

**STREET SMART**

**2022**

# DOVER, NJ

## FINAL REPORT



**Avenues in Motion**

Improving Community Transportation Options

## SUMMARY

Street Smart NJ campaign efforts were conducted in Dover in the spring of 2022 to promote pedestrian safety, increase awareness and knowledge, and improve walking and driving behaviors. The campaign consisted of education and outreach activities, a targeted paid social media advertisement campaign, and enforcement efforts by the Dover Police Department.

Results from the social media advertisement campaign showed that the average reach was 1,700 for each educational video and the average play time per audience member was 13 seconds. Surveys indicated that 37 percent of 2022 participants reported seeing pedestrian safety messaging on social media, an 11 percent increase from a 2021 survey. Overall survey results showed increases in awareness of pedestrian safety messaging and the presence of the Street Smart NJ campaign in the community. In addition, results from two intersection observations conducted in Dover in 2022 showed that there was a statistically significant 10 percent decrease in drivers failing to stop for pedestrians at the intersection of Blackwell Street and Essex Street.

## STREET SMART NJ OVERVIEW

Street Smart NJ is a statewide public education, awareness and behavioral change campaign that was developed in 2013 by the North Jersey Transportation Planning Authority (NJTPA), the metropolitan planning organization for the 13-county northern New Jersey region. The NJTPA, along with the Federal Highway Administration (FHWA), the New Jersey Department of Transportation (NJDOT), NJ TRANSIT, NJ Division of Highway Traffic Safety (NJDOTS), and the Transportation Management Associations (TMAs) worked with numerous community partners to develop and pilot the Street Smart NJ program. The campaign is funded through U.S. Department of Transportation resources.

## AVENUES IN MOTION

Avenues in Motion, formerly known as TransOptions, is a nonprofit organization and is one of eight Transportation Management Associations (TMA) in New Jersey. The TMAs are tasked with implementing strategies and programs that address traffic congestion, economic development, air quality, roadway user safety and livability issues.

Each TMA is responsible for a designated service area, with Avenues in Motion being responsible for the northwestern area of the state. This area encompasses all of Morris, Warren and Sussex counties, as well as suburban Essex, Passaic and Union counties.

## DOVER, NEW JERSEY

The Town of Dover is located in Morris County, New Jersey. Dover had a population of 18,460 as of April 1, 2020, according to the United States Census Bureau<sup>1</sup>. Dover is a walkable community with shopping, restaurants, religious centers, parks, and access to NJ TRANSIT bus and train service.

The community of Dover has experienced disproportionate crash and equity burdens. Between January 1, 2016 and December 31, 2020, 80 pedestrians were involved in crashes, making Dover the municipality with the second highest number of pedestrians involved in crashes in Morris County. Of these crashes in Dover, one resulted in a pedestrian fatality and six pedestrians had suspected serious injuries<sup>2</sup>. Data sourced from the American Community Survey 5-year estimates between 2016 and 2020 also shows that, compared to other Morris County towns, Dover has a higher level of populations that are low income, minority, Limited English Proficiency, and households with no access to a vehicle.<sup>3</sup> Avenues in Motion has prioritized safety efforts in Dover to increase focus on reducing crash burdens in underserved communities.

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<sup>1</sup> United States Census Bureau. (2022). *QuickFacts Dover town, New Jersey*. [www.census.gov/quickfacts/fact/table/dovertownnewjersey](https://www.census.gov/quickfacts/fact/table/dovertownnewjersey)

<sup>2</sup> New Jersey Division of Highway Traffic Safety. (2022). *Numetric Crash Analysis Tool*.

<sup>3</sup> North Jersey Transportation Planning Authority (2022). *Equity Analysis Tool*. [equity-resources-njtpa.hub.arcgis.com/pages/equity-analysis-tool](https://equity-resources-njtpa.hub.arcgis.com/pages/equity-analysis-tool)

## STREET SMART NJ EFFORTS IN DOVER

Street Smart NJ and pedestrian safety-focused activities started in Dover in May of 2022 after the community previously participated in efforts in 2017, 2019, and 2021. Avenues in Motion coordinated efforts with the police department and representatives from local community organizations, including Connecting Dover, a group of local community organizations serving Dover to address needs and share resources in the community.

In May and June 2022, Avenues in Motion launched a series of educational social media video advertisements geographically targeted at Dover with key pedestrian safety behavior-focused messaging. Campaign signage was also displayed throughout the community and pedestrian safety was promoted at local events. The Dover Police Department also increased interactions related to pedestrian safety laws in the following months.

Pedestrian safety and Street Smart NJ was promoted at the following events:

- Connecting Dover's April 2022 meeting
- Dover Bike Run
- 8<sup>th</sup> grade orientation at Dover High School
- Bookmark Contest with Dover Middle School
- Dover National Night Out Event
- Connecting Dover's Cultural Connections Festival

To evaluate impacts of these efforts, Avenues in Motion conducted intersection observations in both April and June of 2022 as well as an online survey that collected responses throughout the summer of 2022. Avenues in Motion also reviewed the results associated with the targeted social media advertisement campaign.

Connections and partnerships made during Dover's 2022 Street Smart NJ activities also led to Avenues in Motion coordinating a walk audit in August 2022 around the school building that houses both East Dover Elementary School and Dover Middle School. School representatives, the police department, and representatives from NJDOT participated in the walk audit.

## PAID SOCIAL MEDIA ADVERTISEMENT CAMPAIGN

Avenues in Motion developed a series of educational videos that address specific driving and walking behaviors associated with Street Smart NJ and general pedestrian safety behavioral needs. Each video advertisement was less than 30 seconds in length with the average length of the videos being 23.1 seconds. Advertisements were posted weekly over six weeks on Facebook and Instagram with target audiences of people who reside in or had recently visited Dover and the surrounding area. Many videos included photos of specific roadway locations in Dover to provide local examples of areas where certain safe walking and driving behaviors are necessary. The videos were launched as paid advertisements and were posted directly to Avenues in Motion's social media accounts. The videos were also directly shared with Connecting Dover and posted on their Facebook page.

Dover is home to a high population of people of Hispanic and Latino origins (67.5 percent), according to the United States Census Bureau<sup>4</sup>. Advertisements were developed in both English and Spanish and targeted social media users using the platforms in both languages.

Below are the topics addressed in the paid social media video advertisement campaign. The videos were evaluated using reach and average play time metrics provided by Meta. Reach is defined as the number of people who saw the advertisement at least once. The average play time is defined as the average amount of time the audience spent watching the video. For the entire campaign, the average reach was 1,700 and the average play time was 13 seconds.

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<sup>4</sup> United States Census Bureau. (2022). *QuickFacts Dover town, New Jersey*. [www.census.gov/quickfacts/fact/table/dovertownnewjersey](https://www.census.gov/quickfacts/fact/table/dovertownnewjersey)

## VIDEO 1: STOP FOR PEDESTRIANS | PARE Y DE PASO A LOS PEATONES



- Reviewed the need for people driving to stop for pedestrians at non-signalized crosswalks and intersections
- Video highlighted specific locations in Dover where there are non-signalized intersections where drivers must stop for pedestrians

	English	Spanish
Video length	24.3 seconds	23.2 seconds
Reach	1,986 reached	1,820 reached
Average play time	13 seconds	13 seconds

## VIDEO 2: SPEED AND PEDESTRIAN SAFETY | VELOCIDADES SEGURAS Y SEGURIDAD PEATONAL



- Video was specifically targeted at young males ages 18 to 34 who reside in or had recently visited Dover and the surrounding area. This population was selected because young male drivers are the population most likely to be speeding at the time of fatal crashes, according to the National Highway Traffic Safety Administration (NHTSA)<sup>5</sup>

<sup>5</sup> National Highway Traffic Safety Administration. (2020). Traffic Safety Facts: 2018 Data. Speeding. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812932>

- Messaging addressed common beliefs held by the target audience related to how they value their driving skills
- Informed target audience that good driving skills can be accomplished by slowing down

	English	Spanish
Video length	25.5 seconds	27.8 seconds
Reach	1,564	1,300
Average play time	12 seconds	13 seconds

### VIDEO 3: USE CROSSWALKS | USE CRUCES DE PEATONES



- Informed audience that both crosswalks and corners are an acceptable place to cross the street
- Video highlighted busy crosswalk locations in Dover

	English	Spanish
Video length	20.5 seconds	21.3 seconds
Reach	1,963	1,784
Average play time	18 seconds	15 seconds

### VIDEO 4: PEDESTRIAN SIGNALS | SEÑALES PARA PEATONES





**NO CRUCES**  **PRESIONA EL BOTÓN**



- Video feature footage of the pedestrian signal counting down at the intersection of Blackwell Street & Morris Street and reminded the audience not to cross when the signal is counting down
- Encouraged audience to press the button using an example of a pedestrian push button in Dover
- Reminded audience to cross the street only with the 'Walk' signal

