



Street Smart Morristown

2019 Campaign



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2019



TransOptions is a nonprofit organization and is one of eight Transportation Management Associations (TMAs) in New Jersey. The TMAs are tasked with implementing strategies and programs that address traffic congestion, economic development, air quality, roadway user safety and livability issues.

Each TMA is responsible for a designated service area, with TransOptions being responsible for the northwestern quadrant of the state. This area encompasses all of Morris, Warren and Sussex counties, as well as suburban Essex, Passaic and Union counties.

Executive Summary

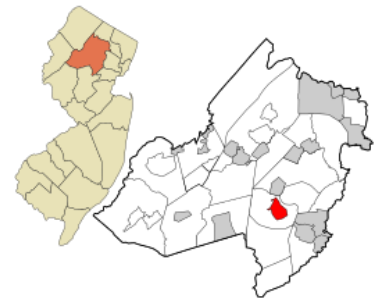
The Morristown Police Department and the Town of Morristown participated in their third Street Smart NJ pedestrian safety campaign between May 2019 and September 2019. Morristown had previously completed Street Smart NJ campaigns in the spring of 2016 and the spring of 2017. During the 2019 campaign, TransOptions, the Morristown Police Department, and the Town of Morristown worked collaboratively to increase safe walking and driving behaviors in the community through enforcement, education, and outreach. The campaign was evaluated using a pre-/post- study design using community surveys and intersection observations. TransOptions also evaluated data from a speed radar sign used throughout the campaign to slow drivers in high-risk speed areas in town.

The campaign resulted in:

- 308 enforcement hours dedicated to Street Smart
- 58 percent reduction in non-compliant midblock crossings
- 5 percent decrease in drivers traveling straight failing to stop for pedestrian at the crosswalk
- 7 percent decrease in drivers turning failing to yield to pedestrian at the crosswalk
- 9 percent increase in survey participants' awareness of police department efforts to enforce pedestrian safety laws
- 14 percent improvement in survey participant knowledge that they should not begin crossing when the pedestrian signal is counting down
- 23 percent increase in identifying an unmarked crosswalk at an intersection.
- 32 percent increase in survey participants who reported being exposed to pedestrian safety messages
- 46 percent increase in survey participants who reported being exposed to Street Smart messaging
- 5 percent decrease in drivers traveling straight failing to stop for pedestrian at the crosswalk while temporary delineators were applied to the roadway

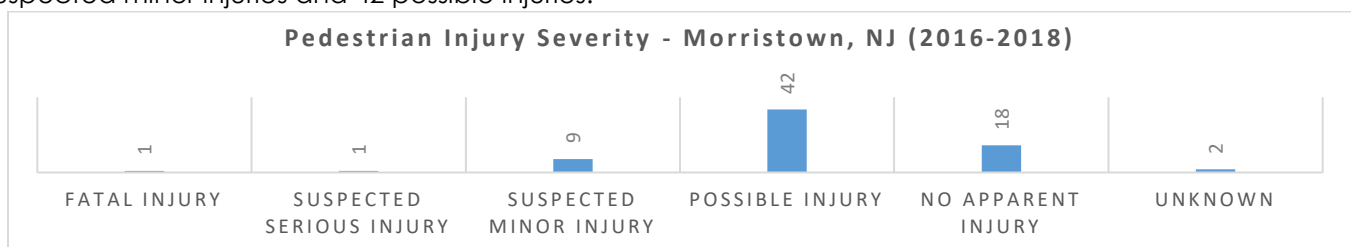
Morristown, New Jersey

Morristown is located in Morris County, New Jersey. The town is 3.026 square miles and with a population of 18,411, according to the 2010 United States Census. Morristown serves as the county seat for Morris County where many county services and departments are based. Morristown has a walkable downtown and serves as a regional destination for shopping, restaurants, bars, and entertainment. Morristown is also home to Morristown Medical Center as well as the hospital's parent company, Atlantic Health System, one of the largest employers in Morris County. In recent years, the town has been developing with more housing and businesses being added to the community. As Morristown continues to grow, it attracts more people walking and driving in the town making pedestrian safety a vital need in the community.



Crash Data

According to data from the New Jersey Division of Highway Traffic Safety and Rutgers Center for Advanced Infrastructure and Transportation (CAIT), between January 1, 2016 and December 31, 2018, there were 73 pedestrians involved in crashes in Morristown, NJ. These crashes include 1 fatal injury, 1 suspected serious injury, 9 suspected minor injuries and 42 possible injuries.



Pedestrian behaviors at the time of these crashes include 32 pedestrians crossing in a marked crosswalk at an intersection and 9 pedestrians crossing midblock not at an intersection. Driver behaviors at the time of these crashes include 27 drivers who failed to yield the right-of-way to a pedestrian and 11 drivers who were inattentive.

Pedestrians			Drivers		
Contributing Factor	Count	%	Contributing Factor	Count	%
Pedestrians crossing in a marked crosswalk at an intersection	32	44%	Failed to yield the right-of-way to pedestrian	27	37%
Pedestrians crossing midblock	9	12%	Driver Inattention	11	15%

Pedestrian Safety in New Jersey

The federal government has designated New Jersey as a pedestrian safety focus state for its high rate of fatalities and injuries. Pedestrians comprised 29 percent (183 people) of the 624 people killed in crashes in New Jersey in 2017, nearly double the national average of 16 percent, according to the National Highway Traffic Safety Administration (NHTSA). As of 2017, New Jersey ranks 13th in the nation in pedestrian fatalities per 100,000 people. On average, one pedestrian is killed every two days in New Jersey and 12 are injured daily.

Street Smart Pedestrian Safety Campaign

Street Smart NJ is a statewide public education, awareness and behavioral change campaign that was developed by the North Jersey Transportation Planning Authority (NJTPA), the metropolitan planning organization for the 13-county northern New Jersey region, and piloted in 2013. 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 program. The campaign is funded through U.S. Department of Transportation resources and the Highway Traffic Safety (HTS) Federal Highway Safety Grant 2019 administered by the New Jersey Division of Highway Traffic Safety (NJDOT) as well as in-kind contributions.

The program was developed in response to New Jersey being designated as a pedestrian focus state in 2011. As of 2019, the program has reached approximately 100 communities in New Jersey. The campaign is implemented throughout New Jersey by several organizations, including the state's eight Transportation Management Associations (TMAs), including TransOptions, in partnership with the NJTPA.

Street Smart uses education, enforcement, and grassroots outreach to change behaviors and improve pedestrian safety in communities. Target behaviors for drivers are to obey speed limits and stop for people crossing. Target behaviors for pedestrians are to use crosswalks (marked and unmarked) and cross with the signals. Avoiding cellphone use while traveling is a target behavior for both drivers and pedestrians.

Street Smart NJ has three main goals:

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

Street Smart Morristown 2019

NHTSA recommends using a multidisciplinary approach to addressing pedestrian safety in communities using enforcement, education and engineering strategies. ¹ The 2019 Street Smart campaign in Morristown utilized each of these strategies.

¹ NHTSA: Pedestrian Safety Enforcement Operations: A How-To Guide

Campaign Kickoff and Press Coverage

Morristown's 2019 Street Smart campaign was launched at a press conference on May 8, 2019 at the front entrance to Morristown's Town Hall. Municipal, county and state representatives were invited to attend the event. Speakers included Timothy Dougherty, Mayor of Morristown, Assemblyman Anthony M. Bucco of Legislative District 25, Daniel Callas, president of TransOptions, Sgt. Brian LaBarre of the Morristown Police Department, and Lois Goldman, Director at the North Jersey Transportation Planning Authority. The press conference event represented the official start to Morristown's 2019 Street Smart campaign and was covered by The Daily Record, Fios 1 News, Morristown Green, TAP into Morristown, and WMBC TV.



Enforcement

The Morristown Police Department conducted enforcement efforts from May 2019 through September 2019. The Morristown Police Department received a Federal Highway Safety grant from the New Jersey Division of Highway Traffic Safety to increase pedestrian focused enforcement efforts throughout the town. The grant provided reimbursement for officer overtime hours as well as a budget for the purchase of campaign materials.

TransOptions provided two training presentations for Morristown police officers on the state's pedestrian safety laws and best practices for applying enforcement in the community. Morristown Police Department also attended a pedestrian safety enforcement training for the Cops in the Crosswalk Decoy program in May 2019 hosted by AAA Northeast. Officers from throughout Morris County attended the training and the in-person demonstration portion was conducted in Morristown so officers could experience hands-on decoy education.



Decoy Training



Police Decoy Operation

Morristown Police Department dedicated 308 enforcement hours to Street Smart efforts using roving patrols and the decoy operations. The campaign addressed motorist and pedestrian behaviors town-wide with a focus on the central business district, including South Street, Speedwell Avenue, Morris Street, Washington Street, Elm Street, Madison Avenue, Maple Avenue, Lafayette Avenue, and MacCulloch Avenue. These locations have high pedestrian activity and have had crashes involving pedestrians in the past or are known driver/pedestrian conflict points in the community. These areas included a mix of signalized and non-signalized crossings.



Pedestrian Engagement from Morristown Police

Morristown Police Department stopped a total of 313 drivers and issued 141 summonses as part of the campaign. Officers addressed pedestrians 449 times for midblock crossing and crossing against pedestrian signals. Officers focused more on educating pedestrians crossing unsafely and provided them with warnings and safety tip cards, but did not issue summonses.

Infrastructure

Public understanding of engineering and infrastructure on our roadways is important to improving safety for all users. TransOptions provides education to improve public knowledge of the functions of infrastructure. During the 2019 Street Smart campaign in Morristown, TransOptions partnered with the police department and local organizations to provide education on a newly installed leading pedestrian interval traffic signal at Morristown Medical Center, conducted a pop-up crosswalk project using delineators, and created educational materials for a new high intensity activated crosswalk, or HAWK signal, on Speedwell Avenue.

LEADING PEDESTRIAN INTERVAL – MADISON AVENUE (NJ-124) AT THE ENTRANCE OF MORRISTOWN MEDICAL CENTER

Morristown Medical Center and its parent company, Atlantic Health, are both based in Morristown and are among the largest employers in Morris County. Recently, Morristown Medical Center relocated employees to satellite office buildings directly across the street from the main hospital. This increased the amount of people needing to cross Madison Avenue (NJ-124) at the intersection of the main entrance to



Intersection of Madison Avenue and Morristown Medical Center Entrance

Morristown Medical Center. Reports of near-misses and driver-pedestrian conflicts increased. TransOptions and the Morristown Police Department met with representatives from Morristown Medical Center to review solutions. The Morristown Police Department worked with NJ DOT to install a leading pedestrian interval phase to the traffic signal at Madison Avenue, creating a delay in the green light to give pedestrians a 10-second head start to cross the road. While pedestrians have the leading walk signal, drivers on all sides of the intersection have a red light.

The police department and NJ DOT recommended encouraging pedestrians to cross at specific locations at the intersection in order to maximize safe crossing. TransOptions worked with Morristown Medical Center to manufacture directional signage for the intersection as well as painted sidewalk arrows and the "heads up phones down" messaging at the crosswalks.



Signage, directional arrows and phones down messaging at intersection of Madison Avenue and Morristown Medical Center Entrance

Pop-Up Delineators – Morris Street at the Morristown Train Station

TransOptions worked with the Morristown Police Department and Morris County to conduct a two-hour pop-up infrastructure study at a busy crosswalk at the entrance of the Morristown Train Station. This location served as the intersection observation site for Morristown's 2016, 2017, and 2019 Street Smart campaigns. During peak morning rush hour, delineators were strategically placed along the unsignalized crosswalk to increase visibility of the crosswalk, increase drivers stopping for pedestrians, and slow driver speeds. TransOptions speed sentry radar speed detection sign was also placed at the location to collect data on motor vehicle speeds. Results of the pop-up project can be found on page 25.



