

Asbury Park, NJ



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July 19, 2019



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Executive Summary

Street Smart NJ is a public education, awareness and behavioral change campaign developed by the North Jersey Transportation Planning Authority (NJTPA) and funded with U.S. Department of Transportation and Highway Traffic Safety (HTS) resources, as well as with substantial local in-kind contributions. New Jersey has been designated a "Pedestrian and Bicycle Focus State" by the federal government due to its high rate of pedestrian injuries and fatalities. The Street Smart NJ campaign aims to raise public awareness, educate drivers and pedestrians about safe travel, and change unsafe behavior through collaboration between public, private, and non-profit organizations.

EZ Ride worked with the City of Asbury Park Planning Department, the Asbury Park Police Department, the NJTPA, and a team of consultants from Rowan University and Rutgers' Center for Advanced Infrastructure and Transportation (CAIT) to conduct a Street Smart NJ campaign in fall 2018. Police distributed Street Smart materials, enforced pedestrian-related laws in the city, and worked with businesses and the school district to educate residents and students about safe driving and walking practices. This is the second Street Smart campaign in the City of Asbury Park. Because of the shared interest to improve traffic and pedestrian safety the group developed a positive and collaborative relationship.

Street Smart activities began with pre-campaign surveys and intersection observations at the focus intersection of Memorial Drive and Springwood Avenue in early August 2018. This intersection was selected because of its crash history. Based on data from the National Highway Traffic Safety Administration (NHTSA), 18 percent of pedestrian fatalities occurred at intersections in 2017. In addition to the intersection observations, NJTPA and a consultant team developed a survey to gather input from residents. Flyers seeking participation in the survey were mailed to residences on August 8, 2018 for pre-campaign and October 1, 2018 for post-campaign.

The survey was advertised via social media by community leaders in the City of Asbury Park and included questions about driving and walking conditions, driving and pedestrian behavior, and knowledge of traffic laws in the city. In addition, flyers were handed out in person to passers-by on the following dates: August 14, 16 and 28 and October 20, 21 and 23. Pre-campaign intercept surveying was conducted on August 16 and 28 and post-campaign intercept surveying was conducted on October 20 and 21. Finally, the survey was advertised via social media by the City Director of Communications and local community leaders in Asbury Park.

The Street Smart campaign kicked off with a September 5, 2018 press conference at the Transportation Center at Asbury Park. Monmouth County Freeholder Director Thomas A.

Street Smart Asbury Park

Arnone, Asbury Park Mayor John Moor, Zenobia Fields of NJTPA, Lisa Lee, Bike and Pedestrian Programs Manager from EZ Ride, and Wendy Berk, Executive Director of the Brain Injury Alliance of New Jersey spoke during the event. The campaign's goal was to emphasize pedestrian safety in the community as students were returning to school.

The Asbury Park Police Department increased enforcement efforts for two weeks at the target intersection from September 20 through October 3 as part of the campaign. During that time, the Asbury Park Police Department issued a total of 11 summons and warnings to pedestrians and drivers. Following the educational and enforcement activities, a consultant team from Rowan & Rutgers Universities returned to the focus intersection to complete post-campaign observations on Tuesday October 23, 2018. Observations were collected both by video camera and conventional hand counts every 15 minutes.

The success of the campaign was evaluated by comparing the results of pre- and post-campaign intersection observations and surveys. These quantitative measures provide an indication of the short term impact of the campaign. Analysis revealed the campaign and surveys were successful in helping to raise public awareness of pedestrian related laws in New Jersey and unsafe behavior. However, in terms of changing the behavior of pedestrians and drivers it was only moderately successful as demonstrated by the following results:

- There was a significant decrease (60 percent) post-campaign in the number of people observed crossing streets mid-block and against the red 'do not walk' signal.
- There was an increase in the number of people observed using cell phones while crossing.
- In terms of driver behavior, there was no reduction in the rate of drivers observed using cell phones or not stopping for pedestrians in the crosswalks.

The decrease in mid-block crossing may be a direct result of the Street Smart campaign messaging. The increase in distracted crossing by pedestrians suggests greater education and enforcement is needed.

1. Street Smart Overview

Street Smart NJ was developed in response to New Jersey's designation by FHWA as a pedestrian focus state due to the high incidence of pedestrian injuries and fatalities. New Jersey was ranked 15th in the nation in pedestrian fatalities per 100,000 population January to December 2017, according to the Governors Highway Safety Association Report "Spotlight on Highway Safety". [Source: State Highway Safety Offices and U.S. Census Bureau]. Between2014-2018, 912 pedestrians were killed and nearly 27,000 were injured on the state's roadways, equaling an average of one pedestrian death every two days and 15 pedestrian injuries a day.

The campaign has three goals:

- Change pedestrian and motorist behavior to reduce the incidence of pedestrian injuries and fatalities in New Jersey
- Educate motorists and pedestrians about their roles and responsibilities to safely share the road
- Increase police enforcement of pedestrian safety laws and roadway users' awareness of that effort

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The Street Smart NJ program was first piloted in five communities — Newark, Jersey City, Woodbridge, Hackettstown and Long Beach Island —in 2013 and 2014. These communities were selected to incorporate the state's diverse landscape of urban, suburban, rural, and shore regions. The program has since expanded to more than 100 communities throughout the state, including Asbury Park.

1.1 EZ Ride's Street Smart Program

The NJTPA has partnered with the eight Transportation Management Associations (TMAs) to expand the number of Street Smart NJ campaigns across the state. A TMA is an organization that provides transportation solutions to reduce traffic congestion and air pollution. Each TMA is funded to lead or assist with campaigns and program implementation by providing education, conducting intersection surveys and observations, and developing a final written report. The campaign also helps TMAs to build relationships with municipalities to further safety partnerships and generate local support. In 2018, NJTPA engaged a team of consultants



from Rowan University and Rutgers CAIT to conduct the surveys and intersection observations.

