REPORT & CAMPAIGN RESULTS

2016 Pedestrian Safety Education and Enforcement Campaign
## EXECUTIVE SUMMARY

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The NJTPA is the federally authorized Metropolitan Planning Organization for 6.7 million people in the 13-county northern New Jersey region. Each year, the NJTPA oversees more than $2 billion in transportation improvement projects and provides a forum for interagency cooperation and public input. It also sponsors and conducts studies, assists county planning agencies and monitors compliance with national air quality goals.

The preparation of this report has been financed in part by the U.S. Department of Transportation, North Jersey Transportation Planning Authority, Inc., Federal Transit Administration and the Federal Highway Administration. This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or its use thereof.
EXECUTIVE SUMMARY

Street Smart NJ

Street Smart NJ is a statewide public education, awareness and behavioral change campaign funded and managed by the North Jersey Transportation Planning Authority (NJTPA). The campaign combines grassroots public awareness efforts in participating communities – street signs and posters, teams handing out safety tip cards, events at schools and senior centers, etc. – together with traditional and social media messaging and police enforcement of pedestrian safety laws. The campaign addresses high crash areas and, in many cases, builds on physical safety improvements. First piloted in five northern and central New Jersey communities in 2013 and 2014, the NJTPA selected seven additional communities to participate in a second phase of the campaign during the spring and summer of 2016. These 12 communities (the focus of this final report) received consultant assistance, printed materials, targeted advertising and other assistance from the NJTPA. Over 30 other communities have also conducted campaigns with more limited assistance from the NJTPA or with support from Transportation Management Associations (TMAs) in the region.

Positive Impact Found

To assess the effectiveness of the campaign activities, study teams conducted evaluations – consisting of pre- and post-campaign surveys and observations at selected intersections – in eight of the Phase II communities. These surveys and observations found statistically significant positive results, including:

- A 28 percent reduction in pedestrians jaywalking or crossing against the signal.
- A 40 percent reduction in drivers failing to yield to crossing pedestrians or cyclists.
- An increase in the awareness of Street Smart NJ campaign materials.
- Increased awareness of the enforcement of pedestrian safety laws.
- A positive relationship between the intensity of local campaign activities and awareness of campaign messages among drivers and pedestrians.

Based on these findings, the campaign consultant, McAndrew Company, concluded that there is reason to explore expanding the Street Smart NJ campaign to more communities in the NJTPA region and to the entire state through additional partners and a continued focus on high-frequency crash locations.

Need for the Campaign

Pedestrian safety is a concern in every state across the country, and pedestrian and driver education and awareness programs can be found in many cities and municipalities.

Part of the impetus behind Street Smart NJ is that the Federal Highway Administration identified New Jersey as a pedestrian “focus” state and the City of Newark as a particular “focus” city due to a high incidence of pedestrian injuries and fatalities:

1. From 2011-2014, 591 pedestrians were killed and more than 17,000 injured on New Jersey’s roadways, which translates to one death every 2.5 days and 11 injuries daily.
2. Annually, nearly 6,000 pedestrians are injured and 139 killed in motor vehicle crashes statewide.
3. New Jersey’s pedestrian fatality rate (30 percent in 2014) is more than double the national average (14 percent). The City of

Figure 1. New Jersey Pedestrian Fatalities, 2012-2014

Newark has the highest number of annual pedestrian deaths in the state (29 fatalities, 2011-2014).

**Campaign Goals:**

1. Change pedestrian and motorist behavior in order to reduce the incidence of pedestrian injuries and fatalities on New Jersey’s roadways.
2. Educate motorists and pedestrians about their roles and responsibilities for safely sharing the road.
3. Increase enforcement of pedestrian safety laws and roadway users’ awareness of that effort.
4. Develop and evaluate a program that leverages physical improvements with education and enforcement and can be expanded.

**Campaign Messages**

The Street Smart NJ campaign combines outreach, enforcement, and targeted messaging to urge pedestrians and motorists to “Check your vital signs.” The program’s four core messages have been: Obey speed limits; Stop for pedestrians; Wait for the walk; and Use crosswalks. Based on feedback from local law enforcement officials, a fifth message – Heads up, phones down – was added in 2016 to address the increasingly prevalent issue of distracted driving and walking.

The media campaign uses a graphically simple yet compelling visual – street signs coupled with a heart rate monitor – to remind motorists and pedestrians that lives are on the line and that walking is good for your health and the community’s wellbeing.

With its multi-pronged approach to message delivery, the Street Smart NJ campaign achieved an estimated 36 million impressions* in 2016. Impressions were gained in a wide variety of ways, including the BeStreetSmartNJ.org website, street teams, posters, billboards, digital advertising, streaming radio and social media targeting partner communities.

*Impressions are the number of times a campaign message(s) appeared or was viewed during the specified campaign period.

**Participating Agencies**

Administered by the NJTPA, Street Smart NJ is supported by federal and state funds, with additional funding/in-kind contributions from local partners. Street Smart NJ is coordinated with the New Jersey Department of Transportation, NJ TRANSIT and the New Jersey Division of Highway Traffic Safety (which provides grants to local law enforcement for campaign-related activities). In addition, as noted, TMAs provided valuable support for the Phase II March campaign, coordinating activities in selected communities and promoting messaging to their members, among other activities.
Street Smart NJ Pilot Communities

Phase II participating communities included:

- The City of Newark in Essex County
- The City of Jersey City in Hudson County
- The Township of Woodbridge in Middlesex County
- The Borough of Metuchen in Middlesex County
- The Borough of Red Bank in Monmouth County
- The Township of Lakewood in Ocean County
- The Township of Toms River in Ocean County
- The City Passaic in Passaic County
- Franklin Borough in Sussex County
- The City of Elizabeth in Union County
- The Town of Hackettstown in Warren County
- Long Beach Island in Ocean County

*Municipalities that participated in Phase I of Street Smart NJ are indicated in italics.

