

Cranford, NJ



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Executive Summary

New Jersey has been designated a "Pedestrian and Bicycle Focus State" by the federal government due to its large number of pedestrian fatalities. The StreetSmart Campaign raises public awareness and educates drivers and pedestrians on safe travel through a collaborative effort of public, private, and non-profit organizations. StreetSmart was a pilot program implemented in five municipalities in 2013 - 2014 and has expanded to over 50 New Jersey municipalities, including Cranford in 2017.

EZ Ride agreed to work with the City of Cranford to conduct a full StreetSmart campaign in late Spring 2017. During the planning and implementation of the Spring campaign EZ Ride developed a positive and collaborative relationship with the North Jersey Transportation Planning Association (NJTPA), Cranford Police Department, Cranford Department of Planning and Redevelopment, Emergency and Public Works, Public Affairs, as well as the Union County Transportation Planner.

The full StreetSmart NJ campaign began with a selected intersection observation at Walnut Avenue and South Union Avenue on April 27, 2017. The intersection was selected because of its location near the train station and downtown area as well as a high incidence rate of cars not yielding to pedestrians and pedestrians not using the crosswalk.

While there was no official press meeting kickoff, Cranford notified residents that the campaign was underway on May 1, 2017 via email blasts and social media resources. The educational campaign consisted of posters and street signs being displayed and approximately 520 StreetSmart materials were distributed or posted by the Cranford Police Department between May 1st and May 14th. The enforcement campaign began May 15th and lasted until May 28th. During the enforcement period, the Cranford Police Department issued 64 citations and 14 warnings for violations. A final post-campaign observation at the selected intersection was held on June 29th to measure any changes in pedestrian or driver behavior.

The evaluation revealed a decrease in some unsafe driver or pedestrian behaviors and an increase in other unsafe driver or pedestrian behaviors. When comparing pre and post campaign observations, there were fewer instances of distracted driving, cyclists riding against traffic, cyclists on sidewalks, and midblock crossing/ jaywalking. However, there were more instances of cars not stopping for pedestrians and distracted pedestrians. These results indicate that the StreetSmart Cranford campaign was able to raise some awareness about driver and pedestrian responsibilities and encouraged safer driver and pedestrian behaviors. However the increase in some of the unsafe practices suggests greater outreach, awareness and education/enforcement is needed.

1. StreetSmart Overview

StreetSmart NJ is a public education, awareness and behavioral change campaign developed and funded by the North Jersey Transportation Planning Authority (NJTPA) with supplemental funding from the State 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 due to a high incidence of pedestrian injuries and fatalities. According to 2014 data from the National Highway Traffic Safety Administration, the State of New Jersey ranked 6th in the nation in pedestrian fatalities. From 2010 - 2014, 750 pedestrians were killed and 17,000 were injured on the state's roadways equaling one pedestrian death every 2.5 days and 11 pedestrian injuries every day.

The campaign 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 about their roles and responsibilities for safely sharing the road.
- Increase enforcement of pedestrian safety laws and roadway users' awareness of that effort

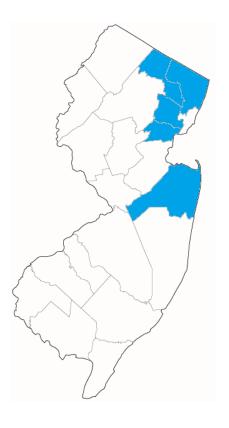
The StreetSmart NJ program was piloted in five communities in New Jersey in 2013 and 2014. The pilot programs were conducted in Newark, Jersey City, Woodbridge, Hackettstown, and Long Beach Island. These five communities were selected in order to incorporate the state's diverse landscape of urban, suburban, rural, and shore regions. The program was later expanded to additional municipalities in 2015 and 2016.

EZ Ride has initiated full Street Smart NJ campaigns in Asbury Park, Bloomfield, Cranford, and Highlands. Light campaigns were done in Long Branch and Teaneck. Additional full campaigns will be carried out in Hackensack and Paterson in Fall 2017.