Temporary Delineators at Intersection of Morris Street and King Street

HIGH INTENSITY ACTIVATED CROSSWALK (HAWK) BEACON - SPEEDWELL AVENUE (US-202)

Installing a high intensity activated crosswalk or HAWK signal in Morristown along Speedwell Avenue (US-202) was a long-term project in the town. The HAWK signal was placed at the intersection of Speedwell Avenue (US-202) and Flagler Street, which is one of the highest pedestrian-vehicle crash locations. The Town of Morristown, the Morristown Police Department, and TransOptions worked on educational efforts to increase awareness and understanding of using the HAWK signal at this location.

TransOptions created and designed educational materials in both English and Spanish in order to engage the Spanish-speaking population in the surrounding neighborhood. The team also worked to educate local business and organizations and used social media to explain how the signal works.

Morristown Department of Public Safety
August 27

Pedestrian safety improvements are coming!
Earlier this morning, Morristown Police met with officials from the New Jersey Department of Transportation to test out the new Pedestrian Safety signal that has been installed on Speedwell Avenue at Flagler Street. This innovative signal system will allow for greater visibility and safety for pedestrians and motorists on this busy stretch of roadway and will be fully operational in the very near future.
As with any new project, we're busy fine tuning the details and working out the kinks but we look forward to another step to ensuring the safety of those who share our Morristown roads.



Educational Messaging for HAWK



Education and Outreach

Education and outreach was conducted throughout the 2019 Street Smart efforts in Morristown. Efforts were made to raise awareness of the campaign's presence in Morristown and to increase safe behaviors of both drivers and pedestrians throughout the town.

The following education and outreach efforts were conducted as part of Morristown's Street Smart campaign:

- Posters and tip cards distributed to the downtown businesses
- Campaign messaging displayed on street signs throughout the community
- Materials placed at the Morristown Library
- Messaging displayed on the digital sign board at the Mayo Performing Arts Center on South Street
- Pedestrian safety posters placed in the Dehart Street parking deck
- Banners placed on Morris County Tourism Bureau's wayfinding sign
- Pedestrian safety highlights by the Morristown Partnership in newsletters to local businesses and public
- Stakeholder engagement at Morristown Bicycle and Pedestrian Task Force meetings
- Pedestrian safety presentation at Morristown's 60 Plus Club
- Pedestrian safety presentation at the Morris County Council of Older Persons' Organization
- Pedestrian safety lesson and police pedestrian decoy demonstration at the Tri-Morris Junior Police Academy
- Coffee with a Cop at SmartWorld Coffee
- Morristown Medical Center safe crossing education for employees
- Safe crossing education and outreach at a newly installed HAWK signal



Messaging at Performing Arts Center



Tables Tents



Posters – Spanish



Posters – English



Coffee Sleeves



In-class pedestrian education, Tri-Morris Junior Police Academy



Decoy Demonstration, Tri-Morris Junior Police Academy

Coffee with a Cop

TransOptions worked with local businesses in Morristown to provide coupons that police officers could distribute to pedestrians demonstrating safe walking behaviors such as using crosswalks or crossing with the walk signal. TransOptions and the Morristown Police Department worked with SmartWorld Coffee, one of the local businesses participating in the safe behavior coupon initiative, to conduct a Coffee with a Cop program. Police officers and TransOptions staff spoke to customers as they exited SmartWorld Coffee about safe walking and driving in Morristown, provided safety tip cards, a reflective bracelet, and a coupon for a free coffee on their next visit to SmartWorld. Officers from Morristown Police Department, the neighboring Morris Township Police Department, the Morris County Prosecutors Office, and the Morris County Sheriff attended the event.



Sample Coupon



Coffee with a Cop and Coupon Distribution – SmartWorld Coffee, Morristown, NJ

ATLANTIC HEALTH SAFE CROSSING EDUCATION

Morristown Medical Center included safe walking messaging on its digital screens throughout the hospital to inform employees crossing the street to satellite buildings about the new leading pedestrian interval as well as the safest locations to cross. More information can be found on page 7.



Messaging displayed on digital screens throughout Morristown Medical Center

SOCIAL MEDIA

Social media posts and advertisements were launched on Facebook, Twitter, SnapChat and Instagram accounts between May 2019 and September 2019 reaching 14,114 people with 4,990 engagements (likes, shares or comments.)

TransOptions used zip code targeted social media advertisements on Facebook to highlight specific areas in Morristown with pedestrian safety concerns along with safe behavior tips for those specific locations.

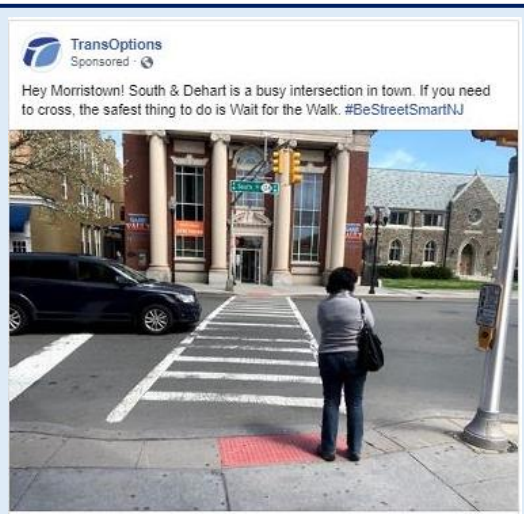
TransOptions also included pedestrian safety messaging as a filter on SnapChat. The filter was active over a busy weekend in May 2019. The filter was geolocated along a portion of Morristown's busy South Street and the Green to target people at popular bars and restaurants in that area.



SnapChat Filter



Facebook Advertisement



Instagram Posts

Methods

The campaign was evaluated through a pre-/post- study design using community surveys and intersection observations. TransOptions also evaluated data from a speed radar sign used throughout the campaign to slow drivers in high-risk speed areas in town. Surveys and intersection observations were conducted both before and after the campaign to measure the effectiveness of campaign activities. The speed sign was used during the campaign in order to slow drivers in areas of the community with high levels of pedestrian activity and measure behavior change in drivers when exposed to digital speed displays. TransOptions included an additional evaluation of the use of temporary delineators at the observation intersection on Morris Street at the Morristown Train Station.

Results

Surveys

The Town of Morristown assisted in distributing the survey on social media and other forms of town-based digital communications.

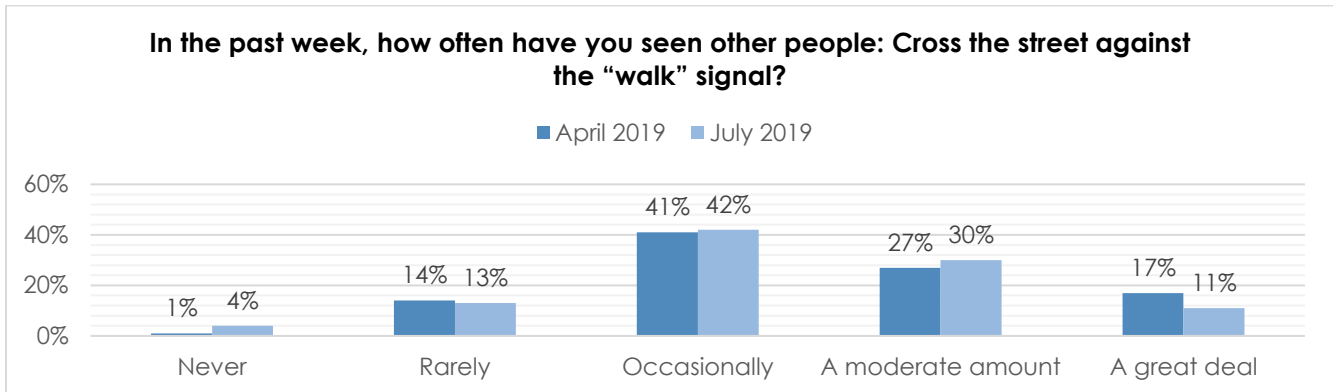
532 people participated in the pre-campaign survey in April 2019. 371 people participated in the post-campaign survey in July 2019.

BEHAVIOR AWARENESS OF OTHERS:

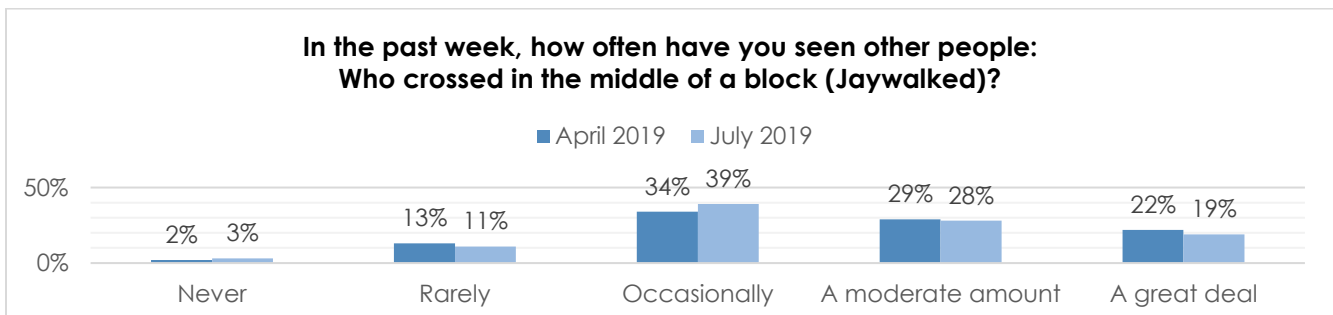
The survey questions below asked participants to respond regarding their perceptions of the walking and driving behaviors of other people they see in Morristown.



Survey Post on Facebook

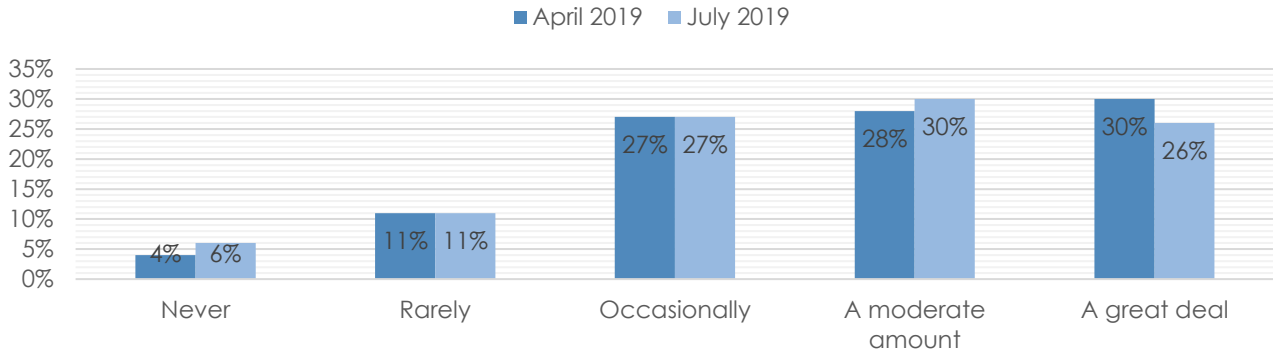


Result - Seeing other people cross the street against the "walk" signal: 3 percent increase in "never"; 6 percent decrease in "a great deal".