ADDITIONAL CAMPAIGN PARTNERS
As of Fall 2016

Numerous other communities and organizations have participated in Street Smart NJ campaigns using NJTPA or TMA assistance, including:

- Borough of Caldwell
- City of East Orange
- Essex County Sheriff's Department
- Borough of Bergenfield
- City of Nutley
- Township of Maplewood
- Borough of Bay Head
- Borough of Barnegat Light
- Borough of Bradley Beach
- Borough of Harvey Cedars
- City of Long Branch
- Borough of Manasquan
- NJ TRANSIT
- NJIT
- Rutgers University, Newark Campus
- Borough of Point Pleasant Beach
- Borough of Surf City
- City of Asbury Park
- Princeton Township (GMTMA)
- City of Summit (TransOptions TMA)
- Town of Clinton
- Borough of Flemington (HART TMA)
- Frenchtown Borough (HART TMA)
- Hillsborough Township
- Town of Morristown (TransOptions TMA)
- Town of Newton (TransOptions TMA)
- Washington Township (TransOptions TMA)
INTRODUCTION: THE STREET SMART NJ 2016 CAMPAIGN

Campaign Goals:

1. Change pedestrian and motorist behavior in order to reduce the incidence of pedestrian injuries and fatalities on New Jersey’s roadways.
2. Educate motorists and pedestrians about their roles and responsibilities for safely sharing the road.
3. Increase enforcement of pedestrian safety laws and roadway users’ awareness of that effort.
4. Develop and evaluate a program that can be implemented statewide.

Partner Communities

A wide range of selection factors played a role in choosing the 12 communities involved in Street Smart NJ 2016. The selection process began with a data-driven approach to identify communities of concern using pedestrian crash data. The NJTPA project team used data from the Rutgers Center for Advanced Infrastructure & Technology (CAIT) to help identify local crash factors.

Because local support activities such as the distribution of campaign materials, engaging the local community at events, and developing partnerships within the community is so critical, municipality interest and eagerness was an important factor. Community placetype (urban, rural, suburban) was important, too. The campaign received input from the NJTPA’s Regional Transportation Advisory Committee (RTAC) and considered community participation in NJTPA’s Local Safety Program (LSP), which awards grants for engineering improvements. The presence of NJDHTS enforcement grants to support and supplement the program also played an important role in selection.

A Multi-Pronged Campaign Approach

Street Smart NJ utilizes a three-pronged approach to educate and engage motorists and pedestrians, blending earned, owned, and paid media, grassroots public outreach and high visibility enforcement (HVE).

The slogan “Check your vital signs” was designed to encourage both drivers and pedestrians to pay attention to and adhere to posted pedestrian safety laws, which makes travel safer for all roadway users. The “vital signs” message brought home the health implications of the shared responsibility for pedestrian safety, as well as connected the message to the general health benefits of being a pedestrian.

The media campaign uses graphically simple yet compelling visuals — street signs coupled

<table>
<thead>
<tr>
<th>Location</th>
<th>Crashes</th>
<th>Fatalities</th>
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<tr>
<td>Newark (Essex County)</td>
<td>1,665</td>
<td>35</td>
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<tr>
<td>Jersey City (Hudson County)</td>
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<td>183</td>
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<td>39</td>
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<td>11</td>
<td>152</td>
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<td>179</td>
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<td>Passaic (Passaic County)</td>
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<td>Franklin Borough (Sussex County)</td>
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<td>30</td>
</tr>
<tr>
<td>Long Beach Island (Ocean County)</td>
<td>8</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

Data Source: Data provided by NJTPA using Plan4Safety (Rutgers/CAIT).
with a heart rate monitor – to remind motorists and pedestrians that lives are on the line. The underlying message is that walking is good for your health and the community’s wellbeing, but it can also be dangerous if drivers and pedestrians don’t check – and follow – vital traffic safety signs.

Data analysis for Phase II confirmed the validity of the same core messages that were developed for Phase I:

1. Obey speed limits
2. Stop for pedestrians
3. Wait for the walk
4. Use crosswalks

These messages are backed by the strength of New Jersey’s laws. Based on a spike in distraction-related crashes and feedback from local law enforcement officials, a fifth message – Heads up, phones down – was added to address the increasing prevalence of distracted driving and walking. While distracted walking is not a legal violation, distracted driving (particularly using a handheld mobile device while driving) is a motor vehicle violation and a growing concern. If followed, these messages would aid in significantly reducing the number of pedestrian/motor vehicle crashes occurring in the partner communities.

Each message also includes a reminder that police enforce pedestrian laws for the safety of all roadway users. Through highly visible education and enforcement activities, law enforcement in partner communities addressed speeding, illegal turns and distracted and inattentive driving and walking, which also contribute to pedestrian-motor vehicle crashes.

The Target Audience

An NJTPA project team mined data from the Plan4Safety database maintained by Rutgers Center for Advanced Infrastructure & Technology (CAIT) to help identify local crash factors. For each community, the team used the crash data to find hot spot pedestrian crash intersections and contributing circumstances, such as lighting conditions, time of day, or pre-crash actions. Each campaign community was given fact sheets summarizing the local crash data to help establish data-driven baselines and campaign targets.
Analysis of NHTSA national crash and fatality data also played a part in identifying general campaign-wide targets. For example, the data revealed that in 2015, male drivers 20-59 years of age were involved in the majority of pedestrian-motor vehicle crashes and males accounted for 52 percent of all pedestrian fatalities in New Jersey. For pedestrian fatalities from crashes with drivers, the age range is 10-59. (See the Research & Analysis for Phase II Execution section on page 17 for more information.) Accordingly, the campaign targeted all drivers 20-59 years of age and all pedestrians.

**Message Delivery**

With a multi-pronged approach, campaign messages delivered more than 36 million impressions, which means the number of times a campaign message appeared or was viewed. Message vehicles included:

- Out-of-home advertising across each community, with a total of 83 bus king ads, 305 interior bus cards, 100 interior rail cards, 21 rail station posters and three billboards placed in high-traffic areas.

