Improving pedestrian safety requires an integrated approach involving engineering, education and enforcement. This report provides recommendations that include modifying the existing roadway infrastructure, raising pedestrian and driver awareness, and modifying behavior through increased education and enforcement.
Thank you is extended to all those who dedicated time and effort to the completion of the Pedestrian Safety Study for State Routes 59 and 45. The following are those who volunteered their time and served in an advisory capacity and those who worked on the New York State Department of Transportation (NYSDOT) project team. We would also like to thank the many community residents who participated in the Public Workshops.

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For access to this report and all its appendices, please visit: [www.dot.ny.gov/Rts59and45PedSafetyStudy](http://www.dot.ny.gov/Rts59and45PedSafetyStudy)
Every year pedestrians are involved in crashes which result in injury or loss of life. U.S. Department of Transportation Secretary Anthony Foxx released a national action plan, “Safer People, Safer Streets”. One of the first activities the Secretary outlined in the plan was the need for Walk and Bike Assessments. In every state, the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and National Highway Traffic Safety Administration (NHTSA) field offices were directed to facilitate or participate in Walk and Bike Assessments of selected corridors. On Thursday, April 16, 2015 a Walk and Bike Assessment was conducted on Routes 59 and 45 in Rockland County, participants included federal, state and local officials with expertise in the areas of law enforcement, public health and transportation. These corridors were selected based on previous roadway studies that showed high pedestrian volume and pedestrian involved crash data.

As a consequence of the Walk and Bike Assessment and knowledge of other safety deficiencies in the corridors, New York State Department of Transportation (NYSDOT) initiated this pedestrian safety study to further identify specific recommendations that could be implemented to help improve pedestrian safety along Route 59 and Route 45 with an emphasis on engineering, education and enforcement.

**Study Area & Demographics**

The two corridors in the project study area, Routes 45 and 59 in Rockland County, New York, both fall under the jurisdiction of the NYSDOT. The project study corridor on Route 45 is approximately 1 ¼ mile long and the study segment on Route 59 is approximately 3 miles long as shown in Figure 1.1.

Route 45 is a north-south roadway classified as a two-lane, undivided, urban principal arterial with a posted speed limit of 30 miles per
State Routes 59 and 45

Figure 1.1: Study Area
hour. According to the New York State Traffic Data Viewer, the Annual Average Daily Traffic (AADT) along Route 45 is approximately 17,000 vehicles per day. Along Route 45 busy retail and restaurant establishments are located in the downtown business district along with a few multi-family dwellings. The Spring Valley Transit Center, at Municipal Plaza, is a major transportation hub.

Route 59 is a major east-west corridor in Rockland County and is classified as an undivided, urban principal arterial. The character of Route 59 changes throughout the study area. The western and eastern limits of the study area consists of one travel lane in each direction with a center two-way left turn lane, dedicated left turn lanes at select intersections and wide shoulder areas with posted speed limits of 40 MPH. The section in between consists of one travel lane in each direction with dedicated left turn lanes at select intersections and a minimal shoulder area with a posted speed limit of 30 MPH. Along Route 59 the AADT approaches 17,000 vehicles per day west of Route 45 and is approximately 22,000 vehicles per day east of Route 45. The study corridor along Route 59 is characterized by large commercial businesses which include strip malls, automobile dealerships and shopping centers.

Routes 45 and 59 directly connect to densely-populated residential neighborhoods, producing sustained high levels of vehicle and pedestrian traffic. Pedestrians are serviced by public transit via rail and bus services. The rail stop is located on Route 45 just a couple blocks from its intersection with Route 59 at the Spring Valley Station. Bus stops are located throughout the corridors.

The ethnic makeup of the Village of Spring Valley consists of white, African American and Hispanic or Latino. The majority of the population speaks English followed by Spanish and French Creole. Monsey is dominated by a large Orthodox Jewish community, consisting mainly of Hasidim. The majority of the population speaks Yiddish. Additionally, the Hasidic Jewish community religious and cultural observances prevent them from driving vehicles during certain days of the week and/or hours of the day thereby increasing the pedestrian traffic in Monsey significantly during those times.
Public Involvement Structure

The Study Advisory Committee (SAC) was the core advisory body for the development of this pedestrian safety study. The committee was represented by federal, state, county and local officials with expertise in the areas of transportation, law enforcement and public health. The SAC met a total of five times between October 2015 and February 2016. The SAC members were instrumental in providing guidance and input on the inventorying of existing conditions and formulation of goals, objectives and recommendations for improved pedestrian safety within the corridors.

Two public workshops were held during the development of the study to solicit input from the general public and stakeholders not directly represented by the SAC. The stakeholder list was developed in partnership with SAC members and was comprised of additional local, state, and federal government agencies, as well as, local school districts, business associations, community groups, not-for-profits, transportation advocacy groups, and emergency services. The first public workshop was held on December 1, 2015, at the Finkelstein Memorial Library near the intersection of Route 59 and Route 45 in Spring Valley. The second public workshop was held on February 4, 2016 at the same location.

Existing Conditions

Existing pedestrian facilities inventoried included: sidewalk and curb ramps, pedestrian and traffic signal equipment and operation, striped crosswalks and lighting. The vehicular and pedestrian data collected included: pedestrian and vehicle volumes, vehicle speed, pedestrian behavioral patterns and pedestrian and vehicle crash data.

Throughout the study area most of the pedestrian ramps were found to be non-ADA compliant or in poor condition, crosswalks were faded or in poor condition and pedestrian signal equipment was outdated and non-ADA compliant. Additionally, the traffic signals along Route 45 and Route 59 were found to not be coordinated. In addition, a cursory review of the nighttime lighting conditions revealed that they are marginal in many areas.
Behavioral observations revealed pedestrians take the most direct route to their destination including midblock crossings. On Route 45, in the downtown area between Route 59 and Maple Avenue, pedestrians were observed to frequently cross diagonally across intersections as well as at unmarked mid-block locations. The majority of pedestrians did not use push buttons during the observation periods. In cases where there is no pedestrian signal equipment, pedestrians often appeared confused about right of way.