	English	Spanish
<b>Video length</b>	22.8 seconds	22.8 seconds
<b>Reach</b>	1,875	1,720
<b>Average play time</b>	13 seconds	13 seconds

#### VIDEO 5: YIELD TO PEDESTRIANS WHEN TURNING | CEDE EL PASO A PEATONES CUANDO ESTÁS GIRANDO

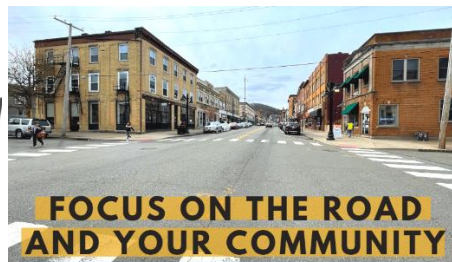


- Reviewed the need for people driving to give pedestrians the right-of-way when turning at signalized intersections
- Video highlighted specific locations in Dover where signalized intersections are present
- Featured examples of drivers yielding to pedestrians in crosswalks when turning in Dover

	English	Spanish
<b>Video length</b>	22.9 seconds	22.9 seconds
<b>Reach</b>	1,769	1,583
<b>Average play time</b>	13 seconds	14 seconds

## VIDEO 6: DISTRACTED DRIVING AND PEDESTRIAN SAFETY | DISTRACCIONES EN LA CALLE

**YOU'RE A  
BETTER DRIVER  
WITHOUT  
YOUR PHONE**



**Heads up,  
phones down**



**ERES UN  
MEJOR CONDUCTOR  
SIN TU  
TELÉFONO**



**MANEJE CON CAUTELA**

**Mirando hacia  
delante, y con el  
teléfono apagado**



- Messaging address the values drivers hold in having good driving skills and that cellphone use can impede their driving abilities
- Videos featured images of downtown Dover and encourage the audience to focus on their community instead of their phone while driving.

	English	Spanish
<b>Video length</b>	20.4 seconds	23.3 seconds
<b>Reach</b>	1,451	1,319
<b>Average play time</b>	9 seconds	9 seconds

### SURVEY RESULTS

Avenues in Motion conducted an online survey in July 2022 to evaluate the impacts of the 2022 Street Smart activities in Dover. The results of the 2022 survey were compared to most recent 2021 survey results from the Street Smart efforts conducted approximately one year prior. New questions were added to the 2022 survey which are noted in this section.

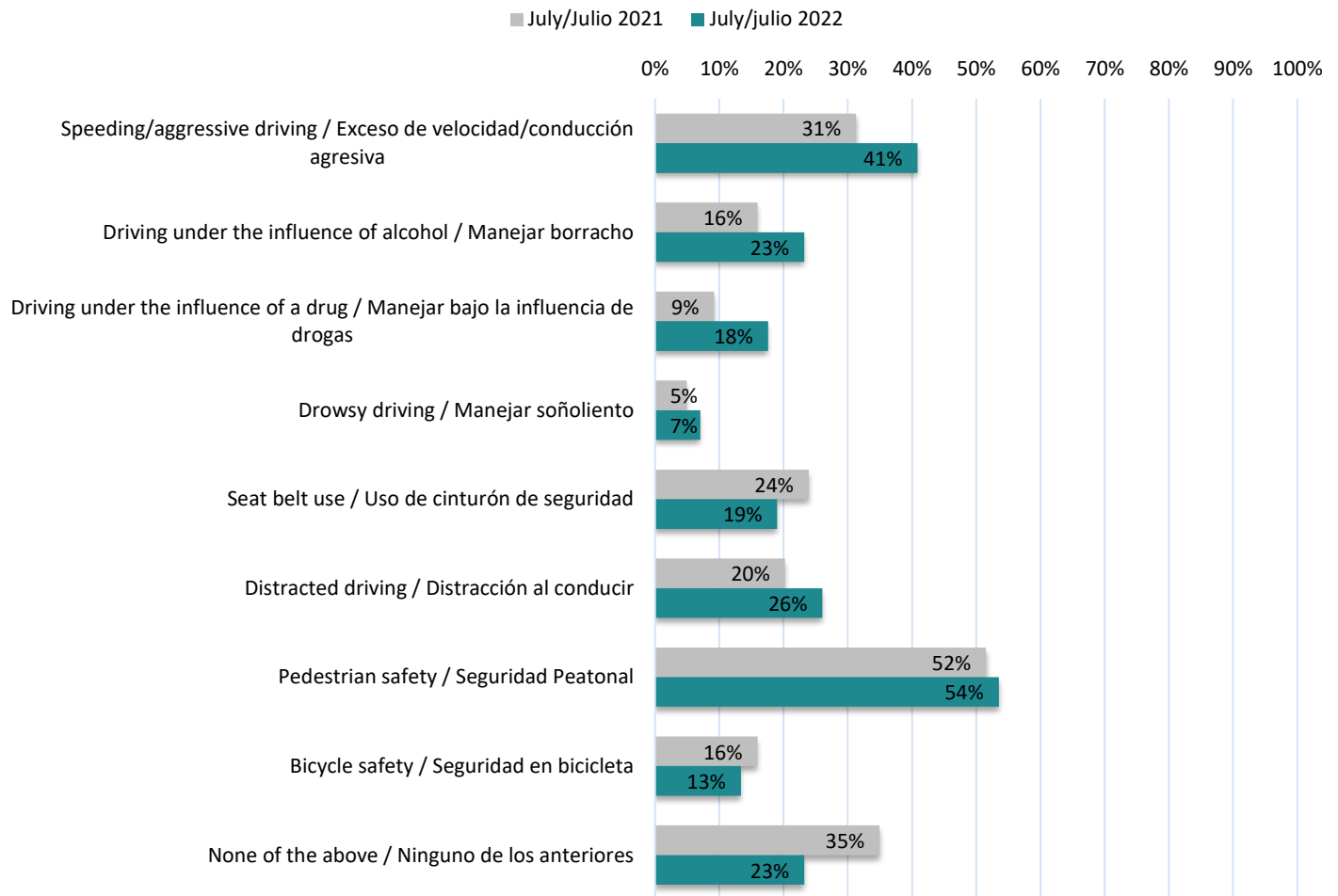
In order to participate in the surveys, participants had to be 18 years of age or older, have to live, work or go to school in Dover or otherwise frequently visit the community. The surveys were available in both English and Spanish. The Dover Police Department and Connecting Dover assisted in distributing the survey on social media. The 2021 survey received 164 responses (134 in English, 30 in Spanish) and the 2022 survey received 179 responses (117 responses in English, 62 responses in Spanish).

The survey results showed increases in awareness of pedestrian safety messaging and the presence of the Street Smart NJ campaign in the community. Future evaluation efforts should focus on increasing survey participation and obtaining appropriate sample sizes in both English and Spanish.

## CAMPAIGN AWARENESS RESULTS

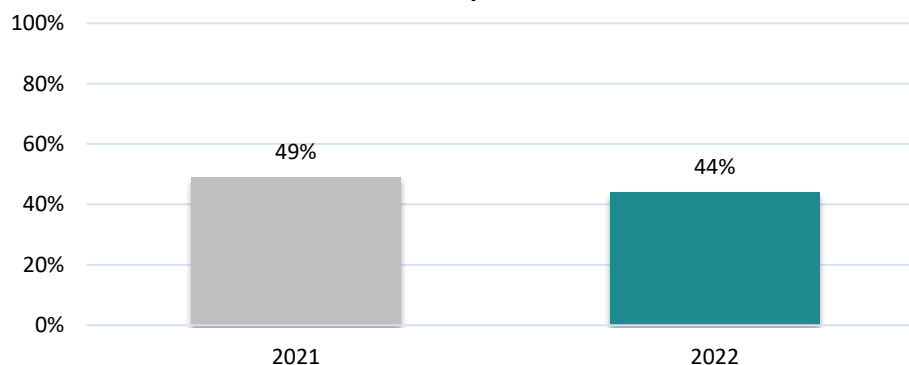
IN THE LAST 30 DAYS, HAVE YOU READ, SEEN OR HEARD ANY MESSAGES ADDRESSING THE FOLLOWING...

