STREET SMART DOVER

Final Report

Presented by: TransOptions
Acknowledgments

TransOptions would like to thank the following for a successful Street Smart pedestrian safety campaign in Dover:

- Dover Police Department
- The Town of Dover
- Family Success Center – Dover, NJ
- Zufall Health
- North Jersey Transportation Planning Authority (NJTPA)
- New Jersey Division of Highway Traffic Safety (NJDHTS)
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Street Smart Dover

Executive Summary

The Street Smart pedestrian safety campaign was a focused effort in Dover, New Jersey in April, 2017. The campaign was a collaborative effort among TransOptions, the Dover Police Department, the Town of Dover, and local businesses and organizations. As an education and enforcement campaign, Street Smart Dover included 96 hours of pedestrian safety law enforcement by the Dover Police Department as well as multiple educational outreach events coordinated by TransOptions. The program was evaluated through pre- and post- campaign surveys as well as pre- and post- campaign intersection observations. The evaluations showed that the Street Smart campaign in Dover resulted in an increased awareness in the public’s understanding of New Jersey’s pedestrian safety laws as well as an increased awareness of the campaign’s presence in the community. Street Smart successfully changed behaviors with reductions in pedestrians crossing midblock (jaywalking) and drivers failing to stop for pedestrians in the crosswalk.

Street Smart Overview

Street Smart NJ is a public education, awareness and behavioral change campaign developed by the North Jersey Transportation Planning Authority (NJTPA) and funded through the Highway Safety Improvement Program (HSIP) and Pedestrian Safety Education and Enforcement Fund administered by the New Jersey Division of Highway Traffic Safety (NJDHTS).

The campaign is a collaborative effort among public, private and non-profit organizations. The NJTPA, along with the Federal Highway Administration (FHWA), the New Jersey Department of Transportation (NJDOT), NJ Transit, NJDHTS, and the Transportation Management Associations (TMAs) worked with numerous community partners to develop and pilot the Street Smart NJ campaign.

Street Smart NJ was developed in response to New Jersey’s designation by FHWA as a pedestrian “focus” state and Newark as a “focus” city due to a high incidence of pedestrian injuries and fatalities. In 2015, New Jersey was ranked 15th in the nation in pedestrian fatalities, according to a recent report from The Governor’s Highway Safety Association. From 2011 through 2015, 765 pedestrians were killed on New Jersey’s roads and more than 17,000 were injured, according to the National Highway Traffic Safety Administration which translates into one death every 2.4 days and 11 injuries daily.

Street Smart NJ has three main goals:

- Change pedestrian and motorist behaviors to reduce the incidence of pedestrian injuries and fatalities in New Jersey.
- Educate motorists and pedestrians both about their roles and responsibilities for safely sharing the road.
- Increase enforcement of pedestrian safety laws and roadway users’ awareness of that effort.

The Street Smart NJ program was piloted in five communities in New Jersey in 2013 and 2014. The pilot programs were conducted in Newark, Jersey City, Woodbridge, Hackettstown, and Long Beach Island. These five communities were selected in order to incorporate the state’s diverse landscape of urban, suburban, rural, and shore regions. Since the pilot programs, Street Smart has grown significantly and has been active in over 40 municipalities throughout the state of New Jersey.
TransOptions’ Street Smart Program

After the conclusion of the first five pilot programs, the NJTPA’s goal was to continue bringing attention to the issue of pedestrian safety statewide through the Street Smart initiative. With the success of the pilot programs, the NJTPA invited the regional Transportation Management Associations (TMAs) to conduct the Street Smart NJ campaign within their designated service areas to expand the program’s reach throughout the state.

As the TMA for northwestern New Jersey, TransOptions delivers pedestrian safety programs along with other transportation resources to the counties of Morris, Sussex, Warren as well suburban areas of Union, Essex, and Passaic. TransOptions selected Dover as one of four municipalities to conduct the Street Smart pedestrian safety program in the fiscal year from July 1, 2016 – June 30, 2017.

Dover, Morris County, New Jersey

Dover is located in Morris County, covering approximately 2.730 square miles with a population of 18,157, according to the 2010 U.S. Census. Dover is unique to this region of the county and state since the town has a large Spanish-speaking population, with close to 70% of the residents identifying as Hispanic or Latino, according to the 2010 U.S Census.

Dover is home to a busy downtown with stores and restaurants, St. Clare’s Medical Center, Zufall Health, Berkeley College, active bus routes and a commuter train station. The Dover Train Station is situated on NJ Transit’s Morris & Essex line providing access to New York City and other towns in northern New Jersey.