Crash data from NYSDOT Accident Location Information System (ALIS) records for the most recent available three year period was obtained for April 1st, 2012 through March 31st, 2015. There was a total of 401 crashes recorded on Route 45 and 716 crashes on Route 59 with 32 (8.0%) and 26 (3.6%) crashes involving a pedestrian, respectively. The pedestrian crash data revealed that contributing factors included pedestrians crossing at unmarked midblock locations and motor vehicle operators failing to yield to pedestrians in crosswalks while making left turns or right-turns-on-red.

Pedestrian Safety Goals, Objectives & Recommendations

A review of the existing conditions and results of the data analysis, along with the information collected from SAC members and the public, guided the development of the study goals, objectives and recommendations to improve pedestrian safety. Recommendations included modifying the existing roadway infrastructure, raising pedestrian and driver awareness, and modifying behavior through increased education and enforcement.

- **GOAL #1 – Infrastructure:** Improve transportation infrastructure to optimize the safety of pedestrians through the implementation of strategic countermeasures and reconstruction projects.
  - **OBJECTIVE #1 – Sidewalks:** Provide a network of consistent, continuous, accessible and well delineated sidewalks, including corridor-wide ADA compliant ramps, thereby reducing pedestrian exposure to vehicular traffic.
OBJECTIVE #2 – Crosswalks: Establish a network of safe crossing opportunities with a reasonable distance between crossings to accommodate safe pedestrian circulation and accessibility.

OBJECTIVE #3 – Equipment: Provide updated roadway equipment including lighting, signing and pedestrian signals.

OBJECTIVE #4 – Transit Stops: Provide improved pedestrian access and safe crossing opportunities at designated transit stops.

OBJECTIVE #5 – Roadway: Change the character of the roadways through reconstruction projects that incorporate features such as raised and planted medians, midblock crosswalks and curb extensions which are designed to promote safe/convenient use by pedestrians and efficient movement of vehicles.

GOAL #2 – User Behavior: Influence the behavior of drivers and pedestrians to increase and promote compliance with existing laws while encouraging mutual respect and courtesy.

OBJECTIVE #1 – Education: Improve pedestrian and motorist awareness about their legal rights and responsibilities as drivers and pedestrians.

OBJECTIVE #2 – Enforcement: Enhance enforcement of pedestrian and motorist traffic laws.

Implementation Plan

It takes a sustained effort involving local, county, state and federal agencies, along with private entities, to improve pedestrian safety through engineering, education and enforcement. Chapter 4 includes an implementation plan that identifies the lead agency and supporting agencies responsible for the implementation of the various recommendations and provides a reasonable timeframe for attaining the various pedestrian safety goals and objectives. The implementation period for each solution was categorized by short, medium and long term, with rough cost estimates assigned to each.
The project study corridor for Route 59 is between reference marker (RM) 59 8501 1053 (Monsey Heights Road) to RM 59 8501 1082 (New Clarkstown Road). The study segment on Route 45 is from RM 45 8501 1030 (Route 59) to RM 45 8501 1044 (Eckerson Road).

Route 59 is an east-west roadway and is classified as an undivided, urban principal arterial. The character of Route 59 changes throughout the study area. Between its western limit and Kennedy Drive it generally consists of one travel lane in each direction with a center two-way left turn lane, dedicated left turn lanes at select intersections and wide shoulder areas. Between Kennedy Drive and Route 45 it consists of one travel lane in each direction with dedicated left turn lanes at select intersections and a minimal shoulder area. From Route 45 to the east limit it reverts back to consisting of one travel lane in each direction with a center two-way left turn lane, dedicated left turn lanes at signalized intersections and wide shoulder areas. There are 9 signalized and 12 intersections with stop control along the side street approaches to Route 59 in the study area. The western section of Route 59 has a posted speed limit of 40 miles per hour which decreases to 30 miles per hour between a point east of Secora Road to just west of Clarkstown Road where the 40 miles per hour speed limit resumes.

Route 45 is a north-south roadway classified as a two-lane, undivided, urban principal arterial with a posted speed limit of 30 miles per hour. There are 8 signalized and 11 intersections with stop control along the side street approaches to Route 45 in the study area.

Route 59 and Route 45 are significant transportation corridors within Rockland County. Both routes manage significant vehicular and pedestrian traffic with dense adjoining commercial and residential development. There are two significant traffic generators that exist along Route 59: Orange and Rockland Utilities and the Spring Valley Public High
School. In addition, the former Rockland Drive-in Theatre, just east of the intersection with Robert Pitt Drive, is currently used as a 300 +/- space park and ride lot for bus commuters.

This study inventoried and assessed existing pedestrian facilities and collected and analyzed vehicular and pedestrian data to help identify opportunities to improve pedestrian safety.

Existing pedestrian facilities that were inventoried included sidewalk and curb ramps, pedestrian and traffic signal equipment and operation, striped crosswalks and lighting. The vehicular and pedestrian data collected included pedestrian and vehicle volumes, vehicle speed, pedestrian behavioral patterns and pedestrian and vehicle crash data.

a. Inventory and Assessment of Existing Pedestrian Facilities

On August 5th, 2015 a video field audit was performed as a first step to catalog existing conditions in the study area. This included recording roadway geometry, sidewalks, crosswalks, pedestrian ramps, driveway access and traffic flow. This video was used to develop the base model for data collection using a GIS application. On November 9th and 11th, 2015 a team visited the study area to inventory and assess sidewalks and curb ramps, striped crosswalks and pedestrian and traffic signal equipment and operation. Condition assessment maps, as shown in Figure 2.1, were generated from the GIS collected data. The complete set of pedestrian feature inventory and condition assessment plans can be found in Appendix A. In general, it was found that there were missing sidewalk and curb segments along Route 59. Throughout the study area most of the pedestrian ramps were non-ADA compliant or in poor condition, crosswalks were faded or in poor condition and pedestrian signal equipment was outdated. In addition, a cursory review of the nighttime lighting conditions in the study area was conducted on November 9th, 2015. It was found that the lighting conditions were marginal.
Figure 2.1: Sample GIS Data Collection Map