- Digital advertising, including digital banners and highly visible messaging. This included a “takeover” of the NJ.com homepage, where for a period of time all ads on the homepage contained a Street Smart NJ message, and a network of Internet sites to deliver ads targeted both geographically and demographically. These ads delivered more than 4.3 million impressions across both campaign executions in March and July 2016.

- Audio ads and digital banners were shared with Pandora, streaming radio, users in assigned geographic targets. These ads delivered more than 1.8 million impressions across both program executions in March and July 2016.

- The campaign posted messages daily on its Twitter and Facebook pages and also utilized paid advertising on these platforms with ads geographically targeted to the partner communities. In addition, partner communities and the TMAs shared Street Smart NJ messages on various social media platforms.
• Various outreach materials included street signage, posters, tip cards, tent cards, banners, op-eds, and a series of four email blasts that went to a variety of people and organizations such as partners, law enforcement agencies and local government officials, among others.

• Support for press coverage included “fill in the blank” press releases for use by communities.

• Outreach education teams concentrated their efforts at designated locations and engaged pedestrians and drivers.

• A dedicated website at www.bestreetsmart-nj.org.

**Added Media Value**

Public service-type advertising often gains from no-cost messaging through goodwill and participatory community service. Street Smart NJ gained the following added media value in 2016:

• 300 interior bus cards on NJ TRANSIT buses serving partner communities remained in place for an additional 21 days beyond the paid placement for an added value of approximately $7,900.

• 79 bus kings on NJ TRANSIT remained in place for an additional 30-71 days beyond the paid placement for an added value of approximately $76,900.

• 16 two-sheet station posters at NJ TRANSIT rail stations remained in place for an additional 44 days beyond the paid placement for an added value of approximately $16,500.

• Five two-sheet station posters at PATH stations remained in place for an additional 17 days beyond the paid placement for an added value of approximately $700.

• Four bus kings on Sussex County Transit remained in place for an additional 40 days beyond the paid placement for an added value of approximately $2,000.

<table>
<thead>
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<th>Media Type</th>
<th>Estimated Impressions</th>
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<td>Pandora Internet Radio</td>
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</tr>
<tr>
<td>Digital Banner Ads</td>
<td>4,390,417</td>
</tr>
<tr>
<td>Social Media</td>
<td>2,165,006</td>
</tr>
<tr>
<td>Outdoor (Bulletin/Posters)</td>
<td>1,012,572</td>
</tr>
<tr>
<td>Transit-Interior Bus Cards</td>
<td>3,347,620</td>
</tr>
<tr>
<td>Transit-Interior Rail Cards</td>
<td>3,494,400</td>
</tr>
<tr>
<td>Transit-Kings</td>
<td>8,143,825</td>
</tr>
<tr>
<td>Transit-Two Sheet Posters</td>
<td>12,222,000</td>
</tr>
<tr>
<td><strong>Total Impressions</strong></td>
<td><strong>36,625,840</strong></td>
</tr>
</tbody>
</table>

Estimates based on information provided by respective media vendors.

• Five interior bus cards on Sussex County Transit remained in place for an additional 21 days beyond the paid placement for an added value of approximately $840.

• A billboard in Hackettsstown remained in place for an additional 22 days beyond the paid placement for an added value of approximately $1,280.

• The campaign received additional ads on NJ.com, Pandora and across the Centro digital network at no cost. These ads delivered an additional 2.8 million impressions for an added value of approximately $25,000.

The estimated total added value of free media for the Phase II campaign was $125,872.
ROBUST APPROACH TO SOCIAL MEDIA STRATEGIES

For the 2016 Street Smart NJ campaign, a robust social media component was added to the paid media strategy. These ads not only increased followers and page “likes” on Twitter and Facebook but also contributed to raising message awareness. A multi-faceted catalog of content was developed that included static ads, cinemagraphs and listicles.

Cinemagraphs are still photographs in which an isolated element is animated via video. A series of cinemagraph ads were developed to demonstrate each core message (Wait for the walk; Use crosswalks; Obey speed limits; Stop for pedestrians; and Heads up, phones down). The cinemagraph ads generated more than 411,000 video views during the four-week campaign and were particularly successful in engaging males 25-44 years old (a key target audience based on the data review).

Another tactic employed by the Street Smart NJ social media component were listicles. Listicles are numbered or bullet-pointed lists to encourage social media users to click on an ad for more information. For the campaign, listicles such as “Five ways to make your commute happier and safer;” “Four vital signs that you may be missing;” and “Nine ways to make your walk even healthier” generated more than 11,000 clicks to the bestreetsmartnj.org site. Listicles performed well among males 18-24 years old.

The Street Smart NJ paid social media advertising efforts had a total reach of 774,577 and total impressions of 2,165,000. More than 309,000 people liked, commented on or shared the social media ads. In addition to paid ads on social media, a digital toolkit was distributed to all campaign partners. The toolkit provided numerous suggestions for posts/tweets related to pedestrian safety and the campaign as well as accompanying images. All partners were encouraged to post multiple times a week during the campaign and use the campaign hashtag (#bestreetsmartnj).

Figure 5. Examples of Social Media Ads and Mentions during the Street Smart NJ Campaign

Above: Video still from the Heads up, phones down cinemagraph showing the potential dangers of not looking up when walking.

Right: When viewers clicked on this listicle ad, they were directed to the bestreetsmartnj.org website and were given nine tips for safer walking.

Examples of tweets and Facebook posts by partners during the campaign.
Campaign Events

Street Smart NJ kicked off its spring 2016 campaign with a regional event at Union County College in the City of Elizabeth on March 8. Speakers included: Mary K. Murphy, NJTPA Executive Director; Somerset County Freeholder Peter Palmer, NJTPA Chairman; Mayor Christian Bollwage, the City of Elizabeth; Officer Brian Clancy, the City of Elizabeth Police Department; Dr. John D’Angelo, Chair of Emergency Medicine at Trinitas Regional Medical Center; and Principal Sulisnet Jimenez, Public School No. 28, City of Elizabeth. The event highlighted Street Smart NJ and why there is a need for a statewide pedestrian safety campaign, the role of law enforcement, and the types of injuries that arise from pedestrian/vehicle crashes. It also featured a speed demonstration video and invited attendees to observe the educational street team in action. News coverage included more than 30 stories highlighting Street Smart NJ in local and regional newspapers, online outlets, television news shows and radio programs.