TransOptions used the Plan4Safety crash analysis tool from Rutgers University’s Center for Advanced Infrastructure and Transportation to examine crash data in Dover. The Plan4Safety tool uses police reports to compile crash data from all over the state of New Jersey. From January 2012 to December 2014, there were 47 pedestrian-related crashes involving 47 pedestrians in Dover. Of these crashes, 30% of pedestrians involved were crossing at marked crosswalks and 22% of pedestrians were jaywalking.

The Dover Street Smart campaign was a collaborative effort among TransOptions, the Dover Police Department, officials from the Town of Dover, and local community organizations.

Dover Street Smart Campaign Structure

The Street Smart campaign in Dover was modeled closely after the pilot programs implemented by the NJTPA in Newark, Jersey City, Woodbridge, Hackettstown, and Long Beach Island and the previous campaigns coordinated by TransOptions in Newton, Washington (Warren County), Morristown, and Summit. TransOptions worked closely with Dover’s police department and town officials in planning the program and selecting target areas for education and enforcement operations in the community.
FUNDING
The Dover Police Department secured funding for overtime enforcement through the Pedestrian Safety Education and Enforcement fund from the New Jersey Division of Highway Traffic Safety (NJDHTS). Dover was awarded the funding for the 2017 fiscal year starting on July 1, 2016. From there, TransOptions provided a suggested timeline for police education and enforcement activities and the Dover Police Department developed a schedule and strategy for their officers. The NJDHTS funding allowed the police department to cover the cost of overtime hours for officers participating in the Street Smart enforcement initiatives as well as the purchase of campaign materials.

CAMPAIGN SCHEDULE
Dover’s Street Smart campaign lasted approximately eight weeks with education and enforcement activities concentrated during the month of April. TransOptions’ Speed Sentry Loan Program was also implemented during the month of April to collect speed data from drivers in an area of concern in the community. The campaign consisted of pre- and post- campaign components such as intercept surveys, and intersection observations. These activities were done both before and after the campaign to gauge the impact the Street Smart program made on the community.

<table>
<thead>
<tr>
<th>Street Smart Dover Campaign Timetable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Campaign: (Surveys and Observations)</td>
</tr>
<tr>
<td>Education &amp; Enforcement:</td>
</tr>
<tr>
<td>Speed Sentry Loan:</td>
</tr>
<tr>
<td>Post-Campaign: (Surveys and Observations)</td>
</tr>
</tbody>
</table>

Campaign Evaluation

SPEED SENTRY LOAN PROGRAM
TransOptions utilized the existing Speed Sentry Loan Program to reduce the speed of drivers traveling towards Dover’s downtown area where there is a steady flow of pedestrian activity. With this program, TransOptions loans the speed Sentry device to municipalities within their service area. The radar sign digitally displays the speed of oncoming vehicles as they approach the sign. Data is collected on a web-based cloud server developed by All Traffic Solutions which is monitored and accessed at the office of TransOptions.

The speed Sentry device was displayed in Dover in April during the campaign’s education and enforcement activities. The placement location of the speed Sentry device was recommended by the Dover Police Department due to their familiarity with problem areas in town. The speed Sentry device was mounted on a 25 MPH street sign on South Morris Avenue between Mountain Avenue and Park Avenue. The sign recorded the speeds of drivers heading north towards downtown Dover. Although the area immediately surrounding the sign was mostly residential, several stores, offices, restaurants and the Dover Train Station were located within 1,300 feet downhill of the speed Sentry’s location.
Compliance
The speed sentry categorized each vehicle that passed the sign as “Compliant”, “Low Risk”, “Medium Risk”, and “High Risk”:

- Violators that exceeded the speed limit by less than 5 MPH are considered Low Risk
- Violators exceeding speed limits by more than 5 MPH but under 10 MPH are Medium Risk
- Violators exceeding speed limits by more than 10 MPH are High Risk

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 7 to April 15</td>
<td>34,756</td>
</tr>
<tr>
<td>April 16 - April 22</td>
<td>33,604</td>
</tr>
<tr>
<td>April 23 - April 29</td>
<td>34,446</td>
</tr>
</tbody>
</table>

Speed Compliance

- 49.5% for April 7 to April 15
- 49.2% for April 16 - April 22
- 51.3% for April 23 - April 29
During the evaluation, a total of 131,805 vehicles were detected by the speed sentry sign.

During the first four days of the speed sentry being displayed in Dover, 28,999 vehicles passed the sign at compliant speeds. In the second and third full weeks, compliance level was about 49% with a higher amount of vehicles being counted over seven day periods. By the last week of the speed sentry study, compliance jumped from 49.2% to 51.3% with 34,446 vehicles. This increase in compliance could be related to the campaign’s “Obey Speed Limits” vital sign message.