Chapter II. Existing Conditions Inventory, Data Collection & Findings
b. Pedestrian & Vehicle Data Collection and Analysis

Pedestrian & Vehicle Volumes

On November 4th, 2015 and November 7th, 2015 full turning movement counts (TMC’s) and pedestrian counts were collected using Mivision technology during four day/time periods: Weekday AM (6-9am), Weekday Midday (11am – 2pm), Weekday PM (4pm-7pm) and Saturday Midday (11 am – 2 pm). Count data was collected at 12 intersections (9 signalized and 3 unsignalized) along Route 59 and 9 intersections (8 signalized and 1 unsignalized) on Route 45. These locations are shown in Figure 2.2. The TMC volumes were processed into one of five different classes: autos, trucks, buses, bikes and pedestrians. A summary of the pedestrian and vehicle volumes can be found in Appendix B. This data was used to assess existing and future operational conditions.

Vehicle Speed Study

Spot speed studies were performed on November 7th, 2015 at select locations along each corridor (see Figure 2.2 for locations). The results of the speed study are in Appendix C. The posted speed on Route 59, along the western limits of the study area, is 40 mph. It is reduced to 30 mph just east of the intersection with Saddle River Road. The study found that motorists were traveling above the posted speed limit at the west and east ends of Route 59. It is suspected that the wide roadway section that exists in this vicinity contributes to these higher vehicle speeds. The operating speed in the middle section of the study area along Route 59, is at or about the posted speed limit which is attributed to the narrower roadway width that exists in this vicinity.

The study found that along Route 45 the median speed was below the 30 mph posted speed limit. Only two percent of motorists traveling in the northbound direction along Route 45, south of the intersection with Maple Avenue, exceeded the speed limit. The presence of on-street parking, between Route 59 and Lawler Boulevard, is likely influencing drivers to travel at the lower speeds. North of Maple Street, forty percent of motorists exceeded the speed limit.
Figure 2.2: Data Collection Locations
Pedestrian Behavioral Observations

The ethnic makeup of the Village of Spring Valley consists of white, African American and Hispanic or Latino. Spring Valley has the highest African American and Caribbean population in Rockland County, as well as a large Haitian population, along with a growing Hispanic population. The majority of the population 5 years and older speak only English followed by the Spanish and French Creole population who speak English “less than” very well.

Monsey is dominated by a large Orthodox Jewish community, consisting mainly of Hasidim. The majority of the population 5 years and older speak Yiddish and speak English “less than” very well. Part of their religious and cultural observances prevents Hasidic Jews from driving vehicles during certain days of the week and/or hours of the day.

Pedestrian behavioral observations were conducted to try and better understand how pedestrians may or may not be using the existing facilities and signal equipment and what types of behavioral decisions pedestrians make when crossing the road. The summary of pedestrian behavioral observations are in Appendix D. These were done during the same time periods as the TMC's. It was noted that pedestrians cross the road at existing striped crosswalk locations, across intersection legs where no striped crosswalk exists as well as at unmarked midblock locations. In cases where crosswalks were not marked across all legs of an intersection, pedestrians were observed to cross from corners both with and without crosswalks. In general, pedestrians were observed to take the most direct route to their destination; including midblock crossings when there was a break in traffic, as pictured in Figure 2.3, or when vehicles were stopped or queued. On Route 45, in the downtown area between Route 59 and Maple Avenue, pedestrians were observed to frequently cross diagonally across intersections as well as at unmarked mid-block locations. Public transportation bus riders and school children also crossed at unmarked midblock locations in the vicinity of where the bus stopped. During the SAC meeting it was discussed that the public bus companies in Rockland County operate such that riders are allowed to stand at any point along a bus route and request a pick-up by waving at the driver. This “flag-down” method
Pedestrian Safety Study

was also noted during field observations. During the field observations it was noted that bus riders would often load and unload at midblock crossing locations. Along roadway segments where no marked crosswalks exist, the number of midblock crossings often exceeded crossings at intersections. The observations also noted that pedestrians often crossed against a traffic signal when traffic volumes were light. Pedestrian push button use varied from intersection to intersection. In general, the majority of pedestrians did not use push buttons during the observation periods. The majority of vehicles tended to yield to pedestrians, however, greater instances of non-yielding were observed outside of the downtown areas.

The major generators of pedestrian traffic were the retail, restaurant, laundry and library establishments. There was also a moderate volume of pedestrians that came from and to Robert Pitt Drive to access the two bus shelters that exist along the north and south sides of Route 59 just to the east. The Spring Valley Transit Center, on Route 45, was a major source of pedestrian activity during all time periods. It accommodates commuters traveling on the NJ Transit – Pascack Valley Rail Line and the Tappan Zee Express (TZx), Transport of Rockland (TOR) Rockland Coaches (Red and Tan Lines) and the Spring Valley Jitney busses. Bus and rail services produce a steady flow of pedestrian traffic, along with the taxicabs and private vehicles accessing the station to drop off or pick up passengers. In the AM, the pedestrian flow was towards the transit center and in the PM the reverse was true. Parents with children were observed in large numbers, especially during the midday and Saturday time periods.

Pedestrian & Vehicle Crash Analysis
Crash data from NYSDOT Accident Location Information System (ALIS) records for the most recent available three year period was obtained for April 1st, 2012 through March 31st, 2015. The data was analyzed to determine if there were any significant patterns of pedestrian crashes. In addition to location and motor vehicle action, variables including: day of the week, time of day, month of year and light conditions were reviewed.

During the three year period reviewed there was a total of 401 crashes recorded on Route 45 with 32 (8.0%) that involved a pedestrian. Most
of the crashes had equal contributing factors on the parts of pedestrians and vehicles. Pedestrians failed to use crosswalks and crossed midblock or in-between parked vehicles, and drivers did not yield to pedestrians in crosswalks while making left turns.