(SELECT ALL THAT APPLY) / EN LOS ÚLTIMOS 30 DÍAS, HA LEÍDO, VISTO, O OÍDO UNOS MENSAJES PUBLICADOS EN LA CALLE O EN LAS REDES SOCIALES QUE SE TRATAN DE... (ELIGE TODOS QUE SE APLICAN)

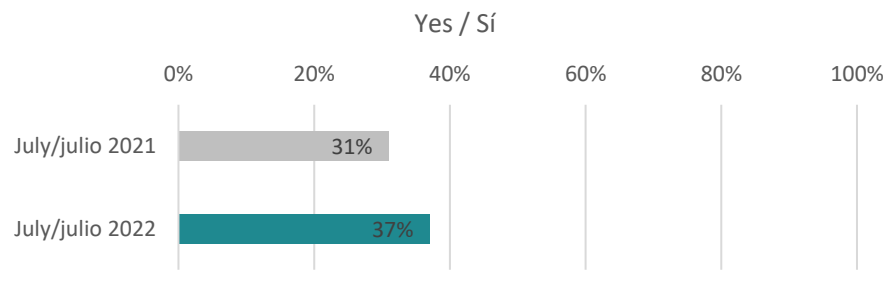
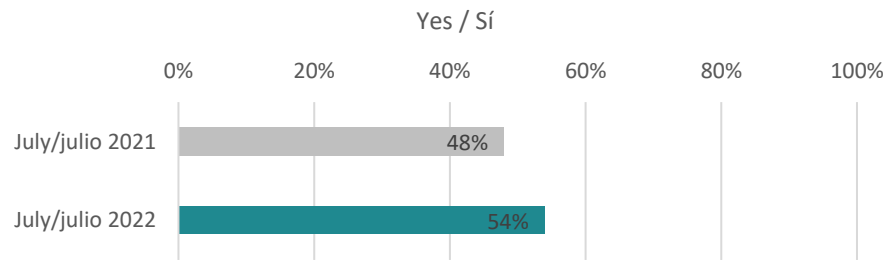
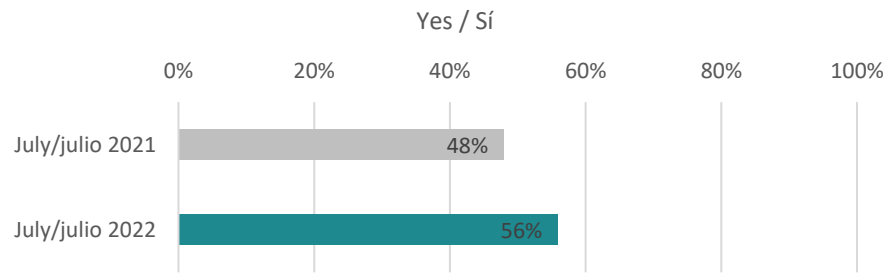
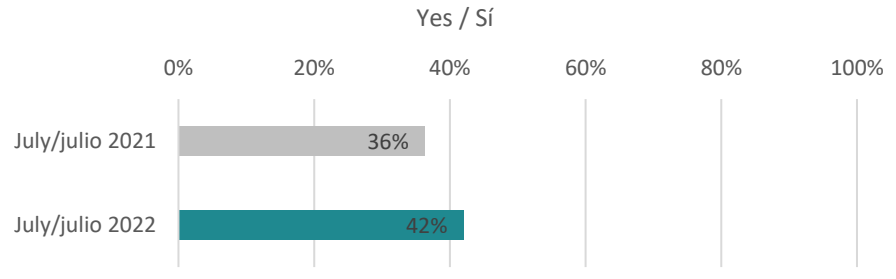
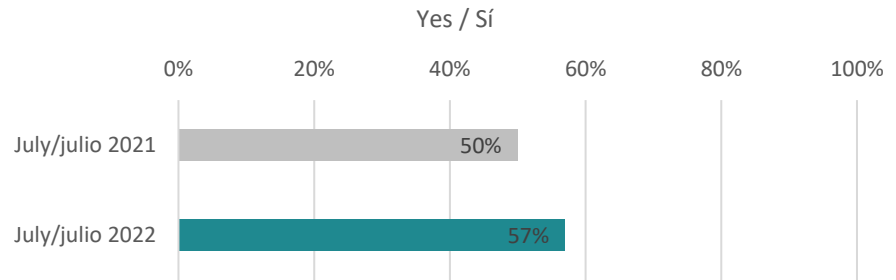


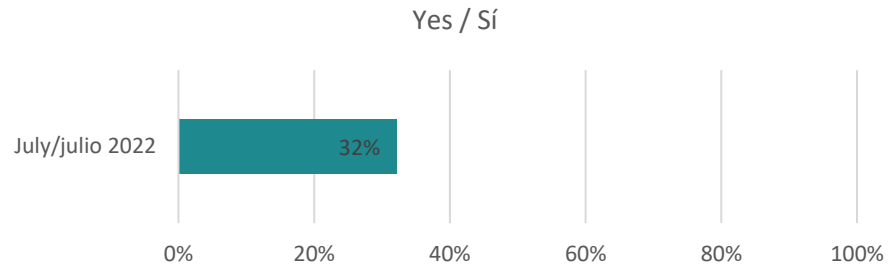
HAVE YOU READ, SEEN OR HEARD ANY MESSAGE OR SIGNAGE THAT MENTIONS "STREET SMART"? / HA LEÍDO, VISTO, O OÍDO UNOS MENSAJES O SEÑALES QUE MENCIONAN "STREET SMART"?

Yes / Sí



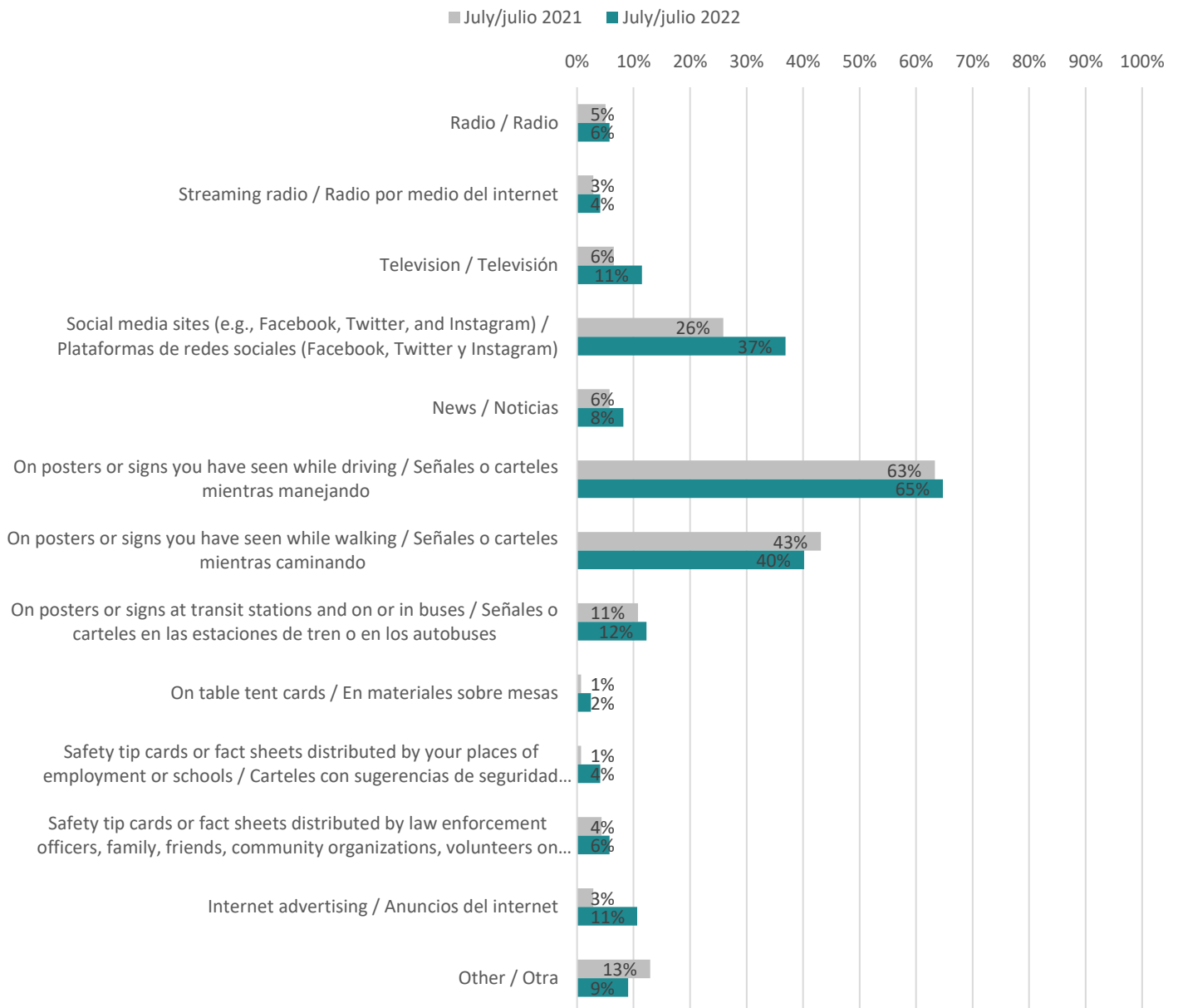
IN THE LAST 30 DAYS, HAVE YOU READ, SEEN OR HEARD ANY MESSAGES SIMILAR TO THE FOLLOWING... /  
EN LOS ÚLTIMOS 30 DÍAS, HA LEÍDO, VISTO O OÍDO UNOS MENSAJES QUE VEAN SIMILAR A...



