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# Pennsauken Township Street Smart NJ Report

# September 2021

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## Introduction

Cross County Connection, in partnership with the Pennsauken Police Department, conducted a month-long Street Smart NJ campaign in May 2021. The Pennsauken Police Department selected Route 130 as a campaign focus corridor. Campaign efforts were focused on businesses and places of worship along Route 130 in Pennsauken in addition to Cooper River Park, which features a highly used bicycle and pedestrian trail. The New Jersey Department of Transportation (NJDOT), the Delaware Valley Regional Planning Commission (DVRPC) and Camden County were also notified of this Street Smart NJ campaign.

There were 30 reported bicycle and pedestrian crashes on Route 130 in Pennsauken from 2015 – 2019, four resulting in a fatality, prompting its selection as the focus of a Street Smart NJ campaign. These 30 bicycle and pedestrian crashes account for one-third of the total bicycle and pedestrian crashes in Pennsauken Township. Cross County Connection worked with Pennsauken Police Department to identify specific intersections using factors such as the clustering of businesses and observed pedestrian activity. Police have frequently observed unsafe behaviors at these locations such as crossing outside of a crosswalk and hopping the center median barrier. Based on Cross County Connection's analysis and the reported dangerous pedestrian behaviors, locations targeted for specific focus included Route 130 between Terrace Avenue and Marlton Pike and the interchange of Route 70, Route 38 and Route 130. Map 1 shows the campaign's target areas.

Street Smart NJ aims to educate pedestrians and motorists on traffic laws and change the behaviors that lead to pedestrian crashes and fatalities. The campaign includes targeted public outreach and education in areas with a high rate of crashes involving pedestrians and bicyclists. The program emphasizes educating drivers, pedestrians and bicyclists through community outreach and distribution of available Street Smart NJ materials at select locations, as seen in Figure 1. Additional campaign strategies could include media outreach, and in some cases, targeted enforcement.

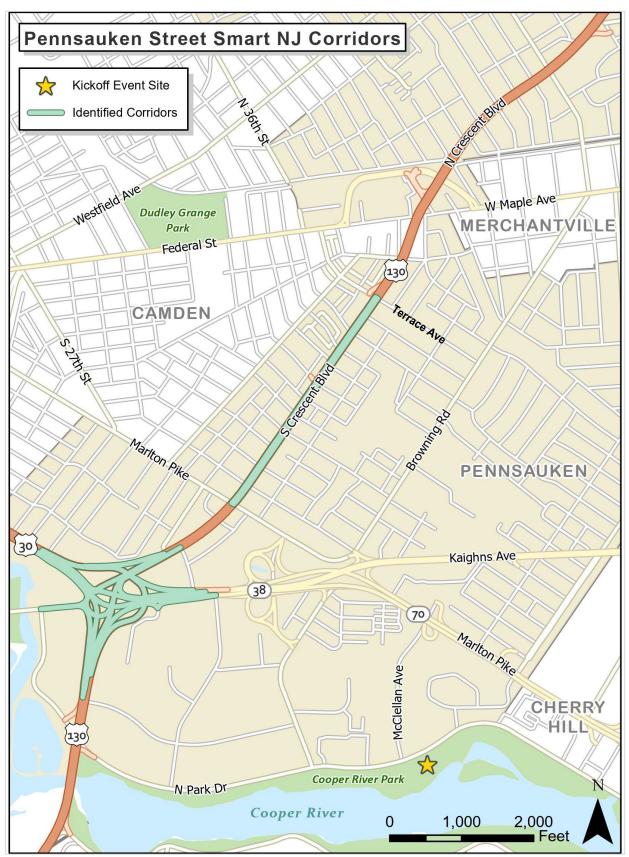


Figure 1: Street Smart NJ Material Lining Cooper River Park's Multi-Use Trail

Cross County Connection partners with the North Jersey Transportation Planning Authority (NJTPA) and local police departments to conduct Street Smart NJ campaigns in New Jersey's seven southern counties – Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem. The state-wide Street Smart NJ program is coordinated by the North Jersey Transportation Planning Authority (NJTPA) and is supported by federal and state funds.