As shown in the blue areas of the map (page 6) of New Jersey, EZ Ride delivers transportation solution services to Passaic, Essex, Union, Monmouth, and Bergen counties. Besides Asbury Park, EZ Ride has initiated Street Smart NJ campaigns in Bloomfield, Cranford, Highlands, Hackensack, Paterson, and Rutherford, and supported city outreach efforts in Elizabeth, Garfield, Long Branch, Teaneck and Westwood.

1.2 The City of Asbury Park, Monmouth County, New Jersey

The City of Asbury Park is a seaside community located in New Jersey's Central Coast with a land area of 1.42 square miles and a population of 15,767. During the 1920's, the city saw a dramatic change in its boardwalk with construction such as the Paramount Theater, Convention Hall Complex, the Casino Area, Carousel House, and two handsome red-brick pavilions on the boardwalk. In the mid-1930s there was an ocean liner wreck just yards away from the Asbury Park Convention Hall. The city capitalized on the event turning the wreck into a tourist attraction. From 2002 onward, the rest of Asbury Park has been in the midst of a cultural, political, and economic revival, including a burgeoning industry of local and national artists. It was ranked the sixth-best beach in New Jersey in the 2008 Top 10 Beaches Contest sponsored by the New Jersey Marine Sciences Consortium. In 2012, Hurricane Sandy made a devastating impact on the city damaging most of its boardwalk, which has since been rebuilt.

1.3 Asbury Park Crash Data

EZ Ride uses Numetric, a Crash Analysis Tool funded by the NJ Division of Highway Traffic Safety and hosted by CAIT, and Safety Voyager, NJ Department of Transportation's crash analysis program, to examine crash data. Both tools use police reports to compile NJ crash data so data is dependent on the number of crashes reported and the completeness of reporting. In Asbury Park, there were 97 pedestrians involved in motor vehicle crashes from 2012-2016, according to Numetric. There were no pedestrian fatalities during that time, but the crashes injured 77 pedestrians, including eight with incapacitating injuries.

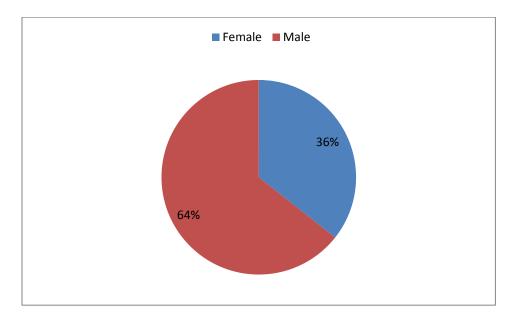


Chart 1: Gender of Pedestrians in Crashes, 2011-2017

According to Safety Voyager's City of Asbury Park report, 64 percent of pedestrian crashes between the years of 2011-2017 involved male pedestrians and 36 percent involved female pedestrians. This information is useful for outreach/campaign purposes.

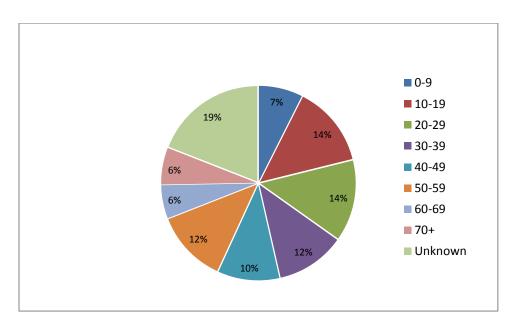


Chart 2: Age of Pedestrians in Crashes, 2011-2017

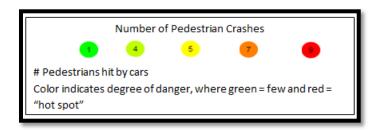
While 19 percent of crashes did not report the ages of victims, Chart 2 shows the most reported pedestrian crashes involved pedestrians who were 10-19, 20-29, 30-39 or 50-59 years old.

Maps 1, 2, and 3 were generated with the NJDOT Safety Voyager Crash analysis tool. Safety Voyager uses a color coded system to display "hot spot" areas where multiple crashes occur. The actual number of crashes at each location is labeled on each colored circle. Fewer crashes are indicated by a green dot; higher numbers of crashes are indicated by a yellow, orange, or red dot. As shown in Map 1, the number of crashes involving vehicles ranges from 1-356 depending on the area and intersections.



Map 1: City of Asbury Park Vehicular Crashes, 2010-2018

Source: NJ Safety Voyager, 2010-2018



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Wanamassa

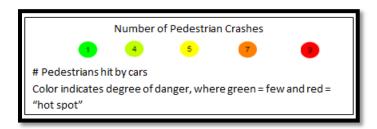
Pedgemont Dr

Edgemont Dr

Edgemont

Map 2: Asbury Park Pedestrian Crashes, 2010-2018

Source: NJ Safety Voyager, 2010-2018



Map 2 displays all pedestrian crashes in the City of Asbury Park from 2010 to 2018.



Map 3: Asbury Park Pedestrian Crashes, 2010 -2018

Source: Numetric Roads, 2010 – 2018

Fatality/Incapacitating InjuryInjury/PainProperty/ Vehicle Damage

Map 3 was generated with Numetric. There were 176 crashes involving pedestrians. Numetric uses a color coded system to display "hot spot" areas showing injuries ranging from pain to an incapacitating injury as well as pedestrian fatalities and property damage.

Table 1: Asbury Park Campaign Schedule

Planning Meeting	June 27, 2018
Pre-Campaign Observations	Tuesday, August 14, 2018
Campaign Kick-Off	September 5, 2018
Education Period	September 5 to September 19, 2018
Enforcement Period	September 20 to October 3, 2018
Post Campaign Observations	Tuesday, October 23, 2018
Report Development	December 2018 to April 2019
Report Submission	July 5, 2019
NJTPA Review	July 5-15, 2019
Final Report Submission	July 19, 2019

1.4 Campaign Selected Intersection

The City's director of transportation and the police selected the intersection of Memorial Drive and Springwood Avenue as the campaign focus due to the high volume of pedestrian and vehicle traffic and the history of pedestrian-vehicle crashes. Pre- and post-campaign observations were conducted at this intersection, along with public education and police enforcement.



