

Puerto Rico: Impact of the Car Seat Campaign

Final Report

Submitted to: Traffic Safety Commission of Puerto Rico



February 17, 2021

TABLE OF CONTENT

INTRODUCTION	3
METHODOLOGY	3
FINDINGS	3
DEMOGRAPHIC PROFILE.....	3
GENERAL DRIVING HABITS.....	7
CAR SEAT PROTECTION FOR MINORS BETWEEN CERO AND EIGHT YEARS.....	13

INTRODUCTION

In November of 2020, 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 car seat campaign, utilizing a research methodology in compliance with the National Highway Traffic Safety Administration (NHTSA) requirements. This report presents the results of the survey, conducted from November 12 of 2020 through February 8, 2021.

METHODOLOGY

A telephone survey was made to residents in Puerto Rico 16 years or older with an active driver's license, father, mother, guardian or responsible for a child between 0 to 8 years old. The survey used a probabilistic sample. 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

The general demographic profile of the sample follows:

The sample gender distribution consisted of 183 males (36.6%) and 317 females (63.4%). The median and average age of the sample was 39 years old. The youngest participant had 16 years and the oldest was 78 years old.

Gender of the interviewee		
	Freq.	%
Male	183	36.6%
Female	317	63.4%
Total	500	100.0%

N=500.

Age

	Freq.
16 to 24	45
25 to 34	174
35 to 44	145
45 to 59	91
60 or older	45
Total	500
Mean	39
Median	36
Minimum	16
Maximum	78

N=500.

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

How many people live in your household, including yourself?

Mean	3.4
Median	3
Minimum	1
Maximum	8

N=491. Nine did not responded.

One out of four participants (27.2%) had a bachelor's degree, while one out of three (36.2%) had an associate degree or some years of college. The median academic degree of the sample was an associate degree or some years of college while more than 73% of the sample had some college education.

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

	Freq.	%	
High School or less	13	2.6%	
High School Diploma	109	21.8%	
Associate Degree or some years of college	181	36.2%	MEDIAN
Bachelor's Degree	136	27.2%	
Master's Degree	46	9.2%	
Doctorate Degree	5	1.0%	
Does not say	10	2.0%	
Total	500	100.0%	

N=500.

More than a half (54.4%) of the participants are currently “working full time”, while 20 percent are “working part time”.

Which is your current occupational status?

	Freq.	%
Working full time	272	54.4%
Working part time	99	19.8%
Housekeeper	48	9.6%
Retired / Pensioned	34	6.8%
Unemployed	27	5.4%
Working and studying	10	2.0%
Only studying	4	0.8%
Does not say	6	1.2%
Total	500	100.0%

N=500.

Almost half (49%) of the participants are married and one out of four (25.6%) is single.

Civil status

	Freq.	%
Married	245	49.0%
Single	128	25.6%
Cohabiting	84	16.8%
Divorced	25	5.0%
Widowed	7	1.4%
Does not say	11	2.2%
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	69	13.8%
\$15,001-\$25,000	83	16.6%
\$25,001-\$35,000	56	11.2%
\$35,001-\$50,000	41	8.2%
\$50,001-\$75,000	31	6.2%
\$75,001 or more	28	5.6%
Does not say	192	38.4%
Total	500	100.0%

MEDIAN

N=500.

GENERAL DRIVING HABITS

Most of the participants of the study (73.8%) drive their vehicles "every day", while two percent drive "once a week".

How often do you drive a motor vehicle?

	Freq.	%
Every day	369	73.8%
Almost every day	89	17.8%
Several times a week	30	6.0%
Once a week	12	2.4%
Total	500	100.0%

N=500.

"Regular car" is the most frequent vehicle used among participants (52.2%), followed by "SUV" (39.2%). Also, almost one out of 10 (5.4%) reported the use of a "pick-up truck or trucks".

What type of motor vehicle do you drive most frequently?

	Freq.	%
Regular car	261	52.2%
SUV	196	39.2%
Van	4	0.8%
Mini van	11	2.2%
Pick-up truck or truck	27	5.4%
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 spends driving is two hours. In a typical weekend the median amount of time participants spends driving is one hour and thirty minutes. The minimum time reported on weekdays was ten minutes, while on weekends some participants do not spend time driving.

