "associate degree".

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

	Freq.	%	_
High School or less	17	3.4%	_
High School Diploma	124	24.8%	
Associate Degree or some years of college	153	30.6%	MEDIAN
Bachelor's Degree	126	25.2%	
Master's Degree	58	11.6%	
Doctorate Degree	12	2.4%	
Does not say	10	2.0%	
Total	500	100.0%	=

N=500.

Half (54.8%) of the participants are currently "working full time", while one out of every ten (11.6%) are working "part time". Also, one out of five (20.0%) are "retired / pensioner".

What is your current occupational status?

	Freq.	%
Working full time	274	54.8%
Working part time	58	11.6%
Only studying	5	1.0%
Working and studying	28	5.6%
Retired / Pensioner	100	20.0%
Unemployed	12	2.4%
Homemaker	18	3.6%
Other	3	0.6%
Does not say	2	0.4%
Total	500	100.0%

Half (49.8%) of the participants are married and one out of ten (29.2%) is single.

**Civil status** 

	Freq.	%
Single	146	29.2%
Married	249	49.8%
Divorced	35	7.0%
Widowed	20	4.0%
Cohabiting	44	8.8%
Does not say	6	1.2%
Total	500	100.0%

N=500.

The median household income was between \$15,001 and \$25,000 per year.

What is your annual household income?

	Freq.	%	<b>-</b> -
Up to \$15,000	93	18.6%	
\$15,001-\$25,000	73	14.6%	MEDIAN
\$25,001-\$35,000	83	16.6%	
\$35,001-\$50,000	62	12.4%	
\$50,001-\$75,000	38	7.6%	
\$75,001 or more	43	8.6%	
Does not say	108	21.6%	_
Total	500	100.0%	_

#### GENERAL DRIVING HABITS

Most of the participants of the study (75.6%) drive their vehicles "every day". While only 2.0 percent drive "once a week".

How often do you drive a motor vehicle?

	Freq.	%
Every day	378	75.6%
Almost every day	73	14.6%
Several times a week	39	7.8%
Once a week	10	2.0%
Total	500	100.0%

N=500.

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

	Freq.	%
Regular car	215	43.0%
SUV	211	42.2%
Pick-up truck or truck	52	10.4%
Van	12	2.4%
Mini van	8	1.6%
Motorbike	1	0.2%
Does not know / Does not say	1	0.2%
Total	500	100.0%

<sup>&</sup>quot;Regular cars" is the most frequent vehicle used among participants (43.0%), followed by "SUV" (42.2%). One out of every 10 participants reported the use of "pick-up or truck".

In a typical weekday the median amount of time participants spend driving is two hours, with some respondents driving as much as 20 hours. In a typical weekend day, two hours is the median amount of time participants spend driving, with respondents driving as much as 12 hours.

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

Mean	2 hours 39 minutes
Median	2 hours
Minimum	Does not drive
Maximum	20 hours

N=492. Note: 8 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 13 minutes
Median	1 hour 30 minutos
Minimum	Does not drive
Maximum	12 hours

N=488. Note: 12 did not respond.

On weekdays, three out of every four participants (74.4%) drive to "work", followed by "Shopping" (33.4%), while three out of every ten go to "medical appointments". On weekends, the most frequent driving activities were "visiting family and friends" (40.8%) and "Shopping" (40.4%) while "work" drops to 16.8%.

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

	Freq.	%
Work	372	74.4%
Shopping (grocery store, etc.)	167	33.4%
Medical appointments	151	30.2%
School / College	116	23.2%
Visiting family and friends	96	19.2%
Entertainment (movie theater, the beach, the park, etc.)	57	11.4%
Traveling around different places and spending most of the time inside the vehicle	38	7.6%
Other	4	0.8%
Does not know / Does not say	4	0.8%
Total	500	-

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	204	40.8%
Shopping (grocery store, etc.)	202	40.4%
Entertainment (movie theater, the beach, the park, etc.)	186	37.2%
Traveling around different places and spending most of the time inside the vehicle	173	34.6%
Work	84	16.8%
Medical appointments	37	7.4%
Church	21	4.2%
Does not drive on weekends	15	3.0%
School / College	5	1.0%
Other	3	0.6%
Does not know / Does not say	28	5.6%
Total	500	-