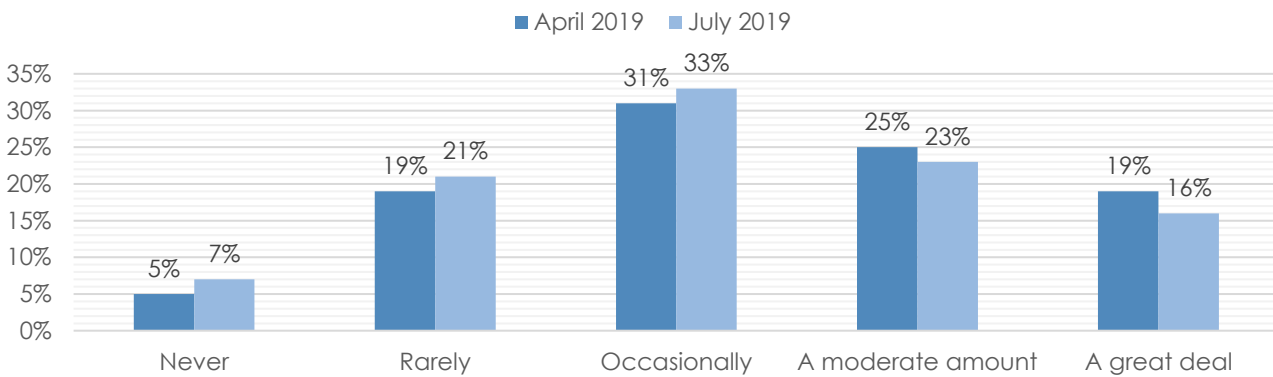
Result - Seeing other people who crossed midblock: 3 percent decrease in "a great deal".

**In the past week, how often have you seen other people:
Using a hand-held cell phone while walking or crossing the street?**



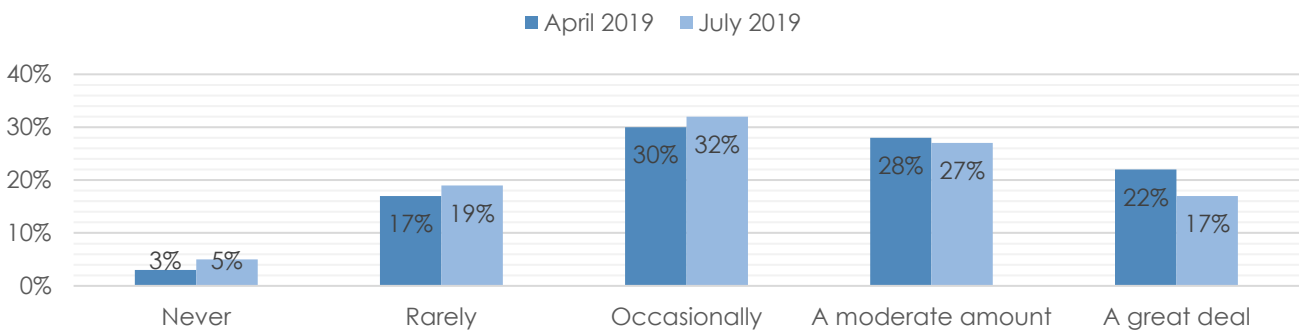
Result – Seeing other people use a hand-held cell phone while crossing the street: 4 percent decrease in respondents seeing “a great deal”.

**In the past week, how often have you seen other people:
Not stopping for pedestrians in the crosswalk when traveling or making a left or right turn while driving?**

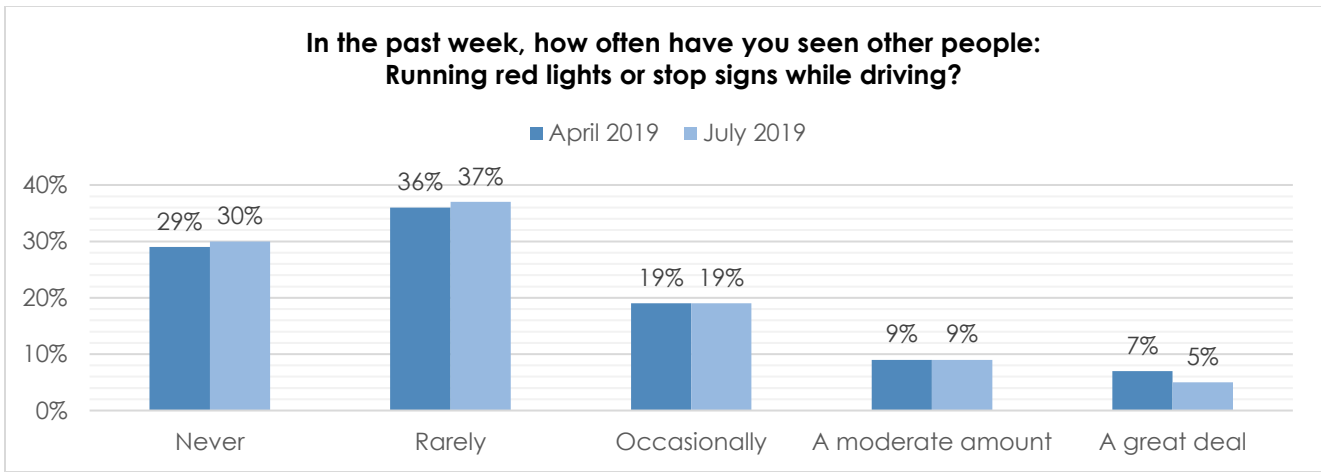


Result – Seeing other people driving not stop for pedestrians in the crosswalk: 3 percent decrease in respondents seeing “a great deal”.

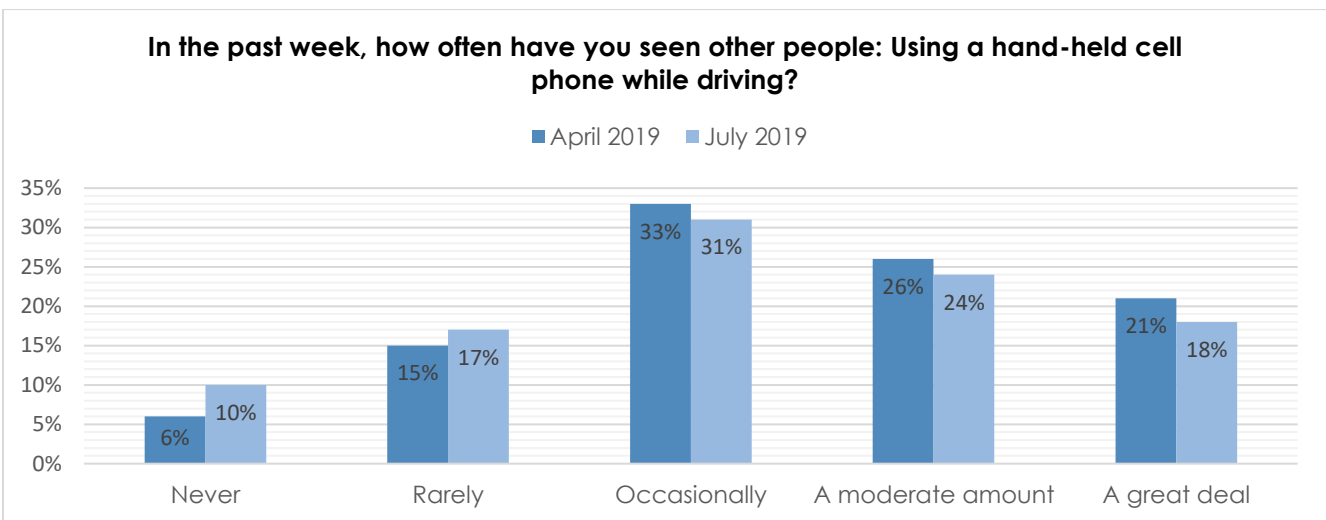
**In the past week, how often have you seen other people:
Speeding in areas with a lot of people walking?**



Result – Seeing other people speeding while driving in areas with a lot of people walking: 5 percent decrease in respondents seeing “a great deal”.



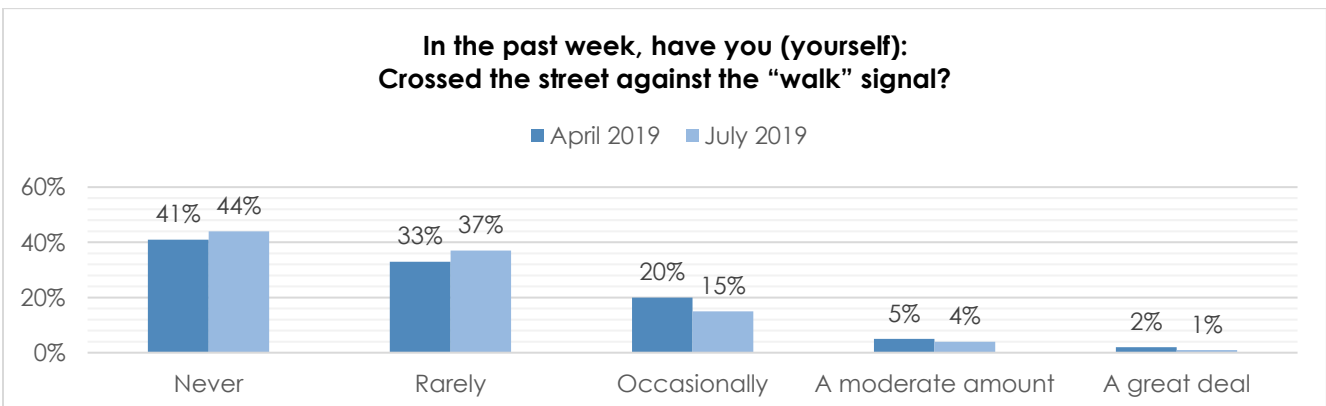
Result – Seeing other people run red lights or stop signs while driving: 2 percent decrease in “a great deal”



Result – Seeing other people use a hand-held cell phone while driving: 4 percent increase in “never”; 3 percent decrease in “a great deal”.

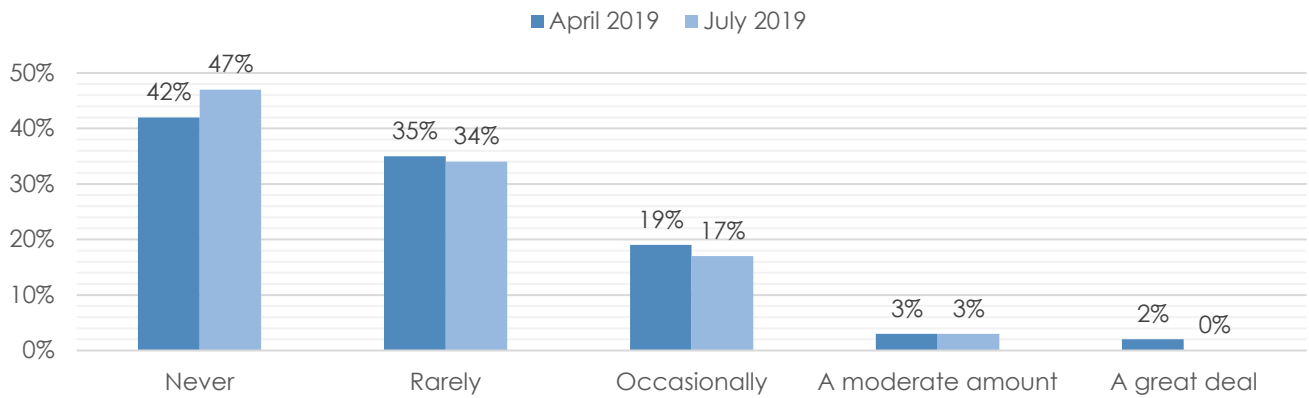
SELF-REPORTED BEHAVIORS

The survey questions below asked participants to respond regarding their own behaviors when walking and driving in Morristown.