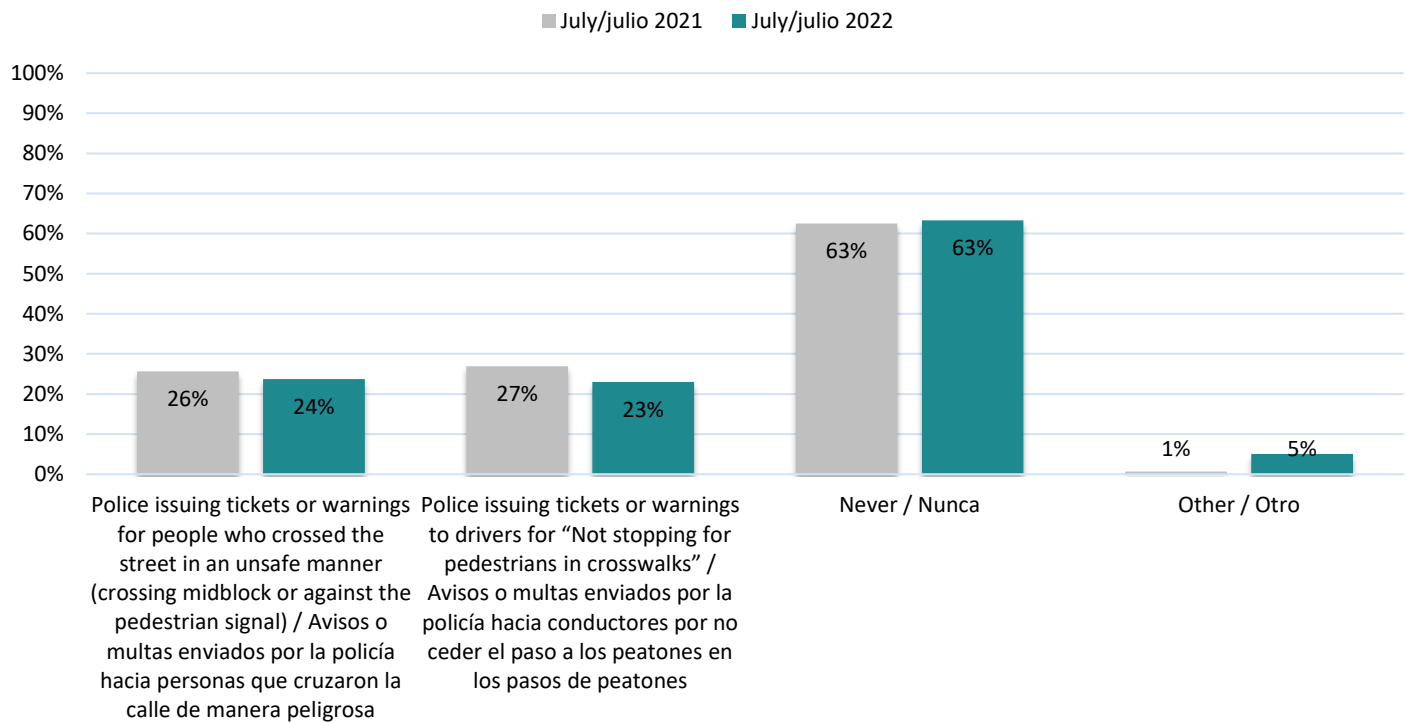


**\*New question added in 2022.** In March 2022, New Jersey passed the Safe Passing Law. Messaging about the new law was added to the Street Smart NJ campaign

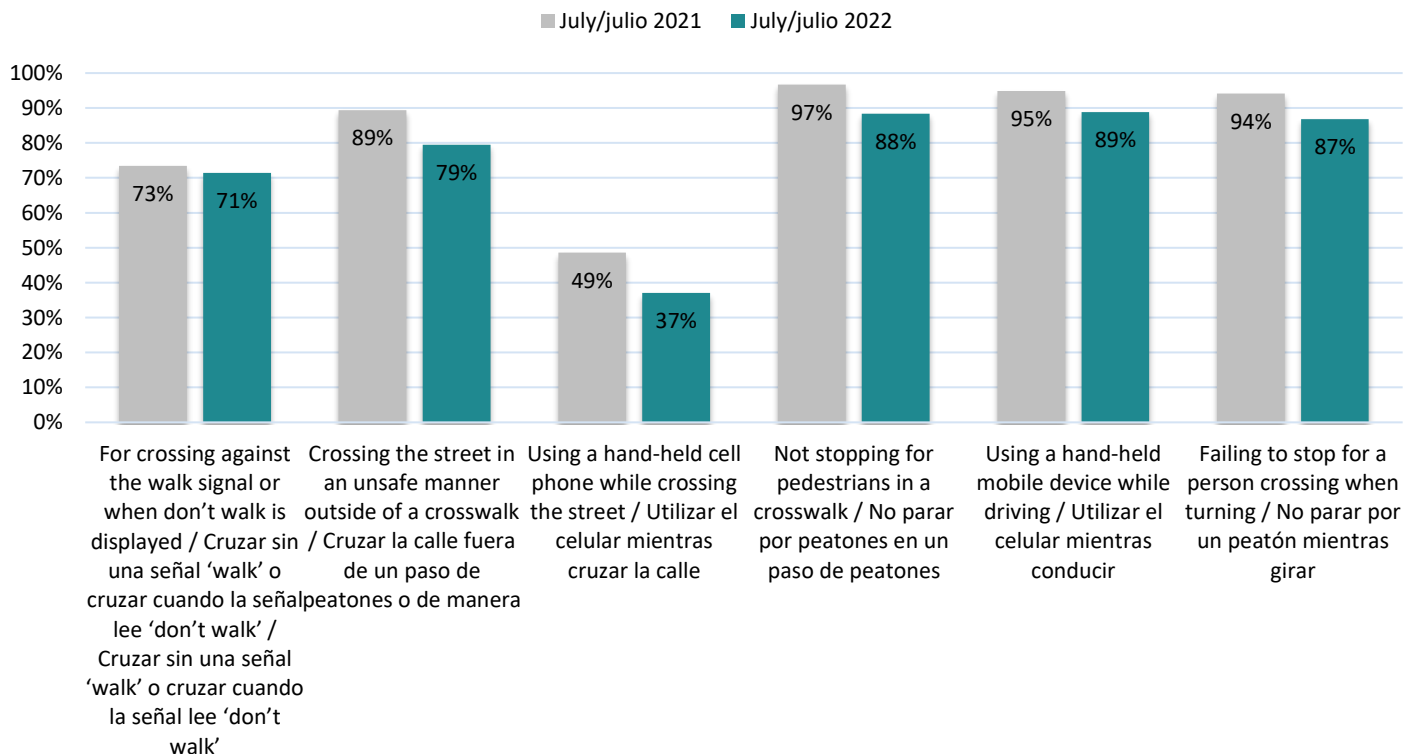
**IF YOU SAW OR HEARD ANY OF THE MESSAGES FROM THE PREVIOUS QUESTIONS, WHERE DID YOU SEE OR HEAR THEM? (SELECT ALL THAT APPLY). / ¿SI HABÍA VISTO ALGUNOS DE LOS MENSAJES DE LA PREGUNTAS ANTERIORES ¿DÓNDE LOS VIO? (MARQUE TODOS LOS QUE APLIQUEN)**