**Sign Effectiveness**

Sign effectiveness data averages speed by hour of the day for the 26 day period.

According to the report, the speed sentry slowed 89% of drivers passing the sign while the Street Smart campaign was active in Dover.

PRE & POST CAMPAIGN SURVEYS

Both before and after the Street Smart campaign in Dover, people from the community were asked to complete a survey to measure the effectiveness of the campaign. The survey was available in both English and Spanish and used the same questions from NJTPA’s Street Smart campaigns.

TransOptions distributed survey cards in Dover during the pre- and post-campaign intersection observations. The message on the card was translated in Spanish and added to the survey cards that were distributed during observations. Spanish speaking staff members were particularly valuable for engaging the community. The survey was also distributed online through the Town of Dover’s electronic communication channels. Several local organizations offered to help circulate the survey to their clients.
clients, such as Zufall Health. TransOptions also created a targeted Facebook advertisement that prompted Facebook users in Dover to complete the survey. For the post-campaign survey, participants from the pre-campaign survey were contacted directly with a request to take the survey a second time as part of an ongoing safety study in Dover.

Upon completing the questionnaire, the respondents had the option to enter into a raffle to win a $100 Visa Gift Card. A winner was selected from both the pre- and post-campaign survey groups.

The survey was created using SurveyMonkey and consisted of 27 questions that asked respondents to report their walking and driving behaviors and what they observed others doing on the road. The survey included questions on the respondents’ knowledge of New Jersey’s pedestrian safety laws and awareness of the Street Smart campaign in Dover. Demographic information was also captured in the survey. The pre-and post-campaign responses were then compared to determine the effectiveness of the Street Smart program in Dover.

Behaviors

The data displayed in this section shows the percentage of respondents that answered ‘Yes’ to the questions regarding their own behaviors or behaviors they observe others doing when walking and driving in Dover. The data below compares the pre-campaign survey to the post-campaign survey.

Respondents had the option to take the survey in English or Spanish. The availability of the Spanish option was particularly important to gauging the perceptions on walking and driving in Dover. 97 respondents (61 English; 36 Spanish) participated in the pre-campaign survey and 62 respondents (54 English; 8 Spanish) participated in the post-campaign survey. Results from both the English and Spanish surveys were combined and calculated to reflect the scores below. Respondents were asked to answer ‘Yes’ or ‘No’ to the following questions:

*Percentages may not total 100% due to rounding
*Some questions had respondents answering “yes” or “no” to multiple categories.
The respondents reported that they observed others engaging in several negative behaviors in Dover according to the post-campaign survey results. The campaign may have caused more people to be aware of negative behaviors they regularly experience on the roadways. However, there was a 6% reduction in survey participants observing drivers speeding in areas with a lot of people walking. Speed is the most dangerous factor in pedestrian-related crashes. A person struck by a vehicle traveling 40 MPH has an 85% chance of dying while a person struck by a vehicle traveling 25 MPH has a 95% chance of living.
The surveys showed several increases in negative behaviors in the self-reported behaviors. However, results show a 6% decrease in people who reported that they used a handheld cellphone while crossing the street. Results show a 14% increase in respondents who admitted to jaywalking and an 18% increase in respondents who admitted to driving 10 MPH over the speed limit. Education and enforcement of these two dangerous behaviors should be a focus in the community in order to further reduce these risks.

Survey participants had a high awareness of others engaging in unsafe walking and driving behaviors but were less likely to report doing the behaviors themselves. For example, 89% of post-campaign survey respondents reported seeing other pedestrians using a handheld cellphone while only 18% admitted to this behavior themselves. This result was consistent with the Street Smart pilot programs and other Street Smart campaigns conducted by TransOptions. Most often, the individual believes others are engaging in dangerous behavior when walking and driving and are not likely to report their own negative actions.

The increase in negative results in the post-campaign survey results from both the observed behavior and self-reported behavior questions may be due cultural differences in walking and driving safety in participants from Central and South America. According to Federal Highway Administration (FHWA) and National Highway Transportation Safety Administration (FHWA/NHTSA), traffic laws are enforced more strictly in the United States and there are more signs and regulations compared to Latin American nations. The report states that “Many features of the U.S. traffic system appear to be somewhat unfamiliar to Hispanics” and that “crosswalks appear to be less common in Latino countries” (source: https://safety.fhwa.dot.gov/ped_bike/hispanic/fhwanhtsa/fhwahtsa.pdf)
Respondents who completed the survey for Dover already had a high understanding of correct crossing behaviors but results showed positive increases in knowledge of proper crossing. Results showed a 2% increase in respondents knowing to cross the street when the “walk” sign is on; there was also a 3% increase in awareness of respondents knowing not to cross the street when the “Don’t Walk” or red hand is flashing/counting down. Survey results also showed a 6% increase in respondents knowing to not begin crossing the street when the “Don’t Walk” or red hand is on and not flashing.
Respondents were more aware of driving safety messages associated with the campaign such as speeding/aggressive driving and distracted driving. There was a 15% increase in the reported exposure to messages regarding speeding/aggressive driving and a 21% increase in exposure to distracted driving messages. There was also a 22% increase in awareness of pedestrian safety advertising messages.
In the past 30 days, have you read, seen or heard any advertising message or signage that mentions “Street Smart” and/or talks about pedestrian safety?