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, the median score is "five" when respondents evaluate the driving experience in Puerto Rico. The most frequent score selected by two out of ten participants was "5", and only 3.8% 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?

diffing in Foelio Rico:			_
	Freq.	%	_
1 - Very bad	105	21.0%	_
2	19	3.8%	
3	34	6.8%	
4	51	10.2%	
5	116	23.2%	MEDIAN
6	53	10.6%	
7	50	10.0%	
8	37	7.4%	
9	14	2.8%	
10 - Very good	19	3.8%	
Does not know / Does not say	2	0.4%	_
Total	500	100.0%	_
			_

N=500.

"Road conditions" is the main issue of concern for safety on the roads of Puerto Rico identified by two out of every three participants. However, 58.4% mentioned "distracted drivers" as their secondary concern, while almost half (47.8%) indicated "speed" 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	330	66.0%
Distracted drivers	292	58.4%
Speed	239	47.8%
Drunk drivers	179	35.8%
Lane cutters	84	16.8%
Drivers running red lights	76	15.2%
Motorbikes	41	8.2%
Riders on horsebacks	33	6.6%
Cyclist on the road	29	5.8%
Stray animals	27	5.4%
Pedestrian	19	3.8%
Road lighting	15	3.0%
Not respecting traffic rules	10	2.0%
Signage and traffic signs	6	1.2%
Other	10	2.0%
Total	500	-

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)

priority)		
	Freq.	%
Road conditions	179	35.8%
Speed	110	22.0%
Distracted drivers	101	20.2%
Drunk drivers	52	10.4%
Drivers running red lights	14	2.8%
Motorbikes	9	1.8%
Lane cutters	7	1.4%
Riders on horsebacks	4	0.8%
Stray animals	4	0.8%
Other	15	3.0%
Total	500	-

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	128	25.6%
Road conditions	93	18.6%
Drunk drivers	87	17.4%
Speed	64	12.8%
Drivers running red lights	24	4.8%
Lane cutters	22	4.4%
Cyclist on the road	13	2.6%
Motorbikes	9	1.8%
Pedestrian	7	1.4%
Stray animals	6	1.2%
Riders on horsebacks	4	0.8%
Other	13	2.6%
Total	500	-

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	65	13.0%
Distracted drivers	63	12.6%
Road conditions	58	11.6%
Lane cutters	55	11.0%
Drunk drivers	40	8.0%
Drivers running red lights	38	7.6%
Riders on horsebacks	25	5.0%
Motorbikes	23	4.6%
Stray animals	17	3.4%
Cyclist on the road	16	3.2%
Pedestrian	12	2.4%
Other	13	2.6%
Total	500	-

answer question, therefore and independent count is performed for each of the answers mentioned.

#### DRIVING UNDER THE INFLUENCE OF ALCOHOL

Of all the participants, 40.4% indicated having consumed alcoholic beverages at some point. The median consumption rate is about 1 to 2 times a week.

Do you consume alcoholic beverages?

	Freq.	%
Yes	202	40.4%
No	285	57.0%
Does not know	13	2.6%
Total	500	100.0%

N=500.

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

	Freq.	%	_
Every day	5	2.5%	_
3 to 4 times a week	14	6.9%	
1 to 2 times a week	89	44.1%	MEDIAN
2 to 3 time a month	57	28.2%	
Once a month or less	36	17.8%	
Does not know	1	0.5%	
Total	202	100.0%	_

n=202. Note: n is equal to the number of respondents that indicated consuming alcoholic bev erages.

One out of every ten of the participants (10.6%) admitted having 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	53	10.6%
No	431	86.2%
Does not know	16	3.2%
Total	500	100.0%

On average, the participants indicated having driven a vehicle two times, 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	7
1	18
2	10
3	1
4	3
5	4
6	2
7	1
8	1
Does not know / Does not say	6
Total	53
Mean	2
Median	1
Minimum	0
Maximum	8

n=53. Note: n is equal to the number of respondents that indicated having driven a vehicle after consuming alcoholic beverages.