On Route 59, there were 716 crashes with 26 (3.6%) that involved a pedestrian. A review of the pedestrian crash data along Route 59 found that pedestrian error was reported as a contributing factor more than twice as much as were motor vehicle operators. The pedestrian crash data also revealed that pedestrians crossed at unmarked midblock locations and motor vehicle operators failed to yield to pedestrians in crosswalks while making left turns or right-turn-on-red.

A review of collision diagrams that were prepared to locate each crash revealed a pattern of pedestrian crashes near the intersection of Route 59 and Robert Pitts Drive and a significant number of pedestrian crashes along Route 45 throughout the study limits. A more detailed review of the pedestrian crashes that occurred along Route 45 found that a
fairly significant percentage of them involved motor vehicles making a left turn. Collision diagrams, which also include an inventory of existing signage, are included in Appendix E.

A review of the existing conditions and results of the data analysis, along with the information collected from SAC members and the public, guided the development of the study goals, objectives and recommendations to improve pedestrian safety.
State Routes 59 and 45
Improving pedestrian safety requires an integrated approach involving engineering, education and enforcement. Below are recommendations that include modifying the existing roadway infrastructure, raising pedestrian and driver awareness, and modifying behavior through increased education and enforcement. These recommendations were developed as a result of analyzing existing conditions, input received from the Study Advisory Committee (SAC) members and feedback obtained during public workshops.

**GOAL #1 - Infrastructure**

Improve transportation infrastructure to optimize the safety of pedestrians through the implementation of strategic countermeasures and reconstruction projects. The proposed study plans, which features new sidewalks, ramps, crosswalks, and equipment, are shown in Appendix F.

**OBJECTIVE #1 – Sidewalks**

Provide a network of consistent, continuous, accessible and well delineated sidewalks, including corridor-wide ADA compliant ramps, thereby reducing pedestrian exposure to vehicular traffic.

* • Reconstruct existing sidewalk and curb ramps where they are determined to be either non-ADA compliant or in disrepair as shown in Figure 3.1. Along Route 59 approximately 1,150 lf of sidewalk and 80 curb ramps need to be reconstructed. Along Route 45 approximately 3,500 lf of sidewalk and 80 curb ramps need to be reconstructed.

* • Construct new sidewalk and curb ramps, where practical and none currently exist, to provide a consistent, continuous and accessible network along each corridor. Figure 3.2 shows an example of the lack of continuous sidewalks in the study area. Approximately 12,000 lf of new sidewalk and 150 new curb ramps are needed along Route 59. On Route 45 no new sidewalk and 45 new curb ramps are needed. The construction of new sidewalk along Route 59 would likely involve constructing 7,600 lf of new curb.
Figure 3.1: Existing Conditions - Non-ADA Compliant Ramp

Figure 3.2: Existing Conditions - Lack of Continuous Sidewalks
OBJECTIVE #2 – Crosswalks

Establish a network of safe crossing opportunities with a reasonable distance between crossings to accommodate safe pedestrian circulation and accessibility.

- Restripe all existing crosswalks that are in fair or poor condition, along each corridor with durable, high visibility pavement marking materials. Figure 3.3 is an example of worn crosswalk pavement markings. Along Route 59 approximately 20 existing crosswalks should be restriped and along Route 45 approximately 15 existing crosswalks should be restriped.

- Stripe new crosswalks where practical and deemed appropriate to better service pedestrian crossing opportunities along each corridor. A preliminary review has determined that along Route 59 approximately 40 new crosswalks should be striped and along Route 45 approximately 30 new crosswalks should be striped. Consideration should be given to the designation of mid-block crossings if the distance between striped intersections is greater than 1,000 feet.

Figure 3.3: Existing Conditions - Crosswalk in Poor Condition
OBJECTIVE #3 – Equipment

Provide updated roadway equipment including lighting, signing and pedestrian signals.

- Increase the level of roadway lighting at pedestrian crossings. Street lighting should be installed to improve pedestrian visibility at all crosswalk locations. Additionally, consideration should be given to the installation of pedestrian level lighting along continuous sections of sidewalk to improve pedestrian comfort along each corridor. Along Route 59 approximately 60 new street lights should be added and along Route 45 approximately 55 new street lights should be added. Additionally, the segment of Route 45 between Route 59 and Maple Avenue would benefit from pedestrian level lighting. It was approximated that approximately 15 new LED lights could be added and 45 existing lights could be retrofitted with new LED luminaires.

- Rebuild existing traffic signals that are outdated and ensure that all are equipped with accessible pedestrian signal equipment conforming to the Manual on Uniform Traffic Control Devices (MUTCD) and current NYSDOT Standards. Figure 3.4 is an example of outdated pedestrian signal equipment. Based on a preliminary field assessment there are 8 traffic signals along Route 59 and 6 traffic signals along Route 45 that need to be rebuilt and upgraded with accessible pedestrian signal equipment.

- Evaluate opportunities to modify the operation of the traffic signals (timing and/or phasing) to result in improving vehicular and pedestrian safety. Based on a review of the operation of the existing traffic signals along Routes 59 and 45, it was found that they are not interconnected and therefore are not working in a coordinated manner. In conjunction with rebuilding the traffic signals, provide signal interconnect between all of the Route 59 and Route 45 signals in order to establish a coordinated system along each corridor.

Also consider incorporating a leading pedestrian interval at select locations to give pedestrians an initial period to start crossing and help reduce the frequency of pedestrian crashes involving turning vehicles.
Figure 3.4: Existing Conditions - Outdated Pedestrian Signal Equipment
Another sign to consider at signalized intersections with high pedestrian use is the pedestrian actuated “No-Right-Turn-On-Red LED” sign. This electronic sign is post-mounted and when actuated by a pedestrian it prohibits vehicular turning movement.

- Review signs along each corridor to determine if new signs should be installed to increase driver awareness and improve pedestrian safety. For example, pedestrian warning signs could be installed to better alert motorists to the presence of designated pedestrian crossings at non-signalized locations. Along Route 59, it is estimated that approximately 80 new signs could be added and along Route 45 approximately 75 new signs could be added.