**Pre-Campaign**

- Yes: 32%
- No: 68%

**Post-Campaign**

- Yes: 34%
- No: 66%

Results show a 34% increase in the respondents’ exposure to pedestrian safety messages and the Street Smart name. In the pre-campaign, 32% of respondents said that they were already aware of the Street Smart brand. This may indicate that the Street Smart message is becoming more widespread throughout the state of New Jersey and survey participants may have noticed the messaging in other towns.
In the past 30 days, have you read or heard any messages similar to the following...

<table>
<thead>
<tr>
<th>Use Crosswalks - 40% increase</th>
<th>Pre-Campaign</th>
<th>29%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Campaign</td>
<td>69%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wait for the Walk - 47% increase</th>
<th>Pre-Campaign</th>
<th>22%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Campaign</td>
<td>69%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stop for Pedestrians 41% increase</th>
<th>Pre-Campaign</th>
<th>23%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Post-Campaign</td>
<td>64%</td>
</tr>
</tbody>
</table>
Results showed an increase in recognition of all five vital sign messages with “Wait for the Walk” being the most recognized message. Each individual vital sign message was displayed on street signs throughout Dover for the duration of the campaign.

**Obey Speed Limits - 36% increase**

<table>
<thead>
<tr>
<th></th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26%</td>
<td>62%</td>
</tr>
</tbody>
</table>

**Heads Up, Phones Down - 29% increase**

<table>
<thead>
<tr>
<th></th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Respondents were asked to report where they had seen the images from the previous question.

The results from the post-campaign survey showed that there was a 32\% decrease in respondents reporting that they had not been exposed to any Street Smart messages in the pre-campaign survey. However, 39\% of pre-campaign survey participants indicated that they had seen street signs and posters before the campaign. This increased by 22\% in the post-campaign survey where a total of 61\% of survey participants indicated that they had seen Street Smart messaging displayed on street signs and posters in the community. Social media also played an important role in raising awareness with an increase of 10\% from social media messages being viewed by participants.
The surveys showed increased knowledge of many of New Jersey’s pedestrian safety laws. There was a 10% increase in respondents knowing they can receive a ticket for jaywalking/crossing mid-block. There was also an 8% increase in respondents knowing that they could receive a ticket for not stopping for a pedestrian using the crosswalk and a 6% increase in respondents knowing they can receive a ticket for using a cellphone while driving.
Have you recently read, seen or heard about police efforts to enforce pedestrian safety laws?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-Campaign</strong></td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td><strong>Post-Campaign</strong></td>
<td>39%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Results show a 28% increase in the respondents’ awareness of the pedestrian safety enforcement efforts made by the Dover Police Department.
Respondents rated the following as a “very serious” problem in the community

<table>
<thead>
<tr>
<th>Problem</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distracted driving (e.g., texting or talking on the phone while driving)</td>
<td>61%</td>
</tr>
<tr>
<td>Pedestrians disobeying traffic rules (crossing in the middle of a street or against the light)</td>
<td>56%</td>
</tr>
<tr>
<td>Drivers not stopping for pedestrians in crosswalks</td>
<td>42%</td>
</tr>
<tr>
<td>Speeding</td>
<td>51%</td>
</tr>
<tr>
<td>Bicyclists not following traffic laws</td>
<td>42%</td>
</tr>
</tbody>
</table>

The responses from the pre-campaign survey and the post-campaign survey were combined to create the graph above. The graph represents what the respondents viewed as a ‘Very Serious’ problem in the community. After the conclusion of the Street Smart campaign in Dover, respondents overall felt that distracted driving was the most serious problem in their community followed by pedestrians disobeying traffic rules like crossing mid-block or against the traffic signal.
Participant Profile

The participant profile data in the section below was compiled from both the pre-campaign survey and the post-campaign survey.