Memorial Drive and Springwood Avenue

The intersection of Memorial Drive and Springwood Avenue is located approximately a half-mile from Asbury Park Middle School in the Southwest part of the City. The intersection is located near the Asbury Park train station and Main Street and the railroad track is parallel to Memorial Drive. Around the intersection, there are several residential apartments and a small strip mall with a convenience store, produce market, and several small restaurants. It should be noted that the intersection is only ¾ of a mile away from the Asbury Park beach.

Memorial Drive is a two-way busy street running north-south and bisecting the City. Memorial Drive has two lanes going in each direction. On the south-west side of the intersection, there is an isolated right-turn lane for vehicles that merges into Memorial Drive heading south. Crosswalks are provided at both the northbound and southbound approaches to the intersection.

Springwood Avenue runs east-west from Neptune into Asbury Park. This road ends at Main Street one block to the east. The intersection is controlled by a traffic signal and a crosswalk is provided at the eastbound approach.

Data Collection

Data collection was done on this project by a team of consultants from Rowan University and Rutgers CAIT. Four non-compliant behaviors and four measures of exposure were observed at this selected intersection.

Four non-compliant behaviors:

- 1. Pedestrians crossing against signal or mid-block
- 2. Drivers failing to stop for pedestrians in crosswalk
- 3. Drivers failing to stop at red light for right turn
- 4. Drivers failing to stop at a red light

Four measures of exposure:

- 1. Proper pedestrian crossing
- 2. Turning vehicles stop for pedestrians in crosswalk
- 3. Vehicles stop before right turn on red for pedestrians in crosswalk
- 4. Vehicles stop at red signal or stop sign

To ensure accurate counts, student workers were employed to make video recordings at the target intersection. The video data enabled the extraction of behavior of interest. The students also collected data and observed behavior in the field in a conventional method.

Figure 1: Location of Camera 1 and 2 at Intersection of Memorial Dr. and Springwood Ave

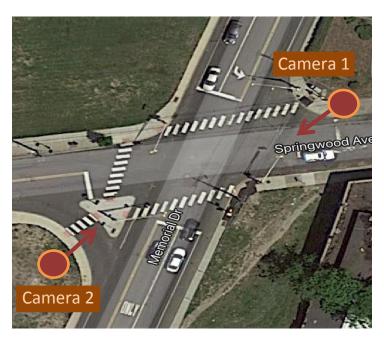
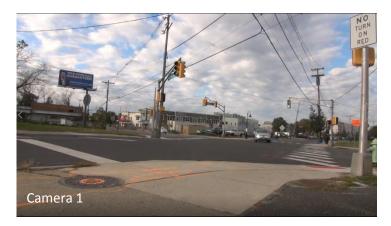


Figure 2: Camera Views at Intersection of Memorial Dr. and Springwood Ave





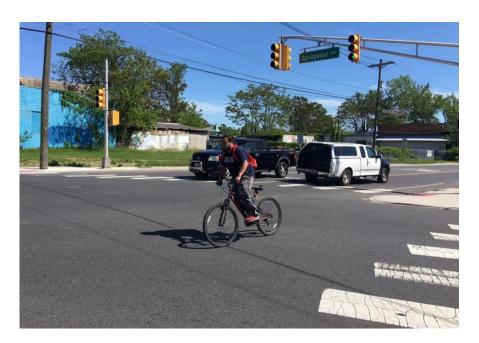
1.5 Pre-Campaign Intersection Observation

Pre-campaign intersection observations were conducted on Tuesday August 14, 2018 from 9 a.m. to 1 p.m. at Memorial Drive and Springwood Avenue. Team members from Rutgers CAIT and Rowan University observed pedestrian, cyclist, and driver behavior at the focus intersection and counted compliant and non-compliant behavior.





Figure 3b: A Cyclist Riding on the Wrong Side of Memorial Drive



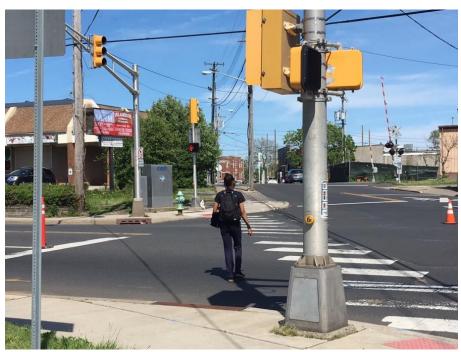


Figure 3c: Pedestrian Crossing on Red, Not Using Crosswalk

Figure 3d: Drivers Not Stopping at Crosswalk and Pedestrian Not Using Crosswalk



Pedestrians were frequently seen crossing from the strip mall across Springwood Avenue where there is no crosswalk painted for pedestrian use.

Figure 3e: Pedestrians Not Using Crosswalk



Figure 3f: Pedestrian Crossing on Red Signal



1.6 Education & Enforcement Campaign

The education portion of the campaign ran from September 5 through September 20, 2018. Staff members from EZ Ride and NJTPA went to the focus intersection to distribute educational materials as part of the education campaign. EZ Ride's team distributed 65 safety tip cards and 80 'Heads Up, Phones Down' cards on September 19 and 21. In addition, On September 19 NJTPA team members distributed 150 safety tip cards to passers-by and 10 two-sided posters to local businesses as part of the outreach and education efforts.



Figure 4a: Street Smart Sign Displayed





Figure 5a: Street Smart Signs Displayed











1.7 Post Campaign Intersection Observation

Once the education and enforcement portions of the campaign were concluded, the consultants returned to the focus intersection on Tuesday October 23, 2018 to observe pedestrian and driver behavior. The team once again monitored pedestrians and motorists noting whether vehicles stopped for pedestrians in the crosswalk, whether pedestrians used the crosswalk, and whether drivers or pedestrians were distracted.