1.1 EZ Ride's Street Smart Program

The NJTPA has partnered with the eight Transportation Management Associations (TMAs) to expand the number of Street Smart NJ campaigns across the state. A TMA is an organization that provides transportation solutions to reduce traffic congestion and air pollution. Each TMA was invited to assist with the program implementation by providing information, conducting intersection observations, and building relationships with municipalities to further partnerships and generate local support.

As shown in the blue areas of the map of New Jersey, EZ Ride delivers transportation solution services to Essex, Union, Monmouth, Bergen, and Passaic counties. The City of Cranford was approached to conduct a Spring Street Smart pedestrian safety awareness campaign in January 2017. After meeting with officials and community stake holders, it was decided to officially hold a full campaign, which includes pre and post-campaign observations during May of 2017.



1.2 Cranford, Union County, New Jersey

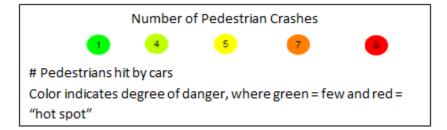
The City of Cranford is located in Union County and was formed in 1871 from portions of the Townships of Clark, Garwood, Kenilworth, Linden, Springfield, Union and Westfield. Cranford was ranked as New Jersey's 34th best place to live by New Jersey Monthly Magazine. As of the 2010 United States Census, Cranford's population was 22,625. The city covers approximately 4.8 square miles of land.

Using the New Jersey Department of Transportation's crash analysis program Safety Voyager, EZ Ride analyzed several crash types in Cranford between 2010 and 2016. Map 1 displays vehicle crashes in Cranford during this time. Map 2 displays pedestrian crashes. Map 3 displays pedestrian crashes near the selected intersection. Each map was generated with the NJ DOT Safety Voyager Crash analysis tool. Safety Voyager uses a color coded system to display "hot spot" areas where multiple crashes occur. The actual number of crashes at each location is labelled on each colored circle. Fewer crashes (1-4) are indicated by a green circle; higher numbers of crashes are indicated by a yellow (5), orange (6), or red (7-9) circle.

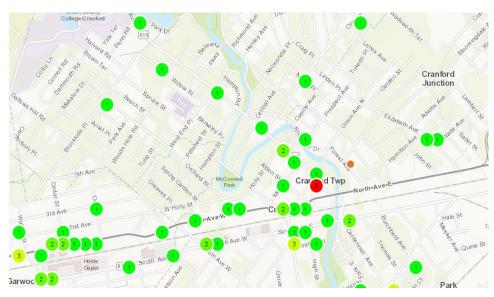
During this time frame, Cranford had 2,711 crashes. Of those crashes, 36 were pedestrian crashes, of which 6 occurred at the targeted intersection of Walnut Avenue and South Union Avenue. The intersection is unique as the intersection is not a 90 degree angle, but a 45 degree angle.

Map 1. Cranford Vehicular Crashes

Source: NJ Safety Voyager, 2010-2016



Map 2. Cranford Pedestrian Involved Crashes



Source: NJ Safety Voyager, 2010-2016



Map 3. Pedestrian Involved Crashes at Walnut Ave. & S. Union Ave.



Source: NJ Safety Voyager, 2010-2016

Table 1: Campaign Schedule		
Planning Meeting	January 17, 2017	
Pre-Campaign Observations	April 27,2017	
Social Media Kick-Off	May 1, 2017	
Education Period	May 1st to May 14th, 2017	
Enforcement Period	May 15th to May 28th, 2017	
Post Campaign Observations	June 29, 2017	
Report Development	June 29, 2017-November 30, 2017	
Report Submission	December 2017	

1.3 Campaign Selected Intersection

The City and the Police department selected the intersection of Walnut Avenue and South Union Avenue as the location to conduct pre and post campaign observations, education, and enforcement activities. Walnut Avenue is a well-travelled commercial street intersecting South Union Avenue and continues past the train station. Many students, residents, and commuters cross the intersection to get to the train, various restaurants, a parking garage, and commercial destinations within the downtown area. It is a two lane road that runs perpendicular to the train station and is known for cars speeding and being particularly difficult for pedestrians to cross. While the intersection is not signalized, there is a lighted pedestrian walk sign and crosswalk present. The lights are triggered when the pedestrian presses the activation button. One side of the intersection is under the bridge and people cross there despite the lack of a painted crosswalk. Lighting is present in the form of charming lamps however the lamps do not provide very good lighting.