### Transportation Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive alone</td>
<td>82%</td>
</tr>
<tr>
<td>NJTRANSIT Train</td>
<td>11%</td>
</tr>
<tr>
<td>PATH Subway</td>
<td>1%</td>
</tr>
<tr>
<td>Hudson Bergen Light Rail</td>
<td>1%</td>
</tr>
<tr>
<td>Newark Light Rail</td>
<td>1%</td>
</tr>
<tr>
<td>Bus</td>
<td>6%</td>
</tr>
<tr>
<td>Walk</td>
<td>24%</td>
</tr>
<tr>
<td>Ferry</td>
<td>2%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>5%</td>
</tr>
<tr>
<td>Carpool</td>
<td>13%</td>
</tr>
<tr>
<td>Rather not say</td>
<td>1%</td>
</tr>
</tbody>
</table>

82% of respondents indicated that they drive alone and 24% walk on a weekly basis. These results are typical to suburban areas of New Jersey, such as Dover. Street Smart’s messages aimed to address both driver and pedestrian populations to reduce crashes in Dover. 13% of respondents indicated that they carpool and 11% indicated that they take NJ Transit trains.

| Do you currently live in Dover, NJ? | 80% |

TransOptions only surveyed respondents who either live in Dover or regularly visit the community for work, school, or other reasons. The pre- and post- intercept surveys first asked respondents to report if they were older than 18 years of age. If the respondent answered “No” they were immediately disqualified. The next questions asked if the respondents lived in Dover followed by a third question asking if they work, go to school or regularly frequent Dover. If “No” was selected as a response for both questions, the participant was disqualified. 80% of the respondents who participated in the pre- and post-campaign surveys identified themselves as residents of Dover.
What is your gender?

- Male: 76%
- Female: 23%
- Rather not say: 1%

Age

- 18-24: 8%
- 25-34: 24%
- 35-44: 27%
- 45-54: 16%
- 55-64: 22%
- 65 or over: 4%
- Rather not say: 0%
### Are you Hispanic or Latino?

- Yes, I am Hispanic or Latino: 31%
- No, I am not Hispanic or Latino: 64%
- Rather not say: 5%

### Race

- American Indian or Alaskan Native: 2%
- Asian: 3%
- Black or African American: 4%
- Hawaii Native or Other Pacific Islander: 0%
- White: 69%
- Don't know / Rather not say: 26%
**INTERSECTION OBSERVATIONS**

Intersection observations were performed immediately before and after the Street Smart campaign in Dover in order to observe changes in walking and driving behavior. To control variables, intersection observations were kept consistent and performed for three hours on Thursdays from 7:00 AM to 10:00 AM.

**Pre-Campaign Observation:**
Thursday, March 30, 2017, 7:00 AM to 10:00 AM.

**Post-Campaign Observation:**
Thursday, May 11, 2017, 7:00 AM to 10:00 AM.

**Intersection Overview**

The intersection of E. Blackwell Street and Essex Street was selected as the observation intersection site. The Town of Dover and the Dover Police Department recommended this intersection because it has high pedestrian foot traffic, is one block away from the Dover Train Station, and has a history of pedestrian-driver conflicts with several near-misses. The 875 and 880 NJ Transit bus lines have stops along Blackwell Street near the observation intersection which also increases pedestrian activity. Blackwell Street is part of County Route 513 (CR-513), which stretches from Hunterdon County to West Milford, NJ (Passaic County).

The observation site is a non-signalized, four-leg intersection with crosswalks connecting all four corners. At this intersection, drivers must stop and give the right-of-way to pedestrians using the crosswalk. The observation intersection is surrounded by two churches, stores, offices, and restaurants, and bakeries.

While TransOptions was planning the Street Smart campaign in Dover, town and police officials indicated that observation activities must be transparent for the community. During this time, there had been national concerns of immigration enforcement. The town and the police department emphasized the need to build trust with the community in order to have a successful campaign. TransOptions posted signs on each camera that read “Traffic study in process / Estudio de tráfico en proceso” so people walking and driving were aware that the cameras were posted only to observe the traffic activity at the intersection.
Observation Setup

Pre- and Post- Campaign Observation Setup

| Camera 1: | Drivers not stopping for pedestrians in the crosswalk  
|Camera 2: | Jaywalking on E. Blackwell Street  
|Drivers not stopping for pedestrians in the crosswalk  
|Camera 3: | Jaywalking on Essex Street (north)  
|Drivers not stopping for pedestrians in the crosswalk  
|Camera 4: | Distracted pedestrians in crosswalk  
|Drivers not stopping for pedestrians in the crosswalk  
|Jaywalking on Essex Street (south)  
|Distracted pedestrians in crosswalk |
Intersection Observation Results

The behaviors of pedestrians and drivers were tallied in person by TransOptions’ staff on the day of the observations and the video footage was later reviewed to get a true count and reduce human error.