Figure 6: Pedestrian Crossing Memorial Drive Using Crosswalk



2. Evaluation

2.1 Pre-Campaign and Post-Campaign Intersection Observations and Resident Input

Pre-campaign observations were conducted at the focus intersection of Memorial Drive and Springwood Avenue on Tuesday, August 14, 2018 from 9 a.m. to 1 p.m. The team returned on Tuesday, October 23, 2018 at the same time for post-campaign observations. The team observed both driver and pedestrian behavior and tallied how often each occurred.

Table 2 below has a list and count of the pedestrian and driver behavior for the pre-and post-campaign intersection observations at Memorial Drive and Springwood Avenue. There were four behaviors observed during both pre- and post- observation:

- Proper pedestrian crossings
- Turning vehicles stop for pedestrians
- Vehicles stop before right turn on red for pedestrians in crosswalk
- Vehicles stop at red signal or stop sign

The results for the City of Asbury Park demonstrate a significant improvement in pedestrian behavior after the Street Smart NJ campaign but no major changes in driver behavior. There was a statistically significant reduction in pedestrians who crossed on the red signal from 92 percent non-compliant to 37 percent non-compliant.

<u>Table 2: Counts of Compliant and Non-Compliant Behaviors by Location and Measure</u>

<u>During Pre- and Post-Campaign</u>

		Pre-Campaign		Post-Campaign				
	Compliant	Rate of Compliance	Non- Compliant	Rate of Non- Compliance	Compliant	Rate of Compliance	Non- Compliant	Rate of Non- Compliance
Proper Pedestrian Crossing	10	8%	114	<mark>92%</mark>	96	63%	56	<mark>37%</mark>
Turning Vehicles Stop for Pedestrians	45	80%	11	20%	38	75%	13	25%
Turning Vehicles Stop for Pedestrians before Right Turn at Red Signal	35	85%	6	15%	45	90%	5	10%
Vehicles Stop at Red Signal or Stop Sign	3173	97%	11	3%	2902	98%	7	2%

The driver and pedestrian behavior results were mixed based on our short window of pre- and post-campaign observations. Some behavior, like proper pedestrian crossing, greatly improved. Other behavior did not change much. The campaign was successful in raising awareness and should be implemented annually in order to see more consistent improvement. However, more signage and education regarding the dangers of distracted walking and failing to stop for pedestrians in crosswalks needs to be emphasized.

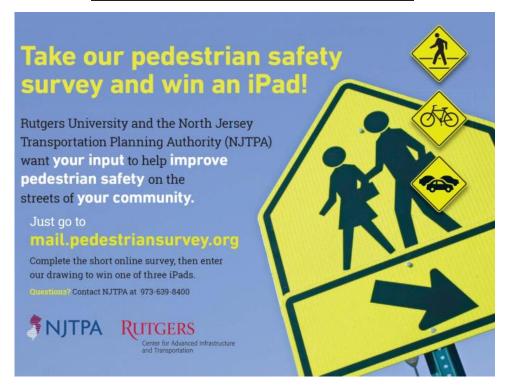
2.2 Pre-Campaign and Post-Campaign Survey Results

In addition to the observational evaluation, people who lived, worked, or regularly frequented Asbury Park were surveyed about their knowledge, behavior, and perceptions of pedestrian safety. The survey was designed to determine the effectiveness of the Street Smart campaign messaging and activities using a cross-sectional design, which captured changes that occurred immediately after the campaign.

Survey participants were recruited during a period of two to six weeks before and after the Street Smart campaign via the following methods: in-person flyer distribution, direct mail advertising, social media advertising, and intercept surveys using tablet devices. This variety of recruitment methods was used to ensure sufficient sample size was collected and to reduce sampling bias based on recruitment method. Figure 7 illustrates samples of flyers used in different recruitment methods, including different survey links.

Figure 7: Sample of Flyer Used in Direct Mail Advertising, in In-person Flyer Distribution

Method and in Social Media Advertising Method







Survey participants were recruited both before and after the Street Smart campaign, which had a kickoff event on September 5, 2018 and lasted for approximately one month.

Flyers advertising participation in the survey were mailed to residences in the zip code of 07712 on August 8 for pre-campaign and October 1 for post-campaign. In addition, flyers were handed out in person to passers-by on the following dates: August 14, 16, 28, October 20, 21, and 23. Intercept surveying was conducted on August 16 and 28 pre-campaign, and on October 20 and 21 post-campaign to recruit survey participants. Finally, the survey was advertised via social media by community leaders in Asbury Park.

Overall, 368 survey participants were recruited, including 179 pre-campaign and 189 post-campaign survey participants. Among pre-survey participants, 76 percent (136) lived in Asbury Park, while only 35.4 percent (67) of post-campaign participants were residents. Survey responses by recruitment method are summarized in Table 3 below.

Table 3: Survey Responses by Recruitment Method

Method of Recruitment	Pre-Campaign	Post -Campaign	Total
Flyer	3	10	13
Mail	13	59	72
Social	153	87	240
Tablet	10	33	43
Total	179	189	368

Chart 3: Results of Pedestrian Safety Observation

Survey Question: In the past week how often have you seen ...?

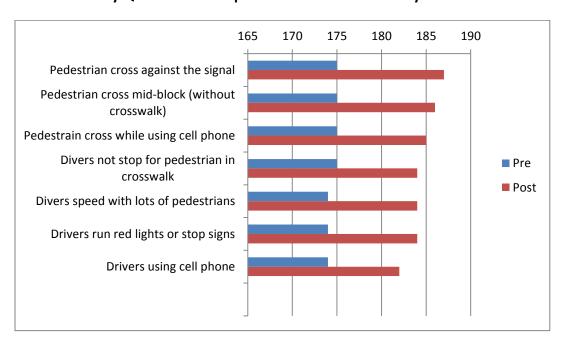
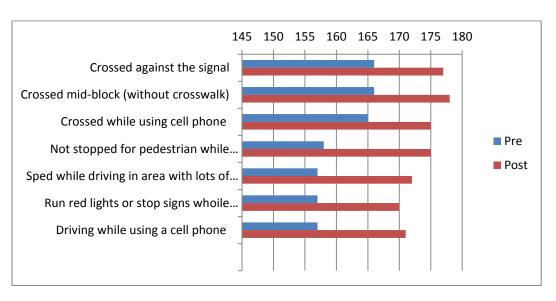


Chart 3 shows the observed pedestrian behavior which indicates that survey respondents observed more undesirable pedestrian bad behavior after the campaign.