Figure 1: Intersection of Walnut Avenue and South Union Avenue

1.4 Pre-Campaign Intersection Observation

The Pre-Campaign intersection observations were conducted on Thursday, April 27, 2017 from 4:00 pm to 6:00 pm. Team members from EZ Ride observed pedestrian, driver, and cyclist behavior at Walnut Avenue and South Union Avenue in Cranford. EZ Ride members tracked the number of cars not stopping for pedestrians in the crosswalk, number of distracted drivers, and the number of distracted pedestrians, cyclists riding on the sidewalk, cyclists riding against traffic, and pedestrians who crossed midblock and did not use the crosswalks.

1.5 Education & Enforcement Campaign

The education portion of the campaign ran from May 1st to May 14th, 2017. The Cranford Police Department and local merchants distributed StreetSmart materials. Signs and posters were installed by the Department of Public Works in several locations including the focus intersection, Walnut Avenue and along South Union Avenue.

The enforcement campaign took place from May 15th to May 28th, 2017 by the Cranford Police Department. While the selected intersection of Walnut and South Union Avenue was the main focus, citations and warnings were also distributed in the surrounding areas of Willow & West End Place, Brookside & Harvard, Lincoln Ave. West & North Avenue West, Centennial & South, South & Washington, North & Elizabeth, Kenilworth Blvd. & County Park, Chestnut Avenue, Willow Street, and Burnside Avenue.

1.6 Post Campaign Intersection Observation

After the Education and Enforcement portions of the campaign were concluded, the team from EZ Ride returned to Walnut Avenue and South Union Avenue on Thursday, June 29, 2017 from 4:00 p.m. to 6:00 p.m. to observe pedestrian and driver behavior. Staff monitored pedestrians, cyclists, and motorists noting whether vehicles stopped for pedestrians in the crosswalk, whether pedestrians used the crosswalk, whether cyclists rode facing traffic or rode on sidewalks, and whether drivers or pedestrians were using their phones, headphones or otherwise distracted as they travelled across the intersection.

2. Evaluation

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

The EZ Ride team observed Walnut Avenue and South Union Avenue in Cranford on April 27, 2017 for pre-campaign observations and June 29, 2017 for post-campaign observations at the same time: the afternoon rush hour between 4:00 pm to 6:00 pm.

The team observed both driver and pedestrian behaviors and tallied how often they occurred. After completing the Post-Campaign observations, EZ Ride's Bike & Pedestrian Safety team engaged in conversation with local business owners, residents, and commuters to ask some questions. The discussion focused on how dangerous the intersection was as people said they often saw "near misses" regarding vehicular and pedestrian crashes.

Many mentioned how particularly dangerous the intersection becomes when the trains arrive and passengers exit the station. Many believe distracted driving and drivers not stopping for pedestrians in crosswalks are the most serious problems.

Tables 2 and Table 3 below have a list and count of the Pedestrian and Driver behaviors that were observed on both days.

Table 2. Pre-Campaign Results

Pre-Campaign	
Cars Not Stopping	33
Distracted Drivers	72
Jaywalking	68
Distracted Walkers	27
Cyclists on Sidewalk	11
Cyclists vs. Traffic	8

Table 3. Post-Campaign Results

Post-Campaign		
Cars Not Stopping	36	
Distracted Drivers	62	
Jaywalking	30	
Distracted Walkers	56	
Cyclists on Sidewalk	18	
Cyclists vs. Traffic	4	

The driver and pedestrian behavior results were mixed based on our short window of pre and post observations. Some behaviors decreased, while other behaviors increased. The campaign was successful in raising awareness and should be implemented annually in order to see more consistent improvement. However, more signage and education regarding the dangers of distracted walking and the law to stop for pedestrians in crosswalks needs to be emphasized.

3. Campaign Overview

3.1 Campaign Kick Off

The city did not hold a press meeting to officially kickoff the campaign but did use the City email system and social media channels to notify residents that the StreetSmart Cranford campaign was being conducted.