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

Mean	2 hours 55 minutes
Median	2 hours
Minimum	10 minutes
Maximum	18 hours

N=435. 65 did not responded.

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

Mean	2 hours 17 minutes
Median	1 hour 30 minutes
Minimum	Does not drive
Maximum	14 hours

N=394. 106 did not responded.

During the week, three of every four participants (74.6%) drive to “work”, followed by “shopping” (32.6%) and “medical appointments” (27.8%). On weekends, the most frequent driving activity is “visiting family and friends” (43.6%) while driving to “work” dropped to 19.4%. Also, four out of ten participants (43.2%) reported driving for “shopping” on weekends.

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

	Freq.	%
Work	373	74.6%
Shopping (grocery store, etc.)	163	32.6%
Medical appointments	139	27.8%
Visiting family and friends	99	19.8%
Son / grandson or dependent school	59	11.8%
Traveling around different places and spending most of the time inside the vehicle	38	7.6%
Entertainment (movie theater, the beach, the park, etc.)	32	6.4%
School / College	28	5.6%
Errands	9	1.8%
Church	5	1.0%
Does not know / Does not say	3	0.6%
Total	500	-

N=500. 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	218	43.6%
Shopping (grocery store, etc.)	216	43.2%
Entertainment (movie theater, the beach, the park, etc.)	138	27.6%
Traveling around different places and spending most of the time inside the vehicle	118	23.6%
Work	97	19.4%
Medical appointments	35	7.0%
Church	19	3.8%
Errands	2	0.4%
Does not drive on weekends	2	0.4%
School / College	1	0.2%
Does not know / Does not say	38	7.6%
Total	500	-

N=500. 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 score selected by two out of 10 participants (18.8%) was “very bad”, and only 0.8% rated the driving experience in Puerto Rico as “very good”. The median is five.

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	91	18.2%	
2	14	2.8%	
3	44	8.8%	
4	42	8.4%	
5	102	20.4%	MEDIAN
6	63	12.6%	
7	64	12.8%	
8	40	8.0%	
9	10	2.0%	
10 - Very good	4	0.8%	
Does not know / Does not say	26	5.2%	
Total	500	100.0%	

N=500.

“Road conditions” was identified (56.6%) as the main issue of safety concern Puerto Rico's roads. Also, 55.2% mentioned “distracted drivers” as their secondary concern, while two out of five (48,2%) identified “speed” as their 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	283	56.6%
Distracted drivers	276	55.2%
Speed	241	48.2%
Drunk drivers	129	25.8%
Lane cutters	113	22.6%
Drivers running red light	81	16.2%
Riders on horsebacks	53	10.6%
Motorbikes	50	10.0%
Stray animals	43	8.6%
Cyclists on the road	36	7.2%
Pedestrians	12	2.4%
Other	51	10.2%
Total	500	-

N=500. 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.	%
Speed	239	47.8%
Distracted drivers	108	21.6%
Drunk drivers	65	13.0%
Road conditions	63	12.6%
Motorbikes	7	1.4%
Cyclists on the road	5	1.0%
Lane cutters	4	0.8%
Drivers running red light	4	0.8%
Pedestrians	2	0.4%
Other	2	0.4%
Does not know	1	0.2%
Total	500	100.0%

N=500.

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	136	27.2%
Road conditions	120	24.0%
Drunk drivers	64	12.8%
Lane cutters	36	7.2%
Motorbikes	27	5.4%
Riders on horsebacks	22	4.4%
Cyclists on the road	20	4.0%
Drivers running red light	9	1.8%
Stray animals	6	1.2%
Pedestrians	4	0.8%
Other	17	3.4%
Does not say	39	7.8%
Total	500	100.0%

N=500.

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	101	20.2%
Lane cutters	73	14.6%
Drivers running red light	68	13.6%
Stray animals	37	7.4%
Distracted drivers	32	6.4%
Riders on horsebacks	31	6.2%
Motorbikes	16	3.2%
Cyclists on the road	11	2.2%
Pedestrians	6	1.2%
Speed	2	0.4%
Other	32	6.4%
Does not say	91	18.2%
Total	500	100.0%

N=500.