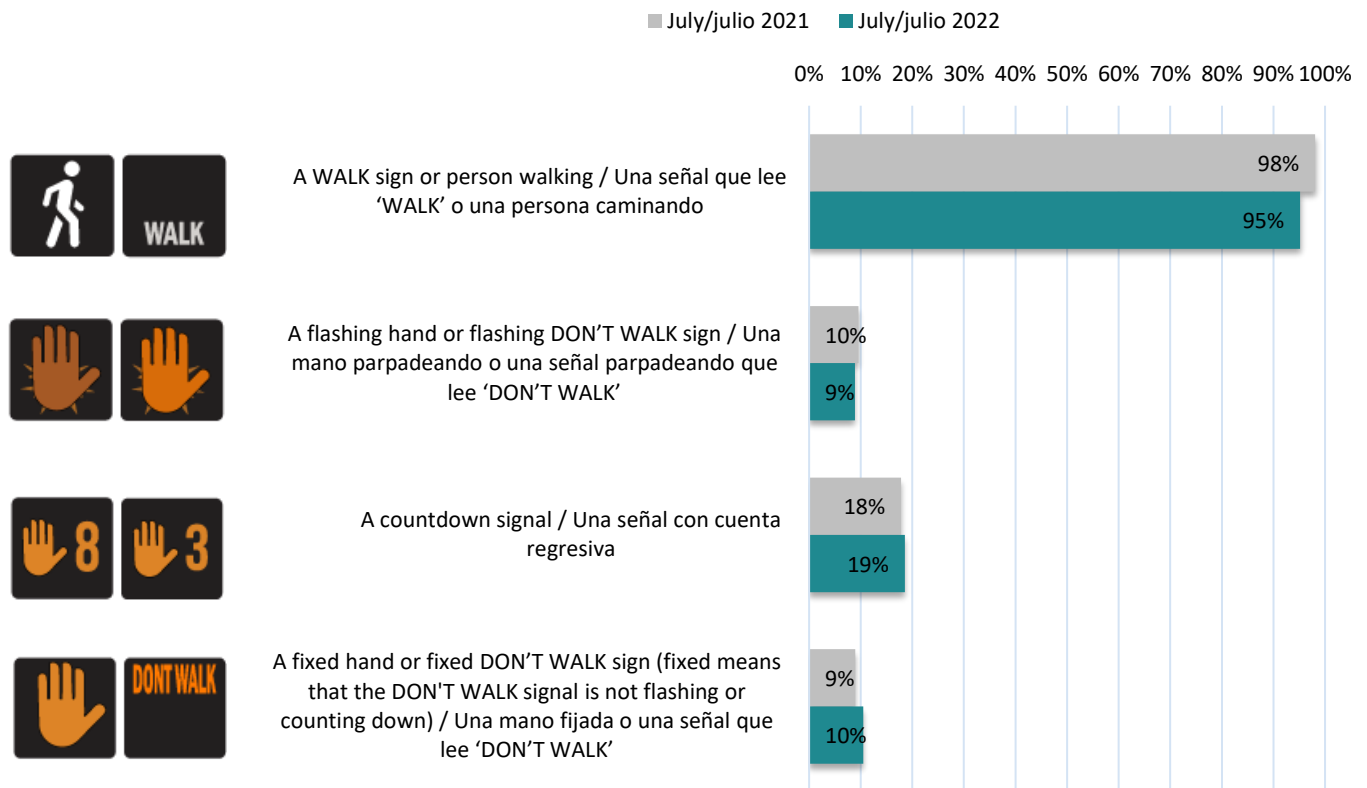
**HAVE YOU RECENTLY READ, SEEN OR HEARD ABOUT THE FOLLOWING POLICE EFFORTS TO ENFORCE PEDESTRIAN SAFETY LAWS? (CHECK ALL THAT APPLY) / HA LEÍDO, VISTO, ¿U OÍDO RECIENTEMENTE DE LOS SIGUIENTES ESFUERZOS POR PARTE DE LA POLICIA CON EL FIN DE IMPONER LA SEGURIDAD PEATONAL? (MARQUE TODOS LOS QUE APLIQUEN)**



**TO THE BEST OF YOUR KNOWLEDGE, CAN YOU RECEIVE A TICKET IN NEW JERSEY FOR... / SEGÚN SU CONOCIMIENTO, UNO PUEDE RECIBIR UNA MULTA EN NUEVA JERSEY POR...**



**AT INTERSECTIONS WITH A TRAFFIC LIGHT AND PEDESTRIAN SIGNAL, YOU SHOULD BEGIN WALKING WHEN THE PEDESTRIAN SIGNAL SHOWS: (SELECT ALL THAT APPLY) / CUANDO LLEGA A UN CRUCE CON UN SEMÁFORO Y UNA SEÑAL PEATONAL, DEBE PASAR POR EL PASO DE PEATONES CUANDO LA SEÑAL PEATONAL MUESTRA: (SE PUEDE ELEGIR RESPUESTAS MÚLTIPLES)**



### SELF-REPORTED BEHAVIOR RESULTS

Questions related to self-reported behaviors were used in the 2022 survey only.

#### WHEN DRIVING, HOW OFTEN DO YOU DO THE FOLLOWING?

	Never	Sometimes	Usually	Always	Does not apply - I do not drive
Drive the speed limit on local/residential streets?	1%	3%	28%	62%	6%
Stop for a pedestrian at a marked crosswalk?	1%	1%	12%	80%	6%
Use your cellphone while driving (phone call, texting, email, change music)?	65%	25%	1%	2%	6%

#### WHEN WALKING, HOW OFTEN DO YOU DO THE FOLLOWING?

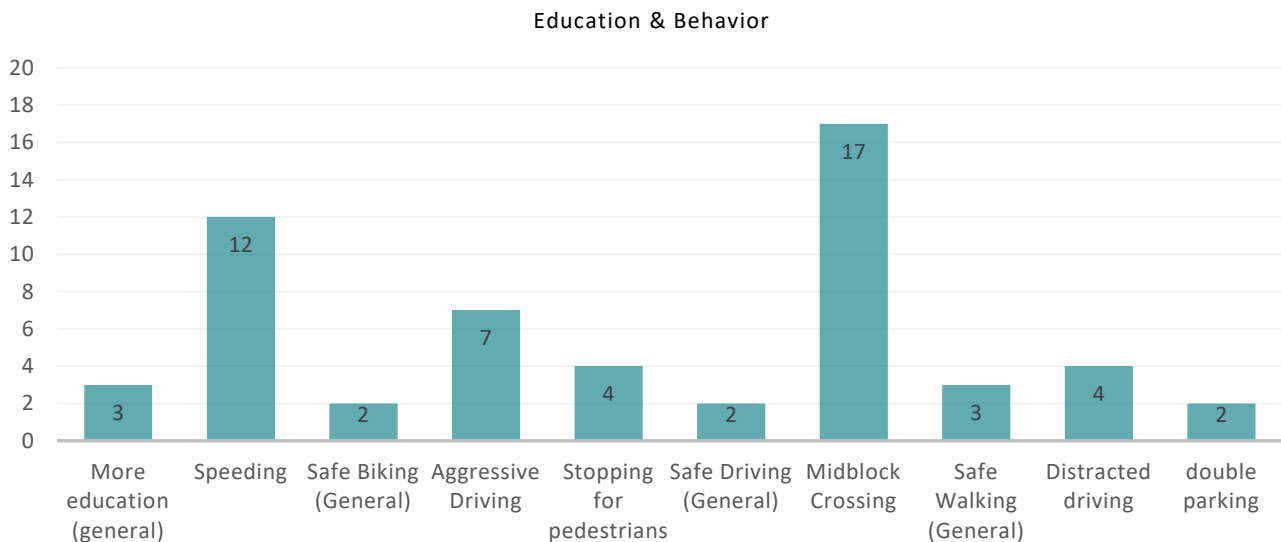
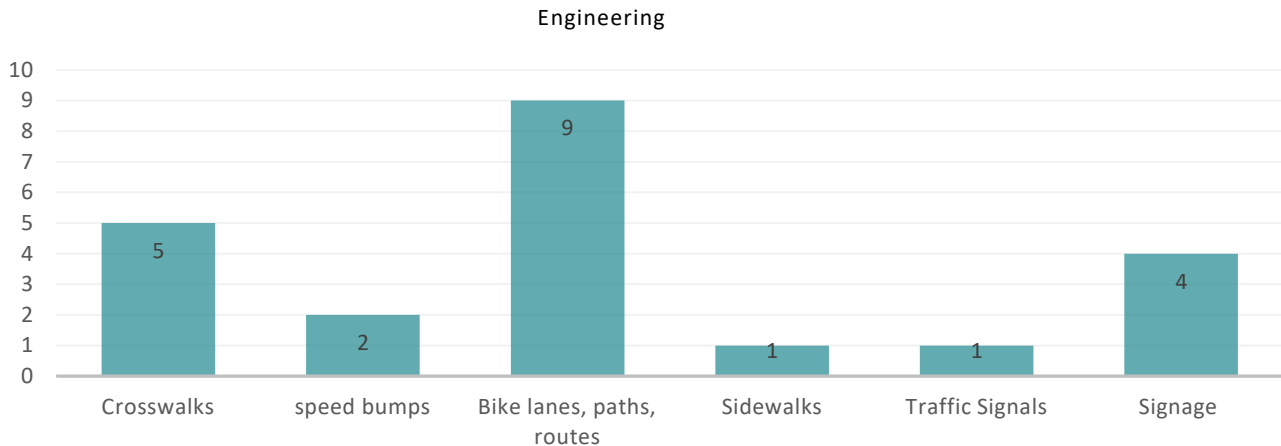
	Never	Sometimes	Usually	Always
Cross the street mid-block (jaywalk)? / ¿Cruzar la calle a mitad de cuadra (jaywalk)?	68%	74%	4%	3%
Cross with the "walk" signal? / ¿Cruzar con la señal de "caminar"?	30%	19%	29%	70%