Map 1: Campaign Target Areas





## **Campaign Overview**

Pennsauken's concerns regarding Route 130 and their dedication to pedestrian safety prompted the police department to reach out to Cross County Connection to plan a campaign. Street Smart NJ provided an opportunity to educate Pennsauken residents through community outreach, social media and public events. Planning efforts began in January 2021 and included frequent meetings during the months leading up to May. The campaign used educational materials such as street banners, signs and brochures distributed at target areas. Locations selected to display materials included local businesses and places of worship. Two public events, including the campaign kick-off, were held at Cooper River Park and materials were distributed at priority areas throughout the month.

## **Crash Analysis and Campaign Site Selection**

Prior to the Street Smart NJ campaign, Cross County Connection met and coordinated with the Pennsauken Police Department to determine target areas for outreach. Utilizing the New Jersey Department of Highway Traffic Safety's (NJDHTS) Crash Analysis Tool (CAT), Cross County Connection conducted a pedestrian and bicycle crash analysis to confirm the selection of priority areas. A total of 93 crashes involving bicyclists or pedestrians were identified in Pennsauken Township between 2015 and 2019.

### Crash Location

To determine the areas that are most concerning in terms of pedestrian safety, Cross County Connection documented the location, severity and surrounding land uses of the 93 crashes occurring in Pennsauken from 2015 – 2019. Map 2 shows the crashes and their location and severity. Route 130 is consistently one of the most dangerous roads for pedestrians in New Jersey due to the history of pedestrian crashes along the highway.<sup>1</sup> There were 30 crashes involving pedestrians along the Route 130 corridor between 2015 and 2019, seven resulting in serious injury and two resulting in a fatality.

### Crash Severity

Crash severity was used to verify where the most serious pedestrian safety issues are present. Crash severity for both pedestrian and bicycle crashes is reported by the responding police officer based on the standards established by the New Jersey NJTR-1 Crash Report Manual, as seen in Table 1. It should be noted that the severity classifications changed in the 2019 manual. In all but one class, *No Apparent* Injury, the definitions/qualifying conditions remained the same. Table 1 also shows how the 2019 classifications were applied to crashes occurring prior to 2019. All pre-2019 *Property Damage Only Crashes* were reclassified as *No Apparent Injury* when analyzing the entire five-year period.

Applied 2019	Pre-2019	Definition
Classification	Classification	
Fatal Injury	Fatal Injury	Injury that results in death within 30 days after the crash in which the injury occurred
Suspected Serious Injury	Incapacitating Injury	Serious non-fatal injury which includes severe laceration resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood; broken or distorted extremity; crush injuries; suspected skull, chest or abdominal injury other than bruises or minor lacerations; second and third degree burns over 10% or more of the body; unconsciousness; paralysis

#### Table 1: NJTR-1 Crash Report Manual Crash Severity Classification

<sup>&</sup>lt;sup>1</sup> <u>https://tstc.org/reports/danger16/summary.pdf</u>



Suspected Minor Injury	Moderate Injury	Evident injury, other than fatal and serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).
Possible Injury	Complaint of Pain	For a reported or claims of injury that is not fatal, serious or minor. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those which are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.
No Apparent Injury	Property Damage Only	No apparent injury is a situation where there is no reason to believe that the person received any bodily harm from the motor vehicle crash. There is no physical evidence of injury and the person does not report any change in normal function. *2019 change - No longer denotes that \$500 of property damage required to be reportable.

Of the pedestrian crashes in Pennsauken Township, crashes reported with a severity of "fatal injury" account for 5% of total crashes. Fatalities were limited to major highways with two on Route 130; two on Route 38; and 1 on Route 70. Crashes reported as "Suspected Serious Injury" account for 8% of total crashes. All seven of these crashes occurred on Route 130. Suspected minor injuries accounted for 40% of total pedestrian crashes. Table 1 lists all crashes by severity.

Alcohol use was reported in 11.5% of crashes while 78.8% reported distracted driving as a contributing factor.