CAR SEAT PROTECTION FOR MINORS BETWEEN CERO AND EIGHT YEARS

When asked about the use of the car seat when driving or traveling with a child of cero to eight years old, most of the participants (93.6% and 92.4, respectively) mentioned they “always” used the car seat.

How often do you use the car seat when you drive a vehicle with a child between cero to eight years old?

	Freq.	%
Always	468	93.6%
Almost always	12	2.4%
Sometimes	3	0.6%
Rarely	6	1.2%
Never	11	2.2%
Total	500	100.0%

N=500.

How often do you use the car seat when you travel in a vehicle with a child between cero to eight years old?

	Freq.	%
Always	462	92.4%
Almost always	10	2.0%
Sometimes	4	0.8%
Rarely	5	1.0%
Never	16	3.2%
Does not know / Does not say	3	0.6%
Total	500	100.0%

N=500.

On average, the participants indicated to travel with one child in the car.

Typically, how many children between cero to eight years old travel with you in the vehicle?

Mean	1.3 children
Median	1 child
Minimum	1 child
Maximum	4 children
Sum	659 children

N=490. 10 did not responded.

In relation to the age of the children and the type of car seat that the child uses in the vehicle, from ages zero to five almost all children use the standard car seat. Once the children reached five years, the participants move them to the booster seat. From six years and above, people tend to have their children either on a booster seat or without any protector seat.

What is the age of those children traveling with you in the vehicle?/ What type of seat does the child use, typically, with you in the vehicle?

Age	Car seat		Booster		None		Does not know / Does not apply		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
0	12	3.1%	0	0.0%	0	0.0%	1	8.3%	13	2.0%
1	63	16.3%	0	0.0%	1	1.7%	1	8.3%	65	9.9%
2	61	15.8%	2	1.0%	1	1.7%	0	0.0%	64	9.7%
3	78	20.2%	3	1.5%	0	0.0%	0	0.0%	81	12.3%
4	65	16.8%	10	4.9%	0	0.0%	3	25.0%	78	11.8%
5	43	11.1%	42	20.7%	3	5.2%	1	8.3%	89	13.5%
6	34	8.8%	45	22.2%	7	12.1%	0	0.0%	86	13.1%
7	16	4.1%	43	21.2%	26	44.8%	3	25.0%	88	13.4%
8	11	2.8%	55	27.1%	20	34.5%	3	25.0%	89	13.5%
Does not say	3	0.8%	3	1.5%	0	0.0%	0	0.0%	6	0.9%
Total	386	100.0%	203	100.0%	58	100.0%	12	100.0%	659	100.0%

n=659 children.

In terms of the participant's knowledge about the age, weight and height needed to use the car seat, the profile is as follows. The median age was seven years old; the median weight was 65 pounds, and the median height was about four feet tall.

According to what you know, up to what age, weight or height should a child between zero and eight years old use the car seat?

	Freq	%	Mean	Median	Mode
Age	N= 244	48.8%	7 years	7 years	8 years
Weight	N= 120	24.0%	69 pounds	65 pounds	60 pounds
Height	N= 43	8.6%	46 inches	48 inches	48 inches

According to what you know, up to what age should a child between zero and eight years old use the car seat?

Age	Freq.	%
2	3	1.2%
3	2	0.8%
4	15	6.1%
5	2	0.8%
5	41	16.8%
6	33	13.5%
7	31	12.7%
8	69	28.3%
9	11	4.5%
10	17	7.0%
11	5	2.0%
12	15	6.1%
Total	244	100.0%
Mean	7 years	
Median	7 years	

N=244.

According to what you know, up to what weight should a child between zero and eight years old use the car seat?

Pounds	Freq.	%
30	4	3.3%
35	2	1.7%
40	8	6.7%
45	5	4.2%
49	1	0.8%
50	15	12.5%
55	6	5.0%
60	17	14.2%
65	6	5.0%
70	10	8.3%
72	1	0.8%
75	1	0.8%
80	14	11.7%
85	2	1.7%
90	3	2.5%
92	1	0.8%
100	20	16.7%
110	2	1.7%
120	2	1.7%
Total	120	100.0%
Mean	69 pounds	
Median	65 pounds	

N=120.