3.2 Education Campaign

The education campaign began May 1, 2017. EZ Ride staff and police officers distributed safety tip cards and "heads up phone down" postcards to pedestrians, cyclists, and drivers. Local businesses also displayed posters and table tent cards.

The goal of the campaign was to raise awareness of five key safe driver and pedestrian behaviors such as obeying the speed limit, crossing streets using crosswalks, waiting for the walk signal, stopping for pedestrians in crosswalks, and not being distracted by phones or other devices. Street signs and small posters were put up around the selected intersection and at the library, post office, public schools, and municipal offices. More than 500 posters, street signs, tent cards, coasters, and cup sleeves were distributed to local residents and various local businesses including the Cake Artist Café, Vinny's, Sub-Ology, The Cranford Hotel, the Kilkenny House, and the Thirsty Turtle.

Table 4 documents the quantity of educational materials distributed.

Table 4. StreetSmart Education Materials Distributed

StreetSmart Small Posters	30
StreetSmart Cup Sleeves	200
StreetSmart Coasters	250
StreetSmart Tent Cards	40

The street signs display the five core campaign messages. For drivers the messages are: Stop for Pedestrians in the Crosswalk and Obey Speed Limits. Pedestrians are reminded to Use Crosswalks and Wait for the Walk Signal. The Heads Up, Phones Down message reminds both drivers and pedestrians to avoid distractions while driving or crossing the street.



Figure 2: StreetSmart Sign at Walnut Avenue and South Union Avenue

3.3 Enforcement Campaign

The Cranford Police Department observed and enforced the law in the target area and intersection from Monday, May 15th to Sunday, May 28th. A total of 64 violations and 14 warnings were issued to residents and/or commuters. 18 violations and 5 warnings occurred at the targeted intersection of Walnut and South Union Avenue for observed behaviors. Table 5 and Table 6 contain a breakdown of the violations and warnings issued.

Table 5. StreetSmart Cranford Enforcement Campaign- Violations

Date	Violation	Number of Instances
5/15/2017	Failure to Stop for a Pedestrian	2
E/16/2017	Use of a Cellular Device	1
5/16/2017	Failure to Stop for a Pedestrian	1
	Use of a Cellular Device	1
5/17/2017	Failure to Stop for a Pedestrian	2
5/18/2017	Failure to Stop for a Pedestrian	2
5/22/2017	Failure to Stop for a Pedestrian	1
5/23/2017	Failure to Stop for a Pedestrian	1
5/24/2017	Failure to Wear Seatbelt	1
5/25/2017	Failure to Stop for a Pedestrian	4
5/26/2017	Failure to Stop for a Pedestrian	2

Table 6. Cranford Police Department Enforcement Campaign Warnings

Date	Violation	Number of Instances
5/15/2017	Failure to Stop for a Pedestrian	1
5/17/2017	Failure to Stop for a Pedestrian	2
5/25/2017	Failure to Stop for a Pedestrian	2

4. Campaign Results

The goal of the StreetSmart Campaign is to reduce avoidable traffic fatalities to zero through a public awareness campaign that aims to improve driver and pedestrian behavior. This is accomplished through educating the public about safe practices, raising awareness of traffic laws, increasing police enforcement, and using traffic violations or fines to deter unsafe pedestrian and driver behavior that contribute to traffic accidents.

An analysis of pre-campaign and post-campaign observations found decreases in the number of distracted drivers, jaywalkers, and instances of cyclists riding against traffic. While those changes were positive, the post-campaign analysis also showed a significant increase in cars not stopping for pedestrians, distracted walkers and cyclists riding on the sidewalk which is disappointing. Clearly, more education and enforcement must be done to impact behavior. The campaign had a positive impact and was somewhat successful in raising awareness and encouraging safer travelling behavior. Additional campaigns and pedestrian safety programming will likely improve these behaviors and are recommended.

As well, some engineering changes would also be helpful to make the intersection safer and these are included in the recommendation section.

4.1 Observed Non-Compliant Behaviors



Figure 3.

Midblock Crossing/ Jaywalking



Figure 4.

Cycling on the Sidewalk

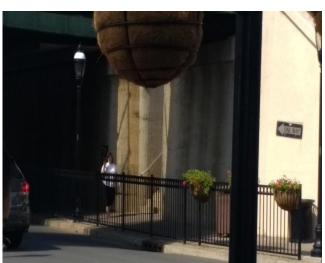


Figure 5.