Table 1: Bicycle and Pedestrian Crashes b	y Severity in Pennsauken, NJ (2015 – 2019)
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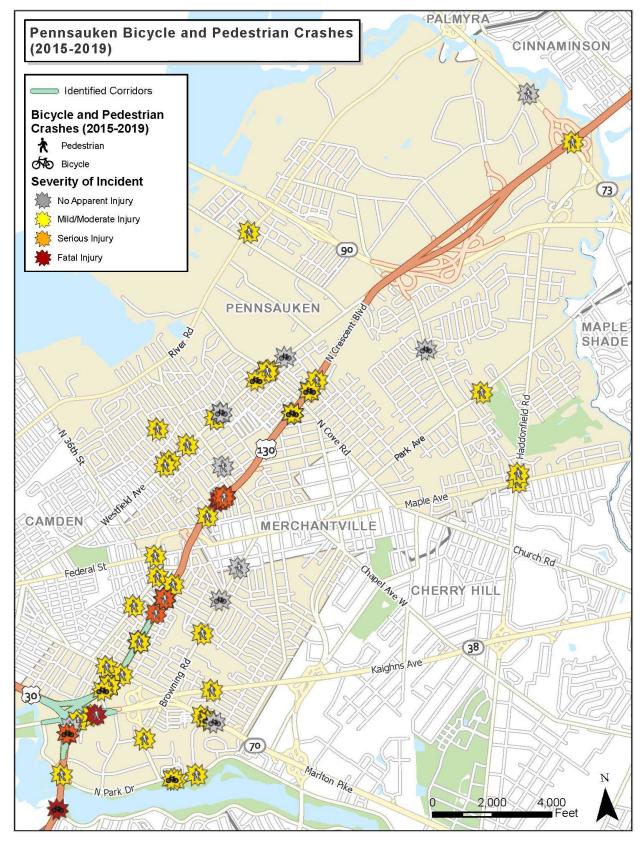
Fatal	Serious Injury	Minor Injury	Possible Injury	No Apparent Injury	Total
5	17	37	29	15	93

The crash analysis findings confirm that Route 130 is a priority location to conduct a Street Smart NJ campaign that both addresses pedestrian and driver behaviors. Not only are there a high number of pedestrian crashes along the highway, but the results of these crashes are often severe. In addition, based on the crash reports and the experiences shared by officers during the campaign process, many of these crashes are preventable resulting from behaviors and decisions that can potentially be corrected through education.

After reviewing crash data and the land uses that are along the highway, certain areas were identified as priority locations to distribute campaign materials. These are places with a history of crashes and destinations that typically attract pedestrian traffic. Priority locations identified include:

Intersection of Route 130 at Route 30, Route 70, Route 38 and Kaighns Avenue – This intersection is a busy highway interchange with free-flowing exits and jug handles surrounded by land uses that could attract pedestrian activity. Three fatal injuries occurred near this location: two on Route 38 and one on Route 70. Destinations include Wawa, Wendy's, and Dunkin Donuts. Additionally, Bishop Eustace Preparatory School is located near this intersection and attracts inexperienced drivers to the area. Displaying materials





Map 2: Crash Locations and Severity in Pennsauken Township (2015 – 2019)



that educate young drivers on a motorist's responsibilities and safe practices could improve pedestrian safety.

 Route 130 from Marlton Pike to Terrace Avenue – This stretch of Route 130 between Marlton Pike and Terrace Avenue has a cluster of 10 crashes, one of which resulted in a serious injury. This area includes the Pennsauken Youth Athletic Association (PYAA) Football Field and GH Carson Elementary School, which may generate pedestrian traffic, including school aged children. There are businesses along Route 130 and at the intersection of Route 130 and Marlton Pike, making this corridor an impactful location to distribute Street Smart NJ materials.

## **Street Smart NJ Campaign Process**

Once locations were determined, the campaign consisted of:

- Meetings with Pennsauken Police Department to determine preferred materials and methods of educating the public
- Observations of selected locations prior to campaign kick-off
- Kick-off campaign event at Cooper River Park on Tuesday, May 4th
- Distribution of education materials at selected locations and local places of worship
- A second larger public event in Cooper River Park on Saturday, May 15th
- Observation of selected locations after the Street Smart NJ campaign was completed

## **Public Material Distribution and Kickoff Event**

Cross County Connection, the Pennsauken Police Department and Pennsauken Township worked to distribute Street Smart NJ material through a kickoff event, social media, brochures, signs and palm-cards.