**OBJECTIVE #4 – Transit Stops**

Provide improved pedestrian access and safe crossing opportunities at designated transit stops.

- Evaluate the current uses of the Route 45 Spring Valley Transit Center and develop a site plan that better accommodates the various functions and provides for safer pedestrian circulation. Field observations noted numerous conflicts between the buses, motorists and pedestrians using the facility. It is recommended that when the transit center is rehabilitated in the future more emphasis be placed on safe accommodation and circulation of pedestrian traffic within the facility and its connection to Route 45.

- Utilize transit infrastructure as a focal point for pedestrian safety education/awareness materials, since most transit trips include a pedestrian component.

- Improve pedestrian crossing facilities at transit centers, transit shelters and high-volume transit stops. The study also recommends consideration is given to the relocation of transit shelters/stop to improve safe pedestrian crossing. In the study area, the Rockland County public bus routes along Routes 45 and 59 have designated bus stop locations, but a pedestrian may also be picked-up between stops using a “flag-down” method. The *Rockland County Bus Stop Study Final Report*, as well as, the *Rockland County Comprehensive Plan: Rockland Tomorrow*, recommends a transition from us-
ing the current “flag-down” method to an established network of formal bus stop locations. This would result in less frequent stopping of buses in the highest demand areas and offer the County the opportunity to identify and establish logical, safe locations for designated bus stops.

- Ensure existing and future Park & Ride lots, along the corridors, are designed and constructed to support safe pedestrian circulation within the facilities and connection with adjoining transit stop. Figure 3.5 shows a transit shelter, by a major Park & Ride Lot, with missing sidewalks in front of the shelter.

OBJECTIVE #5 - Roadway

Change the character of the roadways through reconstruction projects designed to promote safe/convenient use by pedestrians and efficient movement of vehicles.

- Traffic calming. Traffic calming is the combination of various physical measures that reduce the negative effects of motor vehicle use,
alter driver behavior including having the effect of reducing motorist speeds and improve conditions for pedestrians. Route 59 and 45 should be evaluated for opportunities to incorporate physical changes to the roadway which would result in calming traffic and improving pedestrian visibility and safety. Traffic calming techniques, as determined suitable and discussed in more detail in Chapters 18 and 25 of the NYSDOT’s Highway Design Manual, should be considered as part of future reconstruction projects, including intersection improvement projects. Traffic calming features to be considered include:

- Curb extensions at pedestrian crosswalks.
- Minimum shoulder width.
- Minimum lane width.
- Raised, planted medians.
- Pedestrian refuge islands.
- Traffic control islands.
- Street trees planted in buffer between sidewalk and roadway.
- On-Street parking lanes.
- Mid-Block Crossings with Median Pedestrian Refuge Island. Consideration should be given to the installation of mid-block crossings with median pedestrian refuge islands where the distance between existing striped crosswalks is greater than 1,000 feet.
- Consistent Roadway Cross-Section. Within the Route 59 study area, the middle section between Summit Avenue and Route 45 is significantly narrower than the abutting east and west segments. The middle, narrower section, as seen in Figure 3.6, results in lower travel speeds, less aggressive driver behavior, and provides for generally safer pedestrian crossing opportunities since the distance to cross is shorter. It is recommended the roadway cross section be made consistent throughout the Route 59 corridor, redesigning the east and west ends of the study area to be more consistent with the middle section. Figure 3.7 is an example of the wide shoulders on the western end of Route 59. Consideration should be given to convert-
Figure 3.6: Narrower Section of Route 59 at West St.
State Routes 59 and 45

Figure 3.7: Inconsistent Roadway Section with Wide Shoulders at Route 59 & Remsen Avenue.
ing the two-way left turn lanes, found at the east and west sections of Route 59, with a planted median or evenly spaced traffic control islands that could also accommodate pedestrian refuge.

Route 45 existing roadway cross-section within the study limits is consistent, incorporates narrow travel lanes, minimal shoulder width, on-street parking, and street trees.

- Consistent Speed Limit. The speed limit currently varies along Route 59, within the 3 mile long study area. It is recommended the speed limit be set to a consistent speed throughout the Route 59 corridor.

  The Route 45 existing speed limit is consistent within the study limits.

- Route 45 On-Street Parking. Although the Village of Spring has a parking ordinance that does not allow for vehicles to park within 15 feet of a crosswalk or traffic signal, many drivers do not abide by the ordinance making it difficult for pedestrians to cross the road safely. It is recommended “No parking” signs be installed or the sidewalks/curbs be extended to physically prevent cars from parking too close to intersections and pedestrian crosswalks. The physical extension of the sidewalk/curbs would also have the added benefit of reducing the crossing distance for pedestrians and making pedestrians more visible to drivers.

To accommodate the potential reduction in on-street parking the study also recommends the Village of Spring Valley incorporate more signs directing visitors to the large amounts of public parking behind the Route 45 businesses.

- Access Management. Review access to/from existing land uses along each corridor to determine where improvements can be made to better control access and reduce the number of driveways. Route 59 has numerous abutting businesses with driveways in disrepair, resulting in poorly delineated pedestrian paths and contributing to an increased number of conflicts involving vehicles, pedestrians and cyclists. The access management strategy recommendations in the Rockland County Comprehensive Plan: Rockland Tomor-
row recommends consolidation of driveways and improved management of access along the corridors which would result in better traffic flow, fewer crashes and increased pedestrian safety. Efforts to consolidate or better control access should also consider the need to provide a consistent, continuous and accessible sidewalk, where none currently exist. Additionally, consideration should be given to providing training to local municipal employees responsible for site plan review, so that future development plans can better incorporate features to support pedestrian safety.

GOAL #2 – User Behavior
Influence the behavior of drivers and pedestrians to increase and promote compliance with existing laws while encouraging mutual respect and courtesy.

OBJECTIVE #1 - Education
Improve pedestrian and motorist awareness about their legal rights and responsibilities as drivers and pedestrians.