The campaign kicked off its summer 2016 effort at Harvey Cedars’ Sunset Park on Long Beach Island on June 29. In addition to a full campaign on Long Beach Island, the event also signified the beginning of a summer seasonal Street Smart NJ campaign targeting various Jersey Shore communities in Ocean and Monmouth counties. Following the kickoff event, several police officers from Long Beach Township and Harvey Cedars demonstrated positive reinforcement efforts by distributing neon yellow “Lead By Example” (traffic safety) t-shirts, which encourage pedestrians to walk against traffic and cyclists to bike with the flow of traffic. The officers also gave pedestrians who waited for the walk and used crosswalks gift cards, which local businesses donated. Following the demonstration, Community Outreach Ambassadors provided through the Rutgers University Ambassadors in Motion (AIM) program distributed tip cards and were approached on several occasions by individuals requesting free safety t-shirts. AIM outreach teams continued to visit Jersey Shore communities throughout the summer in support of the Street Smart NJ campaign.
Local Partner Contributions

In several municipalities, campaign partners supported and supplemented Street Smart NJ with various activities of their own initiative. These included:

Local Media
- A local public service announcement ad was created and ran on WSUS in Franklin Borough.
- Local TV channel promotional programming ran in the City of Elizabeth.

Social Media
- Street Smart NJ was promoted on campaign partner websites and social media pages in many municipalities.
- NJTPA training webinars were conducted.

In Schools
- Posters were displayed and materials distributed to students in local schools.
- College volunteers distributed materials to students at Rutgers University's Newark campus.
- University police were involved in campaign efforts at Rutgers University and NJIT campuses in the City of Newark.

On Site Messages
- Banners were distributed to community partners and installed at strategic locations.
- Speed counters were set up at select locations.
- Local volunteers supported community outreach teams in several communities.
- In the Borough of Metuchen and Middlesex County, a pedestrian information trailer was set up offering campaign materials and community outreach.
- Some communities displayed campaign messages on electronic variable message signs.

Law Enforcement
- Police details were posted in crosswalks and as decoys in target areas in the Township of Woodbridge, the Borough of Red Bank, the City of Passaic and other jurisdictions.
- Officers gave pedestrian safety demonstrations in some communities.
- Officers distributed informational safety tip cards as part of enforcement details.

Local Organizations
- Red Bank Catholic produced an informational video about Street Smart NJ, “Power to the Pedestrian.”
- The Greater Mercer Transportation Management Association distributed tip cards at crossing locations.
- The City of Passaic Police Department posted regular Facebook updates with campaign enforcement information, as did the Passaic Recreation Department.
- Long Beach Township Police distributed popular Street Smart t-shirts.
- Lakewood Chamber of Commerce distributed campaign tent cards to local restaurants.
- Libraries and EZ Ride Transportation Management Association promoted campaign messages in schools in the City of Elizabeth.
THE BOROUGH OF METUCHEN – A MODEL CAMPAIGN COMMUNITY

In Middlesex County, the Borough of Metuchen assembled a Street Smart NJ campaign team and enthusiastically implemented the campaign, using many recommendations found in the Street Smart NJ implementation guidebook and creating new ways to deliver the pedestrian safety messages. The team’s activities generated a high level of community support behind Street Smart NJ in March 2016, as demonstrated through the following activities.

- The Traffic Transportation Committee, along with members from the Borough of Metuchen’s Police Department and borough officials held a Street Smart kickoff event at Borough Hall. Officials, including the mayor and the chief of police, then walked downtown and passed out tip cards to pedestrians and commuters at the train station. The event was well covered by METv, the borough’s municipal access television station.

- Mayor Peter Cammarano and local officials gave a pedestrian safety presentation at the First Presbyterian Church for approximately 300 members of the congregation.

- Metuchen High School distributed tip cards to students. The school put a “Stop for Pedestrians in Crosswalks” image on its message board on Grove Avenue. Posters and table tent cards were displayed on all lunch tables in the school, and driver’s education classes were given a special lesson on pedestrian safety, incorporating the Street Smart NJ messaging and images.

- Campbell Elementary and Edgar Middle schools displayed posters and table tent cards and distributed tip cards to students.

- The Metuchen Police Department received a Pedestrian Safety Grant for 80 hours of “cops in the crosswalk” enforcement. This grant enabled plainclothes officers to serve as decoys, crossing at problem intersections while officers in marked units stood by and pulled over motorists who failed to stop for pedestrians. Officers conducted these activities at least 10 different locations.

- Officers on patrol conducted another 26 hours of enforcement at various locations. Of the 518 total summonses written in March, 94 were pedestrian-related summonses.

- The Metuchen Department of Public Works put campaign banners on all light posts in the downtown area and printed a large banner (sponsored by nearby JFK Medical Center) that was hung across Main Street. Posters were placed on five different bus stops and at the commuter bus stop on New Street at Pearl Street.

- Woodmount Properties, a local property management company, hung a banner at its construction site on New Street at Route 27, where it was seen by thousands of people using the busy road.

- Another banner hung at the entrance to the Metuchen Sportsplex and campaign tip cards were distributed throughout the building, including 600 tip cards in goodie bags that went to children that attended soccer camp, and more than 400 tip cards given to parents of children attending an Easter Egg Hunt.

- Messages on the variable message board in town on Main Street at Cedar Street included “Pedestrian Safety Month,” “Cops in Crosswalks,” and “Strict Enforcement.” A portable speed counter was used on Grove Avenue at Claredon Court to deter speeding in the newly designated 25 MPH zone.