Cross County Connection conducted two public events with Pennsauken Police Officers at Cooper River Park at the intersection of North Park Avenue and McClellan Street on two separate occasions. The first event was on Tuesday, May 4<sup>th</sup>. A table was set up along the biking and walking trail, stationed by Cross County Connection employees and a few Pennsauken police officers. As people walked by, staff and police officers distributed Street Smart NJ literature and engaged in conversations with many individuals. Officers were given packs of 50 pamphlets to distribute as they walked around the river. They placed the literature on car windshields and dropped off 100 each to the two apartment buildings at the intersection of North Park Avenue and McClellan Street.

On Saturday, May 15<sup>th</sup>, 2021, Cross County Connection staff again met with Pennsauken Township officers at the same location at Cooper River Park. The day before this event, Cross County Connection staff lined the trail with 40 Street Smart signs and a large Street Smart NJ Banner to grab passersby's attention, shown in Figure 3. Since this was a Saturday, it was a busier event. The Pennsauken Township police officers and Cross County Connection staff had opportunities to distribute more literature and engage in conversations with trail users. Over the two days at Cooper River Park, approximately 500 palm cards were given out.



#### Figure 3: Hanging the Street Smart NJ Banner in Cooper River Park



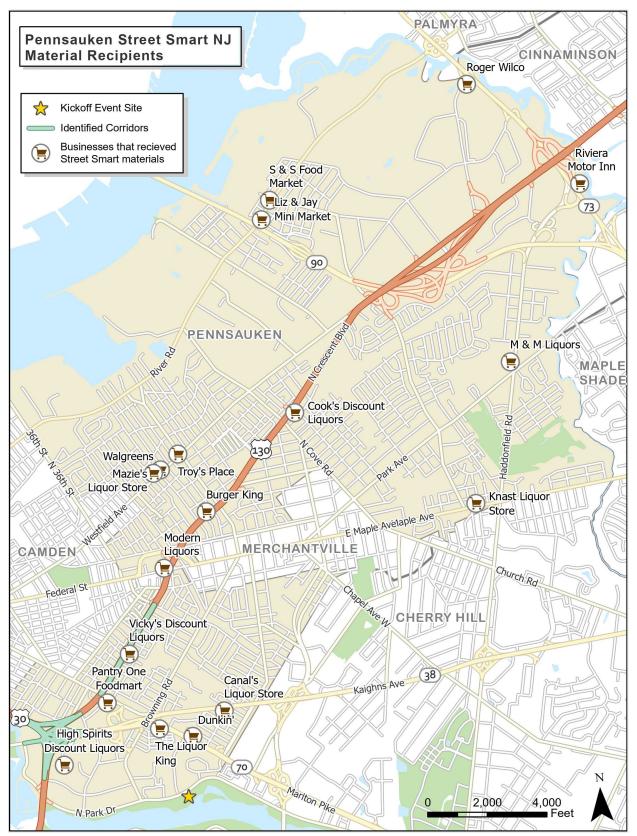
In addition to handing out materials in Cooper River Park, Pennsauken police officers dropped off Street Smart NJ pamphlets and posters with the following merchants in the area:

- M & M Liquors 3333 Haddonfield Rd (CR 644)
- Knast Liquors 7613 Maple Ave (CR 537)
- Riviera Motor Inn 2121 Rt 73
- Cooks Liquors 6540 N Rt 130
- Modern Liquors 3937 Federal St (CR 537)
- Burger King 4801 Rt N Rt 130
- Canals 5360 Rt 38
- Liquor King 4950 Rt 70
- Dunkin Donuts 5245 Rt 70
- Mazies Liquors 4709 Westfield Ave (CR 610)
- Troys Deli 4919 Westfield Ave (CR 610)
- Walgreens 4601 Westfield Ave (CR 610)
- Roger Wilco 1001 Rt 73
- S & S Food Market 8147 River Rd (CR 543)
- Liz & Jay Market 7900 River Rd (CR 543)
- Vickys Liquors 6220 S Rt 130
- High Spirits 7500 S Rt 130
- Pantry One 4040 Marlton Pike (CR 601)

Map 3 shows the locations of businesses receiving Street Smart NJ materials.