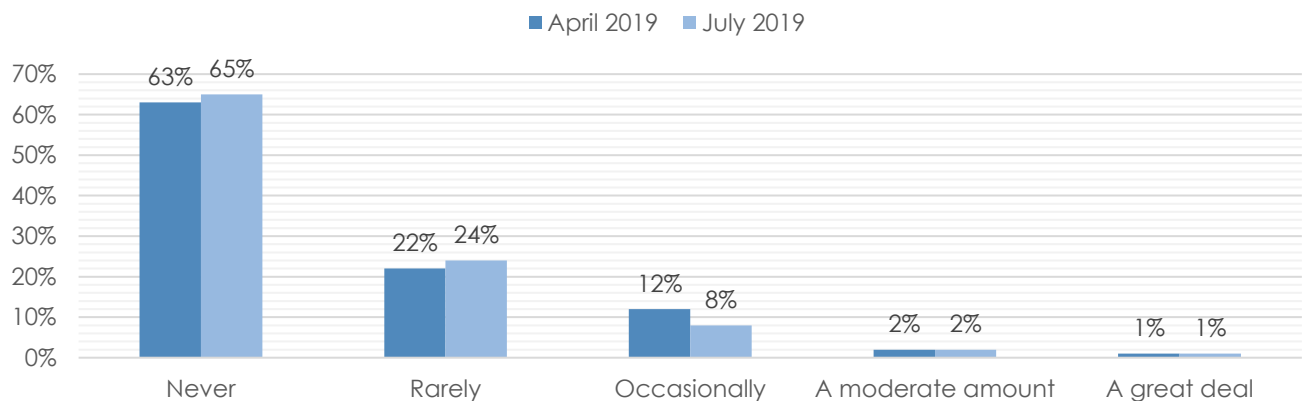
Result – Self-reported crossing against the “walk signal”: 3 percent increase in “never”.

**In the past week, have you (yourself):
Crossed outside of a crosswalk or in the middle of a block (Jaywalked)?**



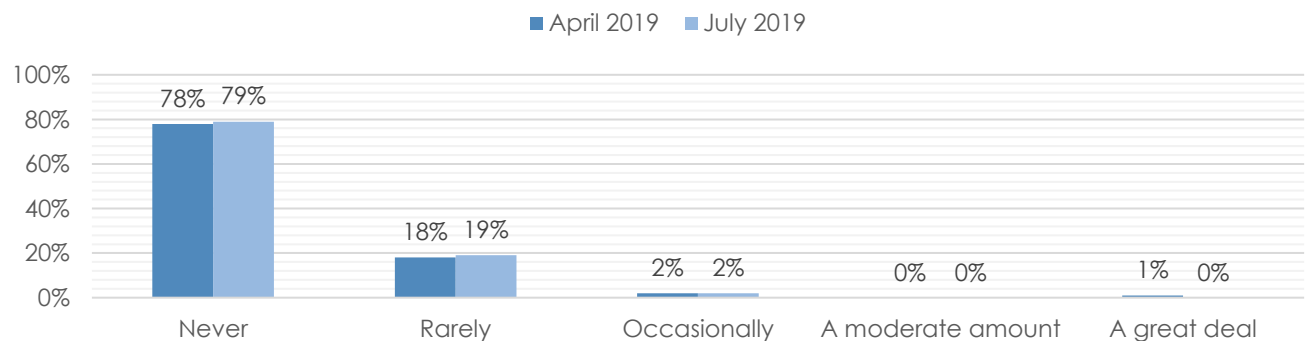
Result – Self-reported crossing midblock: 5 percent increase in “never”.

**In the past week, have you (yourself):
Used a hand-held cell phone while walking or crossing the street?**



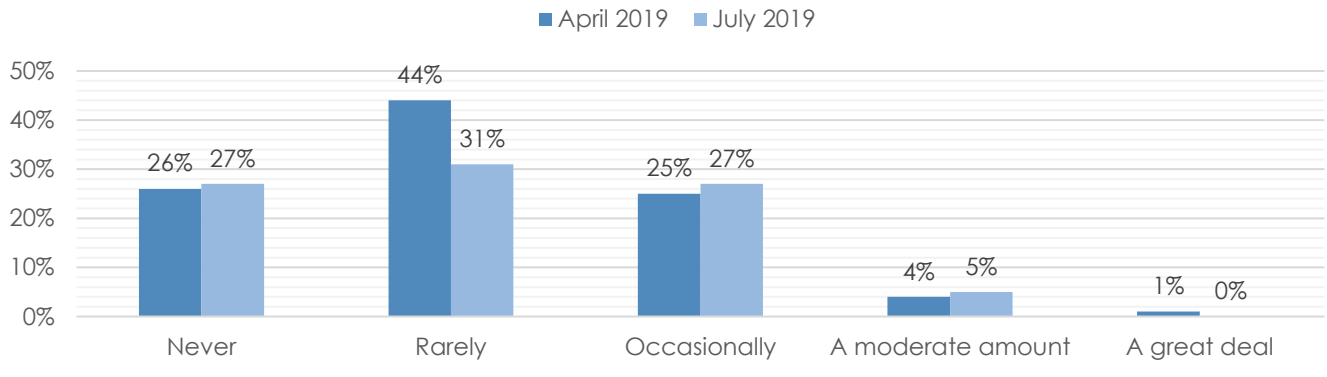
Result – Self-reported using a hand-held cell phone while walking or crossing the street: 2 percent increase in “never”; 2 percent increase in “rarely”; 4 percent decrease in “occasionally”.

**In the past week, have you (yourself):
Not stopped for pedestrians in crosswalks when traveling or making a left or right turn?**



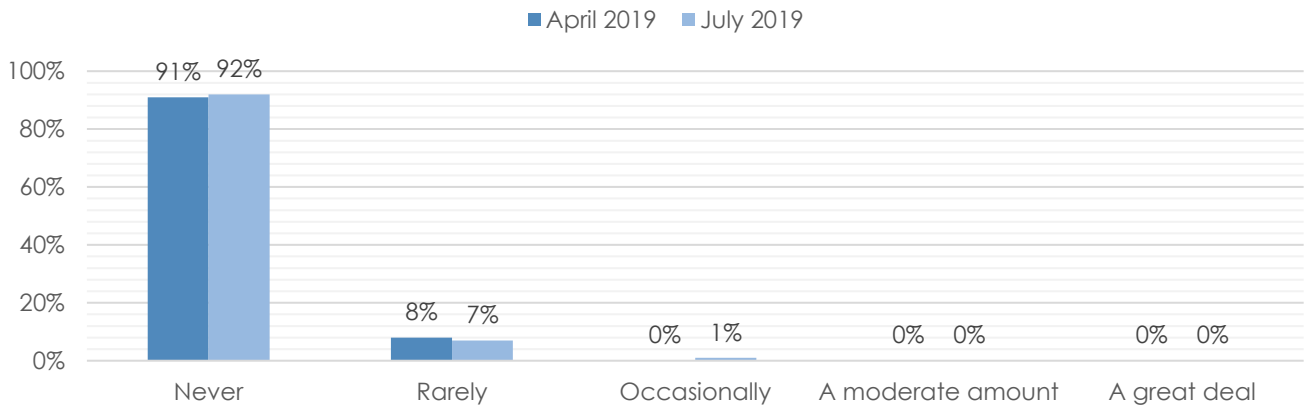
Result – Self-reported not stopping for a pedestrian in a crosswalk: Minimal 0 to 1 percent changes in all question choices.

**In the past week, have you (yourself):
Driven over the speed limit on a local street?**



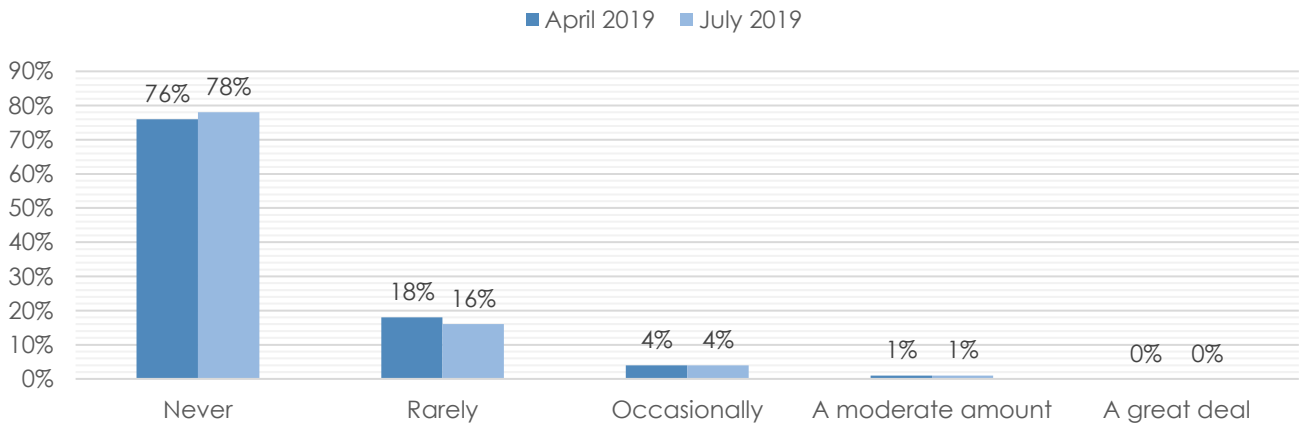
Result – Self-reported driving over the speed limit: 13 percent decrease in “rarely”.

**In the past week, have you (yourself):
Run a red light or stop sign?**



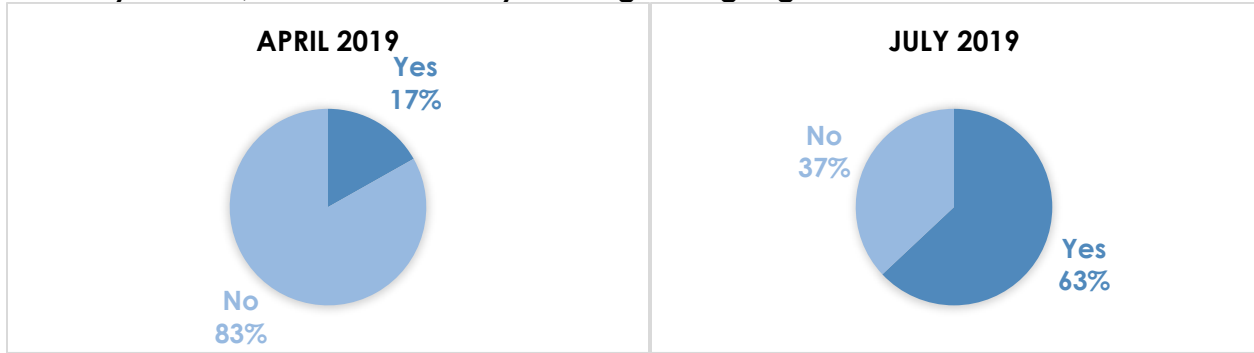
Result – Self-reported running a red light or stop sign while driving: Minimal 0 to 1 percent changes in all question choices.

**In the past week, have you (yourself):
Used a hand-held cell phone while driving?**



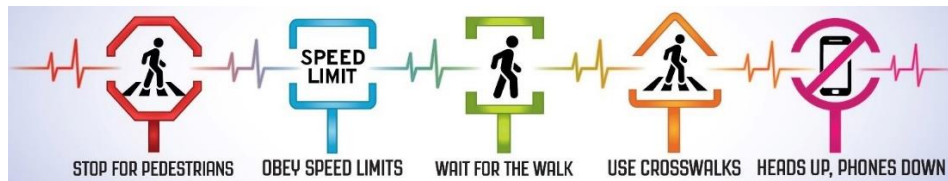
Result – Self-reported using a hand-held cell phone while driving: 2 percent increase in “never”.