Two out of every five of the participants indicated that they know the blood alcohol content allowed for drivers 18 to 20 years old (44.4%) and drivers with 21 years and older (43.6%). When asked about the specific percentage of blood alcohol content allowed, the mode value 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.	%
No	125	25.0%
Yes	193	38.6%
Does not know	182	36.4%
Total	500	100.0%

# 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.	%
No	117	23.4%
Yes	218	43.6%
Does not know	165	33.0%
Total	500	100.0%

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...

1010 2	years ora	
	Freq.	%
0	7	3.6%
0.02	4	2.1%
0.03	3	1.6%
0.04	1	0.5%
0.05	1	0.5%
0.06	5	2.6%
0.08	20	10.4%
0.10	13	6.7%
0.13	1	0.5%
0.13	2	1.0%
0.15	1	0.5%
0.16	1	0.5%
0.17	2	1.0%
0.20	9	4.7%
0.30	11	5.7%
0.35	1	0.5%
0.40	7	3.6%
0.50	9	4.7%
0.60	6	3.1%
0.70	8	4.1%
0.80	73	37.8%
0.81	1	0.5%
0.85	1	0.5%
0.90	3	1.6%
Does not say	3	1.6%
Total	193	1
Median		0.46
Mode		0.8
Minimum		0
Maximum		0.82

n=193. 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.
0	2
0.008	1
0.02	1
0.03	1
0.05	1
0.06	3
0.08	40
0.1	15
0.12	1
0.13	1
0.15	4
0.17	1
0.18	3
0.20	8
0.30	2
0.35	1
0.40	8
0.50	12
0.60	4
0.70	9
0.80	88
0.82	1
0.90	2
Does not know / Does not say	9
Total	218
Median	0.48
Mode	0.5
Minimum	0
Maximum	0.9

n=218. Note: n is equal to the number of respondents that indicated knowing the blood alcohol content allowed for drivers 21 years or older.

One out of four of the participants said that they know the blood alcohol content allowed for motorbike riders and truck drivers. When asked about the specific percentage of blood alcohol content allowed, the mode value was 0.02%.

According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for motorbike riders and truck drivers...

	Freq.	%
No	158	31.6%
Yes	123	24.6%
Does not know	219	43.8%
Total	500	100.0%

N=500.

## According to what you know about alcohol and traffic laws, could you indicate the blood alcohol content allowed for motorbike riders and truck drivers...

	Freq.
0	33
0.01	3
0.02	13
0.03	1
0.04	1
0.05	1
0.06	2
0.08	8
0.1	5
0.2	18
0.3	5
0.4	5
0.5	12
0.6	1
0.7	2
0.8	6
Does not know	7
Total	123
Median	0.19
Mode	0.08
Minimum	0
Maximum	0.8

n=123. Note: n is equal to the number of respondents that indicated knowing the blood alcohol content allowed for motorbike riders and truck drivers.

Almost, 5 out of every 6 (85%) of the participants said that they know what a designated driver is.

Do you know what a designated driver is?

	Freq.	%
Yes	425	85.0%
No	72	14.4%
Does not know	3	0.6%
Total	500	100.0%

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" (30.4%) and "likely" (43.2%) to get arrested for driving under the influence of alcohol. 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	152	30.4%
Likely	216	43.2%
Unlikely	68	13.6%
Very unlikely	50	10.0%
Does not know / Does not say	14	2.8%
Total	500	100.0%

N=500.

Eight participants (1.6%) have been pulled over for driving under the influence of alcohol (during the past 12 months).

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

	Freq.	%
Yes	8	1.6%
No	492	98.4%
Total	500	98.4%

### During the past 12 months, how many times have you been arrested for driving under the influence of alcohol?

	Freq.
1	3
2	2
5	1
Does not know / Does not say	2
Total	8
Mean	2
Median	1
Minimum	1
Maximum	5

Note: n is equal to the number of respondents that indicated having been pulled over for driving under the influence of alcohol. n=8.