- A Pedestrian Trailer located at Middlesex Avenue near the Middlesex Greenway disseminated campaign messages and information.

- Volunteers from the Metuchen Auxiliary Police reported spending several hours handing out tip cards to residents and commuters in the downtown area as well as posters at local businesses. Volunteer groups from the YMCA also handed out tip cards at intersections. They were joined by local Cub Scouts and Girl Scouts.

The Borough of Metuchen supported the Street Smart NJ campaign in a variety of ways such as having Cub Scouts hand out tip cards, VMS messaging at schools and a large banner across Main Street.
Community Outreach Ambassadors

Haas Media, as part of the project team, provided street outreach services for the campaign in March and July in each participating community. The team of Community Outreach Ambassadors provided 22 street outreach sessions in 12 communities.

Ambassadors worked productively to meet the needs of each community by focusing outreach activities at locally preferred locations or intersections. They also distributed messages in a manner that acknowledged the linguistic or cultural preferences of the community. Ambassadors distributed tip cards and engaged with residents in English, Spanish and Portuguese, as appropriate.

Community Outreach Ambassadors distributed a total of 18,863 tip cards; 14,363 in English, 4,209 in Spanish, 224 in Portuguese and 67 with a Hebrew message. This is in addition to the many thousands of tip cards distributed by community leaders and organizations, and the TMAs. The overwhelming majority of the public was receptive to messaging and receiving safety tip cards. Ambassadors reported many positive responses to their educational efforts and personal interactions with pedestrians and drivers.

Community members also took the time to give feedback and shared their challenges as pedestrians in the area. In most instances, pedestrians explained the difficulty of navigating highly trafficked intersections and mentioned the increasing numbers of pedestrians distracted by their cell phones.

In several locations, ambassadors worked in conjunction with the local police department and public safety officers.

Figure 9. Examples of Community Outreach

Street Smart NJ Community Outreach Ambassadors distributed a total of 18,863 tip cards in 12 partner communities.
SUPPORT FROM TRANSPORTATION MANAGEMENT ASSOCIATIONS (TMAs)

The TMAs provided valuable support for the Phase II efforts, and many were also engaged in supporting earlier campaigns.

1. TMAs were active in supporting the campaign on social media. They utilized the library of content from the Digital Toolkit and tailored messages for their respective audiences.
2. TMAs “tagged” the campaign in social media posts using the #bestreetsmartnj hashtag.
3. TMAs promoted the campaign messages and distributed collateral materials such as posters, tip cards and tent cards at community events and schools.
4. TMAs provided messaging to their members via newsletters, blogs, e-blasts and other communications that regularly occurred during the campaign timeframe.
5. TransOptions TMA and HART TMA conducted their own Street Smart NJ campaigns, using the materials and messaging available.

Law Enforcement Efforts

Education about and enforcement of pedestrian safety laws is an essential component of Street Smart NJ. The program encourages police departments to get involved in helping to strengthen the delivery of safety education messages. In most cases, local police preferred to focus on opportunities to engage and educate, rather than simply issue citations to motorists and pedestrians. Community efforts partner with local law enforcement to ensure that all roadway users know and understand their duties and responsibilities for sharing the road safely. Warnings and/or summonses were issued, but the primary focus for law enforcement was to help keep drivers and pedestrians safe, alert and informed about the consequences of unsafe behaviors.

During the 2016 campaign efforts, more than 1,000 summonses were issued. In each municipality where law enforcement conducted enforcement activities, police departments were encouraged to conduct foot patrols and high visibility enforcement, as well as partner with community groups to disseminate pedestrian safety information to the public.

Law enforcement utilized a mix of enforcement tactics, such as decoys, saturation and roving patrols at hot spot locations determined through crash data analysis.

All information gained helps inform future enforcement details, messaging and outreach channels.

During the 2016 Street Smart NJ, law enforcement officers from partner communities engaged and educated residents on safe driving and walking practices as well as enforced traffic safety laws.
STREET SMART NJ WEBSITE: BESTREETSMARTNJ.ORG

The NJTPA project team conducted a thorough review of the bestreetsmartnj.org website and revised several areas in order to enhance viewers experience.

- The site was converted to a responsive web design that reorganizes the way information is presented based on the viewing device (PC, tablet, smartphone). Smartphones and tablets are more commonly used for interacting with social media and since Street Smart ads promoting the website were placed on social media, the site needed to work in these formats.

- Drop-down menu tabs were added to the site’s main navigation pages allowing users to click directly to specific information rather than scrolling down a lengthy page to search for information. This format follows the responsive design model as well making site navigation more consistent on all devices.

- The homepage was restructured to include live Twitter and Facebook feeds as well as the latest news updates making current campaign-related information and tips more readily accessible.

- The campaign resources page was reorganized so that it is easier to find and download materials. This page serves as a comprehensive clearinghouse for all campaign information (how to guide, press releases, fact sheets, webinars, etc) and campaign artwork in multiple formats in multiple languages. All campaign partners were encouraged to take advantage of all resources and tailor materials for use in their community.

- The events page was enhanced with the addition of a calendar that serves to promote all campaign-related events across all communities. Campaign partners are encouraged to submit events which are reviewed then added by NJTPA. This type of calendar not only helps promote events but also is helpful for scheduling in order to avoid potential conflicts as well as for new partners to see the types of events that take place.

Figure 11. Screenshots of bestreetsmartnj.org Enhancements

Screenshot of live social media page feeds and latest updates on home page.

Screenshot of resources page.

Screenshot of events page.
DATA & EVALUATION

Research & Analysis for Phase II Execution

Selecting jurisdictions and developing and executing Street Smart NJ 2016 campaigns involved collecting pedestrian crash data for a list of potential locations using the National Highway Traffic Safety Administration (NHTSA) and the Plan4Safety database maintained by the Center for Advanced Infrastructure and Transportation (CAIT) at Rutgers.