Have you read, seen or heard any message or signage that mentions "Street Smart"?



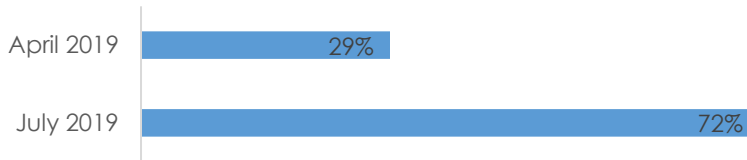
Result: 46 percent increase in people recognizing or recalling being exposed to Street Smart messaging

In the last 30 days, have you read, seen or heard any messages similar to the following...



Use Crosswalks

Result:
43 percent increase



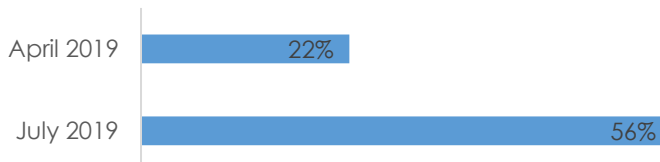
Wait for the Walk

Result:
44 percent increase



Stop for Pedestrians

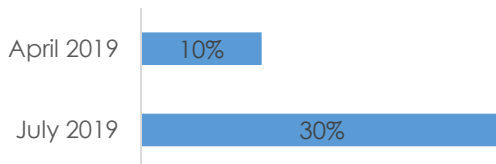
Result:
34 percent increase





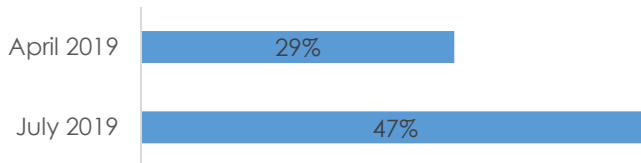
Obey Speed Limits

Result:
20 percent increase

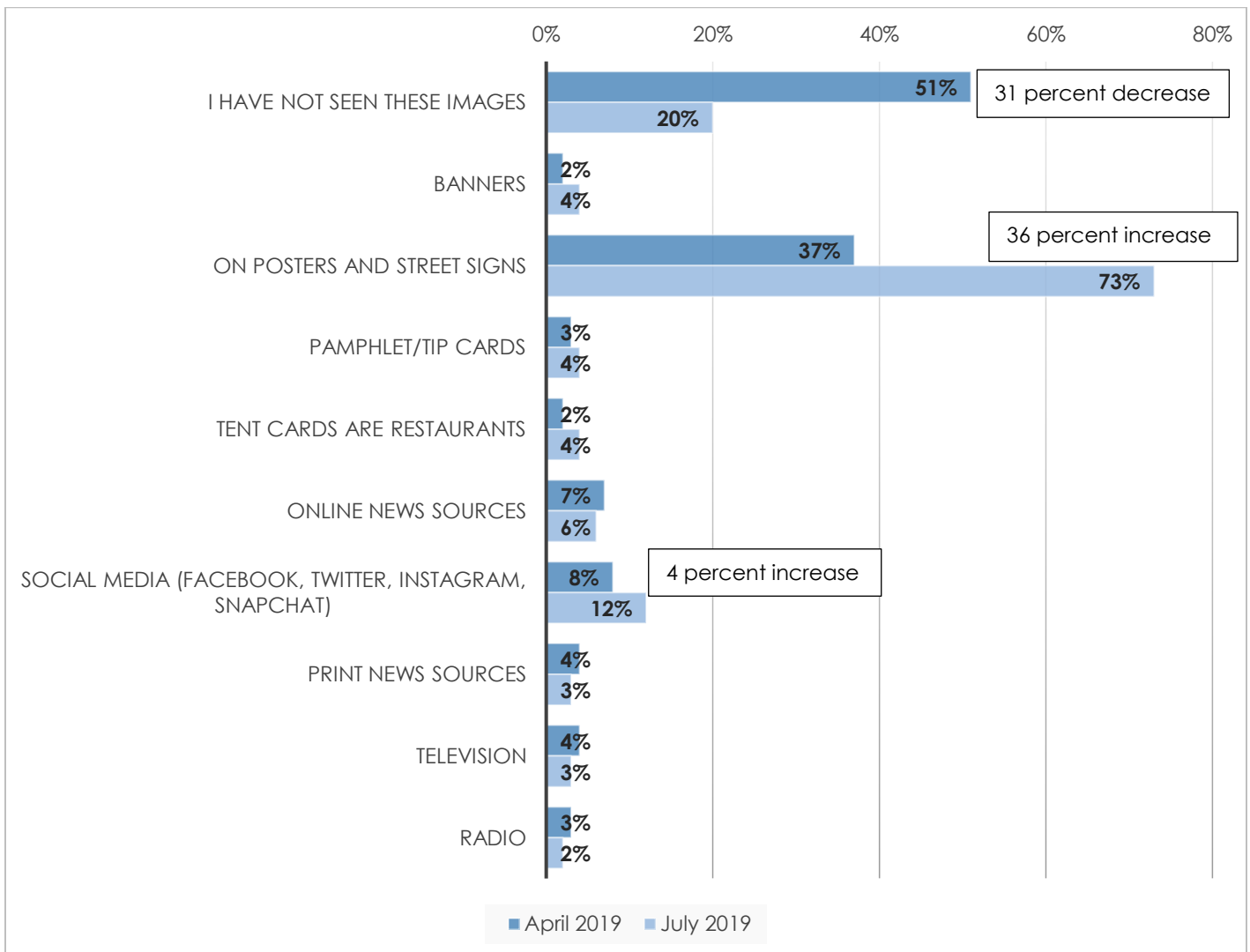


Heads Up, Phones Down

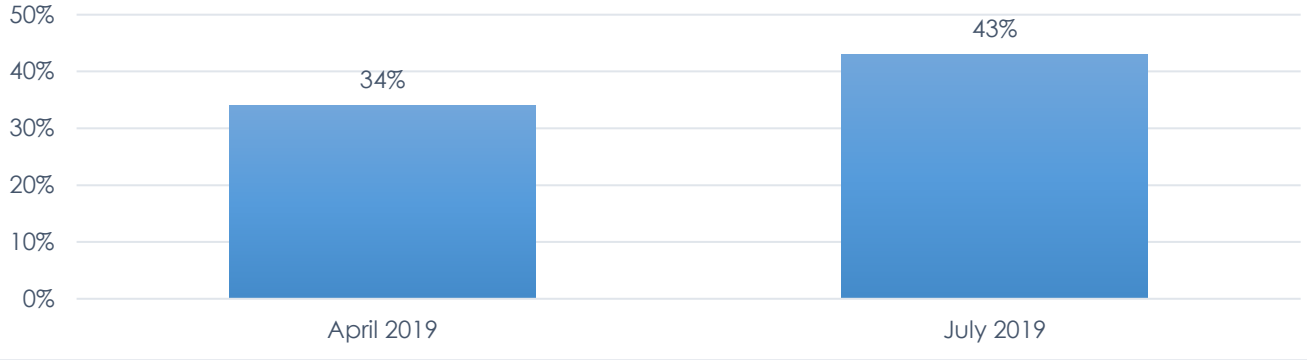
Result:
18 percent increase



Where have you seen or heard these messages (check all that apply)

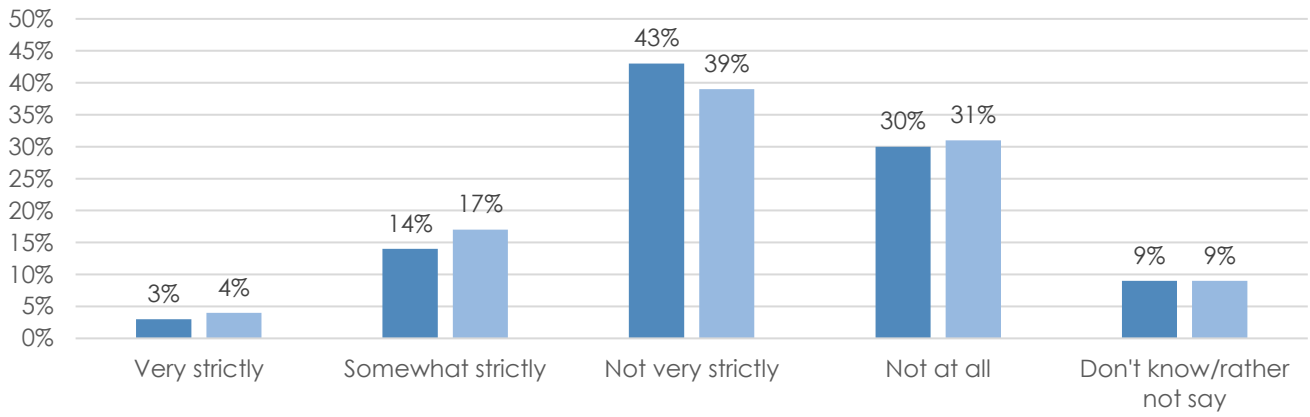


Have you recently read, seen or heard about police efforts to enforce pedestrian safety laws?



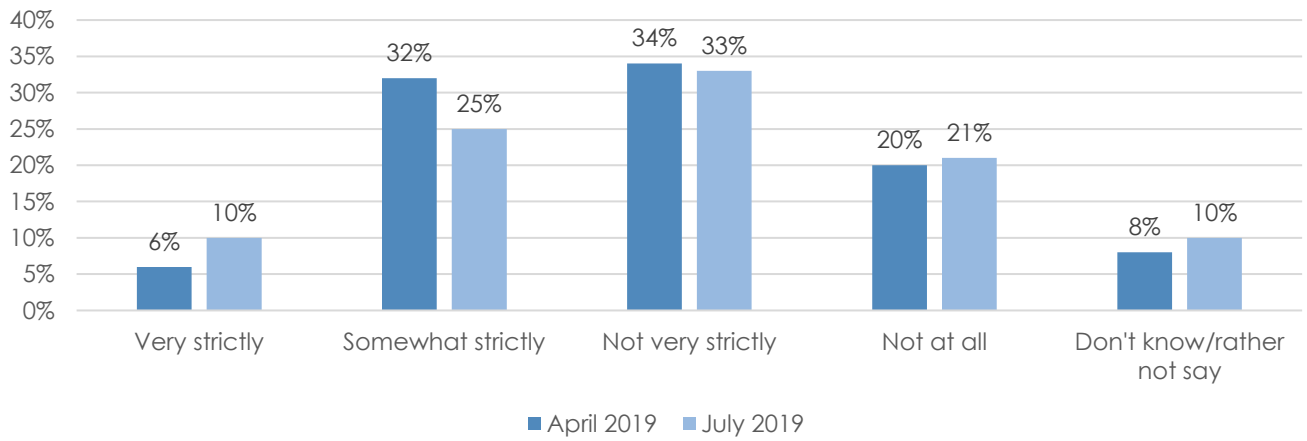
Result: 9 percent increase

How strictly do you think police in your area enforce pedestrian-related safety laws, such as crossing outside of a crosswalk or crossing against the "walk" signal?