## SHORT ANSWER QUESTION

The 2022 survey included two short answer questions where participants were able to submit answers about their perspectives on traffic safety needs in response to the following questions:

- *“Is there anything that would encourage you to walk, bike, or drive more safely in your community?”/ “¿Hay algo que te motiva a caminar, andar en bicicleta, o conducir de manera más segura en tu comunidad?”*
- *“Do you have any additional comments about safe walking and driving in your community?”/ “¿Tienes comentarios adicionales acerca de cómo caminar y conducir con seguridad en tu comunidad?”*

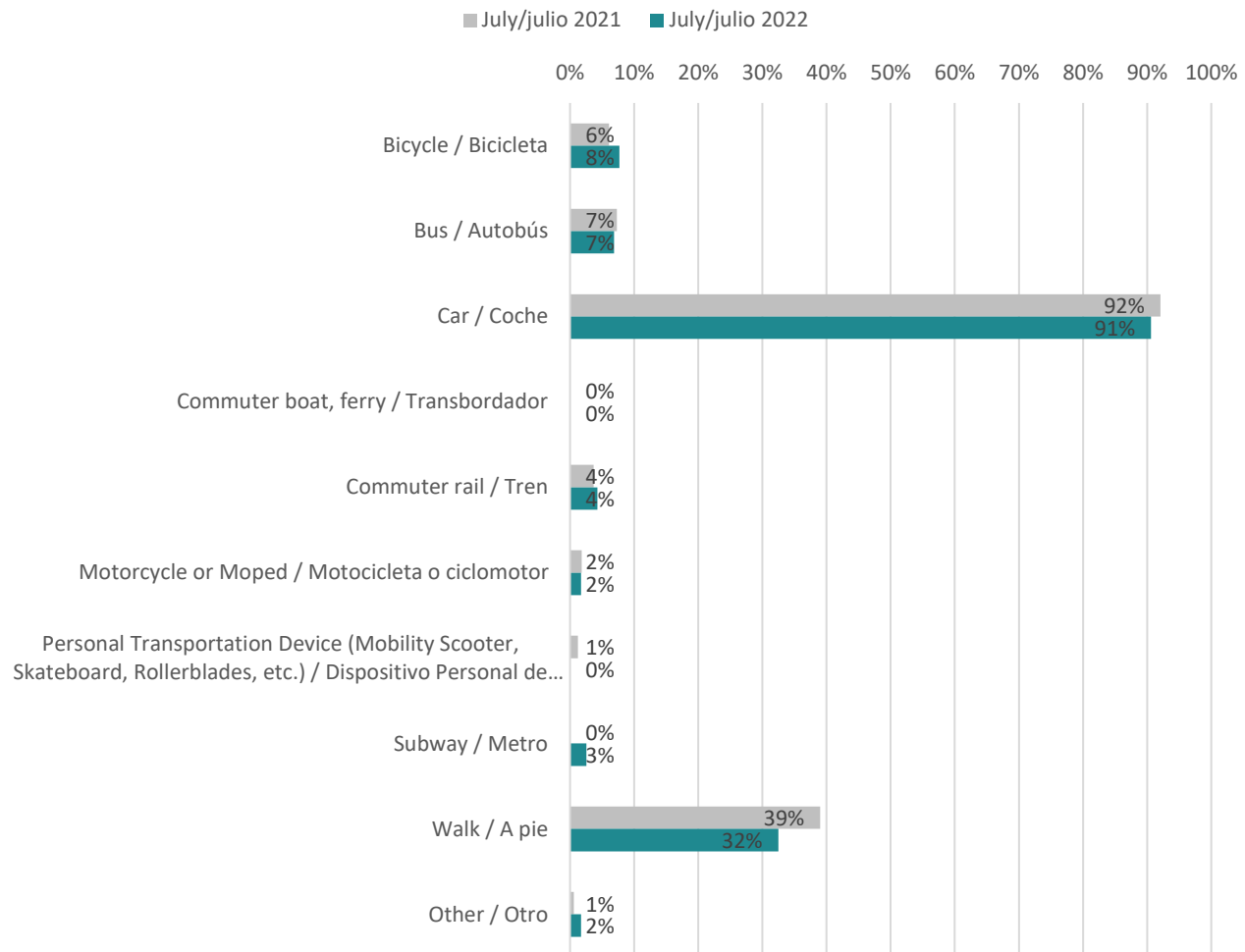
The responses to the questions above were combined and coded to identify patterns in traffic safety needs related to engineering, education and behavior, and enforcement.



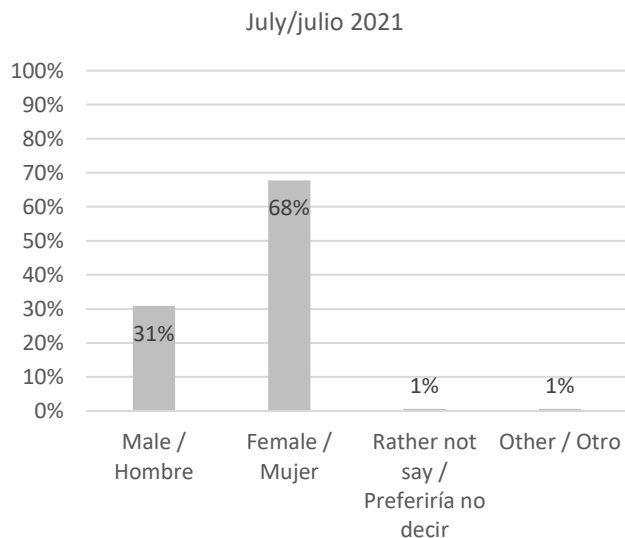
For enforcement, 23 responses related to more enforcement of traffic safety laws and 2 responses related to the need for an increased overall sense of safety and security in the community.

## SURVEY PARTICIPANT DEMOGRAPHICS

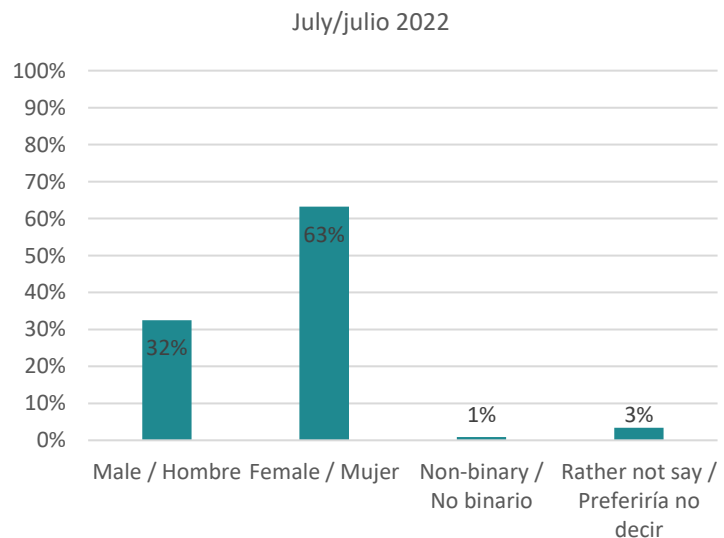
WHAT MODE(S) OF TRANSPORTATION DO YOU USE ON A WEEKLY BASIS? (CHECK ALL THAT APPLY) /  
¿CUAL MODO DE TRANSPORTE UTILIZA USTED SEMANALMENTE? (MARQUE TODOS LOS QUE APLIQUEN)



WHAT IS YOUR GENDER? / ¿CUAL ES SU GÉNERO? (2021)