Posters and pamphlets were also given to local places of worship, with a cover letter on Pennsauken Police Department letterhead providing pedestrian safety facts, potential locations to place materials, and sample messages that can be shared with their congregations through announcements after services and messages that could be shared via social media. The cover letter is provided as Appendix A.

## **Pedestrian and Motorist Observations**

Based on discussions with the Pennsauken Police Department and crash analysis, four locations were included in the preand post-campaign observations. These locations were:

- Route 130 and Terrace Avenue
- Route 130 and Browning Road
- Route 130 and Marlton Pike
- Interchange of Route 70 and Route 38

Map 4 shows the observation locations.

Pre-campaign observations took place from April 28<sup>th</sup> through April 30<sup>th</sup> for three-hour periods between 1:00 PM and 4:00 PM. Post-campaign observations were held on June 2<sup>nd</sup> through June 4<sup>th</sup> between 1:00 PM and 4:00 PM. The behaviors observed depended on the intersection. Overall, observations included tabulating the occurrence of the following driver and pedestrian behaviors:

- Unsafe crossing and crossing against the signal
- Turning vehicle fails to stop for pedestrian
- Failure to stop before a right turn on red signal
- Distracted driving
- Driver blocking crosswalk

Behaviors relating to signalized intersections were not tracked at all observation locations, since some did not have traffic signals.

## Route 30 and Terrace Avenue

Overall pedestrian behavior was generally compliant at this signalized intersection. Most pedestrians either crossed at the intersection of Terrace Avenue and Route 130 during the pedestrian signal phase or at the mid-block pedestrian bridge over Route 130. During the pre-campaign observations, a bicyclist was seen crossing Route 130 when the signal was red. This occurrence is shown in Figure 3. During the post campaign observation, Cross County Connection observed 22 pedestrians at this intersection. Of those observations, 20 crossed at the intersection safely while two crossed against the signal.



Map 4: Street Smart NJ Observation Locations

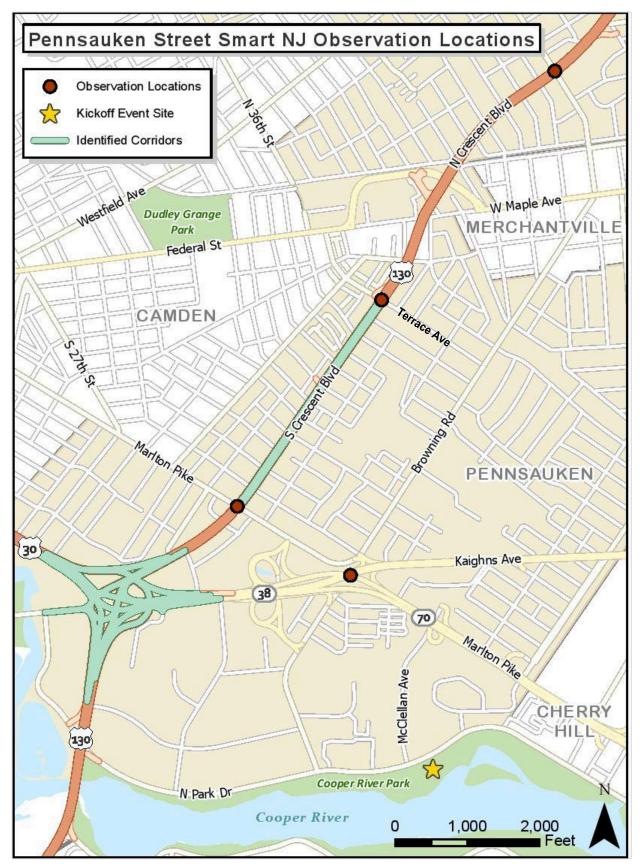




Figure 3: Bicyclist Crossing Against Signal at Route 130



Similar to the pedestrian observations, drivers were compliant at the signal-controlled intersection of Terrace Avenue and Route 130 both pre- and post-campaign. During the pre-campaign observations, one car did not stop for a pedestrian as it was making a left turn while three cars did. Post-campaign observations saw all cars stop for pedestrians.

## Interchange of Route 70 and Route 38

Most of the pedestrian traffic during the pre- and post-campaign observations was seen on Route 70 at this location. There is no signal at this interchange. However, there is a traffic signal at the intersection of Route 70 and McClellan Avenue, approximately 850 feet away. While some pedestrians crossed at this intersection, three pedestrians crossed away from the signal at mid-block locations on Route 70 during the pre-observation campaign.