According to what you know, up to what height should a child between zero and eight years old use the car seat?

Inches	Freq.	%
36	13	30.2%
42	2	4.7%
48	19	44.2%
50	2	4.7%
52	1	2.3%
53	1	2.3%
54	2	4.7%
60	3	7.0%
Total	43	100.0%
Mean	46 inches	
Median	48 inches	

N=43.

The same question was asked about the use of the booster seat, and the profile is as follows. The median age was seven years old with a median weight of 60 pounds and a median height of four feet.

According to what you know, up to what age, weight or height should a child between zero and eight years old use the booster?

	Freq	%	Mean	Median	Mode
Age	N= 269	53.8%	7 years	6 years	5 years
Weight	N= 74	14.8%	62 pounds	60 pounds	60 pounds
Height	N= 23	4.6%	46 inches	48 inches	48 inches

According to what you know, at what age can a child be changed to a booster seat?

Years	Freq.	%
2	2	0.7%
3	5	1.9%
4	21	7.8%
5	66	24.5%
6	41	15.2%
7	35	13.0%
8	39	14.5%
9	14	5.2%
10	24	8.9%
11	7	2.6%
12	13	4.8%
13	1	0.4%
14	1	0.4%
Total	269	100%
Mean	7 years	
Median	6 years	

N=269.

According to what you know, at what pounds can a child be changed to a booster seat?

Pounds	Freq.	%
25	2	2.7%
30	2	2.7%
35	1	1.4%
40	10	13.5%
44	1	1.4%
45	3	4.1%
50	11	14.9%
60	12	16.2%
65	4	5.4%
70	8	10.8%
75	2	2.7%
80	8	10.8%
90	2	2.7%
93	1	1.4%
100	7	9.5%
Total	74	100.0%
Mean	62 pounds	
Median	60 pounds	

N=74.

According to what you know, at what inches can a child be changed to a booster seat?

Inches	Freq.	%
36	6	26.1%
38	1	4.3%
42	1	4.3%
48	9	39.1%
49	1	4.3%
50	1	4.3%
55	2	8.7%
56	1	4.3%
62	1	4.3%
Total	23	100%
Mean	46 inches	
Median	48 inches	

N=23.

More than half (67.6%) of the participants indicated that the agency responsible for the inspection of the protective seats in Puerto Rico is the “Fire Department” while one in every four (25.6%) do not know which agency was responsible.

Could you tell me which is the agency where the installation of protective seats for minors in Puerto Rico is inspected or installed?

	Freq.	%
Fire Department	340	68.0%
Commission for Traffic Safety (CST)	22	4.4%
PR Police	22	4.4%
Puerto Rico Department of Transportation and Public Works	13	2.6%
Other	1	0.2%
Does not know	137	27.4%
Total	500	-

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 encouraging the use of car seat. n= 500.

During the past 12 months, 0.8% of the participants received a police officer fine for not using the car seat. All of them received a ticket in a period of 12 months, the median of those who have paid is \$ 100.

During the past 12 months, have you been given a ticket for not using the car seat?

	Freq.	%
Yes	4	0.8%
No	495	99.0%
Does not know	1	0.2%
Total	500	100.0%

N=500.

How many times have you being given a ticket in the last 12 months for not using the car seat?

Tickets	Freq.
1	4
2	0
4	0
Total	4
Mean	1
Median	1
Minimum	1
Maximum	1

N=6.

How much was the ticket?

Tickets	Freq.
\$100	2
\$500	1
No indica	1
Total	4
Mean	\$233
Median	\$100
Minimum	\$100
Maximum	\$500

N=3.

Six out of ten participants (60.2%) indicated that is “very unlikely” that they get a police officer fine for not using the car seat when traveling with a child.

How likely is it that you get a ticket for not using a car seat when traveling with children between the ages of zero to eight?

	Freq.	%	
Very likely	113	22.6%	
Likely	34	6.8%	
Unlikely	50	10.0%	
Very unlikely	301	60.2%	MEDIAN
Does not know / Does not say	2	0.4%	
Total	500	100.0%	

n= 500

Regarding the awareness of media campaigns to encourage the use of a car seat for children aged zero to eight, 12.2% of the participants recalled at least one type of message during the last 30 days.