<u>Chart 4: Results of Pedestrian Safety Self-Behavior</u>
Survey Question: In the past week how often have you...



Similarly, Chart 4, which is a result of pedestrian safety self-behavior, indicates that survey respondents reported more illegal or unsafe behaviors after the campaign.

Chart 5: Results of Exposure to Highway Safety Campaign Messaging

Question: In the last 30 days, have you read, seen or heard any messages addressing the following...

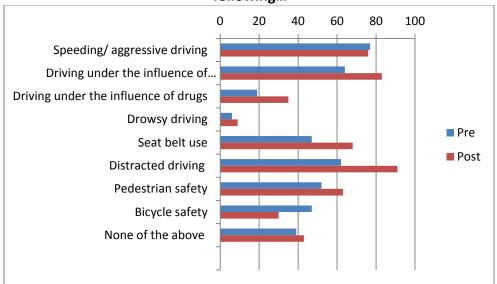
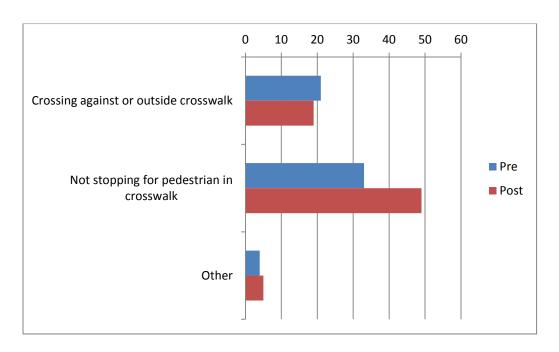


Chart 5 indicates that fewer survey respondents reported awareness of speeding/ aggressive driving and bicycle safety messages post campaign, however, a greater percentage of respondents reported awareness of messages related to driving under influence, distracted driving, and other undesirable behaviors.

Chart 6: Results of Exposure to Police Efforts to Enforce Pedestrian Safety Law

Survey Question: Have you recently read, seen or heard about the following police efforts to enforce pedestrian safety?



Respondents reported greater awareness of police efforts to enforce Not stopping for pedestrian in crosswalk after the campaign.

Chart 7 lists the

posters that were

displayed along the

roads near the target intersection. The data

shows a large increase in awareness of the

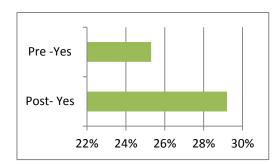
campaign messages

after the campaign.

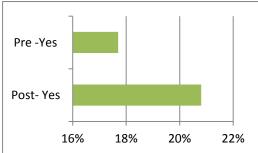
Street Smart

Chart 7: In the Past 30 Days, Have You Seen, Read, or Heard Any of These Messages?

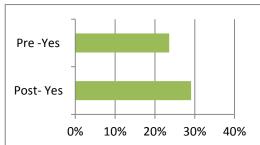






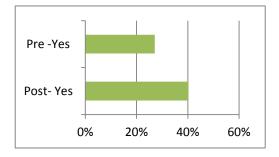














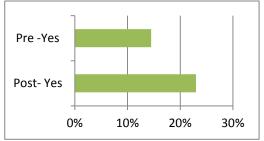


Table 4: Results of Knowledge of Pedestrian Traffic Signals

Question: At intersections with a traffic light and pedestrian signal, when should you begin to cross the street?

	Total	Total
	Frequency	Percentage of
		Respondents
Walk Signal	344	93.5%
Don't Walk	343	93.2%
Eight second countdown clock	61	16.6%
Twenty three second countdown clock	150	40.8%
Total	368	100%

Results indicate that the majority of survey participants were knowledgeable about the walk and don't walk pedestrian signals and understood the meaning of the white walking figure and red hand signals. However, responses indicated some confusion about the use of pedestrian countdown signals. The results indicate that residents would benefit from more education about pedestrian signal countdown clocks.

<u>Table 5: Results of Knowledge of Pedestrian Safety Law Enforcements</u>

(Q. To the best of your knowledge can you receive a ticket in New Jersey for ...?)

	Total	Total Percentage
	Frequency	of Respondents
Violating pedestrian traffic laws?	314	92.4%
Crossing the Street illegally (against signal or mid-block)	303	89.1%
Using a hand held cell phone while crossing	121	35.6%
Not stopping for pedestrians in cross walk	324	95.3%

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Using a hand held cell phone while driving	335	98.5%
Total	340	100%

Results indicate that the majority of survey participants were knowledgeable about pedestrian safety traffic laws, except in the case of using hand-held phones as only 35.6 percent answered correctly. This indicates that residents would benefit from more education on the laws regarding hand-held cell phone use while walking.

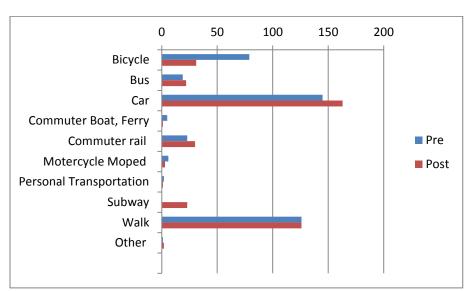


Chart 8: Survey Responses for Mode of Transportation

There were a higher number of survey respondents whose primary mode of transportation is car post-campaign. There were more respondents who travel by bicycle in the pre-campaign survey than post-campaign. There was a significant number of respondents who walk and this number is similar both pre- and post-campaign.