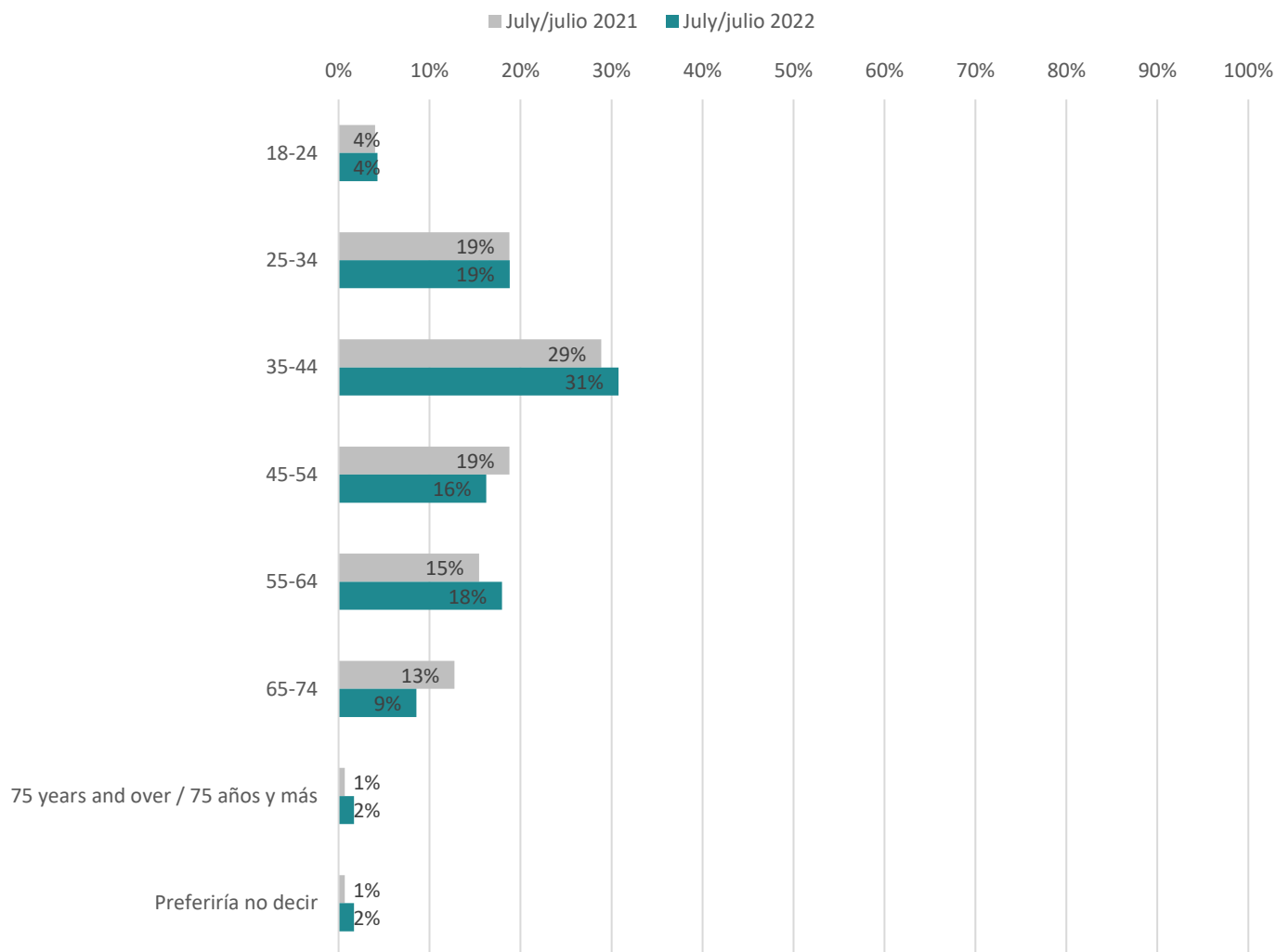


WHAT IS YOUR GENDER? / ¿CUAL ES SU GÉNERO? (2022)

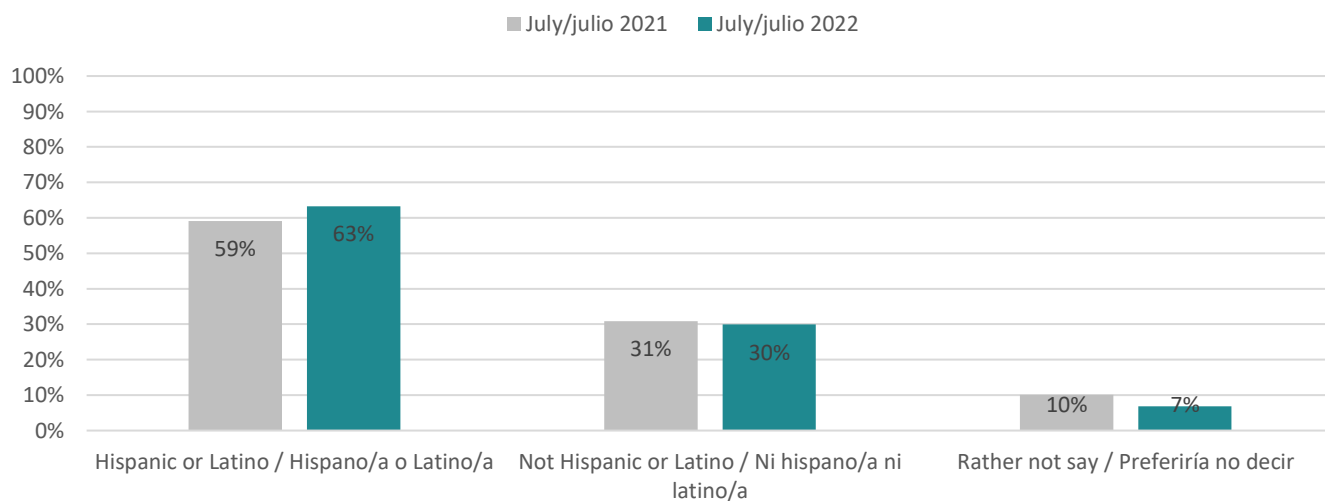


\*The 2022 survey was updated to include non-binary as a response option

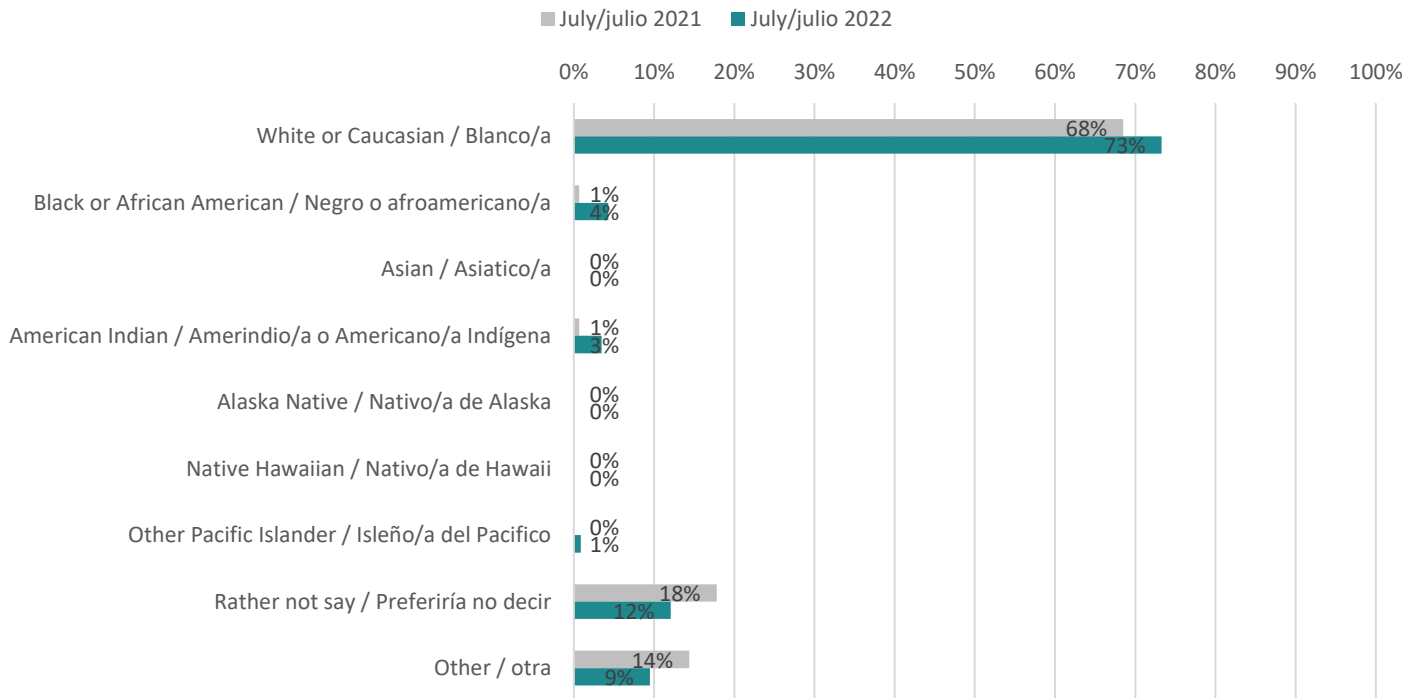
## WHAT IS YOUR AGE? / ¿CUANTOS AÑOS TIENE?