Data analysis found the following common trends in timing, location and potential campaign targets:

- Pedestrian crashes are spread fairly evenly throughout the week with minor decreases in numbers on Sunday.
- A majority of crashes coincide with afternoon/evening rush hour (4 p.m. - 7 p.m.) with some locations showing a spike around the morning rush hour (7 a.m. - 9 a.m.). Woodbridge Township, Franklin Borough, City of Passaic, Township of Toms River and Township of Lakewood all showed another increase midday, possibly correlating to lunchtime activities.
- Driver inattention was a common element among a variety of participating communities. Aside from cell phone use, this factor can include a range of circumstances such as a driver looking at traffic in one direction while a pedestrian comes from another direction. Failure to yield the right of way to other vehicles or pedestrians was the second highest contributing factor in most locations.
- In most locations, the highest frequency of pre-crash action recorded for pedestrians was crossing at a marked crosswalk at an intersection. Jaywalking/crossing outside of a crosswalk was the next common pre-crash action.
- Among all of the selected locations, the data showed that drivers involved in pedestrian crashes were predominately male between 20-59 years old. To some degree, this is consistent with the primary target audience for other traffic safety initiatives such as seat belt use and impaired driving (males, 18-34 years of age).
- Pedestrians in crashes were represented fairly evenly among males and females. Ages ranged from as young as 1 to 70 years and older.
- High crash locations or corridors (roadways with a higher concentration of pedestrian crashes) were identified in each partner community. Most roadways were main thoroughfares with higher volumes of pedestrians and vehicles or higher speed, multi-lane roadways where it is more difficult for pedestrians to cross.

Post-Campaign Evaluation

As with any public safety initiative, a critical aspect of the Street Smart NJ effort is evaluation guided by strategic data collection and analysis. Two studies gave insight into the results and effectiveness of Street Smart NJ 2016 efforts, a pre- and post-campaign observational study conducted by a research team from CAIT, and a pre- and post-campaign survey conducted by a study team from EurekaFacts.

The Observational Study

Observational studies were conducted by the Rutgers CAIT team both before and after the campaign to examine behavioral changes through analysis of video footage. These studies compared the rates of risky pedestrian and driver behaviors in eight communities before and after the campaign.

Three pedestrian safety proxy behaviors (which by regulation are citable violations) were identified for observation. These behaviors are directly related to pedestrian crashes and safety:

1. Pedestrians jaywalking or crossing against the signal.
2. Failure of turning motorists to yield to pedestrians crossing parallel to their vehicles' approach.
3. Failure of motorists turning right on red or passing stop signs to properly yield to pedestrians.

Observations were collected to measure the effect of the campaign by observing pedestrian and driver behaviors at a key intersection in eight communities.
Observation sites included 3-leg and 4-leg intersections, both controlled and not controlled by traffic signals. The diverse pilot sites are indicative of the variety of environments in northern and central New Jersey where pedestrians interact with vehicle traffic. Proxy behaviors were observed before and after the campaign to determine if education and enforcement activities resulted in a change in pedestrian and driver behaviors. Video camera observations were recorded at each site using the same methods, at the same time of day, and on the same day of the week in both pre- and post-campaign observations whenever possible.

The three proxy behaviors were observed at eight study sites, for a total of 24 evaluations. Of these, 16 exhibited statistically significant improvements in safety behavior, five exhibited no statistically significant change in behavior, and three exhibited statistically significant increases in non-compliant behavior. Observations in the City of Jersey City, the City of Passaic, and the Township of Woodbridge showed significant improvements in all behaviors.

Analysis of aggregated observations from all eight study sites combined reveals statistically significant reductions in non-compliant pedestrian behaviors (28 percent reduction injaywalking/crossing against the signal, Proxy 1) and non-compliant behaviors of drivers failing to yield turning on green (40 percent reduction, Proxy 2). Campaign-wide, there was no statistically significant reduction in Proxy 3 – failure of motorists turning right on red or passing stop signs to properly yield to pedestrians. (See Table 3.)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pre-Campaign</th>
<th>Post-Campaign</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Behaviors</td>
<td>Non-Compliant Behaviors</td>
<td>All Behaviors</td>
<td>Non-Compliant Behaviors</td>
</tr>
<tr>
<td>Proxy 1: Pedestrians jaywalking or crossing against the signal.</td>
<td>14,286</td>
<td>3,708</td>
<td>14,167</td>
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<tr>
<td>Proxy 2: Failure of turning motorists to yield to pedestrians crossing parallel to their vehicles’ approach.</td>
<td>9,206</td>
<td>548</td>
<td>11,090</td>
</tr>
<tr>
<td>Proxy 3: Failure of motorists turning right on red or passing stop signs to properly yield to pedestrians.</td>
<td>1,990</td>
<td>355</td>
<td>3,032</td>
</tr>
</tbody>
</table>

* Statistically insignificant change in rate of non-compliance at the 95% level of confidence
Data analyses also revealed potential connections between intersection type and behavioral changes. More specifically, locations with 4-leg intersections (which were also located in more urban environments and had higher flows) demonstrated more consistent statistically significant reductions in risky behaviors. However, locations with 3-leg intersections (which were located in more suburban communities and had lower flows) demonstrated more variability. On average, the effectiveness of Street Smart NJ was similar in both types of intersections. However, in suburban communities with 3-leg intersections, there was more variability from site to site, with more instances of changes that lack statistical significance.

The analysis found that, overall, the Street Smart NJ program was largely successful, although not universally so. Phase II results reinforced some of the initial observations made during the Phase I study. For example, busy urban intersections showed more consistent improvements in safety behavior as a result of education and enforcement compared to suburban locations with lower traffic volumes. The analysis showed that this is a promising result because busy urban intersections are also the locations with the highest crash rates, and are places where the greatest safety benefits can be realized through education and enforcement activities.

**Survey Evaluation**

A pre- and post-campaign survey and a community campaign activities reporting tool helped to supplement the behavioral focus of the observation studies by measuring increased awareness of pedestrian safety and the Street Smart NJ campaign messaging. For data collection, some nearby communities were combined (the Township of Woodbridge and the Borough of Metuchen; and the townships of Lakewood and Toms River). Thus, analyses were based on nine geographical areas.