Route 70 and Route 38 are high speed roads with a large volume of vehicles. A five-minute vehicle count saw 236 vehicles on Route 38 and 272 on Route 70. In addition, there is a concrete median barrier on Route 38 and a grass median buffer on Route 70. Neither barrier includes fencing. There was little interaction between drivers and pedestrians, which led to minimal change in compliant and non-compliant driver behavior between pre- and post-campaign observations.

#### Route 30 and Browning Road

Nineteen pedestrians and four bicyclists were observed at the intersection of Route 130 and Browning Road during precampaign observations. While 83% of those observed were compliant and engaging in safe behaviors, three pedestrians crossed against the signal and one pedestrian hopped the median barrier on Route 130. After the Street Smart NJ campaign, five pedestrians were observed crossing against the signal while seven were compliant.

Drivers generally were compliant before and after the Street Smart NJ campaign at this location. However, three drivers were observed running a red light during both the pre- and post-campaign observations.

#### Route 130 and Marlton Pike

During the pre-campaign observations, 38 pedestrians were observed at this intersection. The clustering of fast-food restaurants on both sides of Route 130 caused a higher volume of pedestrian traffic. As with Terrace Avenue and Route 130, a concrete median barrier dividing the north and south-bound directions on Route 130 may have reduced non-



compliant crossings and other pedestrian behaviors. Though this barrier does not include fencing along the top as an additional deterrent to barrier hopping. In all, 37 pedestrians (97%) were compliant and crossed safely, while one did not. No pedestrians were observed crossing against the signal. Motorists generally did not exhibit behaviors that put pedestrians at risk. Post-campaign observations at this intersection were similar to the pre-campaign observations. Cross County Connection staff observed a total of 14 pedestrians. All 14 pedestrians were compliant and crossed safely.

## **Rate of Behavior Change Statistical Significance**

NJTPA provides the New Jersey Street Smart Pedestrian Observational Evaluation Tool, a Microsoft Excel spreadsheet, to analyze findings of pre- and post-campaign observations. The tool calculates the rate of non-compliance for each behavior type observed and then calculates a rate of change in the compliance before and after the campaign. Rate of non-compliance is determined by dividing the number of non-complaint observations by the sum of all observations. Statistical analysis then determines if the change in rate of non-compliance is statistically significant or insignificant based on a 90 percent normal range of change in behavior. Table 2 shows the results from the New Jersey Street Smart Pedestrian Observational Tool.

Location	Behavior Type	Change in Rate of Non-Compliance	Significance Test	
Route 130 and Browning	Unsafe crossing/barrier hopping	40	Statistically	
Road	onsare crossing/barrier hopping	40	Insignificant	
Route 130 and Browning	Crossing against the signal	18.59	Statistically	
Road	Crossing against the signal	18.39	Insignificant	
Route 130 and Marlton Pike	Unsafe crossing/barrier hopping	-2.63	Statistically	
Route 150 and Mariton Pike	onsate crossing/barrier hopping	-2.05	Insignificant	
Route 130 and Terrace	Uncofe crossing/barrier banning	12 50	Statistically	
Avenue	Unsafe crossing/barrier hopping	-12.50	Significant	
Route 130 and Terrace	Turning vehicle fails to stop for	-1.97	Statistically	
Avenue	pedestrian	-1.97	Insignificant	
Route 70 and Route 38	Unsafe crossing/barrier hopping	-10	Statistically	
Route 70 and Route 38	Unsafe crossing/barrier hopping	-10	Significant	

#### Table 2: Observation Calculator Results

The following is summary of the Observation Tool calculations.