- Implement an education campaign to target both pedestrian and motor vehicle operators advising them of their rights and responsibilities as users along each corridor. The New York State Department of Health (NYSDOH) in cooperation with New York State Department of Transportation (NYSDOT) and the Governor’s Traffic Safety Committee (GTSC) launched an education campaign in 2014 titled “See! Be Seen!” and plans to expand the campaign this year with targeted messaging. It is recommended that the Rockland County Department of Health (DOH) and Rockland County Department of Public Transportation (DOPT), as part of their Rockland County Complete Street Interdepartmental Workgroup (IWG), partner with the State to implement the “See! Be Seen!” education campaign in Spring Valley and Ramapo.

- Distribute pedestrian safety information through public health providers and in public buildings such as libraries, community centers, recreation centers, places of worship and other sites. Direct pedestrian safety campaign material to specific demographic groups, utilize all available media including: websites, billboards, radio,
public access and commercial television, brochures/pamphlets and posters, ads in local, cultural newspapers, social media and radio to reach the diverse study area population. It is recommended Rockland County DOH and local municipalities work with NYSDOH to obtain professional services to develop translated, culturally sensitive versions of the “See! Be Seen!” campaign materials in Spanish, French, French Creole and Yiddish. It is also recommended these agencies develop non-verbal, picture-based campaign materials for non-reading adults and children in the study location.

Additionally, raise awareness among pedestrians and drivers, through public service announcements and other media, about the importance of pedestrian visibility, especially at night. Pedestrians need to be aware that drivers may not see them in low light or dark conditions, especially when they are wearing dark clothing. To increase the visibility of pedestrians, encourage light-colored clothing as well as adding reflective materials to backpacks, shoes and clothing.

- Identify resources for local agencies (police, transportation agencies, local community organizations, etc.) to conduct a pedestrian safety education program. Rockland County DOH and DOPT, along with local municipalities, continue to pursue state safety grants to support ongoing and enhanced pedestrian safety education efforts from the NYSDOH and GTSC (www.safeny.ny.gov). Rockland County DOH currently has a grant from NYSDOH called “Local IMPACT” (Local Initiatives for Multi-Sector Public Health Action) which includes Route 59. The grant money could be used to help with the distribution of educational materials. For 2016, grant money is in place; however, it is important to note that the opportunity to adjust existing scopes is possible to include pedestrian safety initiatives.

- Conduct focused educational outreach efforts in conjunction with infrastructure improvement projects. As NYSDOT implements infrastructure improvement projects, such as installing new pedestrian signal equipment and crosswalks, it is recommended that focused education outreach efforts be conducted simultaneously with local
State Routes 59 and 45

municipalities and the Rockland County DOH centered on the correct use of the new equipment and crosswalks.

- Sponsor pedestrian safety events with local educational centers to promote long-term changes in pedestrian and driver behavior. The level of exposure and risk is greater for school age pedestrians because they often lack the ability to distinguish between safe and unsafe crossing gaps. They may also be less attentive to traffic or be distracted by using mobile phones or other electronic devices. It is recommended that Rockland County DOH and local law enforcement partner with local public and private school districts to organize and implement pedestrian safety events for primary and secondary school age students. These programs help teach children the rules of the road and skills for pedestrian safety. The Ramapo Police Department already has an initiative titled “Adopt-a-Cop” in which local law enforcement officers visit local schools twice a year and educate 2nd and 3rd grade students on a wide range of topics including pedestrian safety. Rockland County DOH has a grant from NYSDOH called “Creating Healthy Schools & Communities” in the

East Ramapo School District. This grant offers the opportunity for assistance in the distribution of pedestrian safety material. Currently, there is a school coordinator for the program.

**OBJECTIVE #2 – Enforcement**

Enhance enforcement of pedestrian and motorist traffic laws.

- Employ an enforcement campaign, after an agreed upon period of education time has elapsed, along each corridor by local police agencies to enforce traffic laws and help modify driver and pedestrian behavior with the objective of improving pedestrian safety. It is recommended that the Town of Ramapo and Village of Spring Valley Police Departments, in cooperation with NYSDOT, consider the implementation of an annual high visibility targeted enforcement campaign with the goal to improve pedestrian safety. Citations would be issued to both pedestrians and drivers who are in violation of the law. It is important to involve the local court system in the initiative so that tickets are not unknowingly dismissed. A similar campaign has successfully been used by State and local po-
Police in the Town of Poughkeepsie, Dutchess County along Route 9 to address aggressive driving. This year, a statewide initiative will be launched by GTSC in cooperation with NYSDOH titled, “Operation See! Be Seen!” in June 2016. Local law enforcement should give consideration to participation in the statewide initiative.

- Provide local law enforcement officers specialized training in pedestrian safety to ensure familiarity with laws governing pedestrian-automobile interaction. It is recommended the local municipal police departments coordinate with GTSC to host a local, two-day Pedestrian & Bicycle Law Enforcement Training. The training has been successfully held in Nassau, Niagara, Erie, NYC and Westchester Counties. This year the training is scheduled for Suffolk, Dutchess, Erie and Onondaga counties in the spring 2016. The training course objectives are to develop officer’s awareness; demonstrate that education and enforcement for pedestrian safety is integral to improving community safety; and encourage law enforcement agencies to adopt a policy for pedestrian and bicycle safety.

Further consideration should be given to programs that offer “Train the Trainer” opportunities so that local law enforcement officers can more easily share their knowledge with coworkers.

- Invite law enforcement officers from Schenectady Police Department to Spring Valley and Ramapo to provide local law enforcement officers a presentation on the implementation of the “See! Be Seen!” initiative. The presentation could include a discussion of challenges encountered by Schenectady Police Department and lessons learned.

- Provide law enforcement officers with pedestrian safety education materials to distribute along with warnings or citations. It is recommended local law enforcement departments partner with Rockland County DOH in securing “See! Be Seen!” educational materials, including materials translated into other languages prominent in the study location.