During the past 30 days, do you remember having seen, read or heard any message from a campaign to encourage the use of a car seat for children aged zero to eight?

	Freq.	%
Yes	61	12.2%
No	436	87.2%
Does not know	3	0.6%
Total	500	100.0%

n= 500

Among the participants who remembered the campaign; "Local TV" (57.4%), "social networks" (26.2%) and "radio" (21.3%) were the main media in which they recalled listening to, reading or watching the campaign.

How did you hear, see, or read the message about the use of car seat?

	Freq.	%
Local TV	35	57.4%
Social media	16	26.2%
Radio	13	21.3%
Newspaper	7	11.5%
Other internet websites	4	6.6%
Billboards or posters at bus stops or other public places	3	4.9%
Cable TV and/or satellite	2	3.3%
Magazine	2	3.3%
Movie theater	2	3.3%
Other:	4	6.6%
Does not know / Does not say	1	1.6%
Total	61	-

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 encouraging the use of car seat. n= 61.

One out of 10 participants (9.8%) that recalled the campaign, remembered slogans or phrases as part of it.

Do you remember any slogan or phrase you saw, heard, or read as part of the campaign about the use of car seat?

	Freq.	%
Yes	6	9.8%
No	55	90.2%
Total	61	100.0%

n is equal to the number of respondents that indicated remembering any messages related to a campaign encouraging the use of car seat. n=61.

The following table summarizes the slogan recall of the participants:

Which slogan, slogans, or phrases do you remember regarding this campaign about the use of car seat?

	Freq.	%
Amárrate a la vida	1	16.7%
Dejaste en un lugar seguro lo que más amas en el lugar de trabajo	1	16.7%
Proteger a los niños para evitar desgracias	1	16.7%
Si no lo tienes se te va a multar	1	16.7%
Does not say	2	33.3%
Total	6	-

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 slogan or phrase related to a campaign encouraging the use of car seat. n=6.

For six of 10 participants (57.4%) that recalled the campaign, the message was “very effective”. Only 7.8% indicated 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 this message you remember seeing, reading, or hearing about the use of car seat?

	Freq.	%
1 - Not at all effective	1	1.6%
2	1	1.6%
3	9	14.8%
4	12	19.7%
5 - Very effective	35	57.4%
Does not know / Does not say	3	4.9%
Total	61	100.0%

n is equal to the number of respondents that indicated remembering any slogan or phrase related to a campaign encouraging the use of car seat. n=61.

Half of these participants (52.5%) that recalled the campaign indicated that the Commission for Traffic Safety (CST) is the agency responsible for the campaign on the use of car seats for children 0 to 8 years of age, while 21.3% said it was the Puerto Rico Police.

From the following agencies, which one do you think is responsible for the campaign on the car seat for children 0 to 8 years old that you remember having been exposed?

	Freq.	%
Commission for Traffic Safety (CST)	32	52.5%
Puerto Rico Police	13	21.3%
Puerto Rico Department of Transportation and Public Works	6	9.8%
Highway Authority	1	1.6%
Fire Department	1	1.6%
Auto Insurance Companies	1	1.6%
Other	2	3.3%
Does not know	5	8.2%
Total	61	100.0%

n is equal to the number of respondents that indicated remembering any slogan or phrase related to a campaign encouraging the use of car seat. n=61.

Almost one out of four (8.6%) of the participants indicated that they remember seeing, reading, or hearing anything about the Puerto Rico police inflicting fines on people traveling with minors without using the car seat.

During the past 60 days, do you remember seeing, reading, or hearing anything about the Puerto Rico police inflicting fines on people traveling with minors without using the car seat?

	Freq.	%
Yes	43	8.6%
No	455	91.0%
Does not know	2	0.4%
Total	500	100.0%

N=500.

Prepared by:



T 787.751.1675 **F** 787.767.2117 **E** estudios tecnicos@estudios tecnicos.com
Domenech 113 Hato Rey PR 00918-3501 | Apartado 12144 San Juan PR 00914-0144