EurekaFacts, an independent market and social research and marketing analytics firm, conducted an evaluation study to assess how the Street Smart NJ pedestrian safety campaigns in 2016 affected the way motorists and pedestrians understood safety-related laws, messages and practices in their communities. In this study, pre- and post-campaign online surveys were issued to assess participants’ knowledge, attitudes, and awareness of campaign materials and their reported behaviors prior to and following the campaign activity period. In addition, municipal representatives tracked and monitored the variety and extent of their outreach activities during the campaign to help draw connections between intensity of campaign activities and rates of compliant behaviors.

A pre-campaign survey was administered approximately two weeks prior to the official launch of the campaign on March 6, 2016. A post-campaign survey was administered following the campaign. The surveys, conducted online with participants recruited through both invitations and open enrollment, became the basis for analyzing awareness of campaign messages and their impacts on attitudes and perceptions about driver and pedestrian safety.

**Key Survey Findings Included:**

1. Increased Awareness of Campaign Messages
   - Overall, the findings reflect a significant gain in awareness of Street Smart NJ campaign messages. After the four-week campaign, slightly more than half of respondents (51 percent) reported recognizing at least one of the campaign images, compared to 40 percent at pre-campaign assessment. (See Figure 13.)
   - There was a clear relationship between the intensity of campaign activities and recall of campaign message images. That is, residents of communities that conducted outreach activities and where more money was spent on outdoor and transit advertising were more likely to report awareness of the campaign.
   - Capacity building activities, defined as networking with other community organizations and training of staff and volunteers, had significant effects on recall of campaign
messages, correlating with an increased awareness of 13 percent.

- Most respondents (63 percent) reported seeing campaign messages on posters or signs, with almost a third specifically mentioning transit locations.

- Relatively high awareness of the campaign activities through local news coverage also attests to successful public relations efforts.

2. Heightened Awareness of Unsafe Behaviors

- Those who were aware of campaign messages were significantly more likely to consider behaviors that endanger pedestrians to be a serious issue in their community. Specifically, they were 12 percent more likely to rate the issue of drivers not yielding to pedestrians in crosswalks as “very serious” or “serious” (70 percent to 58 percent), and 7 percent more likely to rate pedestrians disobeying traffic laws as a “serious” or “very serious” problem in the community (58 percent to 51 percent).

- While awareness of unsafe behaviors was relatively high in both the pre- and post-campaign assessments, the campaign did appear to increase awareness of such behavior. Specifically, in the post campaign survey, there was an 8 percent increase in people who reported observing speeding in pedestrian areas (62 percent vs. 70 percent) and a 4 percent increase in reporting of drivers observed using hand-held cell phones in the past week (82 percent vs. 86 percent).

- In regards to their own behavior, a greater proportion of participants reported speeding and other unsafe behavior in the post-campaign assessment. These findings point to the campaign’s impact on heightening the awareness and relevance of pedestrian safety issues (and are not necessarily indicative of worsening behavior).

3. Increased Awareness of Enforcement Activities

- Compared to the pre-campaign assessment, there was a 10 percent increase in the proportion of participants that reported reading, seeing or hearing about police efforts to enforce pedestrian safety laws (28 percent vs. 38 percent). (See Figure 14.) Such awareness of enforcement reinforces that unsafe behaviors are not acceptable and are subject to potential penalties.

- Participants thought that police enforced laws related to driver behaviors more strictly than those related to pedestrian behaviors. They also thought that people are more likely to obey laws related to driver behavior than pedestrian behavior. This finding suggests a potential challenge to future campaign activities directed at changing pedestrian behavior.

The evaluation suggests that strategies employed by the campaign were successful, and that escalation of the campaign strategies in terms of campaign duration and scope could potentially demonstrate stronger effects.

Comparison Between the Observational and Survey Results

Although direct comparisons and linkages between the observational study and the survey are somewhat limited, the observed increase in awareness of campaign materials, increase in awareness of enforcement activities, and increase in issue relevance suggests that the campaign is prompting safer behavior by drivers and pedestrians. This is reinforced by the behavioral changes seen during on-street observations conducted as part of the evaluations of the 2016 campaign.
LOOKING BACK & NEXT STEPS

Takeaways from Phase II of Street Smart NJ include several key lessons for various aspects of the campaign.

Campaign Message and Implementation

- The campaign continued with the four core messages from Phase I (Stop for pedestrians; Obey speed limits; Use crosswalks; Wait for the walk), and the addition of a message about distraction – Heads up, phones down – in response to partner feedback. These messages were very well received in all partner communities. The Heads up, phones down message also generated the highest increase in recall from survey respondents.

- The mix of collateral materials consisting of posters, tip cards, street signs, tent cards and banners appeared to have an impact in partner communities. As was also seen in Phase I, street signs had a high recall rate in the Phase II awareness study with 63 percent of participants indicating they had seen campaign messaging on signs while walking or driving. This indicates that signage should continue to be included in the collateral material mix provided to partners.

- Results from the survey of campaign awareness show that community-based activities had a significant impact on campaign awareness, generating higher levels of both unaided and aided message recall in areas where more activities were conducted. This finding validates the importance of community involvement in the campaign and partners should be encouraged to continue with these types of activities moving forward.

- Social media (owned, shared and paid) was a large component of message dissemination in Phase II. Street Smart NJ Facebook and Twitter pages both increased their numbers of followers from Phase I levels. Campaign partners were more active in promoting the campaign on their own social media pages while tagging Street Smart NJ as well as using the campaign hashtag (#bestreetsmartnj). Social media should continue to be a primary tool for message dissemination during future campaigns.

- Cinemagraphs, still photos with subtle moving elements, proved to be a highly successful mode of target audience engagement on social media with more than 400,000 video views.

The campaign should continue to identify new ways to engage the target audience.

- TMAs were a valuable resource during the Phase II campaign implementation. These organizations promoted the campaign messages on their social media pages as well as throughout the partner communities via the blast emails and events where campaign materials were distributed.