Result: 3 percent increase in "somewhat strictly"; 4 percent decrease in "not very strictly"

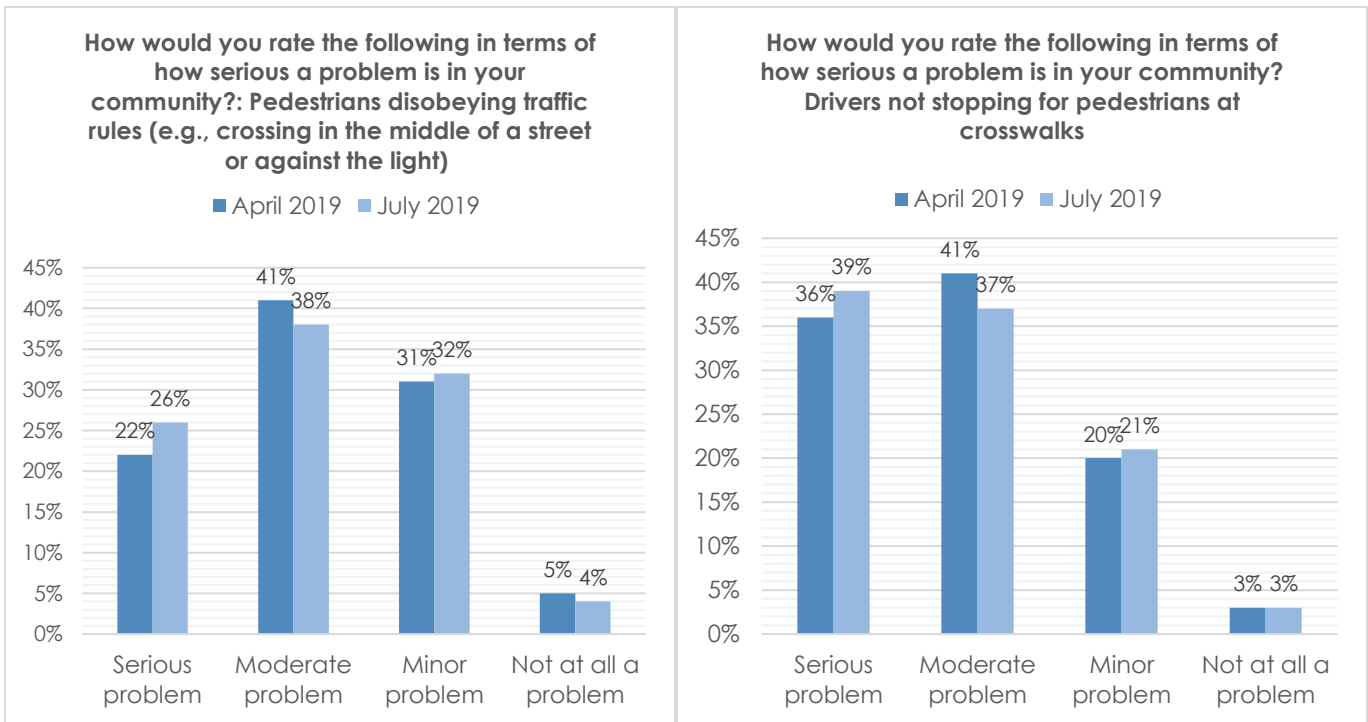
How strictly do you think police in your area enforce driver-related pedestrian safety laws, such as speeding or stopping for pedestrians in crosswalks?



Result: 4 percent increase in "very strictly"; 7 percent decrease in "somewhat strictly"

SERIOUS PROBLEM

Participants were asked to rate driving and walking behaviors as a serious problem in their community.



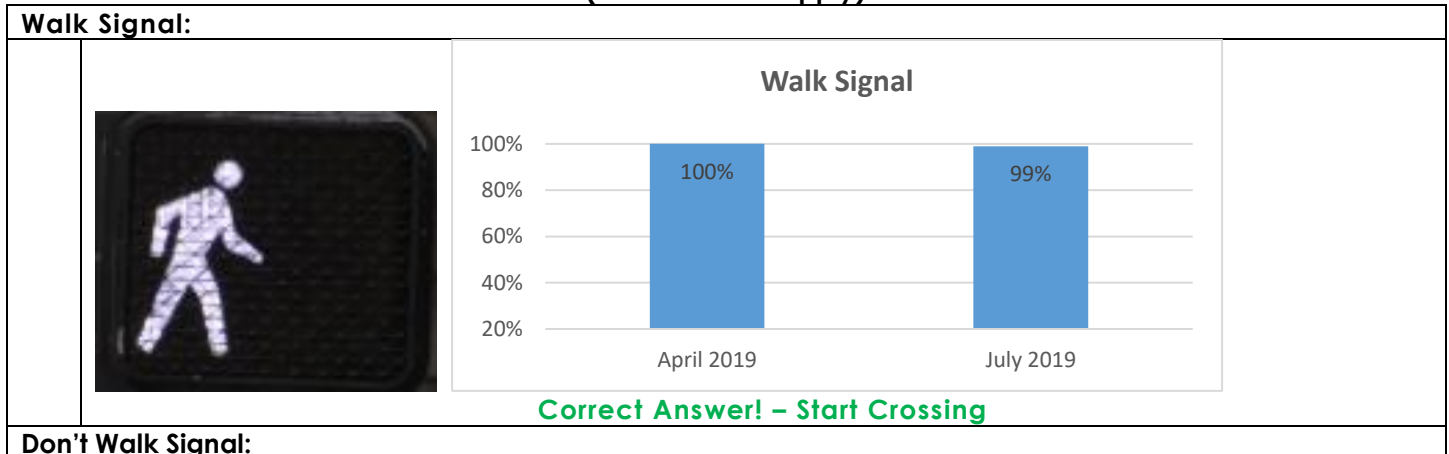
Result:

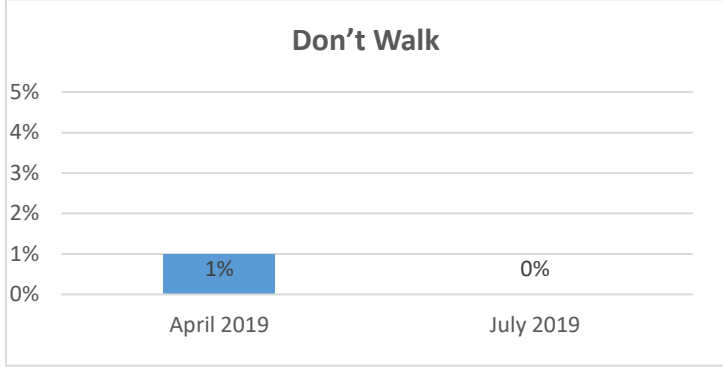
- 4 percent increase in pedestrian violations considered a *serious problem*
- 3 percent increase in driver violations considered a *serious problem*
- Survey participants viewed driver behaviors as a more serious problem compared to pedestrian behaviors

QUIZ STYLE QUESTIONS

Participants were asked to respond to the following questions and were then provided with the correct answer.

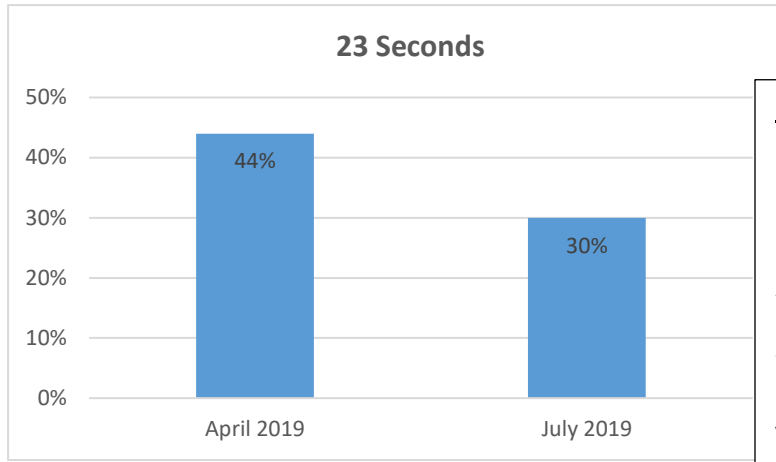
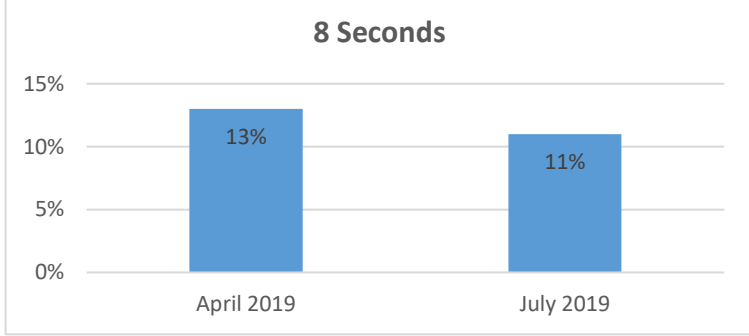
**At intersections with a traffic light and pedestrian signal, when should you begin to cross the street?
(check all that apply)**





X Don't Cross

Counting Down Or Flashing Signal:

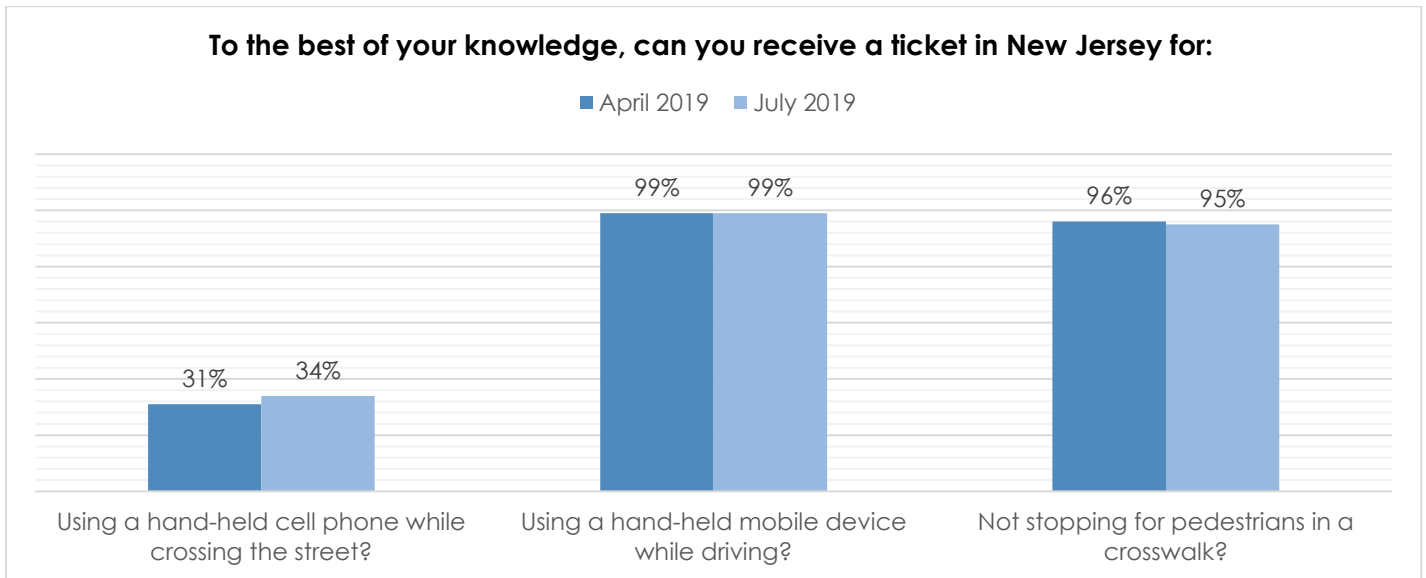


Result:
14 percent decrease in participants believing they should start crossing when the signal is counting down with 23 seconds.