# What was your blood alcohol content when you took the preliminary alcohol screening (PAS) test the last time you were pulled over?

	Freq.	%
Did not take the test	2	25.0%
0.2	1	12.5%
0.24	1	12.5%
Does not know / Does not say	4	50.0%
Total	8	100.0%

n is equal to the number of respondents that indicated having been pulled over for driving under the influence of alcohol. n=8.

### Were you summoned to appear in court for driving under the influence of alcohol?

	Freq.	%
Yes	4	50.0%
No	3	37.5%
Does not know / Does not say	1	12.5%
Total	8	100.0%

n is equal to the number of respondents that indicated having been pulled over for driving under the influence of alcohol. n= 8.

Four participants (0.8%) have they been in a car accident due to driving under the influence of alcohol (during the past 12 months).

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

	Freq.	%
Yes	4	0.8%
No	490	98.0%
Does not know / Does not say	6	1.2%
Total	500	1.2%

N=500.

## What was your blood alcohol content when you had the accident due to driving under the influence of alcohol?

	Freq.	%
Did not take the test	3	75.0%
Does not know / Does not say	1	25.0%
Total	4	100.0%

n is equal to the number of respondents that indicated having been in any car accidents due to driving under the influence of alcohol. n= 4.

As to police enforcement efforts and awareness of media campaigns for DUI, three out of every ten participants (31.2%) have 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	156	31.2%
No	337	67.4%
Does not know	7	1.4%
Total	500	100.0%

Regarding the awareness of media campaigns for DUI's, almost one out of every three participants (35.4%) recalled at least one type of message during the previous 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	177	35.4%
No	318	63.6%
Does not know	5	1.0%
Total	500	100.0%

N=500.

Among those that recalled a campaign, Local TV (70.1%), Social media (21.5%) and Radio (19.8%) 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	124	70.1%
Social media	38	21.5%
Radio	35	19.8%
Cable TV and/or satellite	9	5.1%
Other internet websites	6	3.4%
Billboards or posters at bus stops or other public places	5	2.8%
Newspaper	4	2.3%
Magazine	1	0.6%
Other	11	6.2%
Does not know / Does not say	3	1.7%
Total	177	-

n=177. 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.

Six out of every ten (62.7%) 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	111	62.7%
No	62	35.0%
Does not know	4	2.3%
Total	177	100.0%

n=177. 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 slogans 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 bebes, pasa la llave	30	27.0%
Si guías borracho serás arrestado	28	25.2%
Policía para a su propia hija	18	16.2%
Si conduces bajo los efectos del alcohol, vas arrestado	9	8.1%
Si bebes, serás arrestado	8	7.2%
si bebes, no guíes	4	3.6%
Conductor designado	2	1.8%
Si bebes, pagas	2	1.8%
Ayúdalo dios mío	1	0.9%
Cero tolerancia al alcohol	1	0.9%
Conducir ebrio te lleva a tener un accidente	1	0.9%
Considere las consecuencias a la familia sobre los efectos de conducir bajo	1	0.9%
Guiar borracho no es chiste	1	0.9%
Manejar ebrio tiene sus consecuencias	1	0.9%
No guíes embriagado	1	0.9%
Protege a los tuyos	1	0.9%
Relacionado a la velocidad y alcohol	1	0.9%
Si bebes y guías serás arrestado	1	0.9%
Si conduces ebrio pagas	1	0.9%
si estas ebrio pasa la llave	1	0.9%
Si guías y hieres a alguien te meten preso	1	0.9%
Si sales a la calle, nosotros también	1	0.9%
Si te cogen borracha pagarás	1	0.9%
Término conductor designado	1	0.9%
Tu sales y yo salgo para proteger	1	0.9%
Total	111	-

n=111. 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 (50.5%) of the participants that recalled the campaign said that the message was "very effective" and only 8.1% 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.	%
5 - Very effective	56	50.5%
4	11	9.9%
3	31	27.9%
2	3	2.7%
1 - Not at all effective	9	8.1%
Does not know	1	0.9%
Total	111	100.0%

n=111. 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.

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