During the pre-campaign observation on March 30, 2017, 297 pedestrians used the crosswalks at the intersection. On May 11, 2017, 328 pedestrians used the crosswalk during the post-campaign observation.

<table>
<thead>
<tr>
<th>Pedestrians crossing mid-block</th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
<th>% of Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Compliant</td>
<td>282</td>
<td>260</td>
<td>8%</td>
</tr>
</tbody>
</table>

Mid-block crossing/jaywalking was only marked as a non-compliant behavior. Pedestrians that crossed outside of the crosswalk on Blackwell Street and Essex Street were counted as not compliant as long as the action was captured by the cameras. An 8% reduction was observed in jaywalking behavior from pre-campaign to post-campaign.

<table>
<thead>
<tr>
<th>Distracted Pedestrians</th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
<th>% of Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7%</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Pedestrians who were observed on camera crossing mid-block or crossing in the crosswalk while talking or texting on a cellphone were counted. A 3% reduction was observed in pedestrians crossing while distracted by cellphones from pre-campaign to post-campaign.

<table>
<thead>
<tr>
<th>Drivers failing to stop or yield to pedestrians in the crosswalk</th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliant</td>
<td>82</td>
<td>116</td>
</tr>
<tr>
<td>Not Compliant</td>
<td>218</td>
<td>180</td>
</tr>
<tr>
<td>% Non-Compliant</td>
<td>73%</td>
<td>61%</td>
</tr>
</tbody>
</table>

After the intersection was re-observed in the post-campaign, there was a 12% reduction in drivers who did not stop for pedestrians using the crosswalk at the intersection of Blackwell Street and Essex Street.
Mid-block crossing / Jaywalking

Non-Compliant Crossing

Non-Compliant Crossing
Distracted Pedestrians

Drivers failing to stop for pedestrians in the crosswalk

Non-Compliant
Drivers yielding to pedestrians when turning

Non-Compliant Turning

Compliant Turning
**Campaign Kickoff**

Dover’s Street Smart campaign was formally launched at a press conference at Dover’s Town Hall on Thursday, March 30th, 2017, immediately after the pre-campaign intersection observation. The speakers at the press conference included John F. Ciaffone, President of TransOptions, Lieutenant Anthony Smith of the Dover Police Department, Dover Mayor James P. Dodd, and Mary K. Murphy, Executive Director of the NJTPA. Each speaker highlighted the importance of pedestrian safety for not only Dover, but for the entire State of New Jersey. The event was attended by representatives from Dover and covered by News 12 and the Daily Record.

Campaign materials, such as posters and tip cards, were made available to the community and business members who attended the press conference to assist in promoting the campaign.
Media Coverage & Community Promotion

Dover’s Street Smart program received coverage in print, web, television and social media platform.

Dover launches Street Smart pedestrian safety campaign

‘Street Smart’ campaign launches in Dover
Enforcement

The Dover Police Department dedicated 96 enforcement hours to the Street Smart campaign. Overtime enforcement hours were funded through the Pedestrian Safety Education and Enforcement fund from the New Jersey Division of Highway Traffic Safety.

Officers conducted foot patrols throughout the town during the April campaign. Enforcement of pedestrian safety laws was increased throughout Dover with additional emphasis on the intersection of Blackwell Street and Essex Street (the observation intersection). These areas were selected by the Dover Police Department due to the high volume of pedestrian traffic in the area.

During the first two weeks of enforcement, the police department’s activity focused on educating pedestrians and drivers by issuing warnings instead of citations. After the two week educational period, officers issued summonses for violations against the state’s pedestrian safety laws.

At the time the Street Smart campaign was launching in Dover, there was national attention on immigration. Due to Dover’s high Hispanic population, the Town of Dover and the Dover Police Department expressed concern about conducting high visibility enforcement effort and maintaining trust in the community. Dover mostly favored interacting with pedestrians and drivers over the distribution of formal citations.

A total of 300 police interactions and 26 summonses were issued during Dover’s Street Smart campaign including:

- Failing to stop for pedestrians (summons/Interactions): 26
- Jaywalking (summons/interactions): 200
- Cell Phone (summons/interactions): 1
- Seatbelt: 5
- Other: 14
Education and Outreach

TransOptions employed several efforts to spread the Street Smart message throughout the community in Dover by partnering with local businesses and organizations.

