Estudios Técnicos Inc.

Investigación | Estrategias | Soluciones

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 driving under the Influence of alcohol campaigns. This report presents the results of the survey, conducted between August 22 and September 16, 2019.

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 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 221 males (44.2%) and 279 females (55.8%). The median age of the sample was 46 years, the average was also 46 years, while the youngest participant was 17 years old and the oldest was 91 years old.

Gender of the interviewee

	Freq.	%
Male	221	44.2%
Female	279	55.8%
Total	**500**	**100.0%**

N=500.

Age

	Freq.
16 to 24 years	59
25 to 34 years	86
35 to 44 years	85
45 to 59 years	163
60 or older years	106
Does not say	1
Total	**500**
Mean	**46**
Median	**46**
Minimum	**17**
Maximum	**91**

N=500.

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

How many people live in your household, including yourself?	
Mean	3
Median	3
Minimum	1
Maximum	7

N=496. Four did not respond.

One out of five participants (21.6%) have a high school diploma, while three out of 10 (28.4%) has a bachelor's degree. The median academic degree of the sample was between "some years of college" and "associate degree". More than 70% of the sample has some college education.

Could you please tell me the last academic degree you completed?	Freq.	%
High School or less	36	7.2%
High School Diploma	108	21.6%
Associate Degree or some years of college	143	28.6%
Bachelor's Degree	142	28.4%
Master's Degree	56	11.2%
Doctorate Degree	10	2.0%
Does not say	5	1.0%
Total	**500**	**100.0%**

N=500.

Half (52.4%) of the participants are currently "working full time", while one out of ten (9.0%) are working "part time". Also, one out of five (19.2%) are "retired / pensioner".

What is your current occupational status?	Freq.	%
Working full time	262	52.4%
Retired / Pensioner	96	19.2%
Working part time	45	9.0%
Working and studying	38	7.6%
Homemaker	33	6.6%
Only studying	13	2.6%
Unemployed	12	2.4%
Other	1	0.2%
Total	**500**	**100.0%**

N=500.

Two out of five (43.2%) of the participants are married and one out of three (36.4%) is single.

Civil status

	Freq.	%
Married	216	43.2%
Single	182	36.4%
Cohabiting	36	7.2%
Divorced	35	7.0%
Widowed	23	4.6%
Does not say	8	1.6%
Total	**500**	**100.0%**

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	136	27.2%
$15,001-$25,000	88	17.6%
$25,001-$35,000	68	13.6%
$35,001-$50,000	59	11.8%
$50,001-$75,000	39	7.8%
$75,001 or more	31	6.2%
Does not say	79	15.8%
Total	**500**	**100.0%**

N=500.

GENERAL DRIVING HABITS

Most of the participants of the study (77.2%) drive their vehicles "every day". While only one percent drive "once a week".

How often do you drive a motor vehicle?

	Freq.	%
Every day	386	77.2%
Almost every day	70	14.0%
Several times a week	37	7.4%
Once a week	7	1.4%
Total	**500**	**100.0%**

N=500.

"Regular cars" is the most frequent vehicle used among participants (half), followed by "SUV" preferred by one of every 3. 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	271	54.2%
SUV	167	33.4%
Pick-up truck or truck	45	9.0%
Mini van	11	2.2%
Van	4	0.8%
Motorbike	1	0.2%
Does not know / Does not say	1	0.2%
Total	**500**	**100.0%**

N=500.

In a typical weekday the median amount of time participants spend driving was 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 20 hours. The minimum time reported on weekdays was 6 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	3 hours 2 minutes
Median	2 hours
Minimum	6 minutes
Maximum	20 hours

N=495. Note: Five 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 43 minutes
Median	2 hours
Minimum	Does not drive
Maximum	20 hours

N=488. Note: Twelve did not respond.

On weekdays, two out of three participants (67.8%) drive to "work", followed by "Shopping" (43.8%), while two out of 5 go to "medical appointments". On weekends, the most frequent driving activities were "visiting family and friends" and "Shopping" (47.6%) while "work" drops to 20.2%.