Law Enforcement Activities

- Local law enforcement agencies were highly supportive of Street Smart NJ with all partner agencies executing education activities and many conducting enforcement activities during Phase II. In particular, high visibility enforcement tactics have proven to be successful in changing behavior. This is reinforced by findings in the awareness study showing that a greater share of participants were aware of enforcement activities in post-campaign evaluation and that those participants were also more likely to report that police were strictly enforcing pedestrian safety laws. In order to continue to move toward the goal of zero deaths, it is critical for law enforcement to continue to play a vital role in the Street Smart NJ program.

- Strict reporting of all law enforcement activities not only helps satisfy the needs of any grants issued for enforcement activities for the campaign but it also aids the campaign in overall reporting and sharing best practices with current and potential partners. Future campaigns should continue to encourage detailed law enforcement reporting practices.

Evaluation of the Campaign

- Pre- and post-campaign evaluation was conducted to measure the impact in awareness and behavioral change of the campaign. Evaluation of any kind is essential for determining campaign impact and justifying continued investment by local, state and federal agencies.

Potential Strategies for a Statewide Effort

After two campaigns piloted in several jurisdictions in northern and central New Jersey have shown promise and efficacy for improving pedestrian safety, there is reason to explore development of the Street Smart NJ campaign to run...
statewide. To facilitate this process, the following measures are recommended.

**Broader Campaign Focus**

- Consider a stronger focus on distracted driving and distracted walking in relation to pedestrian safety.

**Statewide Partnerships**

- Include potential statewide partners that allow the NJTPA access to a statewide communications network to disseminate information and implement the campaign. In other states, highway safety offices work with law enforcement traffic safety coordinators and/or local government pedestrian coordinators. These coordinators then work with other organizations within their community to aid in campaign implementation. The New Jersey State Association of Chiefs of Police may offer such an avenue for statewide communication by providing a direct line of communication with law enforcement. The NJTPA might also consider developing a joint venture with the South Jersey Transportation Planning Organization and the Delaware Valley Regional Planning Commission, the other two New Jersey Metropolitan Planning Organizations, and pooling resources.

- Establish a network of partners statewide to aid in campaign communication and implementation. These partners can be state or county police traffic officers associations. This may also include incorporation of campaign implementation in Sustainable Jersey’s point-based system for certification, particularly in the area of Public Information and Engagement or training resources.

- Engage new and diverse local partners, and adapt messaging to cultural or ethnic norms within communities, as well as build on existing relationships. One example is to fully engage the TMAs, who are already working in many schools through their Safe Routes to School programs.

- Continue to develop and maintain partnerships with transportation agencies with advertising space, including NJ TRANSIT and the Port Authority, local news outlets including NJ TRANSIT, PATH, local transit agencies, local news outlets including digital, cable and radio. These types of media partnerships may allow the Street Smart NJ campaign to extend budget dollars through free or reduced rates on ad placements. Local news outlets can also extend the reach of the message via news stories, interviews, and editorials that deliver earned media coverage for the campaign.

**Statewide Coordinated Efforts**

- In order to manage a statewide campaign more efficiently, most traffic safety campaigns implement a unified effort with many agencies coming together to support the campaign during a specific time period(s), rather than sporadically throughout the year. A unified effort allows campaign partners, especially law enforcement agencies, to place the campaign on their annual calendar and to plan accordingly. This allows ample time to plan ahead for applying and obtaining enforcement grants as well as for building coalitions within partner communities for implementation. This model is followed by most of the larger traffic safety campaigns such as Click It or Ticket and Drive Sober or Get Pulled Over. This does not exclude additional activities and education and enforcement conducted outside the designated period(s). However, it does allow for many cost efficiencies, such as lowering the cost per item in printing support materials annually as well as a statewide media allowing for some leverage on media rates as well.

- A paid media campaign should be considered to support statewide coordinated efforts. Paid media provides a unifying element to all outreach efforts. The 2016 campaign used a combination of out-of-home, digital and paid social media advertising to deliver more than 36 million impressions. This level of impressions provided a broad base of message awareness, which local community activities could build upon.

**Enforcement, Engineering and Evaluation**

- Continue to encourage local law enforcement to consider conducting high visibility enforcement activities coupled with educational approaches. Enforcement, combined with messages about enforcement, act as a multiplier, increasing the likelihood of behavior change.

- Continue to focus efforts on high volume intersections with significant crash rates, and focus efforts where possible on locations that have recently had engineering improvements for pedestrian safety to increase the impact of those improvements.

- Continue to conduct rigorous evaluation of the campaign, and to adjust the messaging and tactics accordingly.
Street Smart NJ Sponsors & Funding Organizations:

- The North Jersey Transportation Planning Authority (NJTPA)
- New Jersey Division of Highway Traffic Safety (NJDHTS)
- Federal Highway Administration (FHWA)

Technical and staff support provided by:

- City of Newark
- City of Jersey City
- Township of Woodbridge
- Borough of Metuchen
- Borough of Red Bank
- Township of Lakewood
- Township of Toms River
- City Passaic
- Franklin Borough
- City of Elizabeth
- Town of Hackettstown
- Long Beach Island:
  - Long Beach Township and the communities of Barnegat Light, Beach Haven, Harvey Cedars, Ship Bottom, and Surf City
- Counties of Essex, Hudson, Middlesex, Monmouth, Ocean, Passaic, Sussex, Union, and Warren
- Essex County Sheriff’s Office
- Essex County Community Traffic Safety Program
- NJ TRANSIT
- New Jersey Department of Transportation
- Transportation Management Associations (TMAs):
  - Cross County Connections TMA, Meadowlink/EZ Ride, Keep Middlesex Moving, HART, TransOptions, Ridewise, Hudson TMA, Greater Mercer TMA
- New Jersey Institute of Technology
- Voorhees Transportation Center at the Bloustein School of Planning and Public Policy, Rutgers, the State University of New Jersey