Distracted Pedestrian and dark area under bridge

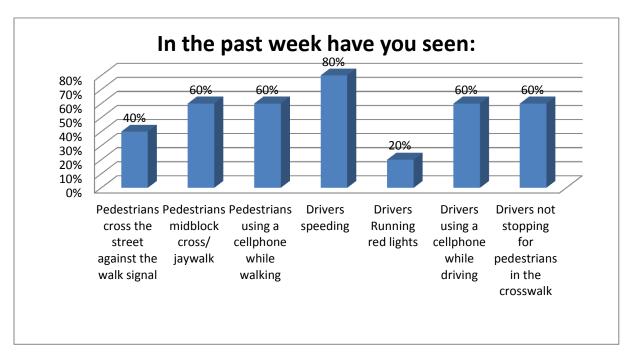
4.2 Post Campaign Survey Results

During the post-observations at Walnut & S. Union Avenue, people were asked if they saw or committed the following acts:

- crossed the street against the walk signal,
- crossed midblock/jaywalked,
- used a cellphone while walking,
- did not stop for pedestrians in the crosswalk,
- drove at least 10 MPH over the speed limit,
- ran a red light, or used a cellphone while driving.

The results are shown in Chart 1 and Chart 2.

Chart 1.Observed Behaviors



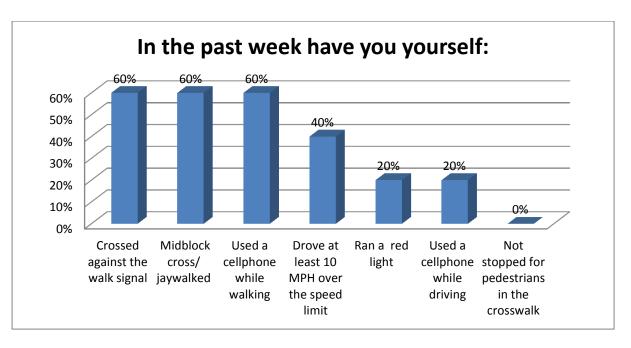


Chart 2: Personal Behaviors

4.3 Recommendations

- Place "Stop for Pedestrians in Crosswalk" signs at busy intersections to raise awareness
- Develop a plan to educate residents and motorists about stopping for pedestrians in crosswalks
- Work with DMV to teach new/renewing drivers and those in defensive driver courses to stop for pedestrians in crosswalk – develop a mail insert for motorists renewing licenses
- Increase efforts to discourage cell phone use distractions for pedestrians and motorists
- Develop a media and communications campaign on trains and in bus/train waiting areas to warn pedestrians about distracted walking and driving
- Develop a traffic calming plan to decrease speeding at the target intersection
- Increase police presence and enforcement of pedestrian and cycling laws at target intersection, with violations or warnings to deter and decrease unwanted behavior
- Distribute material informing cyclists that cycling on city sidewalks is illegal
- Distribute material or post signs advising cyclists to ride with traffic, on right side of street, for safety and to wear helmets
- Conduct additional StreetSmart campaigns to encourage safe driving and walking
- Paint ladder type of crosswalk under the bridge to aid pedestrians and improve visibility
- Add a pedestrian signal head or rapid flashing beacon signal at intersection
- Add additional and better lighting under bridge and in area to aid cars and pedestrians

5. Appendix

5.1 Charts and Tables

Chart 3: Pre-Campaign vs. Post Campaign Incidence of Observed Behaviors

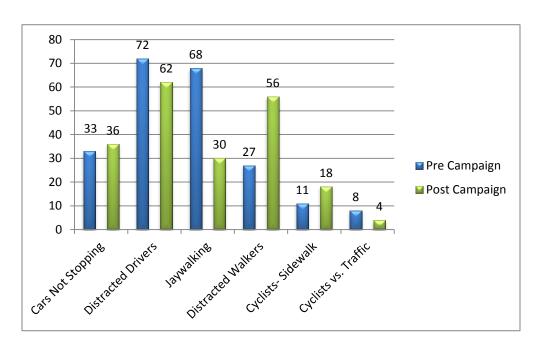


Table 7. Pre-Campaign and Post-Campaign Changes

	Pre-Campaign	Post Campaign	Change
Cars Not Stopping	33	36	9% increase
Distracted Drivers	72	62	14% decrease
Jaywalking	68	30	56% decrease
Distracted Walkers	27	56	107% increase
Cyclists on Sidewalk	11	18	64% increase
Cyclists Riding Against Traffic	8	4	50% decrease