MATERIALS

Street Smart materials were purchased by the Dover Police Department’s grant through the Pedestrian Safety Education and Enforcement Fund from the New Jersey Division of Highway Traffic Safety. Campaign materials included tip cards, posters, banners, table tents, and street signs. TransOptions and the Dover Police Department’s logos were added to most of the campaign materials. Using a variety of campaign materials was vital to increasing recognition and awareness of the campaign. Dover’s downtown business community is mostly Spanish-speaking. TransOptions was able to partner with bilingual volunteers from local community organizations to assist with introducing the campaign to businesses to distribute the Street Smart materials.

Material Quantities

TransOptions assisted the Dover Police Department in designing and ordering materials for the Street Smart campaign. The following quantities were ordered for each item:

- 12,000 Spanish tip cards
- 6,000 English tip cards
- 75 street signs
- 225 posters
- 200 table tents signs
- 2 banners

Approximately 50-60% of each item was printed in Spanish in order to reach Dover’s Spanish-speaking population.
Street Smart Dover Tip Cards

CHECK YOUR VITAL SIGNS
Local police are enforcing pedestrian laws

- Drivers:
  - Motorists in New Jersey MUST stop for pedestrians at a marked crosswalk. Failure to observe the law may subject you to one or more of the following:
    - 2 points
    - $200 fine (plus court costs)
    - 30 days community service
    - Insurance surcharges
  - Speed limit
  - Wait for the walk
  - Use crosswalks

- Pedestrians:
  - The law is clear, pedestrians must obey pedestrian signals and use crosswalks at signalized intersections. Both carry a $54 fine for failure to observe the law.
  - (...continued on next page)

CHECK YOUR VITAL SIGNS
Your life is on the line

- Cross at corners and intersections. Use marked crosswalks when available.
- Before crossing look left, right, then left again.
- Use pedestrian buttons and begin crossing the street on the “Walk” signal.
- Use sidewalks or walk facing traffic where there are no sidewalks.
- Watch out for vehicles turning right on red.
- Be visible at night and in inclement weather.
- Walk sober.
- Eliminate all distractions.

Preste atención a las señales vitales.
La policía está haciendo cumplir la ley.

- Condutores:
  - Los conductores de vehículos automotores están DÉFECTOS a ceder el paso a los peatones en las cruces marcadas con paso peatonal. El incumplimiento de esta ley implica una multa de $100 y tres puntos adicionales:
    - 3 puntos
    - Multa por $100 (más los gastos por trámites administrativos)
    - 30 días de servicio comunitario
    - Multas adicionales por el uso del vehículo

- Peatones:
  - La ley es clara, los peatones deben obedecer las señales peatonales y usar los pasos específicamente designados para cruzar las intersecciones. El incumplimiento implica una multa de $54.

Preste atención a las señales vitales.
Su vida está en peligro

- Cruzar por las esquinas o intersecciones, use los pasos designados para cruzar peatonal.
- Antes de cruzar, mira a la izquierda, a la derecha y nuevamente a la izquierda.
- Use los botones de los semáforos para paso peatonal y cruce cuando el semáforo de “WALK” sea visible.
- Use las aceras o camine de frente al tráfico para que los conductores te vean.
- Cuide de los vehículos que dan vuelta a la derecha cuando el semáforo esté en rojo.
- Mantén visible a los conductores en la noche durante condiciones meteorológicas adversas.
- Centra tu atención.
- Elimina todas las distracciones.

TransOptions.org/street-smart

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Messages on campaign posters, street signs and banners
Local Outreach Partners

Many local businesses were eager to support the Street Smart message. Most offered to display posters in their windows, hand out tip cards to their customers, and put table tents on restaurant tables. Street Smart messaging was displayed at the following locations:

- Shops, restaurants, bars, and organizations in downtown Dover
- Dover Police Department
- Dover Town Hall
- Berkeley College
- Zufall Health Center
- The Family Success Center

Community Outreach & Events

TransOptions specializes in transportation safety education programs and community outreach. During Street Smart, TransOptions focused its safety education programs in Dover with a variety of outreach initiatives and community events.
TransOptions attended the County Council for Young Children’s meeting where multiple community organizations and parents attend. The Street Smart campaign was presented to the attendees, materials were distributed, and the pre-campaign survey was promoted.

Berkeley College’s campus in Dover displayed and distributed Street Smart materials to students.

TransOptions attended Dover's Community Health and Wellness Fair to promote the Street Smart message and pedestrian safety.

Zufall Health displayed Street Smart messaging in their lobby and made materials available to their patients.

Street Smart Dover was promoted at the Shaping Dover meeting which is “a community health initiative that supports environmental and policy change to improve the health of the people of Dover, New Jersey.”

TransOptions participated in Dover’s Family Game night hosted by the Family Success Center. The event featured TransOptions’ “Walk N' Roll” program aimed at educating children from kindergarten to 2nd grade on the rules of the road. A Street Smart information table was also part of the event and materials were distributed to parents.