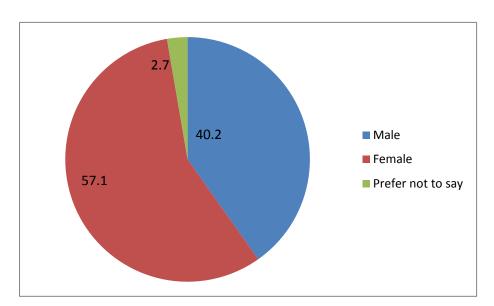


Chart 9: Survey Respondents' Gender

A majority (57.1 percent) of survey respondents were female whereas, according to the US Census Bureau¹, Asbury Park is estimated to be 50.2 percent female as of 2018, indicating that females were slightly overrepresented in the survey response. Since males are far more likely than females to be injured or killed in pedestrian-related crashes (males comprise over two thirds of pedestrian fatalities)², in future studies extra effort may be required to gather a representative sample by gender.

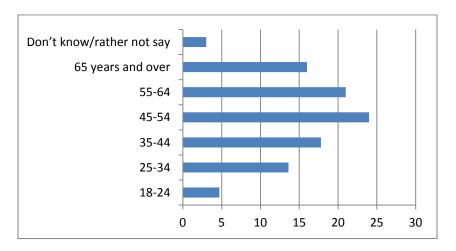


Chart 10: Survey Respondents' Age Group

 $\underline{https://www.census.gov/quickfacts/fact/table/asburyparkcitynewjersey/PST045218}$

¹ US Census Quick Facts, Asbury Park, NJ (2018):

³ NHTSA Traffic Safety Facts: Pedestrians 2016 Data (March 2018 Revised): https://crashstats.nhtsa.dot.gov/Api/Public/Publication/812493

The majority of people (about 62 percent) surveyed were in the age groups of 45 to 54, 55 to 64, and 35 to 44 years old.

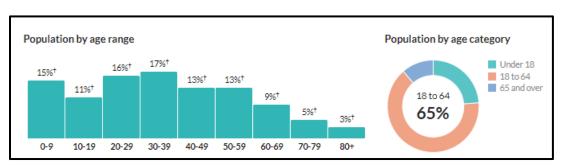


Chart 11: Asbury Park - Population by Age Range

Chart 11, illustrates Asbury Park's population by age using data from the 2017 US Census Bureau 5 year American Community Survey report. The data shows that 42 percent of residents are between the ages of 0-29 and 52 percent are between the ages of 30-69. This indicates that the survey underrepresented the population of younger residents. These results suggest it would be important to survey more young people in the future.

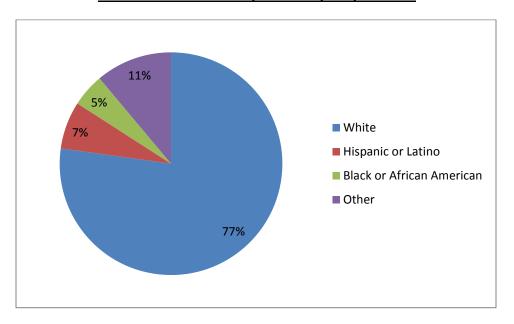


Chart 12: Racial Makeup of Survey Respondents

Chart 12 shows the demographic makeup of the survey respondents. Seventy-seven percent of the survey respondents were white, which is not representative of the diverse racial demographics of the City of Asbury Park.

As of 2018, Asbury Park's population was 37.3 percent white, 46.8 percent black or African-American, and 30.2 percent Hispanic or Latino. This indicates that whites were overrepresented and black or African-American and Hispanics or Latino respondents were underrepresented in the survey data by a wide margin. Future surveys should employ specific efforts to recruit participants who represent the demographics in each campaign location.

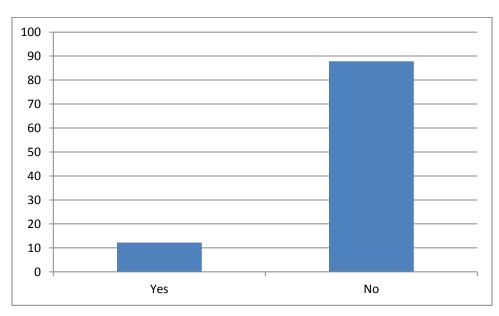


Chart 13: Do Respondents Speak A Language Besides English at Home?

Twelve percent of respondents spoke another language besides English at home.

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⁴ US Census (2018).

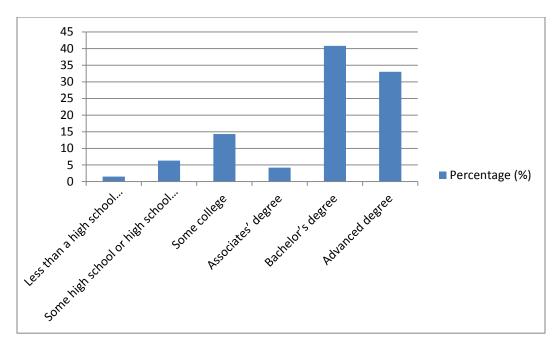


Chart 14: Highest Education Level

A majority of the survey respondents reported completing an education level of bachelor's degrees or above (73.8 percent) which is not representative of the city's population, of which 23.3 percent received bachelor's degrees or above. This could be due to self-selection of the survey respondents who replied to online requests. This result needs to be addressed for future studies by increasing efforts to recruit a sample survey whose demographics match the community.

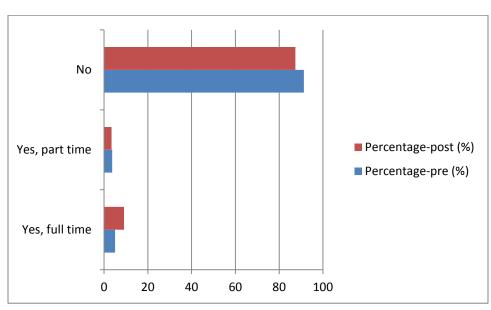


Chart 15: Respondents Currently Attending an Educational Institution

The majority of respondents reported they are not currently studying at an educational institution.