- Identify resources for local law enforcement to help support pedestrian safety targeted enforcement efforts and officer training. NYS-DOH and GTSC (www.safeny.ny.gov) may be a potential source of funding.
State Routes 59 and 45
Chapter IV. Implementation Plan

It takes a sustained effort involving local, county, state and federal agencies, along with private entities, to improve pedestrian safety through engineering, education and enforcement. Table 4.1 is an implementation plan that identifies lead agency and provides a reasonable timeframe for attaining the various pedestrian safety goals, objectives and recommendations.

### Table 4.1: Pedestrian Safety Implementation Plan

<table>
<thead>
<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation Term (Short, Medium, Long)</th>
<th>Approximate Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal #1 - INFRASTRUCTURE</td>
<td>Mayor/Supervisor</td>
<td>Police Dept.</td>
<td>Public Works</td>
<td>DOPT</td>
<td>DOH</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>Improve transportation infrastructure through the implementation of strategic countermeasures and reconstruction projects to optimize the safety of pedestrians.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Objective #1 - Sidewalks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide a network of consistent, continuous, accessible and well delineated sidewalks and ramps (excl of right-of-way costs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruct existing sidewalk and curb ramps.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>Short/Medium</td>
</tr>
<tr>
<td>Construct new sidewalk, curb and ramps.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>Short/Medium</td>
</tr>
</tbody>
</table>

- ● Lead agency responsible for coordinating implementation
- ○ Agency responsible for providing support with implementation
- Short Term 1-2 years
- Medium Term 3-9 years
- Long Term 10 or more years
<table>
<thead>
<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation</th>
<th>Approximate Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective #2 – Crosswalks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish a network of safe crossing opportunities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Restripe existing marked crosswalks in poor condition.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Short</td>
</tr>
<tr>
<td>Stripe new crosswalks.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Short</td>
</tr>
<tr>
<td>Objective #3 – Equipment</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Provide updated roadway equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install street lighting.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Medium</td>
</tr>
<tr>
<td>Install sidewalk lighting.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Medium</td>
</tr>
<tr>
<td>Install traffic and pedestrian signal equipment</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Short</td>
</tr>
<tr>
<td>Modify existing traffic signal operations and install signal interconnect.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Short</td>
</tr>
<tr>
<td>Install additional signs for improved pedestrian safety.</td>
<td>o</td>
<td>o</td>
<td>●</td>
<td>o</td>
<td>o</td>
<td>Short</td>
</tr>
</tbody>
</table>

- ● Lead agency responsible for coordinating implementation
- ○ Agency responsible for providing support with implementation

Short Term 1-2 years | Medium Term 3-9 years | Long Term 10 or more years
Table 4.1: Pedestrian Safety Implementation Plan (continued)

<table>
<thead>
<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation Term (Short, Medium, Long)</th>
<th>Approximate Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mayor/Supervisor Police Dept. Public Works DOPT DOH NYS DOT NYS DOH MTA GTSC MPO FHWA FTA NHTSA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Objective #4 – Transit Stops Provide improved pedestrian access and crossing opportunities at enhanced transit stops.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Evaluate Route 45 Spring Valley Transit Center for improved circulation.</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○  ○  ○</td>
<td>n/a</td>
</tr>
<tr>
<td>Utilize transit infrastructure for pedestrian safety education/awareness materials.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○  ○  ○</td>
<td>n/a</td>
</tr>
<tr>
<td>Improve pedestrian crossing facilities at transit centers, transit shelters and high-volume transit stops.</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○  ○  ○</td>
<td>n/a</td>
</tr>
<tr>
<td>Ensure Park &amp; Ride lots are design and constructed to support safe pedestrian circulation within and with adjoining transit stops.</td>
<td>○</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○  ○  ○</td>
<td>n/a</td>
</tr>
</tbody>
</table>

● Lead agency responsible for coordinating implementation
○ Agency responsible for providing support with implementation

Short Term 1-2 years  Medium Term 3-9 years  Long Term 10 or more years
### Table 4.1: Pedestrian Safety Implementation Plan (continued)

<table>
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<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation Term (Short, Medium, Long)</th>
<th>Approximate Estimated Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective #5 – Roadway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstruct roadway to accommodate safe/convenient use by pedestrians.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Calming</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Short/Medium/ Long</td>
</tr>
<tr>
<td>Mid-Block Crossings with Median Pedestrian Refuge Island</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Long</td>
</tr>
<tr>
<td>Consistent Roadway Cross-Section</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Long</td>
</tr>
<tr>
<td>Consistent Speed Limit</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Short</td>
</tr>
<tr>
<td>Route 45 On-Street Parking</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Medium</td>
</tr>
<tr>
<td>Access Management</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>Short/Medium/ Long</td>
</tr>
</tbody>
</table>

- ● Lead agency responsible for coordinating implementation
- ○ Agency responsible for providing support with implementation

Short Term 1-2 years | Medium Term 3-9 years | Long Term 10 or more years
### Table 4.1: Pedestrian Safety Implementation Plan (continued)

<table>
<thead>
<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation Term (Short, Medium, Long)</th>
<th>Approximate Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal #2 - USER BEHAVIOR</strong> Influence the behavior of drivers and pedestrians to increase and promote compliance with existing laws while encouraging mutual respect and courtesy.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Objective #1 - Education Improve pedestrian and motorist awareness of their legal rights and responsibilities as drivers and pedestrians.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Implement an education campaign, such as “See! Be Seen!”</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Distribute pedestrian safety information.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Identify resources for local agencies to conduct pedestrian safety education programs.</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Conduct focused education outreach efforts as infrastructure improvement projects are built.</td>
<td>○</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Sponsor pedestrian safety events with local educational centers.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

- ● Lead agency responsible for coordinating implementation
- ○ Agency responsible for providing support with implementation

Short Term 1-2 years  Medium Term 3-9 years  Long Term 10 or more years
### Table 4.1: Pedestrian Safety Implementation Plan (concluded)