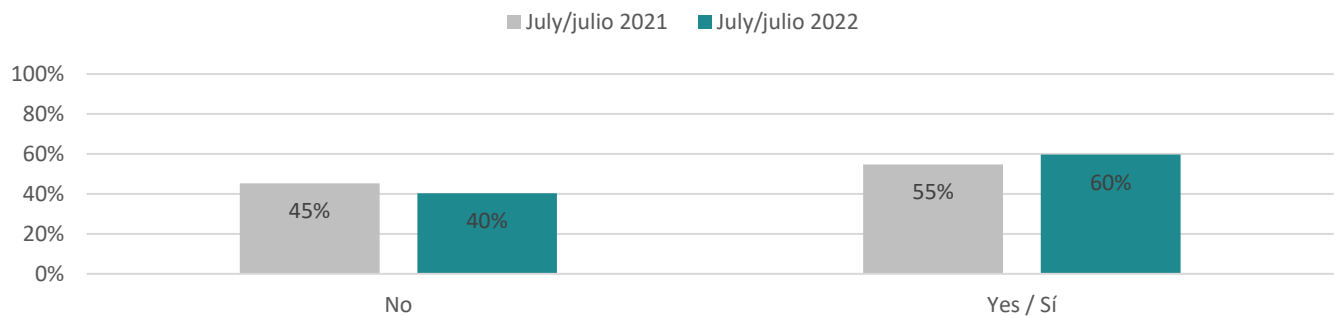
## WHAT IS YOUR ETHNICITY? / ¿CUAL ES SU ETNIA?



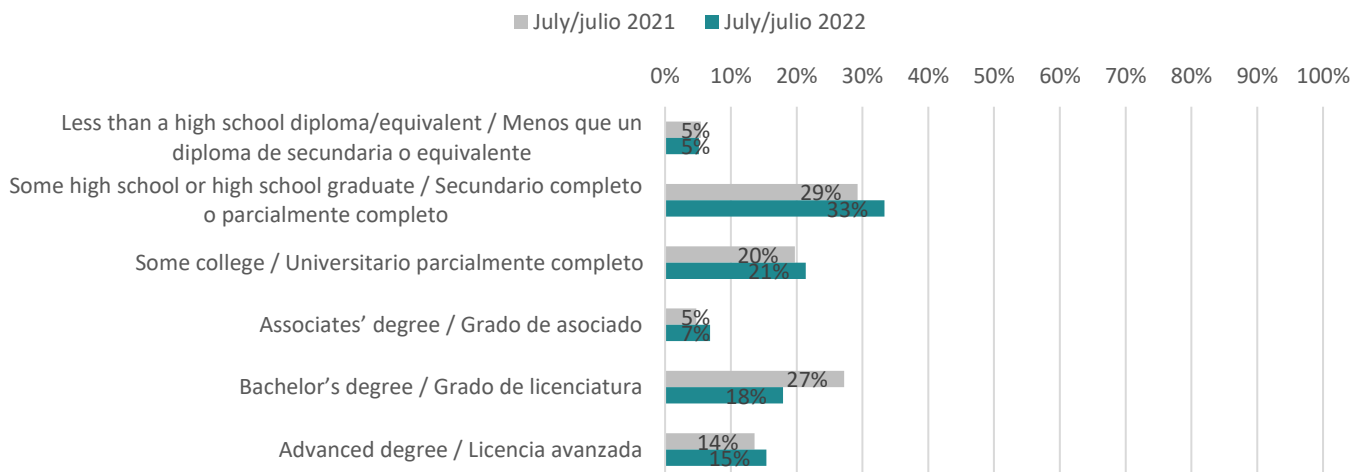
## WHAT IS YOUR RACE? (CHECK ALL THAT APPLY) / ¿CUAL ES SU RAZA? (MARQUE TODOS LOS QUE APLIQUEN)



## DO YOU SPEAK ANY LANGUAGES BESIDES ENGLISH AT HOME? / ¿HABLA OTRO IDIOMA EN CASA A PARTE DEL INGLÉS?



## WHAT IS THE HIGHEST LEVEL OF EDUCATION YOU HAVE COMPLETED? / ¿CUAL ES SU MAYOR NIVEL EDUCATIVO?



## INTERSECTION OBSERVATIONS

Avenues in Motion conducted intersection observations in Dover in April 2022 and again in June 2022. The intersection observations were conducted by filming the intersection of Blackwell Street and Essex Street to assess compliance of drivers stopping for pedestrians. The intersection of Blackwell Street (CR-513) and Essex Street is an uncontrolled intersection in Dover's downtown area with surrounding businesses and near Dover's train station (Figure 2).

The most frequently observed conflicts at this intersection occurred between drivers traveling on Blackwell Street and pedestrians crossing Blackwell Street, the main roadway through Dover's downtown. The compliance of drivers yielding to pedestrians crossing at the two crosswalks over Blackwell Street was recorded, as indicated in Figure 3. Avenues in Motion observed 93 pedestrians crossing at these crosswalks in the April 2022 observation and 130 pedestrians in the June 2022 observation.



Figure 1: Camera filming intersection observation

	April 2022			June 2022			% Change
	Compliant	Not Compliant	% Non-Compliant	Compliant	Not Compliant	% Non-Compliant	
<b>Drivers failing to stop or yield to pedestrians crossing Blackwell Street</b>	55	94	<b>63%</b>	77	88	<b>53%</b>	<b>10% Decrease in Non-Compliance</b> <i>* statistically significant</i>

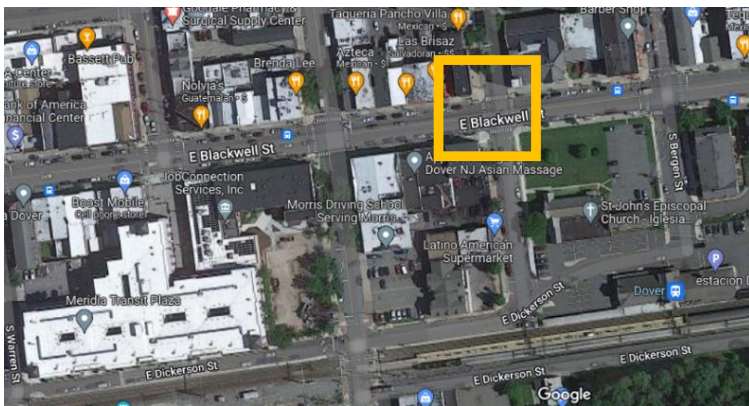


Figure 2: Map of observation area



Figure 3: Crosswalks crossing over Blackwell Street

## ENFORCEMENT

Throughout the summer, the Dover Police Department issued 156 summonses and made 233 contacts with drivers and 202 contacts with pedestrians. Police officers also conducted five community outreach activities where they engaged approximately 120 members of the public at locations including La Sierra Coffee, Medina Transit Plaza, Pollos Pucalor, Rico Pan Bakery and Crescent Field.

## RESULTS

### PAID SOCIAL MEDIA ADVERTISEMENT CAMPAIGN:

Each video of the social media video advertisement campaign had an average reach of 1,700 users who saw the ad at least once

- The average length of each video was 23.1 seconds and the average play time of the campaign was 13 seconds, meaning audience members on average were watching more than half of the videos and received most of the pedestrian safety educational message
- There was an 11-percent increase in survey participants reporting receiving pedestrian safety and Street Smart NJ messaging on social media from 2021 (26%) to 2022 (37%)

### SURVEY:

- There was a 10-percent increase in survey participants reporting awareness of aggressive driving and speeding messages. More than 50 percent of survey participants also reported awareness of pedestrian safety messaging in the community with a 2 percent increase from 2021 (52%) to 2022 (54%)
- There was an increased recognition of all Street Smart NJ messaging and signage from 2021 to 2022
- More than 60 percent of participants reported seeing Street Smart NJ messaging on street signs while driving and 40 percent reported seeing Street Smart NJ messaging on street signs while walking

### INTERSECTION OBSERVATIONS:

- There was a statistically significant 10-percent decrease in drivers failing to stop for pedestrians at the intersection on Blackwell Street and Essex Street from April 2022 to June 2022

## CONCLUSION

Avenues in Motion will continue focusing pedestrian safety education, outreach, and evaluation activities in Dover, New Jersey to increase awareness of safe walking and driving behaviors with the goal of decreasing burdens of pedestrian crashes in the community.

Future steps should include increased education related to knowledge of pedestrian safety laws and pedestrian crosswalk signals as the 2022 survey showed decreases in knowledge in those areas compared to the 2021 survey. Future efforts should address the traffic safety needs identified in the short answer survey responses including additional focus on midblock crossing, speeding, and aggressive driving. In addition, Avenues in Motion anticipates partnering with Dover again in spring and summer of 2023. Avenues in Motion plans to continue partnerships with the Town, police department, schools, and community organizations such as Connecting Dover as well as develop a new social media advertisement campaign with social norm messaging using the results from the 2022 self-reported behavior questions.