3. Campaign Overview

3.1 Campaign Kick Off

The City of Asbury Park held a news conference to publicly kickoff the campaign on September 5, 2018. Various media outlets wrote articles about the Street Smart campaign, which are included in the Appendix.



Figure 9: Street Smart Asbury Park Kickoff

3.2 Campaign Education

The education and public outreach campaign began on September 5, 2018 and lasted two weeks. EZ Ride staff and NJTPA representatives distributed safety tip cards and "Heads up, Phones Down" postcards to pedestrians, cyclists, and drivers. Local businesses also displayed posters and table tent cards. The goal was to raise awareness of five key safe driver and pedestrian behaviors. Drivers were reminded to obey speed limits and stop for pedestrians in crosswalks. People walking were reminded to use crosswalks and wait for the walk signal. The fifth message encouraged everyone to avoid distractions.

Street signs and posters were displayed around the selected intersection and at local businesses, the library, post office, public schools, and municipal offices. The City distributed 1,000 safety tip cards, 60 double-sided posters, 250 coasters, 300 cup sleeves, and 45 table tent cards. Forty Street Smart street signs, displaying the five core messages, were installed around the focus intersection and at other busy intersections in the city. The EZ Ride Bike and Pedestrian team distributed 80 "Heads Up, Phones Down" postcards and 65 Tip Cards to

residents, commuters. The NJTPA staff worked together to distribute additional 150 Tip Cards and 10 two–sided posters to local residents and various local businesses.

Table 6: Street Smart Education Materials Distributed

Street Smart Tip Cards	1,295
2 sided Street Smart Posters	70
Coffee cup sleeves	300
Coasters	250
Table Tent cards	45
Street Signs	40
Total materials	2,000

Figure 10: Street Smart sign displayed at intersection



Figure 11: Street Smart Sign Inside Businesses





3.3 Campaign Enforcement

The Asbury Park police increased its enforcement at the focus intersection from September 20 to October 3, 2018. Officers issued 11 violations and warnings. Table 11 contains a breakdown of the violations and warnings issued.

Table 7: Street Smart Enforcement Campaign- Violations

NUMBER
6
4
1
11

Source: Asbury Park Police Department

4. Summary and Highlights of Campaign

The goal of Street Smart NJ is to reduce avoidable traffic injuries and fatalities to zero using a public awareness campaign that aims to improve driver and pedestrian behavior. The campaign focuses on educating the public on the laws and their responsibilities, raising awareness of each mode of transportation, and increasing enforcement to deter unsafe behaviors often associated with traffic crashes.

- The data from pre- and post-campaign observations shows that respondents feel the most serious problems are distracted driving and pedestrians disobeying traffic rules.
- The Street Smart Asbury Park heightened people's awareness that both drivers and pedestrians share a responsibility to obey traffic laws.
- The campaign had an impact on those who filled out surveys by increasing awareness of the law and unsafe pedestrian and driver practices
- Results showed the majority of survey respondents had a good understanding of New Jersey driver and pedestrian safety laws.
- The post-campaign survey results showed that respondents became more aware that local police are focused on enforcing pedestrian safety laws and holding both pedestrians and drivers accountable for unsafe and unlawful behavior.
- The street signs and posters were the most recognized.
- The most recognized safety message was "Use Crosswalk"
- Based on intersection observations, there were not many reductions in cars not stopping for pedestrians, mid-block crossing instances, and distracted walkers.

The campaign was successful in raising awareness through both the campaign materials as well as by using increased police enforcement and surveys to inform people about traffic laws, multiple modes of travel, and to reflect on their own behavior and what they observed others doing. While the campaign was successful in changing some behaviors, it did not significantly improve the behaviors of drivers.

More education and enforcement is needed to improve pedestrian and motorist behavior. Additional campaigns and pedestrian safety programming will likely improve this behavior and are recommended. Studies could also be conducted to explore whether engineering improvements could make the intersection safer.

4.1 Recommendations

 The City complete an engineering study to determine if adding a fourth painted crosswalk, pedestrian signal heads, and dome pads across Springwood Avenue would increase safety for pedestrians who frequently cross to the strip mall.





Current Situation

Proposal to paint a 4th crosswalk

- The County could conduct a speed study on Memorial Drive to determine whether the speed limit should be lowered.
- Increase police presence and enforcement of pedestrian, driver, and cycling laws at the focus intersection, with violations or warnings to deter unwanted behavior.
- The City can continue distributing educational material to residents and post signs about countdown timers, stopping for pedestrians in crosswalks, stopping before right turns on red for pedestrians, and the dangers of distracted driving and walking.
- The City can work with local bike shops and the Asbury Park Complete Streets Coalition to advise cyclists to ride with traffic on the right side, obey all traffic signals and signs, and encourage helmet use by all cyclists (helmets are required by NJ law for all cyclists under age 17).
- The City can add signs or pavement markings to emphasize stopping for pedestrians in crosswalks.
- Place Street Smart posters/signs in major public buildings, parking garages, busses, trains, and transit station waiting areas to discourage distracted walking and driving.
- Conduct additional Street Smart NJ campaigns to encourage safe driving and walking.
- The city can send Street Smart NJ tips to residents and remind those visiting the city to keep safety in mind.
- NJ Motor Vehicle Commission to teach new/renewing drivers and defensive driver course participants to stop for pedestrians in crosswalk
 - Consider a mail insert for motorists renewing licenses/registrations

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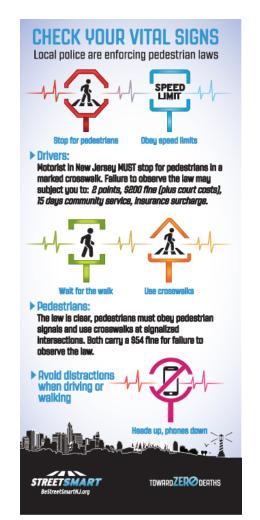
5. Appendix