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

	Freq.	%
Work	339	67.8%
Shopping (grocery store, etc.)	219	43.8%
Medical appointments	201	40.2%
School / College	156	31.2%
Visiting family and friends	136	27.2%
Entertainment (movie theater, the beach, the park, etc.)	77	15.4%
Traveling around different places and spending most of the time inside the vehicle	53	10.6%
Other	22	4.4%
Church	9	1.8%
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.	%
Shopping (grocery store, etc.)	238	47.6%
Visiting family and friends	238	47.6%
Entertainment (movie theater, the beach, the park, etc.)	222	44.4%
Traveling around different places and spending most of the time inside the vehicle	156	31.2%
Work	101	20.2%
Medical appointments	56	11.2%
Church	41	8.2%
School / College	20	4.0%
Other	14	2.8%
Does not drive on weekends	6	1.2%
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, 27.0% of the participants rate driving in Puerto Rico as "five". The most frequent score selected by three out of ten participants was "5", 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	122	24.4%
2	39	7.8%
3	39	7.8%
4	37	7.4%
5	135	27.0%
6	56	11.2%
7	37	7.4%
8	23	4.6%
9	2	0.4%
10 - Very good	7	1.4%
Does not know / Does not say	3	0.6%
Total	**500**	**100.0%**

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 almost half 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	341	68.2%
Distracted drivers	332	66.4%
Speed	242	48.4%
Lane cutters	132	26.4%
Drunk drivers	130	26.0%
Drivers running red lights	92	18.4%
Riders on horsebacks	47	9.4%
Stray animals	41	8.2%
Cyclists on the road	40	8.0%
Pedestrians	19	3.8%
Motorbikes	18	3.6%
Other	51	10.2%
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)

	Freq.	%
Road conditions	165	33.0%
Distracted drivers	126	25.2%
Speed	98	19.6%
Drunk drivers	27	5.4%
Lane cutters	27	5.4%
Drivers running red lights	9	1.8%
Cyclists on the road	8	1.6%
Motorbikes	6	1.2%
Riders on horsebacks	5	1.0%
Stray animals	5	1.0%
Pedestrians	2	0.4%
Other	21	4.2%
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	142	28.4%
Road conditions	99	19.8%
Speed	69	13.8%
Drunk drivers	56	11.2%
Lane cutters	38	7.6%
Drivers running red lights	30	6.0%
Riders on horsebacks	19	3.8%
Stray animals	12	2.4%
Cyclists on the road	9	1.8%
Pedestrians	5	1.0%
Motorbikes	3	0.6%
Other	14	2.8%
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.

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.	%
Road conditions	77	15.4%
Speed	75	15.0%
Lane cutters	67	13.4%
Distracted drivers	64	12.8%
Drivers running red lights	53	10.6%
Drunk drivers	47	9.4%
Stray animals	24	4.8%
Cyclists on the road	23	4.6%
Riders on horsebacks	23	4.6%
Pedestrians	12	2.4%
Motorbikes	9	1.8%
Other	16	3.2%
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.

DRIVING UNDER THE INFLUENCE OF ALCOHOL

Of all the participants, 42.4% 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	212	42.4%
No	287	57.4%
Does not know	1	0.2%
Total	**500**	**100.0%**

N=500.

How often do you consume alcoholic beverages?

	Freq.	%
Every day	3	1.4%
3 to 4 times a week	19	9.0%
1 to 2 times a week	63	29.7%
2 to 3 time a month	58	27.4%
Once a month or less	66	31.1%
Does not know	3	1.4%
Total	**212**	**100.0%**

n=212. Note: n is equal to the number of respondents that indicated consuming alcoholic beverages.

One out of ten of the participants (12.4%) 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	62	12.4%
No	436	87.2%
Does not know	2	0.4%
Total	**500**	**100.0%**

N=500.

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	10
1	16
2	6
3	8
4	6
5	3
6	1
7	1
9	3
Does not know / Does not say	8
Total	**62**
Mean	**2**
Median	**2**
Minimum	**0**
Maximum	**9**

n=62. 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 (35.6%) and drivers with 21 years and older (37.4%). When asked about the specific percentage of blood alcohol content allowed, the average and median values were 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	211	42.2%
Yes	178	35.6%
Does not know	111	22.2%
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…

	Freq.
0	2
0.01	5
0.02	25
0.03	6
0.04	5
0.05	15
0.06	3
0.07	7
0.08	100
1.80	2
Does not know / Does not say	8
Total	**178**
Mean	**0.08**
Median	**0.08**
Minimum	**0**
Maximum	**1.8**

n=178. 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.	%
No	193	38.6%
Yes	187	37.4%
Does not know	120	24.0%
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 21 years or older…

	Freq.
0	3
0.01	6
0.02	7
0.03	10
0.04	1
0.05	15
0.06	1
0.07	6
0.08	125
0.14	1
0.18	1
1.00	1
1.20	1
1.8	1
Does not know / Does not say	8
Total	**187**
Mean	**0.08**
Median	**0.08**
Minimum	**0**
Maximum	**1.8**

n=187. Note: n is equal to the number of respondents that indicated knowing the blood alcohol content allowed for drivers 21 years or older.