<table>
<thead>
<tr>
<th>Goal/Objective</th>
<th>Local</th>
<th>County</th>
<th>State</th>
<th>Federal</th>
<th>Implementation Term (Short, Medium, Long)</th>
<th>Approximate Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective #2 - Enforcement</td>
<td>Mayor/</td>
<td>Police</td>
<td>Public</td>
<td>DOPT</td>
<td>DOH</td>
<td>NYS DOT</td>
</tr>
<tr>
<td>Enhance enforcement of pedestrian and motorist traffic laws.</td>
<td>Supervisor</td>
<td>Dept.</td>
<td>Works</td>
<td>DOT</td>
<td>DOT</td>
<td>DOT</td>
</tr>
<tr>
<td>Employ an annual high visibility targeted enforcement campaign.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Provide local law enforcement officers specialized training in pedestrian safety.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Invite law enforcement officers from Schenectady PD to Spring Valley and Town of Ramapo PDs to share lessons learned.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Provide law enforcement officers with pedestrian safety education materials to distribute along with warnings or citations.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Identify resources for local law enforcement to help support pedestrian safety targeted enforcement efforts.</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>●</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

- ● Lead agency responsible for coordinating implementation
- ○ Agency responsible for providing support with implementation

Short Term 1-2 years               Medium Term 3-9 years          Long Term 10 or more years
Chapter V. Public Involvement

Study Advisory Committee

The Study Advisory Committee (SAC) was the core advisory body for the development of the pedestrian safety study. The committee was represented by federal, state, county and local officials with expertise in the areas of transportation, law enforcement and public health. The SAC met a total of five times between October 2015 and February 2016. The SAC members were instrumental in providing guidance and input on the inventorying of existing conditions and formulation of goals, objectives and recommendations for improved pedestrian safety within the corridors.

It is envisioned that the SAC members, upon completion of the pedestrian safety study, will continue to be advocates for pedestrian safety along Routes 59 and 45 and work to implement the study recommendations through the construction of engineering improvements and execution of educational and enforcement programs. Table 5.1 contains a summary of the SAC and public workshop activities including meeting objectives and results. The details discussed in the SAC meetings can be found in Appendix G.

Public Workshops

Two public workshops were held to solicit input from the general public and stakeholders not directly represented by the SAC. The stakeholder list was developed in partnership with SAC members and comprised of additional local, county, state, and federal government agencies as well as local school districts, business associations, community groups, non-for-profits, transportation advocacy groups, and emergency services. All workshop announcements were provided in English, Spanish, Yiddish and French Creole.

The first public workshop was held on December 1, 2015, at the Finkelstein Memorial Library near the intersection of Route 59 and Route
State Routes 59 and 45

45 in Spring Valley. The workshop was advertised through a mass mail distribution, local postings, a press release and word-of-mouth by the SAC. The workshop included a presentation of data collected by the study team and a group exercise in which participants were placed into groups of 6 to 8 people and asked to brainstorm and record known pedestrian safety issues in the corridors. The groups were then asked to identify their top three priority issues and confirmed they would be address by one of the draft goals and objectives previously developed by the SAC. This exercise provided workshop participants the opportunity to document their concerns and ensure the study draft goals and objectives were comprehensive. The group exercise results can be found in Appendix G.

The second public workshop was held on February 4, 2016 at the same location. The workshop was again advertised through a mass mail distribution, local postings, a press release and word-of-mouth by SAC members. The workshop provided participants a brief summary of the results of the first public workshop, a presentation of study recommendations as they related to the study goals and objectives, and a break-out session where workshop participants had the opportunity to review the recommendations in more detail and discuss with SAC members. The workshop provided the general public and stakeholders the opportunity to review the study recommendations and provide feedback.
### Table 5.1: Public Involvement Summary

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Date/Place/ Time</th>
<th>Objectives</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Advisory Committee (SAC) Meeting #1</td>
<td>October 14, 2015 Spring Valley Village Hall 10:00 am – 12:00 pm</td>
<td>Introduce the study schedule &amp; structure; overview of existing data.</td>
<td>SAC participated in a group exercise and developed draft goals &amp; objectives. Confirmed priority pedestrian safety locations based on crash data.</td>
</tr>
<tr>
<td>Study Advisory Committee (SAC) Meeting #2</td>
<td>November 19, 2015 Ramapo Town Hall 1:30 pm – 2:30 pm</td>
<td>Overview of data collection; review draft goals and objectives.</td>
<td>SAC consensus on study draft goals and objectives. Began preparing for Public Workshop I.</td>
</tr>
<tr>
<td>Public Workshop I</td>
<td>December 1, 2015 Finkelstein Memorial Library 7:00 pm – 8:30 pm</td>
<td>Introduce the community to the project and gather public input through group exercise.</td>
<td>Community was informed of project; Participants recorded issues. Concluded that community issues were addressed by study draft goals and objectives.</td>
</tr>
<tr>
<td>Study Advisory Committee (SAC) Meeting #3</td>
<td>December 17, 2015 Louis Kurtz Civic Center 10:00 am – 11:00 am</td>
<td>Review Public Workshop I results; finalize goals &amp; objectives; review draft recommendations</td>
<td>SAC members reached consensus on study goals and objectives. SAC members provided comment on draft recommendations</td>
</tr>
<tr>
<td>Study Advisory Committee (SAC) Meeting #4</td>
<td>January 26, 2016 Ramapo Town Hall 10:00 pm – 11:30 am</td>
<td>Review final list of pedestrian safety recommendations.</td>
<td>SAC members reached consensus on study recommendations. Began preparing for Public Workshop II.</td>
</tr>
<tr>
<td>Public Workshop II</td>
<td>February 4, 2016 Finkelstein Memorial Library 7:00 pm – 8:30 pm</td>
<td>Present list of pedestrian safety recommendations and solicit community input.</td>
<td>Collect comments from the workshop participants.</td>
</tr>
<tr>
<td>Study Advisory Committee (SAC) Meeting #5</td>
<td>February 26, 2016 Spring Valley Village Hall 10:30 am – 12:00 pm</td>
<td>Review Public Workshop II results; review draft Pedestrian Safety Study.</td>
<td>SAC members reached consensus on draft Pedestrian Safety Study.</td>
</tr>
</tbody>
</table>