5.1 Street Smart Educational Materials















5.2 Media Coverage



FROM THE FOLKS AT TRICITYNEWS

SERVING ASBURY PARK • ALLENHURST • INTERLAKEN • LOCH ARBOUR • OCEAN GROVE • WANAMASSA



STREET SMART NJ ROLL OUT

MOOR: WE ARE A WALKABLE, BIKEABLE CITY THAT PRIORITIZES THE SAFETY OF OUR STREETS FOR ITS MOST VULNERABLE USERS

By Michelle Gladden

Asbury Park kicked off its Street Smart NJ pedestrian safety campaign Wednesday at its municipal owned Transportation Center located at the corner of Main Street and Springwood Avenue. The initiative is in direct response to high pedestrian involved motor vehicle crashes across the state.

"This campaign is important to Asbury Park because we are a walkable, bikeable city that prioritizes safety of our streets for its most vulnerable users," Mayor John
Mayor said. I have this compaign will seem to educate all those who

Moor said. I hope this campaign will serve to educate all those who drive, ride and walk our streets to slow down, stop for pedestrians, and be mindful of cyclers."

Moor said the campaign will work to alleviate concerns that have been brought up regarding traffic safety especially since the city continues to grow in popularity.

"This program is about a shared responsibility to be more mindful about how we can protect the most vulnerable on our streets."

Asbury Park had 97 pedestrians involved motor vehicle crashes from 2012 to 2016, according to Numetric
– a crash analysis tool administered by New Jersey Division of Highway Traffic Safety. While there were no
pedestrian fatalities during that time frame, the crashes injured 77 pedestrians and included eight
incapacitating injuries.







Asbury Park Street Smart NJ Pedestrian Safety Campaign Underway

Asbury Park kicked off its Street Smart NJ pedestrian safety campaign Wednesday.

By flort Davis, Petch National Staff | Sep 5, 2018 h05 pm ET









Asbury Park kicked off its Street Smart NJ pedestrian safety campaign Wednesday, reminding drivers and people walking and biking to be safe when travelling city streets.

"This campaign is important to Asbury Park because we are a very walkable and bikeable City that prioritizes the safety of our streets' most vulnerable users," Asbury Park Mayor John Moor said.

The extra emphasis on pedestrian safety comes as students are returning to school this week.

Street Smart NJ - coordinated by the North Jersey Transportation Planning Authority (NJTPA) - is a collaborative effort between public, private and non-profit organizations that aims to change driver and pedestrian behaviors through education and enforcement. The program, which began in 2013 with five pilot sites, has expanded to include more than 80 community partners.

City and county officials, representatives from the NJTPA, EZ Ride Transportation Management Association, and the Brain Injury Alliance of New Jersey participated in the kickoff event at the Asbury



FROM THE FOLKS AT TRICITYNEWS

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ASBURY PARK MOVES FORWARD WITH STREET SMART INITIATIVES



CAMPAIGN EMPHASIZES PEDESTRIAN SAFETY AS STUDENTS RETURN TO SCHOOL

By Michelle Gladden

Asbury Park will be kicking off a Street Smart pedestrian safety initiative Wednesday by hosting a news conference at its Transportation Center, located at 1 Municipal Plaza.

Asbury Park adopted a complete streets policy in 2017. It has been working with EZ Ride Transportation Management Association and North Jersey Transportation Planning Authority [NJTPA] in making the roadways safe for all who use them.

Speakers at the 11 a.m. event will include Monmouth County Freeholder Director and NJTPA Board Member Thomas A. Amone, Mayor John Moor, EZ Ride's Lisa Lee, who manages the bike & pedestrian safety programs, the safe routes to school initiative and their Ride TMA.

Brain Injury Alliance of New Jersey Vice President Wendy Berk, NJTPA's Director of Planning Zenobia Fields, and Government Affairs' Director David Behrend will also participate.

Organizers say the campaign will work to emphasize pedestrian safety in the community, particularly as students return to school.

According to the National Highway Traffic Safety Administration pedestrian fatality rate is the nearly double the national average. New Jersey was ranked 17 in the nation in 206 for pedestrian fatalities, with 824 pedestrians killed statewide, more than 22,000 injured between 2013-2017, and pedestrian deaths accounting for 28.5 percent of all crash-related fatalities from 2013-2017.

For more information about the Street Smart NJ initiative, visit beetreetamartnj.org









5.3 EZ Ride Community Outreach

EZ Ride's Safe Routes to School team helped to coordinate a full campaign for the Street Smart Campaign in Asbury Park and is actively working to improve pedestrian and cyclist safety in Asbury Park for the last four years with the city and schools. During the campaign period, EZ Ride was invited to present pedestrian and bicycle safety presentations, bike and walk to school days etc. in Asbury Park's schools. Some of these events include:

- Boys and Girls Club "Back to School Block Party" event on September 8, 2018
- Walk to School Day with Mayor on Thursday, October 11, 2018 at Bradley Elementary
 School 213 Walking safety coloring books were distributed to students
- Bradley Elementary Bike Safety Presentation and Bike Rodeo on May 22, 2019 EZ Ride gave out 38 helmets and 22 incentives.
- Bicycle Safety Presentation and Bike Rodeo at Obama Elementary School on October 19, 2019 - there were 17 participants, EZ Ride gave away 17 Helmets, 20 bike lights and 17 bike bells
- Walk to School Day with Mayor at Thurgood Marshall Primary School on October 23,
 2018- 171 Walking safety coloring books were given out
- Asbury Alive Open Streets Rodeo on May 4, 2019 18 rodeo participants, 74 bike safety coloring books, 30 Street Smart tip cards, 20 water bottle holders, 10 sets of bike slights, and 18 helmets given out.