Almost, 9 out of 10 (86.6%) of the participants said that they know what a designated driver is.

Do you know what a designated driver is?

	Freq.	%
Yes	433	86.6%
No	63	12.6%
Does not know	4	0.8%
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" (39.4%) and "likely" (36.6%) 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	197	39.4%
Likely	183	36.6%
Unlikely	44	8.8%
Very unlikely	56	11.2%
Does not know / Does not say	20	4.0%
Total	**500**	**100.0%**

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%
Total	**500**	**100.0%**

N=500.

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

	Freq.	%
No	499	99.8%
Does not know	1	0.2%
Total	**500**	**100.0%**

N=500.

As to police enforcement efforts and awareness of media campaigns for DUI, only one out of three participants (32.6%) 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	163	32.6%
No	327	65.4%
Does not know	10	2.0%
Total	**500**	**100.0%**

N=500.

Regarding the awareness of media campaigns for DUI's, almost half of the participants (48.2%) 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	241	48.2%
No	255	51.0%
Does not know	4	0.8%
Total	**500**	**100.0%**

N=500.

Among those that recalled the campaign, Local TV (74.3%), Radio (29.0%) and Social media (10.0%) 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	179	74.3%
Radio	70	29.0%
Social media	24	10.0%
Newspaper	19	7.9%
Billboards or posters at bus stops or other public places	11	4.6%
Cable TV and/or satellite	7	2.9%
Movie theater	3	1.2%
Other internet websites	3	1.2%
Magazine	2	0.8%
Other	4	1.7%
Does not know / Does not say	3	1.2%
Total	**241**	**-**

n=241. 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 ten (59.8%) 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	144	59.8%
No	91	37.8%
Does not know	6	2.5%
Total	**241**	**100.0%**

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 guías borracho serás arrestado	44	30.6%
Pasa la llave	25	17.4%
Si bebes no guíes	12	8.3%
Si bebes pagas	9	6.3%
Usted va a calle nosotros también	9	6.3%
Guiar borracho es un crimen, serás arrestado	6	4.2%
Si vas a beber pasa la llave	5	3.5%
Guiar borracho es un crimen	4	2.8%
Serás arrestado	4	2.8%
Si guías borracho, pagas	4	2.8%
Si guías no bebas	4	2.8%
Conductor designado	3	2.1%
Es un delito, serás arrestado	2	1.4%
Si guías borracho te van a detener	2	1.4%
Al consumir alcohol te alejas de tu familia	1	0.7%
Anuncio donde la persona esta con la pareja y bajo los efectos del alcohol	1	0.7%
Celulares	1	0.7%
Conductor designado y no tomar alcohol	1	0.7%
El que cojan borracho pa dentro	1	0.7%
Este fin de semana van a estar parando	1	0.7%
Guardia vistiéndose para janguear pero va a trabajar	1	0.7%
Guiar borracho no es alternativa	1	0.7%
Ley 22	1	0.7%
Llaves	1	0.7%
Lo pasan de mano en mano hasta llegar a la casa	1	0.7%
Los policías van para la calle	1	0.7%
Los que llenan el carro de vino	1	0.7%
Sale un policía diciendo que estamos ready para los embudos	1	0.7%
Si algo, pagas	1	0.7%
Si guías pagas	1	0.7%
Si guías pasa la llave	1	0.7%
Tus seres queridos te esperan	1	0.7%
Andar con los cinturones puestos	1	0.7%
La historia de si no pasa la llave pierde los beneficios	1	0.7%
Me gusto la ubicación de la policía	1	0.7%
Pasa las llaves, los niños te esperan	1	0.7%
Total	**144**	**-**

n=144. 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.

Two out of 5 (44.4%) that recalled the campaign said that the message was "very effective" and only 3.5% 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	5	3.5%
2	11	7.6%
3	29	20.1%
4	32	22.2%
5 - Very effective	64	44.4%
Does not know / Does not say	3	2.1%
Total	**144**	**100.0%**

n=144. 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.