X Don't start crossing. Finish crossing if started

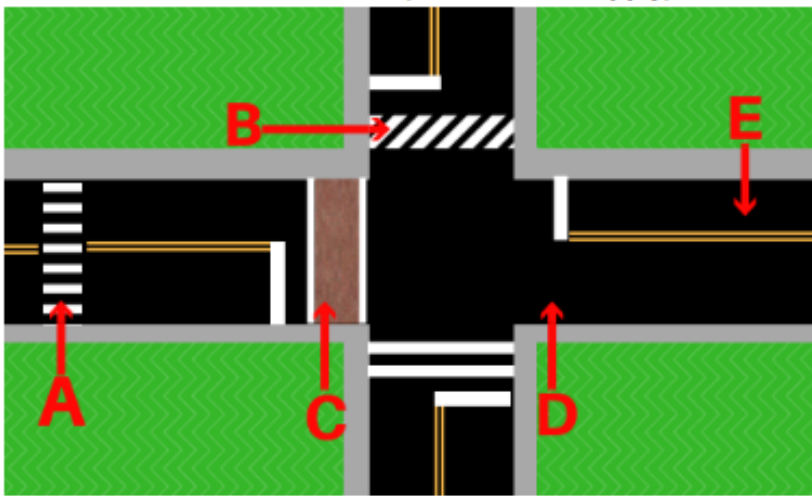
2018 Results

Question	Answer
<p>To the best of your knowledge, can you receive a ticket in New Jersey for: Using a hand-held cell phone while crossing the street?</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><u>Answer:</u> NO: BUT STILL VERY DANGEROUS Although you cannot receive a ticket in New Jersey at this time for using a hand-held phone while crossing the street, using a cellphone while walking is extremely dangerous, especially while crossing a roadway and should be avoided.</p>
<p>To the best of your knowledge, can you receive a ticket in New Jersey for: Using a hand-held mobile device while driving?</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><u>Answer:</u> YES: It is a primary offense in NJ for a motorist to talk or text message with a hand-held wireless telephone or electronic communication device while driving. 1st Offense = \$200 - \$400 fine 2nd Offense = \$400 - \$600 fine 3rd Offense = \$600 - \$800 fine, 3 points, possible 90 day license suspension.</p>
<p>To the best of your knowledge, can you receive a ticket in New Jersey for: Not stopping for pedestrians in a crosswalk?</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>	<p><u>Answer:</u> YES: Drivers in New Jersey MUST stop for pedestrians upon a crosswalk. Failure to observe the law may subject you to: 2 points, \$200 fine (plus court costs), 15 days community service, insurance surcharges</p>



Result: 3 percent increase in participants believing that using a cellphone which crossing the street is illegal

Check off all of the crosswalks (check all that apply).



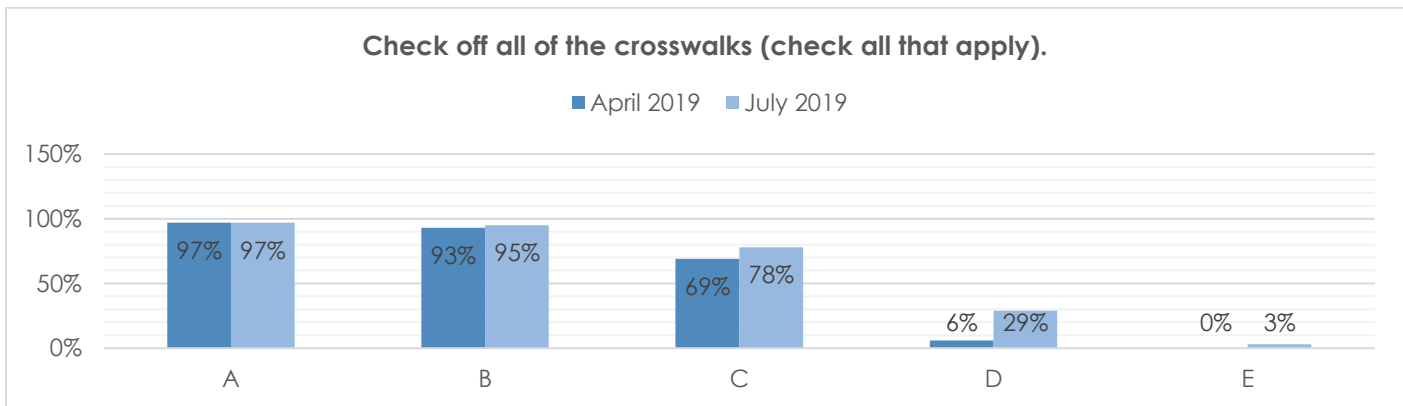
Answer

Answers:
A, B, C and D are all crosswalks

D is considered an unmarked crosswalk. Every corner is a crosswalk, painted lines do not have to be present.

Drivers must stop for pedestrians at all marked and unmarked crosswalks UNLESS at an intersection being directed by signals or a police officer

- A
- B
- C
- D
- E

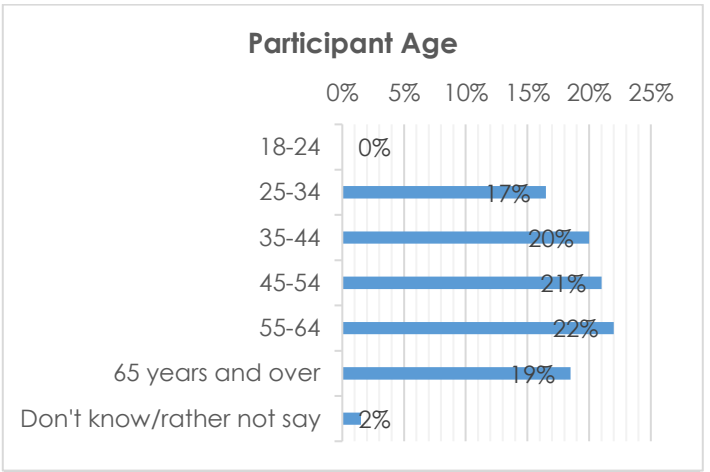
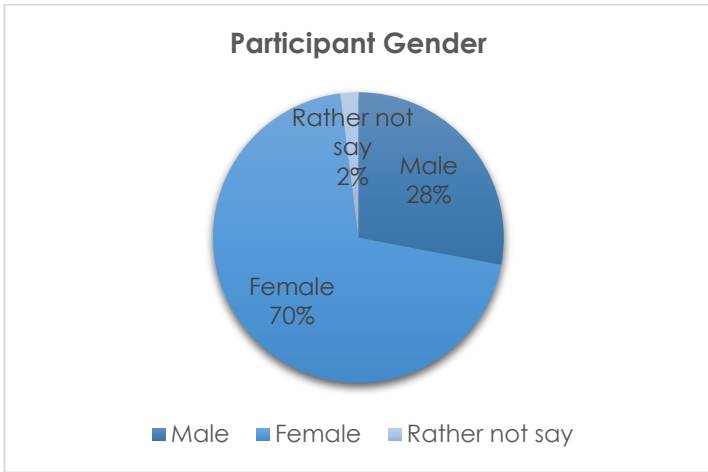


Result: 23 percent increase in respondent identifying answer choice D as an unmarked crosswalk

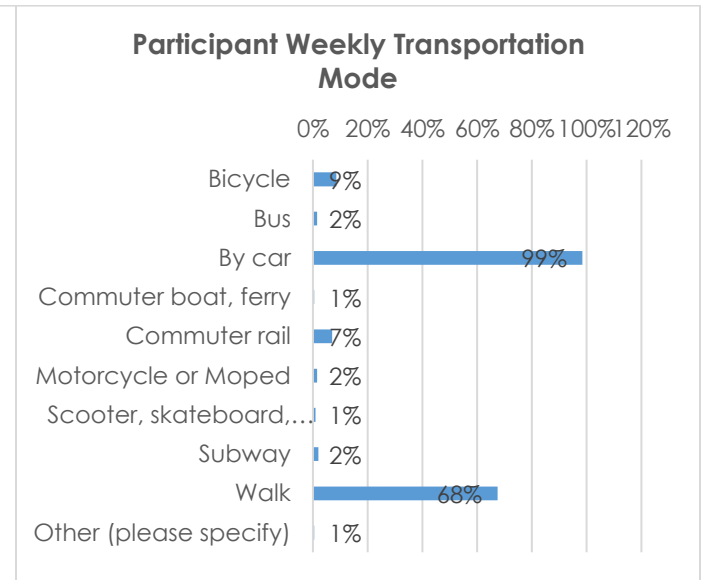
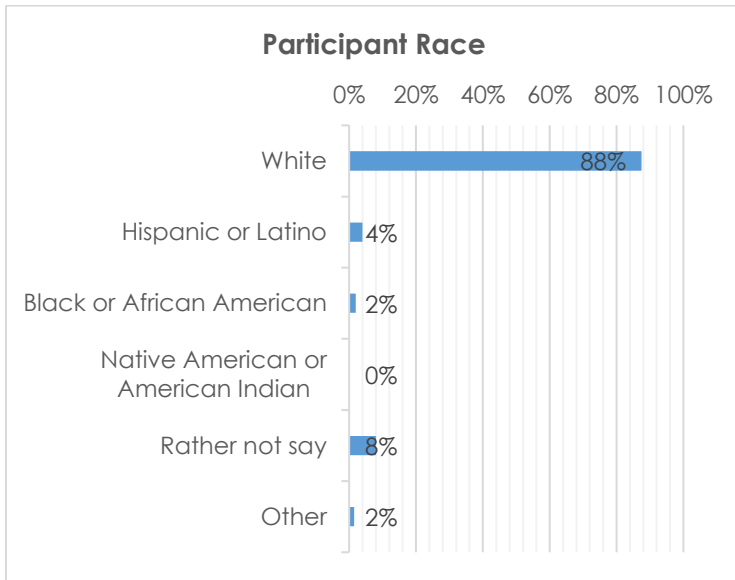
PARTICIPANT DEMOGRAPHICS

Demographic data presented is combined totals from the pre-campaign survey and the post-campaign survey.

Approximately 83 percent of survey participants reported that they live in Morristown, NJ. Participants had to be either residents of Morristown or had to report that they work, go to school, or regularly frequent Morristown, NJ to participate in the survey.



Participants had to be ages 18 years and older to participate in the survey



Intersection Observations

The pre-campaign intersection observation took place on April 17, 2019 and the post-campaign intersection observation took place on June 12, 2019. Both observations were conducted from 7:00 AM – 10:00 AM during peak morning rush hour at the intersection of Morris Street and King Street. This location served as the intersection observation site for Morristown's 2016 and 2017 Street Smart campaigns. The uncontrolled crosswalk over Morris Street links directly to the front entrance of their Morristown Train Station and receives a high amount of pedestrian use throughout the day. The area is also surrounded by several businesses and restaurants. Pedestrians must cross three lanes of traffic when crossing Morris Street. The intersection was chosen due to its history of crashes involving pedestrians and is a known conflict point for pedestrians and drivers with near misses.

The following behaviors were observed during the pre- and post- campaign intersection evaluations and are marked as compliant or not compliant:

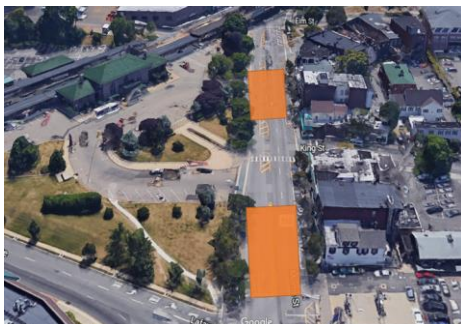


Camera Set-up at Observation Intersection



Intersection of Morris Street and King Street

- **Midblock crossing:** A pedestrian was marked as non-compliant if they crossed between stopped cars in non-moving traffic or if they caused an approaching vehicle to slow down or stop while they were crossing midblock
- **Failure to Yield to Pedestrian:** Drivers who failed to yield to pedestrians when turning to/from Morris Street over the crosswalk on King Street
- **Failure to Stop for Pedestrian:** Drivers traveling straight on Morris Street who failed to stop for a pedestrian in or at the crosswalk



Midblock Crossing Observation Areas



Directions of Turning Drivers Failing to Yield to Pedestrians



Directions of Drivers Failing to Stop for Pedestrians when Traveling Straight

	Pre-Campaign April 2019			Post-Campaign June 2019			% Change
	Compliant	Not Compliant	% Non-Compliant	Compliant	Not Compliant	% Non-Compliant	
Pedestrians Crossing mid-block	1	10	91%	4	2	33%	* 58% Decrease in Non-Compliance
	11 Total Pedestrians Crossing Midblock			6 Total Pedestrians Crossing Midblock			

** Statistically Significant Decrease in non-compliance*

10 out of 11 pedestrians were non-compliant when crossing midblock during the pre-campaign observation. 2 out of 6 pedestrians were non-compliant when crossing midblock in the post-campaign observation.