TransOptions attended the Shaping Dover meeting to continue promoting the Street Smart campaign to the local community organizations.

The Town of Dover posted all five vital Street Smart messages in both English and Spanish on their marquee sign outside of Town Hall.
In July following Dover’s spring Street Smart campaign, TransOptions coordinated Safe Routes to School events including “Walk n’ Roll” for kindergarten to 2nd grade students, Traffic Safety Town for 3rd to 5th grade students, and a program for 6th to 8th grade students.

TransOptions, the Town of Dover and the Dover Police Department made several social media posts reminding residents and visitors of Dover to be aware of pedestrian safety.
Results

1.) **GOAL:** Change pedestrian and motorist behaviors to reduce the incidence of pedestrian injuries and fatalities in New Jersey.

- Data collection from the speed sentry sign showed that drivers traveling at compliant speeds increased by 2.1%, which is approximately 2,768 drivers. The sign also slowed 89% of drivers passing by the sign and heading into Dover’s downtown area.
- Intersection observations showed that there was an 8% reduction in mid-block crossing/jaywalking.
- Intersection observations showed that there was a 3% reduction in pedestrians using their cellphones while crossing (texting or talking).
- Intersection observations showed a 12% decrease in drivers not stopping for pedestrians at the marked crosswalks at the intersection of East Blackwell Street and Essex Street.

2.) **GOAL:** Educate motorists and pedestrians both about their roles and responsibilities for safely sharing the road.

- From pre-campaign to post-campaign, respondents were more aware of the correct times to cross the street. A 3% increase was found in pedestrians’ knowledge that they should not start crossing the street when ‘Don’t Walk’ is flashing or counting down, and a 6% increase in respondents knowing not to start crossing the street when the “Don’t Walk” sign is on and not flashing.
- 34% more survey respondents had read, seen or heard advertising messages or signage that mentioned “Street Smart” and/or talked about pedestrian safety.
- More participants were aware of advertising messages that directly relate to Street Smart’s safety messages. There was a 22% increase in awareness of pedestrian safety messages, a 15% increase in awareness of speeding/aggressive driving, and a 21% increase in awareness of distracted driving advertisements.
- There was an increase in recognition of all five vital sign messages.
  - Use Crosswalks: 40% increase
  - Wait for the Walk: 47% increase
  - Stop for Pedestrians: 41% increase
  - Obey Speed Limits: 36% increase
  - Heads Up, Phones Down: 29% increase
- 22% more respondents reported being exposed to the Street Smart messages on posters and signs.
- In the post-campaign survey, 10% more respondents knew they could receive a ticket for crossing the street mid-block. 8% more respondents knew they could receive a ticket for not stopping for a pedestrian in the crosswalk, 6% more respondents knew they could receive a ticket for using a mobile phone while driving, and 3% more respondents knew they could receive a ticket for not yielding to a pedestrian when turning while driving.
- TransOptions coordinated many safe walking and driving educational events in the community.

3.) **GOAL:** Increase enforcement of pedestrian safety laws and roadway users’ awareness of that effort.

- Dover Police dedicated 96 enforcement hours to the Street Smart campaign, gave out 26 tickets, and had 300 interactions with pedestrians and drivers.
- 28% of survey respondents were aware of increased enforcement efforts made by the Dover Police Department.
14% more respondents answered that they felt the Dover Police Department was “somewhat strict” in their enforcement of driving safety laws in the post-intercept survey.

**Recommendations**

- 61% of respondents felt distracted driving was the most serious problem in the community followed by 56% of pedestrians disobeying traffic rules, such as crossing in the middle of a street or against the signal. Education initiatives and enforcement campaigns from the Dover Police Department should focus on these safety issues.
- Mid-block crossing should be monitored and discouraged along Blackwell Street and along Warren, Sussex, and Morris Streets.
- More enforcement of drivers not stopping for pedestrians at the non-signalized intersection of East Blackwell Street and Essex Street. More signage should be placed at this location including a mid-block crossing sign.

**Conclusion**

Street Smart Dover was a successful collaborative effort between TransOptions, the Dover Police Department, and the Town of Dover. A reduction in the prevalence of non-compliant behaviors by both drivers and pedestrians was observed in the intersection observations and in the surveys. The campaign also resulted in a significant increase in awareness of the Street Smart message, enforcement efforts, and an emphasis on pedestrian safety throughout the community. It is recommended that the Dover Police Department and the Town of Dover maintain their concern for pedestrian safety and enforce laws for both drivers and pedestrians. TransOptions’ education and outreach programs will continue to be available to the businesses, organizations, and schools of Dover.