- The rate of pedestrians and bicyclists observed making an unsafe crossing:
  - Increased at Browning Road and Route 130
  - Decreased at Terrace Avenue and Route 130
  - $\circ$   $\;$  Decreased at the intersection of Marlton Pike and Route 130.
  - The rate of pedestrians crossing against the signal increased at Browning Road and Route 130
- The reduced rate of pedestrians making an unsafe crossing/barrier hopping at the intersection of Route 130 and Terrace Avenue was the only statistically significant result

Small sample sizes at observation locations largely explain the lack of statistical significance resulting from the use of the Street Smart NJ Pedestrian Observation Tool. While Route 130 has a history of severe pedestrian crashes, there are few people walking there. For those that do need to walk there, the highway is an inhospitable environment that is particularly challenging to cross, even when doing so properly, and the consequences of a crash have a strong likelihood of being severe due to the speed of traffic. In addition, due to safety concerns stemming from the speed and volume of traffic, literature could not be distributed to motorists, which could have yielded a higher rate of behavior change. Due to the low volume of pedestrian activity and the inability to reach motorists on Route 130, the Cooper River Park events were conducted to reach a high number of pedestrians and motorists that may pass through the nearby targeted campaign



areas.

## Conclusion

Pennsauken Township Police Department conducted a successful Street Smart NJ campaign that effectively spread campaign messaging. Though the rate of pedestrians and bicyclists making a positive change to their travel behavior at observation locations were marginal, the campaign reached residents and visitors to the area through the high level of visibility and direct interaction with the public at the Cooper River Park events. The event provided an important opportunity for Cross County Connection and the Pennsauken Police Department to interact with residents and visitors and spread the message of pedestrian safety to passersby. During the event Cross County Connection Staff and the Pennsauken Police Department distributed over 500 Street Smart NJ palm cards. In addition, 40 Street Smart NJ signs were placed at various locations in Cooper River Park during the events. The large number of materials displayed at businesses and churches also provided a high level of campaign visibility to those walking and driving along Route 130.

As stated before, though there are few people walking along Route 130, the roadway's high speeds lead to severe injuries when pedestrian crashes do happen. Because of this, it was important to spread Street Smart NJ's message to drivers and pedestrians in Pennsauken Township. The Pedestrian Observation Tool may be more well suited to measure success in an urban area with a higher volume of walkers and bicyclists. In addition to the Pedestrian Observation Tool, a post-campaign survey could help determine the success of the campaign. If evaluating impact in terms of people seeing and receiving campaign materials, this campaign was a success and effectively spread NJTPA's Street Smart NJ's messaging.



Appendix A: Pennsauken Police Department Cover Letter

# **Department of Public Safety**

Bureau of Police 2400 Bethel Ave. Pennsauken, New Jersey 08109

To Pennsauken's Faith Based Community:

The Pennsauken Police Department is Partnering with Cross County Connection TMA to conduct a Street Smart NJ pedestrian safety campaign during the month of May along Route 130. Street Smart NJ is a public education campaign that aims to raise awareness of pedestrian and motorist laws and change the behaviors that lead to pedestrian and bicyclist crashes and fatalities. We are requesting the assistance of our faith-based community to help us promote the campaign and share valuable safety messaging with your congregants.

Cross County Connection, a nonprofit transportation management association, partners with local police departments to conduct Street Smart NJ campaigns in New Jersey's South Jersey counties – Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester and Salem. The program is funded through a partnership with the North Jersey Transportation Planning Authority (NJTPA).

Route 130 is consistently ranked as one of the most dangerous roads for pedestrians and bicyclists in New Jersey and this is unfortunately the case in Pennsauken as well. There were 38 crashes involving a bicyclist or pedestrian along Route 130 within the Township between 2015 and 2020, eight resulting in serious injury and three resulting in a fatality.

The Pennsauken Police Department simply asks that our local places of worship display Street Smart posters and other materials where your congregants can see them. These materials will be provided by Pennsauken Police and Cross County Connection. If you would like to do more, social media messaging and announcements to be shared during services can also be provided.

If you would like to learn more, Cross County Connection and Pennsauken Police Department will hold an information session via ZOOM for our faith-based community and local schools on Monday, April 19<sup>th</sup> at 11:00 AM. You can register for this event <u>here</u>, or by visiting <u>www.driveless.com/street-</u> <u>smart</u>. You may also contact Patrick Farley, Cross County Connection's Program Director, at (856) 596-8228 or via email at <u>farley@driveless.com</u> for more information.

Sincerely,

Lieutenant Gerald Henkel Traffic and Patrol Divisional Commander Pennsauken Police Department (856) 488-0080 (Ext. 2207) <u>ghenkel@pennsaukenpolice.org</u>