- Results showed a significant 58 percent decrease in noncompliant midblock crossing
- Results showed a 45 percent decrease in overall midblock crossing

	Pre-Campaign April 2019			Post-Campaign June 2019			% Change
	Compliant	Not Compliant	% Non-Compliant	Compliant	Not Compliant	% Non-Compliant	
Drivers who failed to yield to pedestrians when turning	16	8	33%	31	11	26%	7% Decrease in Non-Compliance

Not Statistically Significant Decrease

- Results showed a not-statistically-significant 7 percent decrease in turning drivers failing to stop for a pedestrians when turning to/from Morris Street to King Street.

	Pre-Campaign April 2019			Post-Campaign June 2019			% Change
	Compliant	Not Compliant	% Non-Compliant	Compliant	Not Compliant	% Non-Compliant	
Drivers traveling straight failing to stop for pedestrian	142	172	55%	194	197	50%	5% Decrease in Non-Compliance

Not Statistically Significant Decrease

- Results showed a not-statistically-significant 5 percent decrease in drivers traveling straight on Morris Street failing to stop for pedestrians at the crosswalk.

Pop-Up Delineators

In order to increase compliance in drivers stopping for pedestrians, TransOptions applied temporary delineators to the crosswalk over Morris Street. This was the first pop-up infrastructure effort TransOptions conducted. The pop-up treatment was conducted on June 26, 2019 from 7:00 AM to 9:00 AM, two weeks after the post-campaign intersection observation. This effort was evaluated by re-observing the pedestrian crossings and compliance of drivers traveling straight on Morris Street and comparing it to the results of the post-campaign observation that was conducted two weeks before. Data on the speed of drivers was also collected during the temporary delineator treatment and compared to data collected the following day with no treatment.

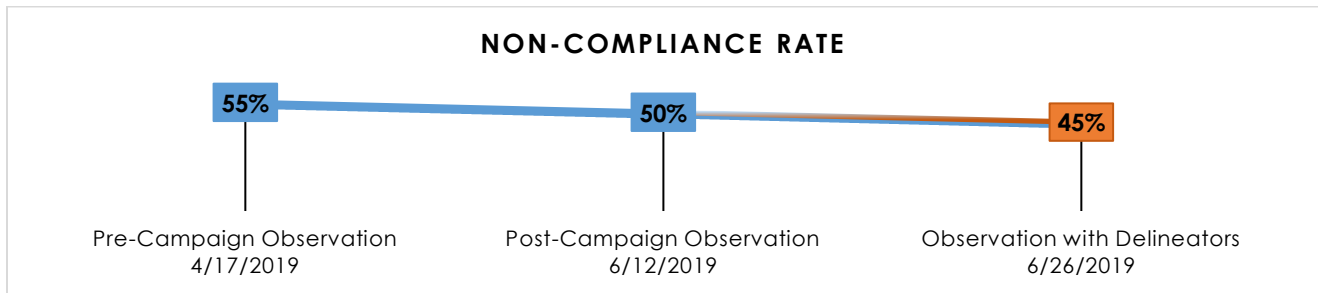


Temporary Delineator Set-Up at Morris Street and King Street

The goal of applying temporary delineators to the roadway was to slow driver speed, increase compliance of stopping for pedestrians, and demonstrate how potential infrastructure improvements could improve pedestrian safety at the intersection.

	Post-Campaign - June 12, 2019			Pop-Up Delineator - June 26, 2019			Change
	Compliant	Not Compliant	% Non-Compliant	Compliant	Not Compliant	% Non-Compliant	
Drivers traveling straight failing to stop for pedestrian	194	197	50%	132	109	45%	5% Decrease in Non-Compliance

* Not Statistically Significant Decrease



POP-UP SPEED ANALYSIS

TransOptions' Speed Sentry radar sign was installed approximately 120 feet from the crosswalk across Morris Street during the pop-up treatment and remained in the place the following day to collect comparative data. The radar device collected the speeds of drivers traveling westbound on Morris Street. The digital speed display remained in the OFF setting throughout the period of study on both June 26 and June 27.

June 26, 2019: Day of Delineator Treatment: 190 Total Vehicles passed sign 7:00 AM – 9:00 AM

Time	Compliant Average Final Speed	Compliant Change in Speed	Low Risk Average Final Speed	Low Risk Change in Speed	Medium Risk Average Final Speed	Medium Risk Change in Speed	High Risk Average Final Speed	High Risk Change in Speed	% of Vehicles Slowed
7:00 AM - 8:00 AM	15.7	-1.8	26.0	-1.0	0.0	0.0	0.0	0.0	89.0%
8:00 AM - 9:00 AM	15.2	-1.8	27.0	1.0	0.0	0.0	0.0	0.0	75.0%

June 27, 2019: Day after Delineator Treatment: 176 Total Vehicles passed sign 7:00 AM – 9:00 AM

Time	Compliant Average Final Speed	Compliant Change in Speed	Low Risk Average Final Speed	Low Risk Change in Speed	Medium Risk Average Final Speed	Medium Risk Change in Speed	High Risk Average Final Speed	High Risk Change in Speed	% of Vehicles Slowed
7:00 AM - 8:00 AM	16.6	-1.4	27.0	0.0	0.0	0.0	0.0	0.0	65.5%
8:00 AM - 9:00 AM	17.0	-1.3	26.0	-1.0	0.0	0.0	0.0	0.0	75.0%

The average speeds of drivers tend to be slow or low risk in this location during the hours of study. According to the data collected from the Speed Sentry device, drivers were slowed by 1.8 MPH on the day of the delineator treatment on June 26, 2019, a slight decrease in speed compared to the day after the treatment on June 27, 2019.

Speed Study

TransOptions used its Speed Sentry radar device in Morristown to encourage slower driving in areas with known pedestrian activity. The sign's digital speed display would be turned off in the beginning of the study period to observe the typical speeding behaviors of drivers traveling in the area. The Speed Sentry continued to collect data even though the digital screen was not displaying speeds for passing drivers.

The digital speed display would later be turned on in order to provide instant speed feedback to drivers in an attempt to slow their speed as they travel towards a pedestrian crosswalk



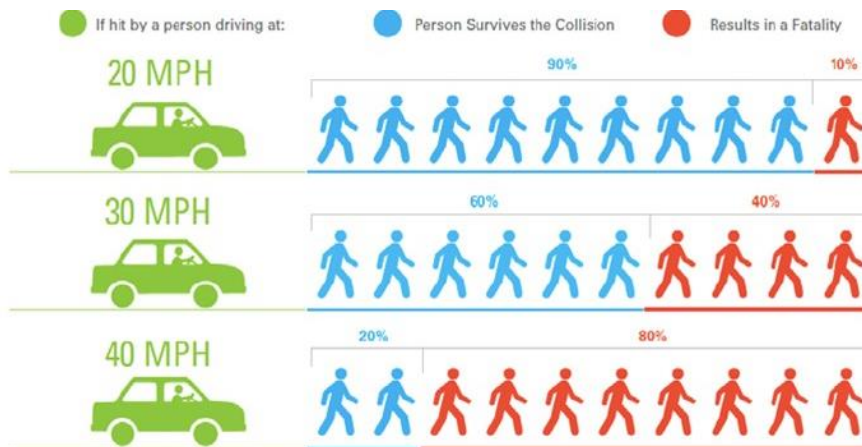
LAFAYETTE AVENUE (JULY 11 – AUGUST 10, 2019):

This one-way road has two driving lanes. At this location, drivers travel downhill and around a curve towards crosswalks connecting to the Morristown Train Station and adjacent businesses. This is a heavily used route between Interstate 287 and downtown Morristown.



Date/Time Range	Speed Limit	Mode	Compliant	Low Risk	Medium Risk	High Risk	Total Number of Vehicles
7/14/2019	30	Display Off	34,334 (71.3%)	10,679 (22.2%)	2,764 (5.6%)	347 (0.9%)	48,124
7/21/2019	30	Display Off, Speed Display	33,177 (71.1%)	10,493 (22.5%)	2,699 (5.8%)	278 (0.6%)	46,647
7/28/2019	30	Speed Display	34,581 (72%)	10,384 (21.6%)	2,704 (5.6%)	309 (0.6%)	47,978
8/4/2019	30	Speed Display	32,791 (71.6%)	10,182 (22.2%)	2,570 (5.6%)	268 (0.6%)	45,811
Total # Vehicles			149,359 (71.5%)	463,46 (22.2%)	11,895 (5.7%)	1,338 (0.6%)	208,938

Data examined from the Speed Sentry showed minimal changes in compliant and low, medium, and high risk speeds. Although high risk percentages were less than 1 percent in the study area, 1,338 drivers were observed traveling at high risk speeds 20 MPH or more than the posted speed limit of 30 MPH. It is recommended that speed continue to be monitored, enforced, and calmed at this location due to known pedestrian activity in the area.



Source: Vision Zero Network

Recommendations

TransOptions recommends the following to address pedestrian safety for Morristown, NJ:

- The Town of Morristown and the Morristown Police Department monitor pedestrian and driver activity throughout the community, especially with new land developments expected to increase the number of residents and businesses. Explore the possibility of developers installing sidewalks and pedestrian safety infrastructure.
- Continue pedestrian safety-related high-visibility enforcement efforts and attention from the Morristown Police Department to reduce pedestrian-involved crashes. It is recommended that Morristown Police Department continue their use of the Cops in the Crosswalk Decoy Program and communicate their efforts to the public. Decoy operations would address survey responses that reported drivers not stopping for pedestrians as a more serious problem compared to negative pedestrian behaviors. Increased enforcement of speed and driver distraction could potentially reduce the seriousness and number of pedestrian-involved crashes. Continued traffic safety enforcement could potentially decrease crashes as well as crime. According to NHTSA's report on Data-Driven Approaches to Crime and Traffic Safety (DDACTS), increased high-visibility enforcement is a proven and effective countermeasure that addresses both crime and crashes whether they occur simultaneously or independently.²
- Explore no- or low-cost engineering improvements or tactics to slow drivers, raise attention of crosswalks, and reduce time/distance pedestrians spend crossing an active roadway. This can be accomplished using paint and cones/delineators. It is also recommended that Morristown review, update, and/or install speed limit and pedestrian signage.
- Morristown can consider adopting a Complete Streets policy. More information on NJ Department of Transportation's Complete Streets program can be found by visiting www.state.nj.us/transportation/eng/completestreets
- Morristown consider adopting a proactive prevention-focused approach to traffic crashes by identifying areas of driver/pedestrian conflicts in the community and implement enforcement efforts and no or low-cost infrastructure improvements to the identified location to prevent crashes.
- Identifying potential education and outreach opportunities in the community. TransOptions can continue focus on Morristown and provide programs and outreach to groups and populations.
- Morristown continue looking for grants and funding opportunities for enforcement and infrastructure improvements.

² Data-Driven Approaches to Crime and Traffic Safety (DDACTS): An Historical Overview (2013)