StreetSmart Cranford

5.2 StreetSmart Educational Materials

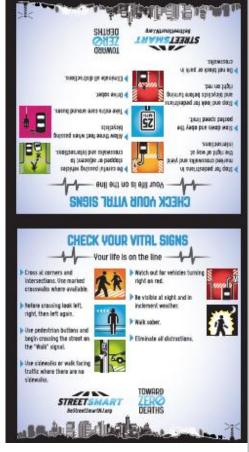












5.3 Media Coverage



Granford Police Department

Sunday April 30th, 2017 :: 08:15 p.m. EDT



CRANFORD JOINS STATE SAFETY CAMPAIGN "STREET SMART NJ" TO REDUCE PEDESTRIANMOTOR VEHICLE CRASHES

CRANFORD JOINS STATE SAFETY CAMPAIGN TO REDUCE PEDESTRIAN-MOTOR VEHICLE CRASHES

"Street Smart NJ" targets speed, distractedness and safety awareness for motorists and pedestrians

Cranford, May 1, 2017 -- Mayor Thomas H. Hannen Jr. announced today that Cranford will be participating in the Street Smart NJ pedestrian safety education and enforcement campaign starting May 1st, 2017 via various Social Media outlets.

The Street Smart NJ campaign is a collaborative effort between public, private and non-profit organizations aimed at reducing pedestrian-motor vehicle crashes in New Jersey. Local police will be working with businesses and community groups — including EZ Ride and the North Jersey Transportation Planning Authority to educate motorists and pedestrians and enforce motorist laws.

New Jersey is ranked 6th in the nation in pedestrian fatalities, according to 2014 data from the National Highway Traffic Safety Administration. In 2014, 170 pedestrians died as a result of pedestrian-vehicle crashes, according to the most recent data from the NJ State Police. From 2010 through 2014, 749 pedestrians were killed and more than 17,000 were injured which translates into one death every 2.4 days and 11 injuries per day. The federal government has designated New Jersey a "focus" state — aiding the state in combating its higher pedestrian fatality rate and providing funding.

Throughout May, you will see street signs, posters, tip cards and other educational materials throughout Cranford. Teams of professionals and volunteers will be out distributing safety fliers at target intersections. Officers will address speeding and distracted driving and walking, which often contribute to crashes involving pedestrians. "We'll be interacting with motorists to make sure they know and obey the law and stop for pedestrians in the crosswalk," said Lt. Davenport. "We'll also be reminding pedestrians to use crosswalks and not jaywalk."

The statewide Street Smart NJ campaign began in 2013 and is managed by the North Jersey Transportation Planning Authority (NJTPA). Motorists are urged to obey the speed limit, stop for pedestrians in crosswalks, and to not use phones while driving. Pedestrians are told to use crosswalks, wait for the walk signal, and also to not walk and use phones at the same time. Distracted driving and walking has greatly contributed a rise in pedestrian crashes and injuries in the past two years. To learn more about the campaign, visit bestreetsmarthj.org. The campaign is also on Facebook (StreetSmartNJ) and Twitter (@njstreetsmart).

5.4 EZ Ride Community Outreach

EZ Ride conducted a Bike Safety Presentation to the Cub Scouts of Cranford to help raise awareness of pedestrian and bicycle safety.

The bike safety presentation promoted safe walking and cycling to school and taught students and their parents how to conduct a bicycle safety "ABC quick check" and how to properly fit and wear a helmet. Students were also reminded to dress to be seen, and to obey traffic laws, signs and signals.

StreetSmart tip cards, biking bookmarks and helmet fitting / bike safety informational sheets were provided to each student and their parents who attended.



April 15, 2017- Bike Safety Presentation at the Cranford Cub Scouts meeting.